

# GCLC Prover Output for conjecture “proof97”

Groebner bases method used

October 2, 2015

## 1 Construction and prover internal state

### Construction commands:

- Point  $A$
- Point  $O$
- Circle,  $c$ :  $O A$
- Random point on circle,  $B$ :  $O A$  0.840512
- Random point on circle,  $C$ :  $O A$  0.240225
- Random point on circle,  $D$ :  $O A$  1.689463
- Random point on circle,  $P$ :  $O A$  4.857068
- Random point on circle,  $P1$ :  $O A$  0.400475
- Line  $ac$ :  $A C$
- Foot,  $F$ :  $P ac$
- Foot,  $F2$ :  $P1 ac$
- Line  $ab$ :  $A B$
- Foot,  $G$ :  $P ab$
- Foot,  $G1$ :  $P1 ab$
- Line  $ad$ :  $A D$
- Foot,  $F1$ :  $P ad$
- Foot,  $F3$ :  $P1 ad$

**Coordinates assigned to the points:**

- $A = (0, 0)$
- $O = (u_1, 0)$
- $B = (x_1, u_2)$
- $C = (x_2, u_3)$
- $D = (x_3, u_4)$
- $P = (x_4, u_5)$
- $P1 = (x_5, u_6)$
- $F = (x_7, x_6)$
- $F2 = (x_9, x_8)$
- $G = (x_{11}, x_{10})$
- $G1 = (x_{13}, x_{12})$
- $F1 = (x_{15}, x_{14})$
- $F3 = (x_{17}, x_{16})$

**Conjecture(s):**

1. Given conjecture

• **GCLC code:**

`equal { angle F G F1 } { angle F2 G1 F3 }`

• **Expression:**

$$\tan(\angle FGF1) = \tan(\angle F2G1F3)$$

• **Expression after rationalization:**

$$(\angle FGF1 \cdot \frac{1}{\angle F2G1F3}) = (\angle F2G1F3 \cdot \frac{1}{\angle FGF1})$$

## 2 Resolving constructed lines

- $ac \ni A, C, F, F2$
- $FP \ni F, P$  ; line is generated by the prover
- $F2P1 \ni F2, P1$  ; line is generated by the prover
- $ab \ni A, B, G, G1$
- $GP \ni G, P$  ; line is generated by the prover
- $G1P1 \ni G1, P1$  ; line is generated by the prover

- $ad \ni A, D, F1, F3$
- $F1P \ni F1, P$  ; line is generated by the prover
- $F3P1 \ni F3, P1$  ; line is generated by the prover
- $AO \ni A, O$  ; line is horizontal (i.e.,  $y(A) = y(O)$ ); line is generated by the prover

### 3 Creating polynomials from hypotheses

- Point  $A$   
no condition
- Point  $O$   
no condition
- Circle,  $c$ :  $O A$   
no condition
- Random point on circle,  $B$ :  $O A$  0.840512  
– Segment  $[B, O]$  equal size as segment  $[A, O]$

$$p_1 = x_1^2 - 2u_1x_1 + u_2^2$$

- Random point on circle,  $C$ :  $O A$  0.240225  
– Segment  $[C, O]$  equal size as segment  $[A, O]$

$$p_2 = x_2^2 - 2u_1x_2 + u_3^2$$

- Random point on circle,  $D$ :  $O A$  1.689463  
– Segment  $[D, O]$  equal size as segment  $[A, O]$

$$p_3 = x_3^2 - 2u_1x_3 + u_4^2$$

- Random point on circle,  $P$ :  $O A$  4.857068  
– Segment  $[P, O]$  equal size as segment  $[A, O]$

$$p_4 = x_4^2 - 2u_1x_4 + u_5^2$$

- Random point on circle,  $P1$ :  $O A$  0.400475  
– Segment  $[P1, O]$  equal size as segment  $[A, O]$

$$p_5 = x_5^2 - 2u_1x_5 + u_6^2$$

- Line  $ac$ :  $A C$   
– point  $A$  is on the line  $(A, C)$   
no condition

- point  $C$  is on the line  $(A, C)$   
no condition

- Foot,  $F$ :  $P\ ac$

- point  $F$  is on the line  $(A, C)$

$$p_6 = -u_3x_7 + x_6x_2$$

- Line  $(F, P)$  perpendicular with line  $(A, C)$

$$p_7 = -x_7x_2 - u_3x_6 + x_4x_2 + u_5u_3$$

- Foot,  $F2$ :  $P1\ ac$

- point  $F2$  is on the line  $(A, C)$

$$p_8 = -u_3x_9 + x_8x_2$$

- Line  $(F2, P1)$  perpendicular with line  $(A, C)$

$$p_9 = -x_9x_2 - u_3x_8 + x_5x_2 + u_6u_3$$

- Line  $ab$ :  $A\ B$

- point  $A$  is on the line  $(A, B)$   
no condition
- point  $B$  is on the line  $(A, B)$   
no condition

- Foot,  $G$ :  $P\ ab$

- point  $G$  is on the line  $(A, B)$

$$p_{10} = -u_2x_{11} + x_{10}x_1$$

- Line  $(G, P)$  perpendicular with line  $(A, B)$

$$p_{11} = -x_{11}x_1 - u_2x_{10} + x_4x_1 + u_5u_2$$

- Foot,  $G1$ :  $P1\ ab$

- point  $G1$  is on the line  $(A, B)$

$$p_{12} = -u_2x_{13} + x_{12}x_1$$

- Line  $(G1, P1)$  perpendicular with line  $(A, B)$

$$p_{13} = -x_{13}x_1 - u_2x_{12} + x_5x_1 + u_6u_2$$

- Line  $ad$ :  $A\ D$

- point  $A$  is on the line  $(A, D)$   
no condition

- point  $D$  is on the line  $(A, D)$   
no condition

- Foot,  $F1$ :  $P$  ad

- point  $F1$  is on the line  $(A, D)$

$$p_{14} = -u_4x_{15} + x_{14}x_3$$

- Line  $(F1, P)$  perpendicular with line  $(A, D)$

$$p_{15} = -x_{15}x_3 - u_4x_{14} + x_4x_3 + u_5u_4$$

- Foot,  $F3$ :  $P1$  ad

- point  $F3$  is on the line  $(A, D)$

$$p_{16} = -u_4x_{17} + x_{16}x_3$$

- Line  $(F3, P1)$  perpendicular with line  $(A, D)$

$$p_{17} = -x_{17}x_3 - u_4x_{16} + x_5x_3 + u_6u_4$$

## 4 Creating polynomial from the conjecture

- Processing given conjecture(s).

**Conjecture 1:** Polynomial too big for output (text size is 2240 characters, number of terms is 96)

## 5 Invoking the theorem prover

The used proving method is Buchberger's method.

Input polynomial system is:

$$\begin{aligned}
p_0 &= x_1^2 - 2u_1x_1 + u_2^2 \\
p_1 &= x_2^2 - 2u_1x_2 + u_3^2 \\
p_2 &= x_3^2 - 2u_1x_3 + u_4^2 \\
p_3 &= x_4^2 - 2u_1x_4 + u_5^2 \\
p_4 &= x_5^2 - 2u_1x_5 + u_6^2 \\
p_5 &= -u_3x_7 + x_6x_2 \\
p_6 &= -x_7x_2 - u_3x_6 + x_4x_2 + u_5u_3 \\
p_7 &= -u_3x_9 + x_8x_2 \\
p_8 &= -x_9x_2 - u_3x_8 + x_5x_2 + u_6u_3 \\
p_9 &= -u_2x_{11} + x_{10}x_1 \\
p_{10} &= -x_{11}x_1 - u_2x_{10} + x_4x_1 + u_5u_2 \\
p_{11} &= -u_2x_{13} + x_{12}x_1 \\
p_{12} &= -x_{13}x_1 - u_2x_{12} + x_5x_1 + u_6u_2 \\
p_{13} &= -u_4x_{15} + x_{14}x_3 \\
p_{14} &= -x_{15}x_3 - u_4x_{14} + x_4x_3 + u_5u_4 \\
p_{15} &= -u_4x_{17} + x_{16}x_3 \\
p_{16} &= -x_{17}x_3 - u_4x_{16} + x_5x_3 + u_6u_4
\end{aligned}$$

## 5.1 Iteration 1

Current set is  $S_1 =$

$$\begin{aligned}
p_0 &= x_1^2 - 2u_1x_1 + u_2^2 \\
p_1 &= x_2^2 - 2u_1x_2 + u_3^2 \\
p_2 &= x_3^2 - 2u_1x_3 + u_4^2 \\
p_3 &= x_4^2 - 2u_1x_4 + u_5^2 \\
p_4 &= x_5^2 - 2u_1x_5 + u_6^2 \\
p_5 &= -u_3x_7 + x_6x_2 \\
p_6 &= -x_7x_2 - u_3x_6 + x_4x_2 + u_5u_3 \\
p_7 &= -u_3x_9 + x_8x_2 \\
p_8 &= -x_9x_2 - u_3x_8 + x_5x_2 + u_6u_3 \\
p_9 &= -u_2x_{11} + x_{10}x_1 \\
p_{10} &= -x_{11}x_1 - u_2x_{10} + x_4x_1 + u_5u_2 \\
p_{11} &= -u_2x_{13} + x_{12}x_1 \\
p_{12} &= -x_{13}x_1 - u_2x_{12} + x_5x_1 + u_6u_2 \\
p_{13} &= -u_4x_{15} + x_{14}x_3 \\
p_{14} &= -x_{15}x_3 - u_4x_{14} + x_4x_3 + u_5u_4 \\
p_{15} &= -u_4x_{17} + x_{16}x_3 \\
p_{16} &= -x_{17}x_3 - u_4x_{16} + x_5x_3 + u_6u_4
\end{aligned}$$

1. Creating S-polynomial from the pair  $(p_0, p_1)$ .  
Skipping pair  $p_0$  and  $p_1$  because gcd of their leading monoms is zero.
2. Creating S-polynomial from the pair  $(p_0, p_2)$ .  
Skipping pair  $p_0$  and  $p_2$  because gcd of their leading monoms is zero.
3. Creating S-polynomial from the pair  $(p_0, p_3)$ .  
Skipping pair  $p_0$  and  $p_3$  because gcd of their leading monoms is zero.
4. Creating S-polynomial from the pair  $(p_0, p_4)$ .  
Skipping pair  $p_0$  and  $p_4$  because gcd of their leading monoms is zero.
5. Creating S-polynomial from the pair  $(p_0, p_5)$ .  
Skipping pair  $p_0$  and  $p_5$  because gcd of their leading monoms is zero.
6. Creating S-polynomial from the pair  $(p_0, p_6)$ .  
Skipping pair  $p_0$  and  $p_6$  because gcd of their leading monoms is zero.
7. Creating S-polynomial from the pair  $(p_0, p_7)$ .  
Skipping pair  $p_0$  and  $p_7$  because gcd of their leading monoms is zero.
8. Creating S-polynomial from the pair  $(p_0, p_8)$ .  
Skipping pair  $p_0$  and  $p_8$  because gcd of their leading monoms is zero.

9. Creating S-polynomial from the pair  $(p_0, p_9)$ .

Skipping pair  $p_0$  and  $p_9$  because gcd of their leading monoms is zero.

10. Creating S-polynomial from the pair  $(p_0, p_{10})$ .

Forming S-pol of  $p_0$  and  $p_{10}$ :

$$p_{52} = 2u_1x_{11}x_1 - u_2^2x_{11} + u_2x_{10}x_1 - x_4x_1^2 - u_5u_2x_1$$

S-pol added.

11. Creating S-polynomial from the pair  $(p_0, p_{11})$ .

Skipping pair  $p_0$  and  $p_{11}$  because gcd of their leading monoms is zero.

12. Creating S-polynomial from the pair  $(p_0, p_{12})$ .

Forming S-pol of  $p_0$  and  $p_{12}$ :

$$p_{53} = 2u_1x_{13}x_1 - u_2^2x_{13} + u_2x_{12}x_1 - x_5x_1^2 - u_6u_2x_1$$

S-pol added.

13. Creating S-polynomial from the pair  $(p_0, p_{13})$ .

Skipping pair  $p_0$  and  $p_{13}$  because gcd of their leading monoms is zero.

14. Creating S-polynomial from the pair  $(p_0, p_{14})$ .

Skipping pair  $p_0$  and  $p_{14}$  because gcd of their leading monoms is zero.

15. Creating S-polynomial from the pair  $(p_0, p_{15})$ .

Skipping pair  $p_0$  and  $p_{15}$  because gcd of their leading monoms is zero.

16. Creating S-polynomial from the pair  $(p_0, p_{16})$ .

Skipping pair  $p_0$  and  $p_{16}$  because gcd of their leading monoms is zero.

17. Creating S-polynomial from the pair  $(p_1, p_2)$ .

Skipping pair  $p_1$  and  $p_2$  because gcd of their leading monoms is zero.

18. Creating S-polynomial from the pair  $(p_1, p_3)$ .

Skipping pair  $p_1$  and  $p_3$  because gcd of their leading monoms is zero.

19. Creating S-polynomial from the pair  $(p_1, p_4)$ .

Skipping pair  $p_1$  and  $p_4$  because gcd of their leading monoms is zero.

20. Creating S-polynomial from the pair  $(p_1, p_5)$ .

Skipping pair  $p_1$  and  $p_5$  because gcd of their leading monoms is zero.

21. Creating S-polynomial from the pair  $(p_1, p_6)$ .

Forming S-pol of  $p_1$  and  $p_6$ :

$$p_{54} = 2u_1x_7x_2 - u_3^2x_7 + u_3x_6x_2 - x_4x_2^2 - u_5u_3x_2$$

S-pol added.



22. Creating S-polynomial from the pair  $(p_1, p_7)$ .  
Skipping pair  $p_1$  and  $p_7$  because gcd of their leading monoms is zero.
23. Creating S-polynomial from the pair  $(p_1, p_8)$ .  
Forming S-pol of  $p_1$  and  $p_8$ :  
$$p_{55} = 2u_1x_9x_2 - u_3^2x_9 + u_3x_8x_2 - x_5x_2^2 - u_6u_3x_2$$
  
S-pol added.
24. Creating S-polynomial from the pair  $(p_1, p_9)$ .  
Skipping pair  $p_1$  and  $p_9$  because gcd of their leading monoms is zero.
25. Creating S-polynomial from the pair  $(p_1, p_{10})$ .  
Skipping pair  $p_1$  and  $p_{10}$  because gcd of their leading monoms is zero.
26. Creating S-polynomial from the pair  $(p_1, p_{11})$ .  
Skipping pair  $p_1$  and  $p_{11}$  because gcd of their leading monoms is zero.
27. Creating S-polynomial from the pair  $(p_1, p_{12})$ .  
Skipping pair  $p_1$  and  $p_{12}$  because gcd of their leading monoms is zero.
28. Creating S-polynomial from the pair  $(p_1, p_{13})$ .  
Skipping pair  $p_1$  and  $p_{13}$  because gcd of their leading monoms is zero.
29. Creating S-polynomial from the pair  $(p_1, p_{14})$ .  
Skipping pair  $p_1$  and  $p_{14}$  because gcd of their leading monoms is zero.
30. Creating S-polynomial from the pair  $(p_1, p_{15})$ .  
Skipping pair  $p_1$  and  $p_{15}$  because gcd of their leading monoms is zero.
31. Creating S-polynomial from the pair  $(p_1, p_{16})$ .  
Skipping pair  $p_1$  and  $p_{16}$  because gcd of their leading monoms is zero.
32. Creating S-polynomial from the pair  $(p_2, p_3)$ .  
Skipping pair  $p_2$  and  $p_3$  because gcd of their leading monoms is zero.
33. Creating S-polynomial from the pair  $(p_2, p_4)$ .  
Skipping pair  $p_2$  and  $p_4$  because gcd of their leading monoms is zero.
34. Creating S-polynomial from the pair  $(p_2, p_5)$ .  
Skipping pair  $p_2$  and  $p_5$  because gcd of their leading monoms is zero.
35. Creating S-polynomial from the pair  $(p_2, p_6)$ .  
Skipping pair  $p_2$  and  $p_6$  because gcd of their leading monoms is zero.
36. Creating S-polynomial from the pair  $(p_2, p_7)$ .  
Skipping pair  $p_2$  and  $p_7$  because gcd of their leading monoms is zero.
37. Creating S-polynomial from the pair  $(p_2, p_8)$ .  
Skipping pair  $p_2$  and  $p_8$  because gcd of their leading monoms is zero.

38. Creating S-polynomial from the pair  $(p_2, p_9)$ .  
 Skipping pair  $p_2$  and  $p_9$  because gcd of their leading monoms is zero.
39. Creating S-polynomial from the pair  $(p_2, p_{10})$ .  
 Skipping pair  $p_2$  and  $p_{10}$  because gcd of their leading monoms is zero.
40. Creating S-polynomial from the pair  $(p_2, p_{11})$ .  
 Skipping pair  $p_2$  and  $p_{11}$  because gcd of their leading monoms is zero.
41. Creating S-polynomial from the pair  $(p_2, p_{12})$ .  
 Skipping pair  $p_2$  and  $p_{12}$  because gcd of their leading monoms is zero.
42. Creating S-polynomial from the pair  $(p_2, p_{13})$ .  
 Skipping pair  $p_2$  and  $p_{13}$  because gcd of their leading monoms is zero.
43. Creating S-polynomial from the pair  $(p_2, p_{14})$ .  
 Forming S-pol of  $p_2$  and  $p_{14}$ :  

$$p_{56} = 2u_1x_{15}x_3 - u_4^2x_{15} + u_4x_{14}x_3 - x_4x_3^2 - u_5u_4x_3$$
 S-pol added.
44. Creating S-polynomial from the pair  $(p_2, p_{15})$ .  
 Skipping pair  $p_2$  and  $p_{15}$  because gcd of their leading monoms is zero.
45. Creating S-polynomial from the pair  $(p_2, p_{16})$ .  
 Forming S-pol of  $p_2$  and  $p_{16}$ :  

$$p_{57} = 2u_1x_{17}x_3 - u_4^2x_{17} + u_4x_{16}x_3 - x_5x_3^2 - u_6u_4x_3$$
 S-pol added.
46. Creating S-polynomial from the pair  $(p_3, p_4)$ .  
 Skipping pair  $p_3$  and  $p_4$  because gcd of their leading monoms is zero.
47. Creating S-polynomial from the pair  $(p_3, p_5)$ .  
 Skipping pair  $p_3$  and  $p_5$  because gcd of their leading monoms is zero.
48. Creating S-polynomial from the pair  $(p_3, p_6)$ .  
 Skipping pair  $p_3$  and  $p_6$  because gcd of their leading monoms is zero.
49. Creating S-polynomial from the pair  $(p_3, p_7)$ .  
 Skipping pair  $p_3$  and  $p_7$  because gcd of their leading monoms is zero.
50. Creating S-polynomial from the pair  $(p_3, p_8)$ .  
 Skipping pair  $p_3$  and  $p_8$  because gcd of their leading monoms is zero.
51. Creating S-polynomial from the pair  $(p_3, p_9)$ .  
 Skipping pair  $p_3$  and  $p_9$  because gcd of their leading monoms is zero.

52. Creating S-polynomial from the pair  $(p_3, p_{10})$ .  
 Skipping pair  $p_3$  and  $p_{10}$  because gcd of their leading monoms is zero.
53. Creating S-polynomial from the pair  $(p_3, p_{11})$ .  
 Skipping pair  $p_3$  and  $p_{11}$  because gcd of their leading monoms is zero.
54. Creating S-polynomial from the pair  $(p_3, p_{12})$ .  
 Skipping pair  $p_3$  and  $p_{12}$  because gcd of their leading monoms is zero.
55. Creating S-polynomial from the pair  $(p_3, p_{13})$ .  
 Skipping pair  $p_3$  and  $p_{13}$  because gcd of their leading monoms is zero.
56. Creating S-polynomial from the pair  $(p_3, p_{14})$ .  
 Skipping pair  $p_3$  and  $p_{14}$  because gcd of their leading monoms is zero.
57. Creating S-polynomial from the pair  $(p_3, p_{15})$ .  
 Skipping pair  $p_3$  and  $p_{15}$  because gcd of their leading monoms is zero.
58. Creating S-polynomial from the pair  $(p_3, p_{16})$ .  
 Skipping pair  $p_3$  and  $p_{16}$  because gcd of their leading monoms is zero.
59. Creating S-polynomial from the pair  $(p_4, p_5)$ .  
 Skipping pair  $p_4$  and  $p_5$  because gcd of their leading monoms is zero.
60. Creating S-polynomial from the pair  $(p_4, p_6)$ .  
 Skipping pair  $p_4$  and  $p_6$  because gcd of their leading monoms is zero.
61. Creating S-polynomial from the pair  $(p_4, p_7)$ .  
 Skipping pair  $p_4$  and  $p_7$  because gcd of their leading monoms is zero.
62. Creating S-polynomial from the pair  $(p_4, p_8)$ .  
 Skipping pair  $p_4$  and  $p_8$  because gcd of their leading monoms is zero.
63. Creating S-polynomial from the pair  $(p_4, p_9)$ .  
 Skipping pair  $p_4$  and  $p_9$  because gcd of their leading monoms is zero.
64. Creating S-polynomial from the pair  $(p_4, p_{10})$ .  
 Skipping pair  $p_4$  and  $p_{10}$  because gcd of their leading monoms is zero.
65. Creating S-polynomial from the pair  $(p_4, p_{11})$ .  
 Skipping pair  $p_4$  and  $p_{11}$  because gcd of their leading monoms is zero.
66. Creating S-polynomial from the pair  $(p_4, p_{12})$ .  
 Skipping pair  $p_4$  and  $p_{12}$  because gcd of their leading monoms is zero.
67. Creating S-polynomial from the pair  $(p_4, p_{13})$ .  
 Skipping pair  $p_4$  and  $p_{13}$  because gcd of their leading monoms is zero.
68. Creating S-polynomial from the pair  $(p_4, p_{14})$ .  
 Skipping pair  $p_4$  and  $p_{14}$  because gcd of their leading monoms is zero.

69. Creating S-polynomial from the pair  $(p_4, p_{15})$ .  
 Skipping pair  $p_4$  and  $p_{15}$  because gcd of their leading monoms is zero.
70. Creating S-polynomial from the pair  $(p_4, p_{16})$ .  
 Skipping pair  $p_4$  and  $p_{16}$  because gcd of their leading monoms is zero.
71. Creating S-polynomial from the pair  $(p_5, p_6)$ .  
 Forming S-pol of  $p_5$  and  $p_6$ :
- $$p_{58} = -x_6x_2^2 - u_3^2x_6 + u_3x_4x_2 + u_5u_3^2$$
- S-pol added.
72. Creating S-polynomial from the pair  $(p_5, p_7)$ .  
 Skipping pair  $p_5$  and  $p_7$  because gcd of their leading monoms is zero.
73. Creating S-polynomial from the pair  $(p_5, p_8)$ .  
 Skipping pair  $p_5$  and  $p_8$  because gcd of their leading monoms is zero.
74. Creating S-polynomial from the pair  $(p_5, p_9)$ .  
 Skipping pair  $p_5$  and  $p_9$  because gcd of their leading monoms is zero.
75. Creating S-polynomial from the pair  $(p_5, p_{10})$ .  
 Skipping pair  $p_5$  and  $p_{10}$  because gcd of their leading monoms is zero.
76. Creating S-polynomial from the pair  $(p_5, p_{11})$ .  
 Skipping pair  $p_5$  and  $p_{11}$  because gcd of their leading monoms is zero.
77. Creating S-polynomial from the pair  $(p_5, p_{12})$ .  
 Skipping pair  $p_5$  and  $p_{12}$  because gcd of their leading monoms is zero.
78. Creating S-polynomial from the pair  $(p_5, p_{13})$ .  
 Skipping pair  $p_5$  and  $p_{13}$  because gcd of their leading monoms is zero.
79. Creating S-polynomial from the pair  $(p_5, p_{14})$ .  
 Skipping pair  $p_5$  and  $p_{14}$  because gcd of their leading monoms is zero.
80. Creating S-polynomial from the pair  $(p_5, p_{15})$ .  
 Skipping pair  $p_5$  and  $p_{15}$  because gcd of their leading monoms is zero.
81. Creating S-polynomial from the pair  $(p_5, p_{16})$ .  
 Skipping pair  $p_5$  and  $p_{16}$  because gcd of their leading monoms is zero.
82. Creating S-polynomial from the pair  $(p_6, p_7)$ .  
 Skipping pair  $p_6$  and  $p_7$  because gcd of their leading monoms is zero.
83. Creating S-polynomial from the pair  $(p_6, p_8)$ .  
 Forming S-pol of  $p_6$  and  $p_8$ :

$$p_{59} = u_3x_9x_6 - x_9x_4x_2 - u_5u_3x_9 - u_3x_8x_7 + x_7x_5x_2 + u_6u_3x_7$$

S-pol added.

84. Creating S-polynomial from the pair  $(p_6, p_9)$ .  
Skipping pair  $p_6$  and  $p_9$  because gcd of their leading monoms is zero.
85. Creating S-polynomial from the pair  $(p_6, p_{10})$ .  
Skipping pair  $p_6$  and  $p_{10}$  because gcd of their leading monoms is zero.
86. Creating S-polynomial from the pair  $(p_6, p_{11})$ .  
Skipping pair  $p_6$  and  $p_{11}$  because gcd of their leading monoms is zero.
87. Creating S-polynomial from the pair  $(p_6, p_{12})$ .  
Skipping pair  $p_6$  and  $p_{12}$  because gcd of their leading monoms is zero.
88. Creating S-polynomial from the pair  $(p_6, p_{13})$ .  
Skipping pair  $p_6$  and  $p_{13}$  because gcd of their leading monoms is zero.
89. Creating S-polynomial from the pair  $(p_6, p_{14})$ .  
Skipping pair  $p_6$  and  $p_{14}$  because gcd of their leading monoms is zero.
90. Creating S-polynomial from the pair  $(p_6, p_{15})$ .  
Skipping pair  $p_6$  and  $p_{15}$  because gcd of their leading monoms is zero.
91. Creating S-polynomial from the pair  $(p_6, p_{16})$ .  
Skipping pair  $p_6$  and  $p_{16}$  because gcd of their leading monoms is zero.
92. Creating S-polynomial from the pair  $(p_7, p_8)$ .  
Forming S-pol of  $p_7$  and  $p_8$ :  
$$p_{60} = -x_8x_2^2 - u_3^2x_8 + u_3x_5x_2 + u_6u_3^2$$
  
S-pol added.
93. Creating S-polynomial from the pair  $(p_7, p_9)$ .  
Skipping pair  $p_7$  and  $p_9$  because gcd of their leading monoms is zero.
94. Creating S-polynomial from the pair  $(p_7, p_{10})$ .  
Skipping pair  $p_7$  and  $p_{10}$  because gcd of their leading monoms is zero.
95. Creating S-polynomial from the pair  $(p_7, p_{11})$ .  
Skipping pair  $p_7$  and  $p_{11}$  because gcd of their leading monoms is zero.
96. Creating S-polynomial from the pair  $(p_7, p_{12})$ .  
Skipping pair  $p_7$  and  $p_{12}$  because gcd of their leading monoms is zero.
97. Creating S-polynomial from the pair  $(p_7, p_{13})$ .  
Skipping pair  $p_7$  and  $p_{13}$  because gcd of their leading monoms is zero.
98. Creating S-polynomial from the pair  $(p_7, p_{14})$ .  
Skipping pair  $p_7$  and  $p_{14}$  because gcd of their leading monoms is zero.
99. Creating S-polynomial from the pair  $(p_7, p_{15})$ .  
Skipping pair  $p_7$  and  $p_{15}$  because gcd of their leading monoms is zero.

100. Creating S-polynomial from the pair  $(p_7, p_{16})$ .  
 Skipping pair  $p_7$  and  $p_{16}$  because gcd of their leading monoms is zero.
101. Creating S-polynomial from the pair  $(p_8, p_9)$ .  
 Skipping pair  $p_8$  and  $p_9$  because gcd of their leading monoms is zero.
102. Creating S-polynomial from the pair  $(p_8, p_{10})$ .  
 Skipping pair  $p_8$  and  $p_{10}$  because gcd of their leading monoms is zero.
103. Creating S-polynomial from the pair  $(p_8, p_{11})$ .  
 Skipping pair  $p_8$  and  $p_{11}$  because gcd of their leading monoms is zero.
104. Creating S-polynomial from the pair  $(p_8, p_{12})$ .  
 Skipping pair  $p_8$  and  $p_{12}$  because gcd of their leading monoms is zero.
105. Creating S-polynomial from the pair  $(p_8, p_{13})$ .  
 Skipping pair  $p_8$  and  $p_{13}$  because gcd of their leading monoms is zero.
106. Creating S-polynomial from the pair  $(p_8, p_{14})$ .  
 Skipping pair  $p_8$  and  $p_{14}$  because gcd of their leading monoms is zero.
107. Creating S-polynomial from the pair  $(p_8, p_{15})$ .  
 Skipping pair  $p_8$  and  $p_{15}$  because gcd of their leading monoms is zero.
108. Creating S-polynomial from the pair  $(p_8, p_{16})$ .  
 Skipping pair  $p_8$  and  $p_{16}$  because gcd of their leading monoms is zero.
109. Creating S-polynomial from the pair  $(p_9, p_{10})$ .  
 Forming S-pol of  $p_9$  and  $p_{10}$ :

$$p_{61} = -x_{10}x_1^2 - u_2^2x_{10} + u_2x_4x_1 + u_5u_2^2$$

S-pol added.

110. Creating S-polynomial from the pair  $(p_9, p_{11})$ .  
 Skipping pair  $p_9$  and  $p_{11}$  because gcd of their leading monoms is zero.
111. Creating S-polynomial from the pair  $(p_9, p_{12})$ .  
 Skipping pair  $p_9$  and  $p_{12}$  because gcd of their leading monoms is zero.
112. Creating S-polynomial from the pair  $(p_9, p_{13})$ .  
 Skipping pair  $p_9$  and  $p_{13}$  because gcd of their leading monoms is zero.
113. Creating S-polynomial from the pair  $(p_9, p_{14})$ .  
 Skipping pair  $p_9$  and  $p_{14}$  because gcd of their leading monoms is zero.
114. Creating S-polynomial from the pair  $(p_9, p_{15})$ .  
 Skipping pair  $p_9$  and  $p_{15}$  because gcd of their leading monoms is zero.
115. Creating S-polynomial from the pair  $(p_9, p_{16})$ .  
 Skipping pair  $p_9$  and  $p_{16}$  because gcd of their leading monoms is zero.

116. Creating S-polynomial from the pair  $(p_{10}, p_{11})$ .  
 Skipping pair  $p_{10}$  and  $p_{11}$  because gcd of their leading monoms is zero.
117. Creating S-polynomial from the pair  $(p_{10}, p_{12})$ .  
 Forming S-pol of  $p_{10}$  and  $p_{12}$ :
- $$p_{62} = u_2 x_{13} x_{10} - x_{13} x_4 x_1 - u_5 u_2 x_{13} - u_2 x_{12} x_{11} + x_{11} x_5 x_1 + u_6 u_2 x_{11}$$
- S-pol added.
118. Creating S-polynomial from the pair  $(p_{10}, p_{13})$ .  
 Skipping pair  $p_{10}$  and  $p_{13}$  because gcd of their leading monoms is zero.
119. Creating S-polynomial from the pair  $(p_{10}, p_{14})$ .  
 Skipping pair  $p_{10}$  and  $p_{14}$  because gcd of their leading monoms is zero.
120. Creating S-polynomial from the pair  $(p_{10}, p_{15})$ .  
 Skipping pair  $p_{10}$  and  $p_{15}$  because gcd of their leading monoms is zero.
121. Creating S-polynomial from the pair  $(p_{10}, p_{16})$ .  
 Skipping pair  $p_{10}$  and  $p_{16}$  because gcd of their leading monoms is zero.
122. Creating S-polynomial from the pair  $(p_{11}, p_{12})$ .  
 Forming S-pol of  $p_{11}$  and  $p_{12}$ :
- $$p_{63} = -x_{12} x_1^2 - u_2^2 x_{12} + u_2 x_5 x_1 + u_6 u_2^2$$
- S-pol added.
123. Creating S-polynomial from the pair  $(p_{11}, p_{13})$ .  
 Skipping pair  $p_{11}$  and  $p_{13}$  because gcd of their leading monoms is zero.
124. Creating S-polynomial from the pair  $(p_{11}, p_{14})$ .  
 Skipping pair  $p_{11}$  and  $p_{14}$  because gcd of their leading monoms is zero.
125. Creating S-polynomial from the pair  $(p_{11}, p_{15})$ .  
 Skipping pair  $p_{11}$  and  $p_{15}$  because gcd of their leading monoms is zero.
126. Creating S-polynomial from the pair  $(p_{11}, p_{16})$ .  
 Skipping pair  $p_{11}$  and  $p_{16}$  because gcd of their leading monoms is zero.
127. Creating S-polynomial from the pair  $(p_{12}, p_{13})$ .  
 Skipping pair  $p_{12}$  and  $p_{13}$  because gcd of their leading monoms is zero.
128. Creating S-polynomial from the pair  $(p_{12}, p_{14})$ .  
 Skipping pair  $p_{12}$  and  $p_{14}$  because gcd of their leading monoms is zero.
129. Creating S-polynomial from the pair  $(p_{12}, p_{15})$ .  
 Skipping pair  $p_{12}$  and  $p_{15}$  because gcd of their leading monoms is zero.

130. Creating S-polynomial from the pair  $(p_{12}, p_{16})$ .

Skipping pair  $p_{12}$  and  $p_{16}$  because gcd of their leading monoms is zero.

131. Creating S-polynomial from the pair  $(p_{13}, p_{14})$ .

Forming S-pol of  $p_{13}$  and  $p_{14}$ :

$$p_{64} = -x_{14}x_3^2 - u_4^2x_{14} + u_4x_4x_3 + u_5u_4^2$$

S-pol added.

132. Creating S-polynomial from the pair  $(p_{13}, p_{15})$ .

Skipping pair  $p_{13}$  and  $p_{15}$  because gcd of their leading monoms is zero.

133. Creating S-polynomial from the pair  $(p_{13}, p_{16})$ .

Skipping pair  $p_{13}$  and  $p_{16}$  because gcd of their leading monoms is zero.

134. Creating S-polynomial from the pair  $(p_{14}, p_{15})$ .

Skipping pair  $p_{14}$  and  $p_{15}$  because gcd of their leading monoms is zero.

135. Creating S-polynomial from the pair  $(p_{14}, p_{16})$ .

Forming S-pol of  $p_{14}$  and  $p_{16}$ :

$$p_{65} = u_4x_{17}x_{14} - x_{17}x_4x_3 - u_5u_4x_{17} - u_4x_{16}x_{15} + x_{15}x_5x_3 + u_6u_4x_{15}$$

S-pol added.

136. Creating S-polynomial from the pair  $(p_{15}, p_{16})$ .

Forming S-pol of  $p_{15}$  and  $p_{16}$ :

$$p_{66} = -x_{16}x_3^2 - u_4^2x_{16} + u_4x_5x_3 + u_6u_4^2$$

S-pol added.



## 5.2 Iteration 2

Current set is  $S_2 =$

$$\begin{aligned}
p_0 &= x_1^2 - 2u_1x_1 + u_2^2 \\
p_1 &= x_2^2 - 2u_1x_2 + u_3^2 \\
p_2 &= x_3^2 - 2u_1x_3 + u_4^2 \\
p_3 &= x_4^2 - 2u_1x_4 + u_5^2 \\
p_4 &= x_5^2 - 2u_1x_5 + u_6^2 \\
p_5 &= -u_3x_7 + x_6x_2 \\
p_6 &= -x_7x_2 - u_3x_6 + x_4x_2 + u_5u_3 \\
p_7 &= -u_3x_9 + x_8x_2 \\
p_8 &= -x_9x_2 - u_3x_8 + x_5x_2 + u_6u_3 \\
p_9 &= -u_2x_{11} + x_{10}x_1 \\
p_{10} &= -x_{11}x_1 - u_2x_{10} + x_4x_1 + u_5u_2 \\
p_{11} &= -u_2x_{13} + x_{12}x_1 \\
p_{12} &= -x_{13}x_1 - u_2x_{12} + x_5x_1 + u_6u_2 \\
p_{13} &= -u_4x_{15} + x_{14}x_3 \\
p_{14} &= -x_{15}x_3 - u_4x_{14} + x_4x_3 + u_5u_4 \\
p_{15} &= -u_4x_{17} + x_{16}x_3 \\
p_{16} &= -x_{17}x_3 - u_4x_{16} + x_5x_3 + u_6u_4 \\
p_{17} &= 4u_2u_1^2x_{10}x_1 - 2u_2^3u_1x_{10} - 2u_2^2u_1x_4x_1 + u_2^4x_4 - u_5u_2^3x_1 \\
p_{18} &= 4u_2u_1^2x_{12}x_1 - 2u_2^3u_1x_{12} - 2u_2^2u_1x_5x_1 + u_2^4x_5 - u_6u_2^3x_1 \\
p_{19} &= 4u_3u_1^2x_6x_2 - 2u_3^3u_1x_6 - 2u_3^2u_1x_4x_2 + u_3^4x_4 - u_5u_3^3x_2 \\
p_{20} &= 4u_3u_1^2x_8x_2 - 2u_3^3u_1x_8 - 2u_3^2u_1x_5x_2 + u_3^4x_5 - u_6u_3^3x_2 \\
p_{21} &= 4u_4u_1^2x_{14}x_3 - 2u_4^3u_1x_{14} - 2u_4^2u_1x_4x_3 + u_4^4x_4 - u_5u_4^3x_3 \\
p_{22} &= 4u_4u_1^2x_{16}x_3 - 2u_4^3u_1x_{16} - 2u_4^2u_1x_5x_3 + u_4^4x_5 - u_6u_4^3x_3 \\
p_{23} &= -2u_1x_6x_2 + u_3x_4x_2 + u_5u_3^2 \\
p_{24} &= -2u_3^5u_1x_8x_4x_2 + u_3^7x_8x_4 - u_5u_3^6x_8x_2 + 2u_3^5u_1x_6x_5x_2 - \\
&\quad u_3^7x_6x_5 + u_6u_3^6x_6x_2 \\
p_{25} &= -2u_1x_8x_2 + u_3x_5x_2 + u_6u_3^2 \\
p_{26} &= -2u_1x_{10}x_1 + u_2x_4x_1 + u_5u_2^2 \\
p_{27} &= -2u_2^5u_1x_{12}x_4x_1 + u_2^7x_{12}x_4 - u_5u_2^6x_{12}x_1 + 2u_2^5u_1x_{10}x_5x_1 - \\
&\quad u_2^7x_{10}x_5 + u_6u_2^6x_{10}x_1 \\
p_{28} &= -2u_1x_{12}x_1 + u_2x_5x_1 + u_6u_2^2 \\
p_{29} &= -2u_1x_{14}x_3 + u_4x_4x_3 + u_5u_4^2 \\
p_{30} &= -2u_4^5u_1x_{16}x_4x_3 + u_4^7x_{16}x_4 - u_5u_4^6x_{16}x_3 + 2u_4^5u_1x_{14}x_5x_3 - \\
&\quad u_4^7x_{14}x_5 + u_6u_4^6x_{14}x_3 \\
p_{31} &= -2u_1x_{16}x_3 + u_4x_5x_3 + u_6u_4^2
\end{aligned}$$

1. Creating S-polynomial from the pair  $(p_0, p_{17})$ .

Forming S-pol of  $p_0$  and  $p_{17}$ :

$$p_{99} = (2u_2^3u_1 - 8u_2u_1^3)x_{10}x_1 + 4u_2^3u_1^2x_{10} + 2u_2^2u_1x_4x_1^2 - u_2^4x_4x_1 + u_5u_2^3x_1^2$$

S-pol added.

2. Creating S-polynomial from the pair  $(p_0, p_{18})$ .

Forming S-pol of  $p_0$  and  $p_{18}$ :

$$p_{100} = (2u_2^3u_1 - 8u_2u_1^3)x_{12}x_1 + 4u_2^3u_1^2x_{12} + 2u_2^2u_1x_5x_1^2 - u_2^4x_5x_1 + u_6u_2^3x_1^2$$

S-pol added.

3. Creating S-polynomial from the pair  $(p_0, p_{19})$ .

Skipping pair  $p_0$  and  $p_{19}$  because gcd of their leading monoms is zero.

4. Creating S-polynomial from the pair  $(p_0, p_{20})$ .

Skipping pair  $p_0$  and  $p_{20}$  because gcd of their leading monoms is zero.

5. Creating S-polynomial from the pair  $(p_0, p_{21})$ .

Skipping pair  $p_0$  and  $p_{21}$  because gcd of their leading monoms is zero.

6. Creating S-polynomial from the pair  $(p_0, p_{22})$ .

Skipping pair  $p_0$  and  $p_{22}$  because gcd of their leading monoms is zero.

7. Creating S-polynomial from the pair  $(p_0, p_{23})$ .

Skipping pair  $p_0$  and  $p_{23}$  because gcd of their leading monoms is zero.

8. Creating S-polynomial from the pair  $(p_0, p_{24})$ .

Skipping pair  $p_0$  and  $p_{24}$  because gcd of their leading monoms is zero.

9. Creating S-polynomial from the pair  $(p_0, p_{25})$ .

Skipping pair  $p_0$  and  $p_{25}$  because gcd of their leading monoms is zero.

10. Creating S-polynomial from the pair  $(p_0, p_{26})$ .

Forming S-pol of  $p_0$  and  $p_{26}$ :

$$p_{101} = 4u_1^2x_{10}x_1 - 2u_2^2u_1x_{10} - u_2x_4x_1^2 - u_5u_2^2x_1$$

Reduced to zero.

11. Creating S-polynomial from the pair  $(p_0, p_{27})$ .

Forming S-pol of  $p_0$  and  $p_{27}$ :

$$p_{102} = (-u_2^7 + 4u_2^5u_1^2)x_{12}x_4x_1 - 2u_2^7u_1x_{12}x_4 + u_5u_2^6x_{12}x_1^2 - 2u_2^5u_1x_{10}x_5x_1^2 + u_2^7x_{10}x_5x_1 - u_6u_2^6x_{10}x_1^2$$

S-pol added.

12. Creating S-polynomial from the pair  $(p_0, p_{28})$ .

Forming S-pol of  $p_0$  and  $p_{28}$ :

$$p_{103} = 4u_1^2x_{12}x_1 - 2u_2^2u_1x_{12} - u_2x_5x_1^2 - u_6u_2^2x_1$$

Reduced to zero.

13. Creating S-polynomial from the pair  $(p_0, p_{29})$ .

Skipping pair  $p_0$  and  $p_{29}$  because gcd of their leading monoms is zero.

14. Creating S-polynomial from the pair  $(p_0, p_{30})$ .

Skipping pair  $p_0$  and  $p_{30}$  because gcd of their leading monoms is zero.

15. Creating S-polynomial from the pair  $(p_0, p_{31})$ .

Skipping pair  $p_0$  and  $p_{31}$  because gcd of their leading monoms is zero.

16. Creating S-polynomial from the pair  $(p_1, p_{17})$ .

Skipping pair  $p_1$  and  $p_{17}$  because gcd of their leading monoms is zero.

17. Creating S-polynomial from the pair  $(p_1, p_{18})$ .

Skipping pair  $p_1$  and  $p_{18}$  because gcd of their leading monoms is zero.

18. Creating S-polynomial from the pair  $(p_1, p_{19})$ .

Forming S-pol of  $p_1$  and  $p_{19}$ :

$$p_{104} = (2u_3^3u_1 - 8u_3u_1^3)x_6x_2 + 4u_3^3u_1^2x_6 + 2u_3^2u_1x_4x_2^2 - u_3^4x_4x_2 + u_5u_3^3x_2^2$$

S-pol added.

19. Creating S-polynomial from the pair  $(p_1, p_{20})$ .

Forming S-pol of  $p_1$  and  $p_{20}$ :

$$p_{105} = (2u_3^3u_1 - 8u_3u_1^3)x_8x_2 + 4u_3^3u_1^2x_8 + 2u_3^2u_1x_5x_2^2 - u_3^4x_5x_2 + u_6u_3^3x_2^2$$

S-pol added.

20. Creating S-polynomial from the pair  $(p_1, p_{21})$ .

Skipping pair  $p_1$  and  $p_{21}$  because gcd of their leading monoms is zero.

21. Creating S-polynomial from the pair  $(p_1, p_{22})$ .

Skipping pair  $p_1$  and  $p_{22}$  because gcd of their leading monoms is zero.

22. Creating S-polynomial from the pair  $(p_1, p_{23})$ .

Forming S-pol of  $p_1$  and  $p_{23}$ :

$$p_{106} = 4u_1^2x_6x_2 - 2u_3^2u_1x_6 - u_3x_4x_2^2 - u_5u_3^2x_2$$

Reduced to zero.

23. Creating S-polynomial from the pair  $(p_1, p_{24})$ .

Forming S-pol of  $p_1$  and  $p_{24}$ :

$$p_{107} = (-u_3^7 + 4u_3^5u_1^2)x_8x_4x_2 - 2u_3^7u_1x_8x_4 + u_5u_3^6x_8x_2^2 - \\ 2u_3^5u_1x_6x_5x_2^2 + u_3^7x_6x_5x_2 - u_6u_3^6x_6x_2^2$$

S-pol added.

24. Creating S-polynomial from the pair  $(p_1, p_{25})$ .

Forming S-pol of  $p_1$  and  $p_{25}$ :

$$p_{108} = 4u_1^2x_8x_2 - 2u_3^2u_1x_8 - u_3x_5x_2^2 - u_6u_3^2x_2$$

Reduced to zero.

25. Creating S-polynomial from the pair  $(p_1, p_{26})$ .

Skipping pair  $p_1$  and  $p_{26}$  because gcd of their leading monoms is zero.

26. Creating S-polynomial from the pair  $(p_1, p_{27})$ .

Skipping pair  $p_1$  and  $p_{27}$  because gcd of their leading monoms is zero.

27. Creating S-polynomial from the pair  $(p_1, p_{28})$ .

Skipping pair  $p_1$  and  $p_{28}$  because gcd of their leading monoms is zero.

28. Creating S-polynomial from the pair  $(p_1, p_{29})$ .

Skipping pair  $p_1$  and  $p_{29}$  because gcd of their leading monoms is zero.

29. Creating S-polynomial from the pair  $(p_1, p_{30})$ .

Skipping pair  $p_1$  and  $p_{30}$  because gcd of their leading monoms is zero.

30. Creating S-polynomial from the pair  $(p_1, p_{31})$ .

Skipping pair  $p_1$  and  $p_{31}$  because gcd of their leading monoms is zero.

31. Creating S-polynomial from the pair  $(p_2, p_{17})$ .

Skipping pair  $p_2$  and  $p_{17}$  because gcd of their leading monoms is zero.

32. Creating S-polynomial from the pair  $(p_2, p_{18})$ .

Skipping pair  $p_2$  and  $p_{18}$  because gcd of their leading monoms is zero.

33. Creating S-polynomial from the pair  $(p_2, p_{19})$ .

Skipping pair  $p_2$  and  $p_{19}$  because gcd of their leading monoms is zero.

34. Creating S-polynomial from the pair  $(p_2, p_{20})$ .

Skipping pair  $p_2$  and  $p_{20}$  because gcd of their leading monoms is zero.

35. Creating S-polynomial from the pair  $(p_2, p_{21})$ .

Forming S-pol of  $p_2$  and  $p_{21}$ :

$$p_{109} = (2u_4^3u_1 - 8u_4u_1^3)x_{14}x_3 + 4u_4^3u_1^2x_{14} + 2u_4^2u_1x_4x_3^2 - u_4^4x_4x_3 + \\ u_5u_4^3x_3^2$$

S-pol added.

36. Creating S-polynomial from the pair  $(p_2, p_{22})$ .

Forming S-pol of  $p_2$  and  $p_{22}$ :

$$p_{110} = (2u_4^3u_1 - 8u_4u_1^3)x_{16}x_3 + 4u_4^3u_1^2x_{16} + 2u_4^2u_1x_5x_3^2 - u_4^4x_5x_3 + u_6u_4^3x_3^2$$

S-pol added.

37. Creating S-polynomial from the pair  $(p_2, p_{23})$ .

Skipping pair  $p_2$  and  $p_{23}$  because gcd of their leading monoms is zero.

38. Creating S-polynomial from the pair  $(p_2, p_{24})$ .

Skipping pair  $p_2$  and  $p_{24}$  because gcd of their leading monoms is zero.

39. Creating S-polynomial from the pair  $(p_2, p_{25})$ .

Skipping pair  $p_2$  and  $p_{25}$  because gcd of their leading monoms is zero.

40. Creating S-polynomial from the pair  $(p_2, p_{26})$ .

Skipping pair  $p_2$  and  $p_{26}$  because gcd of their leading monoms is zero.

41. Creating S-polynomial from the pair  $(p_2, p_{27})$ .

Skipping pair  $p_2$  and  $p_{27}$  because gcd of their leading monoms is zero.

42. Creating S-polynomial from the pair  $(p_2, p_{28})$ .

Skipping pair  $p_2$  and  $p_{28}$  because gcd of their leading monoms is zero.

43. Creating S-polynomial from the pair  $(p_2, p_{29})$ .

Forming S-pol of  $p_2$  and  $p_{29}$ :

$$p_{111} = 4u_1^2x_{14}x_3 - 2u_4^2u_1x_{14} - u_4x_4x_3^2 - u_5u_4^2x_3$$

Reduced to zero.

44. Creating S-polynomial from the pair  $(p_2, p_{30})$ .

Forming S-pol of  $p_2$  and  $p_{30}$ :

$$p_{112} = (-u_4^7 + 4u_4^5u_1^2)x_{16}x_4x_3 - 2u_4^7u_1x_{16}x_4 + u_5u_4^6x_{16}x_3^2 - 2u_4^5u_1x_{14}x_5x_3^2 + u_4^7x_{14}x_5x_3 - u_6u_4^6x_{14}x_3^2$$

S-pol added.

45. Creating S-polynomial from the pair  $(p_2, p_{31})$ .

Forming S-pol of  $p_2$  and  $p_{31}$ :

$$p_{113} = 4u_1^2x_{16}x_3 - 2u_4^2u_1x_{16} - u_4x_5x_3^2 - u_6u_4^2x_3$$

Reduced to zero.

46. Creating S-polynomial from the pair  $(p_3, p_{17})$ .

Skipping pair  $p_3$  and  $p_{17}$  because gcd of their leading monoms is zero.

47. Creating S-polynomial from the pair  $(p_3, p_{18})$ .  
Skipping pair  $p_3$  and  $p_{18}$  because gcd of their leading monoms is zero.
48. Creating S-polynomial from the pair  $(p_3, p_{19})$ .  
Skipping pair  $p_3$  and  $p_{19}$  because gcd of their leading monoms is zero.
49. Creating S-polynomial from the pair  $(p_3, p_{20})$ .  
Skipping pair  $p_3$  and  $p_{20}$  because gcd of their leading monoms is zero.
50. Creating S-polynomial from the pair  $(p_3, p_{21})$ .  
Skipping pair  $p_3$  and  $p_{21}$  because gcd of their leading monoms is zero.
51. Creating S-polynomial from the pair  $(p_3, p_{22})$ .  
Skipping pair  $p_3$  and  $p_{22}$  because gcd of their leading monoms is zero.
52. Creating S-polynomial from the pair  $(p_3, p_{23})$ .  
Skipping pair  $p_3$  and  $p_{23}$  because gcd of their leading monoms is zero.
53. Creating S-polynomial from the pair  $(p_3, p_{24})$ .  
Forming S-pol of  $p_3$  and  $p_{24}$ :

$$\begin{aligned}
p_{114} = & -u_3^7 x_8 x_4^2 + \\
& (u_5 u_3^6 + 4u_3^5 u_1^2) x_8 x_4 x_2 - 2u_5^2 u_3^5 u_1 x_8 x_2 - \\
& 2u_3^5 u_1 x_6 x_5 x_4 x_2 + u_3^7 x_6 x_5 x_4 - u_6 u_3^6 x_6 x_4 x_2
\end{aligned}$$

S-pol added.

54. Creating S-polynomial from the pair  $(p_3, p_{25})$ .  
Skipping pair  $p_3$  and  $p_{25}$  because gcd of their leading monoms is zero.
55. Creating S-polynomial from the pair  $(p_3, p_{26})$ .  
Skipping pair  $p_3$  and  $p_{26}$  because gcd of their leading monoms is zero.
56. Creating S-polynomial from the pair  $(p_3, p_{27})$ .  
Forming S-pol of  $p_3$  and  $p_{27}$ :

$$\begin{aligned}
p_{115} = & -u_2^7 x_{12} x_4^2 + \\
& (u_5 u_2^6 + 4u_2^5 u_1^2) x_{12} x_4 x_1 - 2u_5^2 u_2^5 u_1 x_{12} x_1 - \\
& 2u_2^5 u_1 x_{10} x_5 x_4 x_1 + u_2^7 x_{10} x_5 x_4 - u_6 u_2^6 x_{10} x_4 x_1
\end{aligned}$$

S-pol added.

57. Creating S-polynomial from the pair  $(p_3, p_{28})$ .  
Skipping pair  $p_3$  and  $p_{28}$  because gcd of their leading monoms is zero.
58. Creating S-polynomial from the pair  $(p_3, p_{29})$ .  
Skipping pair  $p_3$  and  $p_{29}$  because gcd of their leading monoms is zero.

59. Creating S-polynomial from the pair  $(p_3, p_{30})$ .

Forming S-pol of  $p_3$  and  $p_{30}$ :

$$\begin{aligned} p_{116} = & -u_4^7 x_{16} x_4^2 + \\ & (u_5 u_4^6 + 4u_4^5 u_1^2) x_{16} x_4 x_3 - 2u_5^2 u_4^5 u_1 x_{16} x_3 - \\ & 2u_4^5 u_1 x_{14} x_5 x_4 x_3 + u_4^7 x_{14} x_5 x_4 - u_6 u_4^6 x_{14} x_4 x_3 \end{aligned}$$

S-pol added.

60. Creating S-polynomial from the pair  $(p_3, p_{31})$ .

Skipping pair  $p_3$  and  $p_{31}$  because gcd of their leading monoms is zero.

61. Creating S-polynomial from the pair  $(p_4, p_{17})$ .

Skipping pair  $p_4$  and  $p_{17}$  because gcd of their leading monoms is zero.

62. Creating S-polynomial from the pair  $(p_4, p_{18})$ .

Skipping pair  $p_4$  and  $p_{18}$  because gcd of their leading monoms is zero.

63. Creating S-polynomial from the pair  $(p_4, p_{19})$ .

Skipping pair  $p_4$  and  $p_{19}$  because gcd of their leading monoms is zero.

64. Creating S-polynomial from the pair  $(p_4, p_{20})$ .

Skipping pair  $p_4$  and  $p_{20}$  because gcd of their leading monoms is zero.

65. Creating S-polynomial from the pair  $(p_4, p_{21})$ .

Skipping pair  $p_4$  and  $p_{21}$  because gcd of their leading monoms is zero.

66. Creating S-polynomial from the pair  $(p_4, p_{22})$ .

Skipping pair  $p_4$  and  $p_{22}$  because gcd of their leading monoms is zero.

67. Creating S-polynomial from the pair  $(p_4, p_{23})$ .

Skipping pair  $p_4$  and  $p_{23}$  because gcd of their leading monoms is zero.

68. Creating S-polynomial from the pair  $(p_4, p_{24})$ .

Skipping pair  $p_4$  and  $p_{24}$  because gcd of their leading monoms is zero.

69. Creating S-polynomial from the pair  $(p_4, p_{25})$ .

Skipping pair  $p_4$  and  $p_{25}$  because gcd of their leading monoms is zero.

70. Creating S-polynomial from the pair  $(p_4, p_{26})$ .

Skipping pair  $p_4$  and  $p_{26}$  because gcd of their leading monoms is zero.

71. Creating S-polynomial from the pair  $(p_4, p_{27})$ .

Skipping pair  $p_4$  and  $p_{27}$  because gcd of their leading monoms is zero.

72. Creating S-polynomial from the pair  $(p_4, p_{28})$ .

Skipping pair  $p_4$  and  $p_{28}$  because gcd of their leading monoms is zero.

73. Creating S-polynomial from the pair  $(p_4, p_{29})$ .

Skipping pair  $p_4$  and  $p_{29}$  because gcd of their leading monoms is zero.

74. Creating S-polynomial from the pair  $(p_4, p_{30})$ .  
 Skipping pair  $p_4$  and  $p_{30}$  because gcd of their leading monoms is zero.
75. Creating S-polynomial from the pair  $(p_4, p_{31})$ .  
 Skipping pair  $p_4$  and  $p_{31}$  because gcd of their leading monoms is zero.
76. Creating S-polynomial from the pair  $(p_5, p_{17})$ .  
 Skipping pair  $p_5$  and  $p_{17}$  because gcd of their leading monoms is zero.
77. Creating S-polynomial from the pair  $(p_5, p_{18})$ .  
 Skipping pair  $p_5$  and  $p_{18}$  because gcd of their leading monoms is zero.
78. Creating S-polynomial from the pair  $(p_5, p_{19})$ .  
 Skipping pair  $p_5$  and  $p_{19}$  because gcd of their leading monoms is zero.
79. Creating S-polynomial from the pair  $(p_5, p_{20})$ .  
 Skipping pair  $p_5$  and  $p_{20}$  because gcd of their leading monoms is zero.
80. Creating S-polynomial from the pair  $(p_5, p_{21})$ .  
 Skipping pair  $p_5$  and  $p_{21}$  because gcd of their leading monoms is zero.
81. Creating S-polynomial from the pair  $(p_5, p_{22})$ .  
 Skipping pair  $p_5$  and  $p_{22}$  because gcd of their leading monoms is zero.
82. Creating S-polynomial from the pair  $(p_5, p_{23})$ .  
 Skipping pair  $p_5$  and  $p_{23}$  because gcd of their leading monoms is zero.
83. Creating S-polynomial from the pair  $(p_5, p_{24})$ .  
 Skipping pair  $p_5$  and  $p_{24}$  because gcd of their leading monoms is zero.
84. Creating S-polynomial from the pair  $(p_5, p_{25})$ .  
 Skipping pair  $p_5$  and  $p_{25}$  because gcd of their leading monoms is zero.
85. Creating S-polynomial from the pair  $(p_5, p_{26})$ .  
 Skipping pair  $p_5$  and  $p_{26}$  because gcd of their leading monoms is zero.
86. Creating S-polynomial from the pair  $(p_5, p_{27})$ .  
 Skipping pair  $p_5$  and  $p_{27}$  because gcd of their leading monoms is zero.
87. Creating S-polynomial from the pair  $(p_5, p_{28})$ .  
 Skipping pair  $p_5$  and  $p_{28}$  because gcd of their leading monoms is zero.
88. Creating S-polynomial from the pair  $(p_5, p_{29})$ .  
 Skipping pair  $p_5$  and  $p_{29}$  because gcd of their leading monoms is zero.
89. Creating S-polynomial from the pair  $(p_5, p_{30})$ .  
 Skipping pair  $p_5$  and  $p_{30}$  because gcd of their leading monoms is zero.
90. Creating S-polynomial from the pair  $(p_5, p_{31})$ .  
 Skipping pair  $p_5$  and  $p_{31}$  because gcd of their leading monoms is zero.



91. Creating S-polynomial from the pair  $(p_6, p_{17})$ .

Skipping pair  $p_6$  and  $p_{17}$  because gcd of their leading monoms is zero.

92. Creating S-polynomial from the pair  $(p_6, p_{18})$ .

Skipping pair  $p_6$  and  $p_{18}$  because gcd of their leading monoms is zero.

93. Creating S-polynomial from the pair  $(p_6, p_{19})$ .

Forming S-pol of  $p_6$  and  $p_{19}$ :

$$p_{117} = -2u_3^3u_1x_7x_6 - 2u_3^2u_1x_7x_4x_2 + u_3^4x_7x_4 - u_5u_3^3x_7x_2 - \\ 4u_3^2u_1^2x_6^2 + 4u_3u_1^2x_6x_4x_2 + 4u_5u_3^2u_1^2x_6$$

S-pol added.

94. Creating S-polynomial from the pair  $(p_6, p_{20})$ .

Forming S-pol of  $p_6$  and  $p_{20}$ :

$$p_{118} = -2u_3^3u_1x_8x_7 - 4u_3^2u_1^2x_8x_6 + 4u_3u_1^2x_8x_4x_2 + 4u_5u_3^2u_1^2x_8 - \\ 2u_3^2u_1x_7x_5x_2 + u_3^4x_7x_5 - u_6u_3^3x_7x_2$$

S-pol added.

95. Creating S-polynomial from the pair  $(p_6, p_{21})$ .

Skipping pair  $p_6$  and  $p_{21}$  because gcd of their leading monoms is zero.

96. Creating S-polynomial from the pair  $(p_6, p_{22})$ .

Skipping pair  $p_6$  and  $p_{22}$  because gcd of their leading monoms is zero.

97. Creating S-polynomial from the pair  $(p_6, p_{23})$ .

Forming S-pol of  $p_6$  and  $p_{23}$ :

$$p_{119} = u_3x_7x_4x_2 + u_5u_3^2x_7 + 2u_3u_1x_6^2 - 2u_1x_6x_4x_2 - 2u_5u_3u_1x_6$$

S-pol added.

98. Creating S-polynomial from the pair  $(p_6, p_{24})$ .

Forming S-pol of  $p_6$  and  $p_{24}$ :

$$p_{120} = u_3^7x_8x_7x_4 - u_5u_3^6x_8x_7x_2 + 2u_3^6u_1x_8x_6x_4 - 2u_3^5u_1x_8x_4^2x_2 - \\ 2u_5u_3^6u_1x_8x_4 + 2u_3^5u_1x_7x_6x_5x_2 - u_3^7x_7x_6x_5 + u_6u_3^6x_7x_6x_2$$

S-pol added.

99. Creating S-polynomial from the pair  $(p_6, p_{25})$ .

Forming S-pol of  $p_6$  and  $p_{25}$ :

$$p_{121} = 2u_3u_1x_8x_6 - 2u_1x_8x_4x_2 - 2u_5u_3u_1x_8 + u_3x_7x_5x_2 + u_6u_3^2x_7$$

S-pol added.

100. Creating S-polynomial from the pair  $(p_6, p_{26})$ .  
 Skipping pair  $p_6$  and  $p_{26}$  because gcd of their leading monoms is zero.
101. Creating S-polynomial from the pair  $(p_6, p_{27})$ .  
 Skipping pair  $p_6$  and  $p_{27}$  because gcd of their leading monoms is zero.
102. Creating S-polynomial from the pair  $(p_6, p_{28})$ .  
 Skipping pair  $p_6$  and  $p_{28}$  because gcd of their leading monoms is zero.
103. Creating S-polynomial from the pair  $(p_6, p_{29})$ .  
 Skipping pair  $p_6$  and  $p_{29}$  because gcd of their leading monoms is zero.
104. Creating S-polynomial from the pair  $(p_6, p_{30})$ .  
 Skipping pair  $p_6$  and  $p_{30}$  because gcd of their leading monoms is zero.
105. Creating S-polynomial from the pair  $(p_6, p_{31})$ .  
 Skipping pair  $p_6$  and  $p_{31}$  because gcd of their leading monoms is zero.
106. Creating S-polynomial from the pair  $(p_7, p_{17})$ .  
 Skipping pair  $p_7$  and  $p_{17}$  because gcd of their leading monoms is zero.
107. Creating S-polynomial from the pair  $(p_7, p_{18})$ .  
 Skipping pair  $p_7$  and  $p_{18}$  because gcd of their leading monoms is zero.
108. Creating S-polynomial from the pair  $(p_7, p_{19})$ .  
 Skipping pair  $p_7$  and  $p_{19}$  because gcd of their leading monoms is zero.
109. Creating S-polynomial from the pair  $(p_7, p_{20})$ .  
 Skipping pair  $p_7$  and  $p_{20}$  because gcd of their leading monoms is zero.
110. Creating S-polynomial from the pair  $(p_7, p_{21})$ .  
 Skipping pair  $p_7$  and  $p_{21}$  because gcd of their leading monoms is zero.
111. Creating S-polynomial from the pair  $(p_7, p_{22})$ .  
 Skipping pair  $p_7$  and  $p_{22}$  because gcd of their leading monoms is zero.
112. Creating S-polynomial from the pair  $(p_7, p_{23})$ .  
 Skipping pair  $p_7$  and  $p_{23}$  because gcd of their leading monoms is zero.
113. Creating S-polynomial from the pair  $(p_7, p_{24})$ .  
 Skipping pair  $p_7$  and  $p_{24}$  because gcd of their leading monoms is zero.
114. Creating S-polynomial from the pair  $(p_7, p_{25})$ .  
 Skipping pair  $p_7$  and  $p_{25}$  because gcd of their leading monoms is zero.
115. Creating S-polynomial from the pair  $(p_7, p_{26})$ .  
 Skipping pair  $p_7$  and  $p_{26}$  because gcd of their leading monoms is zero.
116. Creating S-polynomial from the pair  $(p_7, p_{27})$ .  
 Skipping pair  $p_7$  and  $p_{27}$  because gcd of their leading monoms is zero.

117. Creating S-polynomial from the pair  $(p_7, p_{28})$ .  
 Skipping pair  $p_7$  and  $p_{28}$  because gcd of their leading monoms is zero.
118. Creating S-polynomial from the pair  $(p_7, p_{29})$ .  
 Skipping pair  $p_7$  and  $p_{29}$  because gcd of their leading monoms is zero.
119. Creating S-polynomial from the pair  $(p_7, p_{30})$ .  
 Skipping pair  $p_7$  and  $p_{30}$  because gcd of their leading monoms is zero.
120. Creating S-polynomial from the pair  $(p_7, p_{31})$ .  
 Skipping pair  $p_7$  and  $p_{31}$  because gcd of their leading monoms is zero.
121. Creating S-polynomial from the pair  $(p_8, p_{17})$ .  
 Skipping pair  $p_8$  and  $p_{17}$  because gcd of their leading monoms is zero.
122. Creating S-polynomial from the pair  $(p_8, p_{18})$ .  
 Skipping pair  $p_8$  and  $p_{18}$  because gcd of their leading monoms is zero.
123. Creating S-polynomial from the pair  $(p_8, p_{19})$ .  
 Forming S-pol of  $p_8$  and  $p_{19}$ :
- $$p_{122} = -2u_3^3u_1x_9x_6 - 2u_3^2u_1x_9x_4x_2 + u_3^4x_9x_4 - u_5u_3^3x_9x_2 -$$
- $$4u_3^2u_1^2x_8x_6 + 4u_3u_1^2x_6x_5x_2 + 4u_6u_3^2u_1^2x_6$$
- S-pol added.
124. Creating S-polynomial from the pair  $(p_8, p_{20})$ .  
 Forming S-pol of  $p_8$  and  $p_{20}$ :
- $$p_{123} = -2u_3^3u_1x_9x_8 - 2u_3^2u_1x_9x_5x_2 + u_3^4x_9x_5 - u_6u_3^3x_9x_2 -$$
- $$4u_3^2u_1^2x_8^2 + 4u_3u_1^2x_8x_5x_2 + 4u_6u_3^2u_1^2x_8$$
- S-pol added.
125. Creating S-polynomial from the pair  $(p_8, p_{21})$ .  
 Skipping pair  $p_8$  and  $p_{21}$  because gcd of their leading monoms is zero.
126. Creating S-polynomial from the pair  $(p_8, p_{22})$ .  
 Skipping pair  $p_8$  and  $p_{22}$  because gcd of their leading monoms is zero.
127. Creating S-polynomial from the pair  $(p_8, p_{23})$ .  
 Forming S-pol of  $p_8$  and  $p_{23}$ :
- $$p_{124} = u_3x_9x_4x_2 + u_5u_3^2x_9 + 2u_3u_1x_8x_6 - 2u_1x_6x_5x_2 - 2u_6u_3u_1x_6$$
- S-pol added.

128. Creating S-polynomial from the pair  $(p_8, p_{24})$ .

Forming S-pol of  $p_8$  and  $p_{24}$ :

$$\begin{aligned} p_{125} = & u_3^7 x_9 x_8 x_4 - u_5 u_3^6 x_9 x_8 x_2 + 2u_3^5 u_1 x_9 x_6 x_5 x_2 - u_3^7 x_9 x_6 x_5 + \\ & u_6 u_3^6 x_9 x_6 x_2 + 2u_3^6 u_1 x_8^2 x_4 - 2u_3^5 u_1 x_8 x_5 x_4 x_2 - \\ & 2u_6 u_3^6 u_1 x_8 x_4 \end{aligned}$$

S-pol added.

129. Creating S-polynomial from the pair  $(p_8, p_{25})$ .

Forming S-pol of  $p_8$  and  $p_{25}$ :

$$p_{126} = u_3 x_9 x_5 x_2 + u_6 u_3^2 x_9 + 2u_3 u_1 x_8^2 - 2u_1 x_8 x_5 x_2 - 2u_6 u_3 u_1 x_8$$

S-pol added.

130. Creating S-polynomial from the pair  $(p_8, p_{26})$ .

Skipping pair  $p_8$  and  $p_{26}$  because gcd of their leading monoms is zero.

131. Creating S-polynomial from the pair  $(p_8, p_{27})$ .

Skipping pair  $p_8$  and  $p_{27}$  because gcd of their leading monoms is zero.

132. Creating S-polynomial from the pair  $(p_8, p_{28})$ .

Skipping pair  $p_8$  and  $p_{28}$  because gcd of their leading monoms is zero.

133. Creating S-polynomial from the pair  $(p_8, p_{29})$ .

Skipping pair  $p_8$  and  $p_{29}$  because gcd of their leading monoms is zero.

134. Creating S-polynomial from the pair  $(p_8, p_{30})$ .

Skipping pair  $p_8$  and  $p_{30}$  because gcd of their leading monoms is zero.

135. Creating S-polynomial from the pair  $(p_8, p_{31})$ .

Skipping pair  $p_8$  and  $p_{31}$  because gcd of their leading monoms is zero.

136. Creating S-polynomial from the pair  $(p_9, p_{17})$ .

Skipping pair  $p_9$  and  $p_{17}$  because gcd of their leading monoms is zero.

137. Creating S-polynomial from the pair  $(p_9, p_{18})$ .

Skipping pair  $p_9$  and  $p_{18}$  because gcd of their leading monoms is zero.

138. Creating S-polynomial from the pair  $(p_9, p_{19})$ .

Skipping pair  $p_9$  and  $p_{19}$  because gcd of their leading monoms is zero.

139. Creating S-polynomial from the pair  $(p_9, p_{20})$ .

Skipping pair  $p_9$  and  $p_{20}$  because gcd of their leading monoms is zero.

140. Creating S-polynomial from the pair  $(p_9, p_{21})$ .

Skipping pair  $p_9$  and  $p_{21}$  because gcd of their leading monoms is zero.

141. Creating S-polynomial from the pair  $(p_9, p_{22})$ .  
 Skipping pair  $p_9$  and  $p_{22}$  because gcd of their leading monoms is zero.
142. Creating S-polynomial from the pair  $(p_9, p_{23})$ .  
 Skipping pair  $p_9$  and  $p_{23}$  because gcd of their leading monoms is zero.
143. Creating S-polynomial from the pair  $(p_9, p_{24})$ .  
 Skipping pair  $p_9$  and  $p_{24}$  because gcd of their leading monoms is zero.
144. Creating S-polynomial from the pair  $(p_9, p_{25})$ .  
 Skipping pair  $p_9$  and  $p_{25}$  because gcd of their leading monoms is zero.
145. Creating S-polynomial from the pair  $(p_9, p_{26})$ .  
 Skipping pair  $p_9$  and  $p_{26}$  because gcd of their leading monoms is zero.
146. Creating S-polynomial from the pair  $(p_9, p_{27})$ .  
 Skipping pair  $p_9$  and  $p_{27}$  because gcd of their leading monoms is zero.
147. Creating S-polynomial from the pair  $(p_9, p_{28})$ .  
 Skipping pair  $p_9$  and  $p_{28}$  because gcd of their leading monoms is zero.
148. Creating S-polynomial from the pair  $(p_9, p_{29})$ .  
 Skipping pair  $p_9$  and  $p_{29}$  because gcd of their leading monoms is zero.
149. Creating S-polynomial from the pair  $(p_9, p_{30})$ .  
 Skipping pair  $p_9$  and  $p_{30}$  because gcd of their leading monoms is zero.
150. Creating S-polynomial from the pair  $(p_9, p_{31})$ .  
 Skipping pair  $p_9$  and  $p_{31}$  because gcd of their leading monoms is zero.
151. Creating S-polynomial from the pair  $(p_{10}, p_{17})$ .  
 Forming S-pol of  $p_{10}$  and  $p_{17}$ :
- $$p_{127} = -2u_2^3u_1x_{11}x_{10} - 2u_2^2u_1x_{11}x_4x_1 + u_2^4x_{11}x_4 - u_5u_2^3x_{11}x_1 -$$
- $$4u_2^2u_1^2x_{10}^2 + 4u_2u_1^2x_{10}x_4x_1 + 4u_5u_2^2u_1^2x_{10}$$
- S-pol added.
152. Creating S-polynomial from the pair  $(p_{10}, p_{18})$ .  
 Forming S-pol of  $p_{10}$  and  $p_{18}$ :
- $$p_{128} = -2u_2^3u_1x_{12}x_{11} - 4u_2^2u_1^2x_{12}x_{10} + 4u_2u_1^2x_{12}x_4x_1 +$$
- $$4u_5u_2^2u_1^2x_{12} - 2u_2^2u_1x_{11}x_5x_1 + u_2^4x_{11}x_5 - u_6u_2^3x_{11}x_1$$
- S-pol added.
153. Creating S-polynomial from the pair  $(p_{10}, p_{19})$ .  
 Skipping pair  $p_{10}$  and  $p_{19}$  because gcd of their leading monoms is zero.

154. Creating S-polynomial from the pair  $(p_{10}, p_{20})$ .  
 Skipping pair  $p_{10}$  and  $p_{20}$  because gcd of their leading monoms is zero.
155. Creating S-polynomial from the pair  $(p_{10}, p_{21})$ .  
 Skipping pair  $p_{10}$  and  $p_{21}$  because gcd of their leading monoms is zero.
156. Creating S-polynomial from the pair  $(p_{10}, p_{22})$ .  
 Skipping pair  $p_{10}$  and  $p_{22}$  because gcd of their leading monoms is zero.
157. Creating S-polynomial from the pair  $(p_{10}, p_{23})$ .  
 Skipping pair  $p_{10}$  and  $p_{23}$  because gcd of their leading monoms is zero.
158. Creating S-polynomial from the pair  $(p_{10}, p_{24})$ .  
 Skipping pair  $p_{10}$  and  $p_{24}$  because gcd of their leading monoms is zero.
159. Creating S-polynomial from the pair  $(p_{10}, p_{25})$ .  
 Skipping pair  $p_{10}$  and  $p_{25}$  because gcd of their leading monoms is zero.
160. Creating S-polynomial from the pair  $(p_{10}, p_{26})$ .  
 Forming S-pol of  $p_{10}$  and  $p_{26}$ :  

$$p_{129} = u_2 x_{11} x_4 x_1 + u_5 u_2^2 x_{11} + 2u_2 u_1 x_{10}^2 - 2u_1 x_{10} x_4 x_1 - 2u_5 u_2 u_1 x_{10}$$
  
 S-pol added.
161. Creating S-polynomial from the pair  $(p_{10}, p_{27})$ .  
 Forming S-pol of  $p_{10}$  and  $p_{27}$ :  

$$\begin{aligned} p_{130} = & u_2^7 x_{12} x_{11} x_4 - u_5 u_2^6 x_{12} x_{11} x_1 + 2u_2^6 u_1 x_{12} x_{10} x_4 - \\ & 2u_2^5 u_1 x_{12} x_4^2 x_1 - 2u_5 u_2^6 u_1 x_{12} x_4 + 2u_2^5 u_1 x_{11} x_{10} x_5 x_1 - \\ & u_2^7 x_{11} x_{10} x_5 + u_6 u_2^6 x_{11} x_{10} x_1 \end{aligned}$$
  
 S-pol added.
162. Creating S-polynomial from the pair  $(p_{10}, p_{28})$ .  
 Forming S-pol of  $p_{10}$  and  $p_{28}$ :  

$$p_{131} = 2u_2 u_1 x_{12} x_{10} - 2u_1 x_{12} x_4 x_1 - 2u_5 u_2 u_1 x_{12} + u_2 x_{11} x_5 x_1 + u_6 u_2^2 x_{11}$$
  
 S-pol added.
163. Creating S-polynomial from the pair  $(p_{10}, p_{29})$ .  
 Skipping pair  $p_{10}$  and  $p_{29}$  because gcd of their leading monoms is zero.
164. Creating S-polynomial from the pair  $(p_{10}, p_{30})$ .  
 Skipping pair  $p_{10}$  and  $p_{30}$  because gcd of their leading monoms is zero.
165. Creating S-polynomial from the pair  $(p_{10}, p_{31})$ .  
 Skipping pair  $p_{10}$  and  $p_{31}$  because gcd of their leading monoms is zero.

166. Creating S-polynomial from the pair  $(p_{11}, p_{17})$ .  
 Skipping pair  $p_{11}$  and  $p_{17}$  because gcd of their leading monoms is zero.
167. Creating S-polynomial from the pair  $(p_{11}, p_{18})$ .  
 Skipping pair  $p_{11}$  and  $p_{18}$  because gcd of their leading monoms is zero.
168. Creating S-polynomial from the pair  $(p_{11}, p_{19})$ .  
 Skipping pair  $p_{11}$  and  $p_{19}$  because gcd of their leading monoms is zero.
169. Creating S-polynomial from the pair  $(p_{11}, p_{20})$ .  
 Skipping pair  $p_{11}$  and  $p_{20}$  because gcd of their leading monoms is zero.
170. Creating S-polynomial from the pair  $(p_{11}, p_{21})$ .  
 Skipping pair  $p_{11}$  and  $p_{21}$  because gcd of their leading monoms is zero.
171. Creating S-polynomial from the pair  $(p_{11}, p_{22})$ .  
 Skipping pair  $p_{11}$  and  $p_{22}$  because gcd of their leading monoms is zero.
172. Creating S-polynomial from the pair  $(p_{11}, p_{23})$ .  
 Skipping pair  $p_{11}$  and  $p_{23}$  because gcd of their leading monoms is zero.
173. Creating S-polynomial from the pair  $(p_{11}, p_{24})$ .  
 Skipping pair  $p_{11}$  and  $p_{24}$  because gcd of their leading monoms is zero.
174. Creating S-polynomial from the pair  $(p_{11}, p_{25})$ .  
 Skipping pair  $p_{11}$  and  $p_{25}$  because gcd of their leading monoms is zero.
175. Creating S-polynomial from the pair  $(p_{11}, p_{26})$ .  
 Skipping pair  $p_{11}$  and  $p_{26}$  because gcd of their leading monoms is zero.
176. Creating S-polynomial from the pair  $(p_{11}, p_{27})$ .  
 Skipping pair  $p_{11}$  and  $p_{27}$  because gcd of their leading monoms is zero.
177. Creating S-polynomial from the pair  $(p_{11}, p_{28})$ .  
 Skipping pair  $p_{11}$  and  $p_{28}$  because gcd of their leading monoms is zero.
178. Creating S-polynomial from the pair  $(p_{11}, p_{29})$ .  
 Skipping pair  $p_{11}$  and  $p_{29}$  because gcd of their leading monoms is zero.
179. Creating S-polynomial from the pair  $(p_{11}, p_{30})$ .  
 Skipping pair  $p_{11}$  and  $p_{30}$  because gcd of their leading monoms is zero.
180. Creating S-polynomial from the pair  $(p_{11}, p_{31})$ .  
 Skipping pair  $p_{11}$  and  $p_{31}$  because gcd of their leading monoms is zero.
181. Creating S-polynomial from the pair  $(p_{12}, p_{17})$ .  
 Forming S-pol of  $p_{12}$  and  $p_{17}$ :

$$p_{132} = -2u_2^3u_1x_{13}x_{10} - 2u_2^2u_1x_{13}x_4x_1 + u_2^4x_{13}x_4 - u_5u_2^3x_{13}x_1 - \\ 4u_2^2u_1^2x_{12}x_{10} + 4u_2u_1^2x_{10}x_5x_1 + 4u_6u_2^2u_1^2x_{10}$$

S-pol added.

182. Creating S-polynomial from the pair  $(p_{12}, p_{18})$ .

Forming S-pol of  $p_{12}$  and  $p_{18}$ :

$$p_{133} = -2u_2^3u_1x_{13}x_{12} - 2u_2^2u_1x_{13}x_5x_1 + u_2^4x_{13}x_5 - u_6u_2^3x_{13}x_1 - \\ 4u_2^2u_1^2x_{12}^2 + 4u_2u_1^2x_{12}x_5x_1 + 4u_6u_2^2u_1^2x_{12}$$

S-pol added.

183. Creating S-polynomial from the pair  $(p_{12}, p_{19})$ .

Skipping pair  $p_{12}$  and  $p_{19}$  because gcd of their leading monoms is zero.

184. Creating S-polynomial from the pair  $(p_{12}, p_{20})$ .

Skipping pair  $p_{12}$  and  $p_{20}$  because gcd of their leading monoms is zero.

185. Creating S-polynomial from the pair  $(p_{12}, p_{21})$ .

Skipping pair  $p_{12}$  and  $p_{21}$  because gcd of their leading monoms is zero.

186. Creating S-polynomial from the pair  $(p_{12}, p_{22})$ .

Skipping pair  $p_{12}$  and  $p_{22}$  because gcd of their leading monoms is zero.

187. Creating S-polynomial from the pair  $(p_{12}, p_{23})$ .

Skipping pair  $p_{12}$  and  $p_{23}$  because gcd of their leading monoms is zero.

188. Creating S-polynomial from the pair  $(p_{12}, p_{24})$ .

Skipping pair  $p_{12}$  and  $p_{24}$  because gcd of their leading monoms is zero.

189. Creating S-polynomial from the pair  $(p_{12}, p_{25})$ .

Skipping pair  $p_{12}$  and  $p_{25}$  because gcd of their leading monoms is zero.

190. Creating S-polynomial from the pair  $(p_{12}, p_{26})$ .

Forming S-pol of  $p_{12}$  and  $p_{26}$ :

$$p_{134} = u_2x_{13}x_4x_1 + u_5u_2^2x_{13} + 2u_2u_1x_{12}x_{10} - 2u_1x_{10}x_5x_1 - 2u_6u_2u_1x_{10}$$

S-pol added.

191. Creating S-polynomial from the pair  $(p_{12}, p_{27})$ .

Forming S-pol of  $p_{12}$  and  $p_{27}$ :

$$p_{135} = u_2^7x_{13}x_{12}x_4 - u_5u_2^6x_{13}x_{12}x_1 + 2u_2^5u_1x_{13}x_{10}x_5x_1 - \\ u_2^7x_{13}x_{10}x_5 + u_6u_2^6x_{13}x_{10}x_1 + 2u_2^6u_1x_{12}^2x_4 - \\ 2u_2^5u_1x_{12}x_5x_4x_1 - 2u_6u_2^6u_1x_{12}x_4$$

S-pol added.

192. Creating S-polynomial from the pair  $(p_{12}, p_{28})$ .

Forming S-pol of  $p_{12}$  and  $p_{28}$ :

$$p_{136} = u_2x_{13}x_5x_1 + u_6u_2^2x_{13} + 2u_2u_1x_{12}^2 - 2u_1x_{12}x_5x_1 - 2u_6u_2u_1x_{12}$$

S-pol added.



193. Creating S-polynomial from the pair  $(p_{12}, p_{29})$ .  
 Skipping pair  $p_{12}$  and  $p_{29}$  because gcd of their leading monoms is zero.
194. Creating S-polynomial from the pair  $(p_{12}, p_{30})$ .  
 Skipping pair  $p_{12}$  and  $p_{30}$  because gcd of their leading monoms is zero.
195. Creating S-polynomial from the pair  $(p_{12}, p_{31})$ .  
 Skipping pair  $p_{12}$  and  $p_{31}$  because gcd of their leading monoms is zero.
196. Creating S-polynomial from the pair  $(p_{13}, p_{17})$ .  
 Skipping pair  $p_{13}$  and  $p_{17}$  because gcd of their leading monoms is zero.
197. Creating S-polynomial from the pair  $(p_{13}, p_{18})$ .  
 Skipping pair  $p_{13}$  and  $p_{18}$  because gcd of their leading monoms is zero.
198. Creating S-polynomial from the pair  $(p_{13}, p_{19})$ .  
 Skipping pair  $p_{13}$  and  $p_{19}$  because gcd of their leading monoms is zero.
199. Creating S-polynomial from the pair  $(p_{13}, p_{20})$ .  
 Skipping pair  $p_{13}$  and  $p_{20}$  because gcd of their leading monoms is zero.
200. Creating S-polynomial from the pair  $(p_{13}, p_{21})$ .  
 Skipping pair  $p_{13}$  and  $p_{21}$  because gcd of their leading monoms is zero.
201. Creating S-polynomial from the pair  $(p_{13}, p_{22})$ .  
 Skipping pair  $p_{13}$  and  $p_{22}$  because gcd of their leading monoms is zero.
202. Creating S-polynomial from the pair  $(p_{13}, p_{23})$ .  
 Skipping pair  $p_{13}$  and  $p_{23}$  because gcd of their leading monoms is zero.
203. Creating S-polynomial from the pair  $(p_{13}, p_{24})$ .  
 Skipping pair  $p_{13}$  and  $p_{24}$  because gcd of their leading monoms is zero.
204. Creating S-polynomial from the pair  $(p_{13}, p_{25})$ .  
 Skipping pair  $p_{13}$  and  $p_{25}$  because gcd of their leading monoms is zero.
205. Creating S-polynomial from the pair  $(p_{13}, p_{26})$ .  
 Skipping pair  $p_{13}$  and  $p_{26}$  because gcd of their leading monoms is zero.
206. Creating S-polynomial from the pair  $(p_{13}, p_{27})$ .  
 Skipping pair  $p_{13}$  and  $p_{27}$  because gcd of their leading monoms is zero.
207. Creating S-polynomial from the pair  $(p_{13}, p_{28})$ .  
 Skipping pair  $p_{13}$  and  $p_{28}$  because gcd of their leading monoms is zero.
208. Creating S-polynomial from the pair  $(p_{13}, p_{29})$ .  
 Skipping pair  $p_{13}$  and  $p_{29}$  because gcd of their leading monoms is zero.
209. Creating S-polynomial from the pair  $(p_{13}, p_{30})$ .  
 Skipping pair  $p_{13}$  and  $p_{30}$  because gcd of their leading monoms is zero.

210. Creating S-polynomial from the pair  $(p_{13}, p_{31})$ .  
 Skipping pair  $p_{13}$  and  $p_{31}$  because gcd of their leading monoms is zero.
211. Creating S-polynomial from the pair  $(p_{14}, p_{17})$ .  
 Skipping pair  $p_{14}$  and  $p_{17}$  because gcd of their leading monoms is zero.
212. Creating S-polynomial from the pair  $(p_{14}, p_{18})$ .  
 Skipping pair  $p_{14}$  and  $p_{18}$  because gcd of their leading monoms is zero.
213. Creating S-polynomial from the pair  $(p_{14}, p_{19})$ .  
 Skipping pair  $p_{14}$  and  $p_{19}$  because gcd of their leading monoms is zero.
214. Creating S-polynomial from the pair  $(p_{14}, p_{20})$ .  
 Skipping pair  $p_{14}$  and  $p_{20}$  because gcd of their leading monoms is zero.
215. Creating S-polynomial from the pair  $(p_{14}, p_{21})$ .  
 Forming S-pol of  $p_{14}$  and  $p_{21}$ :
- $$p_{137} = -2u_4^3u_1x_{15}x_{14} - 2u_4^2u_1x_{15}x_4x_3 + u_4^4x_{15}x_4 - u_5u_4^3x_{15}x_3 -$$
- $$4u_4^2u_1^2x_{14}^2 + 4u_4u_1^2x_{14}x_4x_3 + 4u_5u_4^2u_1^2x_{14}$$
- S-pol added.
216. Creating S-polynomial from the pair  $(p_{14}, p_{22})$ .  
 Forming S-pol of  $p_{14}$  and  $p_{22}$ :
- $$p_{138} = -2u_4^3u_1x_{16}x_{15} - 4u_4^2u_1^2x_{16}x_{14} + 4u_4u_1^2x_{16}x_4x_3 +$$
- $$4u_5u_4^2u_1^2x_{16} - 2u_4^2u_1x_{15}x_5x_3 + u_4^4x_{15}x_5 - u_6u_4^3x_{15}x_3$$
- S-pol added.
217. Creating S-polynomial from the pair  $(p_{14}, p_{23})$ .  
 Skipping pair  $p_{14}$  and  $p_{23}$  because gcd of their leading monoms is zero.
218. Creating S-polynomial from the pair  $(p_{14}, p_{24})$ .  
 Skipping pair  $p_{14}$  and  $p_{24}$  because gcd of their leading monoms is zero.
219. Creating S-polynomial from the pair  $(p_{14}, p_{25})$ .  
 Skipping pair  $p_{14}$  and  $p_{25}$  because gcd of their leading monoms is zero.
220. Creating S-polynomial from the pair  $(p_{14}, p_{26})$ .  
 Skipping pair  $p_{14}$  and  $p_{26}$  because gcd of their leading monoms is zero.
221. Creating S-polynomial from the pair  $(p_{14}, p_{27})$ .  
 Skipping pair  $p_{14}$  and  $p_{27}$  because gcd of their leading monoms is zero.
222. Creating S-polynomial from the pair  $(p_{14}, p_{28})$ .  
 Skipping pair  $p_{14}$  and  $p_{28}$  because gcd of their leading monoms is zero.

223. Creating S-polynomial from the pair  $(p_{14}, p_{29})$ .

Forming S-pol of  $p_{14}$  and  $p_{29}$ :

$$p_{139} = u_4 x_{15} x_4 x_3 + u_5 u_4^2 x_{15} + 2u_4 u_1 x_{14}^2 - 2u_1 x_{14} x_4 x_3 - 2u_5 u_4 u_1 x_{14}$$

S-pol added.

224. Creating S-polynomial from the pair  $(p_{14}, p_{30})$ .

Forming S-pol of  $p_{14}$  and  $p_{30}$ :

$$\begin{aligned} p_{140} = & u_4^7 x_{16} x_{15} x_4 - u_5 u_4^6 x_{16} x_{15} x_3 + 2u_4^6 u_1 x_{16} x_{14} x_4 - \\ & 2u_4^5 u_1 x_{16} x_4^2 x_3 - 2u_5 u_4^6 u_1 x_{16} x_4 + 2u_4^5 u_1 x_{15} x_{14} x_5 x_3 - \\ & u_4^7 x_{15} x_{14} x_5 + u_6 u_4^6 x_{15} x_{14} x_3 \end{aligned}$$

S-pol added.

225. Creating S-polynomial from the pair  $(p_{14}, p_{31})$ .

Forming S-pol of  $p_{14}$  and  $p_{31}$ :

$$p_{141} = 2u_4 u_1 x_{16} x_{14} - 2u_1 x_{16} x_4 x_3 - 2u_5 u_4 u_1 x_{16} + u_4 x_{15} x_5 x_3 + u_6 u_4^2 x_{15}$$

S-pol added.

226. Creating S-polynomial from the pair  $(p_{15}, p_{17})$ .

Skipping pair  $p_{15}$  and  $p_{17}$  because gcd of their leading monoms is zero.

227. Creating S-polynomial from the pair  $(p_{15}, p_{18})$ .

Skipping pair  $p_{15}$  and  $p_{18}$  because gcd of their leading monoms is zero.

228. Creating S-polynomial from the pair  $(p_{15}, p_{19})$ .

Skipping pair  $p_{15}$  and  $p_{19}$  because gcd of their leading monoms is zero.

229. Creating S-polynomial from the pair  $(p_{15}, p_{20})$ .

Skipping pair  $p_{15}$  and  $p_{20}$  because gcd of their leading monoms is zero.

230. Creating S-polynomial from the pair  $(p_{15}, p_{21})$ .

Skipping pair  $p_{15}$  and  $p_{21}$  because gcd of their leading monoms is zero.

231. Creating S-polynomial from the pair  $(p_{15}, p_{22})$ .

Skipping pair  $p_{15}$  and  $p_{22}$  because gcd of their leading monoms is zero.

232. Creating S-polynomial from the pair  $(p_{15}, p_{23})$ .

Skipping pair  $p_{15}$  and  $p_{23}$  because gcd of their leading monoms is zero.

233. Creating S-polynomial from the pair  $(p_{15}, p_{24})$ .

Skipping pair  $p_{15}$  and  $p_{24}$  because gcd of their leading monoms is zero.

234. Creating S-polynomial from the pair  $(p_{15}, p_{25})$ .

Skipping pair  $p_{15}$  and  $p_{25}$  because gcd of their leading monoms is zero.

235. Creating S-polynomial from the pair  $(p_{15}, p_{26})$ .  
 Skipping pair  $p_{15}$  and  $p_{26}$  because gcd of their leading monoms is zero.
236. Creating S-polynomial from the pair  $(p_{15}, p_{27})$ .  
 Skipping pair  $p_{15}$  and  $p_{27}$  because gcd of their leading monoms is zero.
237. Creating S-polynomial from the pair  $(p_{15}, p_{28})$ .  
 Skipping pair  $p_{15}$  and  $p_{28}$  because gcd of their leading monoms is zero.
238. Creating S-polynomial from the pair  $(p_{15}, p_{29})$ .  
 Skipping pair  $p_{15}$  and  $p_{29}$  because gcd of their leading monoms is zero.
239. Creating S-polynomial from the pair  $(p_{15}, p_{30})$ .  
 Skipping pair  $p_{15}$  and  $p_{30}$  because gcd of their leading monoms is zero.
240. Creating S-polynomial from the pair  $(p_{15}, p_{31})$ .  
 Skipping pair  $p_{15}$  and  $p_{31}$  because gcd of their leading monoms is zero.
241. Creating S-polynomial from the pair  $(p_{16}, p_{17})$ .  
 Skipping pair  $p_{16}$  and  $p_{17}$  because gcd of their leading monoms is zero.
242. Creating S-polynomial from the pair  $(p_{16}, p_{18})$ .  
 Skipping pair  $p_{16}$  and  $p_{18}$  because gcd of their leading monoms is zero.
243. Creating S-polynomial from the pair  $(p_{16}, p_{19})$ .  
 Skipping pair  $p_{16}$  and  $p_{19}$  because gcd of their leading monoms is zero.
244. Creating S-polynomial from the pair  $(p_{16}, p_{20})$ .  
 Skipping pair  $p_{16}$  and  $p_{20}$  because gcd of their leading monoms is zero.
245. Creating S-polynomial from the pair  $(p_{16}, p_{21})$ .  
 Forming S-pol of  $p_{16}$  and  $p_{21}$ :
- $$p_{142} = -2u_4^3u_1x_{17}x_{14} - 2u_4^2u_1x_{17}x_4x_3 + u_4^4x_{17}x_4 - u_5u_4^3x_{17}x_3 -$$
- $$4u_4^2u_1^2x_{16}x_{14} + 4u_4u_1^2x_{14}x_5x_3 + 4u_6u_4^2u_1^2x_{14}$$
- S-pol added.
246. Creating S-polynomial from the pair  $(p_{16}, p_{22})$ .  
 Forming S-pol of  $p_{16}$  and  $p_{22}$ :
- $$p_{143} = -2u_4^3u_1x_{17}x_{16} - 2u_4^2u_1x_{17}x_5x_3 + u_4^4x_{17}x_5 - u_6u_4^3x_{17}x_3 -$$
- $$4u_4^2u_1^2x_{16}^2 + 4u_4u_1^2x_{16}x_5x_3 + 4u_6u_4^2u_1^2x_{16}$$
- S-pol added.
247. Creating S-polynomial from the pair  $(p_{16}, p_{23})$ .  
 Skipping pair  $p_{16}$  and  $p_{23}$  because gcd of their leading monoms is zero.

248. Creating S-polynomial from the pair  $(p_{16}, p_{24})$ .  
 Skipping pair  $p_{16}$  and  $p_{24}$  because gcd of their leading monoms is zero.
249. Creating S-polynomial from the pair  $(p_{16}, p_{25})$ .  
 Skipping pair  $p_{16}$  and  $p_{25}$  because gcd of their leading monoms is zero.
250. Creating S-polynomial from the pair  $(p_{16}, p_{26})$ .  
 Skipping pair  $p_{16}$  and  $p_{26}$  because gcd of their leading monoms is zero.
251. Creating S-polynomial from the pair  $(p_{16}, p_{27})$ .  
 Skipping pair  $p_{16}$  and  $p_{27}$  because gcd of their leading monoms is zero.
252. Creating S-polynomial from the pair  $(p_{16}, p_{28})$ .  
 Skipping pair  $p_{16}$  and  $p_{28}$  because gcd of their leading monoms is zero.
253. Creating S-polynomial from the pair  $(p_{16}, p_{29})$ .  
 Forming S-pol of  $p_{16}$  and  $p_{29}$ :  

$$p_{144} = u_4 x_{17} x_4 x_3 + u_5 u_4^2 x_{17} + 2u_4 u_1 x_{16} x_{14} - 2u_1 x_{14} x_5 x_3 - 2u_6 u_4 u_1 x_{14}$$
 S-pol added.
254. Creating S-polynomial from the pair  $(p_{16}, p_{30})$ .  
 Forming S-pol of  $p_{16}$  and  $p_{30}$ :  

$$\begin{aligned} p_{145} = & u_4^7 x_{17} x_{16} x_4 - u_5 u_4^6 x_{17} x_{16} x_3 + 2u_4^5 u_1 x_{17} x_{14} x_5 x_3 - \\ & u_4^7 x_{17} x_{14} x_5 + u_6 u_4^6 x_{17} x_{14} x_3 + 2u_4^6 u_1 x_{16}^2 x_4 - \\ & 2u_4^5 u_1 x_{16} x_5 x_4 x_3 - 2u_6 u_4^6 u_1 x_{16} x_4 \end{aligned}$$
 S-pol added.
255. Creating S-polynomial from the pair  $(p_{16}, p_{31})$ .  
 Forming S-pol of  $p_{16}$  and  $p_{31}$ :  

$$p_{146} = u_4 x_{17} x_5 x_3 + u_6 u_4^2 x_{17} + 2u_4 u_1 x_{16}^2 - 2u_1 x_{16} x_5 x_3 - 2u_6 u_4 u_1 x_{16}$$
 S-pol added.
256. Creating S-polynomial from the pair  $(p_{17}, p_{18})$ .  
 Forming S-pol of  $p_{17}$  and  $p_{18}$ :  

$$\begin{aligned} p_{147} = & -8u_2^3 u_1^3 x_{12} x_4 x_1 + 4u_2^5 u_1^2 x_{12} x_4 - 4u_5 u_2^4 u_1^2 x_{12} x_1 + \\ & 8u_2^3 u_1^3 x_{10} x_5 x_1 - 4u_2^5 u_1^2 x_{10} x_5 + 4u_6 u_2^4 u_1^2 x_{10} x_1 \end{aligned}$$
 S-pol added.
257. Creating S-polynomial from the pair  $(p_{17}, p_{19})$ .  
 Skipping pair  $p_{17}$  and  $p_{19}$  because gcd of their leading monoms is zero.
258. Creating S-polynomial from the pair  $(p_{17}, p_{20})$ .  
 Skipping pair  $p_{17}$  and  $p_{20}$  because gcd of their leading monoms is zero.

259. Creating S-polynomial from the pair  $(p_{17}, p_{21})$ .  
 Skipping pair  $p_{17}$  and  $p_{21}$  because gcd of their leading monoms is zero.
260. Creating S-polynomial from the pair  $(p_{17}, p_{22})$ .  
 Skipping pair  $p_{17}$  and  $p_{22}$  because gcd of their leading monoms is zero.
261. Creating S-polynomial from the pair  $(p_{17}, p_{23})$ .  
 Skipping pair  $p_{17}$  and  $p_{23}$  because gcd of their leading monoms is zero.
262. Creating S-polynomial from the pair  $(p_{17}, p_{24})$ .  
 Skipping pair  $p_{17}$  and  $p_{24}$  because gcd of their leading monoms is zero.
263. Creating S-polynomial from the pair  $(p_{17}, p_{25})$ .  
 Skipping pair  $p_{17}$  and  $p_{25}$  because gcd of their leading monoms is zero.
264. Creating S-polynomial from the pair  $(p_{17}, p_{26})$ .  
 Forming S-pol of  $p_{17}$  and  $p_{26}$ :
- $$p_{148} = 4u_2^3u_1^2x_{10}x_1 - 2u_2^4u_1x_4x_1 + 2u_5u_2^3u_1x_1^2 - 4u_5u_2^3u_1^2x_1$$
- S-pol added.
265. Creating S-polynomial from the pair  $(p_{17}, p_{27})$ .  
 Forming S-pol of  $p_{17}$  and  $p_{27}$ :
- $$\begin{aligned} p_{149} = & 4u_5u_2^7u_1^2x_{12}x_{10}x_1 + 4u_2^7u_1^2x_{12}x_4^2x_1 - 2u_2^9u_1x_{12}x_4^2 + \\ & 2u_5u_2^8u_1x_{12}x_4x_1 - 8u_2^6u_1^3x_{10}^2x_5x_1 + 4u_2^8u_1^2x_{10}^2x_5 - \\ & 4u_6u_2^7u_1^2x_{10}^2x_1 \end{aligned}$$
- S-pol added.
266. Creating S-polynomial from the pair  $(p_{17}, p_{28})$ .  
 Forming S-pol of  $p_{17}$  and  $p_{28}$ :
- $$\begin{aligned} p_{150} = & 4u_2^3u_1^2x_{12}x_{10} + 4u_2^2u_1^2x_{12}x_4x_1 - 2u_2^4u_1x_{12}x_4 + \\ & 2u_5u_2^3u_1x_{12}x_1 - 4u_2^2u_1^2x_{10}x_5x_1 - 4u_6u_2^3u_1^2x_{10} \end{aligned}$$
- S-pol added.
267. Creating S-polynomial from the pair  $(p_{17}, p_{29})$ .  
 Skipping pair  $p_{17}$  and  $p_{29}$  because gcd of their leading monoms is zero.
268. Creating S-polynomial from the pair  $(p_{17}, p_{30})$ .  
 Skipping pair  $p_{17}$  and  $p_{30}$  because gcd of their leading monoms is zero.
269. Creating S-polynomial from the pair  $(p_{17}, p_{31})$ .  
 Skipping pair  $p_{17}$  and  $p_{31}$  because gcd of their leading monoms is zero.
270. Creating S-polynomial from the pair  $(p_{18}, p_{19})$ .  
 Skipping pair  $p_{18}$  and  $p_{19}$  because gcd of their leading monoms is zero.

271. Creating S-polynomial from the pair  $(p_{18}, p_{20})$ .  
 Skipping pair  $p_{18}$  and  $p_{20}$  because gcd of their leading monoms is zero.
272. Creating S-polynomial from the pair  $(p_{18}, p_{21})$ .  
 Skipping pair  $p_{18}$  and  $p_{21}$  because gcd of their leading monoms is zero.
273. Creating S-polynomial from the pair  $(p_{18}, p_{22})$ .  
 Skipping pair  $p_{18}$  and  $p_{22}$  because gcd of their leading monoms is zero.
274. Creating S-polynomial from the pair  $(p_{18}, p_{23})$ .  
 Skipping pair  $p_{18}$  and  $p_{23}$  because gcd of their leading monoms is zero.
275. Creating S-polynomial from the pair  $(p_{18}, p_{24})$ .  
 Skipping pair  $p_{18}$  and  $p_{24}$  because gcd of their leading monoms is zero.
276. Creating S-polynomial from the pair  $(p_{18}, p_{25})$ .  
 Skipping pair  $p_{18}$  and  $p_{25}$  because gcd of their leading monoms is zero.
277. Creating S-polynomial from the pair  $(p_{18}, p_{26})$ .  
 Forming S-pol of  $p_{18}$  and  $p_{26}$ :
- $$p_{151} = 4u_2^3u_1^2x_{12}x_{10} - 4u_2^2u_1^2x_{12}x_4x_1 - 4u_5u_2^3u_1^2x_{12} + 4u_2^2u_1^2x_{10}x_5x_1 - 2u_2^4u_1x_{10}x_5 + 2u_6u_2^3u_1x_{10}x_1$$
- S-pol added.
278. Creating S-polynomial from the pair  $(p_{18}, p_{27})$ .  
 Forming S-pol of  $p_{18}$  and  $p_{27}$ :
- $$p_{152} = -4u_2^8u_1^2x_{12}x_4x_1 + 4u_2^8u_1^2x_{12}x_4 + 4u_5u_2^7u_1^2x_{12}x_1^2 - 8u_2^6u_1^3x_{10}x_5x_1^2 + 4u_2^8u_1^2x_{10}x_5x_1 - 4u_6u_2^7u_1^2x_{10}x_1^2 + 4u_2^7u_1^2x_5x_4x_1 - 2u_2^9u_1x_5x_4 + 2u_6u_2^8u_1x_4x_1$$
- S-pol added.
279. Creating S-polynomial from the pair  $(p_{18}, p_{28})$ .  
 Forming S-pol of  $p_{18}$  and  $p_{28}$ :
- $$p_{153} = 4u_2^3u_1^2x_{12}x_1 - 2u_2^4u_1x_5x_1 + 2u_6u_2^3u_1x_1^2 - 4u_6u_2^3u_1^2x_1$$
- S-pol added.
280. Creating S-polynomial from the pair  $(p_{18}, p_{29})$ .  
 Skipping pair  $p_{18}$  and  $p_{29}$  because gcd of their leading monoms is zero.
281. Creating S-polynomial from the pair  $(p_{18}, p_{30})$ .  
 Skipping pair  $p_{18}$  and  $p_{30}$  because gcd of their leading monoms is zero.
282. Creating S-polynomial from the pair  $(p_{18}, p_{31})$ .  
 Skipping pair  $p_{18}$  and  $p_{31}$  because gcd of their leading monoms is zero.

283. Creating S-polynomial from the pair  $(p_{19}, p_{20})$ .

Forming S-pol of  $p_{19}$  and  $p_{20}$ :

$$p_{154} = -8u_3^3u_1^3x_8x_4x_2 + 4u_3^5u_1^2x_8x_4 - 4u_5u_3^4u_1^2x_8x_2 + \\ 8u_3^3u_1^3x_6x_5x_2 - 4u_3^5u_1^2x_6x_5 + 4u_6u_3^4u_1^2x_6x_2$$

S-pol added.

284. Creating S-polynomial from the pair  $(p_{19}, p_{21})$ .

Skipping pair  $p_{19}$  and  $p_{21}$  because gcd of their leading monoms is zero.

285. Creating S-polynomial from the pair  $(p_{19}, p_{22})$ .

Skipping pair  $p_{19}$  and  $p_{22}$  because gcd of their leading monoms is zero.

286. Creating S-polynomial from the pair  $(p_{19}, p_{23})$ .

Forming S-pol of  $p_{19}$  and  $p_{23}$ :

$$p_{155} = 4u_3^3u_1^2x_6x_2 - 2u_3^4u_1x_4x_2 + 2u_5u_3^3u_1x_2^2 - 4u_5u_3^3u_1^2x_2$$

S-pol added.

287. Creating S-polynomial from the pair  $(p_{19}, p_{24})$ .

Forming S-pol of  $p_{19}$  and  $p_{24}$ :

$$p_{156} = 4u_5u_3^7u_1^2x_8x_6x_2 + 4u_3^7u_1^2x_8x_4^2x_2 - 2u_3^9u_1x_8x_4^2 + \\ 2u_5u_3^8u_1x_8x_4x_2 - 8u_3^6u_1^3x_6^2x_5x_2 + 4u_3^8u_1^2x_6^2x_5 - \\ 4u_6u_3^7u_1^2x_6^2x_2$$

S-pol added.

288. Creating S-polynomial from the pair  $(p_{19}, p_{25})$ .

Forming S-pol of  $p_{19}$  and  $p_{25}$ :

$$p_{157} = 4u_3^3u_1^2x_8x_6 + 4u_3^2u_1^2x_8x_4x_2 - 2u_3^4u_1x_8x_4 + \\ 2u_5u_3^3u_1x_8x_2 - 4u_3^2u_1^2x_6x_5x_2 - 4u_6u_3^3u_1^2x_6$$

S-pol added.

289. Creating S-polynomial from the pair  $(p_{19}, p_{26})$ .

Skipping pair  $p_{19}$  and  $p_{26}$  because gcd of their leading monoms is zero.

290. Creating S-polynomial from the pair  $(p_{19}, p_{27})$ .

Skipping pair  $p_{19}$  and  $p_{27}$  because gcd of their leading monoms is zero.

291. Creating S-polynomial from the pair  $(p_{19}, p_{28})$ .

Skipping pair  $p_{19}$  and  $p_{28}$  because gcd of their leading monoms is zero.

292. Creating S-polynomial from the pair  $(p_{19}, p_{29})$ .

Skipping pair  $p_{19}$  and  $p_{29}$  because gcd of their leading monoms is zero.



293. Creating S-polynomial from the pair  $(p_{19}, p_{30})$ .  
 Skipping pair  $p_{19}$  and  $p_{30}$  because gcd of their leading monoms is zero.
294. Creating S-polynomial from the pair  $(p_{19}, p_{31})$ .  
 Skipping pair  $p_{19}$  and  $p_{31}$  because gcd of their leading monoms is zero.
295. Creating S-polynomial from the pair  $(p_{20}, p_{21})$ .  
 Skipping pair  $p_{20}$  and  $p_{21}$  because gcd of their leading monoms is zero.
296. Creating S-polynomial from the pair  $(p_{20}, p_{22})$ .  
 Skipping pair  $p_{20}$  and  $p_{22}$  because gcd of their leading monoms is zero.
297. Creating S-polynomial from the pair  $(p_{20}, p_{23})$ .  
 Forming S-pol of  $p_{20}$  and  $p_{23}$ :
- $$p_{158} = 4u_3^3u_1^2x_8x_6 - 4u_3^2u_1^2x_8x_4x_2 - 4u_5u_3^3u_1^2x_8 + 4u_3^2u_1^2x_6x_5x_2 - 2u_3^4u_1x_6x_5 + 2u_6u_3^3u_1x_6x_2$$
- S-pol added.
298. Creating S-polynomial from the pair  $(p_{20}, p_{24})$ .  
 Forming S-pol of  $p_{20}$  and  $p_{24}$ :
- $$p_{159} = -4u_3^8u_1^2x_8x_4x_2 + 4u_3^8u_1^2x_8x_4 + 4u_5u_3^7u_1^2x_8x_2^2 - 8u_3^6u_1^3x_6x_5x_2^2 + 4u_3^8u_1^2x_6x_5x_2 - 4u_6u_3^7u_1^2x_6x_2^2 + 4u_3^7u_1^2x_5x_4x_2 - 2u_3^9u_1x_5x_4 + 2u_6u_3^8u_1x_4x_2$$
- S-pol added.
299. Creating S-polynomial from the pair  $(p_{20}, p_{25})$ .  
 Forming S-pol of  $p_{20}$  and  $p_{25}$ :
- $$p_{160} = 4u_3^3u_1^2x_8x_2 - 2u_3^4u_1x_5x_2 + 2u_6u_3^3u_1x_2^2 - 4u_6u_3^3u_1^2x_2$$
- S-pol added.
300. Creating S-polynomial from the pair  $(p_{20}, p_{26})$ .  
 Skipping pair  $p_{20}$  and  $p_{26}$  because gcd of their leading monoms is zero.
301. Creating S-polynomial from the pair  $(p_{20}, p_{27})$ .  
 Skipping pair  $p_{20}$  and  $p_{27}$  because gcd of their leading monoms is zero.
302. Creating S-polynomial from the pair  $(p_{20}, p_{28})$ .  
 Skipping pair  $p_{20}$  and  $p_{28}$  because gcd of their leading monoms is zero.
303. Creating S-polynomial from the pair  $(p_{20}, p_{29})$ .  
 Skipping pair  $p_{20}$  and  $p_{29}$  because gcd of their leading monoms is zero.
304. Creating S-polynomial from the pair  $(p_{20}, p_{30})$ .  
 Skipping pair  $p_{20}$  and  $p_{30}$  because gcd of their leading monoms is zero.

305. Creating S-polynomial from the pair  $(p_{20}, p_{31})$ .

Skipping pair  $p_{20}$  and  $p_{31}$  because gcd of their leading monoms is zero.

306. Creating S-polynomial from the pair  $(p_{21}, p_{22})$ .

Forming S-pol of  $p_{21}$  and  $p_{22}$ :

$$p_{161} = -8u_4^3u_1^3x_{16}x_4x_3 + 4u_4^5u_1^2x_{16}x_4 - 4u_5u_4^4u_1^2x_{16}x_3 + \\ 8u_4^3u_1^3x_{14}x_5x_3 - 4u_4^5u_1^2x_{14}x_5 + 4u_6u_4^4u_1^2x_{14}x_3$$

S-pol added.

307. Creating S-polynomial from the pair  $(p_{21}, p_{23})$ .

Skipping pair  $p_{21}$  and  $p_{23}$  because gcd of their leading monoms is zero.

308. Creating S-polynomial from the pair  $(p_{21}, p_{24})$ .

Skipping pair  $p_{21}$  and  $p_{24}$  because gcd of their leading monoms is zero.

309. Creating S-polynomial from the pair  $(p_{21}, p_{25})$ .

Skipping pair  $p_{21}$  and  $p_{25}$  because gcd of their leading monoms is zero.

310. Creating S-polynomial from the pair  $(p_{21}, p_{26})$ .

Skipping pair  $p_{21}$  and  $p_{26}$  because gcd of their leading monoms is zero.

311. Creating S-polynomial from the pair  $(p_{21}, p_{27})$ .

Skipping pair  $p_{21}$  and  $p_{27}$  because gcd of their leading monoms is zero.

312. Creating S-polynomial from the pair  $(p_{21}, p_{28})$ .

Skipping pair  $p_{21}$  and  $p_{28}$  because gcd of their leading monoms is zero.

313. Creating S-polynomial from the pair  $(p_{21}, p_{29})$ .

Forming S-pol of  $p_{21}$  and  $p_{29}$ :

$$p_{162} = 4u_4^3u_1^2x_{14}x_3 - 2u_4^4u_1x_4x_3 + 2u_5u_4^3u_1x_3^2 - 4u_5u_4^3u_1^2x_3$$

S-pol added.

314. Creating S-polynomial from the pair  $(p_{21}, p_{30})$ .

Forming S-pol of  $p_{21}$  and  $p_{30}$ :

$$p_{163} = 4u_5u_4^7u_1^2x_{16}x_{14}x_3 + 4u_4^7u_1^2x_{16}x_4^2x_3 - 2u_4^9u_1x_{16}x_4^2 + \\ 2u_5u_4^8u_1x_{16}x_4x_3 - 8u_4^6u_1^3x_{14}^2x_5x_3 + 4u_4^8u_1^2x_{14}^2x_5 - \\ 4u_6u_4^7u_1^2x_{14}^2x_3$$

S-pol added.

315. Creating S-polynomial from the pair  $(p_{21}, p_{31})$ .

Forming S-pol of  $p_{21}$  and  $p_{31}$ :

$$p_{164} = 4u_4^3u_1^2x_{16}x_{14} + 4u_4^2u_1^2x_{16}x_4x_3 - 2u_4^4u_1x_{16}x_4 + \\ 2u_5u_4^3u_1x_{16}x_3 - 4u_4^2u_1^2x_{14}x_5x_3 - 4u_6u_4^3u_1^2x_{14}$$

S-pol added.

316. Creating S-polynomial from the pair  $(p_{22}, p_{23})$ .  
 Skipping pair  $p_{22}$  and  $p_{23}$  because gcd of their leading monoms is zero.
317. Creating S-polynomial from the pair  $(p_{22}, p_{24})$ .  
 Skipping pair  $p_{22}$  and  $p_{24}$  because gcd of their leading monoms is zero.
318. Creating S-polynomial from the pair  $(p_{22}, p_{25})$ .  
 Skipping pair  $p_{22}$  and  $p_{25}$  because gcd of their leading monoms is zero.
319. Creating S-polynomial from the pair  $(p_{22}, p_{26})$ .  
 Skipping pair  $p_{22}$  and  $p_{26}$  because gcd of their leading monoms is zero.
320. Creating S-polynomial from the pair  $(p_{22}, p_{27})$ .  
 Skipping pair  $p_{22}$  and  $p_{27}$  because gcd of their leading monoms is zero.
321. Creating S-polynomial from the pair  $(p_{22}, p_{28})$ .  
 Skipping pair  $p_{22}$  and  $p_{28}$  because gcd of their leading monoms is zero.
322. Creating S-polynomial from the pair  $(p_{22}, p_{29})$ .  
 Forming S-pol of  $p_{22}$  and  $p_{29}$ :

$$p_{165} = 4u_4^3u_1^2x_{16}x_{14} - 4u_4^2u_1^2x_{16}x_4x_3 - 4u_5u_4^3u_1^2x_{16} + 4u_4^2u_1^2x_{14}x_5x_3 - 2u_4^4u_1x_{14}x_5 + 2u_6u_4^3u_1x_{14}x_3$$

S-pol added.

323. Creating S-polynomial from the pair  $(p_{22}, p_{30})$ .  
 Forming S-pol of  $p_{22}$  and  $p_{30}$ :

$$p_{166} = -4u_4^8u_1^2x_{16}x_4x_3 + 4u_4^8u_1^2x_{16}x_4 + 4u_5u_4^7u_1^2x_{16}x_3^2 - 8u_4^6u_1^3x_{14}x_5x_3^2 + 4u_4^8u_1^2x_{14}x_5x_3 - 4u_6u_4^7u_1^2x_{14}x_3^2 + 4u_4^7u_1^2x_5x_4x_3 - 2u_4^9u_1x_5x_4 + 2u_6u_4^8u_1x_4x_3$$

S-pol added.

324. Creating S-polynomial from the pair  $(p_{22}, p_{31})$ .  
 Forming S-pol of  $p_{22}$  and  $p_{31}$ :

$$p_{167} = 4u_4^3u_1^2x_{16}x_3 - 2u_4^4u_1x_5x_3 + 2u_6u_4^3u_1x_3^2 - 4u_6u_4^3u_1^2x_3$$

S-pol added.

325. Creating S-polynomial from the pair  $(p_{23}, p_{24})$ .  
 Forming S-pol of  $p_{23}$  and  $p_{24}$ :

$$p_{168} = 2u_3^7u_1x_8x_6x_4 - 2u_5u_3^6u_1x_8x_6x_2 - 2u_3^6u_1x_8x_4^2x_2 - 2u_5u_3^7u_1x_8x_4 + 4u_3^5u_1^2x_6^2x_5x_2 - 2u_3^7u_1x_6^2x_5 + 2u_6u_3^6u_1x_6^2x_2$$

S-pol added.

326. Creating S-polynomial from the pair  $(p_{23}, p_{25})$ .

Forming S-pol of  $p_{23}$  and  $p_{25}$ :

$$p_{169} = -2u_3u_1x_8x_4x_2 - 2u_5u_3^2u_1x_8 + 2u_3u_1x_6x_5x_2 + 2u_6u_3^2u_1x_6$$

S-pol added.

327. Creating S-polynomial from the pair  $(p_{23}, p_{26})$ .

Skipping pair  $p_{23}$  and  $p_{26}$  because gcd of their leading monoms is zero.

328. Creating S-polynomial from the pair  $(p_{23}, p_{27})$ .

Skipping pair  $p_{23}$  and  $p_{27}$  because gcd of their leading monoms is zero.

329. Creating S-polynomial from the pair  $(p_{23}, p_{28})$ .

Skipping pair  $p_{23}$  and  $p_{28}$  because gcd of their leading monoms is zero.

330. Creating S-polynomial from the pair  $(p_{23}, p_{29})$ .

Skipping pair  $p_{23}$  and  $p_{29}$  because gcd of their leading monoms is zero.

331. Creating S-polynomial from the pair  $(p_{23}, p_{30})$ .

Skipping pair  $p_{23}$  and  $p_{30}$  because gcd of their leading monoms is zero.

332. Creating S-polynomial from the pair  $(p_{23}, p_{31})$ .

Skipping pair  $p_{23}$  and  $p_{31}$  because gcd of their leading monoms is zero.

333. Creating S-polynomial from the pair  $(p_{24}, p_{25})$ .

Forming S-pol of  $p_{24}$  and  $p_{25}$ :

$$\begin{aligned} p_{170} = & -2u_3^7u_1x_8x_4x_2 + 2u_5u_3^6u_1x_8x_2^2 - 4u_3^5u_1^2x_6x_5x_2^2 + \\ & 2u_3^7u_1x_6x_5x_2 - 2u_6u_3^6u_1x_6x_2^2 + 2u_3^6u_1x_5x_4x_2 + \\ & 2u_6u_3^7u_1x_4 \end{aligned}$$

S-pol added.

334. Creating S-polynomial from the pair  $(p_{24}, p_{26})$ .

Skipping pair  $p_{24}$  and  $p_{26}$  because gcd of their leading monoms is zero.

335. Creating S-polynomial from the pair  $(p_{24}, p_{27})$ .

Forming S-pol of  $p_{24}$  and  $p_{27}$ :

$$\begin{aligned} p_{171} = & 2u_3^5u_2^7u_1x_{12}x_8x_4x_2 - 2u_3^7u_2^5u_1x_{12}x_8x_4x_1 + \\ & (2u_5u_3^6u_2^5u_1 - 2u_5u_3^5u_2^6u_1)x_{12}x_8x_2x_1 - \\ & 4u_3^5u_2^5u_1^2x_{12}x_6x_5x_2x_1 + 2u_3^7u_2^5u_1x_{12}x_6x_5x_1 - \\ & 2u_6u_3^6u_2^5u_1x_{12}x_6x_2x_1 + 4u_3^5u_2^5u_1^2x_{10}x_8x_5x_2x_1 - \\ & 2u_3^5u_2^7u_1x_{10}x_8x_5x_2 + 2u_6u_3^5u_2^6u_1x_{10}x_8x_2x_1 \end{aligned}$$

S-pol added.

336. Creating S-polynomial from the pair  $(p_{24}, p_{28})$ .

Skipping pair  $p_{24}$  and  $p_{28}$  because gcd of their leading monoms is zero.

337. Creating S-polynomial from the pair  $(p_{24}, p_{29})$ .

Skipping pair  $p_{24}$  and  $p_{29}$  because gcd of their leading monoms is zero.

338. Creating S-polynomial from the pair  $(p_{24}, p_{30})$ .

Forming S-pol of  $p_{24}$  and  $p_{30}$ :

$$\begin{aligned} p_{172} = & -2u_4^5u_3^7u_1x_{16}x_8x_4x_3 + 2u_4^7u_3^5u_1x_{16}x_8x_4x_2 + \\ & (-2u_5u_4^6u_3^5u_1 + 2u_5u_4^5u_3^6u_1)x_{16}x_8x_3x_2 - \\ & 4u_4^5u_3^5u_1^2x_{16}x_6x_5x_3x_2 + 2u_4^5u_3^7u_1x_{16}x_6x_5x_3 - \\ & 2u_6u_4^5u_3^6u_1x_{16}x_6x_3x_2 + 4u_4^5u_3^5u_1^2x_{14}x_8x_5x_3x_2 - \\ & 2u_4^7u_3^5u_1x_{14}x_8x_5x_2 + 2u_6u_4^6u_3^5u_1x_{14}x_8x_3x_2 \end{aligned}$$

S-pol added.

339. Creating S-polynomial from the pair  $(p_{24}, p_{31})$ .

Skipping pair  $p_{24}$  and  $p_{31}$  because gcd of their leading monoms is zero.

340. Creating S-polynomial from the pair  $(p_{25}, p_{26})$ .

Skipping pair  $p_{25}$  and  $p_{26}$  because gcd of their leading monoms is zero.

341. Creating S-polynomial from the pair  $(p_{25}, p_{27})$ .

Skipping pair  $p_{25}$  and  $p_{27}$  because gcd of their leading monoms is zero.

342. Creating S-polynomial from the pair  $(p_{25}, p_{28})$ .

Skipping pair  $p_{25}$  and  $p_{28}$  because gcd of their leading monoms is zero.

343. Creating S-polynomial from the pair  $(p_{25}, p_{29})$ .

Skipping pair  $p_{25}$  and  $p_{29}$  because gcd of their leading monoms is zero.

344. Creating S-polynomial from the pair  $(p_{25}, p_{30})$ .

Skipping pair  $p_{25}$  and  $p_{30}$  because gcd of their leading monoms is zero.

345. Creating S-polynomial from the pair  $(p_{25}, p_{31})$ .

Skipping pair  $p_{25}$  and  $p_{31}$  because gcd of their leading monoms is zero.

346. Creating S-polynomial from the pair  $(p_{26}, p_{27})$ .

Forming S-pol of  $p_{26}$  and  $p_{27}$ :

$$\begin{aligned} p_{173} = & 2u_2^7u_1x_{12}x_{10}x_4 - 2u_5u_2^6u_1x_{12}x_{10}x_1 - 2u_2^6u_1x_{12}x_4^2x_1 - \\ & 2u_5u_2^7u_1x_{12}x_4 + 4u_2^5u_1^2x_{10}^2x_5x_1 - 2u_2^7u_1x_{10}^2x_5 + \\ & 2u_6u_2^6u_1x_{10}^2x_1 \end{aligned}$$

S-pol added.

347. Creating S-polynomial from the pair  $(p_{26}, p_{28})$ .

Forming S-pol of  $p_{26}$  and  $p_{28}$ :

$$p_{174} = -2u_2u_1x_{12}x_4x_1 - 2u_5u_2^2u_1x_{12} + 2u_2u_1x_{10}x_5x_1 + 2u_6u_2^2u_1x_{10}$$

S-pol added.

348. Creating S-polynomial from the pair  $(p_{26}, p_{29})$ .

Skipping pair  $p_{26}$  and  $p_{29}$  because gcd of their leading monoms is zero.

349. Creating S-polynomial from the pair  $(p_{26}, p_{30})$ .

Skipping pair  $p_{26}$  and  $p_{30}$  because gcd of their leading monoms is zero.

350. Creating S-polynomial from the pair  $(p_{26}, p_{31})$ .

Skipping pair  $p_{26}$  and  $p_{31}$  because gcd of their leading monoms is zero.

351. Creating S-polynomial from the pair  $(p_{27}, p_{28})$ .

Forming S-pol of  $p_{27}$  and  $p_{28}$ :

$$\begin{aligned} p_{175} = & -2u_2^7u_1x_{12}x_4x_1 + 2u_5u_2^6u_1x_{12}x_1^2 - 4u_2^5u_1^2x_{10}x_5x_1^2 + \\ & 2u_2^7u_1x_{10}x_5x_1 - 2u_6u_2^6u_1x_{10}x_1^2 + 2u_2^6u_1x_5x_4x_1 + \\ & 2u_6u_2^7u_1x_4 \end{aligned}$$

S-pol added.

352. Creating S-polynomial from the pair  $(p_{27}, p_{29})$ .

Skipping pair  $p_{27}$  and  $p_{29}$  because gcd of their leading monoms is zero.

353. Creating S-polynomial from the pair  $(p_{27}, p_{30})$ .

Forming S-pol of  $p_{27}$  and  $p_{30}$ :

$$\begin{aligned} p_{176} = & -2u_4^5u_2^7u_1x_{16}x_{12}x_4x_3 + 2u_4^7u_2^5u_1x_{16}x_{12}x_4x_1 + \\ & (-2u_5u_4^6u_2^5u_1 + 2u_5u_4^5u_2^6u_1)x_{16}x_{12}x_3x_1 - \\ & 4u_4^5u_2^5u_1^2x_{16}x_{10}x_5x_3x_1 + 2u_4^5u_2^7u_1x_{16}x_{10}x_5x_3 - \\ & 2u_6u_4^5u_2^6u_1x_{16}x_{10}x_3x_1 + 4u_4^5u_2^5u_1^2x_{14}x_{12}x_5x_3x_1 - \\ & 2u_4^7u_2^5u_1x_{14}x_{12}x_5x_1 + 2u_6u_4^6u_2^5u_1x_{14}x_{12}x_3x_1 \end{aligned}$$

S-pol added.

354. Creating S-polynomial from the pair  $(p_{27}, p_{31})$ .

Skipping pair  $p_{27}$  and  $p_{31}$  because gcd of their leading monoms is zero.

355. Creating S-polynomial from the pair  $(p_{28}, p_{29})$ .

Skipping pair  $p_{28}$  and  $p_{29}$  because gcd of their leading monoms is zero.

356. Creating S-polynomial from the pair  $(p_{28}, p_{30})$ .

Skipping pair  $p_{28}$  and  $p_{30}$  because gcd of their leading monoms is zero.

357. Creating S-polynomial from the pair  $(p_{28}, p_{31})$ .

Skipping pair  $p_{28}$  and  $p_{31}$  because gcd of their leading monoms is zero.

358. Creating S-polynomial from the pair  $(p_{29}, p_{30})$ .

Forming S-pol of  $p_{29}$  and  $p_{30}$ :

$$\begin{aligned} p_{177} = & 2u_4^7 u_1 x_{16} x_{14} x_4 - 2u_5 u_4^6 u_1 x_{16} x_{14} x_3 - 2u_4^6 u_1 x_{16} x_4^2 x_3 - \\ & 2u_5 u_4^7 u_1 x_{16} x_4 + 4u_4^5 u_1^2 x_{14}^2 x_5 x_3 - 2u_4^7 u_1 x_{14}^2 x_5 + \\ & 2u_6 u_4^6 u_1 x_{14}^2 x_3 \end{aligned}$$

S-pol added.

359. Creating S-polynomial from the pair  $(p_{29}, p_{31})$ .

Forming S-pol of  $p_{29}$  and  $p_{31}$ :

$$p_{178} = -2u_4 u_1 x_{16} x_4 x_3 - 2u_5 u_4^2 u_1 x_{16} + 2u_4 u_1 x_{14} x_5 x_3 + 2u_6 u_4^2 u_1 x_{14}$$

S-pol added.

360. Creating S-polynomial from the pair  $(p_{30}, p_{31})$ .

Forming S-pol of  $p_{30}$  and  $p_{31}$ :

$$\begin{aligned} p_{179} = & -2u_4^7 u_1 x_{16} x_4 x_3 + 2u_5 u_4^6 u_1 x_{16} x_3^2 - 4u_4^5 u_1^2 x_{14} x_5 x_3^2 + \\ & 2u_4^7 u_1 x_{14} x_5 x_3 - 2u_6 u_4^6 u_1 x_{14} x_3^2 + 2u_4^6 u_1 x_5 x_4 x_3 + \\ & 2u_6 u_4^7 u_1 x_4 \end{aligned}$$

S-pol added.

### 5.3 Iteration 3

Current set is  $S_3 =$

$$\begin{aligned}
p_0 &= x_1^2 - 2u_1x_1 + u_2^2 \\
p_1 &= x_2^2 - 2u_1x_2 + u_3^2 \\
p_2 &= x_3^2 - 2u_1x_3 + u_4^2 \\
p_3 &= x_4^2 - 2u_1x_4 + u_5^2 \\
p_4 &= x_5^2 - 2u_1x_5 + u_6^2 \\
p_5 &= -u_3x_7 + x_6x_2 \\
p_6 &= -x_7x_2 - u_3x_6 + x_4x_2 + u_5u_3 \\
p_7 &= -u_3x_9 + x_8x_2 \\
p_8 &= -x_9x_2 - u_3x_8 + x_5x_2 + u_6u_3 \\
p_9 &= -u_2x_{11} + x_{10}x_1 \\
p_{10} &= -x_{11}x_1 - u_2x_{10} + x_4x_1 + u_5u_2 \\
p_{11} &= -u_2x_{13} + x_{12}x_1 \\
p_{12} &= -x_{13}x_1 - u_2x_{12} + x_5x_1 + u_6u_2 \\
p_{13} &= -u_4x_{15} + x_{14}x_3 \\
p_{14} &= -x_{15}x_3 - u_4x_{14} + x_4x_3 + u_5u_4 \\
p_{15} &= -u_4x_{17} + x_{16}x_3 \\
p_{16} &= -x_{17}x_3 - u_4x_{16} + x_5x_3 + u_6u_4 \\
p_{17} &= 4u_2u_1^2x_{10}x_1 - 2u_2^3u_1x_{10} - 2u_2^2u_1x_4x_1 + u_2^4x_4 - u_5u_2^3x_1 \\
p_{18} &= 4u_2u_1^2x_{12}x_1 - 2u_2^3u_1x_{12} - 2u_2^2u_1x_5x_1 + u_2^4x_5 - u_6u_2^3x_1 \\
p_{19} &= 4u_3u_1^2x_6x_2 - 2u_3^3u_1x_6 - 2u_3^2u_1x_4x_2 + u_3^4x_4 - u_5u_3^3x_2 \\
p_{20} &= 4u_3u_1^2x_8x_2 - 2u_3^3u_1x_8 - 2u_3^2u_1x_5x_2 + u_3^4x_5 - u_6u_3^3x_2 \\
p_{21} &= 4u_4u_1^2x_{14}x_3 - 2u_4^3u_1x_{14} - 2u_4^2u_1x_4x_3 + u_4^4x_4 - u_5u_4^3x_3 \\
p_{22} &= 4u_4u_1^2x_{16}x_3 - 2u_4^3u_1x_{16} - 2u_4^2u_1x_5x_3 + u_4^4x_5 - u_6u_4^3x_3 \\
p_{23} &= -2u_1x_6x_2 + u_3x_4x_2 + u_5u_3^2 \\
p_{24} &= -2u_3^5u_1x_8x_4x_2 + u_3^7x_8x_4 - u_5u_3^6x_8x_2 + 2u_3^5u_1x_6x_5x_2 - \\
&\quad u_3^7x_6x_5 + u_6u_3^6x_6x_2 \\
p_{25} &= -2u_1x_8x_2 + u_3x_5x_2 + u_6u_3^2 \\
p_{26} &= -2u_1x_{10}x_1 + u_2x_4x_1 + u_5u_2^2 \\
p_{27} &= -2u_2^5u_1x_{12}x_4x_1 + u_2^7x_{12}x_4 - u_5u_2^6x_{12}x_1 + 2u_2^5u_1x_{10}x_5x_1 - \\
&\quad u_2^7x_{10}x_5 + u_6u_2^6x_{10}x_1 \\
p_{28} &= -2u_1x_{12}x_1 + u_2x_5x_1 + u_6u_2^2 \\
p_{29} &= -2u_1x_{14}x_3 + u_4x_4x_3 + u_5u_4^2 \\
p_{30} &= -2u_4^5u_1x_{16}x_4x_3 + u_4^7x_{16}x_4 - u_5u_4^6x_{16}x_3 + 2u_4^5u_1x_{14}x_5x_3 - \\
&\quad u_4^7x_{14}x_5 + u_6u_4^6x_{14}x_3 \\
p_{31} &= -2u_1x_{16}x_3 + u_4x_5x_3 + u_6u_4^2 \\
p_{32} &= 4u_2^6u_1^2x_{10} - 2u_2^7u_1x_4 + 2u_5u_2^6u_1x_1 - 4u_5u_2^6u_1^2 \\
p_{33} &= 4u_2^6u_1^2x_{12} - 2u_2^7u_1x_5 + 2u_6u_2^6u_1x_1 - 4u_6u_2^6u_1^2 \\
p_{34} &= -128u_2^{13}u_1^7x_{12}x_4 + 128u_2^{13}u_1^7x_{10}x_5 + 64u_5u_2^{13}u_1^6x_5x_1 - \\
&\quad 128u_5u_2^{13}u_1^7x_5 - 64u_6u_2^{13}u_1^6x_4x_1 + 128u_6u_2^{13}u_1^7x_4 \\
p_{35} &= 4u_3^6u_1^2x_6 - 2u_3^7u_1x_4 + 2u_5u_3^6u_1x_2 - 4u_5u_3^6u_1^2 \\
p_{36} &= 4u_3^6u_1^2x_8 - 2u_3^7u_1x_5 + 2u_6u_3^6u_1x_2 - 4u_6u_3^6u_1^2 \\
p_{37} &= -128u_3^{13}u_1^7x_8x_4 + 128u_3^{13}u_1^7x_6x_5 + 64u_5u_3^{13}u_1^6x_5x_2 - \\
&\quad 128u_5u_3^{13}u_1^7x_5 - 64u_6u_3^{13}u_1^6x_4x_2 + 128u_6u_3^{13}u_1^7x_4 \\
p_{38} &= 4u_4^6u_1^2x_{14} - 2u_4^7u_1x_4 + 2u_5u_4^6u_1x_3 - 4u_5u_4^6u_1^2 \\
p_{39} &= 4u_4^6u_1^2x_{16} - 2u_4^7u_1x_5 + 2u_6u_4^6u_1x_3 - 4u_6u_4^6u_1^2 \\
p_{40} &= -128u_4^{13}u_1^7x_{16}x_4 + 128u_4^{13}u_1^7x_{14}x_5 + 64u_5u_4^{13}u_1^6x_5x_3 -
\end{aligned}$$



1. Creating S-polynomial from the pair  $(p_0, p_{32})$ .  
Skipping pair  $p_0$  and  $p_{32}$  because gcd of their leading monoms is zero.
2. Creating S-polynomial from the pair  $(p_0, p_{33})$ .  
Skipping pair  $p_0$  and  $p_{33}$  because gcd of their leading monoms is zero.
3. Creating S-polynomial from the pair  $(p_0, p_{34})$ .  
Skipping pair  $p_0$  and  $p_{34}$  because gcd of their leading monoms is zero.
4. Creating S-polynomial from the pair  $(p_0, p_{35})$ .  
Skipping pair  $p_0$  and  $p_{35}$  because gcd of their leading monoms is zero.
5. Creating S-polynomial from the pair  $(p_0, p_{36})$ .  
Skipping pair  $p_0$  and  $p_{36}$  because gcd of their leading monoms is zero.
6. Creating S-polynomial from the pair  $(p_0, p_{37})$ .  
Skipping pair  $p_0$  and  $p_{37}$  because gcd of their leading monoms is zero.
7. Creating S-polynomial from the pair  $(p_0, p_{38})$ .  
Skipping pair  $p_0$  and  $p_{38}$  because gcd of their leading monoms is zero.
8. Creating S-polynomial from the pair  $(p_0, p_{39})$ .  
Skipping pair  $p_0$  and  $p_{39}$  because gcd of their leading monoms is zero.
9. Creating S-polynomial from the pair  $(p_0, p_{40})$ .  
Skipping pair  $p_0$  and  $p_{40}$  because gcd of their leading monoms is zero.
10. Creating S-polynomial from the pair  $(p_0, p_{41})$ .  
Skipping pair  $p_0$  and  $p_{41}$  because gcd of their leading monoms is zero.
11. Creating S-polynomial from the pair  $(p_0, p_{42})$ .  
Skipping pair  $p_0$  and  $p_{42}$  because gcd of their leading monoms is zero.
12. Creating S-polynomial from the pair  $(p_0, p_{43})$ .  
Skipping pair  $p_0$  and  $p_{43}$  because gcd of their leading monoms is zero.
13. Creating S-polynomial from the pair  $(p_0, p_{44})$ .  
Skipping pair  $p_0$  and  $p_{44}$  because gcd of their leading monoms is zero.
14. Creating S-polynomial from the pair  $(p_0, p_{45})$ .  
Skipping pair  $p_0$  and  $p_{45}$  because gcd of their leading monoms is zero.
15. Creating S-polynomial from the pair  $(p_0, p_{46})$ .  
Skipping pair  $p_0$  and  $p_{46}$  because gcd of their leading monoms is zero.
16. Creating S-polynomial from the pair  $(p_0, p_{47})$ .  
Skipping pair  $p_0$  and  $p_{47}$  because gcd of their leading monoms is zero.
17. Creating S-polynomial from the pair  $(p_0, p_{48})$ .  
Skipping pair  $p_0$  and  $p_{48}$  because gcd of their leading monoms is zero.

18. Creating S-polynomial from the pair  $(p_0, p_{49})$ .  
Skipping pair  $p_0$  and  $p_{49}$  because gcd of their leading monoms is zero.
19. Creating S-polynomial from the pair  $(p_0, p_{50})$ .  
Skipping pair  $p_0$  and  $p_{50}$  because gcd of their leading monoms is zero.
20. Creating S-polynomial from the pair  $(p_0, p_{51})$ .  
Skipping pair  $p_0$  and  $p_{51}$  because gcd of their leading monoms is zero.
21. Creating S-polynomial from the pair  $(p_0, p_{52})$ .  
Skipping pair  $p_0$  and  $p_{52}$  because gcd of their leading monoms is zero.
22. Creating S-polynomial from the pair  $(p_0, p_{53})$ .  
Skipping pair  $p_0$  and  $p_{53}$  because gcd of their leading monoms is zero.
23. Creating S-polynomial from the pair  $(p_0, p_{54})$ .  
Skipping pair  $p_0$  and  $p_{54}$  because gcd of their leading monoms is zero.
24. Creating S-polynomial from the pair  $(p_0, p_{55})$ .  
Skipping pair  $p_0$  and  $p_{55}$  because gcd of their leading monoms is zero.
25. Creating S-polynomial from the pair  $(p_0, p_{56})$ .  
Skipping pair  $p_0$  and  $p_{56}$  because gcd of their leading monoms is zero.
26. Creating S-polynomial from the pair  $(p_0, p_{57})$ .  
Skipping pair  $p_0$  and  $p_{57}$  because gcd of their leading monoms is zero.
27. Creating S-polynomial from the pair  $(p_0, p_{58})$ .  
Skipping pair  $p_0$  and  $p_{58}$  because gcd of their leading monoms is zero.
28. Creating S-polynomial from the pair  $(p_0, p_{59})$ .  
Skipping pair  $p_0$  and  $p_{59}$  because gcd of their leading monoms is zero.
29. Creating S-polynomial from the pair  $(p_0, p_{60})$ .  
Skipping pair  $p_0$  and  $p_{60}$  because gcd of their leading monoms is zero.
30. Creating S-polynomial from the pair  $(p_0, p_{61})$ .  
Skipping pair  $p_0$  and  $p_{61}$  because gcd of their leading monoms is zero.
31. Creating S-polynomial from the pair  $(p_0, p_{62})$ .  
Skipping pair  $p_0$  and  $p_{62}$  because gcd of their leading monoms is zero.
32. Creating S-polynomial from the pair  $(p_0, p_{63})$ .  
Skipping pair  $p_0$  and  $p_{63}$  because gcd of their leading monoms is zero.
33. Creating S-polynomial from the pair  $(p_0, p_{64})$ .  
Skipping pair  $p_0$  and  $p_{64}$  because gcd of their leading monoms is zero.
34. Creating S-polynomial from the pair  $(p_0, p_{65})$ .  
Skipping pair  $p_0$  and  $p_{65}$  because gcd of their leading monoms is zero.

35. Creating S-polynomial from the pair  $(p_0, p_{66})$ .  
 Skipping pair  $p_0$  and  $p_{66}$  because gcd of their leading monoms is zero.
36. Creating S-polynomial from the pair  $(p_0, p_{67})$ .  
 Skipping pair  $p_0$  and  $p_{67}$  because gcd of their leading monoms is zero.
37. Creating S-polynomial from the pair  $(p_0, p_{68})$ .  
 Skipping pair  $p_0$  and  $p_{68}$  because gcd of their leading monoms is zero.
38. Creating S-polynomial from the pair  $(p_0, p_{69})$ .  
 Skipping pair  $p_0$  and  $p_{69}$  because gcd of their leading monoms is zero.
39. Creating S-polynomial from the pair  $(p_0, p_{70})$ .  
 Skipping pair  $p_0$  and  $p_{70}$  because gcd of their leading monoms is zero.
40. Creating S-polynomial from the pair  $(p_0, p_{71})$ .  
 Skipping pair  $p_0$  and  $p_{71}$  because gcd of their leading monoms is zero.
41. Creating S-polynomial from the pair  $(p_0, p_{72})$ .  
 Skipping pair  $p_0$  and  $p_{72}$  because gcd of their leading monoms is zero.
42. Creating S-polynomial from the pair  $(p_0, p_{73})$ .  
 Skipping pair  $p_0$  and  $p_{73}$  because gcd of their leading monoms is zero.
43. Creating S-polynomial from the pair  $(p_0, p_{74})$ .  
 Skipping pair  $p_0$  and  $p_{74}$  because gcd of their leading monoms is zero.
44. Creating S-polynomial from the pair  $(p_0, p_{75})$ .  
 Skipping pair  $p_0$  and  $p_{75}$  because gcd of their leading monoms is zero.
45. Creating S-polynomial from the pair  $(p_0, p_{76})$ .  
 Skipping pair  $p_0$  and  $p_{76}$  because gcd of their leading monoms is zero.
46. Creating S-polynomial from the pair  $(p_0, p_{77})$ .  
 Skipping pair  $p_0$  and  $p_{77}$  because gcd of their leading monoms is zero.
47. Creating S-polynomial from the pair  $(p_0, p_{78})$ .  
 Skipping pair  $p_0$  and  $p_{78}$  because gcd of their leading monoms is zero.
48. Creating S-polynomial from the pair  $(p_0, p_{79})$ .  
 Skipping pair  $p_0$  and  $p_{79}$  because gcd of their leading monoms is zero.
49. Creating S-polynomial from the pair  $(p_0, p_{80})$ .  
 Skipping pair  $p_0$  and  $p_{80}$  because gcd of their leading monoms is zero.
50. Creating S-polynomial from the pair  $(p_0, p_{81})$ .  
 Skipping pair  $p_0$  and  $p_{81}$  because gcd of their leading monoms is zero.
51. Creating S-polynomial from the pair  $(p_0, p_{82})$ .  
 Skipping pair  $p_0$  and  $p_{82}$  because gcd of their leading monoms is zero.

52. Creating S-polynomial from the pair  $(p_0, p_{83})$ .  
 Skipping pair  $p_0$  and  $p_{83}$  because gcd of their leading monoms is zero.
53. Creating S-polynomial from the pair  $(p_0, p_{84})$ .  
 Skipping pair  $p_0$  and  $p_{84}$  because gcd of their leading monoms is zero.
54. Creating S-polynomial from the pair  $(p_0, p_{85})$ .  
 Skipping pair  $p_0$  and  $p_{85}$  because gcd of their leading monoms is zero.
55. Creating S-polynomial from the pair  $(p_0, p_{86})$ .  
 Skipping pair  $p_0$  and  $p_{86}$  because gcd of their leading monoms is zero.
56. Creating S-polynomial from the pair  $(p_0, p_{87})$ .  
 Skipping pair  $p_0$  and  $p_{87}$  because gcd of their leading monoms is zero.
57. Creating S-polynomial from the pair  $(p_0, p_{88})$ .  
 Skipping pair  $p_0$  and  $p_{88}$  because gcd of their leading monoms is zero.
58. Creating S-polynomial from the pair  $(p_0, p_{89})$ .  
 Skipping pair  $p_0$  and  $p_{89}$  because gcd of their leading monoms is zero.
59. Creating S-polynomial from the pair  $(p_0, p_{90})$ .  
 Skipping pair  $p_0$  and  $p_{90}$  because gcd of their leading monoms is zero.
60. Creating S-polynomial from the pair  $(p_0, p_{91})$ .  
 Skipping pair  $p_0$  and  $p_{91}$  because gcd of their leading monoms is zero.
61. Creating S-polynomial from the pair  $(p_0, p_{92})$ .  
 Skipping pair  $p_0$  and  $p_{92}$  because gcd of their leading monoms is zero.
62. Creating S-polynomial from the pair  $(p_0, p_{93})$ .  
 Skipping pair  $p_0$  and  $p_{93}$  because gcd of their leading monoms is zero.
63. Creating S-polynomial from the pair  $(p_0, p_{94})$ .  
 Skipping pair  $p_0$  and  $p_{94}$  because gcd of their leading monoms is zero.
64. Creating S-polynomial from the pair  $(p_0, p_{95})$ .  
 Skipping pair  $p_0$  and  $p_{95}$  because gcd of their leading monoms is zero.
65. Creating S-polynomial from the pair  $(p_0, p_{96})$ .  
 Skipping pair  $p_0$  and  $p_{96}$  because gcd of their leading monoms is zero.
66. Creating S-polynomial from the pair  $(p_0, p_{97})$ .  
 Skipping pair  $p_0$  and  $p_{97}$  because gcd of their leading monoms is zero.
67. Creating S-polynomial from the pair  $(p_0, p_{98})$ .  
 Skipping pair  $p_0$  and  $p_{98}$  because gcd of their leading monoms is zero.
68. Creating S-polynomial from the pair  $(p_0, p_{99})$ .  
 Skipping pair  $p_0$  and  $p_{99}$  because gcd of their leading monoms is zero.

69. Creating S-polynomial from the pair  $(p_0, p_{100})$ .  
 Skipping pair  $p_0$  and  $p_{100}$  because gcd of their leading monoms is zero.
70. Creating S-polynomial from the pair  $(p_0, p_{101})$ .  
 Skipping pair  $p_0$  and  $p_{101}$  because gcd of their leading monoms is zero.
71. Creating S-polynomial from the pair  $(p_0, p_{102})$ .  
 Skipping pair  $p_0$  and  $p_{102}$  because gcd of their leading monoms is zero.
72. Creating S-polynomial from the pair  $(p_0, p_{103})$ .  
 Skipping pair  $p_0$  and  $p_{103}$  because gcd of their leading monoms is zero.
73. Creating S-polynomial from the pair  $(p_0, p_{104})$ .  
 Skipping pair  $p_0$  and  $p_{104}$  because gcd of their leading monoms is zero.
74. Creating S-polynomial from the pair  $(p_0, p_{105})$ .  
 Skipping pair  $p_0$  and  $p_{105}$  because gcd of their leading monoms is zero.
75. Creating S-polynomial from the pair  $(p_0, p_{106})$ .  
 Skipping pair  $p_0$  and  $p_{106}$  because gcd of their leading monoms is zero.
76. Creating S-polynomial from the pair  $(p_1, p_{32})$ .  
 Skipping pair  $p_1$  and  $p_{32}$  because gcd of their leading monoms is zero.
77. Creating S-polynomial from the pair  $(p_1, p_{33})$ .  
 Skipping pair  $p_1$  and  $p_{33}$  because gcd of their leading monoms is zero.
78. Creating S-polynomial from the pair  $(p_1, p_{34})$ .  
 Skipping pair  $p_1$  and  $p_{34}$  because gcd of their leading monoms is zero.
79. Creating S-polynomial from the pair  $(p_1, p_{35})$ .  
 Skipping pair  $p_1$  and  $p_{35}$  because gcd of their leading monoms is zero.
80. Creating S-polynomial from the pair  $(p_1, p_{36})$ .  
 Skipping pair  $p_1$  and  $p_{36}$  because gcd of their leading monoms is zero.
81. Creating S-polynomial from the pair  $(p_1, p_{37})$ .  
 Skipping pair  $p_1$  and  $p_{37}$  because gcd of their leading monoms is zero.
82. Creating S-polynomial from the pair  $(p_1, p_{38})$ .  
 Skipping pair  $p_1$  and  $p_{38}$  because gcd of their leading monoms is zero.
83. Creating S-polynomial from the pair  $(p_1, p_{39})$ .  
 Skipping pair  $p_1$  and  $p_{39}$  because gcd of their leading monoms is zero.
84. Creating S-polynomial from the pair  $(p_1, p_{40})$ .  
 Skipping pair  $p_1$  and  $p_{40}$  because gcd of their leading monoms is zero.
85. Creating S-polynomial from the pair  $(p_1, p_{41})$ .  
 Skipping pair  $p_1$  and  $p_{41}$  because gcd of their leading monoms is zero.

86. Creating S-polynomial from the pair  $(p_1, p_{42})$ .  
 Skipping pair  $p_1$  and  $p_{42}$  because gcd of their leading monoms is zero.
87. Creating S-polynomial from the pair  $(p_1, p_{43})$ .  
 Skipping pair  $p_1$  and  $p_{43}$  because gcd of their leading monoms is zero.
88. Creating S-polynomial from the pair  $(p_1, p_{44})$ .  
 Skipping pair  $p_1$  and  $p_{44}$  because gcd of their leading monoms is zero.
89. Creating S-polynomial from the pair  $(p_1, p_{45})$ .  
 Skipping pair  $p_1$  and  $p_{45}$  because gcd of their leading monoms is zero.
90. Creating S-polynomial from the pair  $(p_1, p_{46})$ .  
 Skipping pair  $p_1$  and  $p_{46}$  because gcd of their leading monoms is zero.
91. Creating S-polynomial from the pair  $(p_1, p_{47})$ .  
 Skipping pair  $p_1$  and  $p_{47}$  because gcd of their leading monoms is zero.
92. Creating S-polynomial from the pair  $(p_1, p_{48})$ .  
 Skipping pair  $p_1$  and  $p_{48}$  because gcd of their leading monoms is zero.
93. Creating S-polynomial from the pair  $(p_1, p_{49})$ .  
 Skipping pair  $p_1$  and  $p_{49}$  because gcd of their leading monoms is zero.
94. Creating S-polynomial from the pair  $(p_1, p_{50})$ .  
 Skipping pair  $p_1$  and  $p_{50}$  because gcd of their leading monoms is zero.
95. Creating S-polynomial from the pair  $(p_1, p_{51})$ .  
 Skipping pair  $p_1$  and  $p_{51}$  because gcd of their leading monoms is zero.
96. Creating S-polynomial from the pair  $(p_1, p_{52})$ .  
 Skipping pair  $p_1$  and  $p_{52}$  because gcd of their leading monoms is zero.
97. Creating S-polynomial from the pair  $(p_1, p_{53})$ .  
 Skipping pair  $p_1$  and  $p_{53}$  because gcd of their leading monoms is zero.
98. Creating S-polynomial from the pair  $(p_1, p_{54})$ .  
 Skipping pair  $p_1$  and  $p_{54}$  because gcd of their leading monoms is zero.
99. Creating S-polynomial from the pair  $(p_1, p_{55})$ .  
 Skipping pair  $p_1$  and  $p_{55}$  because gcd of their leading monoms is zero.
100. Creating S-polynomial from the pair  $(p_1, p_{56})$ .  
 Skipping pair  $p_1$  and  $p_{56}$  because gcd of their leading monoms is zero.
101. Creating S-polynomial from the pair  $(p_1, p_{57})$ .  
 Skipping pair  $p_1$  and  $p_{57}$  because gcd of their leading monoms is zero.
102. Creating S-polynomial from the pair  $(p_1, p_{58})$ .  
 Skipping pair  $p_1$  and  $p_{58}$  because gcd of their leading monoms is zero.

103. Creating S-polynomial from the pair  $(p_1, p_{59})$ .  
 Skipping pair  $p_1$  and  $p_{59}$  because gcd of their leading monoms is zero.
104. Creating S-polynomial from the pair  $(p_1, p_{60})$ .  
 Skipping pair  $p_1$  and  $p_{60}$  because gcd of their leading monoms is zero.
105. Creating S-polynomial from the pair  $(p_1, p_{61})$ .  
 Skipping pair  $p_1$  and  $p_{61}$  because gcd of their leading monoms is zero.
106. Creating S-polynomial from the pair  $(p_1, p_{62})$ .  
 Skipping pair  $p_1$  and  $p_{62}$  because gcd of their leading monoms is zero.
107. Creating S-polynomial from the pair  $(p_1, p_{63})$ .  
 Skipping pair  $p_1$  and  $p_{63}$  because gcd of their leading monoms is zero.
108. Creating S-polynomial from the pair  $(p_1, p_{64})$ .  
 Skipping pair  $p_1$  and  $p_{64}$  because gcd of their leading monoms is zero.
109. Creating S-polynomial from the pair  $(p_1, p_{65})$ .  
 Skipping pair  $p_1$  and  $p_{65}$  because gcd of their leading monoms is zero.
110. Creating S-polynomial from the pair  $(p_1, p_{66})$ .  
 Skipping pair  $p_1$  and  $p_{66}$  because gcd of their leading monoms is zero.
111. Creating S-polynomial from the pair  $(p_1, p_{67})$ .  
 Skipping pair  $p_1$  and  $p_{67}$  because gcd of their leading monoms is zero.
112. Creating S-polynomial from the pair  $(p_1, p_{68})$ .  
 Skipping pair  $p_1$  and  $p_{68}$  because gcd of their leading monoms is zero.
113. Creating S-polynomial from the pair  $(p_1, p_{69})$ .  
 Skipping pair  $p_1$  and  $p_{69}$  because gcd of their leading monoms is zero.
114. Creating S-polynomial from the pair  $(p_1, p_{70})$ .  
 Skipping pair  $p_1$  and  $p_{70}$  because gcd of their leading monoms is zero.
115. Creating S-polynomial from the pair  $(p_1, p_{71})$ .  
 Skipping pair  $p_1$  and  $p_{71}$  because gcd of their leading monoms is zero.
116. Creating S-polynomial from the pair  $(p_1, p_{72})$ .  
 Skipping pair  $p_1$  and  $p_{72}$  because gcd of their leading monoms is zero.
117. Creating S-polynomial from the pair  $(p_1, p_{73})$ .  
 Skipping pair  $p_1$  and  $p_{73}$  because gcd of their leading monoms is zero.
118. Creating S-polynomial from the pair  $(p_1, p_{74})$ .  
 Skipping pair  $p_1$  and  $p_{74}$  because gcd of their leading monoms is zero.
119. Creating S-polynomial from the pair  $(p_1, p_{75})$ .  
 Skipping pair  $p_1$  and  $p_{75}$  because gcd of their leading monoms is zero.

120. Creating S-polynomial from the pair  $(p_1, p_{76})$ .  
 Skipping pair  $p_1$  and  $p_{76}$  because gcd of their leading monoms is zero.
121. Creating S-polynomial from the pair  $(p_1, p_{77})$ .  
 Skipping pair  $p_1$  and  $p_{77}$  because gcd of their leading monoms is zero.
122. Creating S-polynomial from the pair  $(p_1, p_{78})$ .  
 Skipping pair  $p_1$  and  $p_{78}$  because gcd of their leading monoms is zero.
123. Creating S-polynomial from the pair  $(p_1, p_{79})$ .  
 Skipping pair  $p_1$  and  $p_{79}$  because gcd of their leading monoms is zero.
124. Creating S-polynomial from the pair  $(p_1, p_{80})$ .  
 Skipping pair  $p_1$  and  $p_{80}$  because gcd of their leading monoms is zero.
125. Creating S-polynomial from the pair  $(p_1, p_{81})$ .  
 Skipping pair  $p_1$  and  $p_{81}$  because gcd of their leading monoms is zero.
126. Creating S-polynomial from the pair  $(p_1, p_{82})$ .  
 Skipping pair  $p_1$  and  $p_{82}$  because gcd of their leading monoms is zero.
127. Creating S-polynomial from the pair  $(p_1, p_{83})$ .  
 Skipping pair  $p_1$  and  $p_{83}$  because gcd of their leading monoms is zero.
128. Creating S-polynomial from the pair  $(p_1, p_{84})$ .  
 Skipping pair  $p_1$  and  $p_{84}$  because gcd of their leading monoms is zero.
129. Creating S-polynomial from the pair  $(p_1, p_{85})$ .  
 Skipping pair  $p_1$  and  $p_{85}$  because gcd of their leading monoms is zero.
130. Creating S-polynomial from the pair  $(p_1, p_{86})$ .  
 Skipping pair  $p_1$  and  $p_{86}$  because gcd of their leading monoms is zero.
131. Creating S-polynomial from the pair  $(p_1, p_{87})$ .  
 Skipping pair  $p_1$  and  $p_{87}$  because gcd of their leading monoms is zero.
132. Creating S-polynomial from the pair  $(p_1, p_{88})$ .  
 Skipping pair  $p_1$  and  $p_{88}$  because gcd of their leading monoms is zero.
133. Creating S-polynomial from the pair  $(p_1, p_{89})$ .  
 Skipping pair  $p_1$  and  $p_{89}$  because gcd of their leading monoms is zero.
134. Creating S-polynomial from the pair  $(p_1, p_{90})$ .  
 Skipping pair  $p_1$  and  $p_{90}$  because gcd of their leading monoms is zero.
135. Creating S-polynomial from the pair  $(p_1, p_{91})$ .  
 Skipping pair  $p_1$  and  $p_{91}$  because gcd of their leading monoms is zero.
136. Creating S-polynomial from the pair  $(p_1, p_{92})$ .  
 Skipping pair  $p_1$  and  $p_{92}$  because gcd of their leading monoms is zero.



137. Creating S-polynomial from the pair  $(p_1, p_{93})$ .  
 Skipping pair  $p_1$  and  $p_{93}$  because gcd of their leading monoms is zero.
138. Creating S-polynomial from the pair  $(p_1, p_{94})$ .  
 Skipping pair  $p_1$  and  $p_{94}$  because gcd of their leading monoms is zero.
139. Creating S-polynomial from the pair  $(p_1, p_{95})$ .  
 Skipping pair  $p_1$  and  $p_{95}$  because gcd of their leading monoms is zero.
140. Creating S-polynomial from the pair  $(p_1, p_{96})$ .  
 Skipping pair  $p_1$  and  $p_{96}$  because gcd of their leading monoms is zero.
141. Creating S-polynomial from the pair  $(p_1, p_{97})$ .  
 Skipping pair  $p_1$  and  $p_{97}$  because gcd of their leading monoms is zero.
142. Creating S-polynomial from the pair  $(p_1, p_{98})$ .  
 Skipping pair  $p_1$  and  $p_{98}$  because gcd of their leading monoms is zero.
143. Creating S-polynomial from the pair  $(p_1, p_{99})$ .  
 Skipping pair  $p_1$  and  $p_{99}$  because gcd of their leading monoms is zero.
144. Creating S-polynomial from the pair  $(p_1, p_{100})$ .  
 Skipping pair  $p_1$  and  $p_{100}$  because gcd of their leading monoms is zero.
145. Creating S-polynomial from the pair  $(p_1, p_{101})$ .  
 Skipping pair  $p_1$  and  $p_{101}$  because gcd of their leading monoms is zero.
146. Creating S-polynomial from the pair  $(p_1, p_{102})$ .  
 Skipping pair  $p_1$  and  $p_{102}$  because gcd of their leading monoms is zero.
147. Creating S-polynomial from the pair  $(p_1, p_{103})$ .  
 Skipping pair  $p_1$  and  $p_{103}$  because gcd of their leading monoms is zero.
148. Creating S-polynomial from the pair  $(p_1, p_{104})$ .  
 Skipping pair  $p_1$  and  $p_{104}$  because gcd of their leading monoms is zero.
149. Creating S-polynomial from the pair  $(p_1, p_{105})$ .  
 Skipping pair  $p_1$  and  $p_{105}$  because gcd of their leading monoms is zero.
150. Creating S-polynomial from the pair  $(p_1, p_{106})$ .  
 Skipping pair  $p_1$  and  $p_{106}$  because gcd of their leading monoms is zero.
151. Creating S-polynomial from the pair  $(p_2, p_{32})$ .  
 Skipping pair  $p_2$  and  $p_{32}$  because gcd of their leading monoms is zero.
152. Creating S-polynomial from the pair  $(p_2, p_{33})$ .  
 Skipping pair  $p_2$  and  $p_{33}$  because gcd of their leading monoms is zero.
153. Creating S-polynomial from the pair  $(p_2, p_{34})$ .  
 Skipping pair  $p_2$  and  $p_{34}$  because gcd of their leading monoms is zero.

154. Creating S-polynomial from the pair  $(p_2, p_{35})$ .  
 Skipping pair  $p_2$  and  $p_{35}$  because gcd of their leading monoms is zero.
155. Creating S-polynomial from the pair  $(p_2, p_{36})$ .  
 Skipping pair  $p_2$  and  $p_{36}$  because gcd of their leading monoms is zero.
156. Creating S-polynomial from the pair  $(p_2, p_{37})$ .  
 Skipping pair  $p_2$  and  $p_{37}$  because gcd of their leading monoms is zero.
157. Creating S-polynomial from the pair  $(p_2, p_{38})$ .  
 Skipping pair  $p_2$  and  $p_{38}$  because gcd of their leading monoms is zero.
158. Creating S-polynomial from the pair  $(p_2, p_{39})$ .  
 Skipping pair  $p_2$  and  $p_{39}$  because gcd of their leading monoms is zero.
159. Creating S-polynomial from the pair  $(p_2, p_{40})$ .  
 Skipping pair  $p_2$  and  $p_{40}$  because gcd of their leading monoms is zero.
160. Creating S-polynomial from the pair  $(p_2, p_{41})$ .  
 Skipping pair  $p_2$  and  $p_{41}$  because gcd of their leading monoms is zero.
161. Creating S-polynomial from the pair  $(p_2, p_{42})$ .  
 Skipping pair  $p_2$  and  $p_{42}$  because gcd of their leading monoms is zero.
162. Creating S-polynomial from the pair  $(p_2, p_{43})$ .  
 Skipping pair  $p_2$  and  $p_{43}$  because gcd of their leading monoms is zero.
163. Creating S-polynomial from the pair  $(p_2, p_{44})$ .  
 Skipping pair  $p_2$  and  $p_{44}$  because gcd of their leading monoms is zero.
164. Creating S-polynomial from the pair  $(p_2, p_{45})$ .  
 Skipping pair  $p_2$  and  $p_{45}$  because gcd of their leading monoms is zero.
165. Creating S-polynomial from the pair  $(p_2, p_{46})$ .  
 Skipping pair  $p_2$  and  $p_{46}$  because gcd of their leading monoms is zero.
166. Creating S-polynomial from the pair  $(p_2, p_{47})$ .  
 Skipping pair  $p_2$  and  $p_{47}$  because gcd of their leading monoms is zero.
167. Creating S-polynomial from the pair  $(p_2, p_{48})$ .  
 Skipping pair  $p_2$  and  $p_{48}$  because gcd of their leading monoms is zero.
168. Creating S-polynomial from the pair  $(p_2, p_{49})$ .  
 Skipping pair  $p_2$  and  $p_{49}$  because gcd of their leading monoms is zero.
169. Creating S-polynomial from the pair  $(p_2, p_{50})$ .  
 Skipping pair  $p_2$  and  $p_{50}$  because gcd of their leading monoms is zero.
170. Creating S-polynomial from the pair  $(p_2, p_{51})$ .  
 Skipping pair  $p_2$  and  $p_{51}$  because gcd of their leading monoms is zero.

171. Creating S-polynomial from the pair  $(p_2, p_{52})$ .  
 Skipping pair  $p_2$  and  $p_{52}$  because gcd of their leading monoms is zero.
172. Creating S-polynomial from the pair  $(p_2, p_{53})$ .  
 Skipping pair  $p_2$  and  $p_{53}$  because gcd of their leading monoms is zero.
173. Creating S-polynomial from the pair  $(p_2, p_{54})$ .  
 Skipping pair  $p_2$  and  $p_{54}$  because gcd of their leading monoms is zero.
174. Creating S-polynomial from the pair  $(p_2, p_{55})$ .  
 Skipping pair  $p_2$  and  $p_{55}$  because gcd of their leading monoms is zero.
175. Creating S-polynomial from the pair  $(p_2, p_{56})$ .  
 Skipping pair  $p_2$  and  $p_{56}$  because gcd of their leading monoms is zero.
176. Creating S-polynomial from the pair  $(p_2, p_{57})$ .  
 Skipping pair  $p_2$  and  $p_{57}$  because gcd of their leading monoms is zero.
177. Creating S-polynomial from the pair  $(p_2, p_{58})$ .  
 Skipping pair  $p_2$  and  $p_{58}$  because gcd of their leading monoms is zero.
178. Creating S-polynomial from the pair  $(p_2, p_{59})$ .  
 Skipping pair  $p_2$  and  $p_{59}$  because gcd of their leading monoms is zero.
179. Creating S-polynomial from the pair  $(p_2, p_{60})$ .  
 Skipping pair  $p_2$  and  $p_{60}$  because gcd of their leading monoms is zero.
180. Creating S-polynomial from the pair  $(p_2, p_{61})$ .  
 Skipping pair  $p_2$  and  $p_{61}$  because gcd of their leading monoms is zero.
181. Creating S-polynomial from the pair  $(p_2, p_{62})$ .  
 Skipping pair  $p_2$  and  $p_{62}$  because gcd of their leading monoms is zero.
182. Creating S-polynomial from the pair  $(p_2, p_{63})$ .  
 Skipping pair  $p_2$  and  $p_{63}$  because gcd of their leading monoms is zero.
183. Creating S-polynomial from the pair  $(p_2, p_{64})$ .  
 Skipping pair  $p_2$  and  $p_{64}$  because gcd of their leading monoms is zero.
184. Creating S-polynomial from the pair  $(p_2, p_{65})$ .  
 Skipping pair  $p_2$  and  $p_{65}$  because gcd of their leading monoms is zero.
185. Creating S-polynomial from the pair  $(p_2, p_{66})$ .  
 Skipping pair  $p_2$  and  $p_{66}$  because gcd of their leading monoms is zero.
186. Creating S-polynomial from the pair  $(p_2, p_{67})$ .  
 Skipping pair  $p_2$  and  $p_{67}$  because gcd of their leading monoms is zero.
187. Creating S-polynomial from the pair  $(p_2, p_{68})$ .  
 Skipping pair  $p_2$  and  $p_{68}$  because gcd of their leading monoms is zero.

188. Creating S-polynomial from the pair  $(p_2, p_{69})$ .  
 Skipping pair  $p_2$  and  $p_{69}$  because gcd of their leading monoms is zero.
189. Creating S-polynomial from the pair  $(p_2, p_{70})$ .  
 Skipping pair  $p_2$  and  $p_{70}$  because gcd of their leading monoms is zero.
190. Creating S-polynomial from the pair  $(p_2, p_{71})$ .  
 Skipping pair  $p_2$  and  $p_{71}$  because gcd of their leading monoms is zero.
191. Creating S-polynomial from the pair  $(p_2, p_{72})$ .  
 Skipping pair  $p_2$  and  $p_{72}$  because gcd of their leading monoms is zero.
192. Creating S-polynomial from the pair  $(p_2, p_{73})$ .  
 Skipping pair  $p_2$  and  $p_{73}$  because gcd of their leading monoms is zero.
193. Creating S-polynomial from the pair  $(p_2, p_{74})$ .  
 Skipping pair  $p_2$  and  $p_{74}$  because gcd of their leading monoms is zero.
194. Creating S-polynomial from the pair  $(p_2, p_{75})$ .  
 Skipping pair  $p_2$  and  $p_{75}$  because gcd of their leading monoms is zero.
195. Creating S-polynomial from the pair  $(p_2, p_{76})$ .  
 Skipping pair  $p_2$  and  $p_{76}$  because gcd of their leading monoms is zero.
196. Creating S-polynomial from the pair  $(p_2, p_{77})$ .  
 Skipping pair  $p_2$  and  $p_{77}$  because gcd of their leading monoms is zero.
197. Creating S-polynomial from the pair  $(p_2, p_{78})$ .  
 Skipping pair  $p_2$  and  $p_{78}$  because gcd of their leading monoms is zero.
198. Creating S-polynomial from the pair  $(p_2, p_{79})$ .  
 Skipping pair  $p_2$  and  $p_{79}$  because gcd of their leading monoms is zero.
199. Creating S-polynomial from the pair  $(p_2, p_{80})$ .  
 Skipping pair  $p_2$  and  $p_{80}$  because gcd of their leading monoms is zero.
200. Creating S-polynomial from the pair  $(p_2, p_{81})$ .  
 Skipping pair  $p_2$  and  $p_{81}$  because gcd of their leading monoms is zero.
201. Creating S-polynomial from the pair  $(p_2, p_{82})$ .  
 Skipping pair  $p_2$  and  $p_{82}$  because gcd of their leading monoms is zero.
202. Creating S-polynomial from the pair  $(p_2, p_{83})$ .  
 Skipping pair  $p_2$  and  $p_{83}$  because gcd of their leading monoms is zero.
203. Creating S-polynomial from the pair  $(p_2, p_{84})$ .  
 Skipping pair  $p_2$  and  $p_{84}$  because gcd of their leading monoms is zero.
204. Creating S-polynomial from the pair  $(p_2, p_{85})$ .  
 Skipping pair  $p_2$  and  $p_{85}$  because gcd of their leading monoms is zero.

205. Creating S-polynomial from the pair  $(p_2, p_{86})$ .  
 Skipping pair  $p_2$  and  $p_{86}$  because gcd of their leading monoms is zero.
206. Creating S-polynomial from the pair  $(p_2, p_{87})$ .  
 Skipping pair  $p_2$  and  $p_{87}$  because gcd of their leading monoms is zero.
207. Creating S-polynomial from the pair  $(p_2, p_{88})$ .  
 Skipping pair  $p_2$  and  $p_{88}$  because gcd of their leading monoms is zero.
208. Creating S-polynomial from the pair  $(p_2, p_{89})$ .  
 Skipping pair  $p_2$  and  $p_{89}$  because gcd of their leading monoms is zero.
209. Creating S-polynomial from the pair  $(p_2, p_{90})$ .  
 Skipping pair  $p_2$  and  $p_{90}$  because gcd of their leading monoms is zero.
210. Creating S-polynomial from the pair  $(p_2, p_{91})$ .  
 Skipping pair  $p_2$  and  $p_{91}$  because gcd of their leading monoms is zero.
211. Creating S-polynomial from the pair  $(p_2, p_{92})$ .  
 Skipping pair  $p_2$  and  $p_{92}$  because gcd of their leading monoms is zero.
212. Creating S-polynomial from the pair  $(p_2, p_{93})$ .  
 Skipping pair  $p_2$  and  $p_{93}$  because gcd of their leading monoms is zero.
213. Creating S-polynomial from the pair  $(p_2, p_{94})$ .  
 Skipping pair  $p_2$  and  $p_{94}$  because gcd of their leading monoms is zero.
214. Creating S-polynomial from the pair  $(p_2, p_{95})$ .  
 Skipping pair  $p_2$  and  $p_{95}$  because gcd of their leading monoms is zero.
215. Creating S-polynomial from the pair  $(p_2, p_{96})$ .  
 Skipping pair  $p_2$  and  $p_{96}$  because gcd of their leading monoms is zero.
216. Creating S-polynomial from the pair  $(p_2, p_{97})$ .  
 Skipping pair  $p_2$  and  $p_{97}$  because gcd of their leading monoms is zero.
217. Creating S-polynomial from the pair  $(p_2, p_{98})$ .  
 Skipping pair  $p_2$  and  $p_{98}$  because gcd of their leading monoms is zero.
218. Creating S-polynomial from the pair  $(p_2, p_{99})$ .  
 Skipping pair  $p_2$  and  $p_{99}$  because gcd of their leading monoms is zero.
219. Creating S-polynomial from the pair  $(p_2, p_{100})$ .  
 Skipping pair  $p_2$  and  $p_{100}$  because gcd of their leading monoms is zero.
220. Creating S-polynomial from the pair  $(p_2, p_{101})$ .  
 Skipping pair  $p_2$  and  $p_{101}$  because gcd of their leading monoms is zero.
221. Creating S-polynomial from the pair  $(p_2, p_{102})$ .  
 Skipping pair  $p_2$  and  $p_{102}$  because gcd of their leading monoms is zero.

222. Creating S-polynomial from the pair  $(p_2, p_{103})$ .  
 Skipping pair  $p_2$  and  $p_{103}$  because gcd of their leading monoms is zero.
223. Creating S-polynomial from the pair  $(p_2, p_{104})$ .  
 Skipping pair  $p_2$  and  $p_{104}$  because gcd of their leading monoms is zero.
224. Creating S-polynomial from the pair  $(p_2, p_{105})$ .  
 Skipping pair  $p_2$  and  $p_{105}$  because gcd of their leading monoms is zero.
225. Creating S-polynomial from the pair  $(p_2, p_{106})$ .  
 Skipping pair  $p_2$  and  $p_{106}$  because gcd of their leading monoms is zero.
226. Creating S-polynomial from the pair  $(p_3, p_{32})$ .  
 Skipping pair  $p_3$  and  $p_{32}$  because gcd of their leading monoms is zero.
227. Creating S-polynomial from the pair  $(p_3, p_{33})$ .  
 Skipping pair  $p_3$  and  $p_{33}$  because gcd of their leading monoms is zero.
228. Creating S-polynomial from the pair  $(p_3, p_{34})$ .  
 Forming S-pol of  $p_3$  and  $p_{34}$ :

$$\begin{aligned}
 p_{284} = & 256u_2^{13}u_1^8x_{12}x_4 - 128u_5^2u_2^{13}u_1^7x_{12} - 128u_2^{13}u_1^7x_{10}x_5x_4 - \\
 & 64u_5u_2^{13}u_1^6x_5x_4x_1 + 128u_5u_2^{13}u_1^7x_5x_4 + 64u_6u_2^{13}u_1^6x_4^2x_1 - \\
 & 128u_6u_2^{13}u_1^7x_4^2
 \end{aligned}$$

Reduced to zero.

229. Creating S-polynomial from the pair  $(p_3, p_{35})$ .  
 Skipping pair  $p_3$  and  $p_{35}$  because gcd of their leading monoms is zero.
230. Creating S-polynomial from the pair  $(p_3, p_{36})$ .  
 Skipping pair  $p_3$  and  $p_{36}$  because gcd of their leading monoms is zero.
231. Creating S-polynomial from the pair  $(p_3, p_{37})$ .  
 Forming S-pol of  $p_3$  and  $p_{37}$ :

$$\begin{aligned}
 p_{285} = & 256u_3^{13}u_1^8x_8x_4 - 128u_5^2u_3^{13}u_1^7x_8 - 128u_3^{13}u_1^7x_6x_5x_4 - \\
 & 64u_5u_3^{13}u_1^6x_5x_4x_2 + 128u_5u_3^{13}u_1^7x_5x_4 + 64u_6u_3^{13}u_1^6x_4^2x_2 - \\
 & 128u_6u_3^{13}u_1^7x_4^2
 \end{aligned}$$

Reduced to zero.

232. Creating S-polynomial from the pair  $(p_3, p_{38})$ .  
 Skipping pair  $p_3$  and  $p_{38}$  because gcd of their leading monoms is zero.
233. Creating S-polynomial from the pair  $(p_3, p_{39})$ .  
 Skipping pair  $p_3$  and  $p_{39}$  because gcd of their leading monoms is zero.

234. Creating S-polynomial from the pair  $(p_3, p_{40})$ .

Forming S-pol of  $p_3$  and  $p_{40}$ :

$$\begin{aligned} p_{286} = & 256u_4^{13}u_1^8x_{16}x_4 - 128u_5^2u_4^{13}u_1^7x_{16} - 128u_4^{13}u_1^7x_{14}x_5x_4 - \\ & 64u_5u_4^{13}u_1^6x_5x_4x_3 + 128u_5u_4^{13}u_1^7x_5x_4 + 64u_6u_4^{13}u_1^6x_4^2x_3 - \\ & 128u_6u_4^{13}u_1^7x_4^2 \end{aligned}$$

Reduced to zero.

235. Creating S-polynomial from the pair  $(p_3, p_{41})$ .

Forming S-pol of  $p_3$  and  $p_{41}$ :

$$\begin{aligned} p_{287} = & -256u_5u_3^{12}u_1^8x_8x_4 + 128u_5^3u_3^{12}u_1^7x_8 + 128u_6u_3^{12}u_1^7x_6x_4^2 + \\ & 64u_5u_3^{13}u_1^6x_5x_4^2 - 128u_6u_3^{13}u_1^7x_4^2 + 64u_6u_5^2u_3^{13}u_1^6x_4 \end{aligned}$$

Reduced to zero.

236. Creating S-polynomial from the pair  $(p_3, p_{42})$ .

Forming S-pol of  $p_3$  and  $p_{42}$ :

$$\begin{aligned} p_{288} = & -256u_5u_2^{12}u_1^8x_{12}x_4 + 128u_5^3u_2^{12}u_1^7x_{12} + 128u_6u_2^{12}u_1^7x_{10}x_4^2 + \\ & 64u_5u_2^{13}u_1^6x_5x_4^2 - 128u_6u_2^{13}u_1^7x_4^2 + 64u_6u_5^2u_2^{13}u_1^6x_4 \end{aligned}$$

Reduced to zero.

237. Creating S-polynomial from the pair  $(p_3, p_{43})$ .

Forming S-pol of  $p_3$  and  $p_{43}$ :

$$\begin{aligned} p_{289} = & -256u_5u_4^{12}u_1^8x_{16}x_4 + 128u_5^3u_4^{12}u_1^7x_{16} + 128u_6u_4^{12}u_1^7x_{14}x_4^2 + \\ & 64u_5u_4^{13}u_1^6x_5x_4^2 - 128u_6u_4^{13}u_1^7x_4^2 + 64u_6u_5^2u_4^{13}u_1^6x_4 \end{aligned}$$

Reduced to zero.

238. Creating S-polynomial from the pair  $(p_3, p_{44})$ .

Skipping pair  $p_3$  and  $p_{44}$  because gcd of their leading monoms is zero.

239. Creating S-polynomial from the pair  $(p_3, p_{45})$ .

Skipping pair  $p_3$  and  $p_{45}$  because gcd of their leading monoms is zero.

240. Creating S-polynomial from the pair  $(p_3, p_{46})$ .

Skipping pair  $p_3$  and  $p_{46}$  because gcd of their leading monoms is zero.

241. Creating S-polynomial from the pair  $(p_3, p_{47})$ .

Forming S-pol of  $p_3$  and  $p_{47}$ : Polynomial too big for output (text size is 1010 characters, number of terms is 14)

Reduced to zero.

242. Creating S-polynomial from the pair  $(p_3, p_{48})$ .

Skipping pair  $p_3$  and  $p_{48}$  because gcd of their leading monoms is zero.

243. Creating S-polynomial from the pair  $(p_3, p_{49})$ .  
 Skipping pair  $p_3$  and  $p_{49}$  because gcd of their leading monoms is zero.
244. Creating S-polynomial from the pair  $(p_3, p_{50})$ .  
 Skipping pair  $p_3$  and  $p_{50}$  because gcd of their leading monoms is zero.
245. Creating S-polynomial from the pair  $(p_3, p_{51})$ .  
 Skipping pair  $p_3$  and  $p_{51}$  because gcd of their leading monoms is zero.
246. Creating S-polynomial from the pair  $(p_3, p_{52})$ .  
 Forming S-pol of  $p_3$  and  $p_{52}$ :

$$\begin{aligned}
 p_{290} = & (4096u_3^{19}u_1^{12} + 16384u_3^{17}u_1^{14})x_8^2x_4 + \\
 & (-2048u_5^2u_3^{19}u_1^{11} - 8192u_5^2u_3^{17}u_1^{13})x_8^2 - \\
 & 2048u_3^{19}u_1^{11}x_8x_6x_5x_4 - 4096u_3^{18}u_1^{12}x_8x_5x_4^2 + \\
 & (-512u_5u_3^{21}u_1^9 + 2048u_5u_3^{19}u_1^{11})x_8x_5x_4 + \\
 & (512u_6u_3^{21}u_1^9 - 8192u_6u_3^{17}u_1^{13})x_8x_4^2 + \\
 & (512u_6u_3^{20}u_1^9 + 2048u_6u_3^{18}u_1^{11})x_5x_4^2x_2 + \\
 & (-256u_6u_3^{22}u_1^8 - 1024u_6u_3^{20}u_1^{10})x_5x_4^2 + \\
 & (-256u_6u_5u_3^{21}u_1^8 - 1024u_5u_3^{20}u_1^{10})x_5x_4x_2 + 512u_5u_3^{22}u_1^9x_5x_4 + \\
 & (256u_6^2u_3^{21}u_1^8 + 1024u_6^2u_3^{19}u_1^{10})x_4^2x_2 + \\
 & 512u_6^2u_5u_3^{20}u_1^9x_4x_2 - 256u_6^2u_5u_3^{22}u_1^8x_4
 \end{aligned}$$

Reduced to zero.

247. Creating S-polynomial from the pair  $(p_3, p_{53})$ .  
 Skipping pair  $p_3$  and  $p_{53}$  because gcd of their leading monoms is zero.
248. Creating S-polynomial from the pair  $(p_3, p_{54})$ .  
 Skipping pair  $p_3$  and  $p_{54}$  because gcd of their leading monoms is zero.
249. Creating S-polynomial from the pair  $(p_3, p_{55})$ .  
 Skipping pair  $p_3$  and  $p_{55}$  because gcd of their leading monoms is zero.
250. Creating S-polynomial from the pair  $(p_3, p_{56})$ .  
 Skipping pair  $p_3$  and  $p_{56}$  because gcd of their leading monoms is zero.
251. Creating S-polynomial from the pair  $(p_3, p_{57})$ .  
 Forming S-pol of  $p_3$  and  $p_{57}$ : Polynomial too big for output (text size is 1019 characters, number of terms is 14)  
 Reduced to zero.
252. Creating S-polynomial from the pair  $(p_3, p_{58})$ .  
 Skipping pair  $p_3$  and  $p_{58}$  because gcd of their leading monoms is zero.



253. Creating S-polynomial from the pair  $(p_3, p_{59})$ .  
 Skipping pair  $p_3$  and  $p_{59}$  because gcd of their leading monoms is zero.
254. Creating S-polynomial from the pair  $(p_3, p_{60})$ .  
 Skipping pair  $p_3$  and  $p_{60}$  because gcd of their leading monoms is zero.
255. Creating S-polynomial from the pair  $(p_3, p_{61})$ .  
 Skipping pair  $p_3$  and  $p_{61}$  because gcd of their leading monoms is zero.
256. Creating S-polynomial from the pair  $(p_3, p_{62})$ .  
 Forming S-pol of  $p_3$  and  $p_{62}$ :

$$\begin{aligned}
 p_{291} = & (4096u_2^{19}u_1^{12} + 16384u_2^{17}u_1^{14})x_{12}^2x_4 + \\
 & (-2048u_5^2u_2^{19}u_1^{11} - 8192u_5^2u_2^{17}u_1^{13})x_{12}^2 - \\
 & 2048u_2^{19}u_1^{11}x_{12}x_{10}x_5x_4 - 4096u_2^{18}u_1^{12}x_{12}x_5x_4^2 + \\
 & (-512u_5u_2^{21}u_1^9 + 2048u_5u_2^{19}u_1^{11})x_{12}x_5x_4 + \\
 & (512u_6u_2^{21}u_1^9 - 8192u_6u_2^{17}u_1^{13})x_{12}x_4^2 + \\
 & (512u_6u_2^{20}u_1^9 + 2048u_6u_2^{18}u_1^{11})x_5x_4^2x_1 + \\
 & (-256u_6u_2^{22}u_1^8 - 1024u_6u_2^{20}u_1^{10})x_5x_4^2 + \\
 & (-256u_6u_5u_2^{21}u_1^8 - 1024u_5u_2^{20}u_1^{10})x_5x_4x_1 + 512u_5u_2^{22}u_1^9x_5x_4 + \\
 & (256u_6^2u_2^{21}u_1^8 + 1024u_6^2u_2^{19}u_1^{10})x_4^2x_1 + \\
 & 512u_6^2u_5u_2^{20}u_1^9x_4x_1 - 256u_6^2u_5u_2^{22}u_1^8x_4
 \end{aligned}$$

Reduced to zero.

257. Creating S-polynomial from the pair  $(p_3, p_{63})$ .  
 Skipping pair  $p_3$  and  $p_{63}$  because gcd of their leading monoms is zero.
258. Creating S-polynomial from the pair  $(p_3, p_{64})$ .  
 Skipping pair  $p_3$  and  $p_{64}$  because gcd of their leading monoms is zero.
259. Creating S-polynomial from the pair  $(p_3, p_{65})$ .  
 Skipping pair  $p_3$  and  $p_{65}$  because gcd of their leading monoms is zero.
260. Creating S-polynomial from the pair  $(p_3, p_{66})$ .  
 Skipping pair  $p_3$  and  $p_{66}$  because gcd of their leading monoms is zero.
261. Creating S-polynomial from the pair  $(p_3, p_{67})$ .  
 Forming S-pol of  $p_3$  and  $p_{67}$ : Polynomial too big for output (text size is 1019 characters, number of terms is 14)  
 Reduced to zero.
262. Creating S-polynomial from the pair  $(p_3, p_{68})$ .  
 Skipping pair  $p_3$  and  $p_{68}$  because gcd of their leading monoms is zero.

263. Creating S-polynomial from the pair  $(p_3, p_{69})$ .  
 Skipping pair  $p_3$  and  $p_{69}$  because gcd of their leading monoms is zero.
264. Creating S-polynomial from the pair  $(p_3, p_{70})$ .  
 Skipping pair  $p_3$  and  $p_{70}$  because gcd of their leading monoms is zero.
265. Creating S-polynomial from the pair  $(p_3, p_{71})$ .  
 Skipping pair  $p_3$  and  $p_{71}$  because gcd of their leading monoms is zero.
266. Creating S-polynomial from the pair  $(p_3, p_{72})$ .  
 Forming S-pol of  $p_3$  and  $p_{72}$ :

$$\begin{aligned}
 p_{292} = & (4096u_4^{19}u_1^{12} + 16384u_4^{17}u_1^{14})x_{16}^2x_4 + \\
 & (-2048u_5^2u_4^{19}u_1^{11} - 8192u_5^2u_4^{17}u_1^{13})x_{16}^2 - \\
 & 2048u_4^{19}u_1^{11}x_{16}x_{14}x_5x_4 - 4096u_4^{18}u_1^{12}x_{16}x_5x_4^2 + \\
 & (-512u_5u_4^{21}u_1^9 + 2048u_5u_4^{19}u_1^{11})x_{16}x_5x_4 + \\
 & (512u_6u_4^{21}u_1^9 - 8192u_6u_4^{17}u_1^{13})x_{16}x_4^2 + \\
 & (512u_6u_4^{20}u_1^9 + 2048u_6u_4^{18}u_1^{11})x_5x_4^2x_3 + \\
 & (-256u_6u_4^{22}u_1^8 - 1024u_6u_4^{20}u_1^{10})x_5x_4^2 + \\
 & (-256u_6u_5u_4^{21}u_1^8 - 1024u_5u_4^{20}u_1^{10})x_5x_4x_3 + 512u_5u_4^{22}u_1^9x_5x_4 + \\
 & (256u_6^2u_4^{21}u_1^8 + 1024u_6^2u_4^{19}u_1^{10})x_4^2x_3 + \\
 & 512u_6^2u_5u_4^{20}u_1^9x_4x_3 - 256u_6^2u_5u_4^{22}u_1^8x_4
 \end{aligned}$$

Reduced to zero.

267. Creating S-polynomial from the pair  $(p_3, p_{73})$ .  
 Skipping pair  $p_3$  and  $p_{73}$  because gcd of their leading monoms is zero.
268. Creating S-polynomial from the pair  $(p_3, p_{74})$ .  
 Skipping pair  $p_3$  and  $p_{74}$  because gcd of their leading monoms is zero.
269. Creating S-polynomial from the pair  $(p_3, p_{75})$ .  
 Skipping pair  $p_3$  and  $p_{75}$  because gcd of their leading monoms is zero.
270. Creating S-polynomial from the pair  $(p_3, p_{76})$ .  
 Skipping pair  $p_3$  and  $p_{76}$  because gcd of their leading monoms is zero.
271. Creating S-polynomial from the pair  $(p_3, p_{77})$ .  
 Skipping pair  $p_3$  and  $p_{77}$  because gcd of their leading monoms is zero.
272. Creating S-polynomial from the pair  $(p_3, p_{78})$ .  
 Skipping pair  $p_3$  and  $p_{78}$  because gcd of their leading monoms is zero.

273. Creating S-polynomial from the pair  $(p_3, p_{79})$ .

Forming S-pol of  $p_3$  and  $p_{79}$ :

$$\begin{aligned} p_{293} = & (1024u_2^{14}u_1^{10} - 2048u_2^{12}u_1^{11})x_{12}x_4 + \\ & (-512u_5^2u_2^{14}u_1^9 + 1024u_5^2u_2^{12}u_1^{10})x_{12} - 512u_2^{14}u_1^9x_{10}x_5x_4 + \\ & (2048u_2^{11}u_1^{11} - 1024u_2^{11}u_1^{10})x_5x_4^2x_1 + \\ & (-1024u_2^{13}u_1^{10} + 512u_2^{13}u_1^9)x_5x_4^2 - 256u_5u_2^{14}u_1^8x_5x_4x_1 + \\ & 512u_5u_2^{14}u_1^9x_5x_4 + \\ & (256u_6u_2^{14}u_1^8 + 1024u_6u_2^{12}u_1^{10} - 512u_6u_2^{12}u_1^9)x_4^2x_1 - \\ & 512u_6u_2^{14}u_1^9x_4^2 \end{aligned}$$

S-pol added.

274. Creating S-polynomial from the pair  $(p_3, p_{80})$ .

Skipping pair  $p_3$  and  $p_{80}$  because gcd of their leading monoms is zero.

275. Creating S-polynomial from the pair  $(p_3, p_{81})$ .

Skipping pair  $p_3$  and  $p_{81}$  because gcd of their leading monoms is zero.

276. Creating S-polynomial from the pair  $(p_3, p_{82})$ .

Skipping pair  $p_3$  and  $p_{82}$  because gcd of their leading monoms is zero.

277. Creating S-polynomial from the pair  $(p_3, p_{83})$ .

Skipping pair  $p_3$  and  $p_{83}$  because gcd of their leading monoms is zero.

278. Creating S-polynomial from the pair  $(p_3, p_{84})$ .

Skipping pair  $p_3$  and  $p_{84}$  because gcd of their leading monoms is zero.

279. Creating S-polynomial from the pair  $(p_3, p_{85})$ .

Skipping pair  $p_3$  and  $p_{85}$  because gcd of their leading monoms is zero.

280. Creating S-polynomial from the pair  $(p_3, p_{86})$ .

Forming S-pol of  $p_3$  and  $p_{86}$ :

$$\begin{aligned} p_{294} = & (1024u_3^{14}u_1^{10} - 2048u_3^{12}u_1^{11})x_8x_4 + \\ & (-512u_5^2u_3^{14}u_1^9 + 1024u_5^2u_3^{12}u_1^{10})x_8 - 512u_3^{14}u_1^9x_6x_5x_4 + \\ & (2048u_3^{11}u_1^{11} - 1024u_3^{11}u_1^{10})x_5x_4^2x_2 + \\ & (-1024u_3^{13}u_1^{10} + 512u_3^{13}u_1^9)x_5x_4^2 - 256u_5u_3^{14}u_1^8x_5x_4x_2 + \\ & 512u_5u_3^{14}u_1^9x_5x_4 + \\ & (256u_6u_3^{14}u_1^8 + 1024u_6u_3^{12}u_1^{10} - 512u_6u_3^{12}u_1^9)x_4^2x_2 - \\ & 512u_6u_3^{14}u_1^9x_4^2 \end{aligned}$$

S-pol added.

281. Creating S-polynomial from the pair  $(p_3, p_{87})$ .  
 Skipping pair  $p_3$  and  $p_{87}$  because gcd of their leading monoms is zero.
282. Creating S-polynomial from the pair  $(p_3, p_{88})$ .  
 Skipping pair  $p_3$  and  $p_{88}$  because gcd of their leading monoms is zero.
283. Creating S-polynomial from the pair  $(p_3, p_{89})$ .  
 Skipping pair  $p_3$  and  $p_{89}$  because gcd of their leading monoms is zero.
284. Creating S-polynomial from the pair  $(p_3, p_{90})$ .  
 Skipping pair  $p_3$  and  $p_{90}$  because gcd of their leading monoms is zero.
285. Creating S-polynomial from the pair  $(p_3, p_{91})$ .  
 Skipping pair  $p_3$  and  $p_{91}$  because gcd of their leading monoms is zero.
286. Creating S-polynomial from the pair  $(p_3, p_{92})$ .  
 Skipping pair  $p_3$  and  $p_{92}$  because gcd of their leading monoms is zero.
287. Creating S-polynomial from the pair  $(p_3, p_{93})$ .  
 Forming S-pol of  $p_3$  and  $p_{93}$ :

$$\begin{aligned}
 p_{295} = & (1024u_4^{14}u_1^{10} - 2048u_4^{12}u_1^{11})x_{16}x_4 + \\
 & (-512u_5^2u_4^{14}u_1^9 + 1024u_5^2u_4^{12}u_1^{10})x_{16} - 512u_4^{14}u_1^9x_{14}x_5x_4 + \\
 & (2048u_4^{11}u_1^{11} - 1024u_4^{11}u_1^{10})x_5x_4^2x_3 + \\
 & (-1024u_4^{13}u_1^{10} + 512u_4^{13}u_1^9)x_5x_4^2 - 256u_5u_4^{14}u_1^8x_5x_4x_3 + \\
 & 512u_5u_4^{14}u_1^9x_5x_4 + \\
 & (256u_6u_4^{14}u_1^8 + 1024u_6u_4^{12}u_1^{10} - 512u_6u_4^{12}u_1^9)x_4^2x_3 - \\
 & 512u_6u_4^{14}u_1^9x_4^2
 \end{aligned}$$

S-pol added.

288. Creating S-polynomial from the pair  $(p_3, p_{94})$ .  
 Skipping pair  $p_3$  and  $p_{94}$  because gcd of their leading monoms is zero.
289. Creating S-polynomial from the pair  $(p_3, p_{95})$ .  
 Forming S-pol of  $p_3$  and  $p_{95}$ :

$$\begin{aligned}
 p_{296} = & (262144u_5u_3^{17}u_1^{18} - 1048576u_3^{16}u_1^{20})x_8x_6x_4 + \\
 & 524288u_5^2u_3^{16}u_1^{19}x_8x_6 + (524288u_5u_3^{16}u_1^{19} + 524288u_3^{17}u_1^{19})x_8x_4^2 + \\
 & (65536u_5^2u_3^{19}u_1^{16} - 262144u_5^2u_3^{17}u_1^{18})x_8x_4 - \\
 & 262144u_6u_3^{17}u_1^{18}x_6^2x_4 - 131072u_5u_3^{18}u_1^{17}x_6x_5x_4 - \\
 & 65536u_6u_5u_3^{19}u_1^{16}x_6x_4 - 131072u_5u_3^{17}u_1^{17}x_5x_4^2x_2 - \\
 & 32768u_5^2u_3^{20}u_1^{15}x_5x_4 - 65536u_6u_5u_3^{18}u_1^{16}x_4^2x_2 + \\
 & (32768u_6u_5u_3^{20}u_1^{15} + 131072u_6u_3^{19}u_1^{17})x_4^2 - \\
 & 65536u_6u_5^2u_3^{19}u_1^{16}x_4
 \end{aligned}$$

Reduced to zero.

290. Creating S-polynomial from the pair  $(p_3, p_{96})$ .

Forming S-pol of  $p_3$  and  $p_{96}$ :

$$\begin{aligned} p_{297} = & (32u_5u_3^4u_1^5 + 32u_3^5u_1^5)x_8x_4 - 16u_5^2u_3^5u_1^4x_8 - \\ & 16u_3^5u_1^4x_6x_5x_4 - 32u_6u_3^4u_1^5x_6x_4 - 8u_5u_3^5u_1^3x_5x_4x_2 + \\ & 8u_6u_3^5u_1^3x_4^2x_2 \end{aligned}$$

Reduced to zero.

291. Creating S-polynomial from the pair  $(p_3, p_{97})$ .

Forming S-pol of  $p_3$  and  $p_{97}$ :

$$\begin{aligned} p_{298} = & 512u_3^{13}u_1^9x_8x_4 - 256u_5^2u_3^{13}u_1^8x_8 - 256u_3^{13}u_1^8x_6x_5x_4 + \\ & (1024u_3^{10}u_1^{10} - 512u_3^{10}u_1^9)x_5x_4^2x_2 - 512u_3^{12}u_1^9x_5x_4^2 - \\ & 128u_5u_3^{13}u_1^7x_5x_4x_2 + 256u_5u_3^{13}u_1^8x_5x_4 + \\ & (128u_6u_3^{13}u_1^7 + 512u_6u_3^{11}u_1^9)x_4^2x_2 + \\ & (-256u_6u_3^{13}u_1^8 - 512u_6u_3^{11}u_1^9)x_4^2 \end{aligned}$$

S-pol added.

292. Creating S-polynomial from the pair  $(p_3, p_{98})$ .

Skipping pair  $p_3$  and  $p_{98}$  because gcd of their leading monoms is zero.

293. Creating S-polynomial from the pair  $(p_3, p_{99})$ .

Skipping pair  $p_3$  and  $p_{99}$  because gcd of their leading monoms is zero.

294. Creating S-polynomial from the pair  $(p_3, p_{100})$ .

Forming S-pol of  $p_3$  and  $p_{100}$ :

$$\begin{aligned} p_{299} = & (262144u_5u_2^{17}u_1^{18} - 1048576u_2^{16}u_1^{20})x_{12}x_{10}x_4 + \\ & 524288u_5^2u_2^{16}u_1^{19}x_{12}x_{10} + \\ & (524288u_5u_2^{16}u_1^{19} + 524288u_2^{17}u_1^{19})x_{12}x_4^2 + \\ & (65536u_5^2u_2^{19}u_1^{16} - 262144u_5^2u_2^{17}u_1^{18})x_{12}x_4 - \\ & 262144u_6u_2^{17}u_1^{18}x_{10}^2x_4 - 131072u_5u_2^{18}u_1^{17}x_{10}x_5x_4 - \\ & 65536u_6u_5u_2^{19}u_1^{16}x_{10}x_4 - 131072u_5u_2^{17}u_1^{17}x_5x_4^2x_1 - \\ & 32768u_5^2u_2^{20}u_1^{15}x_5x_4 - 65536u_6u_5u_2^{18}u_1^{16}x_4^2x_1 + \\ & (32768u_6u_5u_2^{20}u_1^{15} + 131072u_6u_2^{19}u_1^{17})x_4^2 - \\ & 65536u_6u_3^2u_2^{19}u_1^{16}x_4 \end{aligned}$$

Reduced to zero.

295. Creating S-polynomial from the pair  $(p_3, p_{101})$ .

Forming S-pol of  $p_3$  and  $p_{101}$ :

$$\begin{aligned} p_{300} = & (32u_5u_2^4u_1^5 + 32u_2^5u_1^5)x_{12}x_4 - 16u_5^2u_2^5u_1^4x_{12} - \\ & 16u_2^5u_1^4x_{10}x_5x_4 - 32u_6u_2^4u_1^5x_{10}x_4 - 8u_5u_2^5u_1^3x_5x_4x_1 + \\ & 8u_6u_2^5u_1^3x_4^2x_1 \end{aligned}$$

Reduced to zero.

296. Creating S-polynomial from the pair  $(p_3, p_{102})$ .

Forming S-pol of  $p_3$  and  $p_{102}$ :

$$\begin{aligned} p_{301} = & 512u_2^{13}u_1^9x_{12}x_4 - 256u_5^2u_2^{13}u_1^8x_{12} - 256u_2^{13}u_1^8x_{10}x_5x_4 + \\ & (1024u_2^{10}u_1^{10} - 512u_2^{10}u_1^9)x_5x_4^2x_1 - 512u_2^{12}u_1^9x_5x_4^2 - \\ & 128u_5u_2^{13}u_1^7x_5x_4x_1 + 256u_5u_2^{13}u_1^8x_5x_4 + \\ & (128u_6u_2^{13}u_1^7 + 512u_6u_2^{11}u_1^9)x_4^2x_1 + \\ & (-256u_6u_2^{13}u_1^8 - 512u_6u_2^{11}u_1^9)x_4^2 \end{aligned}$$

S-pol added.

297. Creating S-polynomial from the pair  $(p_3, p_{103})$ .

Skipping pair  $p_3$  and  $p_{103}$  because gcd of their leading monoms is zero.

298. Creating S-polynomial from the pair  $(p_3, p_{104})$ .

Forming S-pol of  $p_3$  and  $p_{104}$ :

$$\begin{aligned} p_{302} = & (262144u_5u_4^{17}u_1^{18} - 1048576u_4^{16}u_1^{20})x_{16}x_{14}x_4 + \\ & 524288u_5^2u_4^{16}u_1^{19}x_{16}x_{14} + \\ & (524288u_5u_4^{16}u_1^{19} + 524288u_4^{17}u_1^{19})x_{16}x_4^2 + \\ & (65536u_5^2u_4^{19}u_1^{16} - 262144u_5^2u_4^{17}u_1^{18})x_{16}x_4 - \\ & 262144u_6u_4^{17}u_1^{18}x_{14}x_4 - 131072u_5u_4^{18}u_1^{17}x_{14}x_5x_4 - \\ & 65536u_6u_5u_4^{19}u_1^{16}x_{14}x_4 - 131072u_5u_4^{17}u_1^{17}x_5x_4^2x_3 - \\ & 32768u_5^2u_4^{20}u_1^{15}x_5x_4 - 65536u_6u_5u_4^{18}u_1^{16}x_4^2x_3 + \\ & (32768u_6u_5u_4^{20}u_1^{15} + 131072u_6u_4^{19}u_1^{17})x_4^2 - \\ & 65536u_6u_5^2u_4^{19}u_1^{16}x_4 \end{aligned}$$

Reduced to zero.

299. Creating S-polynomial from the pair  $(p_3, p_{105})$ .

Forming S-pol of  $p_3$  and  $p_{105}$ :

$$\begin{aligned} p_{303} = & (32u_5u_4^4u_1^5 + 32u_4^5u_1^5)x_{16}x_4 - 16u_5^2u_4^5u_1^4x_{16} - \\ & 16u_4^5u_1^4x_{14}x_5x_4 - 32u_6u_4^4u_1^5x_{14}x_4 - 8u_5u_4^5u_1^3x_5x_4x_3 + \\ & 8u_6u_4^5u_1^3x_4^2x_3 \end{aligned}$$

Reduced to zero.

300. Creating S-polynomial from the pair  $(p_3, p_{106})$ .

Forming S-pol of  $p_3$  and  $p_{106}$ :

$$\begin{aligned} p_{304} = & 512u_4^{13}u_1^9x_{16}x_4 - 256u_5^2u_4^{13}u_1^8x_{16} - 256u_4^{13}u_1^8x_{14}x_5x_4 + \\ & (1024u_4^{10}u_1^{10} - 512u_4^{10}u_1^9)x_5x_4^2x_3 - 512u_4^{12}u_1^9x_5x_4^2 - \\ & 128u_5u_4^{13}u_1^7x_5x_4x_3 + 256u_5u_4^{13}u_1^8x_5x_4 + \\ & (128u_6u_4^{13}u_1^7 + 512u_6u_4^{11}u_1^9)x_4^2x_3 + \\ & (-256u_6u_4^{13}u_1^8 - 512u_6u_4^{11}u_1^9)x_4^2 \end{aligned}$$

S-pol added.

301. Creating S-polynomial from the pair  $(p_4, p_{32})$ .

Skipping pair  $p_4$  and  $p_{32}$  because gcd of their leading monoms is zero.

302. Creating S-polynomial from the pair  $(p_4, p_{33})$ .

Skipping pair  $p_4$  and  $p_{33}$  because gcd of their leading monoms is zero.

303. Creating S-polynomial from the pair  $(p_4, p_{34})$ .

Skipping pair  $p_4$  and  $p_{34}$  because gcd of their leading monoms is zero.

304. Creating S-polynomial from the pair  $(p_4, p_{35})$ .

Skipping pair  $p_4$  and  $p_{35}$  because gcd of their leading monoms is zero.

305. Creating S-polynomial from the pair  $(p_4, p_{36})$ .

Skipping pair  $p_4$  and  $p_{36}$  because gcd of their leading monoms is zero.

306. Creating S-polynomial from the pair  $(p_4, p_{37})$ .

Skipping pair  $p_4$  and  $p_{37}$  because gcd of their leading monoms is zero.

307. Creating S-polynomial from the pair  $(p_4, p_{38})$ .

Skipping pair  $p_4$  and  $p_{38}$  because gcd of their leading monoms is zero.

308. Creating S-polynomial from the pair  $(p_4, p_{39})$ .

Skipping pair  $p_4$  and  $p_{39}$  because gcd of their leading monoms is zero.

309. Creating S-polynomial from the pair  $(p_4, p_{40})$ .

Skipping pair  $p_4$  and  $p_{40}$  because gcd of their leading monoms is zero.

310. Creating S-polynomial from the pair  $(p_4, p_{41})$ .

Skipping pair  $p_4$  and  $p_{41}$  because gcd of their leading monoms is zero.

311. Creating S-polynomial from the pair  $(p_4, p_{42})$ .

Skipping pair  $p_4$  and  $p_{42}$  because gcd of their leading monoms is zero.

312. Creating S-polynomial from the pair  $(p_4, p_{43})$ .

Skipping pair  $p_4$  and  $p_{43}$  because gcd of their leading monoms is zero.

313. Creating S-polynomial from the pair  $(p_4, p_{44})$ .

Skipping pair  $p_4$  and  $p_{44}$  because gcd of their leading monoms is zero.

314. Creating S-polynomial from the pair  $(p_4, p_{45})$ .  
 Skipping pair  $p_4$  and  $p_{45}$  because gcd of their leading monoms is zero.
315. Creating S-polynomial from the pair  $(p_4, p_{46})$ .  
 Skipping pair  $p_4$  and  $p_{46}$  because gcd of their leading monoms is zero.
316. Creating S-polynomial from the pair  $(p_4, p_{47})$ .  
 Skipping pair  $p_4$  and  $p_{47}$  because gcd of their leading monoms is zero.
317. Creating S-polynomial from the pair  $(p_4, p_{48})$ .  
 Skipping pair  $p_4$  and  $p_{48}$  because gcd of their leading monoms is zero.
318. Creating S-polynomial from the pair  $(p_4, p_{49})$ .  
 Skipping pair  $p_4$  and  $p_{49}$  because gcd of their leading monoms is zero.
319. Creating S-polynomial from the pair  $(p_4, p_{50})$ .  
 Skipping pair  $p_4$  and  $p_{50}$  because gcd of their leading monoms is zero.
320. Creating S-polynomial from the pair  $(p_4, p_{51})$ .  
 Skipping pair  $p_4$  and  $p_{51}$  because gcd of their leading monoms is zero.
321. Creating S-polynomial from the pair  $(p_4, p_{52})$ .  
 Skipping pair  $p_4$  and  $p_{52}$  because gcd of their leading monoms is zero.
322. Creating S-polynomial from the pair  $(p_4, p_{53})$ .  
 Skipping pair  $p_4$  and  $p_{53}$  because gcd of their leading monoms is zero.
323. Creating S-polynomial from the pair  $(p_4, p_{54})$ .  
 Skipping pair  $p_4$  and  $p_{54}$  because gcd of their leading monoms is zero.
324. Creating S-polynomial from the pair  $(p_4, p_{55})$ .  
 Skipping pair  $p_4$  and  $p_{55}$  because gcd of their leading monoms is zero.
325. Creating S-polynomial from the pair  $(p_4, p_{56})$ .  
 Skipping pair  $p_4$  and  $p_{56}$  because gcd of their leading monoms is zero.
326. Creating S-polynomial from the pair  $(p_4, p_{57})$ .  
 Skipping pair  $p_4$  and  $p_{57}$  because gcd of their leading monoms is zero.
327. Creating S-polynomial from the pair  $(p_4, p_{58})$ .  
 Skipping pair  $p_4$  and  $p_{58}$  because gcd of their leading monoms is zero.
328. Creating S-polynomial from the pair  $(p_4, p_{59})$ .  
 Skipping pair  $p_4$  and  $p_{59}$  because gcd of their leading monoms is zero.
329. Creating S-polynomial from the pair  $(p_4, p_{60})$ .  
 Skipping pair  $p_4$  and  $p_{60}$  because gcd of their leading monoms is zero.
330. Creating S-polynomial from the pair  $(p_4, p_{61})$ .  
 Skipping pair  $p_4$  and  $p_{61}$  because gcd of their leading monoms is zero.



331. Creating S-polynomial from the pair  $(p_4, p_{62})$ .  
 Skipping pair  $p_4$  and  $p_{62}$  because gcd of their leading monoms is zero.
332. Creating S-polynomial from the pair  $(p_4, p_{63})$ .  
 Skipping pair  $p_4$  and  $p_{63}$  because gcd of their leading monoms is zero.
333. Creating S-polynomial from the pair  $(p_4, p_{64})$ .  
 Skipping pair  $p_4$  and  $p_{64}$  because gcd of their leading monoms is zero.
334. Creating S-polynomial from the pair  $(p_4, p_{65})$ .  
 Skipping pair  $p_4$  and  $p_{65}$  because gcd of their leading monoms is zero.
335. Creating S-polynomial from the pair  $(p_4, p_{66})$ .  
 Skipping pair  $p_4$  and  $p_{66}$  because gcd of their leading monoms is zero.
336. Creating S-polynomial from the pair  $(p_4, p_{67})$ .  
 Skipping pair  $p_4$  and  $p_{67}$  because gcd of their leading monoms is zero.
337. Creating S-polynomial from the pair  $(p_4, p_{68})$ .  
 Skipping pair  $p_4$  and  $p_{68}$  because gcd of their leading monoms is zero.
338. Creating S-polynomial from the pair  $(p_4, p_{69})$ .  
 Skipping pair  $p_4$  and  $p_{69}$  because gcd of their leading monoms is zero.
339. Creating S-polynomial from the pair  $(p_4, p_{70})$ .  
 Skipping pair  $p_4$  and  $p_{70}$  because gcd of their leading monoms is zero.
340. Creating S-polynomial from the pair  $(p_4, p_{71})$ .  
 Skipping pair  $p_4$  and  $p_{71}$  because gcd of their leading monoms is zero.
341. Creating S-polynomial from the pair  $(p_4, p_{72})$ .  
 Skipping pair  $p_4$  and  $p_{72}$  because gcd of their leading monoms is zero.
342. Creating S-polynomial from the pair  $(p_4, p_{73})$ .  
 Skipping pair  $p_4$  and  $p_{73}$  because gcd of their leading monoms is zero.
343. Creating S-polynomial from the pair  $(p_4, p_{74})$ .  
 Skipping pair  $p_4$  and  $p_{74}$  because gcd of their leading monoms is zero.
344. Creating S-polynomial from the pair  $(p_4, p_{75})$ .  
 Skipping pair  $p_4$  and  $p_{75}$  because gcd of their leading monoms is zero.
345. Creating S-polynomial from the pair  $(p_4, p_{76})$ .  
 Skipping pair  $p_4$  and  $p_{76}$  because gcd of their leading monoms is zero.
346. Creating S-polynomial from the pair  $(p_4, p_{77})$ .  
 Skipping pair  $p_4$  and  $p_{77}$  because gcd of their leading monoms is zero.
347. Creating S-polynomial from the pair  $(p_4, p_{78})$ .  
 Skipping pair  $p_4$  and  $p_{78}$  because gcd of their leading monoms is zero.

348. Creating S-polynomial from the pair  $(p_4, p_{79})$ .  
 Skipping pair  $p_4$  and  $p_{79}$  because gcd of their leading monoms is zero.
349. Creating S-polynomial from the pair  $(p_4, p_{80})$ .  
 Skipping pair  $p_4$  and  $p_{80}$  because gcd of their leading monoms is zero.
350. Creating S-polynomial from the pair  $(p_4, p_{81})$ .  
 Skipping pair  $p_4$  and  $p_{81}$  because gcd of their leading monoms is zero.
351. Creating S-polynomial from the pair  $(p_4, p_{82})$ .  
 Skipping pair  $p_4$  and  $p_{82}$  because gcd of their leading monoms is zero.
352. Creating S-polynomial from the pair  $(p_4, p_{83})$ .  
 Skipping pair  $p_4$  and  $p_{83}$  because gcd of their leading monoms is zero.
353. Creating S-polynomial from the pair  $(p_4, p_{84})$ .  
 Skipping pair  $p_4$  and  $p_{84}$  because gcd of their leading monoms is zero.
354. Creating S-polynomial from the pair  $(p_4, p_{85})$ .  
 Skipping pair  $p_4$  and  $p_{85}$  because gcd of their leading monoms is zero.
355. Creating S-polynomial from the pair  $(p_4, p_{86})$ .  
 Skipping pair  $p_4$  and  $p_{86}$  because gcd of their leading monoms is zero.
356. Creating S-polynomial from the pair  $(p_4, p_{87})$ .  
 Skipping pair  $p_4$  and  $p_{87}$  because gcd of their leading monoms is zero.
357. Creating S-polynomial from the pair  $(p_4, p_{88})$ .  
 Skipping pair  $p_4$  and  $p_{88}$  because gcd of their leading monoms is zero.
358. Creating S-polynomial from the pair  $(p_4, p_{89})$ .  
 Skipping pair  $p_4$  and  $p_{89}$  because gcd of their leading monoms is zero.
359. Creating S-polynomial from the pair  $(p_4, p_{90})$ .  
 Skipping pair  $p_4$  and  $p_{90}$  because gcd of their leading monoms is zero.
360. Creating S-polynomial from the pair  $(p_4, p_{91})$ .  
 Skipping pair  $p_4$  and  $p_{91}$  because gcd of their leading monoms is zero.
361. Creating S-polynomial from the pair  $(p_4, p_{92})$ .  
 Skipping pair  $p_4$  and  $p_{92}$  because gcd of their leading monoms is zero.
362. Creating S-polynomial from the pair  $(p_4, p_{93})$ .  
 Skipping pair  $p_4$  and  $p_{93}$  because gcd of their leading monoms is zero.
363. Creating S-polynomial from the pair  $(p_4, p_{94})$ .  
 Skipping pair  $p_4$  and  $p_{94}$  because gcd of their leading monoms is zero.
364. Creating S-polynomial from the pair  $(p_4, p_{95})$ .  
 Skipping pair  $p_4$  and  $p_{95}$  because gcd of their leading monoms is zero.

365. Creating S-polynomial from the pair  $(p_4, p_{96})$ .  
 Skipping pair  $p_4$  and  $p_{96}$  because gcd of their leading monoms is zero.
366. Creating S-polynomial from the pair  $(p_4, p_{97})$ .  
 Skipping pair  $p_4$  and  $p_{97}$  because gcd of their leading monoms is zero.
367. Creating S-polynomial from the pair  $(p_4, p_{98})$ .  
 Skipping pair  $p_4$  and  $p_{98}$  because gcd of their leading monoms is zero.
368. Creating S-polynomial from the pair  $(p_4, p_{99})$ .  
 Skipping pair  $p_4$  and  $p_{99}$  because gcd of their leading monoms is zero.
369. Creating S-polynomial from the pair  $(p_4, p_{100})$ .  
 Skipping pair  $p_4$  and  $p_{100}$  because gcd of their leading monoms is zero.
370. Creating S-polynomial from the pair  $(p_4, p_{101})$ .  
 Skipping pair  $p_4$  and  $p_{101}$  because gcd of their leading monoms is zero.
371. Creating S-polynomial from the pair  $(p_4, p_{102})$ .  
 Skipping pair  $p_4$  and  $p_{102}$  because gcd of their leading monoms is zero.
372. Creating S-polynomial from the pair  $(p_4, p_{103})$ .  
 Skipping pair  $p_4$  and  $p_{103}$  because gcd of their leading monoms is zero.
373. Creating S-polynomial from the pair  $(p_4, p_{104})$ .  
 Skipping pair  $p_4$  and  $p_{104}$  because gcd of their leading monoms is zero.
374. Creating S-polynomial from the pair  $(p_4, p_{105})$ .  
 Skipping pair  $p_4$  and  $p_{105}$  because gcd of their leading monoms is zero.
375. Creating S-polynomial from the pair  $(p_4, p_{106})$ .  
 Skipping pair  $p_4$  and  $p_{106}$  because gcd of their leading monoms is zero.
376. Creating S-polynomial from the pair  $(p_5, p_{32})$ .  
 Skipping pair  $p_5$  and  $p_{32}$  because gcd of their leading monoms is zero.
377. Creating S-polynomial from the pair  $(p_5, p_{33})$ .  
 Skipping pair  $p_5$  and  $p_{33}$  because gcd of their leading monoms is zero.
378. Creating S-polynomial from the pair  $(p_5, p_{34})$ .  
 Skipping pair  $p_5$  and  $p_{34}$  because gcd of their leading monoms is zero.
379. Creating S-polynomial from the pair  $(p_5, p_{35})$ .  
 Skipping pair  $p_5$  and  $p_{35}$  because gcd of their leading monoms is zero.
380. Creating S-polynomial from the pair  $(p_5, p_{36})$ .  
 Skipping pair  $p_5$  and  $p_{36}$  because gcd of their leading monoms is zero.
381. Creating S-polynomial from the pair  $(p_5, p_{37})$ .  
 Skipping pair  $p_5$  and  $p_{37}$  because gcd of their leading monoms is zero.

382. Creating S-polynomial from the pair  $(p_5, p_{38})$ .  
 Skipping pair  $p_5$  and  $p_{38}$  because gcd of their leading monoms is zero.
383. Creating S-polynomial from the pair  $(p_5, p_{39})$ .  
 Skipping pair  $p_5$  and  $p_{39}$  because gcd of their leading monoms is zero.
384. Creating S-polynomial from the pair  $(p_5, p_{40})$ .  
 Skipping pair  $p_5$  and  $p_{40}$  because gcd of their leading monoms is zero.
385. Creating S-polynomial from the pair  $(p_5, p_{41})$ .  
 Skipping pair  $p_5$  and  $p_{41}$  because gcd of their leading monoms is zero.
386. Creating S-polynomial from the pair  $(p_5, p_{42})$ .  
 Skipping pair  $p_5$  and  $p_{42}$  because gcd of their leading monoms is zero.
387. Creating S-polynomial from the pair  $(p_5, p_{43})$ .  
 Skipping pair  $p_5$  and  $p_{43}$  because gcd of their leading monoms is zero.
388. Creating S-polynomial from the pair  $(p_5, p_{44})$ .  
 Skipping pair  $p_5$  and  $p_{44}$  because gcd of their leading monoms is zero.
389. Creating S-polynomial from the pair  $(p_5, p_{45})$ .  
 Skipping pair  $p_5$  and  $p_{45}$  because gcd of their leading monoms is zero.
390. Creating S-polynomial from the pair  $(p_5, p_{46})$ .  
 Skipping pair  $p_5$  and  $p_{46}$  because gcd of their leading monoms is zero.
391. Creating S-polynomial from the pair  $(p_5, p_{47})$ .  
 Skipping pair  $p_5$  and  $p_{47}$  because gcd of their leading monoms is zero.
392. Creating S-polynomial from the pair  $(p_5, p_{48})$ .  
 Skipping pair  $p_5$  and  $p_{48}$  because gcd of their leading monoms is zero.
393. Creating S-polynomial from the pair  $(p_5, p_{49})$ .  
 Skipping pair  $p_5$  and  $p_{49}$  because gcd of their leading monoms is zero.
394. Creating S-polynomial from the pair  $(p_5, p_{50})$ .  
 Skipping pair  $p_5$  and  $p_{50}$  because gcd of their leading monoms is zero.
395. Creating S-polynomial from the pair  $(p_5, p_{51})$ .  
 Skipping pair  $p_5$  and  $p_{51}$  because gcd of their leading monoms is zero.
396. Creating S-polynomial from the pair  $(p_5, p_{52})$ .  
 Skipping pair  $p_5$  and  $p_{52}$  because gcd of their leading monoms is zero.
397. Creating S-polynomial from the pair  $(p_5, p_{53})$ .  
 Skipping pair  $p_5$  and  $p_{53}$  because gcd of their leading monoms is zero.
398. Creating S-polynomial from the pair  $(p_5, p_{54})$ .  
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399. Creating S-polynomial from the pair  $(p_5, p_{55})$ .  
 Skipping pair  $p_5$  and  $p_{55}$  because gcd of their leading monoms is zero.
400. Creating S-polynomial from the pair  $(p_5, p_{56})$ .  
 Skipping pair  $p_5$  and  $p_{56}$  because gcd of their leading monoms is zero.
401. Creating S-polynomial from the pair  $(p_5, p_{57})$ .  
 Skipping pair  $p_5$  and  $p_{57}$  because gcd of their leading monoms is zero.
402. Creating S-polynomial from the pair  $(p_5, p_{58})$ .  
 Skipping pair  $p_5$  and  $p_{58}$  because gcd of their leading monoms is zero.
403. Creating S-polynomial from the pair  $(p_5, p_{59})$ .  
 Skipping pair  $p_5$  and  $p_{59}$  because gcd of their leading monoms is zero.
404. Creating S-polynomial from the pair  $(p_5, p_{60})$ .  
 Skipping pair  $p_5$  and  $p_{60}$  because gcd of their leading monoms is zero.
405. Creating S-polynomial from the pair  $(p_5, p_{61})$ .  
 Skipping pair  $p_5$  and  $p_{61}$  because gcd of their leading monoms is zero.
406. Creating S-polynomial from the pair  $(p_5, p_{62})$ .  
 Skipping pair  $p_5$  and  $p_{62}$  because gcd of their leading monoms is zero.
407. Creating S-polynomial from the pair  $(p_5, p_{63})$ .  
 Skipping pair  $p_5$  and  $p_{63}$  because gcd of their leading monoms is zero.
408. Creating S-polynomial from the pair  $(p_5, p_{64})$ .  
 Skipping pair  $p_5$  and  $p_{64}$  because gcd of their leading monoms is zero.
409. Creating S-polynomial from the pair  $(p_5, p_{65})$ .  
 Skipping pair  $p_5$  and  $p_{65}$  because gcd of their leading monoms is zero.
410. Creating S-polynomial from the pair  $(p_5, p_{66})$ .  
 Skipping pair  $p_5$  and  $p_{66}$  because gcd of their leading monoms is zero.
411. Creating S-polynomial from the pair  $(p_5, p_{67})$ .  
 Skipping pair  $p_5$  and  $p_{67}$  because gcd of their leading monoms is zero.
412. Creating S-polynomial from the pair  $(p_5, p_{68})$ .  
 Skipping pair  $p_5$  and  $p_{68}$  because gcd of their leading monoms is zero.
413. Creating S-polynomial from the pair  $(p_5, p_{69})$ .  
 Skipping pair  $p_5$  and  $p_{69}$  because gcd of their leading monoms is zero.
414. Creating S-polynomial from the pair  $(p_5, p_{70})$ .  
 Skipping pair  $p_5$  and  $p_{70}$  because gcd of their leading monoms is zero.
415. Creating S-polynomial from the pair  $(p_5, p_{71})$ .  
 Skipping pair  $p_5$  and  $p_{71}$  because gcd of their leading monoms is zero.

416. Creating S-polynomial from the pair  $(p_5, p_{72})$ .  
 Skipping pair  $p_5$  and  $p_{72}$  because gcd of their leading monoms is zero.
417. Creating S-polynomial from the pair  $(p_5, p_{73})$ .  
 Skipping pair  $p_5$  and  $p_{73}$  because gcd of their leading monoms is zero.
418. Creating S-polynomial from the pair  $(p_5, p_{74})$ .  
 Skipping pair  $p_5$  and  $p_{74}$  because gcd of their leading monoms is zero.
419. Creating S-polynomial from the pair  $(p_5, p_{75})$ .  
 Skipping pair  $p_5$  and  $p_{75}$  because gcd of their leading monoms is zero.
420. Creating S-polynomial from the pair  $(p_5, p_{76})$ .  
 Skipping pair  $p_5$  and  $p_{76}$  because gcd of their leading monoms is zero.
421. Creating S-polynomial from the pair  $(p_5, p_{77})$ .  
 Skipping pair  $p_5$  and  $p_{77}$  because gcd of their leading monoms is zero.
422. Creating S-polynomial from the pair  $(p_5, p_{78})$ .  
 Skipping pair  $p_5$  and  $p_{78}$  because gcd of their leading monoms is zero.
423. Creating S-polynomial from the pair  $(p_5, p_{79})$ .  
 Skipping pair  $p_5$  and  $p_{79}$  because gcd of their leading monoms is zero.
424. Creating S-polynomial from the pair  $(p_5, p_{80})$ .  
 Skipping pair  $p_5$  and  $p_{80}$  because gcd of their leading monoms is zero.
425. Creating S-polynomial from the pair  $(p_5, p_{81})$ .  
 Skipping pair  $p_5$  and  $p_{81}$  because gcd of their leading monoms is zero.
426. Creating S-polynomial from the pair  $(p_5, p_{82})$ .  
 Skipping pair  $p_5$  and  $p_{82}$  because gcd of their leading monoms is zero.
427. Creating S-polynomial from the pair  $(p_5, p_{83})$ .  
 Skipping pair  $p_5$  and  $p_{83}$  because gcd of their leading monoms is zero.
428. Creating S-polynomial from the pair  $(p_5, p_{84})$ .  
 Skipping pair  $p_5$  and  $p_{84}$  because gcd of their leading monoms is zero.
429. Creating S-polynomial from the pair  $(p_5, p_{85})$ .  
 Skipping pair  $p_5$  and  $p_{85}$  because gcd of their leading monoms is zero.
430. Creating S-polynomial from the pair  $(p_5, p_{86})$ .  
 Skipping pair  $p_5$  and  $p_{86}$  because gcd of their leading monoms is zero.
431. Creating S-polynomial from the pair  $(p_5, p_{87})$ .  
 Skipping pair  $p_5$  and  $p_{87}$  because gcd of their leading monoms is zero.
432. Creating S-polynomial from the pair  $(p_5, p_{88})$ .  
 Skipping pair  $p_5$  and  $p_{88}$  because gcd of their leading monoms is zero.

433. Creating S-polynomial from the pair  $(p_5, p_{89})$ .  
 Skipping pair  $p_5$  and  $p_{89}$  because gcd of their leading monoms is zero.
434. Creating S-polynomial from the pair  $(p_5, p_{90})$ .  
 Skipping pair  $p_5$  and  $p_{90}$  because gcd of their leading monoms is zero.
435. Creating S-polynomial from the pair  $(p_5, p_{91})$ .  
 Skipping pair  $p_5$  and  $p_{91}$  because gcd of their leading monoms is zero.
436. Creating S-polynomial from the pair  $(p_5, p_{92})$ .  
 Skipping pair  $p_5$  and  $p_{92}$  because gcd of their leading monoms is zero.
437. Creating S-polynomial from the pair  $(p_5, p_{93})$ .  
 Skipping pair  $p_5$  and  $p_{93}$  because gcd of their leading monoms is zero.
438. Creating S-polynomial from the pair  $(p_5, p_{94})$ .  
 Skipping pair  $p_5$  and  $p_{94}$  because gcd of their leading monoms is zero.
439. Creating S-polynomial from the pair  $(p_5, p_{95})$ .  
 Skipping pair  $p_5$  and  $p_{95}$  because gcd of their leading monoms is zero.
440. Creating S-polynomial from the pair  $(p_5, p_{96})$ .  
 Skipping pair  $p_5$  and  $p_{96}$  because gcd of their leading monoms is zero.
441. Creating S-polynomial from the pair  $(p_5, p_{97})$ .  
 Skipping pair  $p_5$  and  $p_{97}$  because gcd of their leading monoms is zero.
442. Creating S-polynomial from the pair  $(p_5, p_{98})$ .  
 Skipping pair  $p_5$  and  $p_{98}$  because gcd of their leading monoms is zero.
443. Creating S-polynomial from the pair  $(p_5, p_{99})$ .  
 Skipping pair  $p_5$  and  $p_{99}$  because gcd of their leading monoms is zero.
444. Creating S-polynomial from the pair  $(p_5, p_{100})$ .  
 Skipping pair  $p_5$  and  $p_{100}$  because gcd of their leading monoms is zero.
445. Creating S-polynomial from the pair  $(p_5, p_{101})$ .  
 Skipping pair  $p_5$  and  $p_{101}$  because gcd of their leading monoms is zero.
446. Creating S-polynomial from the pair  $(p_5, p_{102})$ .  
 Skipping pair  $p_5$  and  $p_{102}$  because gcd of their leading monoms is zero.
447. Creating S-polynomial from the pair  $(p_5, p_{103})$ .  
 Skipping pair  $p_5$  and  $p_{103}$  because gcd of their leading monoms is zero.
448. Creating S-polynomial from the pair  $(p_5, p_{104})$ .  
 Skipping pair  $p_5$  and  $p_{104}$  because gcd of their leading monoms is zero.
449. Creating S-polynomial from the pair  $(p_5, p_{105})$ .  
 Skipping pair  $p_5$  and  $p_{105}$  because gcd of their leading monoms is zero.

450. Creating S-polynomial from the pair  $(p_5, p_{106})$ .  
 Skipping pair  $p_5$  and  $p_{106}$  because gcd of their leading monoms is zero.
451. Creating S-polynomial from the pair  $(p_6, p_{32})$ .  
 Skipping pair  $p_6$  and  $p_{32}$  because gcd of their leading monoms is zero.
452. Creating S-polynomial from the pair  $(p_6, p_{33})$ .  
 Skipping pair  $p_6$  and  $p_{33}$  because gcd of their leading monoms is zero.
453. Creating S-polynomial from the pair  $(p_6, p_{34})$ .  
 Skipping pair  $p_6$  and  $p_{34}$  because gcd of their leading monoms is zero.
454. Creating S-polynomial from the pair  $(p_6, p_{35})$ .  
 Skipping pair  $p_6$  and  $p_{35}$  because gcd of their leading monoms is zero.
455. Creating S-polynomial from the pair  $(p_6, p_{36})$ .  
 Skipping pair  $p_6$  and  $p_{36}$  because gcd of their leading monoms is zero.
456. Creating S-polynomial from the pair  $(p_6, p_{37})$ .  
 Skipping pair  $p_6$  and  $p_{37}$  because gcd of their leading monoms is zero.
457. Creating S-polynomial from the pair  $(p_6, p_{38})$ .  
 Skipping pair  $p_6$  and  $p_{38}$  because gcd of their leading monoms is zero.
458. Creating S-polynomial from the pair  $(p_6, p_{39})$ .  
 Skipping pair  $p_6$  and  $p_{39}$  because gcd of their leading monoms is zero.
459. Creating S-polynomial from the pair  $(p_6, p_{40})$ .  
 Skipping pair  $p_6$  and  $p_{40}$  because gcd of their leading monoms is zero.
460. Creating S-polynomial from the pair  $(p_6, p_{41})$ .  
 Skipping pair  $p_6$  and  $p_{41}$  because gcd of their leading monoms is zero.
461. Creating S-polynomial from the pair  $(p_6, p_{42})$ .  
 Skipping pair  $p_6$  and  $p_{42}$  because gcd of their leading monoms is zero.
462. Creating S-polynomial from the pair  $(p_6, p_{43})$ .  
 Skipping pair  $p_6$  and  $p_{43}$  because gcd of their leading monoms is zero.
463. Creating S-polynomial from the pair  $(p_6, p_{44})$ .  
 Skipping pair  $p_6$  and  $p_{44}$  because gcd of their leading monoms is zero.
464. Creating S-polynomial from the pair  $(p_6, p_{45})$ .  
 Skipping pair  $p_6$  and  $p_{45}$  because gcd of their leading monoms is zero.
465. Creating S-polynomial from the pair  $(p_6, p_{46})$ .  
 Skipping pair  $p_6$  and  $p_{46}$  because gcd of their leading monoms is zero.
466. Creating S-polynomial from the pair  $(p_6, p_{47})$ .  
 Skipping pair  $p_6$  and  $p_{47}$  because gcd of their leading monoms is zero.



467. Creating S-polynomial from the pair  $(p_6, p_{48})$ .  
 Skipping pair  $p_6$  and  $p_{48}$  because gcd of their leading monoms is zero.
468. Creating S-polynomial from the pair  $(p_6, p_{49})$ .  
 Skipping pair  $p_6$  and  $p_{49}$  because gcd of their leading monoms is zero.
469. Creating S-polynomial from the pair  $(p_6, p_{50})$ .  
 Skipping pair  $p_6$  and  $p_{50}$  because gcd of their leading monoms is zero.
470. Creating S-polynomial from the pair  $(p_6, p_{51})$ .  
 Skipping pair  $p_6$  and  $p_{51}$  because gcd of their leading monoms is zero.
471. Creating S-polynomial from the pair  $(p_6, p_{52})$ .  
 Skipping pair  $p_6$  and  $p_{52}$  because gcd of their leading monoms is zero.
472. Creating S-polynomial from the pair  $(p_6, p_{53})$ .  
 Skipping pair  $p_6$  and  $p_{53}$  because gcd of their leading monoms is zero.
473. Creating S-polynomial from the pair  $(p_6, p_{54})$ .  
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474. Creating S-polynomial from the pair  $(p_6, p_{55})$ .  
 Skipping pair  $p_6$  and  $p_{55}$  because gcd of their leading monoms is zero.
475. Creating S-polynomial from the pair  $(p_6, p_{56})$ .  
 Skipping pair  $p_6$  and  $p_{56}$  because gcd of their leading monoms is zero.
476. Creating S-polynomial from the pair  $(p_6, p_{57})$ .  
 Skipping pair  $p_6$  and  $p_{57}$  because gcd of their leading monoms is zero.
477. Creating S-polynomial from the pair  $(p_6, p_{58})$ .  
 Skipping pair  $p_6$  and  $p_{58}$  because gcd of their leading monoms is zero.
478. Creating S-polynomial from the pair  $(p_6, p_{59})$ .  
 Skipping pair  $p_6$  and  $p_{59}$  because gcd of their leading monoms is zero.
479. Creating S-polynomial from the pair  $(p_6, p_{60})$ .  
 Skipping pair  $p_6$  and  $p_{60}$  because gcd of their leading monoms is zero.
480. Creating S-polynomial from the pair  $(p_6, p_{61})$ .  
 Skipping pair  $p_6$  and  $p_{61}$  because gcd of their leading monoms is zero.
481. Creating S-polynomial from the pair  $(p_6, p_{62})$ .  
 Skipping pair  $p_6$  and  $p_{62}$  because gcd of their leading monoms is zero.
482. Creating S-polynomial from the pair  $(p_6, p_{63})$ .  
 Skipping pair  $p_6$  and  $p_{63}$  because gcd of their leading monoms is zero.
483. Creating S-polynomial from the pair  $(p_6, p_{64})$ .  
 Skipping pair  $p_6$  and  $p_{64}$  because gcd of their leading monoms is zero.

484. Creating S-polynomial from the pair  $(p_6, p_{65})$ .  
 Skipping pair  $p_6$  and  $p_{65}$  because gcd of their leading monoms is zero.
485. Creating S-polynomial from the pair  $(p_6, p_{66})$ .  
 Skipping pair  $p_6$  and  $p_{66}$  because gcd of their leading monoms is zero.
486. Creating S-polynomial from the pair  $(p_6, p_{67})$ .  
 Skipping pair  $p_6$  and  $p_{67}$  because gcd of their leading monoms is zero.
487. Creating S-polynomial from the pair  $(p_6, p_{68})$ .  
 Skipping pair  $p_6$  and  $p_{68}$  because gcd of their leading monoms is zero.
488. Creating S-polynomial from the pair  $(p_6, p_{69})$ .  
 Skipping pair  $p_6$  and  $p_{69}$  because gcd of their leading monoms is zero.
489. Creating S-polynomial from the pair  $(p_6, p_{70})$ .  
 Skipping pair  $p_6$  and  $p_{70}$  because gcd of their leading monoms is zero.
490. Creating S-polynomial from the pair  $(p_6, p_{71})$ .  
 Skipping pair  $p_6$  and  $p_{71}$  because gcd of their leading monoms is zero.
491. Creating S-polynomial from the pair  $(p_6, p_{72})$ .  
 Skipping pair  $p_6$  and  $p_{72}$  because gcd of their leading monoms is zero.
492. Creating S-polynomial from the pair  $(p_6, p_{73})$ .  
 Skipping pair  $p_6$  and  $p_{73}$  because gcd of their leading monoms is zero.
493. Creating S-polynomial from the pair  $(p_6, p_{74})$ .  
 Skipping pair  $p_6$  and  $p_{74}$  because gcd of their leading monoms is zero.
494. Creating S-polynomial from the pair  $(p_6, p_{75})$ .  
 Skipping pair  $p_6$  and  $p_{75}$  because gcd of their leading monoms is zero.
495. Creating S-polynomial from the pair  $(p_6, p_{76})$ .  
 Skipping pair  $p_6$  and  $p_{76}$  because gcd of their leading monoms is zero.
496. Creating S-polynomial from the pair  $(p_6, p_{77})$ .  
 Skipping pair  $p_6$  and  $p_{77}$  because gcd of their leading monoms is zero.
497. Creating S-polynomial from the pair  $(p_6, p_{78})$ .  
 Skipping pair  $p_6$  and  $p_{78}$  because gcd of their leading monoms is zero.
498. Creating S-polynomial from the pair  $(p_6, p_{79})$ .  
 Skipping pair  $p_6$  and  $p_{79}$  because gcd of their leading monoms is zero.
499. Creating S-polynomial from the pair  $(p_6, p_{80})$ .  
 Skipping pair  $p_6$  and  $p_{80}$  because gcd of their leading monoms is zero.
500. Creating S-polynomial from the pair  $(p_6, p_{81})$ .  
 Skipping pair  $p_6$  and  $p_{81}$  because gcd of their leading monoms is zero.

501. Creating S-polynomial from the pair  $(p_6, p_{82})$ .  
 Skipping pair  $p_6$  and  $p_{82}$  because gcd of their leading monoms is zero.
502. Creating S-polynomial from the pair  $(p_6, p_{83})$ .  
 Skipping pair  $p_6$  and  $p_{83}$  because gcd of their leading monoms is zero.
503. Creating S-polynomial from the pair  $(p_6, p_{84})$ .  
 Skipping pair  $p_6$  and  $p_{84}$  because gcd of their leading monoms is zero.
504. Creating S-polynomial from the pair  $(p_6, p_{85})$ .  
 Skipping pair  $p_6$  and  $p_{85}$  because gcd of their leading monoms is zero.
505. Creating S-polynomial from the pair  $(p_6, p_{86})$ .  
 Skipping pair  $p_6$  and  $p_{86}$  because gcd of their leading monoms is zero.
506. Creating S-polynomial from the pair  $(p_6, p_{87})$ .  
 Skipping pair  $p_6$  and  $p_{87}$  because gcd of their leading monoms is zero.
507. Creating S-polynomial from the pair  $(p_6, p_{88})$ .  
 Skipping pair  $p_6$  and  $p_{88}$  because gcd of their leading monoms is zero.
508. Creating S-polynomial from the pair  $(p_6, p_{89})$ .  
 Skipping pair  $p_6$  and  $p_{89}$  because gcd of their leading monoms is zero.
509. Creating S-polynomial from the pair  $(p_6, p_{90})$ .  
 Skipping pair  $p_6$  and  $p_{90}$  because gcd of their leading monoms is zero.
510. Creating S-polynomial from the pair  $(p_6, p_{91})$ .  
 Skipping pair  $p_6$  and  $p_{91}$  because gcd of their leading monoms is zero.
511. Creating S-polynomial from the pair  $(p_6, p_{92})$ .  
 Skipping pair  $p_6$  and  $p_{92}$  because gcd of their leading monoms is zero.
512. Creating S-polynomial from the pair  $(p_6, p_{93})$ .  
 Skipping pair  $p_6$  and  $p_{93}$  because gcd of their leading monoms is zero.
513. Creating S-polynomial from the pair  $(p_6, p_{94})$ .  
 Skipping pair  $p_6$  and  $p_{94}$  because gcd of their leading monoms is zero.
514. Creating S-polynomial from the pair  $(p_6, p_{95})$ .  
 Skipping pair  $p_6$  and  $p_{95}$  because gcd of their leading monoms is zero.
515. Creating S-polynomial from the pair  $(p_6, p_{96})$ .  
 Skipping pair  $p_6$  and  $p_{96}$  because gcd of their leading monoms is zero.
516. Creating S-polynomial from the pair  $(p_6, p_{97})$ .  
 Skipping pair  $p_6$  and  $p_{97}$  because gcd of their leading monoms is zero.
517. Creating S-polynomial from the pair  $(p_6, p_{98})$ .  
 Skipping pair  $p_6$  and  $p_{98}$  because gcd of their leading monoms is zero.

518. Creating S-polynomial from the pair  $(p_6, p_{99})$ .  
 Skipping pair  $p_6$  and  $p_{99}$  because gcd of their leading monoms is zero.
519. Creating S-polynomial from the pair  $(p_6, p_{100})$ .  
 Skipping pair  $p_6$  and  $p_{100}$  because gcd of their leading monoms is zero.
520. Creating S-polynomial from the pair  $(p_6, p_{101})$ .  
 Skipping pair  $p_6$  and  $p_{101}$  because gcd of their leading monoms is zero.
521. Creating S-polynomial from the pair  $(p_6, p_{102})$ .  
 Skipping pair  $p_6$  and  $p_{102}$  because gcd of their leading monoms is zero.
522. Creating S-polynomial from the pair  $(p_6, p_{103})$ .  
 Skipping pair  $p_6$  and  $p_{103}$  because gcd of their leading monoms is zero.
523. Creating S-polynomial from the pair  $(p_6, p_{104})$ .  
 Skipping pair  $p_6$  and  $p_{104}$  because gcd of their leading monoms is zero.
524. Creating S-polynomial from the pair  $(p_6, p_{105})$ .  
 Skipping pair  $p_6$  and  $p_{105}$  because gcd of their leading monoms is zero.
525. Creating S-polynomial from the pair  $(p_6, p_{106})$ .  
 Skipping pair  $p_6$  and  $p_{106}$  because gcd of their leading monoms is zero.
526. Creating S-polynomial from the pair  $(p_7, p_{32})$ .  
 Skipping pair  $p_7$  and  $p_{32}$  because gcd of their leading monoms is zero.
527. Creating S-polynomial from the pair  $(p_7, p_{33})$ .  
 Skipping pair  $p_7$  and  $p_{33}$  because gcd of their leading monoms is zero.
528. Creating S-polynomial from the pair  $(p_7, p_{34})$ .  
 Skipping pair  $p_7$  and  $p_{34}$  because gcd of their leading monoms is zero.
529. Creating S-polynomial from the pair  $(p_7, p_{35})$ .  
 Skipping pair  $p_7$  and  $p_{35}$  because gcd of their leading monoms is zero.
530. Creating S-polynomial from the pair  $(p_7, p_{36})$ .  
 Skipping pair  $p_7$  and  $p_{36}$  because gcd of their leading monoms is zero.
531. Creating S-polynomial from the pair  $(p_7, p_{37})$ .  
 Skipping pair  $p_7$  and  $p_{37}$  because gcd of their leading monoms is zero.
532. Creating S-polynomial from the pair  $(p_7, p_{38})$ .  
 Skipping pair  $p_7$  and  $p_{38}$  because gcd of their leading monoms is zero.
533. Creating S-polynomial from the pair  $(p_7, p_{39})$ .  
 Skipping pair  $p_7$  and  $p_{39}$  because gcd of their leading monoms is zero.
534. Creating S-polynomial from the pair  $(p_7, p_{40})$ .  
 Skipping pair  $p_7$  and  $p_{40}$  because gcd of their leading monoms is zero.

535. Creating S-polynomial from the pair  $(p_7, p_{41})$ .  
 Skipping pair  $p_7$  and  $p_{41}$  because gcd of their leading monoms is zero.
536. Creating S-polynomial from the pair  $(p_7, p_{42})$ .  
 Skipping pair  $p_7$  and  $p_{42}$  because gcd of their leading monoms is zero.
537. Creating S-polynomial from the pair  $(p_7, p_{43})$ .  
 Skipping pair  $p_7$  and  $p_{43}$  because gcd of their leading monoms is zero.
538. Creating S-polynomial from the pair  $(p_7, p_{44})$ .  
 Skipping pair  $p_7$  and  $p_{44}$  because gcd of their leading monoms is zero.
539. Creating S-polynomial from the pair  $(p_7, p_{45})$ .  
 Skipping pair  $p_7$  and  $p_{45}$  because gcd of their leading monoms is zero.
540. Creating S-polynomial from the pair  $(p_7, p_{46})$ .  
 Skipping pair  $p_7$  and  $p_{46}$  because gcd of their leading monoms is zero.
541. Creating S-polynomial from the pair  $(p_7, p_{47})$ .  
 Skipping pair  $p_7$  and  $p_{47}$  because gcd of their leading monoms is zero.
542. Creating S-polynomial from the pair  $(p_7, p_{48})$ .  
 Skipping pair  $p_7$  and  $p_{48}$  because gcd of their leading monoms is zero.
543. Creating S-polynomial from the pair  $(p_7, p_{49})$ .  
 Skipping pair  $p_7$  and  $p_{49}$  because gcd of their leading monoms is zero.
544. Creating S-polynomial from the pair  $(p_7, p_{50})$ .  
 Skipping pair  $p_7$  and  $p_{50}$  because gcd of their leading monoms is zero.
545. Creating S-polynomial from the pair  $(p_7, p_{51})$ .  
 Skipping pair  $p_7$  and  $p_{51}$  because gcd of their leading monoms is zero.
546. Creating S-polynomial from the pair  $(p_7, p_{52})$ .  
 Skipping pair  $p_7$  and  $p_{52}$  because gcd of their leading monoms is zero.
547. Creating S-polynomial from the pair  $(p_7, p_{53})$ .  
 Skipping pair  $p_7$  and  $p_{53}$  because gcd of their leading monoms is zero.
548. Creating S-polynomial from the pair  $(p_7, p_{54})$ .  
 Skipping pair  $p_7$  and  $p_{54}$  because gcd of their leading monoms is zero.
549. Creating S-polynomial from the pair  $(p_7, p_{55})$ .  
 Skipping pair  $p_7$  and  $p_{55}$  because gcd of their leading monoms is zero.
550. Creating S-polynomial from the pair  $(p_7, p_{56})$ .  
 Skipping pair  $p_7$  and  $p_{56}$  because gcd of their leading monoms is zero.
551. Creating S-polynomial from the pair  $(p_7, p_{57})$ .  
 Skipping pair  $p_7$  and  $p_{57}$  because gcd of their leading monoms is zero.

- 552. Creating S-polynomial from the pair  $(p_7, p_{58})$ .  
 Skipping pair  $p_7$  and  $p_{58}$  because gcd of their leading monoms is zero.
- 553. Creating S-polynomial from the pair  $(p_7, p_{59})$ .  
 Skipping pair  $p_7$  and  $p_{59}$  because gcd of their leading monoms is zero.
- 554. Creating S-polynomial from the pair  $(p_7, p_{60})$ .  
 Skipping pair  $p_7$  and  $p_{60}$  because gcd of their leading monoms is zero.
- 555. Creating S-polynomial from the pair  $(p_7, p_{61})$ .  
 Skipping pair  $p_7$  and  $p_{61}$  because gcd of their leading monoms is zero.
- 556. Creating S-polynomial from the pair  $(p_7, p_{62})$ .  
 Skipping pair  $p_7$  and  $p_{62}$  because gcd of their leading monoms is zero.
- 557. Creating S-polynomial from the pair  $(p_7, p_{63})$ .  
 Skipping pair  $p_7$  and  $p_{63}$  because gcd of their leading monoms is zero.
- 558. Creating S-polynomial from the pair  $(p_7, p_{64})$ .  
 Skipping pair  $p_7$  and  $p_{64}$  because gcd of their leading monoms is zero.
- 559. Creating S-polynomial from the pair  $(p_7, p_{65})$ .  
 Skipping pair  $p_7$  and  $p_{65}$  because gcd of their leading monoms is zero.
- 560. Creating S-polynomial from the pair  $(p_7, p_{66})$ .  
 Skipping pair  $p_7$  and  $p_{66}$  because gcd of their leading monoms is zero.
- 561. Creating S-polynomial from the pair  $(p_7, p_{67})$ .  
 Skipping pair  $p_7$  and  $p_{67}$  because gcd of their leading monoms is zero.
- 562. Creating S-polynomial from the pair  $(p_7, p_{68})$ .  
 Skipping pair  $p_7$  and  $p_{68}$  because gcd of their leading monoms is zero.
- 563. Creating S-polynomial from the pair  $(p_7, p_{69})$ .  
 Skipping pair  $p_7$  and  $p_{69}$  because gcd of their leading monoms is zero.
- 564. Creating S-polynomial from the pair  $(p_7, p_{70})$ .  
 Skipping pair  $p_7$  and  $p_{70}$  because gcd of their leading monoms is zero.
- 565. Creating S-polynomial from the pair  $(p_7, p_{71})$ .  
 Skipping pair  $p_7$  and  $p_{71}$  because gcd of their leading monoms is zero.
- 566. Creating S-polynomial from the pair  $(p_7, p_{72})$ .  
 Skipping pair  $p_7$  and  $p_{72}$  because gcd of their leading monoms is zero.
- 567. Creating S-polynomial from the pair  $(p_7, p_{73})$ .  
 Skipping pair  $p_7$  and  $p_{73}$  because gcd of their leading monoms is zero.
- 568. Creating S-polynomial from the pair  $(p_7, p_{74})$ .  
 Skipping pair  $p_7$  and  $p_{74}$  because gcd of their leading monoms is zero.

569. Creating S-polynomial from the pair  $(p_7, p_{75})$ .  
 Skipping pair  $p_7$  and  $p_{75}$  because gcd of their leading monoms is zero.
570. Creating S-polynomial from the pair  $(p_7, p_{76})$ .  
 Skipping pair  $p_7$  and  $p_{76}$  because gcd of their leading monoms is zero.
571. Creating S-polynomial from the pair  $(p_7, p_{77})$ .  
 Skipping pair  $p_7$  and  $p_{77}$  because gcd of their leading monoms is zero.
572. Creating S-polynomial from the pair  $(p_7, p_{78})$ .  
 Skipping pair  $p_7$  and  $p_{78}$  because gcd of their leading monoms is zero.
573. Creating S-polynomial from the pair  $(p_7, p_{79})$ .  
 Skipping pair  $p_7$  and  $p_{79}$  because gcd of their leading monoms is zero.
574. Creating S-polynomial from the pair  $(p_7, p_{80})$ .  
 Skipping pair  $p_7$  and  $p_{80}$  because gcd of their leading monoms is zero.
575. Creating S-polynomial from the pair  $(p_7, p_{81})$ .  
 Skipping pair  $p_7$  and  $p_{81}$  because gcd of their leading monoms is zero.
576. Creating S-polynomial from the pair  $(p_7, p_{82})$ .  
 Skipping pair  $p_7$  and  $p_{82}$  because gcd of their leading monoms is zero.
577. Creating S-polynomial from the pair  $(p_7, p_{83})$ .  
 Skipping pair  $p_7$  and  $p_{83}$  because gcd of their leading monoms is zero.
578. Creating S-polynomial from the pair  $(p_7, p_{84})$ .  
 Skipping pair  $p_7$  and  $p_{84}$  because gcd of their leading monoms is zero.
579. Creating S-polynomial from the pair  $(p_7, p_{85})$ .  
 Skipping pair  $p_7$  and  $p_{85}$  because gcd of their leading monoms is zero.
580. Creating S-polynomial from the pair  $(p_7, p_{86})$ .  
 Skipping pair  $p_7$  and  $p_{86}$  because gcd of their leading monoms is zero.
581. Creating S-polynomial from the pair  $(p_7, p_{87})$ .  
 Skipping pair  $p_7$  and  $p_{87}$  because gcd of their leading monoms is zero.
582. Creating S-polynomial from the pair  $(p_7, p_{88})$ .  
 Skipping pair  $p_7$  and  $p_{88}$  because gcd of their leading monoms is zero.
583. Creating S-polynomial from the pair  $(p_7, p_{89})$ .  
 Skipping pair  $p_7$  and  $p_{89}$  because gcd of their leading monoms is zero.
584. Creating S-polynomial from the pair  $(p_7, p_{90})$ .  
 Skipping pair  $p_7$  and  $p_{90}$  because gcd of their leading monoms is zero.
585. Creating S-polynomial from the pair  $(p_7, p_{91})$ .  
 Skipping pair  $p_7$  and  $p_{91}$  because gcd of their leading monoms is zero.

586. Creating S-polynomial from the pair  $(p_7, p_{92})$ .  
 Skipping pair  $p_7$  and  $p_{92}$  because gcd of their leading monoms is zero.
587. Creating S-polynomial from the pair  $(p_7, p_{93})$ .  
 Skipping pair  $p_7$  and  $p_{93}$  because gcd of their leading monoms is zero.
588. Creating S-polynomial from the pair  $(p_7, p_{94})$ .  
 Skipping pair  $p_7$  and  $p_{94}$  because gcd of their leading monoms is zero.
589. Creating S-polynomial from the pair  $(p_7, p_{95})$ .  
 Skipping pair  $p_7$  and  $p_{95}$  because gcd of their leading monoms is zero.
590. Creating S-polynomial from the pair  $(p_7, p_{96})$ .  
 Skipping pair  $p_7$  and  $p_{96}$  because gcd of their leading monoms is zero.
591. Creating S-polynomial from the pair  $(p_7, p_{97})$ .  
 Skipping pair  $p_7$  and  $p_{97}$  because gcd of their leading monoms is zero.
592. Creating S-polynomial from the pair  $(p_7, p_{98})$ .  
 Skipping pair  $p_7$  and  $p_{98}$  because gcd of their leading monoms is zero.
593. Creating S-polynomial from the pair  $(p_7, p_{99})$ .  
 Skipping pair  $p_7$  and  $p_{99}$  because gcd of their leading monoms is zero.
594. Creating S-polynomial from the pair  $(p_7, p_{100})$ .  
 Skipping pair  $p_7$  and  $p_{100}$  because gcd of their leading monoms is zero.
595. Creating S-polynomial from the pair  $(p_7, p_{101})$ .  
 Skipping pair  $p_7$  and  $p_{101}$  because gcd of their leading monoms is zero.
596. Creating S-polynomial from the pair  $(p_7, p_{102})$ .  
 Skipping pair  $p_7$  and  $p_{102}$  because gcd of their leading monoms is zero.
597. Creating S-polynomial from the pair  $(p_7, p_{103})$ .  
 Skipping pair  $p_7$  and  $p_{103}$  because gcd of their leading monoms is zero.
598. Creating S-polynomial from the pair  $(p_7, p_{104})$ .  
 Skipping pair  $p_7$  and  $p_{104}$  because gcd of their leading monoms is zero.
599. Creating S-polynomial from the pair  $(p_7, p_{105})$ .  
 Skipping pair  $p_7$  and  $p_{105}$  because gcd of their leading monoms is zero.
600. Creating S-polynomial from the pair  $(p_7, p_{106})$ .  
 Skipping pair  $p_7$  and  $p_{106}$  because gcd of their leading monoms is zero.
601. Creating S-polynomial from the pair  $(p_8, p_{32})$ .  
 Skipping pair  $p_8$  and  $p_{32}$  because gcd of their leading monoms is zero.
602. Creating S-polynomial from the pair  $(p_8, p_{33})$ .  
 Skipping pair  $p_8$  and  $p_{33}$  because gcd of their leading monoms is zero.



- 603. Creating S-polynomial from the pair  $(p_8, p_{34})$ .  
 Skipping pair  $p_8$  and  $p_{34}$  because gcd of their leading monoms is zero.
- 604. Creating S-polynomial from the pair  $(p_8, p_{35})$ .  
 Skipping pair  $p_8$  and  $p_{35}$  because gcd of their leading monoms is zero.
- 605. Creating S-polynomial from the pair  $(p_8, p_{36})$ .  
 Skipping pair  $p_8$  and  $p_{36}$  because gcd of their leading monoms is zero.
- 606. Creating S-polynomial from the pair  $(p_8, p_{37})$ .  
 Skipping pair  $p_8$  and  $p_{37}$  because gcd of their leading monoms is zero.
- 607. Creating S-polynomial from the pair  $(p_8, p_{38})$ .  
 Skipping pair  $p_8$  and  $p_{38}$  because gcd of their leading monoms is zero.
- 608. Creating S-polynomial from the pair  $(p_8, p_{39})$ .  
 Skipping pair  $p_8$  and  $p_{39}$  because gcd of their leading monoms is zero.
- 609. Creating S-polynomial from the pair  $(p_8, p_{40})$ .  
 Skipping pair  $p_8$  and  $p_{40}$  because gcd of their leading monoms is zero.
- 610. Creating S-polynomial from the pair  $(p_8, p_{41})$ .  
 Skipping pair  $p_8$  and  $p_{41}$  because gcd of their leading monoms is zero.
- 611. Creating S-polynomial from the pair  $(p_8, p_{42})$ .  
 Skipping pair  $p_8$  and  $p_{42}$  because gcd of their leading monoms is zero.
- 612. Creating S-polynomial from the pair  $(p_8, p_{43})$ .  
 Skipping pair  $p_8$  and  $p_{43}$  because gcd of their leading monoms is zero.
- 613. Creating S-polynomial from the pair  $(p_8, p_{44})$ .  
 Skipping pair  $p_8$  and  $p_{44}$  because gcd of their leading monoms is zero.
- 614. Creating S-polynomial from the pair  $(p_8, p_{45})$ .  
 Skipping pair  $p_8$  and  $p_{45}$  because gcd of their leading monoms is zero.
- 615. Creating S-polynomial from the pair  $(p_8, p_{46})$ .  
 Skipping pair  $p_8$  and  $p_{46}$  because gcd of their leading monoms is zero.
- 616. Creating S-polynomial from the pair  $(p_8, p_{47})$ .  
 Skipping pair  $p_8$  and  $p_{47}$  because gcd of their leading monoms is zero.
- 617. Creating S-polynomial from the pair  $(p_8, p_{48})$ .  
 Skipping pair  $p_8$  and  $p_{48}$  because gcd of their leading monoms is zero.
- 618. Creating S-polynomial from the pair  $(p_8, p_{49})$ .  
 Skipping pair  $p_8$  and  $p_{49}$  because gcd of their leading monoms is zero.
- 619. Creating S-polynomial from the pair  $(p_8, p_{50})$ .  
 Skipping pair  $p_8$  and  $p_{50}$  because gcd of their leading monoms is zero.

- 620. Creating S-polynomial from the pair  $(p_8, p_{51})$ .  
 Skipping pair  $p_8$  and  $p_{51}$  because gcd of their leading monoms is zero.
- 621. Creating S-polynomial from the pair  $(p_8, p_{52})$ .  
 Skipping pair  $p_8$  and  $p_{52}$  because gcd of their leading monoms is zero.
- 622. Creating S-polynomial from the pair  $(p_8, p_{53})$ .  
 Skipping pair  $p_8$  and  $p_{53}$  because gcd of their leading monoms is zero.
- 623. Creating S-polynomial from the pair  $(p_8, p_{54})$ .  
 Skipping pair  $p_8$  and  $p_{54}$  because gcd of their leading monoms is zero.
- 624. Creating S-polynomial from the pair  $(p_8, p_{55})$ .  
 Skipping pair  $p_8$  and  $p_{55}$  because gcd of their leading monoms is zero.
- 625. Creating S-polynomial from the pair  $(p_8, p_{56})$ .  
 Skipping pair  $p_8$  and  $p_{56}$  because gcd of their leading monoms is zero.
- 626. Creating S-polynomial from the pair  $(p_8, p_{57})$ .  
 Skipping pair  $p_8$  and  $p_{57}$  because gcd of their leading monoms is zero.
- 627. Creating S-polynomial from the pair  $(p_8, p_{58})$ .  
 Skipping pair  $p_8$  and  $p_{58}$  because gcd of their leading monoms is zero.
- 628. Creating S-polynomial from the pair  $(p_8, p_{59})$ .  
 Skipping pair  $p_8$  and  $p_{59}$  because gcd of their leading monoms is zero.
- 629. Creating S-polynomial from the pair  $(p_8, p_{60})$ .  
 Skipping pair  $p_8$  and  $p_{60}$  because gcd of their leading monoms is zero.
- 630. Creating S-polynomial from the pair  $(p_8, p_{61})$ .  
 Skipping pair  $p_8$  and  $p_{61}$  because gcd of their leading monoms is zero.
- 631. Creating S-polynomial from the pair  $(p_8, p_{62})$ .  
 Skipping pair  $p_8$  and  $p_{62}$  because gcd of their leading monoms is zero.
- 632. Creating S-polynomial from the pair  $(p_8, p_{63})$ .  
 Skipping pair  $p_8$  and  $p_{63}$  because gcd of their leading monoms is zero.
- 633. Creating S-polynomial from the pair  $(p_8, p_{64})$ .  
 Skipping pair  $p_8$  and  $p_{64}$  because gcd of their leading monoms is zero.
- 634. Creating S-polynomial from the pair  $(p_8, p_{65})$ .  
 Skipping pair  $p_8$  and  $p_{65}$  because gcd of their leading monoms is zero.
- 635. Creating S-polynomial from the pair  $(p_8, p_{66})$ .  
 Skipping pair  $p_8$  and  $p_{66}$  because gcd of their leading monoms is zero.
- 636. Creating S-polynomial from the pair  $(p_8, p_{67})$ .  
 Skipping pair  $p_8$  and  $p_{67}$  because gcd of their leading monoms is zero.

- 637. Creating S-polynomial from the pair  $(p_8, p_{68})$ .  
 Skipping pair  $p_8$  and  $p_{68}$  because gcd of their leading monoms is zero.
- 638. Creating S-polynomial from the pair  $(p_8, p_{69})$ .  
 Skipping pair  $p_8$  and  $p_{69}$  because gcd of their leading monoms is zero.
- 639. Creating S-polynomial from the pair  $(p_8, p_{70})$ .  
 Skipping pair  $p_8$  and  $p_{70}$  because gcd of their leading monoms is zero.
- 640. Creating S-polynomial from the pair  $(p_8, p_{71})$ .  
 Skipping pair  $p_8$  and  $p_{71}$  because gcd of their leading monoms is zero.
- 641. Creating S-polynomial from the pair  $(p_8, p_{72})$ .  
 Skipping pair  $p_8$  and  $p_{72}$  because gcd of their leading monoms is zero.
- 642. Creating S-polynomial from the pair  $(p_8, p_{73})$ .  
 Skipping pair  $p_8$  and  $p_{73}$  because gcd of their leading monoms is zero.
- 643. Creating S-polynomial from the pair  $(p_8, p_{74})$ .  
 Skipping pair  $p_8$  and  $p_{74}$  because gcd of their leading monoms is zero.
- 644. Creating S-polynomial from the pair  $(p_8, p_{75})$ .  
 Skipping pair  $p_8$  and  $p_{75}$  because gcd of their leading monoms is zero.
- 645. Creating S-polynomial from the pair  $(p_8, p_{76})$ .  
 Skipping pair  $p_8$  and  $p_{76}$  because gcd of their leading monoms is zero.
- 646. Creating S-polynomial from the pair  $(p_8, p_{77})$ .  
 Skipping pair  $p_8$  and  $p_{77}$  because gcd of their leading monoms is zero.
- 647. Creating S-polynomial from the pair  $(p_8, p_{78})$ .  
 Skipping pair  $p_8$  and  $p_{78}$  because gcd of their leading monoms is zero.
- 648. Creating S-polynomial from the pair  $(p_8, p_{79})$ .  
 Skipping pair  $p_8$  and  $p_{79}$  because gcd of their leading monoms is zero.
- 649. Creating S-polynomial from the pair  $(p_8, p_{80})$ .  
 Skipping pair  $p_8$  and  $p_{80}$  because gcd of their leading monoms is zero.
- 650. Creating S-polynomial from the pair  $(p_8, p_{81})$ .  
 Skipping pair  $p_8$  and  $p_{81}$  because gcd of their leading monoms is zero.
- 651. Creating S-polynomial from the pair  $(p_8, p_{82})$ .  
 Skipping pair  $p_8$  and  $p_{82}$  because gcd of their leading monoms is zero.
- 652. Creating S-polynomial from the pair  $(p_8, p_{83})$ .  
 Skipping pair  $p_8$  and  $p_{83}$  because gcd of their leading monoms is zero.
- 653. Creating S-polynomial from the pair  $(p_8, p_{84})$ .  
 Skipping pair  $p_8$  and  $p_{84}$  because gcd of their leading monoms is zero.

654. Creating S-polynomial from the pair  $(p_8, p_{85})$ .  
 Skipping pair  $p_8$  and  $p_{85}$  because gcd of their leading monoms is zero.
655. Creating S-polynomial from the pair  $(p_8, p_{86})$ .  
 Skipping pair  $p_8$  and  $p_{86}$  because gcd of their leading monoms is zero.
656. Creating S-polynomial from the pair  $(p_8, p_{87})$ .  
 Skipping pair  $p_8$  and  $p_{87}$  because gcd of their leading monoms is zero.
657. Creating S-polynomial from the pair  $(p_8, p_{88})$ .  
 Skipping pair  $p_8$  and  $p_{88}$  because gcd of their leading monoms is zero.
658. Creating S-polynomial from the pair  $(p_8, p_{89})$ .  
 Skipping pair  $p_8$  and  $p_{89}$  because gcd of their leading monoms is zero.
659. Creating S-polynomial from the pair  $(p_8, p_{90})$ .  
 Skipping pair  $p_8$  and  $p_{90}$  because gcd of their leading monoms is zero.
660. Creating S-polynomial from the pair  $(p_8, p_{91})$ .  
 Skipping pair  $p_8$  and  $p_{91}$  because gcd of their leading monoms is zero.
661. Creating S-polynomial from the pair  $(p_8, p_{92})$ .  
 Skipping pair  $p_8$  and  $p_{92}$  because gcd of their leading monoms is zero.
662. Creating S-polynomial from the pair  $(p_8, p_{93})$ .  
 Skipping pair  $p_8$  and  $p_{93}$  because gcd of their leading monoms is zero.
663. Creating S-polynomial from the pair  $(p_8, p_{94})$ .  
 Skipping pair  $p_8$  and  $p_{94}$  because gcd of their leading monoms is zero.
664. Creating S-polynomial from the pair  $(p_8, p_{95})$ .  
 Skipping pair  $p_8$  and  $p_{95}$  because gcd of their leading monoms is zero.
665. Creating S-polynomial from the pair  $(p_8, p_{96})$ .  
 Skipping pair  $p_8$  and  $p_{96}$  because gcd of their leading monoms is zero.
666. Creating S-polynomial from the pair  $(p_8, p_{97})$ .  
 Skipping pair  $p_8$  and  $p_{97}$  because gcd of their leading monoms is zero.
667. Creating S-polynomial from the pair  $(p_8, p_{98})$ .  
 Skipping pair  $p_8$  and  $p_{98}$  because gcd of their leading monoms is zero.
668. Creating S-polynomial from the pair  $(p_8, p_{99})$ .  
 Skipping pair  $p_8$  and  $p_{99}$  because gcd of their leading monoms is zero.
669. Creating S-polynomial from the pair  $(p_8, p_{100})$ .  
 Skipping pair  $p_8$  and  $p_{100}$  because gcd of their leading monoms is zero.
670. Creating S-polynomial from the pair  $(p_8, p_{101})$ .  
 Skipping pair  $p_8$  and  $p_{101}$  because gcd of their leading monoms is zero.

671. Creating S-polynomial from the pair  $(p_8, p_{102})$ .  
 Skipping pair  $p_8$  and  $p_{102}$  because gcd of their leading monoms is zero.
672. Creating S-polynomial from the pair  $(p_8, p_{103})$ .  
 Skipping pair  $p_8$  and  $p_{103}$  because gcd of their leading monoms is zero.
673. Creating S-polynomial from the pair  $(p_8, p_{104})$ .  
 Skipping pair  $p_8$  and  $p_{104}$  because gcd of their leading monoms is zero.
674. Creating S-polynomial from the pair  $(p_8, p_{105})$ .  
 Skipping pair  $p_8$  and  $p_{105}$  because gcd of their leading monoms is zero.
675. Creating S-polynomial from the pair  $(p_8, p_{106})$ .  
 Skipping pair  $p_8$  and  $p_{106}$  because gcd of their leading monoms is zero.
676. Creating S-polynomial from the pair  $(p_9, p_{32})$ .  
 Skipping pair  $p_9$  and  $p_{32}$  because gcd of their leading monoms is zero.
677. Creating S-polynomial from the pair  $(p_9, p_{33})$ .  
 Skipping pair  $p_9$  and  $p_{33}$  because gcd of their leading monoms is zero.
678. Creating S-polynomial from the pair  $(p_9, p_{34})$ .  
 Skipping pair  $p_9$  and  $p_{34}$  because gcd of their leading monoms is zero.
679. Creating S-polynomial from the pair  $(p_9, p_{35})$ .  
 Skipping pair  $p_9$  and  $p_{35}$  because gcd of their leading monoms is zero.
680. Creating S-polynomial from the pair  $(p_9, p_{36})$ .  
 Skipping pair  $p_9$  and  $p_{36}$  because gcd of their leading monoms is zero.
681. Creating S-polynomial from the pair  $(p_9, p_{37})$ .  
 Skipping pair  $p_9$  and  $p_{37}$  because gcd of their leading monoms is zero.
682. Creating S-polynomial from the pair  $(p_9, p_{38})$ .  
 Skipping pair  $p_9$  and  $p_{38}$  because gcd of their leading monoms is zero.
683. Creating S-polynomial from the pair  $(p_9, p_{39})$ .  
 Skipping pair  $p_9$  and  $p_{39}$  because gcd of their leading monoms is zero.
684. Creating S-polynomial from the pair  $(p_9, p_{40})$ .  
 Skipping pair  $p_9$  and  $p_{40}$  because gcd of their leading monoms is zero.
685. Creating S-polynomial from the pair  $(p_9, p_{41})$ .  
 Skipping pair  $p_9$  and  $p_{41}$  because gcd of their leading monoms is zero.
686. Creating S-polynomial from the pair  $(p_9, p_{42})$ .  
 Skipping pair  $p_9$  and  $p_{42}$  because gcd of their leading monoms is zero.
687. Creating S-polynomial from the pair  $(p_9, p_{43})$ .  
 Skipping pair  $p_9$  and  $p_{43}$  because gcd of their leading monoms is zero.

688. Creating S-polynomial from the pair  $(p_9, p_{44})$ .  
 Skipping pair  $p_9$  and  $p_{44}$  because gcd of their leading monoms is zero.
689. Creating S-polynomial from the pair  $(p_9, p_{45})$ .  
 Skipping pair  $p_9$  and  $p_{45}$  because gcd of their leading monoms is zero.
690. Creating S-polynomial from the pair  $(p_9, p_{46})$ .  
 Skipping pair  $p_9$  and  $p_{46}$  because gcd of their leading monoms is zero.
691. Creating S-polynomial from the pair  $(p_9, p_{47})$ .  
 Skipping pair  $p_9$  and  $p_{47}$  because gcd of their leading monoms is zero.
692. Creating S-polynomial from the pair  $(p_9, p_{48})$ .  
 Skipping pair  $p_9$  and  $p_{48}$  because gcd of their leading monoms is zero.
693. Creating S-polynomial from the pair  $(p_9, p_{49})$ .  
 Skipping pair  $p_9$  and  $p_{49}$  because gcd of their leading monoms is zero.
694. Creating S-polynomial from the pair  $(p_9, p_{50})$ .  
 Skipping pair  $p_9$  and  $p_{50}$  because gcd of their leading monoms is zero.
695. Creating S-polynomial from the pair  $(p_9, p_{51})$ .  
 Skipping pair  $p_9$  and  $p_{51}$  because gcd of their leading monoms is zero.
696. Creating S-polynomial from the pair  $(p_9, p_{52})$ .  
 Skipping pair  $p_9$  and  $p_{52}$  because gcd of their leading monoms is zero.
697. Creating S-polynomial from the pair  $(p_9, p_{53})$ .  
 Skipping pair  $p_9$  and  $p_{53}$  because gcd of their leading monoms is zero.
698. Creating S-polynomial from the pair  $(p_9, p_{54})$ .  
 Skipping pair  $p_9$  and  $p_{54}$  because gcd of their leading monoms is zero.
699. Creating S-polynomial from the pair  $(p_9, p_{55})$ .  
 Skipping pair  $p_9$  and  $p_{55}$  because gcd of their leading monoms is zero.
700. Creating S-polynomial from the pair  $(p_9, p_{56})$ .  
 Skipping pair  $p_9$  and  $p_{56}$  because gcd of their leading monoms is zero.
701. Creating S-polynomial from the pair  $(p_9, p_{57})$ .  
 Skipping pair  $p_9$  and  $p_{57}$  because gcd of their leading monoms is zero.
702. Creating S-polynomial from the pair  $(p_9, p_{58})$ .  
 Skipping pair  $p_9$  and  $p_{58}$  because gcd of their leading monoms is zero.
703. Creating S-polynomial from the pair  $(p_9, p_{59})$ .  
 Skipping pair  $p_9$  and  $p_{59}$  because gcd of their leading monoms is zero.
704. Creating S-polynomial from the pair  $(p_9, p_{60})$ .  
 Skipping pair  $p_9$  and  $p_{60}$  because gcd of their leading monoms is zero.

705. Creating S-polynomial from the pair  $(p_9, p_{61})$ .  
 Skipping pair  $p_9$  and  $p_{61}$  because gcd of their leading monoms is zero.
706. Creating S-polynomial from the pair  $(p_9, p_{62})$ .  
 Skipping pair  $p_9$  and  $p_{62}$  because gcd of their leading monoms is zero.
707. Creating S-polynomial from the pair  $(p_9, p_{63})$ .  
 Skipping pair  $p_9$  and  $p_{63}$  because gcd of their leading monoms is zero.
708. Creating S-polynomial from the pair  $(p_9, p_{64})$ .  
 Skipping pair  $p_9$  and  $p_{64}$  because gcd of their leading monoms is zero.
709. Creating S-polynomial from the pair  $(p_9, p_{65})$ .  
 Skipping pair  $p_9$  and  $p_{65}$  because gcd of their leading monoms is zero.
710. Creating S-polynomial from the pair  $(p_9, p_{66})$ .  
 Skipping pair  $p_9$  and  $p_{66}$  because gcd of their leading monoms is zero.
711. Creating S-polynomial from the pair  $(p_9, p_{67})$ .  
 Skipping pair  $p_9$  and  $p_{67}$  because gcd of their leading monoms is zero.
712. Creating S-polynomial from the pair  $(p_9, p_{68})$ .  
 Skipping pair  $p_9$  and  $p_{68}$  because gcd of their leading monoms is zero.
713. Creating S-polynomial from the pair  $(p_9, p_{69})$ .  
 Skipping pair  $p_9$  and  $p_{69}$  because gcd of their leading monoms is zero.
714. Creating S-polynomial from the pair  $(p_9, p_{70})$ .  
 Skipping pair  $p_9$  and  $p_{70}$  because gcd of their leading monoms is zero.
715. Creating S-polynomial from the pair  $(p_9, p_{71})$ .  
 Skipping pair  $p_9$  and  $p_{71}$  because gcd of their leading monoms is zero.
716. Creating S-polynomial from the pair  $(p_9, p_{72})$ .  
 Skipping pair  $p_9$  and  $p_{72}$  because gcd of their leading monoms is zero.
717. Creating S-polynomial from the pair  $(p_9, p_{73})$ .  
 Skipping pair  $p_9$  and  $p_{73}$  because gcd of their leading monoms is zero.
718. Creating S-polynomial from the pair  $(p_9, p_{74})$ .  
 Skipping pair  $p_9$  and  $p_{74}$  because gcd of their leading monoms is zero.
719. Creating S-polynomial from the pair  $(p_9, p_{75})$ .  
 Skipping pair  $p_9$  and  $p_{75}$  because gcd of their leading monoms is zero.
720. Creating S-polynomial from the pair  $(p_9, p_{76})$ .  
 Skipping pair  $p_9$  and  $p_{76}$  because gcd of their leading monoms is zero.
721. Creating S-polynomial from the pair  $(p_9, p_{77})$ .  
 Skipping pair  $p_9$  and  $p_{77}$  because gcd of their leading monoms is zero.

722. Creating S-polynomial from the pair  $(p_9, p_{78})$ .  
 Skipping pair  $p_9$  and  $p_{78}$  because gcd of their leading monoms is zero.
723. Creating S-polynomial from the pair  $(p_9, p_{79})$ .  
 Skipping pair  $p_9$  and  $p_{79}$  because gcd of their leading monoms is zero.
724. Creating S-polynomial from the pair  $(p_9, p_{80})$ .  
 Skipping pair  $p_9$  and  $p_{80}$  because gcd of their leading monoms is zero.
725. Creating S-polynomial from the pair  $(p_9, p_{81})$ .  
 Skipping pair  $p_9$  and  $p_{81}$  because gcd of their leading monoms is zero.
726. Creating S-polynomial from the pair  $(p_9, p_{82})$ .  
 Skipping pair  $p_9$  and  $p_{82}$  because gcd of their leading monoms is zero.
727. Creating S-polynomial from the pair  $(p_9, p_{83})$ .  
 Skipping pair  $p_9$  and  $p_{83}$  because gcd of their leading monoms is zero.
728. Creating S-polynomial from the pair  $(p_9, p_{84})$ .  
 Skipping pair  $p_9$  and  $p_{84}$  because gcd of their leading monoms is zero.
729. Creating S-polynomial from the pair  $(p_9, p_{85})$ .  
 Skipping pair  $p_9$  and  $p_{85}$  because gcd of their leading monoms is zero.
730. Creating S-polynomial from the pair  $(p_9, p_{86})$ .  
 Skipping pair  $p_9$  and  $p_{86}$  because gcd of their leading monoms is zero.
731. Creating S-polynomial from the pair  $(p_9, p_{87})$ .  
 Skipping pair  $p_9$  and  $p_{87}$  because gcd of their leading monoms is zero.
732. Creating S-polynomial from the pair  $(p_9, p_{88})$ .  
 Skipping pair  $p_9$  and  $p_{88}$  because gcd of their leading monoms is zero.
733. Creating S-polynomial from the pair  $(p_9, p_{89})$ .  
 Skipping pair  $p_9$  and  $p_{89}$  because gcd of their leading monoms is zero.
734. Creating S-polynomial from the pair  $(p_9, p_{90})$ .  
 Skipping pair  $p_9$  and  $p_{90}$  because gcd of their leading monoms is zero.
735. Creating S-polynomial from the pair  $(p_9, p_{91})$ .  
 Skipping pair  $p_9$  and  $p_{91}$  because gcd of their leading monoms is zero.
736. Creating S-polynomial from the pair  $(p_9, p_{92})$ .  
 Skipping pair  $p_9$  and  $p_{92}$  because gcd of their leading monoms is zero.
737. Creating S-polynomial from the pair  $(p_9, p_{93})$ .  
 Skipping pair  $p_9$  and  $p_{93}$  because gcd of their leading monoms is zero.
738. Creating S-polynomial from the pair  $(p_9, p_{94})$ .  
 Skipping pair  $p_9$  and  $p_{94}$  because gcd of their leading monoms is zero.



739. Creating S-polynomial from the pair  $(p_9, p_{95})$ .  
 Skipping pair  $p_9$  and  $p_{95}$  because gcd of their leading monoms is zero.
740. Creating S-polynomial from the pair  $(p_9, p_{96})$ .  
 Skipping pair  $p_9$  and  $p_{96}$  because gcd of their leading monoms is zero.
741. Creating S-polynomial from the pair  $(p_9, p_{97})$ .  
 Skipping pair  $p_9$  and  $p_{97}$  because gcd of their leading monoms is zero.
742. Creating S-polynomial from the pair  $(p_9, p_{98})$ .  
 Skipping pair  $p_9$  and  $p_{98}$  because gcd of their leading monoms is zero.
743. Creating S-polynomial from the pair  $(p_9, p_{99})$ .  
 Skipping pair  $p_9$  and  $p_{99}$  because gcd of their leading monoms is zero.
744. Creating S-polynomial from the pair  $(p_9, p_{100})$ .  
 Skipping pair  $p_9$  and  $p_{100}$  because gcd of their leading monoms is zero.
745. Creating S-polynomial from the pair  $(p_9, p_{101})$ .  
 Skipping pair  $p_9$  and  $p_{101}$  because gcd of their leading monoms is zero.
746. Creating S-polynomial from the pair  $(p_9, p_{102})$ .  
 Skipping pair  $p_9$  and  $p_{102}$  because gcd of their leading monoms is zero.
747. Creating S-polynomial from the pair  $(p_9, p_{103})$ .  
 Skipping pair  $p_9$  and  $p_{103}$  because gcd of their leading monoms is zero.
748. Creating S-polynomial from the pair  $(p_9, p_{104})$ .  
 Skipping pair  $p_9$  and  $p_{104}$  because gcd of their leading monoms is zero.
749. Creating S-polynomial from the pair  $(p_9, p_{105})$ .  
 Skipping pair  $p_9$  and  $p_{105}$  because gcd of their leading monoms is zero.
750. Creating S-polynomial from the pair  $(p_9, p_{106})$ .  
 Skipping pair  $p_9$  and  $p_{106}$  because gcd of their leading monoms is zero.
751. Creating S-polynomial from the pair  $(p_{10}, p_{32})$ .  
 Skipping pair  $p_{10}$  and  $p_{32}$  because gcd of their leading monoms is zero.
752. Creating S-polynomial from the pair  $(p_{10}, p_{33})$ .  
 Skipping pair  $p_{10}$  and  $p_{33}$  because gcd of their leading monoms is zero.
753. Creating S-polynomial from the pair  $(p_{10}, p_{34})$ .  
 Skipping pair  $p_{10}$  and  $p_{34}$  because gcd of their leading monoms is zero.
754. Creating S-polynomial from the pair  $(p_{10}, p_{35})$ .  
 Skipping pair  $p_{10}$  and  $p_{35}$  because gcd of their leading monoms is zero.
755. Creating S-polynomial from the pair  $(p_{10}, p_{36})$ .  
 Skipping pair  $p_{10}$  and  $p_{36}$  because gcd of their leading monoms is zero.

756. Creating S-polynomial from the pair  $(p_{10}, p_{37})$ .  
 Skipping pair  $p_{10}$  and  $p_{37}$  because gcd of their leading monoms is zero.
757. Creating S-polynomial from the pair  $(p_{10}, p_{38})$ .  
 Skipping pair  $p_{10}$  and  $p_{38}$  because gcd of their leading monoms is zero.
758. Creating S-polynomial from the pair  $(p_{10}, p_{39})$ .  
 Skipping pair  $p_{10}$  and  $p_{39}$  because gcd of their leading monoms is zero.
759. Creating S-polynomial from the pair  $(p_{10}, p_{40})$ .  
 Skipping pair  $p_{10}$  and  $p_{40}$  because gcd of their leading monoms is zero.
760. Creating S-polynomial from the pair  $(p_{10}, p_{41})$ .  
 Skipping pair  $p_{10}$  and  $p_{41}$  because gcd of their leading monoms is zero.
761. Creating S-polynomial from the pair  $(p_{10}, p_{42})$ .  
 Skipping pair  $p_{10}$  and  $p_{42}$  because gcd of their leading monoms is zero.
762. Creating S-polynomial from the pair  $(p_{10}, p_{43})$ .  
 Skipping pair  $p_{10}$  and  $p_{43}$  because gcd of their leading monoms is zero.
763. Creating S-polynomial from the pair  $(p_{10}, p_{44})$ .  
 Skipping pair  $p_{10}$  and  $p_{44}$  because gcd of their leading monoms is zero.
764. Creating S-polynomial from the pair  $(p_{10}, p_{45})$ .  
 Skipping pair  $p_{10}$  and  $p_{45}$  because gcd of their leading monoms is zero.
765. Creating S-polynomial from the pair  $(p_{10}, p_{46})$ .  
 Skipping pair  $p_{10}$  and  $p_{46}$  because gcd of their leading monoms is zero.
766. Creating S-polynomial from the pair  $(p_{10}, p_{47})$ .  
 Skipping pair  $p_{10}$  and  $p_{47}$  because gcd of their leading monoms is zero.
767. Creating S-polynomial from the pair  $(p_{10}, p_{48})$ .  
 Skipping pair  $p_{10}$  and  $p_{48}$  because gcd of their leading monoms is zero.
768. Creating S-polynomial from the pair  $(p_{10}, p_{49})$ .  
 Skipping pair  $p_{10}$  and  $p_{49}$  because gcd of their leading monoms is zero.
769. Creating S-polynomial from the pair  $(p_{10}, p_{50})$ .  
 Skipping pair  $p_{10}$  and  $p_{50}$  because gcd of their leading monoms is zero.
770. Creating S-polynomial from the pair  $(p_{10}, p_{51})$ .  
 Skipping pair  $p_{10}$  and  $p_{51}$  because gcd of their leading monoms is zero.
771. Creating S-polynomial from the pair  $(p_{10}, p_{52})$ .  
 Skipping pair  $p_{10}$  and  $p_{52}$  because gcd of their leading monoms is zero.
772. Creating S-polynomial from the pair  $(p_{10}, p_{53})$ .  
 Skipping pair  $p_{10}$  and  $p_{53}$  because gcd of their leading monoms is zero.

773. Creating S-polynomial from the pair  $(p_{10}, p_{54})$ .  
 Skipping pair  $p_{10}$  and  $p_{54}$  because gcd of their leading monoms is zero.
774. Creating S-polynomial from the pair  $(p_{10}, p_{55})$ .  
 Skipping pair  $p_{10}$  and  $p_{55}$  because gcd of their leading monoms is zero.
775. Creating S-polynomial from the pair  $(p_{10}, p_{56})$ .  
 Skipping pair  $p_{10}$  and  $p_{56}$  because gcd of their leading monoms is zero.
776. Creating S-polynomial from the pair  $(p_{10}, p_{57})$ .  
 Skipping pair  $p_{10}$  and  $p_{57}$  because gcd of their leading monoms is zero.
777. Creating S-polynomial from the pair  $(p_{10}, p_{58})$ .  
 Skipping pair  $p_{10}$  and  $p_{58}$  because gcd of their leading monoms is zero.
778. Creating S-polynomial from the pair  $(p_{10}, p_{59})$ .  
 Skipping pair  $p_{10}$  and  $p_{59}$  because gcd of their leading monoms is zero.
779. Creating S-polynomial from the pair  $(p_{10}, p_{60})$ .  
 Skipping pair  $p_{10}$  and  $p_{60}$  because gcd of their leading monoms is zero.
780. Creating S-polynomial from the pair  $(p_{10}, p_{61})$ .  
 Skipping pair  $p_{10}$  and  $p_{61}$  because gcd of their leading monoms is zero.
781. Creating S-polynomial from the pair  $(p_{10}, p_{62})$ .  
 Skipping pair  $p_{10}$  and  $p_{62}$  because gcd of their leading monoms is zero.
782. Creating S-polynomial from the pair  $(p_{10}, p_{63})$ .  
 Skipping pair  $p_{10}$  and  $p_{63}$  because gcd of their leading monoms is zero.
783. Creating S-polynomial from the pair  $(p_{10}, p_{64})$ .  
 Skipping pair  $p_{10}$  and  $p_{64}$  because gcd of their leading monoms is zero.
784. Creating S-polynomial from the pair  $(p_{10}, p_{65})$ .  
 Skipping pair  $p_{10}$  and  $p_{65}$  because gcd of their leading monoms is zero.
785. Creating S-polynomial from the pair  $(p_{10}, p_{66})$ .  
 Skipping pair  $p_{10}$  and  $p_{66}$  because gcd of their leading monoms is zero.
786. Creating S-polynomial from the pair  $(p_{10}, p_{67})$ .  
 Skipping pair  $p_{10}$  and  $p_{67}$  because gcd of their leading monoms is zero.
787. Creating S-polynomial from the pair  $(p_{10}, p_{68})$ .  
 Skipping pair  $p_{10}$  and  $p_{68}$  because gcd of their leading monoms is zero.
788. Creating S-polynomial from the pair  $(p_{10}, p_{69})$ .  
 Skipping pair  $p_{10}$  and  $p_{69}$  because gcd of their leading monoms is zero.
789. Creating S-polynomial from the pair  $(p_{10}, p_{70})$ .  
 Skipping pair  $p_{10}$  and  $p_{70}$  because gcd of their leading monoms is zero.

790. Creating S-polynomial from the pair  $(p_{10}, p_{71})$ .  
 Skipping pair  $p_{10}$  and  $p_{71}$  because gcd of their leading monoms is zero.
791. Creating S-polynomial from the pair  $(p_{10}, p_{72})$ .  
 Skipping pair  $p_{10}$  and  $p_{72}$  because gcd of their leading monoms is zero.
792. Creating S-polynomial from the pair  $(p_{10}, p_{73})$ .  
 Skipping pair  $p_{10}$  and  $p_{73}$  because gcd of their leading monoms is zero.
793. Creating S-polynomial from the pair  $(p_{10}, p_{74})$ .  
 Skipping pair  $p_{10}$  and  $p_{74}$  because gcd of their leading monoms is zero.
794. Creating S-polynomial from the pair  $(p_{10}, p_{75})$ .  
 Skipping pair  $p_{10}$  and  $p_{75}$  because gcd of their leading monoms is zero.
795. Creating S-polynomial from the pair  $(p_{10}, p_{76})$ .  
 Skipping pair  $p_{10}$  and  $p_{76}$  because gcd of their leading monoms is zero.
796. Creating S-polynomial from the pair  $(p_{10}, p_{77})$ .  
 Skipping pair  $p_{10}$  and  $p_{77}$  because gcd of their leading monoms is zero.
797. Creating S-polynomial from the pair  $(p_{10}, p_{78})$ .  
 Skipping pair  $p_{10}$  and  $p_{78}$  because gcd of their leading monoms is zero.
798. Creating S-polynomial from the pair  $(p_{10}, p_{79})$ .  
 Skipping pair  $p_{10}$  and  $p_{79}$  because gcd of their leading monoms is zero.
799. Creating S-polynomial from the pair  $(p_{10}, p_{80})$ .  
 Skipping pair  $p_{10}$  and  $p_{80}$  because gcd of their leading monoms is zero.
800. Creating S-polynomial from the pair  $(p_{10}, p_{81})$ .  
 Skipping pair  $p_{10}$  and  $p_{81}$  because gcd of their leading monoms is zero.
801. Creating S-polynomial from the pair  $(p_{10}, p_{82})$ .  
 Skipping pair  $p_{10}$  and  $p_{82}$  because gcd of their leading monoms is zero.
802. Creating S-polynomial from the pair  $(p_{10}, p_{83})$ .  
 Skipping pair  $p_{10}$  and  $p_{83}$  because gcd of their leading monoms is zero.
803. Creating S-polynomial from the pair  $(p_{10}, p_{84})$ .  
 Skipping pair  $p_{10}$  and  $p_{84}$  because gcd of their leading monoms is zero.
804. Creating S-polynomial from the pair  $(p_{10}, p_{85})$ .  
 Skipping pair  $p_{10}$  and  $p_{85}$  because gcd of their leading monoms is zero.
805. Creating S-polynomial from the pair  $(p_{10}, p_{86})$ .  
 Skipping pair  $p_{10}$  and  $p_{86}$  because gcd of their leading monoms is zero.
806. Creating S-polynomial from the pair  $(p_{10}, p_{87})$ .  
 Skipping pair  $p_{10}$  and  $p_{87}$  because gcd of their leading monoms is zero.

807. Creating S-polynomial from the pair  $(p_{10}, p_{88})$ .  
 Skipping pair  $p_{10}$  and  $p_{88}$  because gcd of their leading monoms is zero.
808. Creating S-polynomial from the pair  $(p_{10}, p_{89})$ .  
 Skipping pair  $p_{10}$  and  $p_{89}$  because gcd of their leading monoms is zero.
809. Creating S-polynomial from the pair  $(p_{10}, p_{90})$ .  
 Skipping pair  $p_{10}$  and  $p_{90}$  because gcd of their leading monoms is zero.
810. Creating S-polynomial from the pair  $(p_{10}, p_{91})$ .  
 Skipping pair  $p_{10}$  and  $p_{91}$  because gcd of their leading monoms is zero.
811. Creating S-polynomial from the pair  $(p_{10}, p_{92})$ .  
 Skipping pair  $p_{10}$  and  $p_{92}$  because gcd of their leading monoms is zero.
812. Creating S-polynomial from the pair  $(p_{10}, p_{93})$ .  
 Skipping pair  $p_{10}$  and  $p_{93}$  because gcd of their leading monoms is zero.
813. Creating S-polynomial from the pair  $(p_{10}, p_{94})$ .  
 Skipping pair  $p_{10}$  and  $p_{94}$  because gcd of their leading monoms is zero.
814. Creating S-polynomial from the pair  $(p_{10}, p_{95})$ .  
 Skipping pair  $p_{10}$  and  $p_{95}$  because gcd of their leading monoms is zero.
815. Creating S-polynomial from the pair  $(p_{10}, p_{96})$ .  
 Skipping pair  $p_{10}$  and  $p_{96}$  because gcd of their leading monoms is zero.
816. Creating S-polynomial from the pair  $(p_{10}, p_{97})$ .  
 Skipping pair  $p_{10}$  and  $p_{97}$  because gcd of their leading monoms is zero.
817. Creating S-polynomial from the pair  $(p_{10}, p_{98})$ .  
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818. Creating S-polynomial from the pair  $(p_{10}, p_{99})$ .  
 Skipping pair  $p_{10}$  and  $p_{99}$  because gcd of their leading monoms is zero.
819. Creating S-polynomial from the pair  $(p_{10}, p_{100})$ .  
 Skipping pair  $p_{10}$  and  $p_{100}$  because gcd of their leading monoms is zero.
820. Creating S-polynomial from the pair  $(p_{10}, p_{101})$ .  
 Skipping pair  $p_{10}$  and  $p_{101}$  because gcd of their leading monoms is zero.
821. Creating S-polynomial from the pair  $(p_{10}, p_{102})$ .  
 Skipping pair  $p_{10}$  and  $p_{102}$  because gcd of their leading monoms is zero.
822. Creating S-polynomial from the pair  $(p_{10}, p_{103})$ .  
 Skipping pair  $p_{10}$  and  $p_{103}$  because gcd of their leading monoms is zero.
823. Creating S-polynomial from the pair  $(p_{10}, p_{104})$ .  
 Skipping pair  $p_{10}$  and  $p_{104}$  because gcd of their leading monoms is zero.

824. Creating S-polynomial from the pair  $(p_{10}, p_{105})$ .  
 Skipping pair  $p_{10}$  and  $p_{105}$  because gcd of their leading monoms is zero.
825. Creating S-polynomial from the pair  $(p_{10}, p_{106})$ .  
 Skipping pair  $p_{10}$  and  $p_{106}$  because gcd of their leading monoms is zero.
826. Creating S-polynomial from the pair  $(p_{11}, p_{32})$ .  
 Skipping pair  $p_{11}$  and  $p_{32}$  because gcd of their leading monoms is zero.
827. Creating S-polynomial from the pair  $(p_{11}, p_{33})$ .  
 Skipping pair  $p_{11}$  and  $p_{33}$  because gcd of their leading monoms is zero.
828. Creating S-polynomial from the pair  $(p_{11}, p_{34})$ .  
 Skipping pair  $p_{11}$  and  $p_{34}$  because gcd of their leading monoms is zero.
829. Creating S-polynomial from the pair  $(p_{11}, p_{35})$ .  
 Skipping pair  $p_{11}$  and  $p_{35}$  because gcd of their leading monoms is zero.
830. Creating S-polynomial from the pair  $(p_{11}, p_{36})$ .  
 Skipping pair  $p_{11}$  and  $p_{36}$  because gcd of their leading monoms is zero.
831. Creating S-polynomial from the pair  $(p_{11}, p_{37})$ .  
 Skipping pair  $p_{11}$  and  $p_{37}$  because gcd of their leading monoms is zero.
832. Creating S-polynomial from the pair  $(p_{11}, p_{38})$ .  
 Skipping pair  $p_{11}$  and  $p_{38}$  because gcd of their leading monoms is zero.
833. Creating S-polynomial from the pair  $(p_{11}, p_{39})$ .  
 Skipping pair  $p_{11}$  and  $p_{39}$  because gcd of their leading monoms is zero.
834. Creating S-polynomial from the pair  $(p_{11}, p_{40})$ .  
 Skipping pair  $p_{11}$  and  $p_{40}$  because gcd of their leading monoms is zero.
835. Creating S-polynomial from the pair  $(p_{11}, p_{41})$ .  
 Skipping pair  $p_{11}$  and  $p_{41}$  because gcd of their leading monoms is zero.
836. Creating S-polynomial from the pair  $(p_{11}, p_{42})$ .  
 Skipping pair  $p_{11}$  and  $p_{42}$  because gcd of their leading monoms is zero.
837. Creating S-polynomial from the pair  $(p_{11}, p_{43})$ .  
 Skipping pair  $p_{11}$  and  $p_{43}$  because gcd of their leading monoms is zero.
838. Creating S-polynomial from the pair  $(p_{11}, p_{44})$ .  
 Skipping pair  $p_{11}$  and  $p_{44}$  because gcd of their leading monoms is zero.
839. Creating S-polynomial from the pair  $(p_{11}, p_{45})$ .  
 Skipping pair  $p_{11}$  and  $p_{45}$  because gcd of their leading monoms is zero.
840. Creating S-polynomial from the pair  $(p_{11}, p_{46})$ .  
 Skipping pair  $p_{11}$  and  $p_{46}$  because gcd of their leading monoms is zero.

841. Creating S-polynomial from the pair  $(p_{11}, p_{47})$ .  
 Skipping pair  $p_{11}$  and  $p_{47}$  because gcd of their leading monoms is zero.
842. Creating S-polynomial from the pair  $(p_{11}, p_{48})$ .  
 Skipping pair  $p_{11}$  and  $p_{48}$  because gcd of their leading monoms is zero.
843. Creating S-polynomial from the pair  $(p_{11}, p_{49})$ .  
 Skipping pair  $p_{11}$  and  $p_{49}$  because gcd of their leading monoms is zero.
844. Creating S-polynomial from the pair  $(p_{11}, p_{50})$ .  
 Skipping pair  $p_{11}$  and  $p_{50}$  because gcd of their leading monoms is zero.
845. Creating S-polynomial from the pair  $(p_{11}, p_{51})$ .  
 Skipping pair  $p_{11}$  and  $p_{51}$  because gcd of their leading monoms is zero.
846. Creating S-polynomial from the pair  $(p_{11}, p_{52})$ .  
 Skipping pair  $p_{11}$  and  $p_{52}$  because gcd of their leading monoms is zero.
847. Creating S-polynomial from the pair  $(p_{11}, p_{53})$ .  
 Skipping pair  $p_{11}$  and  $p_{53}$  because gcd of their leading monoms is zero.
848. Creating S-polynomial from the pair  $(p_{11}, p_{54})$ .  
 Skipping pair  $p_{11}$  and  $p_{54}$  because gcd of their leading monoms is zero.
849. Creating S-polynomial from the pair  $(p_{11}, p_{55})$ .  
 Skipping pair  $p_{11}$  and  $p_{55}$  because gcd of their leading monoms is zero.
850. Creating S-polynomial from the pair  $(p_{11}, p_{56})$ .  
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851. Creating S-polynomial from the pair  $(p_{11}, p_{57})$ .  
 Skipping pair  $p_{11}$  and  $p_{57}$  because gcd of their leading monoms is zero.
852. Creating S-polynomial from the pair  $(p_{11}, p_{58})$ .  
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853. Creating S-polynomial from the pair  $(p_{11}, p_{59})$ .  
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854. Creating S-polynomial from the pair  $(p_{11}, p_{60})$ .  
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855. Creating S-polynomial from the pair  $(p_{11}, p_{61})$ .  
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856. Creating S-polynomial from the pair  $(p_{11}, p_{62})$ .  
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857. Creating S-polynomial from the pair  $(p_{11}, p_{63})$ .  
 Skipping pair  $p_{11}$  and  $p_{63}$  because gcd of their leading monoms is zero.

858. Creating S-polynomial from the pair  $(p_{11}, p_{64})$ .  
 Skipping pair  $p_{11}$  and  $p_{64}$  because gcd of their leading monoms is zero.
859. Creating S-polynomial from the pair  $(p_{11}, p_{65})$ .  
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860. Creating S-polynomial from the pair  $(p_{11}, p_{66})$ .  
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861. Creating S-polynomial from the pair  $(p_{11}, p_{67})$ .  
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862. Creating S-polynomial from the pair  $(p_{11}, p_{68})$ .  
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863. Creating S-polynomial from the pair  $(p_{11}, p_{69})$ .  
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864. Creating S-polynomial from the pair  $(p_{11}, p_{70})$ .  
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865. Creating S-polynomial from the pair  $(p_{11}, p_{71})$ .  
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866. Creating S-polynomial from the pair  $(p_{11}, p_{72})$ .  
 Skipping pair  $p_{11}$  and  $p_{72}$  because gcd of their leading monoms is zero.
867. Creating S-polynomial from the pair  $(p_{11}, p_{73})$ .  
 Skipping pair  $p_{11}$  and  $p_{73}$  because gcd of their leading monoms is zero.
868. Creating S-polynomial from the pair  $(p_{11}, p_{74})$ .  
 Skipping pair  $p_{11}$  and  $p_{74}$  because gcd of their leading monoms is zero.
869. Creating S-polynomial from the pair  $(p_{11}, p_{75})$ .  
 Skipping pair  $p_{11}$  and  $p_{75}$  because gcd of their leading monoms is zero.
870. Creating S-polynomial from the pair  $(p_{11}, p_{76})$ .  
 Skipping pair  $p_{11}$  and  $p_{76}$  because gcd of their leading monoms is zero.
871. Creating S-polynomial from the pair  $(p_{11}, p_{77})$ .  
 Skipping pair  $p_{11}$  and  $p_{77}$  because gcd of their leading monoms is zero.
872. Creating S-polynomial from the pair  $(p_{11}, p_{78})$ .  
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873. Creating S-polynomial from the pair  $(p_{11}, p_{79})$ .  
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875. Creating S-polynomial from the pair  $(p_{11}, p_{81})$ .  
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876. Creating S-polynomial from the pair  $(p_{11}, p_{82})$ .  
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877. Creating S-polynomial from the pair  $(p_{11}, p_{83})$ .  
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878. Creating S-polynomial from the pair  $(p_{11}, p_{84})$ .  
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879. Creating S-polynomial from the pair  $(p_{11}, p_{85})$ .  
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880. Creating S-polynomial from the pair  $(p_{11}, p_{86})$ .  
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888. Creating S-polynomial from the pair  $(p_{11}, p_{94})$ .  
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889. Creating S-polynomial from the pair  $(p_{11}, p_{95})$ .  
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890. Creating S-polynomial from the pair  $(p_{11}, p_{96})$ .  
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891. Creating S-polynomial from the pair  $(p_{11}, p_{97})$ .  
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899. Creating S-polynomial from the pair  $(p_{11}, p_{105})$ .  
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900. Creating S-polynomial from the pair  $(p_{11}, p_{106})$ .  
 Skipping pair  $p_{11}$  and  $p_{106}$  because gcd of their leading monoms is zero.
901. Creating S-polynomial from the pair  $(p_{12}, p_{32})$ .  
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912. Creating S-polynomial from the pair  $(p_{12}, p_{43})$ .  
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913. Creating S-polynomial from the pair  $(p_{12}, p_{44})$ .  
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914. Creating S-polynomial from the pair  $(p_{12}, p_{45})$ .  
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915. Creating S-polynomial from the pair  $(p_{12}, p_{46})$ .  
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916. Creating S-polynomial from the pair  $(p_{12}, p_{47})$ .  
 Skipping pair  $p_{12}$  and  $p_{47}$  because gcd of their leading monoms is zero.
917. Creating S-polynomial from the pair  $(p_{12}, p_{48})$ .  
 Skipping pair  $p_{12}$  and  $p_{48}$  because gcd of their leading monoms is zero.
918. Creating S-polynomial from the pair  $(p_{12}, p_{49})$ .  
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919. Creating S-polynomial from the pair  $(p_{12}, p_{50})$ .  
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929. Creating S-polynomial from the pair  $(p_{12}, p_{60})$ .  
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930. Creating S-polynomial from the pair  $(p_{12}, p_{61})$ .  
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931. Creating S-polynomial from the pair  $(p_{12}, p_{62})$ .  
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932. Creating S-polynomial from the pair  $(p_{12}, p_{63})$ .  
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933. Creating S-polynomial from the pair  $(p_{12}, p_{64})$ .  
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934. Creating S-polynomial from the pair  $(p_{12}, p_{65})$ .  
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936. Creating S-polynomial from the pair  $(p_{12}, p_{67})$ .  
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938. Creating S-polynomial from the pair  $(p_{12}, p_{69})$ .  
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939. Creating S-polynomial from the pair  $(p_{12}, p_{70})$ .  
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940. Creating S-polynomial from the pair  $(p_{12}, p_{71})$ .  
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942. Creating S-polynomial from the pair  $(p_{12}, p_{73})$ .  
 Skipping pair  $p_{12}$  and  $p_{73}$  because gcd of their leading monoms is zero.

943. Creating S-polynomial from the pair  $(p_{12}, p_{74})$ .  
 Skipping pair  $p_{12}$  and  $p_{74}$  because gcd of their leading monoms is zero.
944. Creating S-polynomial from the pair  $(p_{12}, p_{75})$ .  
 Skipping pair  $p_{12}$  and  $p_{75}$  because gcd of their leading monoms is zero.
945. Creating S-polynomial from the pair  $(p_{12}, p_{76})$ .  
 Skipping pair  $p_{12}$  and  $p_{76}$  because gcd of their leading monoms is zero.
946. Creating S-polynomial from the pair  $(p_{12}, p_{77})$ .  
 Skipping pair  $p_{12}$  and  $p_{77}$  because gcd of their leading monoms is zero.
947. Creating S-polynomial from the pair  $(p_{12}, p_{78})$ .  
 Skipping pair  $p_{12}$  and  $p_{78}$  because gcd of their leading monoms is zero.
948. Creating S-polynomial from the pair  $(p_{12}, p_{79})$ .  
 Skipping pair  $p_{12}$  and  $p_{79}$  because gcd of their leading monoms is zero.
949. Creating S-polynomial from the pair  $(p_{12}, p_{80})$ .  
 Skipping pair  $p_{12}$  and  $p_{80}$  because gcd of their leading monoms is zero.
950. Creating S-polynomial from the pair  $(p_{12}, p_{81})$ .  
 Skipping pair  $p_{12}$  and  $p_{81}$  because gcd of their leading monoms is zero.
951. Creating S-polynomial from the pair  $(p_{12}, p_{82})$ .  
 Skipping pair  $p_{12}$  and  $p_{82}$  because gcd of their leading monoms is zero.
952. Creating S-polynomial from the pair  $(p_{12}, p_{83})$ .  
 Skipping pair  $p_{12}$  and  $p_{83}$  because gcd of their leading monoms is zero.
953. Creating S-polynomial from the pair  $(p_{12}, p_{84})$ .  
 Skipping pair  $p_{12}$  and  $p_{84}$  because gcd of their leading monoms is zero.
954. Creating S-polynomial from the pair  $(p_{12}, p_{85})$ .  
 Skipping pair  $p_{12}$  and  $p_{85}$  because gcd of their leading monoms is zero.
955. Creating S-polynomial from the pair  $(p_{12}, p_{86})$ .  
 Skipping pair  $p_{12}$  and  $p_{86}$  because gcd of their leading monoms is zero.
956. Creating S-polynomial from the pair  $(p_{12}, p_{87})$ .  
 Skipping pair  $p_{12}$  and  $p_{87}$  because gcd of their leading monoms is zero.
957. Creating S-polynomial from the pair  $(p_{12}, p_{88})$ .  
 Skipping pair  $p_{12}$  and  $p_{88}$  because gcd of their leading monoms is zero.
958. Creating S-polynomial from the pair  $(p_{12}, p_{89})$ .  
 Skipping pair  $p_{12}$  and  $p_{89}$  because gcd of their leading monoms is zero.
959. Creating S-polynomial from the pair  $(p_{12}, p_{90})$ .  
 Skipping pair  $p_{12}$  and  $p_{90}$  because gcd of their leading monoms is zero.

960. Creating S-polynomial from the pair  $(p_{12}, p_{91})$ .  
 Skipping pair  $p_{12}$  and  $p_{91}$  because gcd of their leading monoms is zero.
961. Creating S-polynomial from the pair  $(p_{12}, p_{92})$ .  
 Skipping pair  $p_{12}$  and  $p_{92}$  because gcd of their leading monoms is zero.
962. Creating S-polynomial from the pair  $(p_{12}, p_{93})$ .  
 Skipping pair  $p_{12}$  and  $p_{93}$  because gcd of their leading monoms is zero.
963. Creating S-polynomial from the pair  $(p_{12}, p_{94})$ .  
 Skipping pair  $p_{12}$  and  $p_{94}$  because gcd of their leading monoms is zero.
964. Creating S-polynomial from the pair  $(p_{12}, p_{95})$ .  
 Skipping pair  $p_{12}$  and  $p_{95}$  because gcd of their leading monoms is zero.
965. Creating S-polynomial from the pair  $(p_{12}, p_{96})$ .  
 Skipping pair  $p_{12}$  and  $p_{96}$  because gcd of their leading monoms is zero.
966. Creating S-polynomial from the pair  $(p_{12}, p_{97})$ .  
 Skipping pair  $p_{12}$  and  $p_{97}$  because gcd of their leading monoms is zero.
967. Creating S-polynomial from the pair  $(p_{12}, p_{98})$ .  
 Skipping pair  $p_{12}$  and  $p_{98}$  because gcd of their leading monoms is zero.
968. Creating S-polynomial from the pair  $(p_{12}, p_{99})$ .  
 Skipping pair  $p_{12}$  and  $p_{99}$  because gcd of their leading monoms is zero.
969. Creating S-polynomial from the pair  $(p_{12}, p_{100})$ .  
 Skipping pair  $p_{12}$  and  $p_{100}$  because gcd of their leading monoms is zero.
970. Creating S-polynomial from the pair  $(p_{12}, p_{101})$ .  
 Skipping pair  $p_{12}$  and  $p_{101}$  because gcd of their leading monoms is zero.
971. Creating S-polynomial from the pair  $(p_{12}, p_{102})$ .  
 Skipping pair  $p_{12}$  and  $p_{102}$  because gcd of their leading monoms is zero.
972. Creating S-polynomial from the pair  $(p_{12}, p_{103})$ .  
 Skipping pair  $p_{12}$  and  $p_{103}$  because gcd of their leading monoms is zero.
973. Creating S-polynomial from the pair  $(p_{12}, p_{104})$ .  
 Skipping pair  $p_{12}$  and  $p_{104}$  because gcd of their leading monoms is zero.
974. Creating S-polynomial from the pair  $(p_{12}, p_{105})$ .  
 Skipping pair  $p_{12}$  and  $p_{105}$  because gcd of their leading monoms is zero.
975. Creating S-polynomial from the pair  $(p_{12}, p_{106})$ .  
 Skipping pair  $p_{12}$  and  $p_{106}$  because gcd of their leading monoms is zero.
976. Creating S-polynomial from the pair  $(p_{13}, p_{32})$ .  
 Skipping pair  $p_{13}$  and  $p_{32}$  because gcd of their leading monoms is zero.

977. Creating S-polynomial from the pair  $(p_{13}, p_{33})$ .  
 Skipping pair  $p_{13}$  and  $p_{33}$  because gcd of their leading monoms is zero.
978. Creating S-polynomial from the pair  $(p_{13}, p_{34})$ .  
 Skipping pair  $p_{13}$  and  $p_{34}$  because gcd of their leading monoms is zero.
979. Creating S-polynomial from the pair  $(p_{13}, p_{35})$ .  
 Skipping pair  $p_{13}$  and  $p_{35}$  because gcd of their leading monoms is zero.
980. Creating S-polynomial from the pair  $(p_{13}, p_{36})$ .  
 Skipping pair  $p_{13}$  and  $p_{36}$  because gcd of their leading monoms is zero.
981. Creating S-polynomial from the pair  $(p_{13}, p_{37})$ .  
 Skipping pair  $p_{13}$  and  $p_{37}$  because gcd of their leading monoms is zero.
982. Creating S-polynomial from the pair  $(p_{13}, p_{38})$ .  
 Skipping pair  $p_{13}$  and  $p_{38}$  because gcd of their leading monoms is zero.
983. Creating S-polynomial from the pair  $(p_{13}, p_{39})$ .  
 Skipping pair  $p_{13}$  and  $p_{39}$  because gcd of their leading monoms is zero.
984. Creating S-polynomial from the pair  $(p_{13}, p_{40})$ .  
 Skipping pair  $p_{13}$  and  $p_{40}$  because gcd of their leading monoms is zero.
985. Creating S-polynomial from the pair  $(p_{13}, p_{41})$ .  
 Skipping pair  $p_{13}$  and  $p_{41}$  because gcd of their leading monoms is zero.
986. Creating S-polynomial from the pair  $(p_{13}, p_{42})$ .  
 Skipping pair  $p_{13}$  and  $p_{42}$  because gcd of their leading monoms is zero.
987. Creating S-polynomial from the pair  $(p_{13}, p_{43})$ .  
 Skipping pair  $p_{13}$  and  $p_{43}$  because gcd of their leading monoms is zero.
988. Creating S-polynomial from the pair  $(p_{13}, p_{44})$ .  
 Skipping pair  $p_{13}$  and  $p_{44}$  because gcd of their leading monoms is zero.
989. Creating S-polynomial from the pair  $(p_{13}, p_{45})$ .  
 Skipping pair  $p_{13}$  and  $p_{45}$  because gcd of their leading monoms is zero.
990. Creating S-polynomial from the pair  $(p_{13}, p_{46})$ .  
 Skipping pair  $p_{13}$  and  $p_{46}$  because gcd of their leading monoms is zero.
991. Creating S-polynomial from the pair  $(p_{13}, p_{47})$ .  
 Skipping pair  $p_{13}$  and  $p_{47}$  because gcd of their leading monoms is zero.
992. Creating S-polynomial from the pair  $(p_{13}, p_{48})$ .  
 Skipping pair  $p_{13}$  and  $p_{48}$  because gcd of their leading monoms is zero.
993. Creating S-polynomial from the pair  $(p_{13}, p_{49})$ .  
 Skipping pair  $p_{13}$  and  $p_{49}$  because gcd of their leading monoms is zero.

994. Creating S-polynomial from the pair  $(p_{13}, p_{50})$ .  
 Skipping pair  $p_{13}$  and  $p_{50}$  because gcd of their leading monoms is zero.
995. Creating S-polynomial from the pair  $(p_{13}, p_{51})$ .  
 Skipping pair  $p_{13}$  and  $p_{51}$  because gcd of their leading monoms is zero.
996. Creating S-polynomial from the pair  $(p_{13}, p_{52})$ .  
 Skipping pair  $p_{13}$  and  $p_{52}$  because gcd of their leading monoms is zero.
997. Creating S-polynomial from the pair  $(p_{13}, p_{53})$ .  
 Skipping pair  $p_{13}$  and  $p_{53}$  because gcd of their leading monoms is zero.
998. Creating S-polynomial from the pair  $(p_{13}, p_{54})$ .  
 Skipping pair  $p_{13}$  and  $p_{54}$  because gcd of their leading monoms is zero.
999. Creating S-polynomial from the pair  $(p_{13}, p_{55})$ .  
 Skipping pair  $p_{13}$  and  $p_{55}$  because gcd of their leading monoms is zero.
1000. Creating S-polynomial from the pair  $(p_{13}, p_{56})$ .  
 Skipping pair  $p_{13}$  and  $p_{56}$  because gcd of their leading monoms is zero.
1001. Creating S-polynomial from the pair  $(p_{13}, p_{57})$ .  
 Skipping pair  $p_{13}$  and  $p_{57}$  because gcd of their leading monoms is zero.
1002. Creating S-polynomial from the pair  $(p_{13}, p_{58})$ .  
 Skipping pair  $p_{13}$  and  $p_{58}$  because gcd of their leading monoms is zero.
1003. Creating S-polynomial from the pair  $(p_{13}, p_{59})$ .  
 Skipping pair  $p_{13}$  and  $p_{59}$  because gcd of their leading monoms is zero.
1004. Creating S-polynomial from the pair  $(p_{13}, p_{60})$ .  
 Skipping pair  $p_{13}$  and  $p_{60}$  because gcd of their leading monoms is zero.
1005. Creating S-polynomial from the pair  $(p_{13}, p_{61})$ .  
 Skipping pair  $p_{13}$  and  $p_{61}$  because gcd of their leading monoms is zero.
1006. Creating S-polynomial from the pair  $(p_{13}, p_{62})$ .  
 Skipping pair  $p_{13}$  and  $p_{62}$  because gcd of their leading monoms is zero.
1007. Creating S-polynomial from the pair  $(p_{13}, p_{63})$ .  
 Skipping pair  $p_{13}$  and  $p_{63}$  because gcd of their leading monoms is zero.
1008. Creating S-polynomial from the pair  $(p_{13}, p_{64})$ .  
 Skipping pair  $p_{13}$  and  $p_{64}$  because gcd of their leading monoms is zero.
1009. Creating S-polynomial from the pair  $(p_{13}, p_{65})$ .  
 Skipping pair  $p_{13}$  and  $p_{65}$  because gcd of their leading monoms is zero.
1010. Creating S-polynomial from the pair  $(p_{13}, p_{66})$ .  
 Skipping pair  $p_{13}$  and  $p_{66}$  because gcd of their leading monoms is zero.



1011. Creating S-polynomial from the pair  $(p_{13}, p_{67})$ .  
 Skipping pair  $p_{13}$  and  $p_{67}$  because gcd of their leading monoms is zero.
1012. Creating S-polynomial from the pair  $(p_{13}, p_{68})$ .  
 Skipping pair  $p_{13}$  and  $p_{68}$  because gcd of their leading monoms is zero.
1013. Creating S-polynomial from the pair  $(p_{13}, p_{69})$ .  
 Skipping pair  $p_{13}$  and  $p_{69}$  because gcd of their leading monoms is zero.
1014. Creating S-polynomial from the pair  $(p_{13}, p_{70})$ .  
 Skipping pair  $p_{13}$  and  $p_{70}$  because gcd of their leading monoms is zero.
1015. Creating S-polynomial from the pair  $(p_{13}, p_{71})$ .  
 Skipping pair  $p_{13}$  and  $p_{71}$  because gcd of their leading monoms is zero.
1016. Creating S-polynomial from the pair  $(p_{13}, p_{72})$ .  
 Skipping pair  $p_{13}$  and  $p_{72}$  because gcd of their leading monoms is zero.
1017. Creating S-polynomial from the pair  $(p_{13}, p_{73})$ .  
 Skipping pair  $p_{13}$  and  $p_{73}$  because gcd of their leading monoms is zero.
1018. Creating S-polynomial from the pair  $(p_{13}, p_{74})$ .  
 Skipping pair  $p_{13}$  and  $p_{74}$  because gcd of their leading monoms is zero.
1019. Creating S-polynomial from the pair  $(p_{13}, p_{75})$ .  
 Skipping pair  $p_{13}$  and  $p_{75}$  because gcd of their leading monoms is zero.
1020. Creating S-polynomial from the pair  $(p_{13}, p_{76})$ .  
 Skipping pair  $p_{13}$  and  $p_{76}$  because gcd of their leading monoms is zero.
1021. Creating S-polynomial from the pair  $(p_{13}, p_{77})$ .  
 Skipping pair  $p_{13}$  and  $p_{77}$  because gcd of their leading monoms is zero.
1022. Creating S-polynomial from the pair  $(p_{13}, p_{78})$ .  
 Skipping pair  $p_{13}$  and  $p_{78}$  because gcd of their leading monoms is zero.
1023. Creating S-polynomial from the pair  $(p_{13}, p_{79})$ .  
 Skipping pair  $p_{13}$  and  $p_{79}$  because gcd of their leading monoms is zero.
1024. Creating S-polynomial from the pair  $(p_{13}, p_{80})$ .  
 Skipping pair  $p_{13}$  and  $p_{80}$  because gcd of their leading monoms is zero.
1025. Creating S-polynomial from the pair  $(p_{13}, p_{81})$ .  
 Skipping pair  $p_{13}$  and  $p_{81}$  because gcd of their leading monoms is zero.
1026. Creating S-polynomial from the pair  $(p_{13}, p_{82})$ .  
 Skipping pair  $p_{13}$  and  $p_{82}$  because gcd of their leading monoms is zero.
1027. Creating S-polynomial from the pair  $(p_{13}, p_{83})$ .  
 Skipping pair  $p_{13}$  and  $p_{83}$  because gcd of their leading monoms is zero.

1028. Creating S-polynomial from the pair  $(p_{13}, p_{84})$ .  
 Skipping pair  $p_{13}$  and  $p_{84}$  because gcd of their leading monoms is zero.
1029. Creating S-polynomial from the pair  $(p_{13}, p_{85})$ .  
 Skipping pair  $p_{13}$  and  $p_{85}$  because gcd of their leading monoms is zero.
1030. Creating S-polynomial from the pair  $(p_{13}, p_{86})$ .  
 Skipping pair  $p_{13}$  and  $p_{86}$  because gcd of their leading monoms is zero.
1031. Creating S-polynomial from the pair  $(p_{13}, p_{87})$ .  
 Skipping pair  $p_{13}$  and  $p_{87}$  because gcd of their leading monoms is zero.
1032. Creating S-polynomial from the pair  $(p_{13}, p_{88})$ .  
 Skipping pair  $p_{13}$  and  $p_{88}$  because gcd of their leading monoms is zero.
1033. Creating S-polynomial from the pair  $(p_{13}, p_{89})$ .  
 Skipping pair  $p_{13}$  and  $p_{89}$  because gcd of their leading monoms is zero.
1034. Creating S-polynomial from the pair  $(p_{13}, p_{90})$ .  
 Skipping pair  $p_{13}$  and  $p_{90}$  because gcd of their leading monoms is zero.
1035. Creating S-polynomial from the pair  $(p_{13}, p_{91})$ .  
 Skipping pair  $p_{13}$  and  $p_{91}$  because gcd of their leading monoms is zero.
1036. Creating S-polynomial from the pair  $(p_{13}, p_{92})$ .  
 Skipping pair  $p_{13}$  and  $p_{92}$  because gcd of their leading monoms is zero.
1037. Creating S-polynomial from the pair  $(p_{13}, p_{93})$ .  
 Skipping pair  $p_{13}$  and  $p_{93}$  because gcd of their leading monoms is zero.
1038. Creating S-polynomial from the pair  $(p_{13}, p_{94})$ .  
 Skipping pair  $p_{13}$  and  $p_{94}$  because gcd of their leading monoms is zero.
1039. Creating S-polynomial from the pair  $(p_{13}, p_{95})$ .  
 Skipping pair  $p_{13}$  and  $p_{95}$  because gcd of their leading monoms is zero.
1040. Creating S-polynomial from the pair  $(p_{13}, p_{96})$ .  
 Skipping pair  $p_{13}$  and  $p_{96}$  because gcd of their leading monoms is zero.
1041. Creating S-polynomial from the pair  $(p_{13}, p_{97})$ .  
 Skipping pair  $p_{13}$  and  $p_{97}$  because gcd of their leading monoms is zero.
1042. Creating S-polynomial from the pair  $(p_{13}, p_{98})$ .  
 Skipping pair  $p_{13}$  and  $p_{98}$  because gcd of their leading monoms is zero.
1043. Creating S-polynomial from the pair  $(p_{13}, p_{99})$ .  
 Skipping pair  $p_{13}$  and  $p_{99}$  because gcd of their leading monoms is zero.
1044. Creating S-polynomial from the pair  $(p_{13}, p_{100})$ .  
 Skipping pair  $p_{13}$  and  $p_{100}$  because gcd of their leading monoms is zero.

1045. Creating S-polynomial from the pair  $(p_{13}, p_{101})$ .  
 Skipping pair  $p_{13}$  and  $p_{101}$  because gcd of their leading monoms is zero.
1046. Creating S-polynomial from the pair  $(p_{13}, p_{102})$ .  
 Skipping pair  $p_{13}$  and  $p_{102}$  because gcd of their leading monoms is zero.
1047. Creating S-polynomial from the pair  $(p_{13}, p_{103})$ .  
 Skipping pair  $p_{13}$  and  $p_{103}$  because gcd of their leading monoms is zero.
1048. Creating S-polynomial from the pair  $(p_{13}, p_{104})$ .  
 Skipping pair  $p_{13}$  and  $p_{104}$  because gcd of their leading monoms is zero.
1049. Creating S-polynomial from the pair  $(p_{13}, p_{105})$ .  
 Skipping pair  $p_{13}$  and  $p_{105}$  because gcd of their leading monoms is zero.
1050. Creating S-polynomial from the pair  $(p_{13}, p_{106})$ .  
 Skipping pair  $p_{13}$  and  $p_{106}$  because gcd of their leading monoms is zero.
1051. Creating S-polynomial from the pair  $(p_{14}, p_{32})$ .  
 Skipping pair  $p_{14}$  and  $p_{32}$  because gcd of their leading monoms is zero.
1052. Creating S-polynomial from the pair  $(p_{14}, p_{33})$ .  
 Skipping pair  $p_{14}$  and  $p_{33}$  because gcd of their leading monoms is zero.
1053. Creating S-polynomial from the pair  $(p_{14}, p_{34})$ .  
 Skipping pair  $p_{14}$  and  $p_{34}$  because gcd of their leading monoms is zero.
1054. Creating S-polynomial from the pair  $(p_{14}, p_{35})$ .  
 Skipping pair  $p_{14}$  and  $p_{35}$  because gcd of their leading monoms is zero.
1055. Creating S-polynomial from the pair  $(p_{14}, p_{36})$ .  
 Skipping pair  $p_{14}$  and  $p_{36}$  because gcd of their leading monoms is zero.
1056. Creating S-polynomial from the pair  $(p_{14}, p_{37})$ .  
 Skipping pair  $p_{14}$  and  $p_{37}$  because gcd of their leading monoms is zero.
1057. Creating S-polynomial from the pair  $(p_{14}, p_{38})$ .  
 Skipping pair  $p_{14}$  and  $p_{38}$  because gcd of their leading monoms is zero.
1058. Creating S-polynomial from the pair  $(p_{14}, p_{39})$ .  
 Skipping pair  $p_{14}$  and  $p_{39}$  because gcd of their leading monoms is zero.
1059. Creating S-polynomial from the pair  $(p_{14}, p_{40})$ .  
 Skipping pair  $p_{14}$  and  $p_{40}$  because gcd of their leading monoms is zero.
1060. Creating S-polynomial from the pair  $(p_{14}, p_{41})$ .  
 Skipping pair  $p_{14}$  and  $p_{41}$  because gcd of their leading monoms is zero.
1061. Creating S-polynomial from the pair  $(p_{14}, p_{42})$ .  
 Skipping pair  $p_{14}$  and  $p_{42}$  because gcd of their leading monoms is zero.

1062. Creating S-polynomial from the pair  $(p_{14}, p_{43})$ .  
 Skipping pair  $p_{14}$  and  $p_{43}$  because gcd of their leading monoms is zero.
1063. Creating S-polynomial from the pair  $(p_{14}, p_{44})$ .  
 Skipping pair  $p_{14}$  and  $p_{44}$  because gcd of their leading monoms is zero.
1064. Creating S-polynomial from the pair  $(p_{14}, p_{45})$ .  
 Skipping pair  $p_{14}$  and  $p_{45}$  because gcd of their leading monoms is zero.
1065. Creating S-polynomial from the pair  $(p_{14}, p_{46})$ .  
 Skipping pair  $p_{14}$  and  $p_{46}$  because gcd of their leading monoms is zero.
1066. Creating S-polynomial from the pair  $(p_{14}, p_{47})$ .  
 Skipping pair  $p_{14}$  and  $p_{47}$  because gcd of their leading monoms is zero.
1067. Creating S-polynomial from the pair  $(p_{14}, p_{48})$ .  
 Skipping pair  $p_{14}$  and  $p_{48}$  because gcd of their leading monoms is zero.
1068. Creating S-polynomial from the pair  $(p_{14}, p_{49})$ .  
 Skipping pair  $p_{14}$  and  $p_{49}$  because gcd of their leading monoms is zero.
1069. Creating S-polynomial from the pair  $(p_{14}, p_{50})$ .  
 Skipping pair  $p_{14}$  and  $p_{50}$  because gcd of their leading monoms is zero.
1070. Creating S-polynomial from the pair  $(p_{14}, p_{51})$ .  
 Skipping pair  $p_{14}$  and  $p_{51}$  because gcd of their leading monoms is zero.
1071. Creating S-polynomial from the pair  $(p_{14}, p_{52})$ .  
 Skipping pair  $p_{14}$  and  $p_{52}$  because gcd of their leading monoms is zero.
1072. Creating S-polynomial from the pair  $(p_{14}, p_{53})$ .  
 Skipping pair  $p_{14}$  and  $p_{53}$  because gcd of their leading monoms is zero.
1073. Creating S-polynomial from the pair  $(p_{14}, p_{54})$ .  
 Skipping pair  $p_{14}$  and  $p_{54}$  because gcd of their leading monoms is zero.
1074. Creating S-polynomial from the pair  $(p_{14}, p_{55})$ .  
 Skipping pair  $p_{14}$  and  $p_{55}$  because gcd of their leading monoms is zero.
1075. Creating S-polynomial from the pair  $(p_{14}, p_{56})$ .  
 Skipping pair  $p_{14}$  and  $p_{56}$  because gcd of their leading monoms is zero.
1076. Creating S-polynomial from the pair  $(p_{14}, p_{57})$ .  
 Skipping pair  $p_{14}$  and  $p_{57}$  because gcd of their leading monoms is zero.
1077. Creating S-polynomial from the pair  $(p_{14}, p_{58})$ .  
 Skipping pair  $p_{14}$  and  $p_{58}$  because gcd of their leading monoms is zero.
1078. Creating S-polynomial from the pair  $(p_{14}, p_{59})$ .  
 Skipping pair  $p_{14}$  and  $p_{59}$  because gcd of their leading monoms is zero.

1079. Creating S-polynomial from the pair  $(p_{14}, p_{60})$ .  
 Skipping pair  $p_{14}$  and  $p_{60}$  because gcd of their leading monoms is zero.
1080. Creating S-polynomial from the pair  $(p_{14}, p_{61})$ .  
 Skipping pair  $p_{14}$  and  $p_{61}$  because gcd of their leading monoms is zero.
1081. Creating S-polynomial from the pair  $(p_{14}, p_{62})$ .  
 Skipping pair  $p_{14}$  and  $p_{62}$  because gcd of their leading monoms is zero.
1082. Creating S-polynomial from the pair  $(p_{14}, p_{63})$ .  
 Skipping pair  $p_{14}$  and  $p_{63}$  because gcd of their leading monoms is zero.
1083. Creating S-polynomial from the pair  $(p_{14}, p_{64})$ .  
 Skipping pair  $p_{14}$  and  $p_{64}$  because gcd of their leading monoms is zero.
1084. Creating S-polynomial from the pair  $(p_{14}, p_{65})$ .  
 Skipping pair  $p_{14}$  and  $p_{65}$  because gcd of their leading monoms is zero.
1085. Creating S-polynomial from the pair  $(p_{14}, p_{66})$ .  
 Skipping pair  $p_{14}$  and  $p_{66}$  because gcd of their leading monoms is zero.
1086. Creating S-polynomial from the pair  $(p_{14}, p_{67})$ .  
 Skipping pair  $p_{14}$  and  $p_{67}$  because gcd of their leading monoms is zero.
1087. Creating S-polynomial from the pair  $(p_{14}, p_{68})$ .  
 Skipping pair  $p_{14}$  and  $p_{68}$  because gcd of their leading monoms is zero.
1088. Creating S-polynomial from the pair  $(p_{14}, p_{69})$ .  
 Skipping pair  $p_{14}$  and  $p_{69}$  because gcd of their leading monoms is zero.
1089. Creating S-polynomial from the pair  $(p_{14}, p_{70})$ .  
 Skipping pair  $p_{14}$  and  $p_{70}$  because gcd of their leading monoms is zero.
1090. Creating S-polynomial from the pair  $(p_{14}, p_{71})$ .  
 Skipping pair  $p_{14}$  and  $p_{71}$  because gcd of their leading monoms is zero.
1091. Creating S-polynomial from the pair  $(p_{14}, p_{72})$ .  
 Skipping pair  $p_{14}$  and  $p_{72}$  because gcd of their leading monoms is zero.
1092. Creating S-polynomial from the pair  $(p_{14}, p_{73})$ .  
 Skipping pair  $p_{14}$  and  $p_{73}$  because gcd of their leading monoms is zero.
1093. Creating S-polynomial from the pair  $(p_{14}, p_{74})$ .  
 Skipping pair  $p_{14}$  and  $p_{74}$  because gcd of their leading monoms is zero.
1094. Creating S-polynomial from the pair  $(p_{14}, p_{75})$ .  
 Skipping pair  $p_{14}$  and  $p_{75}$  because gcd of their leading monoms is zero.
1095. Creating S-polynomial from the pair  $(p_{14}, p_{76})$ .  
 Skipping pair  $p_{14}$  and  $p_{76}$  because gcd of their leading monoms is zero.

1096. Creating S-polynomial from the pair  $(p_{14}, p_{77})$ .  
 Skipping pair  $p_{14}$  and  $p_{77}$  because gcd of their leading monoms is zero.
1097. Creating S-polynomial from the pair  $(p_{14}, p_{78})$ .  
 Skipping pair  $p_{14}$  and  $p_{78}$  because gcd of their leading monoms is zero.
1098. Creating S-polynomial from the pair  $(p_{14}, p_{79})$ .  
 Skipping pair  $p_{14}$  and  $p_{79}$  because gcd of their leading monoms is zero.
1099. Creating S-polynomial from the pair  $(p_{14}, p_{80})$ .  
 Skipping pair  $p_{14}$  and  $p_{80}$  because gcd of their leading monoms is zero.
1100. Creating S-polynomial from the pair  $(p_{14}, p_{81})$ .  
 Skipping pair  $p_{14}$  and  $p_{81}$  because gcd of their leading monoms is zero.
1101. Creating S-polynomial from the pair  $(p_{14}, p_{82})$ .  
 Skipping pair  $p_{14}$  and  $p_{82}$  because gcd of their leading monoms is zero.
1102. Creating S-polynomial from the pair  $(p_{14}, p_{83})$ .  
 Skipping pair  $p_{14}$  and  $p_{83}$  because gcd of their leading monoms is zero.
1103. Creating S-polynomial from the pair  $(p_{14}, p_{84})$ .  
 Skipping pair  $p_{14}$  and  $p_{84}$  because gcd of their leading monoms is zero.
1104. Creating S-polynomial from the pair  $(p_{14}, p_{85})$ .  
 Skipping pair  $p_{14}$  and  $p_{85}$  because gcd of their leading monoms is zero.
1105. Creating S-polynomial from the pair  $(p_{14}, p_{86})$ .  
 Skipping pair  $p_{14}$  and  $p_{86}$  because gcd of their leading monoms is zero.
1106. Creating S-polynomial from the pair  $(p_{14}, p_{87})$ .  
 Skipping pair  $p_{14}$  and  $p_{87}$  because gcd of their leading monoms is zero.
1107. Creating S-polynomial from the pair  $(p_{14}, p_{88})$ .  
 Skipping pair  $p_{14}$  and  $p_{88}$  because gcd of their leading monoms is zero.
1108. Creating S-polynomial from the pair  $(p_{14}, p_{89})$ .  
 Skipping pair  $p_{14}$  and  $p_{89}$  because gcd of their leading monoms is zero.
1109. Creating S-polynomial from the pair  $(p_{14}, p_{90})$ .  
 Skipping pair  $p_{14}$  and  $p_{90}$  because gcd of their leading monoms is zero.
1110. Creating S-polynomial from the pair  $(p_{14}, p_{91})$ .  
 Skipping pair  $p_{14}$  and  $p_{91}$  because gcd of their leading monoms is zero.
1111. Creating S-polynomial from the pair  $(p_{14}, p_{92})$ .  
 Skipping pair  $p_{14}$  and  $p_{92}$  because gcd of their leading monoms is zero.
1112. Creating S-polynomial from the pair  $(p_{14}, p_{93})$ .  
 Skipping pair  $p_{14}$  and  $p_{93}$  because gcd of their leading monoms is zero.

- 1113. Creating S-polynomial from the pair  $(p_{14}, p_{94})$ .  
 Skipping pair  $p_{14}$  and  $p_{94}$  because gcd of their leading monoms is zero.
- 1114. Creating S-polynomial from the pair  $(p_{14}, p_{95})$ .  
 Skipping pair  $p_{14}$  and  $p_{95}$  because gcd of their leading monoms is zero.
- 1115. Creating S-polynomial from the pair  $(p_{14}, p_{96})$ .  
 Skipping pair  $p_{14}$  and  $p_{96}$  because gcd of their leading monoms is zero.
- 1116. Creating S-polynomial from the pair  $(p_{14}, p_{97})$ .  
 Skipping pair  $p_{14}$  and  $p_{97}$  because gcd of their leading monoms is zero.
- 1117. Creating S-polynomial from the pair  $(p_{14}, p_{98})$ .  
 Skipping pair  $p_{14}$  and  $p_{98}$  because gcd of their leading monoms is zero.
- 1118. Creating S-polynomial from the pair  $(p_{14}, p_{99})$ .  
 Skipping pair  $p_{14}$  and  $p_{99}$  because gcd of their leading monoms is zero.
- 1119. Creating S-polynomial from the pair  $(p_{14}, p_{100})$ .  
 Skipping pair  $p_{14}$  and  $p_{100}$  because gcd of their leading monoms is zero.
- 1120. Creating S-polynomial from the pair  $(p_{14}, p_{101})$ .  
 Skipping pair  $p_{14}$  and  $p_{101}$  because gcd of their leading monoms is zero.
- 1121. Creating S-polynomial from the pair  $(p_{14}, p_{102})$ .  
 Skipping pair  $p_{14}$  and  $p_{102}$  because gcd of their leading monoms is zero.
- 1122. Creating S-polynomial from the pair  $(p_{14}, p_{103})$ .  
 Skipping pair  $p_{14}$  and  $p_{103}$  because gcd of their leading monoms is zero.
- 1123. Creating S-polynomial from the pair  $(p_{14}, p_{104})$ .  
 Skipping pair  $p_{14}$  and  $p_{104}$  because gcd of their leading monoms is zero.
- 1124. Creating S-polynomial from the pair  $(p_{14}, p_{105})$ .  
 Skipping pair  $p_{14}$  and  $p_{105}$  because gcd of their leading monoms is zero.
- 1125. Creating S-polynomial from the pair  $(p_{14}, p_{106})$ .  
 Skipping pair  $p_{14}$  and  $p_{106}$  because gcd of their leading monoms is zero.
- 1126. Creating S-polynomial from the pair  $(p_{15}, p_{32})$ .  
 Skipping pair  $p_{15}$  and  $p_{32}$  because gcd of their leading monoms is zero.
- 1127. Creating S-polynomial from the pair  $(p_{15}, p_{33})$ .  
 Skipping pair  $p_{15}$  and  $p_{33}$  because gcd of their leading monoms is zero.
- 1128. Creating S-polynomial from the pair  $(p_{15}, p_{34})$ .  
 Skipping pair  $p_{15}$  and  $p_{34}$  because gcd of their leading monoms is zero.
- 1129. Creating S-polynomial from the pair  $(p_{15}, p_{35})$ .  
 Skipping pair  $p_{15}$  and  $p_{35}$  because gcd of their leading monoms is zero.

1130. Creating S-polynomial from the pair  $(p_{15}, p_{36})$ .  
 Skipping pair  $p_{15}$  and  $p_{36}$  because gcd of their leading monoms is zero.
1131. Creating S-polynomial from the pair  $(p_{15}, p_{37})$ .  
 Skipping pair  $p_{15}$  and  $p_{37}$  because gcd of their leading monoms is zero.
1132. Creating S-polynomial from the pair  $(p_{15}, p_{38})$ .  
 Skipping pair  $p_{15}$  and  $p_{38}$  because gcd of their leading monoms is zero.
1133. Creating S-polynomial from the pair  $(p_{15}, p_{39})$ .  
 Skipping pair  $p_{15}$  and  $p_{39}$  because gcd of their leading monoms is zero.
1134. Creating S-polynomial from the pair  $(p_{15}, p_{40})$ .  
 Skipping pair  $p_{15}$  and  $p_{40}$  because gcd of their leading monoms is zero.
1135. Creating S-polynomial from the pair  $(p_{15}, p_{41})$ .  
 Skipping pair  $p_{15}$  and  $p_{41}$  because gcd of their leading monoms is zero.
1136. Creating S-polynomial from the pair  $(p_{15}, p_{42})$ .  
 Skipping pair  $p_{15}$  and  $p_{42}$  because gcd of their leading monoms is zero.
1137. Creating S-polynomial from the pair  $(p_{15}, p_{43})$ .  
 Skipping pair  $p_{15}$  and  $p_{43}$  because gcd of their leading monoms is zero.
1138. Creating S-polynomial from the pair  $(p_{15}, p_{44})$ .  
 Skipping pair  $p_{15}$  and  $p_{44}$  because gcd of their leading monoms is zero.
1139. Creating S-polynomial from the pair  $(p_{15}, p_{45})$ .  
 Skipping pair  $p_{15}$  and  $p_{45}$  because gcd of their leading monoms is zero.
1140. Creating S-polynomial from the pair  $(p_{15}, p_{46})$ .  
 Skipping pair  $p_{15}$  and  $p_{46}$  because gcd of their leading monoms is zero.
1141. Creating S-polynomial from the pair  $(p_{15}, p_{47})$ .  
 Skipping pair  $p_{15}$  and  $p_{47}$  because gcd of their leading monoms is zero.
1142. Creating S-polynomial from the pair  $(p_{15}, p_{48})$ .  
 Skipping pair  $p_{15}$  and  $p_{48}$  because gcd of their leading monoms is zero.
1143. Creating S-polynomial from the pair  $(p_{15}, p_{49})$ .  
 Skipping pair  $p_{15}$  and  $p_{49}$  because gcd of their leading monoms is zero.
1144. Creating S-polynomial from the pair  $(p_{15}, p_{50})$ .  
 Skipping pair  $p_{15}$  and  $p_{50}$  because gcd of their leading monoms is zero.
1145. Creating S-polynomial from the pair  $(p_{15}, p_{51})$ .  
 Skipping pair  $p_{15}$  and  $p_{51}$  because gcd of their leading monoms is zero.
1146. Creating S-polynomial from the pair  $(p_{15}, p_{52})$ .  
 Skipping pair  $p_{15}$  and  $p_{52}$  because gcd of their leading monoms is zero.



1147. Creating S-polynomial from the pair  $(p_{15}, p_{53})$ .  
 Skipping pair  $p_{15}$  and  $p_{53}$  because gcd of their leading monoms is zero.
1148. Creating S-polynomial from the pair  $(p_{15}, p_{54})$ .  
 Skipping pair  $p_{15}$  and  $p_{54}$  because gcd of their leading monoms is zero.
1149. Creating S-polynomial from the pair  $(p_{15}, p_{55})$ .  
 Skipping pair  $p_{15}$  and  $p_{55}$  because gcd of their leading monoms is zero.
1150. Creating S-polynomial from the pair  $(p_{15}, p_{56})$ .  
 Skipping pair  $p_{15}$  and  $p_{56}$  because gcd of their leading monoms is zero.
1151. Creating S-polynomial from the pair  $(p_{15}, p_{57})$ .  
 Skipping pair  $p_{15}$  and  $p_{57}$  because gcd of their leading monoms is zero.
1152. Creating S-polynomial from the pair  $(p_{15}, p_{58})$ .  
 Skipping pair  $p_{15}$  and  $p_{58}$  because gcd of their leading monoms is zero.
1153. Creating S-polynomial from the pair  $(p_{15}, p_{59})$ .  
 Skipping pair  $p_{15}$  and  $p_{59}$  because gcd of their leading monoms is zero.
1154. Creating S-polynomial from the pair  $(p_{15}, p_{60})$ .  
 Skipping pair  $p_{15}$  and  $p_{60}$  because gcd of their leading monoms is zero.
1155. Creating S-polynomial from the pair  $(p_{15}, p_{61})$ .  
 Skipping pair  $p_{15}$  and  $p_{61}$  because gcd of their leading monoms is zero.
1156. Creating S-polynomial from the pair  $(p_{15}, p_{62})$ .  
 Skipping pair  $p_{15}$  and  $p_{62}$  because gcd of their leading monoms is zero.
1157. Creating S-polynomial from the pair  $(p_{15}, p_{63})$ .  
 Skipping pair  $p_{15}$  and  $p_{63}$  because gcd of their leading monoms is zero.
1158. Creating S-polynomial from the pair  $(p_{15}, p_{64})$ .  
 Skipping pair  $p_{15}$  and  $p_{64}$  because gcd of their leading monoms is zero.
1159. Creating S-polynomial from the pair  $(p_{15}, p_{65})$ .  
 Skipping pair  $p_{15}$  and  $p_{65}$  because gcd of their leading monoms is zero.
1160. Creating S-polynomial from the pair  $(p_{15}, p_{66})$ .  
 Skipping pair  $p_{15}$  and  $p_{66}$  because gcd of their leading monoms is zero.
1161. Creating S-polynomial from the pair  $(p_{15}, p_{67})$ .  
 Skipping pair  $p_{15}$  and  $p_{67}$  because gcd of their leading monoms is zero.
1162. Creating S-polynomial from the pair  $(p_{15}, p_{68})$ .  
 Skipping pair  $p_{15}$  and  $p_{68}$  because gcd of their leading monoms is zero.
1163. Creating S-polynomial from the pair  $(p_{15}, p_{69})$ .  
 Skipping pair  $p_{15}$  and  $p_{69}$  because gcd of their leading monoms is zero.

- 1164. Creating S-polynomial from the pair  $(p_{15}, p_{70})$ .  
 Skipping pair  $p_{15}$  and  $p_{70}$  because gcd of their leading monoms is zero.
- 1165. Creating S-polynomial from the pair  $(p_{15}, p_{71})$ .  
 Skipping pair  $p_{15}$  and  $p_{71}$  because gcd of their leading monoms is zero.
- 1166. Creating S-polynomial from the pair  $(p_{15}, p_{72})$ .  
 Skipping pair  $p_{15}$  and  $p_{72}$  because gcd of their leading monoms is zero.
- 1167. Creating S-polynomial from the pair  $(p_{15}, p_{73})$ .  
 Skipping pair  $p_{15}$  and  $p_{73}$  because gcd of their leading monoms is zero.
- 1168. Creating S-polynomial from the pair  $(p_{15}, p_{74})$ .  
 Skipping pair  $p_{15}$  and  $p_{74}$  because gcd of their leading monoms is zero.
- 1169. Creating S-polynomial from the pair  $(p_{15}, p_{75})$ .  
 Skipping pair  $p_{15}$  and  $p_{75}$  because gcd of their leading monoms is zero.
- 1170. Creating S-polynomial from the pair  $(p_{15}, p_{76})$ .  
 Skipping pair  $p_{15}$  and  $p_{76}$  because gcd of their leading monoms is zero.
- 1171. Creating S-polynomial from the pair  $(p_{15}, p_{77})$ .  
 Skipping pair  $p_{15}$  and  $p_{77}$  because gcd of their leading monoms is zero.
- 1172. Creating S-polynomial from the pair  $(p_{15}, p_{78})$ .  
 Skipping pair  $p_{15}$  and  $p_{78}$  because gcd of their leading monoms is zero.
- 1173. Creating S-polynomial from the pair  $(p_{15}, p_{79})$ .  
 Skipping pair  $p_{15}$  and  $p_{79}$  because gcd of their leading monoms is zero.
- 1174. Creating S-polynomial from the pair  $(p_{15}, p_{80})$ .  
 Skipping pair  $p_{15}$  and  $p_{80}$  because gcd of their leading monoms is zero.
- 1175. Creating S-polynomial from the pair  $(p_{15}, p_{81})$ .  
 Skipping pair  $p_{15}$  and  $p_{81}$  because gcd of their leading monoms is zero.
- 1176. Creating S-polynomial from the pair  $(p_{15}, p_{82})$ .  
 Skipping pair  $p_{15}$  and  $p_{82}$  because gcd of their leading monoms is zero.
- 1177. Creating S-polynomial from the pair  $(p_{15}, p_{83})$ .  
 Skipping pair  $p_{15}$  and  $p_{83}$  because gcd of their leading monoms is zero.
- 1178. Creating S-polynomial from the pair  $(p_{15}, p_{84})$ .  
 Skipping pair  $p_{15}$  and  $p_{84}$  because gcd of their leading monoms is zero.
- 1179. Creating S-polynomial from the pair  $(p_{15}, p_{85})$ .  
 Skipping pair  $p_{15}$  and  $p_{85}$  because gcd of their leading monoms is zero.
- 1180. Creating S-polynomial from the pair  $(p_{15}, p_{86})$ .  
 Skipping pair  $p_{15}$  and  $p_{86}$  because gcd of their leading monoms is zero.

1181. Creating S-polynomial from the pair  $(p_{15}, p_{87})$ .  
 Skipping pair  $p_{15}$  and  $p_{87}$  because gcd of their leading monoms is zero.
1182. Creating S-polynomial from the pair  $(p_{15}, p_{88})$ .  
 Skipping pair  $p_{15}$  and  $p_{88}$  because gcd of their leading monoms is zero.
1183. Creating S-polynomial from the pair  $(p_{15}, p_{89})$ .  
 Skipping pair  $p_{15}$  and  $p_{89}$  because gcd of their leading monoms is zero.
1184. Creating S-polynomial from the pair  $(p_{15}, p_{90})$ .  
 Skipping pair  $p_{15}$  and  $p_{90}$  because gcd of their leading monoms is zero.
1185. Creating S-polynomial from the pair  $(p_{15}, p_{91})$ .  
 Skipping pair  $p_{15}$  and  $p_{91}$  because gcd of their leading monoms is zero.
1186. Creating S-polynomial from the pair  $(p_{15}, p_{92})$ .  
 Skipping pair  $p_{15}$  and  $p_{92}$  because gcd of their leading monoms is zero.
1187. Creating S-polynomial from the pair  $(p_{15}, p_{93})$ .  
 Skipping pair  $p_{15}$  and  $p_{93}$  because gcd of their leading monoms is zero.
1188. Creating S-polynomial from the pair  $(p_{15}, p_{94})$ .  
 Skipping pair  $p_{15}$  and  $p_{94}$  because gcd of their leading monoms is zero.
1189. Creating S-polynomial from the pair  $(p_{15}, p_{95})$ .  
 Skipping pair  $p_{15}$  and  $p_{95}$  because gcd of their leading monoms is zero.
1190. Creating S-polynomial from the pair  $(p_{15}, p_{96})$ .  
 Skipping pair  $p_{15}$  and  $p_{96}$  because gcd of their leading monoms is zero.
1191. Creating S-polynomial from the pair  $(p_{15}, p_{97})$ .  
 Skipping pair  $p_{15}$  and  $p_{97}$  because gcd of their leading monoms is zero.
1192. Creating S-polynomial from the pair  $(p_{15}, p_{98})$ .  
 Skipping pair  $p_{15}$  and  $p_{98}$  because gcd of their leading monoms is zero.
1193. Creating S-polynomial from the pair  $(p_{15}, p_{99})$ .  
 Skipping pair  $p_{15}$  and  $p_{99}$  because gcd of their leading monoms is zero.
1194. Creating S-polynomial from the pair  $(p_{15}, p_{100})$ .  
 Skipping pair  $p_{15}$  and  $p_{100}$  because gcd of their leading monoms is zero.
1195. Creating S-polynomial from the pair  $(p_{15}, p_{101})$ .  
 Skipping pair  $p_{15}$  and  $p_{101}$  because gcd of their leading monoms is zero.
1196. Creating S-polynomial from the pair  $(p_{15}, p_{102})$ .  
 Skipping pair  $p_{15}$  and  $p_{102}$  because gcd of their leading monoms is zero.
1197. Creating S-polynomial from the pair  $(p_{15}, p_{103})$ .  
 Skipping pair  $p_{15}$  and  $p_{103}$  because gcd of their leading monoms is zero.

1198. Creating S-polynomial from the pair  $(p_{15}, p_{104})$ .  
 Skipping pair  $p_{15}$  and  $p_{104}$  because gcd of their leading monoms is zero.
1199. Creating S-polynomial from the pair  $(p_{15}, p_{105})$ .  
 Skipping pair  $p_{15}$  and  $p_{105}$  because gcd of their leading monoms is zero.
1200. Creating S-polynomial from the pair  $(p_{15}, p_{106})$ .  
 Skipping pair  $p_{15}$  and  $p_{106}$  because gcd of their leading monoms is zero.
1201. Creating S-polynomial from the pair  $(p_{16}, p_{32})$ .  
 Skipping pair  $p_{16}$  and  $p_{32}$  because gcd of their leading monoms is zero.
1202. Creating S-polynomial from the pair  $(p_{16}, p_{33})$ .  
 Skipping pair  $p_{16}$  and  $p_{33}$  because gcd of their leading monoms is zero.
1203. Creating S-polynomial from the pair  $(p_{16}, p_{34})$ .  
 Skipping pair  $p_{16}$  and  $p_{34}$  because gcd of their leading monoms is zero.
1204. Creating S-polynomial from the pair  $(p_{16}, p_{35})$ .  
 Skipping pair  $p_{16}$  and  $p_{35}$  because gcd of their leading monoms is zero.
1205. Creating S-polynomial from the pair  $(p_{16}, p_{36})$ .  
 Skipping pair  $p_{16}$  and  $p_{36}$  because gcd of their leading monoms is zero.
1206. Creating S-polynomial from the pair  $(p_{16}, p_{37})$ .  
 Skipping pair  $p_{16}$  and  $p_{37}$  because gcd of their leading monoms is zero.
1207. Creating S-polynomial from the pair  $(p_{16}, p_{38})$ .  
 Skipping pair  $p_{16}$  and  $p_{38}$  because gcd of their leading monoms is zero.
1208. Creating S-polynomial from the pair  $(p_{16}, p_{39})$ .  
 Skipping pair  $p_{16}$  and  $p_{39}$  because gcd of their leading monoms is zero.
1209. Creating S-polynomial from the pair  $(p_{16}, p_{40})$ .  
 Skipping pair  $p_{16}$  and  $p_{40}$  because gcd of their leading monoms is zero.
1210. Creating S-polynomial from the pair  $(p_{16}, p_{41})$ .  
 Skipping pair  $p_{16}$  and  $p_{41}$  because gcd of their leading monoms is zero.
1211. Creating S-polynomial from the pair  $(p_{16}, p_{42})$ .  
 Skipping pair  $p_{16}$  and  $p_{42}$  because gcd of their leading monoms is zero.
1212. Creating S-polynomial from the pair  $(p_{16}, p_{43})$ .  
 Skipping pair  $p_{16}$  and  $p_{43}$  because gcd of their leading monoms is zero.
1213. Creating S-polynomial from the pair  $(p_{16}, p_{44})$ .  
 Skipping pair  $p_{16}$  and  $p_{44}$  because gcd of their leading monoms is zero.
1214. Creating S-polynomial from the pair  $(p_{16}, p_{45})$ .  
 Skipping pair  $p_{16}$  and  $p_{45}$  because gcd of their leading monoms is zero.

1215. Creating S-polynomial from the pair  $(p_{16}, p_{46})$ .  
 Skipping pair  $p_{16}$  and  $p_{46}$  because gcd of their leading monoms is zero.
1216. Creating S-polynomial from the pair  $(p_{16}, p_{47})$ .  
 Skipping pair  $p_{16}$  and  $p_{47}$  because gcd of their leading monoms is zero.
1217. Creating S-polynomial from the pair  $(p_{16}, p_{48})$ .  
 Skipping pair  $p_{16}$  and  $p_{48}$  because gcd of their leading monoms is zero.
1218. Creating S-polynomial from the pair  $(p_{16}, p_{49})$ .  
 Skipping pair  $p_{16}$  and  $p_{49}$  because gcd of their leading monoms is zero.
1219. Creating S-polynomial from the pair  $(p_{16}, p_{50})$ .  
 Skipping pair  $p_{16}$  and  $p_{50}$  because gcd of their leading monoms is zero.
1220. Creating S-polynomial from the pair  $(p_{16}, p_{51})$ .  
 Skipping pair  $p_{16}$  and  $p_{51}$  because gcd of their leading monoms is zero.
1221. Creating S-polynomial from the pair  $(p_{16}, p_{52})$ .  
 Skipping pair  $p_{16}$  and  $p_{52}$  because gcd of their leading monoms is zero.
1222. Creating S-polynomial from the pair  $(p_{16}, p_{53})$ .  
 Skipping pair  $p_{16}$  and  $p_{53}$  because gcd of their leading monoms is zero.
1223. Creating S-polynomial from the pair  $(p_{16}, p_{54})$ .  
 Skipping pair  $p_{16}$  and  $p_{54}$  because gcd of their leading monoms is zero.
1224. Creating S-polynomial from the pair  $(p_{16}, p_{55})$ .  
 Skipping pair  $p_{16}$  and  $p_{55}$  because gcd of their leading monoms is zero.
1225. Creating S-polynomial from the pair  $(p_{16}, p_{56})$ .  
 Skipping pair  $p_{16}$  and  $p_{56}$  because gcd of their leading monoms is zero.
1226. Creating S-polynomial from the pair  $(p_{16}, p_{57})$ .  
 Skipping pair  $p_{16}$  and  $p_{57}$  because gcd of their leading monoms is zero.
1227. Creating S-polynomial from the pair  $(p_{16}, p_{58})$ .  
 Skipping pair  $p_{16}$  and  $p_{58}$  because gcd of their leading monoms is zero.
1228. Creating S-polynomial from the pair  $(p_{16}, p_{59})$ .  
 Skipping pair  $p_{16}$  and  $p_{59}$  because gcd of their leading monoms is zero.
1229. Creating S-polynomial from the pair  $(p_{16}, p_{60})$ .  
 Skipping pair  $p_{16}$  and  $p_{60}$  because gcd of their leading monoms is zero.
1230. Creating S-polynomial from the pair  $(p_{16}, p_{61})$ .  
 Skipping pair  $p_{16}$  and  $p_{61}$  because gcd of their leading monoms is zero.
1231. Creating S-polynomial from the pair  $(p_{16}, p_{62})$ .  
 Skipping pair  $p_{16}$  and  $p_{62}$  because gcd of their leading monoms is zero.

1232. Creating S-polynomial from the pair  $(p_{16}, p_{63})$ .  
 Skipping pair  $p_{16}$  and  $p_{63}$  because gcd of their leading monoms is zero.
1233. Creating S-polynomial from the pair  $(p_{16}, p_{64})$ .  
 Skipping pair  $p_{16}$  and  $p_{64}$  because gcd of their leading monoms is zero.
1234. Creating S-polynomial from the pair  $(p_{16}, p_{65})$ .  
 Skipping pair  $p_{16}$  and  $p_{65}$  because gcd of their leading monoms is zero.
1235. Creating S-polynomial from the pair  $(p_{16}, p_{66})$ .  
 Skipping pair  $p_{16}$  and  $p_{66}$  because gcd of their leading monoms is zero.
1236. Creating S-polynomial from the pair  $(p_{16}, p_{67})$ .  
 Skipping pair  $p_{16}$  and  $p_{67}$  because gcd of their leading monoms is zero.
1237. Creating S-polynomial from the pair  $(p_{16}, p_{68})$ .  
 Skipping pair  $p_{16}$  and  $p_{68}$  because gcd of their leading monoms is zero.
1238. Creating S-polynomial from the pair  $(p_{16}, p_{69})$ .  
 Skipping pair  $p_{16}$  and  $p_{69}$  because gcd of their leading monoms is zero.
1239. Creating S-polynomial from the pair  $(p_{16}, p_{70})$ .  
 Skipping pair  $p_{16}$  and  $p_{70}$  because gcd of their leading monoms is zero.
1240. Creating S-polynomial from the pair  $(p_{16}, p_{71})$ .  
 Skipping pair  $p_{16}$  and  $p_{71}$  because gcd of their leading monoms is zero.
1241. Creating S-polynomial from the pair  $(p_{16}, p_{72})$ .  
 Skipping pair  $p_{16}$  and  $p_{72}$  because gcd of their leading monoms is zero.
1242. Creating S-polynomial from the pair  $(p_{16}, p_{73})$ .  
 Skipping pair  $p_{16}$  and  $p_{73}$  because gcd of their leading monoms is zero.
1243. Creating S-polynomial from the pair  $(p_{16}, p_{74})$ .  
 Skipping pair  $p_{16}$  and  $p_{74}$  because gcd of their leading monoms is zero.
1244. Creating S-polynomial from the pair  $(p_{16}, p_{75})$ .  
 Skipping pair  $p_{16}$  and  $p_{75}$  because gcd of their leading monoms is zero.
1245. Creating S-polynomial from the pair  $(p_{16}, p_{76})$ .  
 Skipping pair  $p_{16}$  and  $p_{76}$  because gcd of their leading monoms is zero.
1246. Creating S-polynomial from the pair  $(p_{16}, p_{77})$ .  
 Skipping pair  $p_{16}$  and  $p_{77}$  because gcd of their leading monoms is zero.
1247. Creating S-polynomial from the pair  $(p_{16}, p_{78})$ .  
 Skipping pair  $p_{16}$  and  $p_{78}$  because gcd of their leading monoms is zero.
1248. Creating S-polynomial from the pair  $(p_{16}, p_{79})$ .  
 Skipping pair  $p_{16}$  and  $p_{79}$  because gcd of their leading monoms is zero.

1249. Creating S-polynomial from the pair  $(p_{16}, p_{80})$ .  
 Skipping pair  $p_{16}$  and  $p_{80}$  because gcd of their leading monoms is zero.
1250. Creating S-polynomial from the pair  $(p_{16}, p_{81})$ .  
 Skipping pair  $p_{16}$  and  $p_{81}$  because gcd of their leading monoms is zero.
1251. Creating S-polynomial from the pair  $(p_{16}, p_{82})$ .  
 Skipping pair  $p_{16}$  and  $p_{82}$  because gcd of their leading monoms is zero.
1252. Creating S-polynomial from the pair  $(p_{16}, p_{83})$ .  
 Skipping pair  $p_{16}$  and  $p_{83}$  because gcd of their leading monoms is zero.
1253. Creating S-polynomial from the pair  $(p_{16}, p_{84})$ .  
 Skipping pair  $p_{16}$  and  $p_{84}$  because gcd of their leading monoms is zero.
1254. Creating S-polynomial from the pair  $(p_{16}, p_{85})$ .  
 Skipping pair  $p_{16}$  and  $p_{85}$  because gcd of their leading monoms is zero.
1255. Creating S-polynomial from the pair  $(p_{16}, p_{86})$ .  
 Skipping pair  $p_{16}$  and  $p_{86}$  because gcd of their leading monoms is zero.
1256. Creating S-polynomial from the pair  $(p_{16}, p_{87})$ .  
 Skipping pair  $p_{16}$  and  $p_{87}$  because gcd of their leading monoms is zero.
1257. Creating S-polynomial from the pair  $(p_{16}, p_{88})$ .  
 Skipping pair  $p_{16}$  and  $p_{88}$  because gcd of their leading monoms is zero.
1258. Creating S-polynomial from the pair  $(p_{16}, p_{89})$ .  
 Skipping pair  $p_{16}$  and  $p_{89}$  because gcd of their leading monoms is zero.
1259. Creating S-polynomial from the pair  $(p_{16}, p_{90})$ .  
 Skipping pair  $p_{16}$  and  $p_{90}$  because gcd of their leading monoms is zero.
1260. Creating S-polynomial from the pair  $(p_{16}, p_{91})$ .  
 Skipping pair  $p_{16}$  and  $p_{91}$  because gcd of their leading monoms is zero.
1261. Creating S-polynomial from the pair  $(p_{16}, p_{92})$ .  
 Skipping pair  $p_{16}$  and  $p_{92}$  because gcd of their leading monoms is zero.
1262. Creating S-polynomial from the pair  $(p_{16}, p_{93})$ .  
 Skipping pair  $p_{16}$  and  $p_{93}$  because gcd of their leading monoms is zero.
1263. Creating S-polynomial from the pair  $(p_{16}, p_{94})$ .  
 Skipping pair  $p_{16}$  and  $p_{94}$  because gcd of their leading monoms is zero.
1264. Creating S-polynomial from the pair  $(p_{16}, p_{95})$ .  
 Skipping pair  $p_{16}$  and  $p_{95}$  because gcd of their leading monoms is zero.
1265. Creating S-polynomial from the pair  $(p_{16}, p_{96})$ .  
 Skipping pair  $p_{16}$  and  $p_{96}$  because gcd of their leading monoms is zero.

1266. Creating S-polynomial from the pair  $(p_{16}, p_{97})$ .  
 Skipping pair  $p_{16}$  and  $p_{97}$  because gcd of their leading monoms is zero.
1267. Creating S-polynomial from the pair  $(p_{16}, p_{98})$ .  
 Skipping pair  $p_{16}$  and  $p_{98}$  because gcd of their leading monoms is zero.
1268. Creating S-polynomial from the pair  $(p_{16}, p_{99})$ .  
 Skipping pair  $p_{16}$  and  $p_{99}$  because gcd of their leading monoms is zero.
1269. Creating S-polynomial from the pair  $(p_{16}, p_{100})$ .  
 Skipping pair  $p_{16}$  and  $p_{100}$  because gcd of their leading monoms is zero.
1270. Creating S-polynomial from the pair  $(p_{16}, p_{101})$ .  
 Skipping pair  $p_{16}$  and  $p_{101}$  because gcd of their leading monoms is zero.
1271. Creating S-polynomial from the pair  $(p_{16}, p_{102})$ .  
 Skipping pair  $p_{16}$  and  $p_{102}$  because gcd of their leading monoms is zero.
1272. Creating S-polynomial from the pair  $(p_{16}, p_{103})$ .  
 Skipping pair  $p_{16}$  and  $p_{103}$  because gcd of their leading monoms is zero.
1273. Creating S-polynomial from the pair  $(p_{16}, p_{104})$ .  
 Skipping pair  $p_{16}$  and  $p_{104}$  because gcd of their leading monoms is zero.
1274. Creating S-polynomial from the pair  $(p_{16}, p_{105})$ .  
 Skipping pair  $p_{16}$  and  $p_{105}$  because gcd of their leading monoms is zero.
1275. Creating S-polynomial from the pair  $(p_{16}, p_{106})$ .  
 Skipping pair  $p_{16}$  and  $p_{106}$  because gcd of their leading monoms is zero.
1276. Creating S-polynomial from the pair  $(p_{17}, p_{32})$ .  
 Forming S-pol of  $p_{17}$  and  $p_{32}$ :
- $$p_{305} = -8u_2^9 u_1^3 x_{10} + 4u_2^{10} u_1^2 x_4 - 8u_5 u_2^7 u_1^3 x_1^2 +$$
- $$(-4u_5 u_2^9 u_1^2 + 16u_5 u_2^7 u_1^4) x_1$$
- Reduced to zero.
1277. Creating S-polynomial from the pair  $(p_{17}, p_{33})$ .  
 Skipping pair  $p_{17}$  and  $p_{33}$  because gcd of their leading monoms is zero.
1278. Creating S-polynomial from the pair  $(p_{17}, p_{34})$ .  
 Skipping pair  $p_{17}$  and  $p_{34}$  because gcd of their leading monoms is zero.
1279. Creating S-polynomial from the pair  $(p_{17}, p_{35})$ .  
 Skipping pair  $p_{17}$  and  $p_{35}$  because gcd of their leading monoms is zero.
1280. Creating S-polynomial from the pair  $(p_{17}, p_{36})$ .  
 Skipping pair  $p_{17}$  and  $p_{36}$  because gcd of their leading monoms is zero.



1281. Creating S-polynomial from the pair  $(p_{17}, p_{37})$ .  
 Skipping pair  $p_{17}$  and  $p_{37}$  because gcd of their leading monoms is zero.
1282. Creating S-polynomial from the pair  $(p_{17}, p_{38})$ .  
 Skipping pair  $p_{17}$  and  $p_{38}$  because gcd of their leading monoms is zero.
1283. Creating S-polynomial from the pair  $(p_{17}, p_{39})$ .  
 Skipping pair  $p_{17}$  and  $p_{39}$  because gcd of their leading monoms is zero.
1284. Creating S-polynomial from the pair  $(p_{17}, p_{40})$ .  
 Skipping pair  $p_{17}$  and  $p_{40}$  because gcd of their leading monoms is zero.
1285. Creating S-polynomial from the pair  $(p_{17}, p_{41})$ .  
 Skipping pair  $p_{17}$  and  $p_{41}$  because gcd of their leading monoms is zero.
1286. Creating S-polynomial from the pair  $(p_{17}, p_{42})$ .  
 Skipping pair  $p_{17}$  and  $p_{42}$  because gcd of their leading monoms is zero.
1287. Creating S-polynomial from the pair  $(p_{17}, p_{43})$ .  
 Skipping pair  $p_{17}$  and  $p_{43}$  because gcd of their leading monoms is zero.
1288. Creating S-polynomial from the pair  $(p_{17}, p_{44})$ .  
 Skipping pair  $p_{17}$  and  $p_{44}$  because gcd of their leading monoms is zero.
1289. Creating S-polynomial from the pair  $(p_{17}, p_{45})$ .  
 Skipping pair  $p_{17}$  and  $p_{45}$  because gcd of their leading monoms is zero.
1290. Creating S-polynomial from the pair  $(p_{17}, p_{46})$ .  
 Skipping pair  $p_{17}$  and  $p_{46}$  because gcd of their leading monoms is zero.
1291. Creating S-polynomial from the pair  $(p_{17}, p_{47})$ .  
 Skipping pair  $p_{17}$  and  $p_{47}$  because gcd of their leading monoms is zero.
1292. Creating S-polynomial from the pair  $(p_{17}, p_{48})$ .  
 Skipping pair  $p_{17}$  and  $p_{48}$  because gcd of their leading monoms is zero.
1293. Creating S-polynomial from the pair  $(p_{17}, p_{49})$ .  
 Skipping pair  $p_{17}$  and  $p_{49}$  because gcd of their leading monoms is zero.
1294. Creating S-polynomial from the pair  $(p_{17}, p_{50})$ .  
 Skipping pair  $p_{17}$  and  $p_{50}$  because gcd of their leading monoms is zero.
1295. Creating S-polynomial from the pair  $(p_{17}, p_{51})$ .  
 Skipping pair  $p_{17}$  and  $p_{51}$  because gcd of their leading monoms is zero.
1296. Creating S-polynomial from the pair  $(p_{17}, p_{52})$ .  
 Skipping pair  $p_{17}$  and  $p_{52}$  because gcd of their leading monoms is zero.
1297. Creating S-polynomial from the pair  $(p_{17}, p_{53})$ .  
 Skipping pair  $p_{17}$  and  $p_{53}$  because gcd of their leading monoms is zero.

1298. Creating S-polynomial from the pair  $(p_{17}, p_{54})$ .

Forming S-pol of  $p_{17}$  and  $p_{54}$ :

$$\begin{aligned} p_{306} = & (32u_2^{13}u_1^5 + 128u_2^{11}u_1^7)x_{10}^2 + (-16u_2^{14}u_1^4 - 64u_2^{12}u_1^6)x_{10}x_4 + \\ & (32u_5u_2^{13}u_1^4 + 64u_5u_2^{11}u_1^6 - 256u_5u_2^9u_1^8)x_{10}x_1 + \\ & (16u_5u_2^{12}u_1^4 + 64u_5u_2^{10}u_1^6)x_4x_1^2 + \\ & (-8u_5u_2^{14}u_1^3 - 32u_5u_2^{12}u_1^5)x_4x_1 + \\ & (8u_5^2u_2^{13}u_1^3 + 32u_5^2u_2^{11}u_1^5)x_1^2 \end{aligned}$$

Reduced to zero.

1299. Creating S-polynomial from the pair  $(p_{17}, p_{55})$ .

Forming S-pol of  $p_{17}$  and  $p_{55}$ :

$$\begin{aligned} p_{307} = & (2048u_2^{16}u_1^{11} + 8192u_2^{14}u_1^{13})x_{12}x_{10} + 2048u_2^{15}u_1^{11}x_{12}x_4x_1 + \\ & (-1024u_2^{17}u_1^{10} - 4096u_2^{15}u_1^{12})x_{12}x_4 + \\ & (2048u_5u_2^{16}u_1^{10} + 4096u_5u_2^{14}u_1^{12} - 16384u_5u_2^{12}u_1^{14})x_{12}x_1 - \\ & 2048u_2^{15}u_1^{11}x_{10}x_5x_1 + 4096u_5u_2^{13}u_1^{12}x_5x_1^2 - \\ & 512u_5u_2^{17}u_1^9x_5x_1 + 1024u_6u_2^{15}u_1^{10}x_4x_1^2 - \\ & 2048u_6u_2^{15}u_1^{11}x_4x_1 + (512u_6u_5u_2^{16}u_1^9 + 2048u_6u_5u_2^{14}u_1^{11})x_1^2 \end{aligned}$$

Reduced to zero.

1300. Creating S-polynomial from the pair  $(p_{17}, p_{56})$ .

Forming S-pol of  $p_{17}$  and  $p_{56}$ :

$$\begin{aligned} p_{308} = & -16u_2^7u_1^4x_{10}^2 + 8u_2^8u_1^3x_{10}x_4 + \\ & (-16u_5u_2^7u_1^3 + 32u_5u_2^5u_1^5)x_{10}x_1 - 8u_5u_2^6u_1^3x_4x_1^2 + \\ & 4u_5u_2^8u_1^2x_4x_1 - 4u_5^2u_2^7u_1^2x_1^2 \end{aligned}$$

Reduced to zero.

1301. Creating S-polynomial from the pair  $(p_{17}, p_{57})$ .

Forming S-pol of  $p_{17}$  and  $p_{57}$ : Polynomial too big for output (text size is 1127 characters, number of terms is 15)

Reduced to zero.

1302. Creating S-polynomial from the pair  $(p_{17}, p_{58})$ .

Forming S-pol of  $p_{17}$  and  $p_{58}$ :

$$\begin{aligned} p_{309} = & -256u_2^9u_1^8x_{12}x_{10} + 128u_2^{10}u_1^7x_{12}x_4 + \\ & (-128u_5u_2^9u_1^7 + 512u_5u_2^7u_1^9)x_{12}x_1 - 128u_6u_2^9u_1^7x_{10}x_1 - \\ & 128u_5u_2^8u_1^7x_5x_1^2 + 64u_6u_2^{10}u_1^6x_4x_1 - 64u_6u_5u_2^9u_1^6x_1^2 \end{aligned}$$

Reduced to zero.

1303. Creating S-polynomial from the pair  $(p_{17}, p_{59})$ .

Forming S-pol of  $p_{17}$  and  $p_{59}$ :

$$\begin{aligned} p_{310} = & (512u_2^{15}u_1^9 + 2048u_2^{13}u_1^{11})x_{12}x_{10} + 2048u_2^{12}u_1^{11}x_{12}x_4x_1 + \\ & (-256u_2^{16}u_1^8 - 1024u_2^{14}u_1^{10})x_{12}x_4 + \\ & (512u_5u_2^{15}u_1^8 + 1024u_5u_2^{13}u_1^{10})x_{12}x_1 - 2048u_2^{12}u_1^{11}x_{10}x_5x_1 - \\ & 4096u_6u_2^{11}u_1^{12}x_{10}x_1 + 256u_5u_2^{14}u_1^8x_5x_1^2 + \\ & (-128u_5u_2^{16}u_1^7 - 512u_5u_2^{14}u_1^9)x_5x_1 + 1024u_6u_2^{12}u_1^{10}x_4x_1^2 + \\ & (128u_6u_5u_2^{15}u_1^7 + 512u_6u_5u_2^{13}u_1^9)x_1^2 \end{aligned}$$

Reduced to zero.

1304. Creating S-polynomial from the pair  $(p_{17}, p_{60})$ .

Skipping pair  $p_{17}$  and  $p_{60}$  because gcd of their leading monoms is zero.

1305. Creating S-polynomial from the pair  $(p_{17}, p_{61})$ .

Forming S-pol of  $p_{17}$  and  $p_{61}$ :

$$\begin{aligned} p_{311} = & -256u_2^9u_1^8x_{12}x_{10} - 256u_2^8u_1^8x_{12}x_4x_1 + 128u_2^{10}u_1^7x_{12}x_4 - \\ & 256u_5u_2^9u_1^7x_{12}x_1 + 256u_2^8u_1^8x_{10}x_5x_1 + 512u_6u_2^7u_1^9x_{10}x_1 + \\ & 64u_5u_2^{10}u_1^6x_5x_1 - 128u_6u_2^8u_1^7x_4x_1^2 - 64u_6u_5u_2^9u_1^6x_1^2 \end{aligned}$$

Reduced to zero.

1306. Creating S-polynomial from the pair  $(p_{17}, p_{62})$ .

Skipping pair  $p_{17}$  and  $p_{62}$  because gcd of their leading monoms is zero.

1307. Creating S-polynomial from the pair  $(p_{17}, p_{63})$ .

Skipping pair  $p_{17}$  and  $p_{63}$  because gcd of their leading monoms is zero.

1308. Creating S-polynomial from the pair  $(p_{17}, p_{64})$ .

Skipping pair  $p_{17}$  and  $p_{64}$  because gcd of their leading monoms is zero.

1309. Creating S-polynomial from the pair  $(p_{17}, p_{65})$ .

Skipping pair  $p_{17}$  and  $p_{65}$  because gcd of their leading monoms is zero.

1310. Creating S-polynomial from the pair  $(p_{17}, p_{66})$ .

Skipping pair  $p_{17}$  and  $p_{66}$  because gcd of their leading monoms is zero.

1311. Creating S-polynomial from the pair  $(p_{17}, p_{67})$ .

Skipping pair  $p_{17}$  and  $p_{67}$  because gcd of their leading monoms is zero.

1312. Creating S-polynomial from the pair  $(p_{17}, p_{68})$ .

Skipping pair  $p_{17}$  and  $p_{68}$  because gcd of their leading monoms is zero.

1313. Creating S-polynomial from the pair  $(p_{17}, p_{69})$ .

Skipping pair  $p_{17}$  and  $p_{69}$  because gcd of their leading monoms is zero.

1314. Creating S-polynomial from the pair  $(p_{17}, p_{70})$ .

Skipping pair  $p_{17}$  and  $p_{70}$  because gcd of their leading monoms is zero.

1315. Creating S-polynomial from the pair  $(p_{17}, p_{71})$ .

Skipping pair  $p_{17}$  and  $p_{71}$  because gcd of their leading monoms is zero.

1316. Creating S-polynomial from the pair  $(p_{17}, p_{72})$ .

Skipping pair  $p_{17}$  and  $p_{72}$  because gcd of their leading monoms is zero.

1317. Creating S-polynomial from the pair  $(p_{17}, p_{73})$ .

Skipping pair  $p_{17}$  and  $p_{73}$  because gcd of their leading monoms is zero.

1318. Creating S-polynomial from the pair  $(p_{17}, p_{74})$ .

Skipping pair  $p_{17}$  and  $p_{74}$  because gcd of their leading monoms is zero.

1319. Creating S-polynomial from the pair  $(p_{17}, p_{75})$ .

Forming S-pol of  $p_{17}$  and  $p_{75}$ :

$$p_{312} = -16u_2^9u_1^4x_{10} + 8u_2^{10}u_1^3x_4 - 16u_5u_2^7u_1^4x_1^2 + \\ (-8u_5u_2^9u_1^3 + 32u_5u_2^7u_1^5)x_1$$

Reduced to zero.

1320. Creating S-polynomial from the pair  $(p_{17}, p_{76})$ .

Forming S-pol of  $p_{17}$  and  $p_{76}$ :

$$p_{313} = -1048576u_5u_2^{21}u_1^{20}x_{12}x_{10} - 2097152u_5u_2^{20}u_1^{20}x_{12}x_4x_1 + \\ 524288u_5u_2^{22}u_1^{19}x_{12}x_4 - 1048576u_5^2u_2^{21}u_1^{19}x_{12}x_1 + \\ 2097152u_6u_2^{19}u_1^{21}x_{10}^2x_1 + 1048576u_5u_2^{20}u_1^{20}x_{10}x_5x_1 + \\ 524288u_6u_5u_2^{21}u_1^{19}x_{10}x_1 + 524288u_5u_2^{21}u_1^{19}x_5x_4x_1 + \\ 262144u_5^2u_2^{22}u_1^{18}x_5x_1 + \\ (-262144u_6u_5u_2^{22}u_1^{18} - 1048576u_6u_2^{21}u_1^{20})x_4x_1 + \\ 524288u_6u_5^2u_2^{21}u_1^{19}x_1$$

Reduced to zero.

1321. Creating S-polynomial from the pair  $(p_{17}, p_{77})$ .

Forming S-pol of  $p_{17}$  and  $p_{77}$ :

$$p_{314} = -512u_2^9u_1^9x_{12}x_{10} - 512u_2^8u_1^9x_{12}x_4x_1 + 256u_2^{10}u_1^8x_{12}x_4 - \\ 512u_5u_2^9u_1^8x_{12}x_1 + 512u_2^8u_1^9x_{10}x_5x_1 + 1024u_6u_2^7u_1^{10}x_{10}x_1 + \\ 128u_5u_2^{10}u_1^7x_5x_1 - 256u_6u_2^8u_1^8x_4x_1^2 - 128u_6u_5u_2^9u_1^7x_1^2$$

Reduced to zero.

1322. Creating S-polynomial from the pair  $(p_{17}, p_{78})$ .

Forming S-pol of  $p_{17}$  and  $p_{78}$ :

$$\begin{aligned} p_{315} = & -512u_2^9u_1^9x_{12}x_{10} + 256u_2^{10}u_1^8x_{12}x_4 + \\ & (-256u_5u_2^9u_1^8 + 1024u_5u_2^7u_1^{10})x_{12}x_1 - 256u_6u_2^9u_1^8x_{10}x_1 - \\ & 256u_5u_2^8u_1^8x_5x_1^2 + 128u_6u_2^{10}u_1^7x_4x_1 - 128u_6u_5u_2^9u_1^7x_1^2 \end{aligned}$$

Reduced to zero.

1323. Creating S-polynomial from the pair  $(p_{17}, p_{79})$ .

Skipping pair  $p_{17}$  and  $p_{79}$  because gcd of their leading monoms is zero.

1324. Creating S-polynomial from the pair  $(p_{17}, p_{80})$ .

Skipping pair  $p_{17}$  and  $p_{80}$  because gcd of their leading monoms is zero.

1325. Creating S-polynomial from the pair  $(p_{17}, p_{81})$ .

Skipping pair  $p_{17}$  and  $p_{81}$  because gcd of their leading monoms is zero.

1326. Creating S-polynomial from the pair  $(p_{17}, p_{82})$ .

Skipping pair  $p_{17}$  and  $p_{82}$  because gcd of their leading monoms is zero.

1327. Creating S-polynomial from the pair  $(p_{17}, p_{83})$ .

Skipping pair  $p_{17}$  and  $p_{83}$  because gcd of their leading monoms is zero.

1328. Creating S-polynomial from the pair  $(p_{17}, p_{84})$ .

Skipping pair  $p_{17}$  and  $p_{84}$  because gcd of their leading monoms is zero.

1329. Creating S-polynomial from the pair  $(p_{17}, p_{85})$ .

Skipping pair  $p_{17}$  and  $p_{85}$  because gcd of their leading monoms is zero.

1330. Creating S-polynomial from the pair  $(p_{17}, p_{86})$ .

Skipping pair  $p_{17}$  and  $p_{86}$  because gcd of their leading monoms is zero.

1331. Creating S-polynomial from the pair  $(p_{17}, p_{87})$ .

Skipping pair  $p_{17}$  and  $p_{87}$  because gcd of their leading monoms is zero.

1332. Creating S-polynomial from the pair  $(p_{17}, p_{88})$ .

Skipping pair  $p_{17}$  and  $p_{88}$  because gcd of their leading monoms is zero.

1333. Creating S-polynomial from the pair  $(p_{17}, p_{89})$ .

Skipping pair  $p_{17}$  and  $p_{89}$  because gcd of their leading monoms is zero.

1334. Creating S-polynomial from the pair  $(p_{17}, p_{90})$ .

Skipping pair  $p_{17}$  and  $p_{90}$  because gcd of their leading monoms is zero.

1335. Creating S-polynomial from the pair  $(p_{17}, p_{91})$ .

Skipping pair  $p_{17}$  and  $p_{91}$  because gcd of their leading monoms is zero.

1336. Creating S-polynomial from the pair  $(p_{17}, p_{92})$ .

Skipping pair  $p_{17}$  and  $p_{92}$  because gcd of their leading monoms is zero.

1337. Creating S-polynomial from the pair  $(p_{17}, p_{93})$ .  
 Skipping pair  $p_{17}$  and  $p_{93}$  because gcd of their leading monoms is zero.
1338. Creating S-polynomial from the pair  $(p_{17}, p_{94})$ .  
 Skipping pair  $p_{17}$  and  $p_{94}$  because gcd of their leading monoms is zero.
1339. Creating S-polynomial from the pair  $(p_{17}, p_{95})$ .  
 Skipping pair  $p_{17}$  and  $p_{95}$  because gcd of their leading monoms is zero.
1340. Creating S-polynomial from the pair  $(p_{17}, p_{96})$ .  
 Skipping pair  $p_{17}$  and  $p_{96}$  because gcd of their leading monoms is zero.
1341. Creating S-polynomial from the pair  $(p_{17}, p_{97})$ .  
 Skipping pair  $p_{17}$  and  $p_{97}$  because gcd of their leading monoms is zero.
1342. Creating S-polynomial from the pair  $(p_{17}, p_{98})$ .  
 Skipping pair  $p_{17}$  and  $p_{98}$  because gcd of their leading monoms is zero.
1343. Creating S-polynomial from the pair  $(p_{17}, p_{99})$ .  
 Skipping pair  $p_{17}$  and  $p_{99}$  because gcd of their leading monoms is zero.
1344. Creating S-polynomial from the pair  $(p_{17}, p_{100})$ .  
 Forming S-pol of  $p_{17}$  and  $p_{100}$ :

$$\begin{aligned}
 p_{316} = & -1048576u_2^{19}u_1^{20}x_{12}x_{10}x_4 + 1048576u_5u_2^{18}u_1^{20}x_{12}x_{10}x_1 - \\
 & 1048576u_2^{18}u_1^{20}x_{12}x_4^2x_1 + 524288u_2^{20}u_1^{19}x_{12}x_4^2 + \\
 & (-524288u_5u_2^{19}u_1^{19} + 2097152u_5u_2^{17}u_1^{21} + 2097152u_2^{18}u_1^{21})x_{12}x_4x_1 + \\
 & (262144u_5^2u_2^{20}u_1^{18} - 1048576u_5^2u_2^{18}u_1^{20})x_{12}x_1 - \\
 & 1048576u_6u_2^{18}u_1^{20}x_{10}^2x_1 - 524288u_5u_2^{19}u_1^{19}x_{10}x_5x_1 - \\
 & 262144u_6u_5u_2^{20}u_1^{18}x_{10}x_1 - 524288u_5u_2^{18}u_1^{19}x_5x_4x_1^2 - \\
 & 131072u_5^2u_2^{21}u_1^{17}x_5x_1 - 262144u_6u_5u_2^{19}u_1^{18}x_4x_1^2 + \\
 & (131072u_6u_5u_2^{21}u_1^{17} + 524288u_6u_2^{20}u_1^{19})x_4x_1 - \\
 & 262144u_6u_5^2u_2^{20}u_1^{18}x_1
 \end{aligned}$$

Reduced to zero.

1345. Creating S-polynomial from the pair  $(p_{17}, p_{101})$ .  
 Skipping pair  $p_{17}$  and  $p_{101}$  because gcd of their leading monoms is zero.
1346. Creating S-polynomial from the pair  $(p_{17}, p_{102})$ .  
 Skipping pair  $p_{17}$  and  $p_{102}$  because gcd of their leading monoms is zero.
1347. Creating S-polynomial from the pair  $(p_{17}, p_{103})$ .  
 Skipping pair  $p_{17}$  and  $p_{103}$  because gcd of their leading monoms is zero.
1348. Creating S-polynomial from the pair  $(p_{17}, p_{104})$ .  
 Skipping pair  $p_{17}$  and  $p_{104}$  because gcd of their leading monoms is zero.

1349. Creating S-polynomial from the pair  $(p_{17}, p_{105})$ .  
 Skipping pair  $p_{17}$  and  $p_{105}$  because gcd of their leading monoms is zero.
1350. Creating S-polynomial from the pair  $(p_{17}, p_{106})$ .  
 Skipping pair  $p_{17}$  and  $p_{106}$  because gcd of their leading monoms is zero.
1351. Creating S-polynomial from the pair  $(p_{18}, p_{32})$ .  
 Skipping pair  $p_{18}$  and  $p_{32}$  because gcd of their leading monoms is zero.
1352. Creating S-polynomial from the pair  $(p_{18}, p_{33})$ .  
 Forming S-pol of  $p_{18}$  and  $p_{33}$ :
- $$p_{317} = -8u_2^9u_1^3x_{12} + 4u_2^{10}u_1^2x_5 - 8u_6u_2^7u_1^3x_1^2 + (-4u_6u_2^9u_1^2 + 16u_6u_2^7u_1^4)x_1$$
- Reduced to zero.
1353. Creating S-polynomial from the pair  $(p_{18}, p_{34})$ .  
 Forming S-pol of  $p_{18}$  and  $p_{34}$ :
- $$p_{318} = 256u_2^{16}u_1^8x_{12}x_4 - 512u_2^{14}u_1^9x_{10}x_5x_1 + 256u_2^{15}u_1^8x_5x_4x_1 - 128u_2^{17}u_1^7x_5x_4 - 256u_5u_2^{14}u_1^8x_5x_1^2 + 512u_5u_2^{14}u_1^9x_5x_1 + 256u_6u_2^{14}u_1^8x_4x_1^2 + (128u_6u_2^{16}u_1^7 - 512u_6u_2^{14}u_1^9)x_4x_1$$
- Reduced to zero.
1354. Creating S-polynomial from the pair  $(p_{18}, p_{35})$ .  
 Skipping pair  $p_{18}$  and  $p_{35}$  because gcd of their leading monoms is zero.
1355. Creating S-polynomial from the pair  $(p_{18}, p_{36})$ .  
 Skipping pair  $p_{18}$  and  $p_{36}$  because gcd of their leading monoms is zero.
1356. Creating S-polynomial from the pair  $(p_{18}, p_{37})$ .  
 Skipping pair  $p_{18}$  and  $p_{37}$  because gcd of their leading monoms is zero.
1357. Creating S-polynomial from the pair  $(p_{18}, p_{38})$ .  
 Skipping pair  $p_{18}$  and  $p_{38}$  because gcd of their leading monoms is zero.
1358. Creating S-polynomial from the pair  $(p_{18}, p_{39})$ .  
 Skipping pair  $p_{18}$  and  $p_{39}$  because gcd of their leading monoms is zero.
1359. Creating S-polynomial from the pair  $(p_{18}, p_{40})$ .  
 Skipping pair  $p_{18}$  and  $p_{40}$  because gcd of their leading monoms is zero.
1360. Creating S-polynomial from the pair  $(p_{18}, p_{41})$ .  
 Skipping pair  $p_{18}$  and  $p_{41}$  because gcd of their leading monoms is zero.

1361. Creating S-polynomial from the pair  $(p_{18}, p_{42})$ .

Forming S-pol of  $p_{18}$  and  $p_{42}$ :

$$\begin{aligned} p_{319} = & -256u_5u_2^{15}u_1^8x_{12}x_4 + 512u_6u_2^{13}u_1^9x_{10}x_4x_1 + \\ & 128u_5u_2^{16}u_1^7x_5x_4 + \\ & (-128u_6u_5u_2^{15}u_1^7 - 512u_6u_2^{14}u_1^9)x_4x_1 + 256u_6u_5^2u_2^{14}u_1^8x_1 \end{aligned}$$

Reduced to zero.

1362. Creating S-polynomial from the pair  $(p_{18}, p_{43})$ .

Skipping pair  $p_{18}$  and  $p_{43}$  because gcd of their leading monoms is zero.

1363. Creating S-polynomial from the pair  $(p_{18}, p_{44})$ .

Skipping pair  $p_{18}$  and  $p_{44}$  because gcd of their leading monoms is zero.

1364. Creating S-polynomial from the pair  $(p_{18}, p_{45})$ .

Skipping pair  $p_{18}$  and  $p_{45}$  because gcd of their leading monoms is zero.

1365. Creating S-polynomial from the pair  $(p_{18}, p_{46})$ .

Skipping pair  $p_{18}$  and  $p_{46}$  because gcd of their leading monoms is zero.

1366. Creating S-polynomial from the pair  $(p_{18}, p_{47})$ .

Skipping pair  $p_{18}$  and  $p_{47}$  because gcd of their leading monoms is zero.

1367. Creating S-polynomial from the pair  $(p_{18}, p_{48})$ .

Skipping pair  $p_{18}$  and  $p_{48}$  because gcd of their leading monoms is zero.

1368. Creating S-polynomial from the pair  $(p_{18}, p_{49})$ .

Skipping pair  $p_{18}$  and  $p_{49}$  because gcd of their leading monoms is zero.

1369. Creating S-polynomial from the pair  $(p_{18}, p_{50})$ .

Skipping pair  $p_{18}$  and  $p_{50}$  because gcd of their leading monoms is zero.

1370. Creating S-polynomial from the pair  $(p_{18}, p_{51})$ .

Skipping pair  $p_{18}$  and  $p_{51}$  because gcd of their leading monoms is zero.

1371. Creating S-polynomial from the pair  $(p_{18}, p_{52})$ .

Skipping pair  $p_{18}$  and  $p_{52}$  because gcd of their leading monoms is zero.

1372. Creating S-polynomial from the pair  $(p_{18}, p_{53})$ .

Skipping pair  $p_{18}$  and  $p_{53}$  because gcd of their leading monoms is zero.

1373. Creating S-polynomial from the pair  $(p_{18}, p_{54})$ .

Skipping pair  $p_{18}$  and  $p_{54}$  because gcd of their leading monoms is zero.



1374. Creating S-polynomial from the pair  $(p_{18}, p_{55})$ .

Forming S-pol of  $p_{18}$  and  $p_{55}$ :

$$\begin{aligned} p_{320} = & (2048u_2^{16}u_1^{11} + 8192u_2^{14}u_1^{13})x_{12}x_{10} - 8192u_2^{13}u_1^{13}x_{12}x_4x_1 + \\ & (1024u_5u_2^{16}u_1^{10} - 16384u_5u_2^{12}u_1^{14})x_{12}x_1 + 8192u_2^{13}u_1^{13}x_{10}x_5x_1 + \\ & (-1024u_2^{17}u_1^{10} - 4096u_2^{15}u_1^{12})x_{10}x_5 + \\ & (1024u_6u_2^{16}u_1^{10} + 4096u_6u_2^{14}u_1^{12})x_{10}x_1 + 4096u_5u_2^{13}u_1^{12}x_5x_1^2 - \\ & 512u_5u_2^{17}u_1^9x_5x_1 + 1024u_6u_2^{15}u_1^{10}x_4x_1^2 - \\ & 2048u_6u_2^{15}u_1^{11}x_4x_1 + (512u_6u_5u_2^{16}u_1^9 + 2048u_6u_5u_2^{14}u_1^{11})x_1^2 \end{aligned}$$

Reduced to zero.

1375. Creating S-polynomial from the pair  $(p_{18}, p_{56})$ .

Skipping pair  $p_{18}$  and  $p_{56}$  because gcd of their leading monoms is zero.

1376. Creating S-polynomial from the pair  $(p_{18}, p_{57})$ .

Forming S-pol of  $p_{18}$  and  $p_{57}$ : Polynomial too big for output (text size is 1178 characters, number of terms is 16)

Reduced to zero.

1377. Creating S-polynomial from the pair  $(p_{18}, p_{58})$ .

Forming S-pol of  $p_{18}$  and  $p_{58}$ :

$$\begin{aligned} p_{321} = & -256u_2^9u_1^8x_{12}x_{10} + 256u_2^8u_1^8x_{12}x_4x_1 + 512u_5u_2^7u_1^9x_{12}x_1 - \\ & 256u_2^8u_1^8x_{10}x_5x_1 + 128u_2^{10}u_1^7x_{10}x_5 - 256u_6u_2^9u_1^7x_{10}x_1 - \\ & 128u_5u_2^8u_1^7x_5x_1^2 + 64u_6u_2^{10}u_1^6x_4x_1 - 64u_6u_5u_2^9u_1^6x_1^2 \end{aligned}$$

Reduced to zero.

1378. Creating S-polynomial from the pair  $(p_{18}, p_{59})$ .

Forming S-pol of  $p_{18}$  and  $p_{59}$ :

$$\begin{aligned} p_{322} = & (512u_2^{15}u_1^9 + 2048u_2^{13}u_1^{11})x_{12}x_{10} - 512u_2^{14}u_1^9x_{12}x_4x_1 + \\ & 256u_5u_2^{15}u_1^8x_{12}x_1 + 512u_2^{14}u_1^9x_{10}x_5x_1 + \\ & (-256u_2^{16}u_1^8 - 1024u_2^{14}u_1^{10})x_{10}x_5 + \\ & (256u_6u_2^{15}u_1^8 + 1024u_6u_2^{13}u_1^{10} - 4096u_6u_2^{11}u_1^{12})x_{10}x_1 + \\ & 256u_5u_2^{14}u_1^8x_5x_1^2 + \\ & (-128u_5u_2^{16}u_1^7 - 512u_5u_2^{14}u_1^9)x_5x_1 + 1024u_6u_2^{12}u_1^{10}x_4x_1^2 + \\ & (128u_6u_5u_2^{15}u_1^7 + 512u_6u_5u_2^{13}u_1^9)x_1^2 \end{aligned}$$

Reduced to zero.

1379. Creating S-polynomial from the pair  $(p_{18}, p_{60})$ .

Forming S-pol of  $p_{18}$  and  $p_{60}$ :

$$\begin{aligned} p_{323} = & (32u_2^{13}u_1^5 + 128u_2^{11}u_1^7)x_{12}^2 + (-16u_2^{14}u_1^4 - 64u_2^{12}u_1^6)x_{12}x_5 + \\ & (32u_6u_2^{13}u_1^4 + 64u_6u_2^{11}u_1^6 - 256u_6u_2^9u_1^8)x_{12}x_1 + \\ & (16u_6u_2^{12}u_1^4 + 64u_6u_2^{10}u_1^6)x_5x_1^2 + \\ & (-8u_6u_2^{14}u_1^3 - 32u_6u_2^{12}u_1^5)x_5x_1 + \\ & (8u_6^2u_2^{13}u_1^3 + 32u_6^2u_2^{11}u_1^5)x_1^2 \end{aligned}$$

Reduced to zero.

1380. Creating S-polynomial from the pair  $(p_{18}, p_{61})$ .

Forming S-pol of  $p_{18}$  and  $p_{61}$ :

$$\begin{aligned} p_{324} = & -256u_2^9u_1^8x_{12}x_{10} - 128u_5u_2^9u_1^7x_{12}x_1 + 128u_2^{10}u_1^7x_{10}x_5 + \\ & (-128u_6u_2^9u_1^7 + 512u_6u_2^7u_1^9)x_{10}x_1 + 64u_5u_2^{10}u_1^6x_5x_1 - \\ & 128u_6u_2^8u_1^7x_4x_1^2 - 64u_6u_5u_2^9u_1^6x_1^2 \end{aligned}$$

Reduced to zero.

1381. Creating S-polynomial from the pair  $(p_{18}, p_{62})$ .

Forming S-pol of  $p_{18}$  and  $p_{62}$ :

$$\begin{aligned} p_{325} = & (4096u_2^{22}u_1^{12} + 16384u_2^{20}u_1^{14})x_{12}^2x_4 - 8192u_2^{20}u_1^{13}x_{12}x_{10}x_5x_1 + \\ & 4096u_2^{21}u_1^{12}x_{12}x_5x_4x_1 + (-2048u_2^{23}u_1^{11} - 8192u_2^{21}u_1^{13})x_{12}x_5x_4 + \\ & (-2048u_5u_2^{22}u_1^{11} + 8192u_5u_2^{20}u_1^{13})x_{12}x_5x_1 + \\ & (4096u_6u_2^{22}u_1^{11} + 8192u_6u_2^{20}u_1^{13} - 32768u_6u_2^{18}u_1^{15})x_{12}x_4x_1 + \\ & (2048u_6u_2^{21}u_1^{11} + 8192u_6u_2^{19}u_1^{13})x_5x_4x_1^2 + \\ & (-1024u_6u_2^{23}u_1^{10} - 4096u_6u_2^{21}u_1^{12})x_5x_4x_1 + \\ & (-1024u_6u_5u_2^{22}u_1^{10} - 4096u_5u_2^{21}u_1^{12})x_5x_1^2 + 2048u_5u_2^{23}u_1^{11}x_5x_1 + \\ & (1024u_6^2u_2^{22}u_1^{10} + 4096u_6^2u_2^{20}u_1^{12})x_4x_1^2 + \\ & 2048u_6^2u_5u_2^{21}u_1^{11}x_1^2 - 1024u_6^2u_5u_2^{23}u_1^{10}x_1 \end{aligned}$$

Reduced to zero.

1382. Creating S-polynomial from the pair  $(p_{18}, p_{63})$ .

Forming S-pol of  $p_{18}$  and  $p_{63}$ :

$$\begin{aligned} p_{326} = & -16u_2^7u_1^4x_{12}^2 + 8u_2^8u_1^3x_{12}x_5 + \\ & (-16u_6u_2^7u_1^3 + 32u_6u_2^5u_1^5)x_{12}x_1 - 8u_6u_2^6u_1^3x_5x_1^2 + \\ & 4u_6u_2^8u_1^2x_5x_1 - 4u_6^2u_2^7u_1^2x_1^2 \end{aligned}$$

Reduced to zero.

1383. Creating S-polynomial from the pair  $(p_{18}, p_{64})$ .  
 Skipping pair  $p_{18}$  and  $p_{64}$  because gcd of their leading monoms is zero.
1384. Creating S-polynomial from the pair  $(p_{18}, p_{65})$ .  
 Skipping pair  $p_{18}$  and  $p_{65}$  because gcd of their leading monoms is zero.
1385. Creating S-polynomial from the pair  $(p_{18}, p_{66})$ .  
 Skipping pair  $p_{18}$  and  $p_{66}$  because gcd of their leading monoms is zero.
1386. Creating S-polynomial from the pair  $(p_{18}, p_{67})$ .  
 Skipping pair  $p_{18}$  and  $p_{67}$  because gcd of their leading monoms is zero.
1387. Creating S-polynomial from the pair  $(p_{18}, p_{68})$ .  
 Skipping pair  $p_{18}$  and  $p_{68}$  because gcd of their leading monoms is zero.
1388. Creating S-polynomial from the pair  $(p_{18}, p_{69})$ .  
 Skipping pair  $p_{18}$  and  $p_{69}$  because gcd of their leading monoms is zero.
1389. Creating S-polynomial from the pair  $(p_{18}, p_{70})$ .  
 Skipping pair  $p_{18}$  and  $p_{70}$  because gcd of their leading monoms is zero.
1390. Creating S-polynomial from the pair  $(p_{18}, p_{71})$ .  
 Skipping pair  $p_{18}$  and  $p_{71}$  because gcd of their leading monoms is zero.
1391. Creating S-polynomial from the pair  $(p_{18}, p_{72})$ .  
 Skipping pair  $p_{18}$  and  $p_{72}$  because gcd of their leading monoms is zero.
1392. Creating S-polynomial from the pair  $(p_{18}, p_{73})$ .  
 Skipping pair  $p_{18}$  and  $p_{73}$  because gcd of their leading monoms is zero.
1393. Creating S-polynomial from the pair  $(p_{18}, p_{74})$ .  
 Forming S-pol of  $p_{18}$  and  $p_{74}$ :  

$$p_{327} = 1024u_5u_2^{13}u_1^{10}x_{12} - 2048u_6u_2^{11}u_1^{11}x_{10}x_1 - 512u_5u_2^{14}u_1^9x_5 + \\ 1024u_6u_2^{12}u_1^{10}x_4x_1 + 512u_6u_5u_2^{13}u_1^9x_1$$
  
 Reduced to zero.
1394. Creating S-polynomial from the pair  $(p_{18}, p_{75})$ .  
 Skipping pair  $p_{18}$  and  $p_{75}$  because gcd of their leading monoms is zero.
1395. Creating S-polynomial from the pair  $(p_{18}, p_{76})$ .  
 Forming S-pol of  $p_{18}$  and  $p_{76}$ :  

$$p_{328} = -1048576u_5u_2^{21}u_1^{20}x_{12}x_{10} - 1048576u_5u_2^{20}u_1^{20}x_{12}x_4x_1 - \\ 524288u_5^2u_2^{21}u_1^{19}x_{12}x_1 + 2097152u_6u_2^{19}u_1^{21}x_{10}^2x_1 + \\ 524288u_5u_2^{22}u_1^{19}x_{10}x_5 + 524288u_5u_2^{21}u_1^{19}x_5x_4x_1 + \\ 262144u_5^2u_2^{22}u_1^{18}x_5x_1 + \\ (-262144u_6u_5u_2^{22}u_1^{18} - 1048576u_6u_2^{21}u_1^{20})x_4x_1 + \\ 524288u_6u_5^2u_2^{21}u_1^{19}x_1$$
  
 Reduced to zero.

1396. Creating S-polynomial from the pair  $(p_{18}, p_{77})$ .

Forming S-pol of  $p_{18}$  and  $p_{77}$ :

$$\begin{aligned} p_{329} = & -512u_2^9u_1^9x_{12}x_{10} - 256u_5u_2^9u_1^8x_{12}x_1 + 256u_2^{10}u_1^8x_{10}x_5 + \\ & (-256u_6u_2^9u_1^8 + 1024u_6u_2^7u_1^{10})x_{10}x_1 + 128u_5u_2^{10}u_1^7x_5x_1 - \\ & 256u_6u_2^8u_1^8x_4x_1^2 - 128u_6u_5u_2^9u_1^7x_1^2 \end{aligned}$$

Reduced to zero.

1397. Creating S-polynomial from the pair  $(p_{18}, p_{78})$ .

Forming S-pol of  $p_{18}$  and  $p_{78}$ :

$$\begin{aligned} p_{330} = & -512u_2^9u_1^9x_{12}x_{10} + 512u_2^8u_1^9x_{12}x_4x_1 + 1024u_5u_2^7u_1^{10}x_{12}x_1 - \\ & 512u_2^8u_1^9x_{10}x_5x_1 + 256u_2^{10}u_1^8x_{10}x_5 - 512u_6u_2^9u_1^8x_{10}x_1 - \\ & 256u_5u_2^8u_1^8x_5x_1^2 + 128u_6u_2^{10}u_1^7x_4x_1 - 128u_6u_5u_2^9u_1^7x_1^2 \end{aligned}$$

Reduced to zero.

1398. Creating S-polynomial from the pair  $(p_{18}, p_{79})$ .

Forming S-pol of  $p_{18}$  and  $p_{79}$ :

$$\begin{aligned} p_{331} = & (1024u_2^{17}u_1^{10} - 2048u_2^{15}u_1^{11})x_{12}x_4 - 2048u_2^{15}u_1^{11}x_{10}x_5x_1 + \\ & (8192u_2^{12}u_1^{13} - 4096u_2^{12}u_1^{12})x_5x_4x_1^2 + \\ & (1024u_2^{16}u_1^{10} - 4096u_2^{14}u_1^{12})x_5x_4x_1 + \\ & (-512u_2^{18}u_1^9 + 1024u_2^{16}u_1^{10})x_5x_4 - 1024u_5u_2^{15}u_1^{10}x_5x_1^2 + \\ & 2048u_5u_2^{15}u_1^{11}x_5x_1 + \\ & (1024u_6u_2^{15}u_1^{10} + 4096u_6u_2^{13}u_1^{12} - 2048u_6u_2^{13}u_1^{11})x_4x_1^2 + \\ & (512u_6u_2^{17}u_1^9 - 2048u_6u_2^{15}u_1^{11} - 1024u_6u_2^{15}u_1^{10})x_4x_1 \end{aligned}$$

S-pol added.

1399. Creating S-polynomial from the pair  $(p_{18}, p_{80})$ .

Forming S-pol of  $p_{18}$  and  $p_{80}$ :

$$\begin{aligned} p_{332} = & -16u_2^9u_1^4x_{12} + 8u_2^{10}u_1^3x_5 - 16u_6u_2^7u_1^4x_1^2 + \\ & (-8u_6u_2^9u_1^3 + 32u_6u_2^7u_1^5)x_1 \end{aligned}$$

Reduced to zero.

1400. Creating S-polynomial from the pair  $(p_{18}, p_{81})$ .

Skipping pair  $p_{18}$  and  $p_{81}$  because gcd of their leading monoms is zero.

1401. Creating S-polynomial from the pair  $(p_{18}, p_{82})$ .

Skipping pair  $p_{18}$  and  $p_{82}$  because gcd of their leading monoms is zero.

1402. Creating S-polynomial from the pair  $(p_{18}, p_{83})$ .  
 Skipping pair  $p_{18}$  and  $p_{83}$  because gcd of their leading monoms is zero.
1403. Creating S-polynomial from the pair  $(p_{18}, p_{84})$ .  
 Skipping pair  $p_{18}$  and  $p_{84}$  because gcd of their leading monoms is zero.
1404. Creating S-polynomial from the pair  $(p_{18}, p_{85})$ .  
 Skipping pair  $p_{18}$  and  $p_{85}$  because gcd of their leading monoms is zero.
1405. Creating S-polynomial from the pair  $(p_{18}, p_{86})$ .  
 Skipping pair  $p_{18}$  and  $p_{86}$  because gcd of their leading monoms is zero.
1406. Creating S-polynomial from the pair  $(p_{18}, p_{87})$ .  
 Skipping pair  $p_{18}$  and  $p_{87}$  because gcd of their leading monoms is zero.
1407. Creating S-polynomial from the pair  $(p_{18}, p_{88})$ .  
 Skipping pair  $p_{18}$  and  $p_{88}$  because gcd of their leading monoms is zero.
1408. Creating S-polynomial from the pair  $(p_{18}, p_{89})$ .  
 Skipping pair  $p_{18}$  and  $p_{89}$  because gcd of their leading monoms is zero.
1409. Creating S-polynomial from the pair  $(p_{18}, p_{90})$ .  
 Skipping pair  $p_{18}$  and  $p_{90}$  because gcd of their leading monoms is zero.
1410. Creating S-polynomial from the pair  $(p_{18}, p_{91})$ .  
 Skipping pair  $p_{18}$  and  $p_{91}$  because gcd of their leading monoms is zero.
1411. Creating S-polynomial from the pair  $(p_{18}, p_{92})$ .  
 Skipping pair  $p_{18}$  and  $p_{92}$  because gcd of their leading monoms is zero.
1412. Creating S-polynomial from the pair  $(p_{18}, p_{93})$ .  
 Skipping pair  $p_{18}$  and  $p_{93}$  because gcd of their leading monoms is zero.
1413. Creating S-polynomial from the pair  $(p_{18}, p_{94})$ .  
 Skipping pair  $p_{18}$  and  $p_{94}$  because gcd of their leading monoms is zero.
1414. Creating S-polynomial from the pair  $(p_{18}, p_{95})$ .  
 Skipping pair  $p_{18}$  and  $p_{95}$  because gcd of their leading monoms is zero.
1415. Creating S-polynomial from the pair  $(p_{18}, p_{96})$ .  
 Skipping pair  $p_{18}$  and  $p_{96}$  because gcd of their leading monoms is zero.
1416. Creating S-polynomial from the pair  $(p_{18}, p_{97})$ .  
 Skipping pair  $p_{18}$  and  $p_{97}$  because gcd of their leading monoms is zero.
1417. Creating S-polynomial from the pair  $(p_{18}, p_{98})$ .  
 Forming S-pol of  $p_{18}$  and  $p_{98}$ : Polynomial too big for output (text size is 2439 characters, number of terms is 29)  
 Reduced to zero.

1418. Creating S-polynomial from the pair  $(p_{18}, p_{99})$ .

Skipping pair  $p_{18}$  and  $p_{99}$  because gcd of their leading monoms is zero.

1419. Creating S-polynomial from the pair  $(p_{18}, p_{100})$ .

Forming S-pol of  $p_{18}$  and  $p_{100}$ :

$$\begin{aligned}
p_{333} = & -1048576u_2^{19}u_1^{20}x_{12}x_{10}x_4 + 1048576u_5u_2^{18}u_1^{20}x_{12}x_{10}x_1 + \\
& (2097152u_5u_2^{17}u_1^{21} + 2097152u_2^{18}u_1^{21})x_{12}x_4x_1 + \\
& (262144u_5^2u_2^{20}u_1^{18} - 1048576u_5^2u_2^{18}u_1^{20})x_{12}x_1 - \\
& 1048576u_6u_2^{18}u_1^{20}x_{10}^2x_1 - 1048576u_2^{18}u_1^{20}x_{10}x_5x_4x_1 + \\
& 524288u_2^{20}u_1^{19}x_{10}x_5x_4 - 524288u_5u_2^{19}u_1^{19}x_{10}x_5x_1 - \\
& 524288u_6u_2^{19}u_1^{19}x_{10}x_4x_1 - 262144u_6u_5u_2^{20}u_1^{18}x_{10}x_1 - \\
& 524288u_5u_2^{18}u_1^{19}x_5x_4x_1^2 - 131072u_5^2u_2^{21}u_1^{17}x_5x_1 - \\
& 262144u_6u_5u_2^{19}u_1^{18}x_4x_1^2 + \\
& (131072u_6u_5u_2^{21}u_1^{17} + 524288u_6u_2^{20}u_1^{19})x_4x_1 - \\
& 262144u_6u_5^2u_2^{20}u_1^{18}x_1
\end{aligned}$$

Reduced to zero.

1420. Creating S-polynomial from the pair  $(p_{18}, p_{101})$ .

Forming S-pol of  $p_{18}$  and  $p_{101}$ :

$$\begin{aligned}
p_{334} = & 32u_2^8u_1^5x_{12}x_4 + 128u_5u_2^5u_1^7x_{12}x_1 - 64u_2^6u_1^6x_{10}x_5x_1 - \\
& 128u_6u_2^5u_1^7x_{10}x_1 + 32u_2^7u_1^5x_5x_4x_1 - 16u_2^9u_1^4x_5x_4 - \\
& 32u_5u_2^6u_1^5x_5x_1^2 + 32u_6u_2^6u_1^5x_4x_1^2 + 16u_6u_2^8u_1^4x_4x_1
\end{aligned}$$

Reduced to zero.

1421. Creating S-polynomial from the pair  $(p_{18}, p_{102})$ .

Forming S-pol of  $p_{18}$  and  $p_{102}$ :

$$\begin{aligned}
p_{335} = & 512u_2^{16}u_1^9x_{12}x_4 - 1024u_2^{14}u_1^{10}x_{10}x_5x_1 + \\
& (4096u_2^{11}u_1^{12} - 2048u_2^{11}u_1^{11})x_5x_4x_1^2 + \\
& (512u_2^{15}u_1^9 - 2048u_2^{13}u_1^{11})x_5x_4x_1 - 256u_2^{17}u_1^8x_5x_4 - \\
& 512u_5u_2^{14}u_1^9x_5x_1^2 + 1024u_5u_2^{14}u_1^{10}x_5x_1 + \\
& (512u_6u_2^{14}u_1^9 + 2048u_6u_2^{12}u_1^{11})x_4x_1^2 + \\
& (256u_6u_2^{16}u_1^8 - 1024u_6u_2^{14}u_1^{10} - 2048u_6u_2^{12}u_1^{11})x_4x_1
\end{aligned}$$

S-pol added.

1422. Creating S-polynomial from the pair  $(p_{18}, p_{103})$ .

Forming S-pol of  $p_{18}$  and  $p_{103}$ : Polynomial too big for output (text size is 2451 characters, number of terms is 29)

Reduced to zero.

1423. Creating S-polynomial from the pair  $(p_{18}, p_{104})$ .  
 Skipping pair  $p_{18}$  and  $p_{104}$  because gcd of their leading monoms is zero.
1424. Creating S-polynomial from the pair  $(p_{18}, p_{105})$ .  
 Skipping pair  $p_{18}$  and  $p_{105}$  because gcd of their leading monoms is zero.
1425. Creating S-polynomial from the pair  $(p_{18}, p_{106})$ .  
 Skipping pair  $p_{18}$  and  $p_{106}$  because gcd of their leading monoms is zero.
1426. Creating S-polynomial from the pair  $(p_{19}, p_{32})$ .  
 Skipping pair  $p_{19}$  and  $p_{32}$  because gcd of their leading monoms is zero.
1427. Creating S-polynomial from the pair  $(p_{19}, p_{33})$ .  
 Skipping pair  $p_{19}$  and  $p_{33}$  because gcd of their leading monoms is zero.
1428. Creating S-polynomial from the pair  $(p_{19}, p_{34})$ .  
 Skipping pair  $p_{19}$  and  $p_{34}$  because gcd of their leading monoms is zero.
1429. Creating S-polynomial from the pair  $(p_{19}, p_{35})$ .  
 Forming S-pol of  $p_{19}$  and  $p_{35}$ :
- $$p_{336} = -8u_3^9u_1^3x_6 + 4u_3^{10}u_1^2x_4 - 8u_5u_3^7u_1^3x_2^2 + (-4u_5u_3^9u_1^2 + 16u_5u_3^7u_1^4)x_2$$
- Reduced to zero.
1430. Creating S-polynomial from the pair  $(p_{19}, p_{36})$ .  
 Skipping pair  $p_{19}$  and  $p_{36}$  because gcd of their leading monoms is zero.
1431. Creating S-polynomial from the pair  $(p_{19}, p_{37})$ .  
 Skipping pair  $p_{19}$  and  $p_{37}$  because gcd of their leading monoms is zero.
1432. Creating S-polynomial from the pair  $(p_{19}, p_{38})$ .  
 Skipping pair  $p_{19}$  and  $p_{38}$  because gcd of their leading monoms is zero.
1433. Creating S-polynomial from the pair  $(p_{19}, p_{39})$ .  
 Skipping pair  $p_{19}$  and  $p_{39}$  because gcd of their leading monoms is zero.
1434. Creating S-polynomial from the pair  $(p_{19}, p_{40})$ .  
 Skipping pair  $p_{19}$  and  $p_{40}$  because gcd of their leading monoms is zero.
1435. Creating S-polynomial from the pair  $(p_{19}, p_{41})$ .  
 Skipping pair  $p_{19}$  and  $p_{41}$  because gcd of their leading monoms is zero.
1436. Creating S-polynomial from the pair  $(p_{19}, p_{42})$ .  
 Skipping pair  $p_{19}$  and  $p_{42}$  because gcd of their leading monoms is zero.
1437. Creating S-polynomial from the pair  $(p_{19}, p_{43})$ .  
 Skipping pair  $p_{19}$  and  $p_{43}$  because gcd of their leading monoms is zero.

1438. Creating S-polynomial from the pair  $(p_{19}, p_{44})$ .

Forming S-pol of  $p_{19}$  and  $p_{44}$ :

$$\begin{aligned} p_{337} = & (32u_3^{13}u_1^5 + 128u_3^{11}u_1^7)x_6^2 + (-16u_3^{14}u_1^4 - 64u_3^{12}u_1^6)x_6x_4 + \\ & (32u_5u_3^{13}u_1^4 + 64u_5u_3^{11}u_1^6 - 256u_5u_3^9u_1^8)x_6x_2 + \\ & (16u_5u_3^{12}u_1^4 + 64u_5u_3^{10}u_1^6)x_4x_2^2 + \\ & (-8u_5u_3^{14}u_1^3 - 32u_5u_3^{12}u_1^5)x_4x_2 + \\ & (8u_5^2u_3^{13}u_1^3 + 32u_5^2u_3^{11}u_1^5)x_2^2 \end{aligned}$$

Reduced to zero.

1439. Creating S-polynomial from the pair  $(p_{19}, p_{45})$ .

Forming S-pol of  $p_{19}$  and  $p_{45}$ :

$$\begin{aligned} p_{338} = & (2048u_3^{16}u_1^{11} + 8192u_3^{14}u_1^{13})x_8x_6 + 2048u_3^{15}u_1^{11}x_8x_4x_2 + \\ & (-1024u_3^{17}u_1^{10} - 4096u_3^{15}u_1^{12})x_8x_4 + \\ & (2048u_5u_3^{16}u_1^{10} + 4096u_5u_3^{14}u_1^{12} - 16384u_5u_3^{12}u_1^{14})x_8x_2 - \\ & 2048u_3^{15}u_1^{11}x_6x_5x_2 + 4096u_5u_3^{13}u_1^{12}x_5x_2^2 - \\ & 512u_5u_3^{17}u_1^9x_5x_2 + 1024u_6u_3^{15}u_1^{10}x_4x_2^2 - \\ & 2048u_6u_3^{15}u_1^{11}x_4x_2 + (512u_6u_5u_3^{16}u_1^9 + 2048u_6u_5u_3^{14}u_1^{11})x_2^2 \end{aligned}$$

Reduced to zero.

1440. Creating S-polynomial from the pair  $(p_{19}, p_{46})$ .

Forming S-pol of  $p_{19}$  and  $p_{46}$ :

$$\begin{aligned} p_{339} = & -16u_3^7u_1^4x_6^2 + 8u_3^8u_1^3x_6x_4 + \\ & (-16u_5u_3^7u_1^3 + 32u_5u_3^5u_1^5)x_6x_2 - 8u_5u_3^6u_1^3x_4x_2^2 + \\ & 4u_5u_3^8u_1^2x_4x_2 - 4u_5^2u_3^7u_1^2x_2^2 \end{aligned}$$

Reduced to zero.

1441. Creating S-polynomial from the pair  $(p_{19}, p_{47})$ .

Forming S-pol of  $p_{19}$  and  $p_{47}$ : Polynomial too big for output (text size is 1118 characters, number of terms is 15)

Reduced to zero.

1442. Creating S-polynomial from the pair  $(p_{19}, p_{48})$ .

Forming S-pol of  $p_{19}$  and  $p_{48}$ :

$$\begin{aligned} p_{340} = & -256u_3^9u_1^8x_8x_6 + 128u_3^{10}u_1^7x_8x_4 + \\ & (-128u_5u_3^9u_1^7 + 512u_5u_3^7u_1^9)x_8x_2 - 128u_6u_3^9u_1^7x_6x_2 - \\ & 128u_5u_3^8u_1^7x_5x_2^2 + 64u_6u_3^{10}u_1^6x_4x_2 - 64u_6u_5u_3^9u_1^6x_2^2 \end{aligned}$$

Reduced to zero.



1443. Creating S-polynomial from the pair  $(p_{19}, p_{49})$ .

Forming S-pol of  $p_{19}$  and  $p_{49}$ :

$$\begin{aligned} p_{341} = & (512u_3^{15}u_1^9 + 2048u_3^{13}u_1^{11})x_8x_6 + 2048u_3^{12}u_1^{11}x_8x_4x_2 + \\ & (-256u_3^{16}u_1^8 - 1024u_3^{14}u_1^{10})x_8x_4 + \\ & (512u_5u_3^{15}u_1^8 + 1024u_5u_3^{13}u_1^{10})x_8x_2 - 2048u_3^{12}u_1^{11}x_6x_5x_2 - \\ & 4096u_6u_3^{11}u_1^{12}x_6x_2 + 256u_5u_3^{14}u_1^8x_5x_2^2 + \\ & (-128u_5u_3^{16}u_1^7 - 512u_5u_3^{14}u_1^9)x_5x_2 + 1024u_6u_3^{12}u_1^{10}x_4x_2^2 + \\ & (128u_6u_5u_3^{15}u_1^7 + 512u_6u_5u_3^{13}u_1^9)x_2^2 \end{aligned}$$

Reduced to zero.

1444. Creating S-polynomial from the pair  $(p_{19}, p_{50})$ .

Skipping pair  $p_{19}$  and  $p_{50}$  because gcd of their leading monoms is zero.

1445. Creating S-polynomial from the pair  $(p_{19}, p_{51})$ .

Forming S-pol of  $p_{19}$  and  $p_{51}$ :

$$\begin{aligned} p_{342} = & -256u_3^9u_1^8x_8x_6 - 256u_3^8u_1^8x_8x_4x_2 + 128u_3^{10}u_1^7x_8x_4 - \\ & 256u_5u_3^9u_1^7x_8x_2 + 256u_3^8u_1^8x_6x_5x_2 + 512u_6u_3^7u_1^9x_6x_2 + \\ & 64u_5u_3^{10}u_1^6x_5x_2 - 128u_6u_3^8u_1^7x_4x_2^2 - 64u_6u_5u_3^9u_1^6x_2^2 \end{aligned}$$

Reduced to zero.

1446. Creating S-polynomial from the pair  $(p_{19}, p_{52})$ .

Skipping pair  $p_{19}$  and  $p_{52}$  because gcd of their leading monoms is zero.

1447. Creating S-polynomial from the pair  $(p_{19}, p_{53})$ .

Skipping pair  $p_{19}$  and  $p_{53}$  because gcd of their leading monoms is zero.

1448. Creating S-polynomial from the pair  $(p_{19}, p_{54})$ .

Skipping pair  $p_{19}$  and  $p_{54}$  because gcd of their leading monoms is zero.

1449. Creating S-polynomial from the pair  $(p_{19}, p_{55})$ .

Skipping pair  $p_{19}$  and  $p_{55}$  because gcd of their leading monoms is zero.

1450. Creating S-polynomial from the pair  $(p_{19}, p_{56})$ .

Skipping pair  $p_{19}$  and  $p_{56}$  because gcd of their leading monoms is zero.

1451. Creating S-polynomial from the pair  $(p_{19}, p_{57})$ .

Skipping pair  $p_{19}$  and  $p_{57}$  because gcd of their leading monoms is zero.

1452. Creating S-polynomial from the pair  $(p_{19}, p_{58})$ .

Skipping pair  $p_{19}$  and  $p_{58}$  because gcd of their leading monoms is zero.

1453. Creating S-polynomial from the pair  $(p_{19}, p_{59})$ .

Skipping pair  $p_{19}$  and  $p_{59}$  because gcd of their leading monoms is zero.

1454. Creating S-polynomial from the pair  $(p_{19}, p_{60})$ .  
 Skipping pair  $p_{19}$  and  $p_{60}$  because gcd of their leading monoms is zero.
1455. Creating S-polynomial from the pair  $(p_{19}, p_{61})$ .  
 Skipping pair  $p_{19}$  and  $p_{61}$  because gcd of their leading monoms is zero.
1456. Creating S-polynomial from the pair  $(p_{19}, p_{62})$ .  
 Skipping pair  $p_{19}$  and  $p_{62}$  because gcd of their leading monoms is zero.
1457. Creating S-polynomial from the pair  $(p_{19}, p_{63})$ .  
 Skipping pair  $p_{19}$  and  $p_{63}$  because gcd of their leading monoms is zero.
1458. Creating S-polynomial from the pair  $(p_{19}, p_{64})$ .  
 Skipping pair  $p_{19}$  and  $p_{64}$  because gcd of their leading monoms is zero.
1459. Creating S-polynomial from the pair  $(p_{19}, p_{65})$ .  
 Skipping pair  $p_{19}$  and  $p_{65}$  because gcd of their leading monoms is zero.
1460. Creating S-polynomial from the pair  $(p_{19}, p_{66})$ .  
 Skipping pair  $p_{19}$  and  $p_{66}$  because gcd of their leading monoms is zero.
1461. Creating S-polynomial from the pair  $(p_{19}, p_{67})$ .  
 Skipping pair  $p_{19}$  and  $p_{67}$  because gcd of their leading monoms is zero.
1462. Creating S-polynomial from the pair  $(p_{19}, p_{68})$ .  
 Skipping pair  $p_{19}$  and  $p_{68}$  because gcd of their leading monoms is zero.
1463. Creating S-polynomial from the pair  $(p_{19}, p_{69})$ .  
 Skipping pair  $p_{19}$  and  $p_{69}$  because gcd of their leading monoms is zero.
1464. Creating S-polynomial from the pair  $(p_{19}, p_{70})$ .  
 Skipping pair  $p_{19}$  and  $p_{70}$  because gcd of their leading monoms is zero.
1465. Creating S-polynomial from the pair  $(p_{19}, p_{71})$ .  
 Skipping pair  $p_{19}$  and  $p_{71}$  because gcd of their leading monoms is zero.
1466. Creating S-polynomial from the pair  $(p_{19}, p_{72})$ .  
 Skipping pair  $p_{19}$  and  $p_{72}$  because gcd of their leading monoms is zero.
1467. Creating S-polynomial from the pair  $(p_{19}, p_{73})$ .  
 Skipping pair  $p_{19}$  and  $p_{73}$  because gcd of their leading monoms is zero.
1468. Creating S-polynomial from the pair  $(p_{19}, p_{74})$ .  
 Skipping pair  $p_{19}$  and  $p_{74}$  because gcd of their leading monoms is zero.
1469. Creating S-polynomial from the pair  $(p_{19}, p_{75})$ .  
 Skipping pair  $p_{19}$  and  $p_{75}$  because gcd of their leading monoms is zero.
1470. Creating S-polynomial from the pair  $(p_{19}, p_{76})$ .  
 Skipping pair  $p_{19}$  and  $p_{76}$  because gcd of their leading monoms is zero.

1471. Creating S-polynomial from the pair  $(p_{19}, p_{77})$ .

Skipping pair  $p_{19}$  and  $p_{77}$  because gcd of their leading monoms is zero.

1472. Creating S-polynomial from the pair  $(p_{19}, p_{78})$ .

Skipping pair  $p_{19}$  and  $p_{78}$  because gcd of their leading monoms is zero.

1473. Creating S-polynomial from the pair  $(p_{19}, p_{79})$ .

Skipping pair  $p_{19}$  and  $p_{79}$  because gcd of their leading monoms is zero.

1474. Creating S-polynomial from the pair  $(p_{19}, p_{80})$ .

Skipping pair  $p_{19}$  and  $p_{80}$  because gcd of their leading monoms is zero.

1475. Creating S-polynomial from the pair  $(p_{19}, p_{81})$ .

Skipping pair  $p_{19}$  and  $p_{81}$  because gcd of their leading monoms is zero.

1476. Creating S-polynomial from the pair  $(p_{19}, p_{82})$ .

Forming S-pol of  $p_{19}$  and  $p_{82}$ :

$$p_{343} = -16u_3^9u_1^4x_6 + 8u_3^{10}u_1^3x_4 - 16u_5u_3^7u_1^4x_2^2 + \\ (-8u_5u_3^9u_1^3 + 32u_5u_3^7u_1^5)x_2$$

Reduced to zero.

1477. Creating S-polynomial from the pair  $(p_{19}, p_{83})$ .

Forming S-pol of  $p_{19}$  and  $p_{83}$ :

$$p_{344} = -1048576u_5u_3^{21}u_1^{20}x_8x_6 - 2097152u_5u_3^{20}u_1^{20}x_8x_4x_2 + \\ 524288u_5u_3^{22}u_1^{19}x_8x_4 - 1048576u_5^2u_3^{21}u_1^{19}x_8x_2 + \\ 2097152u_6u_3^{19}u_1^{21}x_6^2x_2 + 1048576u_5u_3^{20}u_1^{20}x_6x_5x_2 + \\ 524288u_6u_5u_3^{21}u_1^{19}x_6x_2 + 524288u_5u_3^{21}u_1^{19}x_5x_4x_2 + \\ 262144u_5^2u_3^{22}u_1^{18}x_5x_2 + \\ (-262144u_6u_5u_3^{22}u_1^{18} - 1048576u_6u_3^{21}u_1^{20})x_4x_2 + \\ 524288u_6u_5^2u_3^{21}u_1^{19}x_2$$

Reduced to zero.

1478. Creating S-polynomial from the pair  $(p_{19}, p_{84})$ .

Forming S-pol of  $p_{19}$  and  $p_{84}$ :

$$p_{345} = -512u_3^9u_1^9x_8x_6 - 512u_3^8u_1^9x_8x_4x_2 + 256u_3^{10}u_1^8x_8x_4 - \\ 512u_5u_3^9u_1^8x_8x_2 + 512u_3^8u_1^9x_6x_5x_2 + 1024u_6u_3^7u_1^{10}x_6x_2 + \\ 128u_5u_3^{10}u_1^7x_5x_2 - 256u_6u_3^8u_1^8x_4x_2^2 - 128u_6u_5u_3^9u_1^7x_2^2$$

Reduced to zero.

1479. Creating S-polynomial from the pair  $(p_{19}, p_{85})$ .

Forming S-pol of  $p_{19}$  and  $p_{85}$ :

$$\begin{aligned} p_{346} = & -512u_3^9u_1^9x_8x_6 + 256u_3^{10}u_1^8x_8x_4 + \\ & (-256u_5u_3^9u_1^8 + 1024u_5u_3^7u_1^{10})x_8x_2 - 256u_6u_3^9u_1^8x_6x_2 - \\ & 256u_5u_3^8u_1^8x_5x_2^2 + 128u_6u_3^{10}u_1^7x_4x_2 - 128u_6u_5u_3^9u_1^7x_2^2 \end{aligned}$$

Reduced to zero.

1480. Creating S-polynomial from the pair  $(p_{19}, p_{86})$ .

Skipping pair  $p_{19}$  and  $p_{86}$  because gcd of their leading monoms is zero.

1481. Creating S-polynomial from the pair  $(p_{19}, p_{87})$ .

Skipping pair  $p_{19}$  and  $p_{87}$  because gcd of their leading monoms is zero.

1482. Creating S-polynomial from the pair  $(p_{19}, p_{88})$ .

Skipping pair  $p_{19}$  and  $p_{88}$  because gcd of their leading monoms is zero.

1483. Creating S-polynomial from the pair  $(p_{19}, p_{89})$ .

Skipping pair  $p_{19}$  and  $p_{89}$  because gcd of their leading monoms is zero.

1484. Creating S-polynomial from the pair  $(p_{19}, p_{90})$ .

Skipping pair  $p_{19}$  and  $p_{90}$  because gcd of their leading monoms is zero.

1485. Creating S-polynomial from the pair  $(p_{19}, p_{91})$ .

Skipping pair  $p_{19}$  and  $p_{91}$  because gcd of their leading monoms is zero.

1486. Creating S-polynomial from the pair  $(p_{19}, p_{92})$ .

Skipping pair  $p_{19}$  and  $p_{92}$  because gcd of their leading monoms is zero.

1487. Creating S-polynomial from the pair  $(p_{19}, p_{93})$ .

Skipping pair  $p_{19}$  and  $p_{93}$  because gcd of their leading monoms is zero.

1488. Creating S-polynomial from the pair  $(p_{19}, p_{94})$ .

Skipping pair  $p_{19}$  and  $p_{94}$  because gcd of their leading monoms is zero.

1489. Creating S-polynomial from the pair  $(p_{19}, p_{95})$ .

Forming S-pol of  $p_{19}$  and  $p_{95}$ :

$$\begin{aligned} p_{347} = & -1048576u_3^{19}u_1^{20}x_8x_6x_4 + 1048576u_5u_3^{18}u_1^{20}x_8x_6x_2 - \\ & 1048576u_3^{18}u_1^{20}x_8x_4^2x_2 + 524288u_3^{20}u_1^{19}x_8x_4^2 + \\ & (-524288u_5u_3^{19}u_1^{19} + 2097152u_5u_3^{17}u_1^{21} + 2097152u_3^{18}u_1^{21})x_8x_4x_2 + \\ & (262144u_5^2u_3^{20}u_1^{18} - 1048576u_5^2u_3^{18}u_1^{20})x_8x_2 - \\ & 1048576u_6u_3^{18}u_1^{20}x_6^2x_2 - 524288u_5u_3^{19}u_1^{19}x_6x_5x_2 - \\ & 262144u_6u_5u_3^{20}u_1^{18}x_6x_2 - 524288u_5u_3^{18}u_1^{19}x_5x_4x_2^2 - \\ & 131072u_5^2u_3^{21}u_1^{17}x_5x_2 - 262144u_6u_5u_3^{19}u_1^{18}x_4x_2^2 + \\ & (131072u_6u_5u_3^{21}u_1^{17} + 524288u_6u_3^{20}u_1^{19})x_4x_2 - \\ & 262144u_6u_5^2u_3^{20}u_1^{18}x_2 \end{aligned}$$

Reduced to zero.

1490. Creating S-polynomial from the pair  $(p_{19}, p_{96})$ .  
 Skipping pair  $p_{19}$  and  $p_{96}$  because gcd of their leading monoms is zero.
1491. Creating S-polynomial from the pair  $(p_{19}, p_{97})$ .  
 Skipping pair  $p_{19}$  and  $p_{97}$  because gcd of their leading monoms is zero.
1492. Creating S-polynomial from the pair  $(p_{19}, p_{98})$ .  
 Skipping pair  $p_{19}$  and  $p_{98}$  because gcd of their leading monoms is zero.
1493. Creating S-polynomial from the pair  $(p_{19}, p_{99})$ .  
 Skipping pair  $p_{19}$  and  $p_{99}$  because gcd of their leading monoms is zero.
1494. Creating S-polynomial from the pair  $(p_{19}, p_{100})$ .  
 Skipping pair  $p_{19}$  and  $p_{100}$  because gcd of their leading monoms is zero.
1495. Creating S-polynomial from the pair  $(p_{19}, p_{101})$ .  
 Skipping pair  $p_{19}$  and  $p_{101}$  because gcd of their leading monoms is zero.
1496. Creating S-polynomial from the pair  $(p_{19}, p_{102})$ .  
 Skipping pair  $p_{19}$  and  $p_{102}$  because gcd of their leading monoms is zero.
1497. Creating S-polynomial from the pair  $(p_{19}, p_{103})$ .  
 Skipping pair  $p_{19}$  and  $p_{103}$  because gcd of their leading monoms is zero.
1498. Creating S-polynomial from the pair  $(p_{19}, p_{104})$ .  
 Skipping pair  $p_{19}$  and  $p_{104}$  because gcd of their leading monoms is zero.
1499. Creating S-polynomial from the pair  $(p_{19}, p_{105})$ .  
 Skipping pair  $p_{19}$  and  $p_{105}$  because gcd of their leading monoms is zero.
1500. Creating S-polynomial from the pair  $(p_{19}, p_{106})$ .  
 Skipping pair  $p_{19}$  and  $p_{106}$  because gcd of their leading monoms is zero.
1501. Creating S-polynomial from the pair  $(p_{20}, p_{32})$ .  
 Skipping pair  $p_{20}$  and  $p_{32}$  because gcd of their leading monoms is zero.
1502. Creating S-polynomial from the pair  $(p_{20}, p_{33})$ .  
 Skipping pair  $p_{20}$  and  $p_{33}$  because gcd of their leading monoms is zero.
1503. Creating S-polynomial from the pair  $(p_{20}, p_{34})$ .  
 Skipping pair  $p_{20}$  and  $p_{34}$  because gcd of their leading monoms is zero.
1504. Creating S-polynomial from the pair  $(p_{20}, p_{35})$ .  
 Skipping pair  $p_{20}$  and  $p_{35}$  because gcd of their leading monoms is zero.
1505. Creating S-polynomial from the pair  $(p_{20}, p_{36})$ .  
 Forming S-pol of  $p_{20}$  and  $p_{36}$ :

$$p_{348} = -8u_3^9 u_1^3 x_8 + 4u_3^{10} u_1^2 x_5 - 8u_6 u_3^7 u_1^3 x_2^2 + (-4u_6 u_3^9 u_1^2 + 16u_6 u_3^7 u_1^4) x_2$$

Reduced to zero.

1506. Creating S-polynomial from the pair  $(p_{20}, p_{37})$ .

Forming S-pol of  $p_{20}$  and  $p_{37}$ :

$$\begin{aligned} p_{349} = & 256u_3^{16}u_1^8x_8x_4 - 512u_3^{14}u_1^9x_6x_5x_2 + 256u_3^{15}u_1^8x_5x_4x_2 - \\ & 128u_3^{17}u_1^7x_5x_4 - 256u_5u_3^{14}u_1^8x_5x_2^2 + 512u_5u_3^{14}u_1^9x_5x_2 + \\ & 256u_6u_3^{14}u_1^8x_4x_2^2 + (128u_6u_3^{16}u_1^7 - 512u_6u_3^{14}u_1^9)x_4x_2 \end{aligned}$$

Reduced to zero.

1507. Creating S-polynomial from the pair  $(p_{20}, p_{38})$ .

Skipping pair  $p_{20}$  and  $p_{38}$  because gcd of their leading monoms is zero.

1508. Creating S-polynomial from the pair  $(p_{20}, p_{39})$ .

Skipping pair  $p_{20}$  and  $p_{39}$  because gcd of their leading monoms is zero.

1509. Creating S-polynomial from the pair  $(p_{20}, p_{40})$ .

Skipping pair  $p_{20}$  and  $p_{40}$  because gcd of their leading monoms is zero.

1510. Creating S-polynomial from the pair  $(p_{20}, p_{41})$ .

Forming S-pol of  $p_{20}$  and  $p_{41}$ :

$$\begin{aligned} p_{350} = & -256u_5u_3^{15}u_1^8x_8x_4 + 512u_6u_3^{13}u_1^9x_6x_4x_2 + 128u_5u_3^{16}u_1^7x_5x_4 + \\ & (-128u_6u_5u_3^{15}u_1^7 - 512u_6u_3^{14}u_1^9)x_4x_2 + 256u_6u_5^2u_3^{14}u_1^8x_2 \end{aligned}$$

Reduced to zero.

1511. Creating S-polynomial from the pair  $(p_{20}, p_{42})$ .

Skipping pair  $p_{20}$  and  $p_{42}$  because gcd of their leading monoms is zero.

1512. Creating S-polynomial from the pair  $(p_{20}, p_{43})$ .

Skipping pair  $p_{20}$  and  $p_{43}$  because gcd of their leading monoms is zero.

1513. Creating S-polynomial from the pair  $(p_{20}, p_{44})$ .

Skipping pair  $p_{20}$  and  $p_{44}$  because gcd of their leading monoms is zero.

1514. Creating S-polynomial from the pair  $(p_{20}, p_{45})$ .

Forming S-pol of  $p_{20}$  and  $p_{45}$ :

$$\begin{aligned} p_{351} = & (2048u_3^{16}u_1^{11} + 8192u_3^{14}u_1^{13})x_8x_6 - 8192u_3^{13}u_1^{13}x_8x_4x_2 + \\ & (1024u_5u_3^{16}u_1^{10} - 16384u_5u_3^{12}u_1^{14})x_8x_2 + 8192u_3^{13}u_1^{13}x_6x_5x_2 + \\ & (-1024u_3^{17}u_1^{10} - 4096u_3^{15}u_1^{12})x_6x_5 + \\ & (1024u_6u_3^{16}u_1^{10} + 4096u_6u_3^{14}u_1^{12})x_6x_2 + 4096u_5u_3^{13}u_1^{12}x_5x_2 - \\ & 512u_5u_3^{17}u_1^9x_5x_2 + 1024u_6u_3^{15}u_1^{10}x_4x_2^2 - \\ & 2048u_6u_3^{15}u_1^{11}x_4x_2 + (512u_6u_5u_3^{16}u_1^9 + 2048u_6u_5u_3^{14}u_1^{11})x_2^2 \end{aligned}$$

Reduced to zero.

1515. Creating S-polynomial from the pair  $(p_{20}, p_{46})$ .

Skipping pair  $p_{20}$  and  $p_{46}$  because gcd of their leading monoms is zero.

1516. Creating S-polynomial from the pair  $(p_{20}, p_{47})$ .

Forming S-pol of  $p_{20}$  and  $p_{47}$ : Polynomial too big for output (text size is 1168 characters, number of terms is 16)

Reduced to zero.

1517. Creating S-polynomial from the pair  $(p_{20}, p_{48})$ .

Forming S-pol of  $p_{20}$  and  $p_{48}$ :

$$\begin{aligned} p_{352} = & -256u_3^9u_1^8x_8x_6 + 256u_3^8u_1^8x_8x_4x_2 + 512u_5u_3^7u_1^9x_8x_2 - \\ & 256u_3^8u_1^8x_6x_5x_2 + 128u_3^{10}u_1^7x_6x_5 - 256u_6u_3^9u_1^7x_6x_2 - \\ & 128u_5u_3^8u_1^7x_5x_2^2 + 64u_6u_3^{10}u_1^6x_4x_2 - 64u_6u_5u_3^9u_1^6x_2^2 \end{aligned}$$

Reduced to zero.

1518. Creating S-polynomial from the pair  $(p_{20}, p_{49})$ .

Forming S-pol of  $p_{20}$  and  $p_{49}$ :

$$\begin{aligned} p_{353} = & (512u_3^{15}u_1^9 + 2048u_3^{13}u_1^{11})x_8x_6 - 512u_3^{14}u_1^9x_8x_4x_2 + \\ & 256u_5u_3^{15}u_1^8x_8x_2 + 512u_3^{14}u_1^9x_6x_5x_2 + \\ & (-256u_3^{16}u_1^8 - 1024u_3^{14}u_1^{10})x_6x_5 + \\ & (256u_6u_3^{15}u_1^8 + 1024u_6u_3^{13}u_1^{10} - 4096u_6u_3^{11}u_1^{12})x_6x_2 + \\ & 256u_5u_3^{14}u_1^8x_5x_2^2 + \\ & (-128u_5u_3^{16}u_1^7 - 512u_5u_3^{14}u_1^9)x_5x_2 + 1024u_6u_3^{12}u_1^{10}x_4x_2^2 + \\ & (128u_6u_5u_3^{15}u_1^7 + 512u_6u_5u_3^{13}u_1^9)x_2^2 \end{aligned}$$

Reduced to zero.

1519. Creating S-polynomial from the pair  $(p_{20}, p_{50})$ .

Forming S-pol of  $p_{20}$  and  $p_{50}$ :

$$\begin{aligned} p_{354} = & (32u_3^{13}u_1^5 + 128u_3^{11}u_1^7)x_8^2 + (-16u_3^{14}u_1^4 - 64u_3^{12}u_1^6)x_8x_5 + \\ & (32u_6u_3^{13}u_1^4 + 64u_6u_3^{11}u_1^6 - 256u_6u_3^9u_1^8)x_8x_2 + \\ & (16u_6u_3^{12}u_1^4 + 64u_6u_3^{10}u_1^6)x_5x_2^2 + \\ & (-8u_6u_3^{14}u_1^3 - 32u_6u_3^{12}u_1^5)x_5x_2 + \\ & (8u_6^2u_3^{13}u_1^3 + 32u_6^2u_3^{11}u_1^5)x_2^2 \end{aligned}$$

Reduced to zero.

1520. Creating S-polynomial from the pair  $(p_{20}, p_{51})$ .

Forming S-pol of  $p_{20}$  and  $p_{51}$ :

$$\begin{aligned} p_{355} = & -256u_3^9u_1^8x_8x_6 - 128u_5u_3^9u_1^7x_8x_2 + 128u_3^{10}u_1^7x_6x_5 + \\ & (-128u_6u_3^9u_1^7 + 512u_6u_3^7u_1^9)x_6x_2 + 64u_5u_3^{10}u_1^6x_5x_2 - \\ & 128u_6u_3^8u_1^7x_4x_2^2 - 64u_6u_5u_3^9u_1^6x_2^2 \end{aligned}$$

Reduced to zero.

1521. Creating S-polynomial from the pair  $(p_{20}, p_{52})$ .

Forming S-pol of  $p_{20}$  and  $p_{52}$ :

$$\begin{aligned} p_{356} = & (4096u_3^{22}u_1^{12} + 16384u_3^{20}u_1^{14})x_8^2x_4 - 8192u_3^{20}u_1^{13}x_8x_6x_5x_2 + \\ & 4096u_3^{21}u_1^{12}x_8x_5x_4x_2 + (-2048u_3^{23}u_1^{11} - 8192u_3^{21}u_1^{13})x_8x_5x_4 + \\ & (-2048u_5u_3^{22}u_1^{11} + 8192u_5u_3^{20}u_1^{13})x_8x_5x_2 + \\ & (4096u_6u_3^{22}u_1^{11} + 8192u_6u_3^{20}u_1^{13} - 32768u_6u_3^{18}u_1^{15})x_8x_4x_2 + \\ & (2048u_6u_3^{21}u_1^{11} + 8192u_6u_3^{19}u_1^{13})x_5x_4x_2^2 + \\ & (-1024u_6u_3^{23}u_1^{10} - 4096u_6u_3^{21}u_1^{12})x_5x_4x_2 + \\ & (-1024u_6u_5u_3^{22}u_1^{10} - 4096u_5u_3^{21}u_1^{12})x_5x_2^2 + 2048u_5u_3^{23}u_1^{11}x_5x_2 + \\ & (1024u_6^2u_3^{22}u_1^{10} + 4096u_6^2u_3^{20}u_1^{12})x_4x_2^2 + \\ & 2048u_6^2u_5u_3^{21}u_1^{11}x_2^2 - 1024u_6^2u_5u_3^{23}u_1^{10}x_2 \end{aligned}$$

Reduced to zero.

1522. Creating S-polynomial from the pair  $(p_{20}, p_{53})$ .

Forming S-pol of  $p_{20}$  and  $p_{53}$ :

$$\begin{aligned} p_{357} = & -16u_3^7u_1^4x_8^2 + 8u_3^8u_1^3x_8x_5 + \\ & (-16u_6u_3^7u_1^3 + 32u_6u_3^5u_1^5)x_8x_2 - 8u_6u_3^6u_1^3x_5x_2^2 + \\ & 4u_6u_3^8u_1^2x_5x_2 - 4u_6^2u_3^7u_1^2x_2^2 \end{aligned}$$

Reduced to zero.

1523. Creating S-polynomial from the pair  $(p_{20}, p_{54})$ .

Skipping pair  $p_{20}$  and  $p_{54}$  because gcd of their leading monoms is zero.

1524. Creating S-polynomial from the pair  $(p_{20}, p_{55})$ .

Skipping pair  $p_{20}$  and  $p_{55}$  because gcd of their leading monoms is zero.

1525. Creating S-polynomial from the pair  $(p_{20}, p_{56})$ .

Skipping pair  $p_{20}$  and  $p_{56}$  because gcd of their leading monoms is zero.

1526. Creating S-polynomial from the pair  $(p_{20}, p_{57})$ .

Skipping pair  $p_{20}$  and  $p_{57}$  because gcd of their leading monoms is zero.



1527. Creating S-polynomial from the pair  $(p_{20}, p_{58})$ .  
 Skipping pair  $p_{20}$  and  $p_{58}$  because gcd of their leading monoms is zero.
1528. Creating S-polynomial from the pair  $(p_{20}, p_{59})$ .  
 Skipping pair  $p_{20}$  and  $p_{59}$  because gcd of their leading monoms is zero.
1529. Creating S-polynomial from the pair  $(p_{20}, p_{60})$ .  
 Skipping pair  $p_{20}$  and  $p_{60}$  because gcd of their leading monoms is zero.
1530. Creating S-polynomial from the pair  $(p_{20}, p_{61})$ .  
 Skipping pair  $p_{20}$  and  $p_{61}$  because gcd of their leading monoms is zero.
1531. Creating S-polynomial from the pair  $(p_{20}, p_{62})$ .  
 Skipping pair  $p_{20}$  and  $p_{62}$  because gcd of their leading monoms is zero.
1532. Creating S-polynomial from the pair  $(p_{20}, p_{63})$ .  
 Skipping pair  $p_{20}$  and  $p_{63}$  because gcd of their leading monoms is zero.
1533. Creating S-polynomial from the pair  $(p_{20}, p_{64})$ .  
 Skipping pair  $p_{20}$  and  $p_{64}$  because gcd of their leading monoms is zero.
1534. Creating S-polynomial from the pair  $(p_{20}, p_{65})$ .  
 Skipping pair  $p_{20}$  and  $p_{65}$  because gcd of their leading monoms is zero.
1535. Creating S-polynomial from the pair  $(p_{20}, p_{66})$ .  
 Skipping pair  $p_{20}$  and  $p_{66}$  because gcd of their leading monoms is zero.
1536. Creating S-polynomial from the pair  $(p_{20}, p_{67})$ .  
 Skipping pair  $p_{20}$  and  $p_{67}$  because gcd of their leading monoms is zero.
1537. Creating S-polynomial from the pair  $(p_{20}, p_{68})$ .  
 Skipping pair  $p_{20}$  and  $p_{68}$  because gcd of their leading monoms is zero.
1538. Creating S-polynomial from the pair  $(p_{20}, p_{69})$ .  
 Skipping pair  $p_{20}$  and  $p_{69}$  because gcd of their leading monoms is zero.
1539. Creating S-polynomial from the pair  $(p_{20}, p_{70})$ .  
 Skipping pair  $p_{20}$  and  $p_{70}$  because gcd of their leading monoms is zero.
1540. Creating S-polynomial from the pair  $(p_{20}, p_{71})$ .  
 Skipping pair  $p_{20}$  and  $p_{71}$  because gcd of their leading monoms is zero.
1541. Creating S-polynomial from the pair  $(p_{20}, p_{72})$ .  
 Skipping pair  $p_{20}$  and  $p_{72}$  because gcd of their leading monoms is zero.
1542. Creating S-polynomial from the pair  $(p_{20}, p_{73})$ .  
 Skipping pair  $p_{20}$  and  $p_{73}$  because gcd of their leading monoms is zero.
1543. Creating S-polynomial from the pair  $(p_{20}, p_{74})$ .  
 Skipping pair  $p_{20}$  and  $p_{74}$  because gcd of their leading monoms is zero.

1544. Creating S-polynomial from the pair  $(p_{20}, p_{75})$ .  
 Skipping pair  $p_{20}$  and  $p_{75}$  because gcd of their leading monoms is zero.
1545. Creating S-polynomial from the pair  $(p_{20}, p_{76})$ .  
 Skipping pair  $p_{20}$  and  $p_{76}$  because gcd of their leading monoms is zero.
1546. Creating S-polynomial from the pair  $(p_{20}, p_{77})$ .  
 Skipping pair  $p_{20}$  and  $p_{77}$  because gcd of their leading monoms is zero.
1547. Creating S-polynomial from the pair  $(p_{20}, p_{78})$ .  
 Skipping pair  $p_{20}$  and  $p_{78}$  because gcd of their leading monoms is zero.
1548. Creating S-polynomial from the pair  $(p_{20}, p_{79})$ .  
 Skipping pair  $p_{20}$  and  $p_{79}$  because gcd of their leading monoms is zero.
1549. Creating S-polynomial from the pair  $(p_{20}, p_{80})$ .  
 Skipping pair  $p_{20}$  and  $p_{80}$  because gcd of their leading monoms is zero.
1550. Creating S-polynomial from the pair  $(p_{20}, p_{81})$ .  
 Forming S-pol of  $p_{20}$  and  $p_{81}$ :

$$p_{358} = 1024u_5u_3^{13}u_1^{10}x_8 - 2048u_6u_3^{11}u_1^{11}x_6x_2 - 512u_5u_3^{14}u_1^9x_5 + \\ 1024u_6u_3^{12}u_1^{10}x_4x_2 + 512u_6u_5u_3^{13}u_1^9x_2$$

Reduced to zero.

1551. Creating S-polynomial from the pair  $(p_{20}, p_{82})$ .  
 Skipping pair  $p_{20}$  and  $p_{82}$  because gcd of their leading monoms is zero.
1552. Creating S-polynomial from the pair  $(p_{20}, p_{83})$ .  
 Forming S-pol of  $p_{20}$  and  $p_{83}$ :

$$p_{359} = -1048576u_5u_3^{21}u_1^{20}x_8x_6 - 1048576u_5u_3^{20}u_1^{20}x_8x_4x_2 - \\ 524288u_5^2u_3^{21}u_1^{19}x_8x_2 + 2097152u_6u_3^{19}u_1^{21}x_6^2x_2 + \\ 524288u_5u_3^{22}u_1^{19}x_6x_5 + 524288u_5u_3^{21}u_1^{19}x_5x_4x_2 + \\ 262144u_5^2u_3^{22}u_1^{18}x_5x_2 + \\ (-262144u_6u_5u_3^{22}u_1^{18} - 1048576u_6u_3^{21}u_1^{20})x_4x_2 + \\ 524288u_6u_5^2u_3^{21}u_1^{19}x_2$$

Reduced to zero.

1553. Creating S-polynomial from the pair  $(p_{20}, p_{84})$ .  
 Forming S-pol of  $p_{20}$  and  $p_{84}$ :

$$p_{360} = -512u_3^9u_1^9x_8x_6 - 256u_5u_3^9u_1^8x_8x_2 + 256u_3^{10}u_1^8x_6x_5 + \\ (-256u_6u_3^9u_1^8 + 1024u_6u_3^7u_1^{10})x_6x_2 + 128u_5u_3^{10}u_1^7x_5x_2 - \\ 256u_6u_3^8u_1^8x_4x_2^2 - 128u_6u_5u_3^9u_1^7x_2^2$$

Reduced to zero.

1554. Creating S-polynomial from the pair  $(p_{20}, p_{85})$ .

Forming S-pol of  $p_{20}$  and  $p_{85}$ :

$$\begin{aligned} p_{361} = & -512u_3^9u_1^9x_8x_6 + 512u_3^8u_1^9x_8x_4x_2 + 1024u_5u_3^7u_1^{10}x_8x_2 - \\ & 512u_3^8u_1^9x_6x_5x_2 + 256u_3^{10}u_1^8x_6x_5 - 512u_6u_3^9u_1^8x_6x_2 - \\ & 256u_5u_3^8u_1^8x_5x_2^2 + 128u_6u_3^{10}u_1^7x_4x_2 - 128u_6u_5u_3^9u_1^7x_2^2 \end{aligned}$$

Reduced to zero.

1555. Creating S-polynomial from the pair  $(p_{20}, p_{86})$ .

Forming S-pol of  $p_{20}$  and  $p_{86}$ :

$$\begin{aligned} p_{362} = & (1024u_3^{17}u_1^{10} - 2048u_3^{15}u_1^{11})x_8x_4 - 2048u_3^{15}u_1^{11}x_6x_5x_2 + \\ & (8192u_3^{12}u_1^{13} - 4096u_3^{12}u_1^{12})x_5x_4x_2^2 + \\ & (1024u_3^{16}u_1^{10} - 4096u_3^{14}u_1^{12})x_5x_4x_2 + \\ & (-512u_3^{18}u_1^9 + 1024u_3^{16}u_1^{10})x_5x_4 - 1024u_5u_3^{15}u_1^{10}x_5x_2^2 + \\ & 2048u_5u_3^{15}u_1^{11}x_5x_2 + \\ & (1024u_6u_3^{15}u_1^{10} + 4096u_6u_3^{13}u_1^{12} - 2048u_6u_3^{13}u_1^{11})x_4x_2^2 + \\ & (512u_6u_3^{17}u_1^9 - 2048u_6u_3^{15}u_1^{11} - 1024u_6u_3^{15}u_1^{10})x_4x_2 \end{aligned}$$

S-pol added.

1556. Creating S-polynomial from the pair  $(p_{20}, p_{87})$ .

Forming S-pol of  $p_{20}$  and  $p_{87}$ :

$$\begin{aligned} p_{363} = & -16u_3^9u_1^4x_8 + 8u_3^{10}u_1^3x_5 - 16u_6u_3^7u_1^4x_2^2 + \\ & (-8u_6u_3^9u_1^3 + 32u_6u_3^7u_1^5)x_2 \end{aligned}$$

Reduced to zero.

1557. Creating S-polynomial from the pair  $(p_{20}, p_{88})$ .

Skipping pair  $p_{20}$  and  $p_{88}$  because gcd of their leading monoms is zero.

1558. Creating S-polynomial from the pair  $(p_{20}, p_{89})$ .

Skipping pair  $p_{20}$  and  $p_{89}$  because gcd of their leading monoms is zero.

1559. Creating S-polynomial from the pair  $(p_{20}, p_{90})$ .

Skipping pair  $p_{20}$  and  $p_{90}$  because gcd of their leading monoms is zero.

1560. Creating S-polynomial from the pair  $(p_{20}, p_{91})$ .

Skipping pair  $p_{20}$  and  $p_{91}$  because gcd of their leading monoms is zero.

1561. Creating S-polynomial from the pair  $(p_{20}, p_{92})$ .

Skipping pair  $p_{20}$  and  $p_{92}$  because gcd of their leading monoms is zero.

1562. Creating S-polynomial from the pair  $(p_{20}, p_{93})$ .

Skipping pair  $p_{20}$  and  $p_{93}$  because gcd of their leading monoms is zero.

1563. Creating S-polynomial from the pair  $(p_{20}, p_{94})$ .

Skipping pair  $p_{20}$  and  $p_{94}$  because gcd of their leading monoms is zero.

1564. Creating S-polynomial from the pair  $(p_{20}, p_{95})$ .

Forming S-pol of  $p_{20}$  and  $p_{95}$ :

$$\begin{aligned} p_{364} = & -1048576u_3^{19}u_1^{20}x_8x_6x_4 + 1048576u_5u_3^{18}u_1^{20}x_8x_6x_2 + \\ & (2097152u_5u_3^{17}u_1^{21} + 2097152u_3^{18}u_1^{21})x_8x_4x_2 + \\ & (262144u_5^2u_3^{20}u_1^{18} - 1048576u_5^2u_3^{18}u_1^{20})x_8x_2 - \\ & 1048576u_6u_3^{18}u_1^{20}x_6^2x_2 - 1048576u_3^{18}u_1^{20}x_6x_5x_4x_2 + \\ & 524288u_3^{20}u_1^{19}x_6x_5x_4 - 524288u_5u_3^{19}u_1^{19}x_6x_5x_2 - \\ & 524288u_6u_3^{19}u_1^{19}x_6x_4x_2 - 262144u_6u_5u_3^{20}u_1^{18}x_6x_2 - \\ & 524288u_5u_3^{18}u_1^{19}x_5x_4x_2^2 - 131072u_5^2u_3^{21}u_1^{17}x_5x_2 - \\ & 262144u_6u_5u_3^{19}u_1^{18}x_4x_2^2 + \\ & (131072u_6u_5u_3^{21}u_1^{17} + 524288u_6u_3^{20}u_1^{19})x_4x_2 - \\ & 262144u_6u_5^2u_3^{20}u_1^{18}x_2 \end{aligned}$$

Reduced to zero.

1565. Creating S-polynomial from the pair  $(p_{20}, p_{96})$ .

Forming S-pol of  $p_{20}$  and  $p_{96}$ :

$$\begin{aligned} p_{365} = & 32u_3^8u_1^5x_8x_4 + 128u_5u_3^5u_1^7x_8x_2 - 64u_3^6u_1^6x_6x_5x_2 - \\ & 128u_6u_3^5u_1^7x_6x_2 + 32u_3^7u_1^5x_5x_4x_2 - 16u_3^9u_1^4x_5x_4 - \\ & 32u_5u_3^6u_1^5x_5x_2^2 + 32u_6u_3^6u_1^5x_4x_2^2 + 16u_6u_3^8u_1^4x_4x_2 \end{aligned}$$

Reduced to zero.

1566. Creating S-polynomial from the pair  $(p_{20}, p_{97})$ .

Forming S-pol of  $p_{20}$  and  $p_{97}$ :

$$\begin{aligned} p_{366} = & 512u_3^{16}u_1^9x_8x_4 - 1024u_3^{14}u_1^{10}x_6x_5x_2 + \\ & (4096u_3^{11}u_1^{12} - 2048u_3^{11}u_1^{11})x_5x_4x_2^2 + \\ & (512u_3^{15}u_1^9 - 2048u_3^{13}u_1^{11})x_5x_4x_2 - 256u_3^{17}u_1^8x_5x_4 - \\ & 512u_5u_3^{14}u_1^9x_5x_2^2 + 1024u_5u_3^{14}u_1^{10}x_5x_2 + \\ & (512u_6u_3^{14}u_1^9 + 2048u_6u_3^{12}u_1^{11})x_4x_2^2 + \\ & (256u_6u_3^{16}u_1^8 - 1024u_6u_3^{14}u_1^{10} - 2048u_6u_3^{12}u_1^{11})x_4x_2 \end{aligned}$$

S-pol added.

1567. Creating S-polynomial from the pair  $(p_{20}, p_{98})$ .

Forming S-pol of  $p_{20}$  and  $p_{98}$ : Polynomial too big for output (text size is 2440 characters, number of terms is 29)

Reduced to zero.

1568. Creating S-polynomial from the pair  $(p_{20}, p_{99})$ .  
 Forming S-pol of  $p_{20}$  and  $p_{99}$ : Polynomial too big for output (text size is 2441 characters, number of terms is 29)  
 Reduced to zero.
1569. Creating S-polynomial from the pair  $(p_{20}, p_{100})$ .  
 Skipping pair  $p_{20}$  and  $p_{100}$  because gcd of their leading monoms is zero.
1570. Creating S-polynomial from the pair  $(p_{20}, p_{101})$ .  
 Skipping pair  $p_{20}$  and  $p_{101}$  because gcd of their leading monoms is zero.
1571. Creating S-polynomial from the pair  $(p_{20}, p_{102})$ .  
 Skipping pair  $p_{20}$  and  $p_{102}$  because gcd of their leading monoms is zero.
1572. Creating S-polynomial from the pair  $(p_{20}, p_{103})$ .  
 Skipping pair  $p_{20}$  and  $p_{103}$  because gcd of their leading monoms is zero.
1573. Creating S-polynomial from the pair  $(p_{20}, p_{104})$ .  
 Skipping pair  $p_{20}$  and  $p_{104}$  because gcd of their leading monoms is zero.
1574. Creating S-polynomial from the pair  $(p_{20}, p_{105})$ .  
 Skipping pair  $p_{20}$  and  $p_{105}$  because gcd of their leading monoms is zero.
1575. Creating S-polynomial from the pair  $(p_{20}, p_{106})$ .  
 Skipping pair  $p_{20}$  and  $p_{106}$  because gcd of their leading monoms is zero.
1576. Creating S-polynomial from the pair  $(p_{21}, p_{32})$ .  
 Skipping pair  $p_{21}$  and  $p_{32}$  because gcd of their leading monoms is zero.
1577. Creating S-polynomial from the pair  $(p_{21}, p_{33})$ .  
 Skipping pair  $p_{21}$  and  $p_{33}$  because gcd of their leading monoms is zero.
1578. Creating S-polynomial from the pair  $(p_{21}, p_{34})$ .  
 Skipping pair  $p_{21}$  and  $p_{34}$  because gcd of their leading monoms is zero.
1579. Creating S-polynomial from the pair  $(p_{21}, p_{35})$ .  
 Skipping pair  $p_{21}$  and  $p_{35}$  because gcd of their leading monoms is zero.
1580. Creating S-polynomial from the pair  $(p_{21}, p_{36})$ .  
 Skipping pair  $p_{21}$  and  $p_{36}$  because gcd of their leading monoms is zero.
1581. Creating S-polynomial from the pair  $(p_{21}, p_{37})$ .  
 Skipping pair  $p_{21}$  and  $p_{37}$  because gcd of their leading monoms is zero.
1582. Creating S-polynomial from the pair  $(p_{21}, p_{38})$ .  
 Forming S-pol of  $p_{21}$  and  $p_{38}$ :  

$$p_{367} = -8u_4^9u_1^3x_{14} + 4u_4^{10}u_1^2x_4 - 8u_5u_4^7u_1^3x_3^2 + (-4u_5u_4^9u_1^2 + 16u_5u_4^7u_1^4)x_3$$
  
 Reduced to zero.

1583. Creating S-polynomial from the pair  $(p_{21}, p_{39})$ .  
 Skipping pair  $p_{21}$  and  $p_{39}$  because gcd of their leading monoms is zero.
1584. Creating S-polynomial from the pair  $(p_{21}, p_{40})$ .  
 Skipping pair  $p_{21}$  and  $p_{40}$  because gcd of their leading monoms is zero.
1585. Creating S-polynomial from the pair  $(p_{21}, p_{41})$ .  
 Skipping pair  $p_{21}$  and  $p_{41}$  because gcd of their leading monoms is zero.
1586. Creating S-polynomial from the pair  $(p_{21}, p_{42})$ .  
 Skipping pair  $p_{21}$  and  $p_{42}$  because gcd of their leading monoms is zero.
1587. Creating S-polynomial from the pair  $(p_{21}, p_{43})$ .  
 Skipping pair  $p_{21}$  and  $p_{43}$  because gcd of their leading monoms is zero.
1588. Creating S-polynomial from the pair  $(p_{21}, p_{44})$ .  
 Skipping pair  $p_{21}$  and  $p_{44}$  because gcd of their leading monoms is zero.
1589. Creating S-polynomial from the pair  $(p_{21}, p_{45})$ .  
 Skipping pair  $p_{21}$  and  $p_{45}$  because gcd of their leading monoms is zero.
1590. Creating S-polynomial from the pair  $(p_{21}, p_{46})$ .  
 Skipping pair  $p_{21}$  and  $p_{46}$  because gcd of their leading monoms is zero.
1591. Creating S-polynomial from the pair  $(p_{21}, p_{47})$ .  
 Skipping pair  $p_{21}$  and  $p_{47}$  because gcd of their leading monoms is zero.
1592. Creating S-polynomial from the pair  $(p_{21}, p_{48})$ .  
 Skipping pair  $p_{21}$  and  $p_{48}$  because gcd of their leading monoms is zero.
1593. Creating S-polynomial from the pair  $(p_{21}, p_{49})$ .  
 Skipping pair  $p_{21}$  and  $p_{49}$  because gcd of their leading monoms is zero.
1594. Creating S-polynomial from the pair  $(p_{21}, p_{50})$ .  
 Skipping pair  $p_{21}$  and  $p_{50}$  because gcd of their leading monoms is zero.
1595. Creating S-polynomial from the pair  $(p_{21}, p_{51})$ .  
 Skipping pair  $p_{21}$  and  $p_{51}$  because gcd of their leading monoms is zero.
1596. Creating S-polynomial from the pair  $(p_{21}, p_{52})$ .  
 Skipping pair  $p_{21}$  and  $p_{52}$  because gcd of their leading monoms is zero.
1597. Creating S-polynomial from the pair  $(p_{21}, p_{53})$ .  
 Skipping pair  $p_{21}$  and  $p_{53}$  because gcd of their leading monoms is zero.
1598. Creating S-polynomial from the pair  $(p_{21}, p_{54})$ .  
 Skipping pair  $p_{21}$  and  $p_{54}$  because gcd of their leading monoms is zero.
1599. Creating S-polynomial from the pair  $(p_{21}, p_{55})$ .  
 Skipping pair  $p_{21}$  and  $p_{55}$  because gcd of their leading monoms is zero.

1600. Creating S-polynomial from the pair  $(p_{21}, p_{56})$ .  
 Skipping pair  $p_{21}$  and  $p_{56}$  because gcd of their leading monoms is zero.
1601. Creating S-polynomial from the pair  $(p_{21}, p_{57})$ .  
 Skipping pair  $p_{21}$  and  $p_{57}$  because gcd of their leading monoms is zero.
1602. Creating S-polynomial from the pair  $(p_{21}, p_{58})$ .  
 Skipping pair  $p_{21}$  and  $p_{58}$  because gcd of their leading monoms is zero.
1603. Creating S-polynomial from the pair  $(p_{21}, p_{59})$ .  
 Skipping pair  $p_{21}$  and  $p_{59}$  because gcd of their leading monoms is zero.
1604. Creating S-polynomial from the pair  $(p_{21}, p_{60})$ .  
 Skipping pair  $p_{21}$  and  $p_{60}$  because gcd of their leading monoms is zero.
1605. Creating S-polynomial from the pair  $(p_{21}, p_{61})$ .  
 Skipping pair  $p_{21}$  and  $p_{61}$  because gcd of their leading monoms is zero.
1606. Creating S-polynomial from the pair  $(p_{21}, p_{62})$ .  
 Skipping pair  $p_{21}$  and  $p_{62}$  because gcd of their leading monoms is zero.
1607. Creating S-polynomial from the pair  $(p_{21}, p_{63})$ .  
 Skipping pair  $p_{21}$  and  $p_{63}$  because gcd of their leading monoms is zero.
1608. Creating S-polynomial from the pair  $(p_{21}, p_{64})$ .  
 Forming S-pol of  $p_{21}$  and  $p_{64}$ :

$$\begin{aligned}
 p_{368} = & (32u_4^{13}u_1^5 + 128u_4^{11}u_1^7)x_{14}^2 + (-16u_4^{14}u_1^4 - 64u_4^{12}u_1^6)x_{14}x_4 + \\
 & (32u_5u_4^{13}u_1^4 + 64u_5u_4^{11}u_1^6 - 256u_5u_4^9u_1^8)x_{14}x_3 + \\
 & (16u_5u_4^{12}u_1^4 + 64u_5u_4^{10}u_1^6)x_4x_3^2 + \\
 & (-8u_5u_4^{14}u_1^3 - 32u_5u_4^{12}u_1^5)x_4x_3 + \\
 & (8u_5^2u_4^{13}u_1^3 + 32u_5^2u_4^{11}u_1^5)x_3^2
 \end{aligned}$$

Reduced to zero.

1609. Creating S-polynomial from the pair  $(p_{21}, p_{65})$ .  
 Forming S-pol of  $p_{21}$  and  $p_{65}$ :

$$\begin{aligned}
 p_{369} = & (2048u_4^{16}u_1^{11} + 8192u_4^{14}u_1^{13})x_{16}x_{14} + 2048u_4^{15}u_1^{11}x_{16}x_4x_3 + \\
 & (-1024u_4^{17}u_1^{10} - 4096u_4^{15}u_1^{12})x_{16}x_4 + \\
 & (2048u_5u_4^{16}u_1^{10} + 4096u_5u_4^{14}u_1^{12} - 16384u_5u_4^{12}u_1^{14})x_{16}x_3 - \\
 & 2048u_4^{15}u_1^{11}x_{14}x_5x_3 + 4096u_5u_4^{13}u_1^{12}x_5x_3^2 - \\
 & 512u_5u_4^{17}u_1^9x_5x_3 + 1024u_6u_4^{15}u_1^{10}x_4x_3^2 - \\
 & 2048u_6u_4^{15}u_1^{11}x_4x_3 + (512u_6u_5u_4^{16}u_1^9 + 2048u_6u_5u_4^{14}u_1^{11})x_3^2
 \end{aligned}$$

Reduced to zero.

1610. Creating S-polynomial from the pair  $(p_{21}, p_{66})$ .

Forming S-pol of  $p_{21}$  and  $p_{66}$ :

$$\begin{aligned} p_{370} = & -16u_4^7u_1^4x_{14}^2 + 8u_4^8u_1^3x_{14}x_4 + \\ & (-16u_5u_4^7u_1^3 + 32u_5u_4^5u_1^5)x_{14}x_3 - 8u_5u_4^6u_1^3x_4x_3^2 + \\ & 4u_5u_4^8u_1^2x_4x_3 - 4u_5^2u_4^7u_1^2x_3^2 \end{aligned}$$

Reduced to zero.

1611. Creating S-polynomial from the pair  $(p_{21}, p_{67})$ .

Forming S-pol of  $p_{21}$  and  $p_{67}$ : Polynomial too big for output (text size is 1127 characters, number of terms is 15)

Reduced to zero.

1612. Creating S-polynomial from the pair  $(p_{21}, p_{68})$ .

Forming S-pol of  $p_{21}$  and  $p_{68}$ :

$$\begin{aligned} p_{371} = & -256u_4^9u_1^8x_{16}x_{14} + 128u_4^{10}u_1^7x_{16}x_4 + \\ & (-128u_5u_4^9u_1^7 + 512u_5u_4^7u_1^9)x_{16}x_3 - 128u_6u_4^9u_1^7x_{14}x_3 - \\ & 128u_5u_4^8u_1^7x_5x_3^2 + 64u_6u_4^{10}u_1^6x_4x_3 - 64u_6u_5u_4^9u_1^6x_3^2 \end{aligned}$$

Reduced to zero.

1613. Creating S-polynomial from the pair  $(p_{21}, p_{69})$ .

Forming S-pol of  $p_{21}$  and  $p_{69}$ :

$$\begin{aligned} p_{372} = & (512u_4^{15}u_1^9 + 2048u_4^{13}u_1^{11})x_{16}x_{14} + 2048u_4^{12}u_1^{11}x_{16}x_4x_3 + \\ & (-256u_4^{16}u_1^8 - 1024u_4^{14}u_1^{10})x_{16}x_4 + \\ & (512u_5u_4^{15}u_1^8 + 1024u_5u_4^{13}u_1^{10})x_{16}x_3 - 2048u_4^{12}u_1^{11}x_{14}x_5x_3 - \\ & 4096u_6u_4^{11}u_1^{12}x_{14}x_3 + 256u_5u_4^{14}u_1^8x_5x_3^2 + \\ & (-128u_5u_4^{16}u_1^7 - 512u_5u_4^{14}u_1^9)x_5x_3 + 1024u_6u_4^{12}u_1^{10}x_4x_3^2 + \\ & (128u_6u_5u_4^{15}u_1^7 + 512u_6u_5u_4^{13}u_1^9)x_3^2 \end{aligned}$$

Reduced to zero.

1614. Creating S-polynomial from the pair  $(p_{21}, p_{70})$ .

Skipping pair  $p_{21}$  and  $p_{70}$  because gcd of their leading monoms is zero.

1615. Creating S-polynomial from the pair  $(p_{21}, p_{71})$ .

Forming S-pol of  $p_{21}$  and  $p_{71}$ :

$$\begin{aligned} p_{373} = & -256u_4^9u_1^8x_{16}x_{14} - 256u_4^8u_1^8x_{16}x_4x_3 + 128u_4^{10}u_1^7x_{16}x_4 - \\ & 256u_5u_4^9u_1^7x_{16}x_3 + 256u_4^8u_1^8x_{14}x_5x_3 + 512u_6u_4^7u_1^9x_{14}x_3 + \\ & 64u_5u_4^{10}u_1^6x_5x_3 - 128u_6u_4^8u_1^7x_4x_3^2 - 64u_6u_5u_4^9u_1^6x_3^2 \end{aligned}$$

Reduced to zero.



1616. Creating S-polynomial from the pair  $(p_{21}, p_{72})$ .  
 Skipping pair  $p_{21}$  and  $p_{72}$  because gcd of their leading monoms is zero.
1617. Creating S-polynomial from the pair  $(p_{21}, p_{73})$ .  
 Skipping pair  $p_{21}$  and  $p_{73}$  because gcd of their leading monoms is zero.
1618. Creating S-polynomial from the pair  $(p_{21}, p_{74})$ .  
 Skipping pair  $p_{21}$  and  $p_{74}$  because gcd of their leading monoms is zero.
1619. Creating S-polynomial from the pair  $(p_{21}, p_{75})$ .  
 Skipping pair  $p_{21}$  and  $p_{75}$  because gcd of their leading monoms is zero.
1620. Creating S-polynomial from the pair  $(p_{21}, p_{76})$ .  
 Skipping pair  $p_{21}$  and  $p_{76}$  because gcd of their leading monoms is zero.
1621. Creating S-polynomial from the pair  $(p_{21}, p_{77})$ .  
 Skipping pair  $p_{21}$  and  $p_{77}$  because gcd of their leading monoms is zero.
1622. Creating S-polynomial from the pair  $(p_{21}, p_{78})$ .  
 Skipping pair  $p_{21}$  and  $p_{78}$  because gcd of their leading monoms is zero.
1623. Creating S-polynomial from the pair  $(p_{21}, p_{79})$ .  
 Skipping pair  $p_{21}$  and  $p_{79}$  because gcd of their leading monoms is zero.
1624. Creating S-polynomial from the pair  $(p_{21}, p_{80})$ .  
 Skipping pair  $p_{21}$  and  $p_{80}$  because gcd of their leading monoms is zero.
1625. Creating S-polynomial from the pair  $(p_{21}, p_{81})$ .  
 Skipping pair  $p_{21}$  and  $p_{81}$  because gcd of their leading monoms is zero.
1626. Creating S-polynomial from the pair  $(p_{21}, p_{82})$ .  
 Skipping pair  $p_{21}$  and  $p_{82}$  because gcd of their leading monoms is zero.
1627. Creating S-polynomial from the pair  $(p_{21}, p_{83})$ .  
 Skipping pair  $p_{21}$  and  $p_{83}$  because gcd of their leading monoms is zero.
1628. Creating S-polynomial from the pair  $(p_{21}, p_{84})$ .  
 Skipping pair  $p_{21}$  and  $p_{84}$  because gcd of their leading monoms is zero.
1629. Creating S-polynomial from the pair  $(p_{21}, p_{85})$ .  
 Skipping pair  $p_{21}$  and  $p_{85}$  because gcd of their leading monoms is zero.
1630. Creating S-polynomial from the pair  $(p_{21}, p_{86})$ .  
 Skipping pair  $p_{21}$  and  $p_{86}$  because gcd of their leading monoms is zero.
1631. Creating S-polynomial from the pair  $(p_{21}, p_{87})$ .  
 Skipping pair  $p_{21}$  and  $p_{87}$  because gcd of their leading monoms is zero.
1632. Creating S-polynomial from the pair  $(p_{21}, p_{88})$ .  
 Skipping pair  $p_{21}$  and  $p_{88}$  because gcd of their leading monoms is zero.

1633. Creating S-polynomial from the pair  $(p_{21}, p_{89})$ .

Forming S-pol of  $p_{21}$  and  $p_{89}$ :

$$p_{374} = -16u_4^9u_1^4x_{14} + 8u_4^{10}u_1^3x_4 - 16u_5u_4^7u_1^4x_3^2 + \\ (-8u_5u_4^9u_1^3 + 32u_5u_4^7u_1^5)x_3$$

Reduced to zero.

1634. Creating S-polynomial from the pair  $(p_{21}, p_{90})$ .

Forming S-pol of  $p_{21}$  and  $p_{90}$ :

$$p_{375} = -1048576u_5u_4^{21}u_1^{20}x_{16}x_{14} - 2097152u_5u_4^{20}u_1^{20}x_{16}x_4x_3 + \\ 524288u_5u_4^{22}u_1^{19}x_{16}x_4 - 1048576u_5^2u_4^{21}u_1^{19}x_{16}x_3 + \\ 2097152u_6u_4^{19}u_1^{21}x_{14}x_3 + 1048576u_5u_4^{20}u_1^{20}x_{14}x_5x_3 + \\ 524288u_6u_5u_4^{21}u_1^{19}x_{14}x_3 + 524288u_5u_4^{21}u_1^{19}x_5x_4x_3 + \\ 262144u_5^2u_4^{22}u_1^{18}x_5x_3 + \\ (-262144u_6u_5u_4^{22}u_1^{18} - 1048576u_6u_4^{21}u_1^{20})x_4x_3 + \\ 524288u_6u_5^2u_4^{21}u_1^{19}x_3$$

Reduced to zero.

1635. Creating S-polynomial from the pair  $(p_{21}, p_{91})$ .

Forming S-pol of  $p_{21}$  and  $p_{91}$ :

$$p_{376} = -512u_4^9u_1^9x_{16}x_{14} - 512u_4^8u_1^9x_{16}x_4x_3 + 256u_4^{10}u_1^8x_{16}x_4 - \\ 512u_5u_4^9u_1^8x_{16}x_3 + 512u_4^8u_1^9x_{14}x_5x_3 + 1024u_6u_4^7u_1^{10}x_{14}x_3 + \\ 128u_5u_4^{10}u_1^7x_5x_3 - 256u_6u_4^8u_1^8x_4x_3^2 - 128u_6u_5u_4^9u_1^7x_3^2$$

Reduced to zero.

1636. Creating S-polynomial from the pair  $(p_{21}, p_{92})$ .

Forming S-pol of  $p_{21}$  and  $p_{92}$ :

$$p_{377} = -512u_4^9u_1^9x_{16}x_{14} + 256u_4^{10}u_1^8x_{16}x_4 + \\ (-256u_5u_4^9u_1^8 + 1024u_5u_4^7u_1^{10})x_{16}x_3 - 256u_6u_4^9u_1^8x_{14}x_3 - \\ 256u_5u_4^8u_1^8x_5x_3^2 + 128u_6u_4^{10}u_1^7x_4x_3 - 128u_6u_5u_4^9u_1^7x_3^2$$

Reduced to zero.

1637. Creating S-polynomial from the pair  $(p_{21}, p_{93})$ .

Skipping pair  $p_{21}$  and  $p_{93}$  because gcd of their leading monoms is zero.

1638. Creating S-polynomial from the pair  $(p_{21}, p_{94})$ .

Skipping pair  $p_{21}$  and  $p_{94}$  because gcd of their leading monoms is zero.

1639. Creating S-polynomial from the pair  $(p_{21}, p_{95})$ .  
 Skipping pair  $p_{21}$  and  $p_{95}$  because gcd of their leading monoms is zero.
1640. Creating S-polynomial from the pair  $(p_{21}, p_{96})$ .  
 Skipping pair  $p_{21}$  and  $p_{96}$  because gcd of their leading monoms is zero.
1641. Creating S-polynomial from the pair  $(p_{21}, p_{97})$ .  
 Skipping pair  $p_{21}$  and  $p_{97}$  because gcd of their leading monoms is zero.
1642. Creating S-polynomial from the pair  $(p_{21}, p_{98})$ .  
 Skipping pair  $p_{21}$  and  $p_{98}$  because gcd of their leading monoms is zero.
1643. Creating S-polynomial from the pair  $(p_{21}, p_{99})$ .  
 Skipping pair  $p_{21}$  and  $p_{99}$  because gcd of their leading monoms is zero.
1644. Creating S-polynomial from the pair  $(p_{21}, p_{100})$ .  
 Skipping pair  $p_{21}$  and  $p_{100}$  because gcd of their leading monoms is zero.
1645. Creating S-polynomial from the pair  $(p_{21}, p_{101})$ .  
 Skipping pair  $p_{21}$  and  $p_{101}$  because gcd of their leading monoms is zero.
1646. Creating S-polynomial from the pair  $(p_{21}, p_{102})$ .  
 Skipping pair  $p_{21}$  and  $p_{102}$  because gcd of their leading monoms is zero.
1647. Creating S-polynomial from the pair  $(p_{21}, p_{103})$ .  
 Skipping pair  $p_{21}$  and  $p_{103}$  because gcd of their leading monoms is zero.
1648. Creating S-polynomial from the pair  $(p_{21}, p_{104})$ .  
 Forming S-pol of  $p_{21}$  and  $p_{104}$ :

$$\begin{aligned}
 p_{378} = & -1048576u_4^{19}u_1^{20}x_{16}x_{14}x_4 + 1048576u_5u_4^{18}u_1^{20}x_{16}x_{14}x_3 - \\
 & 1048576u_4^{18}u_1^{20}x_{16}x_4^2x_3 + 524288u_4^{20}u_1^{19}x_{16}x_4^2 + \\
 & (-524288u_5u_4^{19}u_1^{19} + 2097152u_5u_4^{17}u_1^{21} + 2097152u_4^{18}u_1^{21})x_{16}x_4x_3 + \\
 & (262144u_5^2u_4^{20}u_1^{18} - 1048576u_5^2u_4^{18}u_1^{20})x_{16}x_3 - \\
 & 1048576u_6u_4^{18}u_1^{20}x_{14}^2x_3 - 524288u_5u_4^{19}u_1^{19}x_{14}x_5x_3 - \\
 & 262144u_6u_5u_4^{20}u_1^{18}x_{14}x_3 - 524288u_5u_4^{18}u_1^{19}x_5x_4x_3^2 - \\
 & 131072u_5^2u_4^{21}u_1^{17}x_5x_3 - 262144u_6u_5u_4^{19}u_1^{18}x_4x_3^2 + \\
 & (131072u_6u_5u_4^{21}u_1^{17} + 524288u_6u_4^{20}u_1^{19})x_4x_3 - \\
 & 262144u_6u_5^2u_4^{20}u_1^{18}x_3
 \end{aligned}$$

Reduced to zero.

1649. Creating S-polynomial from the pair  $(p_{21}, p_{105})$ .  
 Skipping pair  $p_{21}$  and  $p_{105}$  because gcd of their leading monoms is zero.
1650. Creating S-polynomial from the pair  $(p_{21}, p_{106})$ .  
 Skipping pair  $p_{21}$  and  $p_{106}$  because gcd of their leading monoms is zero.

1651. Creating S-polynomial from the pair  $(p_{22}, p_{32})$ .  
 Skipping pair  $p_{22}$  and  $p_{32}$  because gcd of their leading monoms is zero.
1652. Creating S-polynomial from the pair  $(p_{22}, p_{33})$ .  
 Skipping pair  $p_{22}$  and  $p_{33}$  because gcd of their leading monoms is zero.
1653. Creating S-polynomial from the pair  $(p_{22}, p_{34})$ .  
 Skipping pair  $p_{22}$  and  $p_{34}$  because gcd of their leading monoms is zero.
1654. Creating S-polynomial from the pair  $(p_{22}, p_{35})$ .  
 Skipping pair  $p_{22}$  and  $p_{35}$  because gcd of their leading monoms is zero.
1655. Creating S-polynomial from the pair  $(p_{22}, p_{36})$ .  
 Skipping pair  $p_{22}$  and  $p_{36}$  because gcd of their leading monoms is zero.
1656. Creating S-polynomial from the pair  $(p_{22}, p_{37})$ .  
 Skipping pair  $p_{22}$  and  $p_{37}$  because gcd of their leading monoms is zero.
1657. Creating S-polynomial from the pair  $(p_{22}, p_{38})$ .  
 Skipping pair  $p_{22}$  and  $p_{38}$  because gcd of their leading monoms is zero.
1658. Creating S-polynomial from the pair  $(p_{22}, p_{39})$ .  
 Forming S-pol of  $p_{22}$  and  $p_{39}$ :

$$p_{379} = -8u_4^9u_1^3x_{16} + 4u_4^{10}u_1^2x_5 - 8u_6u_4^7u_1^3x_3^2 + (-4u_6u_4^9u_1^2 + 16u_6u_4^7u_1^4)x_3$$

Reduced to zero.

1659. Creating S-polynomial from the pair  $(p_{22}, p_{40})$ .  
 Forming S-pol of  $p_{22}$  and  $p_{40}$ :

$$p_{380} = 256u_4^{16}u_1^8x_{16}x_4 - 512u_4^{14}u_1^9x_{14}x_5x_3 + 256u_4^{15}u_1^8x_5x_4x_3 - 128u_4^{17}u_1^7x_5x_4 - 256u_5u_4^{14}u_1^8x_5x_3^2 + 512u_5u_4^{14}u_1^9x_5x_3 + 256u_6u_4^{14}u_1^8x_4x_3^2 + (128u_6u_4^{16}u_1^7 - 512u_6u_4^{14}u_1^9)x_4x_3$$

Reduced to zero.

1660. Creating S-polynomial from the pair  $(p_{22}, p_{41})$ .  
 Skipping pair  $p_{22}$  and  $p_{41}$  because gcd of their leading monoms is zero.
1661. Creating S-polynomial from the pair  $(p_{22}, p_{42})$ .  
 Skipping pair  $p_{22}$  and  $p_{42}$  because gcd of their leading monoms is zero.
1662. Creating S-polynomial from the pair  $(p_{22}, p_{43})$ .  
 Forming S-pol of  $p_{22}$  and  $p_{43}$ :

$$p_{381} = -256u_5u_4^{15}u_1^8x_{16}x_4 + 512u_6u_4^{13}u_1^9x_{14}x_4x_3 + 128u_5u_4^{16}u_1^7x_5x_4 + (-128u_6u_5u_4^{15}u_1^7 - 512u_6u_4^{14}u_1^9)x_4x_3 + 256u_6u_5^2u_4^{14}u_1^8x_3$$

Reduced to zero.

1663. Creating S-polynomial from the pair  $(p_{22}, p_{44})$ .  
 Skipping pair  $p_{22}$  and  $p_{44}$  because gcd of their leading monoms is zero.
1664. Creating S-polynomial from the pair  $(p_{22}, p_{45})$ .  
 Skipping pair  $p_{22}$  and  $p_{45}$  because gcd of their leading monoms is zero.
1665. Creating S-polynomial from the pair  $(p_{22}, p_{46})$ .  
 Skipping pair  $p_{22}$  and  $p_{46}$  because gcd of their leading monoms is zero.
1666. Creating S-polynomial from the pair  $(p_{22}, p_{47})$ .  
 Skipping pair  $p_{22}$  and  $p_{47}$  because gcd of their leading monoms is zero.
1667. Creating S-polynomial from the pair  $(p_{22}, p_{48})$ .  
 Skipping pair  $p_{22}$  and  $p_{48}$  because gcd of their leading monoms is zero.
1668. Creating S-polynomial from the pair  $(p_{22}, p_{49})$ .  
 Skipping pair  $p_{22}$  and  $p_{49}$  because gcd of their leading monoms is zero.
1669. Creating S-polynomial from the pair  $(p_{22}, p_{50})$ .  
 Skipping pair  $p_{22}$  and  $p_{50}$  because gcd of their leading monoms is zero.
1670. Creating S-polynomial from the pair  $(p_{22}, p_{51})$ .  
 Skipping pair  $p_{22}$  and  $p_{51}$  because gcd of their leading monoms is zero.
1671. Creating S-polynomial from the pair  $(p_{22}, p_{52})$ .  
 Skipping pair  $p_{22}$  and  $p_{52}$  because gcd of their leading monoms is zero.
1672. Creating S-polynomial from the pair  $(p_{22}, p_{53})$ .  
 Skipping pair  $p_{22}$  and  $p_{53}$  because gcd of their leading monoms is zero.
1673. Creating S-polynomial from the pair  $(p_{22}, p_{54})$ .  
 Skipping pair  $p_{22}$  and  $p_{54}$  because gcd of their leading monoms is zero.
1674. Creating S-polynomial from the pair  $(p_{22}, p_{55})$ .  
 Skipping pair  $p_{22}$  and  $p_{55}$  because gcd of their leading monoms is zero.
1675. Creating S-polynomial from the pair  $(p_{22}, p_{56})$ .  
 Skipping pair  $p_{22}$  and  $p_{56}$  because gcd of their leading monoms is zero.
1676. Creating S-polynomial from the pair  $(p_{22}, p_{57})$ .  
 Skipping pair  $p_{22}$  and  $p_{57}$  because gcd of their leading monoms is zero.
1677. Creating S-polynomial from the pair  $(p_{22}, p_{58})$ .  
 Skipping pair  $p_{22}$  and  $p_{58}$  because gcd of their leading monoms is zero.
1678. Creating S-polynomial from the pair  $(p_{22}, p_{59})$ .  
 Skipping pair  $p_{22}$  and  $p_{59}$  because gcd of their leading monoms is zero.
1679. Creating S-polynomial from the pair  $(p_{22}, p_{60})$ .  
 Skipping pair  $p_{22}$  and  $p_{60}$  because gcd of their leading monoms is zero.

1680. Creating S-polynomial from the pair  $(p_{22}, p_{61})$ .

Skipping pair  $p_{22}$  and  $p_{61}$  because gcd of their leading monoms is zero.

1681. Creating S-polynomial from the pair  $(p_{22}, p_{62})$ .

Skipping pair  $p_{22}$  and  $p_{62}$  because gcd of their leading monoms is zero.

1682. Creating S-polynomial from the pair  $(p_{22}, p_{63})$ .

Skipping pair  $p_{22}$  and  $p_{63}$  because gcd of their leading monoms is zero.

1683. Creating S-polynomial from the pair  $(p_{22}, p_{64})$ .

Skipping pair  $p_{22}$  and  $p_{64}$  because gcd of their leading monoms is zero.

1684. Creating S-polynomial from the pair  $(p_{22}, p_{65})$ .

Forming S-pol of  $p_{22}$  and  $p_{65}$ :

$$\begin{aligned} p_{382} = & (2048u_4^{16}u_1^{11} + 8192u_4^{14}u_1^{13})x_{16}x_{14} - 8192u_4^{13}u_1^{13}x_{16}x_4x_3 + \\ & (1024u_5u_4^{16}u_1^{10} - 16384u_5u_4^{12}u_1^{14})x_{16}x_3 + 8192u_4^{13}u_1^{13}x_{14}x_5x_3 + \\ & (-1024u_4^{17}u_1^{10} - 4096u_4^{15}u_1^{12})x_{14}x_5 + \\ & (1024u_6u_4^{16}u_1^{10} + 4096u_6u_4^{14}u_1^{12})x_{14}x_3 + 4096u_5u_4^{13}u_1^{12}x_5x_3^2 - \\ & 512u_5u_4^{17}u_1^9x_5x_3 + 1024u_6u_4^{15}u_1^{10}x_4x_3^2 - \\ & 2048u_6u_4^{15}u_1^{11}x_4x_3 + (512u_6u_5u_4^{16}u_1^9 + 2048u_6u_5u_4^{14}u_1^{11})x_3^2 \end{aligned}$$

Reduced to zero.

1685. Creating S-polynomial from the pair  $(p_{22}, p_{66})$ .

Skipping pair  $p_{22}$  and  $p_{66}$  because gcd of their leading monoms is zero.

1686. Creating S-polynomial from the pair  $(p_{22}, p_{67})$ .

Forming S-pol of  $p_{22}$  and  $p_{67}$ : Polynomial too big for output (text size is 1178 characters, number of terms is 16)

Reduced to zero.

1687. Creating S-polynomial from the pair  $(p_{22}, p_{68})$ .

Forming S-pol of  $p_{22}$  and  $p_{68}$ :

$$\begin{aligned} p_{383} = & -256u_4^9u_1^8x_{16}x_{14} + 256u_4^8u_1^8x_{16}x_4x_3 + 512u_5u_4^7u_1^9x_{16}x_3 - \\ & 256u_4^8u_1^8x_{14}x_5x_3 + 128u_4^{10}u_1^7x_{14}x_5 - 256u_6u_4^9u_1^7x_{14}x_3 - \\ & 128u_5u_4^8u_1^7x_5x_3^2 + 64u_6u_4^{10}u_1^6x_4x_3 - 64u_6u_5u_4^9u_1^6x_3^2 \end{aligned}$$

Reduced to zero.

1688. Creating S-polynomial from the pair  $(p_{22}, p_{69})$ .

Forming S-pol of  $p_{22}$  and  $p_{69}$ :

$$\begin{aligned} p_{384} = & (512u_4^{15}u_1^9 + 2048u_4^{13}u_1^{11})x_{16}x_{14} - 512u_4^{14}u_1^9x_{16}x_4x_3 + \\ & 256u_5u_4^{15}u_1^8x_{16}x_3 + 512u_4^{14}u_1^9x_{14}x_5x_3 + \end{aligned}$$

$$\begin{aligned}
& (-256u_4^{16}u_1^8 - 1024u_4^{14}u_1^{10})x_{14}x_5 + \\
& (256u_6u_4^{15}u_1^8 + 1024u_6u_4^{13}u_1^{10} - 4096u_6u_4^{11}u_1^{12})x_{14}x_3 + \\
& 256u_5u_4^{14}u_1^8x_5x_3^2 + \\
& (-128u_5u_4^{16}u_1^7 - 512u_5u_4^{14}u_1^9)x_5x_3 + 1024u_6u_4^{12}u_1^{10}x_4x_3^2 + \\
& (128u_6u_5u_4^{15}u_1^7 + 512u_6u_5u_4^{13}u_1^9)x_3^2
\end{aligned}$$

Reduced to zero.

1689. Creating S-polynomial from the pair  $(p_{22}, p_{70})$ .

Forming S-pol of  $p_{22}$  and  $p_{70}$ :

$$\begin{aligned}
p_{385} = & (32u_4^{13}u_1^5 + 128u_4^{11}u_1^7)x_{16}^2 + (-16u_4^{14}u_1^4 - 64u_4^{12}u_1^6)x_{16}x_5 + \\
& (32u_6u_4^{13}u_1^4 + 64u_6u_4^{11}u_1^6 - 256u_6u_4^9u_1^8)x_{16}x_3 + \\
& (16u_6u_4^{12}u_1^4 + 64u_6u_4^{10}u_1^6)x_5x_3^2 + \\
& (-8u_6u_4^{14}u_1^3 - 32u_6u_4^{12}u_1^5)x_5x_3 + \\
& (8u_6^2u_4^{13}u_1^3 + 32u_6^2u_4^{11}u_1^5)x_3^2
\end{aligned}$$

Reduced to zero.

1690. Creating S-polynomial from the pair  $(p_{22}, p_{71})$ .

Forming S-pol of  $p_{22}$  and  $p_{71}$ :

$$\begin{aligned}
p_{386} = & -256u_4^9u_1^8x_{16}x_{14} - 128u_5u_4^9u_1^7x_{16}x_3 + 128u_4^{10}u_1^7x_{14}x_5 + \\
& (-128u_6u_4^9u_1^7 + 512u_6u_4^7u_1^9)x_{14}x_3 + 64u_5u_4^{10}u_1^6x_5x_3 - \\
& 128u_6u_4^8u_1^7x_4x_3^2 - 64u_6u_5u_4^9u_1^6x_3^2
\end{aligned}$$

Reduced to zero.

1691. Creating S-polynomial from the pair  $(p_{22}, p_{72})$ .

Forming S-pol of  $p_{22}$  and  $p_{72}$ :

$$\begin{aligned}
p_{387} = & (4096u_4^{22}u_1^{12} + 16384u_4^{20}u_1^{14})x_{16}^2x_4 - 8192u_4^{20}u_1^{13}x_{16}x_{14}x_5x_3 + \\
& 4096u_4^{21}u_1^{12}x_{16}x_5x_4x_3 + (-2048u_4^{23}u_1^{11} - 8192u_4^{21}u_1^{13})x_{16}x_5x_4 + \\
& (-2048u_5u_4^{22}u_1^{11} + 8192u_5u_4^{20}u_1^{13})x_{16}x_5x_3 + \\
& (4096u_6u_4^{22}u_1^{11} + 8192u_6u_4^{20}u_1^{13} - 32768u_6u_4^{18}u_1^{15})x_{16}x_4x_3 + \\
& (2048u_6u_4^{21}u_1^{11} + 8192u_6u_4^{19}u_1^{13})x_5x_4x_3^2 + \\
& (-1024u_6u_4^{23}u_1^{10} - 4096u_6u_4^{21}u_1^{12})x_5x_4x_3 + \\
& (-1024u_6u_5u_4^{22}u_1^{10} - 4096u_5u_4^{21}u_1^{12})x_5x_3^2 + 2048u_5u_4^{23}u_1^{11}x_5x_3 + \\
& (1024u_6^2u_4^{22}u_1^{10} + 4096u_6^2u_4^{20}u_1^{12})x_4x_3^2 + \\
& 2048u_6^2u_5u_4^{21}u_1^{11}x_3^2 - 1024u_6^2u_5u_4^{23}u_1^{10}x_3
\end{aligned}$$

Reduced to zero.

1692. Creating S-polynomial from the pair  $(p_{22}, p_{73})$ .

Forming S-pol of  $p_{22}$  and  $p_{73}$ :

$$\begin{aligned} p_{388} = & -16u_4^7u_1^4x_{16}^2 + 8u_4^8u_1^3x_{16}x_5 + \\ & (-16u_6u_4^7u_1^3 + 32u_6u_4^5u_1^5)x_{16}x_3 - 8u_6u_4^6u_1^3x_5x_3^2 + \\ & 4u_6u_4^8u_1^2x_5x_3 - 4u_6^2u_4^7u_1^2x_3^2 \end{aligned}$$

Reduced to zero.

1693. Creating S-polynomial from the pair  $(p_{22}, p_{74})$ .

Skipping pair  $p_{22}$  and  $p_{74}$  because gcd of their leading monoms is zero.

1694. Creating S-polynomial from the pair  $(p_{22}, p_{75})$ .

Skipping pair  $p_{22}$  and  $p_{75}$  because gcd of their leading monoms is zero.

1695. Creating S-polynomial from the pair  $(p_{22}, p_{76})$ .

Skipping pair  $p_{22}$  and  $p_{76}$  because gcd of their leading monoms is zero.

1696. Creating S-polynomial from the pair  $(p_{22}, p_{77})$ .

Skipping pair  $p_{22}$  and  $p_{77}$  because gcd of their leading monoms is zero.

1697. Creating S-polynomial from the pair  $(p_{22}, p_{78})$ .

Skipping pair  $p_{22}$  and  $p_{78}$  because gcd of their leading monoms is zero.

1698. Creating S-polynomial from the pair  $(p_{22}, p_{79})$ .

Skipping pair  $p_{22}$  and  $p_{79}$  because gcd of their leading monoms is zero.

1699. Creating S-polynomial from the pair  $(p_{22}, p_{80})$ .

Skipping pair  $p_{22}$  and  $p_{80}$  because gcd of their leading monoms is zero.

1700. Creating S-polynomial from the pair  $(p_{22}, p_{81})$ .

Skipping pair  $p_{22}$  and  $p_{81}$  because gcd of their leading monoms is zero.

1701. Creating S-polynomial from the pair  $(p_{22}, p_{82})$ .

Skipping pair  $p_{22}$  and  $p_{82}$  because gcd of their leading monoms is zero.

1702. Creating S-polynomial from the pair  $(p_{22}, p_{83})$ .

Skipping pair  $p_{22}$  and  $p_{83}$  because gcd of their leading monoms is zero.

1703. Creating S-polynomial from the pair  $(p_{22}, p_{84})$ .

Skipping pair  $p_{22}$  and  $p_{84}$  because gcd of their leading monoms is zero.

1704. Creating S-polynomial from the pair  $(p_{22}, p_{85})$ .

Skipping pair  $p_{22}$  and  $p_{85}$  because gcd of their leading monoms is zero.

1705. Creating S-polynomial from the pair  $(p_{22}, p_{86})$ .

Skipping pair  $p_{22}$  and  $p_{86}$  because gcd of their leading monoms is zero.

1706. Creating S-polynomial from the pair  $(p_{22}, p_{87})$ .

Skipping pair  $p_{22}$  and  $p_{87}$  because gcd of their leading monoms is zero.



1707. Creating S-polynomial from the pair  $(p_{22}, p_{88})$ .

Forming S-pol of  $p_{22}$  and  $p_{88}$ :

$$p_{389} = 1024u_5u_4^{13}u_1^{10}x_{16} - 2048u_6u_4^{11}u_1^{11}x_{14}x_3 - 512u_5u_4^{14}u_1^9x_5 + \\ 1024u_6u_4^{12}u_1^{10}x_4x_3 + 512u_6u_5u_4^{13}u_1^9x_3$$

Reduced to zero.

1708. Creating S-polynomial from the pair  $(p_{22}, p_{89})$ .

Skipping pair  $p_{22}$  and  $p_{89}$  because gcd of their leading monoms is zero.

1709. Creating S-polynomial from the pair  $(p_{22}, p_{90})$ .

Forming S-pol of  $p_{22}$  and  $p_{90}$ :

$$p_{390} = -1048576u_5u_4^{21}u_1^{20}x_{16}x_{14} - 1048576u_5u_4^{20}u_1^{20}x_{16}x_4x_3 - \\ 524288u_5^2u_4^{21}u_1^{19}x_{16}x_3 + 2097152u_6u_4^{19}u_1^{21}x_{14}^2x_3 + \\ 524288u_5u_4^{22}u_1^{19}x_{14}x_5 + 524288u_5u_4^{21}u_1^{19}x_5x_4x_3 + \\ 262144u_5^2u_4^{22}u_1^{18}x_5x_3 + \\ (-262144u_6u_5u_4^{22}u_1^{18} - 1048576u_6u_4^{21}u_1^{20})x_4x_3 + \\ 524288u_6u_5^2u_4^{21}u_1^{19}x_3$$

Reduced to zero.

1710. Creating S-polynomial from the pair  $(p_{22}, p_{91})$ .

Forming S-pol of  $p_{22}$  and  $p_{91}$ :

$$p_{391} = -512u_4^9u_1^9x_{16}x_{14} - 256u_5u_4^9u_1^8x_{16}x_3 + 256u_4^{10}u_1^8x_{14}x_5 + \\ (-256u_6u_4^9u_1^8 + 1024u_6u_4^7u_1^{10})x_{14}x_3 + 128u_5u_4^{10}u_1^7x_5x_3 - \\ 256u_6u_4^8u_1^8x_4x_3^2 - 128u_6u_5u_4^9u_1^7x_3^2$$

Reduced to zero.

1711. Creating S-polynomial from the pair  $(p_{22}, p_{92})$ .

Forming S-pol of  $p_{22}$  and  $p_{92}$ :

$$p_{392} = -512u_4^9u_1^9x_{16}x_{14} + 512u_4^8u_1^9x_{16}x_4x_3 + 1024u_5u_4^7u_1^{10}x_{16}x_3 - \\ 512u_4^8u_1^9x_{14}x_5x_3 + 256u_4^{10}u_1^8x_{14}x_5 - 512u_6u_4^9u_1^8x_{14}x_3 - \\ 256u_5u_4^8u_1^8x_5x_3^2 + 128u_6u_4^{10}u_1^7x_4x_3 - 128u_6u_5u_4^9u_1^7x_3^2$$

Reduced to zero.

1712. Creating S-polynomial from the pair  $(p_{22}, p_{93})$ .

Forming S-pol of  $p_{22}$  and  $p_{93}$ :

$$\begin{aligned} p_{393} = & (1024u_4^{17}u_1^{10} - 2048u_4^{15}u_1^{11})x_{16}x_4 - 2048u_4^{15}u_1^{11}x_{14}x_5x_3 + \\ & (8192u_4^{12}u_1^{13} - 4096u_4^{12}u_1^{12})x_5x_4x_3^2 + \\ & (1024u_4^{16}u_1^{10} - 4096u_4^{14}u_1^{12})x_5x_4x_3 + \\ & (-512u_4^{18}u_1^9 + 1024u_4^{16}u_1^{10})x_5x_4 - 1024u_5u_4^{15}u_1^{10}x_5x_3^2 + \\ & 2048u_5u_4^{15}u_1^{11}x_5x_3 + \\ & (1024u_6u_4^{15}u_1^{10} + 4096u_6u_4^{13}u_1^{12} - 2048u_6u_4^{13}u_1^{11})x_4x_3^2 + \\ & (512u_6u_4^{17}u_1^9 - 2048u_6u_4^{15}u_1^{11} - 1024u_6u_4^{15}u_1^{10})x_4x_3 \end{aligned}$$

S-pol added.

1713. Creating S-polynomial from the pair  $(p_{22}, p_{94})$ .

Forming S-pol of  $p_{22}$  and  $p_{94}$ :

$$\begin{aligned} p_{394} = & -16u_4^9u_1^4x_{16} + 8u_4^{10}u_1^3x_5 - 16u_6u_4^7u_1^4x_3^2 + \\ & (-8u_6u_4^9u_1^3 + 32u_6u_4^7u_1^5)x_3 \end{aligned}$$

Reduced to zero.

1714. Creating S-polynomial from the pair  $(p_{22}, p_{95})$ .

Skipping pair  $p_{22}$  and  $p_{95}$  because gcd of their leading monoms is zero.

1715. Creating S-polynomial from the pair  $(p_{22}, p_{96})$ .

Skipping pair  $p_{22}$  and  $p_{96}$  because gcd of their leading monoms is zero.

1716. Creating S-polynomial from the pair  $(p_{22}, p_{97})$ .

Skipping pair  $p_{22}$  and  $p_{97}$  because gcd of their leading monoms is zero.

1717. Creating S-polynomial from the pair  $(p_{22}, p_{98})$ .

Skipping pair  $p_{22}$  and  $p_{98}$  because gcd of their leading monoms is zero.

1718. Creating S-polynomial from the pair  $(p_{22}, p_{99})$ .

Forming S-pol of  $p_{22}$  and  $p_{99}$ : Polynomial too big for output (text size is 2440 characters, number of terms is 29)

Reduced to zero.

1719. Creating S-polynomial from the pair  $(p_{22}, p_{100})$ .

Skipping pair  $p_{22}$  and  $p_{100}$  because gcd of their leading monoms is zero.

1720. Creating S-polynomial from the pair  $(p_{22}, p_{101})$ .

Skipping pair  $p_{22}$  and  $p_{101}$  because gcd of their leading monoms is zero.

1721. Creating S-polynomial from the pair  $(p_{22}, p_{102})$ .

Skipping pair  $p_{22}$  and  $p_{102}$  because gcd of their leading monoms is zero.

1722. Creating S-polynomial from the pair  $(p_{22}, p_{103})$ .

Forming S-pol of  $p_{22}$  and  $p_{103}$ : Polynomial too big for output (text size is 2451 characters, number of terms is 29)

Reduced to zero.

1723. Creating S-polynomial from the pair  $(p_{22}, p_{104})$ .

Forming S-pol of  $p_{22}$  and  $p_{104}$ :

$$\begin{aligned} p_{395} = & -1048576u_4^{19}u_1^{20}x_{16}x_{14}x_4 + 1048576u_5u_4^{18}u_1^{20}x_{16}x_{14}x_3 + \\ & (2097152u_5u_4^{17}u_1^{21} + 2097152u_4^{18}u_1^{21})x_{16}x_4x_3 + \\ & (262144u_5^2u_4^{20}u_1^{18} - 1048576u_5^2u_4^{18}u_1^{20})x_{16}x_3 - \\ & 1048576u_6u_4^{18}u_1^{20}x_{14}x_3 - 1048576u_4^{18}u_1^{20}x_{14}x_5x_4x_3 + \\ & 524288u_4^{20}u_1^{19}x_{14}x_5x_4 - 524288u_5u_4^{19}u_1^{19}x_{14}x_5x_3 - \\ & 524288u_6u_4^{19}u_1^{19}x_{14}x_4x_3 - 262144u_6u_5u_4^{20}u_1^{18}x_{14}x_3 - \\ & 524288u_5u_4^{18}u_1^{19}x_5x_4x_3^2 - 131072u_5^2u_4^{21}u_1^{17}x_5x_3 - \\ & 262144u_6u_5u_4^{19}u_1^{18}x_4x_3^2 + \\ & (131072u_6u_5u_4^{21}u_1^{17} + 524288u_6u_4^{20}u_1^{19})x_4x_3 - \\ & 262144u_6u_5^2u_4^{20}u_1^{18}x_3 \end{aligned}$$

Reduced to zero.

1724. Creating S-polynomial from the pair  $(p_{22}, p_{105})$ .

Forming S-pol of  $p_{22}$  and  $p_{105}$ :

$$\begin{aligned} p_{396} = & 32u_4^8u_1^5x_{16}x_4 + 128u_5u_4^5u_1^7x_{16}x_3 - 64u_4^6u_1^6x_{14}x_5x_3 - \\ & 128u_6u_4^5u_1^7x_{14}x_3 + 32u_4^7u_1^5x_5x_4x_3 - 16u_4^9u_1^4x_5x_4 - \\ & 32u_5u_4^6u_1^5x_5x_3^2 + 32u_6u_4^6u_1^5x_4x_3^2 + 16u_6u_4^8u_1^4x_4x_3 \end{aligned}$$

Reduced to zero.

1725. Creating S-polynomial from the pair  $(p_{22}, p_{106})$ .

Forming S-pol of  $p_{22}$  and  $p_{106}$ :

$$\begin{aligned} p_{397} = & 512u_4^{16}u_1^9x_{16}x_4 - 1024u_4^{14}u_1^{10}x_{14}x_5x_3 + \\ & (4096u_4^{11}u_1^{12} - 2048u_4^{11}u_1^{11})x_5x_4x_3^2 + \\ & (512u_4^{15}u_1^9 - 2048u_4^{13}u_1^{11})x_5x_4x_3 - 256u_4^{17}u_1^8x_5x_4 - \\ & 512u_5u_4^{14}u_1^9x_5x_3^2 + 1024u_5u_4^{14}u_1^{10}x_5x_3 + \\ & (512u_6u_4^{14}u_1^9 + 2048u_6u_4^{12}u_1^{11})x_4x_3^2 + \\ & (256u_6u_4^{16}u_1^8 - 1024u_6u_4^{14}u_1^{10} - 2048u_6u_4^{12}u_1^{11})x_4x_3 \end{aligned}$$

S-pol added.

1726. Creating S-polynomial from the pair  $(p_{23}, p_{32})$ .  
 Skipping pair  $p_{23}$  and  $p_{32}$  because gcd of their leading monoms is zero.
1727. Creating S-polynomial from the pair  $(p_{23}, p_{33})$ .  
 Skipping pair  $p_{23}$  and  $p_{33}$  because gcd of their leading monoms is zero.
1728. Creating S-polynomial from the pair  $(p_{23}, p_{34})$ .  
 Skipping pair  $p_{23}$  and  $p_{34}$  because gcd of their leading monoms is zero.
1729. Creating S-polynomial from the pair  $(p_{23}, p_{35})$ .  
 Forming S-pol of  $p_{23}$  and  $p_{35}$ :

$$p_{398} = 4u_5u_3^6u_1^2x_2^2 - 8u_5u_3^6u_1^3x_2 + 4u_5u_3^8u_1^2$$

Reduced to zero.

1730. Creating S-polynomial from the pair  $(p_{23}, p_{36})$ .  
 Skipping pair  $p_{23}$  and  $p_{36}$  because gcd of their leading monoms is zero.
1731. Creating S-polynomial from the pair  $(p_{23}, p_{37})$ .  
 Skipping pair  $p_{23}$  and  $p_{37}$  because gcd of their leading monoms is zero.
1732. Creating S-polynomial from the pair  $(p_{23}, p_{38})$ .  
 Skipping pair  $p_{23}$  and  $p_{38}$  because gcd of their leading monoms is zero.
1733. Creating S-polynomial from the pair  $(p_{23}, p_{39})$ .  
 Skipping pair  $p_{23}$  and  $p_{39}$  because gcd of their leading monoms is zero.
1734. Creating S-polynomial from the pair  $(p_{23}, p_{40})$ .  
 Skipping pair  $p_{23}$  and  $p_{40}$  because gcd of their leading monoms is zero.
1735. Creating S-polynomial from the pair  $(p_{23}, p_{41})$ .  
 Skipping pair  $p_{23}$  and  $p_{41}$  because gcd of their leading monoms is zero.
1736. Creating S-polynomial from the pair  $(p_{23}, p_{42})$ .  
 Skipping pair  $p_{23}$  and  $p_{42}$  because gcd of their leading monoms is zero.
1737. Creating S-polynomial from the pair  $(p_{23}, p_{43})$ .  
 Skipping pair  $p_{23}$  and  $p_{43}$  because gcd of their leading monoms is zero.
1738. Creating S-polynomial from the pair  $(p_{23}, p_{44})$ .  
 Forming S-pol of  $p_{23}$  and  $p_{44}$ :

$$\begin{aligned} p_{399} = & (-8u_5u_3^{12}u_1^3 + 128u_5u_3^8u_1^7)x_6x_2 + \\ & (-16u_5u_3^{12}u_1^4 - 64u_5u_3^{10}u_1^6)x_6 + \\ & (-8u_5u_3^{11}u_1^3 - 32u_5u_3^9u_1^5)x_4x_2^2 + \\ & (4u_5u_3^{13}u_1^2 + 16u_5u_3^{11}u_1^4)x_4x_2 + \\ & (-4u_5^2u_3^{12}u_1^2 - 16u_5^2u_3^{10}u_1^4)x_2^2 \end{aligned}$$

Reduced to zero.

1739. Creating S-polynomial from the pair  $(p_{23}, p_{45})$ .

Forming S-pol of  $p_{23}$  and  $p_{45}$ :

$$\begin{aligned} p_{400} = & -1024u_3^{14}u_1^{10}x_8x_4x_2 + (-512u_5u_3^{15}u_1^9 + 8192u_5u_3^{11}u_1^{13})x_8x_2 + \\ & (-1024u_5u_3^{15}u_1^{10} - 4096u_5u_3^{13}u_1^{12})x_8 + 1024u_3^{14}u_1^{10}x_6x_5x_2 - \\ & 2048u_5u_3^{12}u_1^{11}x_5x_2^2 + 256u_5u_3^{16}u_1^8x_5x_2 - \\ & 512u_6u_3^{14}u_1^9x_4x_2^2 + 1024u_6u_3^{14}u_1^{10}x_4x_2 + \\ & (-256u_6u_5u_3^{15}u_1^8 - 1024u_6u_5u_3^{13}u_1^{10})x_2^2 \end{aligned}$$

Reduced to zero.

1740. Creating S-polynomial from the pair  $(p_{23}, p_{46})$ .

Forming S-pol of  $p_{23}$  and  $p_{46}$ :

$$\begin{aligned} p_{401} = & (4u_5u_3^6u_1^2 - 16u_5u_3^4u_1^4)x_6x_2 + 8u_5u_3^6u_1^3x_6 + \\ & 4u_5u_3^5u_1^2x_4x_2^2 - 2u_5u_3^7u_1x_4x_2 + 2u_5^2u_3^6u_1x_2^2 \end{aligned}$$

Reduced to zero.

1741. Creating S-polynomial from the pair  $(p_{23}, p_{47})$ .

Forming S-pol of  $p_{23}$  and  $p_{47}$ : Polynomial too big for output (text size is 1010 characters, number of terms is 14)

Reduced to zero.

1742. Creating S-polynomial from the pair  $(p_{23}, p_{48})$ .

Forming S-pol of  $p_{23}$  and  $p_{48}$ :

$$\begin{aligned} p_{402} = & -256u_5u_3^6u_1^8x_8x_2 + 128u_5u_3^8u_1^7x_8 + 64u_6u_3^8u_1^6x_6x_2 + \\ & 64u_5u_3^7u_1^6x_5x_2^2 - 32u_6u_3^9u_1^5x_4x_2 + 32u_6u_5u_3^8u_1^5x_2^2 \end{aligned}$$

Reduced to zero.

1743. Creating S-polynomial from the pair  $(p_{23}, p_{49})$ .

Forming S-pol of  $p_{23}$  and  $p_{49}$ :

$$\begin{aligned} p_{403} = & -1024u_3^{11}u_1^{10}x_8x_4x_2 - 128u_5u_3^{14}u_1^7x_8x_2 + \\ & (-256u_5u_3^{14}u_1^8 - 1024u_5u_3^{12}u_1^{10})x_8 + 1024u_3^{11}u_1^{10}x_6x_5x_2 + \\ & 2048u_6u_3^{10}u_1^{11}x_6x_2 - 128u_5u_3^{13}u_1^7x_5x_2^2 + \\ & (64u_5u_3^{15}u_1^6 + 256u_5u_3^{13}u_1^8)x_5x_2 - 512u_6u_3^{11}u_1^9x_4x_2^2 + \\ & (-64u_6u_5u_3^{14}u_1^6 - 256u_6u_5u_3^{12}u_1^8)x_2^2 \end{aligned}$$

Reduced to zero.

1744. Creating S-polynomial from the pair  $(p_{23}, p_{50})$ .

Skipping pair  $p_{23}$  and  $p_{50}$  because gcd of their leading monoms is zero.

1745. Creating S-polynomial from the pair  $(p_{23}, p_{51})$ .

Forming S-pol of  $p_{23}$  and  $p_{51}$ :

$$\begin{aligned} p_{404} = & 128u_3^7u_1^7x_8x_4x_2 + 64u_5u_3^8u_1^6x_8x_2 + 128u_5u_3^8u_1^7x_8 - \\ & 128u_3^7u_1^7x_6x_5x_2 - 256u_6u_3^6u_1^8x_6x_2 - 32u_5u_3^9u_1^5x_5x_2 + \\ & 64u_6u_3^7u_1^6x_4x_2^2 + 32u_6u_5u_3^8u_1^5x_2^2 \end{aligned}$$

Reduced to zero.

1746. Creating S-polynomial from the pair  $(p_{23}, p_{52})$ .

Skipping pair  $p_{23}$  and  $p_{52}$  because gcd of their leading monoms is zero.

1747. Creating S-polynomial from the pair  $(p_{23}, p_{53})$ .

Skipping pair  $p_{23}$  and  $p_{53}$  because gcd of their leading monoms is zero.

1748. Creating S-polynomial from the pair  $(p_{23}, p_{54})$ .

Skipping pair  $p_{23}$  and  $p_{54}$  because gcd of their leading monoms is zero.

1749. Creating S-polynomial from the pair  $(p_{23}, p_{55})$ .

Skipping pair  $p_{23}$  and  $p_{55}$  because gcd of their leading monoms is zero.

1750. Creating S-polynomial from the pair  $(p_{23}, p_{56})$ .

Skipping pair  $p_{23}$  and  $p_{56}$  because gcd of their leading monoms is zero.

1751. Creating S-polynomial from the pair  $(p_{23}, p_{57})$ .

Skipping pair  $p_{23}$  and  $p_{57}$  because gcd of their leading monoms is zero.

1752. Creating S-polynomial from the pair  $(p_{23}, p_{58})$ .

Skipping pair  $p_{23}$  and  $p_{58}$  because gcd of their leading monoms is zero.

1753. Creating S-polynomial from the pair  $(p_{23}, p_{59})$ .

Skipping pair  $p_{23}$  and  $p_{59}$  because gcd of their leading monoms is zero.

1754. Creating S-polynomial from the pair  $(p_{23}, p_{60})$ .

Skipping pair  $p_{23}$  and  $p_{60}$  because gcd of their leading monoms is zero.

1755. Creating S-polynomial from the pair  $(p_{23}, p_{61})$ .

Skipping pair  $p_{23}$  and  $p_{61}$  because gcd of their leading monoms is zero.

1756. Creating S-polynomial from the pair  $(p_{23}, p_{62})$ .

Skipping pair  $p_{23}$  and  $p_{62}$  because gcd of their leading monoms is zero.

1757. Creating S-polynomial from the pair  $(p_{23}, p_{63})$ .

Skipping pair  $p_{23}$  and  $p_{63}$  because gcd of their leading monoms is zero.

1758. Creating S-polynomial from the pair  $(p_{23}, p_{64})$ .

Skipping pair  $p_{23}$  and  $p_{64}$  because gcd of their leading monoms is zero.

1759. Creating S-polynomial from the pair  $(p_{23}, p_{65})$ .

Skipping pair  $p_{23}$  and  $p_{65}$  because gcd of their leading monoms is zero.

1760. Creating S-polynomial from the pair  $(p_{23}, p_{66})$ .  
 Skipping pair  $p_{23}$  and  $p_{66}$  because gcd of their leading monoms is zero.
1761. Creating S-polynomial from the pair  $(p_{23}, p_{67})$ .  
 Skipping pair  $p_{23}$  and  $p_{67}$  because gcd of their leading monoms is zero.
1762. Creating S-polynomial from the pair  $(p_{23}, p_{68})$ .  
 Skipping pair  $p_{23}$  and  $p_{68}$  because gcd of their leading monoms is zero.
1763. Creating S-polynomial from the pair  $(p_{23}, p_{69})$ .  
 Skipping pair  $p_{23}$  and  $p_{69}$  because gcd of their leading monoms is zero.
1764. Creating S-polynomial from the pair  $(p_{23}, p_{70})$ .  
 Skipping pair  $p_{23}$  and  $p_{70}$  because gcd of their leading monoms is zero.
1765. Creating S-polynomial from the pair  $(p_{23}, p_{71})$ .  
 Skipping pair  $p_{23}$  and  $p_{71}$  because gcd of their leading monoms is zero.
1766. Creating S-polynomial from the pair  $(p_{23}, p_{72})$ .  
 Skipping pair  $p_{23}$  and  $p_{72}$  because gcd of their leading monoms is zero.
1767. Creating S-polynomial from the pair  $(p_{23}, p_{73})$ .  
 Skipping pair  $p_{23}$  and  $p_{73}$  because gcd of their leading monoms is zero.
1768. Creating S-polynomial from the pair  $(p_{23}, p_{74})$ .  
 Skipping pair  $p_{23}$  and  $p_{74}$  because gcd of their leading monoms is zero.
1769. Creating S-polynomial from the pair  $(p_{23}, p_{75})$ .  
 Skipping pair  $p_{23}$  and  $p_{75}$  because gcd of their leading monoms is zero.
1770. Creating S-polynomial from the pair  $(p_{23}, p_{76})$ .  
 Skipping pair  $p_{23}$  and  $p_{76}$  because gcd of their leading monoms is zero.
1771. Creating S-polynomial from the pair  $(p_{23}, p_{77})$ .  
 Skipping pair  $p_{23}$  and  $p_{77}$  because gcd of their leading monoms is zero.
1772. Creating S-polynomial from the pair  $(p_{23}, p_{78})$ .  
 Skipping pair  $p_{23}$  and  $p_{78}$  because gcd of their leading monoms is zero.
1773. Creating S-polynomial from the pair  $(p_{23}, p_{79})$ .  
 Skipping pair  $p_{23}$  and  $p_{79}$  because gcd of their leading monoms is zero.
1774. Creating S-polynomial from the pair  $(p_{23}, p_{80})$ .  
 Skipping pair  $p_{23}$  and  $p_{80}$  because gcd of their leading monoms is zero.
1775. Creating S-polynomial from the pair  $(p_{23}, p_{81})$ .  
 Skipping pair  $p_{23}$  and  $p_{81}$  because gcd of their leading monoms is zero.

1776. Creating S-polynomial from the pair  $(p_{23}, p_{82})$ .

Forming S-pol of  $p_{23}$  and  $p_{82}$ :

$$p_{405} = 8u_5u_3^6u_1^3x_2^2 - 16u_5u_3^6u_1^4x_2 + 8u_5u_3^8u_1^3$$

Reduced to zero.

1777. Creating S-polynomial from the pair  $(p_{23}, p_{83})$ .

Forming S-pol of  $p_{23}$  and  $p_{83}$ :

$$\begin{aligned} p_{406} = & 1048576u_5u_3^{19}u_1^{19}x_8x_4x_2 + 262144u_5^2u_3^{20}u_1^{18}x_8x_2 + \\ & 524288u_5^2u_3^{20}u_1^{19}x_8 - 1048576u_6u_3^{18}u_1^{20}x_6^2x_2 - \\ & 524288u_5u_3^{19}u_1^{19}x_6x_5x_2 - 262144u_6u_5u_3^{20}u_1^{18}x_6x_2 - \\ & 262144u_5u_3^{20}u_1^{18}x_5x_4x_2 - 131072u_5^2u_3^{21}u_1^{17}x_5x_2 + \\ & (131072u_6u_5u_3^{21}u_1^{17} + 524288u_6u_3^{20}u_1^{19})x_4x_2 - \\ & 262144u_6u_5^2u_3^{20}u_1^{18}x_2 \end{aligned}$$

Reduced to zero.

1778. Creating S-polynomial from the pair  $(p_{23}, p_{84})$ .

Forming S-pol of  $p_{23}$  and  $p_{84}$ :

$$\begin{aligned} p_{407} = & 256u_3^7u_1^8x_8x_4x_2 + 128u_5u_3^8u_1^7x_8x_2 + 256u_5u_3^8u_1^8x_8 - \\ & 256u_3^7u_1^8x_6x_5x_2 - 512u_6u_3^6u_1^9x_6x_2 - 64u_5u_3^9u_1^6x_5x_2 + \\ & 128u_6u_3^7u_1^7x_4x_2^2 + 64u_6u_5u_3^8u_1^6x_2^2 \end{aligned}$$

Reduced to zero.

1779. Creating S-polynomial from the pair  $(p_{23}, p_{85})$ .

Forming S-pol of  $p_{23}$  and  $p_{85}$ :

$$\begin{aligned} p_{408} = & -512u_5u_3^6u_1^9x_8x_2 + 256u_5u_3^8u_1^8x_8 + 128u_6u_3^8u_1^7x_6x_2 + \\ & 128u_5u_3^7u_1^7x_5x_2^2 - 64u_6u_3^9u_1^6x_4x_2 + 64u_6u_5u_3^8u_1^6x_2^2 \end{aligned}$$

Reduced to zero.

1780. Creating S-polynomial from the pair  $(p_{23}, p_{86})$ .

Skipping pair  $p_{23}$  and  $p_{86}$  because gcd of their leading monoms is zero.

1781. Creating S-polynomial from the pair  $(p_{23}, p_{87})$ .

Skipping pair  $p_{23}$  and  $p_{87}$  because gcd of their leading monoms is zero.

1782. Creating S-polynomial from the pair  $(p_{23}, p_{88})$ .

Skipping pair  $p_{23}$  and  $p_{88}$  because gcd of their leading monoms is zero.

1783. Creating S-polynomial from the pair  $(p_{23}, p_{89})$ .

Skipping pair  $p_{23}$  and  $p_{89}$  because gcd of their leading monoms is zero.



1784. Creating S-polynomial from the pair  $(p_{23}, p_{90})$ .  
 Skipping pair  $p_{23}$  and  $p_{90}$  because gcd of their leading monoms is zero.
1785. Creating S-polynomial from the pair  $(p_{23}, p_{91})$ .  
 Skipping pair  $p_{23}$  and  $p_{91}$  because gcd of their leading monoms is zero.
1786. Creating S-polynomial from the pair  $(p_{23}, p_{92})$ .  
 Skipping pair  $p_{23}$  and  $p_{92}$  because gcd of their leading monoms is zero.
1787. Creating S-polynomial from the pair  $(p_{23}, p_{93})$ .  
 Skipping pair  $p_{23}$  and  $p_{93}$  because gcd of their leading monoms is zero.
1788. Creating S-polynomial from the pair  $(p_{23}, p_{94})$ .  
 Skipping pair  $p_{23}$  and  $p_{94}$  because gcd of their leading monoms is zero.
1789. Creating S-polynomial from the pair  $(p_{23}, p_{95})$ .  
 Forming S-pol of  $p_{23}$  and  $p_{95}$ :

$$\begin{aligned}
 p_{409} = & -524288u_5u_3^{17}u_1^{19}x_8x_6x_2 + 524288u_3^{17}u_1^{19}x_8x_4^2x_2 + \\
 & (-1048576u_5u_3^{16}u_1^{20} - 1048576u_3^{17}u_1^{20})x_8x_4x_2 + 524288u_5u_3^{18}u_1^{19}x_8x_4 + \\
 & (-131072u_5^2u_3^{19}u_1^{17} + 524288u_5^2u_3^{17}u_1^{19})x_8x_2 + \\
 & 524288u_6u_3^{17}u_1^{19}x_6^2x_2 + 262144u_5u_3^{18}u_1^{18}x_6x_5x_2 + \\
 & 131072u_6u_5u_3^{19}u_1^{17}x_6x_2 + 262144u_5u_3^{17}u_1^{18}x_5x_4x_2^2 + \\
 & 65536u_5^2u_3^{20}u_1^{16}x_5x_2 + 131072u_6u_5u_3^{18}u_1^{17}x_4x_2^2 + \\
 & (-65536u_6u_5u_3^{20}u_1^{16} - 262144u_6u_3^{19}u_1^{18})x_4x_2 + \\
 & 131072u_6u_5^2u_3^{19}u_1^{17}x_2
 \end{aligned}$$

Reduced to zero.

1790. Creating S-polynomial from the pair  $(p_{23}, p_{96})$ .  
 Skipping pair  $p_{23}$  and  $p_{96}$  because gcd of their leading monoms is zero.
1791. Creating S-polynomial from the pair  $(p_{23}, p_{97})$ .  
 Skipping pair  $p_{23}$  and  $p_{97}$  because gcd of their leading monoms is zero.
1792. Creating S-polynomial from the pair  $(p_{23}, p_{98})$ .  
 Skipping pair  $p_{23}$  and  $p_{98}$  because gcd of their leading monoms is zero.
1793. Creating S-polynomial from the pair  $(p_{23}, p_{99})$ .  
 Skipping pair  $p_{23}$  and  $p_{99}$  because gcd of their leading monoms is zero.
1794. Creating S-polynomial from the pair  $(p_{23}, p_{100})$ .  
 Skipping pair  $p_{23}$  and  $p_{100}$  because gcd of their leading monoms is zero.
1795. Creating S-polynomial from the pair  $(p_{23}, p_{101})$ .  
 Skipping pair  $p_{23}$  and  $p_{101}$  because gcd of their leading monoms is zero.

1796. Creating S-polynomial from the pair  $(p_{23}, p_{102})$ .  
 Skipping pair  $p_{23}$  and  $p_{102}$  because gcd of their leading monoms is zero.
1797. Creating S-polynomial from the pair  $(p_{23}, p_{103})$ .  
 Skipping pair  $p_{23}$  and  $p_{103}$  because gcd of their leading monoms is zero.
1798. Creating S-polynomial from the pair  $(p_{23}, p_{104})$ .  
 Skipping pair  $p_{23}$  and  $p_{104}$  because gcd of their leading monoms is zero.
1799. Creating S-polynomial from the pair  $(p_{23}, p_{105})$ .  
 Skipping pair  $p_{23}$  and  $p_{105}$  because gcd of their leading monoms is zero.
1800. Creating S-polynomial from the pair  $(p_{23}, p_{106})$ .  
 Skipping pair  $p_{23}$  and  $p_{106}$  because gcd of their leading monoms is zero.
1801. Creating S-polynomial from the pair  $(p_{24}, p_{32})$ .  
 Skipping pair  $p_{24}$  and  $p_{32}$  because gcd of their leading monoms is zero.
1802. Creating S-polynomial from the pair  $(p_{24}, p_{33})$ .  
 Skipping pair  $p_{24}$  and  $p_{33}$  because gcd of their leading monoms is zero.
1803. Creating S-polynomial from the pair  $(p_{24}, p_{34})$ .  
 Forming S-pol of  $p_{24}$  and  $p_{34}$ :

$$\begin{aligned}
 p_{410} = & -128u_3^7u_2^{13}u_1^7x_{12}x_8x_4 + 128u_5u_3^6u_2^{13}u_1^7x_{12}x_8x_2 - \\
 & 256u_3^5u_2^{13}u_1^8x_{12}x_6x_5x_2 + 128u_3^7u_2^{13}u_1^7x_{12}x_6x_5 - \\
 & 128u_6u_3^6u_2^{13}u_1^7x_{12}x_6x_2 + 256u_3^5u_2^{13}u_1^8x_{10}x_8x_5x_2 + \\
 & 128u_5u_3^5u_2^{13}u_1^7x_8x_5x_2x_1 - 256u_5u_3^5u_2^{13}u_1^8x_8x_5x_2 - \\
 & 128u_6u_3^5u_2^{13}u_1^7x_8x_4x_2x_1 + 256u_6u_3^5u_2^{13}u_1^8x_8x_4x_2
 \end{aligned}$$

Reduced to zero.

1804. Creating S-polynomial from the pair  $(p_{24}, p_{35})$ .  
 Skipping pair  $p_{24}$  and  $p_{35}$  because gcd of their leading monoms is zero.
1805. Creating S-polynomial from the pair  $(p_{24}, p_{36})$ .  
 Forming S-pol of  $p_{24}$  and  $p_{36}$ :

$$\begin{aligned}
 p_{411} = & 4u_3^{13}u_1^2x_8x_4 - 4u_5u_3^{12}u_1^2x_8x_2 + 8u_3^{11}u_1^3x_6x_5x_2 - \\
 & 4u_3^{13}u_1^2x_6x_5 + 4u_6u_3^{12}u_1^2x_6x_2 - 4u_3^{12}u_1^2x_5x_4x_2 + \\
 & 4u_6u_3^{11}u_1^2x_4x_2^2 - 8u_6u_3^{11}u_1^3x_4x_2
 \end{aligned}$$

Reduced to zero.

1806. Creating S-polynomial from the pair  $(p_{24}, p_{37})$ .

Forming S-pol of  $p_{24}$  and  $p_{37}$ :

$$\begin{aligned} p_{412} = & -128u_3^{20}u_1^7x_8x_4^2 + 128u_5u_3^{19}u_1^7x_8x_4x_2 + 128u_3^{20}u_1^7x_6x_5x_4 - \\ & 128u_6u_3^{19}u_1^7x_6x_4x_2 + 128u_5u_3^{18}u_1^7x_5x_4x_2 - \\ & 256u_5u_3^{18}u_1^8x_5x_4x_2 - 128u_6u_3^{18}u_1^7x_4^2x_2 + \\ & 256u_6u_3^{18}u_1^8x_4^2x_2 \end{aligned}$$

Reduced to zero.

1807. Creating S-polynomial from the pair  $(p_{24}, p_{38})$ .

Skipping pair  $p_{24}$  and  $p_{38}$  because gcd of their leading monoms is zero.

1808. Creating S-polynomial from the pair  $(p_{24}, p_{39})$ .

Skipping pair  $p_{24}$  and  $p_{39}$  because gcd of their leading monoms is zero.

1809. Creating S-polynomial from the pair  $(p_{24}, p_{40})$ .

Forming S-pol of  $p_{24}$  and  $p_{40}$ :

$$\begin{aligned} p_{413} = & -128u_4^{13}u_3^7u_1^7x_{16}x_8x_4 + 128u_5u_4^{13}u_3^6u_1^7x_{16}x_8x_2 - \\ & 256u_4^{13}u_3^5u_1^8x_{16}x_6x_5x_2 + 128u_4^{13}u_3^7u_1^7x_{16}x_6x_5 - \\ & 128u_6u_4^{13}u_3^6u_1^7x_{16}x_6x_2 + 256u_4^{13}u_3^5u_1^8x_{14}x_8x_5x_2 + \\ & 128u_5u_4^{13}u_3^5u_1^7x_8x_5x_3x_2 - 256u_5u_4^{13}u_3^5u_1^8x_8x_5x_2 - \\ & 128u_6u_4^{13}u_3^5u_1^7x_8x_4x_3x_2 + 256u_6u_4^{13}u_3^5u_1^8x_8x_4x_2 \end{aligned}$$

Reduced to zero.

1810. Creating S-polynomial from the pair  $(p_{24}, p_{41})$ .

Forming S-pol of  $p_{24}$  and  $p_{41}$ :

$$\begin{aligned} p_{414} = & 128u_5u_3^{19}u_1^7x_8x_4^2 - 128u_5^2u_3^{18}u_1^7x_8x_4x_2 + \\ & 256u_5u_3^{17}u_1^8x_6x_5x_4x_2 - 128u_5u_3^{19}u_1^7x_6x_5x_4 - \\ & 256u_6u_3^{17}u_1^8x_6x_4^2x_2 + 128u_6u_5u_3^{18}u_1^7x_6x_4x_2 - \\ & 128u_5u_3^{18}u_1^7x_5x_4^2x_2 + 256u_6u_3^{18}u_1^8x_4^2x_2 - \\ & 128u_6u_5^2u_3^{18}u_1^7x_4x_2 \end{aligned}$$

Reduced to zero.

1811. Creating S-polynomial from the pair  $(p_{24}, p_{42})$ .

Forming S-pol of  $p_{24}$  and  $p_{42}$ :

$$\begin{aligned} p_{415} = & 128u_5u_3^7u_2^{12}u_1^7x_{12}x_8x_4 - 128u_5^2u_3^6u_2^{12}u_1^7x_{12}x_8x_2 + \\ & 256u_5u_3^5u_2^{12}u_1^8x_{12}x_6x_5x_2 - 128u_5u_3^7u_2^{12}u_1^7x_{12}x_6x_5 + \\ & 128u_6u_5u_3^6u_2^{12}u_1^7x_{12}x_6x_2 - 256u_6u_3^5u_2^{12}u_1^8x_{10}x_8x_4x_2 - \\ & 128u_5u_3^5u_2^{13}u_1^7x_8x_5x_4x_2 + 256u_6u_3^5u_2^{13}u_1^8x_8x_4x_2 - \\ & 128u_6u_5^2u_3^5u_2^{13}u_1^7x_8x_2 \end{aligned}$$

Reduced to zero.

1812. Creating S-polynomial from the pair  $(p_{24}, p_{43})$ .

Forming S-pol of  $p_{24}$  and  $p_{43}$ :

$$\begin{aligned} p_{416} = & 128u_5u_4^{12}u_3^7u_1^7x_{16}x_8x_4 - 128u_5^2u_4^{12}u_3^6u_1^7x_{16}x_8x_2 + \\ & 256u_5u_4^{12}u_3^5u_1^8x_{16}x_6x_5x_2 - 128u_5u_4^{12}u_3^7u_1^7x_{16}x_6x_5 + \\ & 128u_6u_5u_4^{12}u_3^6u_1^7x_{16}x_6x_2 - 256u_6u_4^{12}u_3^5u_1^8x_{14}x_8x_4x_2 - \\ & 128u_5u_4^{13}u_3^5u_1^7x_8x_5x_4x_2 + 256u_6u_4^{13}u_3^5u_1^8x_8x_4x_2 - \\ & 128u_6u_5^2u_4^{13}u_3^5u_1^7x_8x_2 \end{aligned}$$

Reduced to zero.

1813. Creating S-polynomial from the pair  $(p_{24}, p_{44})$ .

Skipping pair  $p_{24}$  and  $p_{44}$  because gcd of their leading monoms is zero.

1814. Creating S-polynomial from the pair  $(p_{24}, p_{45})$ .

Forming S-pol of  $p_{24}$  and  $p_{45}$ :

$$\begin{aligned} p_{417} = & (-1024u_3^{20}u_1^{10} - 4096u_3^{18}u_1^{12})x_8x_6x_4 + \\ & (1024u_5u_3^{19}u_1^{10} + 4096u_5u_3^{17}u_1^{12})x_8x_6x_2 + 4096u_3^{17}u_1^{12}x_8x_4^2x_2 + \\ & (-512u_5u_3^{20}u_1^9 + 8192u_5u_3^{16}u_1^{13})x_8x_4x_2 + \\ & (-2048u_3^{18}u_1^{11} - 8192u_3^{16}u_1^{13})x_6^2x_5x_2 + \\ & (1024u_3^{20}u_1^{10} + 4096u_3^{18}u_1^{12})x_6^2x_5 + \\ & (-1024u_6u_3^{19}u_1^{10} - 4096u_6u_3^{17}u_1^{12})x_6^2x_2 + 1024u_3^{19}u_1^{10}x_6x_5x_4x_2 - \\ & 2048u_5u_3^{17}u_1^{11}x_5x_4x_2^2 + 256u_5u_3^{21}u_1^8x_5x_4x_2 - \\ & 512u_6u_3^{19}u_1^9x_4^2x_2^2 + 1024u_6u_3^{19}u_1^{10}x_4^2x_2 + \\ & (-256u_6u_5u_3^{20}u_1^8 - 1024u_6u_5u_3^{18}u_1^{10})x_4x_2^2 \end{aligned}$$

Reduced to zero.

1815. Creating S-polynomial from the pair  $(p_{24}, p_{46})$ .

Skipping pair  $p_{24}$  and  $p_{46}$  because gcd of their leading monoms is zero.

1816. Creating S-polynomial from the pair  $(p_{24}, p_{47})$ .

Forming S-pol of  $p_{24}$  and  $p_{47}$ : Polynomial too big for output (text size is 1297 characters, number of terms is 17)

S-pol added.

1817. Creating S-polynomial from the pair  $(p_{24}, p_{48})$ .

Forming S-pol of  $p_{24}$  and  $p_{48}$ :

$$\begin{aligned} p_{418} = & 128u_3^{13}u_1^7x_8x_6x_4 - 128u_5u_3^{12}u_1^7x_8x_6x_2 - \\ & 128u_3^{12}u_1^7x_8x_4^2x_2 - 256u_5u_3^{11}u_1^8x_8x_4x_2 + \\ & 256u_3^{11}u_1^8x_6^2x_5x_2 - 128u_3^{13}u_1^7x_6^2x_5 + 128u_6u_3^{12}u_1^7x_6^2x_2 + \\ & 64u_6u_3^{13}u_1^6x_6x_4x_2 + 64u_5u_3^{12}u_1^6x_5x_4x_2 - \\ & 32u_6u_3^{14}u_1^5x_4^2x_2 + 32u_6u_5u_3^{13}u_1^5x_4x_2^2 \end{aligned}$$

Reduced to zero.

1818. Creating S-polynomial from the pair  $(p_{24}, p_{49})$ .

Forming S-pol of  $p_{24}$  and  $p_{49}$ :

$$\begin{aligned}
p_{419} = & (-256u_3^{19}u_1^8 - 1024u_3^{17}u_1^{10})x_8x_6x_4 + \\
& (256u_5u_3^{18}u_1^8 + 1024u_5u_3^{16}u_1^{10})x_8x_6x_2 + 256u_3^{18}u_1^8x_8x_4^2x_2 - \\
& 128u_5u_3^{19}u_1^7x_8x_4x_2 + (-512u_3^{17}u_1^9 - 2048u_3^{15}u_1^{11})x_6^2x_5x_2 + \\
& (256u_3^{19}u_1^8 + 1024u_3^{17}u_1^{10})x_6^2x_5 + \\
& (-256u_6u_3^{18}u_1^8 - 1024u_6u_3^{16}u_1^{10})x_6^2x_2 + 1024u_3^{16}u_1^{10}x_6x_5x_4x_2 + \\
& 2048u_6u_3^{15}u_1^{11}x_6x_4x_2 - 128u_5u_3^{18}u_1^7x_5x_4x_2^2 + \\
& (64u_5u_3^{20}u_1^6 + 256u_5u_3^{18}u_1^8)x_5x_4x_2 - 512u_6u_3^{16}u_1^9x_4^2x_2^2 + \\
& (-64u_6u_5u_3^{19}u_1^6 - 256u_6u_5u_3^{17}u_1^8)x_4x_2^2
\end{aligned}$$

Reduced to zero.

1819. Creating S-polynomial from the pair  $(p_{24}, p_{50})$ .

Forming S-pol of  $p_{24}$  and  $p_{50}$ :

$$\begin{aligned}
p_{420} = & (-16u_3^{17}u_1^4 - 64u_3^{15}u_1^6)x_8^2x_4 + \\
& (16u_5u_3^{16}u_1^4 + 64u_5u_3^{14}u_1^6)x_8^2x_2 + \\
& (-32u_3^{15}u_1^5 - 128u_3^{13}u_1^7)x_8x_6x_5x_2 + \\
& (16u_3^{17}u_1^4 + 64u_3^{15}u_1^6)x_8x_6x_5 + \\
& (-16u_6u_3^{16}u_1^4 - 64u_6u_3^{14}u_1^6)x_8x_6x_2 + \\
& (16u_3^{16}u_1^4 + 64u_3^{14}u_1^6)x_8x_5x_4x_2 + \\
& (-8u_6u_3^{17}u_1^3 + 128u_6u_3^{13}u_1^7)x_8x_4x_2 + \\
& (-8u_6u_3^{16}u_1^3 - 32u_6u_3^{14}u_1^5)x_5x_4x_2^2 + \\
& (4u_6u_3^{18}u_1^2 + 16u_6u_3^{16}u_1^4)x_5x_4x_2 + \\
& (-4u_6^2u_3^{17}u_1^2 - 16u_6^2u_3^{15}u_1^4)x_4x_2^2
\end{aligned}$$

Reduced to zero.

1820. Creating S-polynomial from the pair  $(p_{24}, p_{51})$ .

Forming S-pol of  $p_{24}$  and  $p_{51}$ :

$$\begin{aligned}
p_{421} = & 128u_3^{13}u_1^7x_8x_6x_4 - 128u_5u_3^{12}u_1^7x_8x_6x_2 + \\
& 64u_5u_3^{13}u_1^6x_8x_4x_2 + 256u_3^{11}u_1^8x_6^2x_5x_2 - 128u_3^{13}u_1^7x_6^2x_5 + \\
& 128u_6u_3^{12}u_1^7x_6^2x_2 - 128u_3^{12}u_1^7x_6x_5x_4x_2 - \\
& 256u_6u_3^{11}u_1^8x_6x_4x_2 - 32u_5u_3^{14}u_1^5x_5x_4x_2 + \\
& 64u_6u_3^{12}u_1^6x_4^2x_2^2 + 32u_6u_5u_3^{13}u_1^5x_4x_2^2
\end{aligned}$$

Reduced to zero.

1821. Creating S-polynomial from the pair  $(p_{24}, p_{52})$ .  
 Forming S-pol of  $p_{24}$  and  $p_{52}$ : Polynomial too big for output (text size is 1107 characters, number of terms is 16)  
 S-pol added.
1822. Creating S-polynomial from the pair  $(p_{24}, p_{53})$ .  
 Forming S-pol of  $p_{24}$  and  $p_{53}$ :  

$$p_{422} = 8u_3^{11}u_1^3x_8^2x_4 - 8u_5u_3^{10}u_1^3x_8^2x_2 + 16u_3^9u_1^4x_8x_6x_5x_2 -$$

$$8u_3^{11}u_1^3x_8x_6x_5 + 8u_6u_3^{10}u_1^3x_8x_6x_2 - 8u_3^{10}u_1^3x_8x_5x_4x_2 +$$

$$(4u_6u_3^{11}u_1^2 - 16u_6u_3^9u_1^4)x_8x_4x_2 + 4u_6u_3^{10}u_1^2x_5x_4x_2 -$$

$$2u_6u_3^{12}u_1x_5x_4x_2 + 2u_6^2u_3^{11}u_1x_4x_2^2$$
  
 Reduced to zero.
1823. Creating S-polynomial from the pair  $(p_{24}, p_{54})$ .  
 Skipping pair  $p_{24}$  and  $p_{54}$  because gcd of their leading monoms is zero.
1824. Creating S-polynomial from the pair  $(p_{24}, p_{55})$ .  
 Skipping pair  $p_{24}$  and  $p_{55}$  because gcd of their leading monoms is zero.
1825. Creating S-polynomial from the pair  $(p_{24}, p_{56})$ .  
 Skipping pair  $p_{24}$  and  $p_{56}$  because gcd of their leading monoms is zero.
1826. Creating S-polynomial from the pair  $(p_{24}, p_{57})$ .  
 Forming S-pol of  $p_{24}$  and  $p_{57}$ : Polynomial too big for output (text size is 1618 characters, number of terms is 17)  
 Reduced to zero.
1827. Creating S-polynomial from the pair  $(p_{24}, p_{58})$ .  
 Skipping pair  $p_{24}$  and  $p_{58}$  because gcd of their leading monoms is zero.
1828. Creating S-polynomial from the pair  $(p_{24}, p_{59})$ .  
 Skipping pair  $p_{24}$  and  $p_{59}$  because gcd of their leading monoms is zero.
1829. Creating S-polynomial from the pair  $(p_{24}, p_{60})$ .  
 Skipping pair  $p_{24}$  and  $p_{60}$  because gcd of their leading monoms is zero.
1830. Creating S-polynomial from the pair  $(p_{24}, p_{61})$ .  
 Skipping pair  $p_{24}$  and  $p_{61}$  because gcd of their leading monoms is zero.
1831. Creating S-polynomial from the pair  $(p_{24}, p_{62})$ .  
 Forming S-pol of  $p_{24}$  and  $p_{62}$ : Polynomial too big for output (text size is 1391 characters, number of terms is 16)  
 Reduced to zero.
1832. Creating S-polynomial from the pair  $(p_{24}, p_{63})$ .  
 Skipping pair  $p_{24}$  and  $p_{63}$  because gcd of their leading monoms is zero.

1833. Creating S-polynomial from the pair  $(p_{24}, p_{64})$ .  
 Skipping pair  $p_{24}$  and  $p_{64}$  because gcd of their leading monoms is zero.
1834. Creating S-polynomial from the pair  $(p_{24}, p_{65})$ .  
 Skipping pair  $p_{24}$  and  $p_{65}$  because gcd of their leading monoms is zero.
1835. Creating S-polynomial from the pair  $(p_{24}, p_{66})$ .  
 Skipping pair  $p_{24}$  and  $p_{66}$  because gcd of their leading monoms is zero.
1836. Creating S-polynomial from the pair  $(p_{24}, p_{67})$ .  
 Forming S-pol of  $p_{24}$  and  $p_{67}$ : Polynomial too big for output (text size is 1618 characters, number of terms is 17)  
 Reduced to zero.
1837. Creating S-polynomial from the pair  $(p_{24}, p_{68})$ .  
 Skipping pair  $p_{24}$  and  $p_{68}$  because gcd of their leading monoms is zero.
1838. Creating S-polynomial from the pair  $(p_{24}, p_{69})$ .  
 Skipping pair  $p_{24}$  and  $p_{69}$  because gcd of their leading monoms is zero.
1839. Creating S-polynomial from the pair  $(p_{24}, p_{70})$ .  
 Skipping pair  $p_{24}$  and  $p_{70}$  because gcd of their leading monoms is zero.
1840. Creating S-polynomial from the pair  $(p_{24}, p_{71})$ .  
 Skipping pair  $p_{24}$  and  $p_{71}$  because gcd of their leading monoms is zero.
1841. Creating S-polynomial from the pair  $(p_{24}, p_{72})$ .  
 Forming S-pol of  $p_{24}$  and  $p_{72}$ : Polynomial too big for output (text size is 1391 characters, number of terms is 16)  
 Reduced to zero.
1842. Creating S-polynomial from the pair  $(p_{24}, p_{73})$ .  
 Skipping pair  $p_{24}$  and  $p_{73}$  because gcd of their leading monoms is zero.
1843. Creating S-polynomial from the pair  $(p_{24}, p_{74})$ .  
 Skipping pair  $p_{24}$  and  $p_{74}$  because gcd of their leading monoms is zero.
1844. Creating S-polynomial from the pair  $(p_{24}, p_{75})$ .  
 Skipping pair  $p_{24}$  and  $p_{75}$  because gcd of their leading monoms is zero.
1845. Creating S-polynomial from the pair  $(p_{24}, p_{76})$ .  
 Skipping pair  $p_{24}$  and  $p_{76}$  because gcd of their leading monoms is zero.
1846. Creating S-polynomial from the pair  $(p_{24}, p_{77})$ .  
 Skipping pair  $p_{24}$  and  $p_{77}$  because gcd of their leading monoms is zero.
1847. Creating S-polynomial from the pair  $(p_{24}, p_{78})$ .  
 Skipping pair  $p_{24}$  and  $p_{78}$  because gcd of their leading monoms is zero.

1848. Creating S-polynomial from the pair  $(p_{24}, p_{79})$ .

Forming S-pol of  $p_{24}$  and  $p_{79}$ :

$$\begin{aligned}
p_{423} = & (-512u_3^7u_2^{14}u_1^9 + 1024u_3^7u_2^{12}u_1^{10})x_{12}x_8x_4 + \\
& (512u_5u_3^6u_2^{14}u_1^9 - 1024u_5u_3^6u_2^{12}u_1^{10})x_{12}x_8x_2 + \\
& (-1024u_3^5u_2^{14}u_1^{10} + 2048u_3^5u_2^{12}u_1^{11})x_{12}x_6x_5x_2 + \\
& (512u_3^7u_2^{14}u_1^9 - 1024u_3^7u_2^{12}u_1^{10})x_{12}x_6x_5 + \\
& (-512u_6u_3^6u_2^{14}u_1^9 + 1024u_6u_3^6u_2^{12}u_1^{10})x_{12}x_6x_2 + \\
& 1024u_3^5u_2^{14}u_1^{10}x_{10}x_8x_5x_2 + \\
& (-4096u_3^5u_2^{11}u_1^{12} + 2048u_3^5u_2^{11}u_1^{11})x_8x_5x_4x_2x_1 + \\
& (2048u_3^5u_2^{13}u_1^{11} - 1024u_3^5u_2^{13}u_1^{10})x_8x_5x_4x_2 + \\
& 512u_5u_3^5u_2^{14}u_1^9x_8x_5x_2x_1 - 1024u_5u_3^5u_2^{14}u_1^{10}x_8x_5x_2 + \\
& (-512u_6u_3^5u_2^{14}u_1^9 - 2048u_6u_3^5u_2^{12}u_1^{11} + \\
& 1024u_6u_3^5u_2^{12}u_1^{10})x_8x_4x_2x_1 + 1024u_6u_3^5u_2^{14}u_1^{10}x_8x_4x_2
\end{aligned}$$

S-pol added.

1849. Creating S-polynomial from the pair  $(p_{24}, p_{80})$ .

Skipping pair  $p_{24}$  and  $p_{80}$  because gcd of their leading monoms is zero.

1850. Creating S-polynomial from the pair  $(p_{24}, p_{81})$ .

Forming S-pol of  $p_{24}$  and  $p_{81}$ :

$$\begin{aligned}
p_{424} = & -512u_5u_3^{17}u_1^9x_8x_4 + 512u_5^2u_3^{16}u_1^9x_8x_2 - \\
& 1024u_5u_3^{15}u_1^{10}x_6x_5x_2 + 512u_5u_3^{17}u_1^9x_6x_5 + \\
& 1024u_6u_3^{15}u_1^{10}x_6x_4x_2 - 512u_6u_5u_3^{16}u_1^9x_6x_2 + \\
& 512u_5u_3^{16}u_1^9x_5x_4x_2 - 512u_6u_3^{16}u_1^9x_4^2x_2
\end{aligned}$$

Reduced to zero.

1851. Creating S-polynomial from the pair  $(p_{24}, p_{82})$ .

Skipping pair  $p_{24}$  and  $p_{82}$  because gcd of their leading monoms is zero.

1852. Creating S-polynomial from the pair  $(p_{24}, p_{83})$ .

Forming S-pol of  $p_{24}$  and  $p_{83}$ :

$$\begin{aligned}
p_{425} = & 524288u_5u_3^{25}u_1^{19}x_8x_6x_4 - 524288u_5^2u_3^{24}u_1^{19}x_8x_6x_2 + \\
& 524288u_5u_3^{24}u_1^{19}x_8x_4^2x_2 + 262144u_5^2u_3^{25}u_1^{18}x_8x_4x_2 + \\
& 1048576u_5u_3^{23}u_1^{20}x_6^2x_5x_2 - 524288u_5u_3^{25}u_1^{19}x_6^2x_5 - \\
& 1048576u_6u_3^{23}u_1^{20}x_6^2x_4x_2 + 524288u_6u_5u_3^{24}u_1^{19}x_6^2x_2 - \\
& 524288u_5u_3^{24}u_1^{19}x_6x_5x_4x_2 - 262144u_6u_5u_3^{25}u_1^{18}x_6x_4x_2 - \\
& 262144u_5u_3^{25}u_1^{18}x_5x_4^2x_2 - 131072u_5^2u_3^{26}u_1^{17}x_5x_4x_2 + \\
& (131072u_6u_5u_3^{26}u_1^{17} + 524288u_6u_3^{25}u_1^{19})x_4^2x_2 - \\
& 262144u_6u_5^2u_3^{25}u_1^{18}x_4x_2
\end{aligned}$$

Reduced to zero.



1853. Creating S-polynomial from the pair  $(p_{24}, p_{84})$ .

Forming S-pol of  $p_{24}$  and  $p_{84}$ :

$$\begin{aligned} p_{426} = & 256u_3^{13}u_1^8x_8x_6x_4 - 256u_5u_3^{12}u_1^8x_8x_6x_2 + \\ & 128u_5u_3^{13}u_1^7x_8x_4x_2 + 512u_3^{11}u_1^9x_6^2x_5x_2 - \\ & 256u_3^{13}u_1^8x_6^2x_5 + 256u_6u_3^{12}u_1^8x_6^2x_2 - \\ & 256u_3^{12}u_1^8x_6x_5x_4x_2 - 512u_6u_3^{11}u_1^9x_6x_4x_2 - \\ & 64u_5u_3^{14}u_1^6x_5x_4x_2 + 128u_6u_3^{12}u_1^7x_4^2x_2 + \\ & 64u_6u_5u_3^{13}u_1^6x_4x_2^2 \end{aligned}$$

Reduced to zero.

1854. Creating S-polynomial from the pair  $(p_{24}, p_{85})$ .

Forming S-pol of  $p_{24}$  and  $p_{85}$ :

$$\begin{aligned} p_{427} = & 256u_3^{13}u_1^8x_8x_6x_4 - 256u_5u_3^{12}u_1^8x_8x_6x_2 - \\ & 256u_3^{12}u_1^8x_8x_4^2x_2 - 512u_5u_3^{11}u_1^9x_8x_4x_2 + \\ & 512u_3^{11}u_1^9x_6^2x_5x_2 - 256u_3^{13}u_1^8x_6^2x_5 + 256u_6u_3^{12}u_1^8x_6^2x_2 + \\ & 128u_6u_3^{13}u_1^7x_6x_4x_2 + 128u_5u_3^{12}u_1^7x_5x_4x_2^2 - \\ & 64u_6u_3^{14}u_1^6x_4^2x_2 + 64u_6u_5u_3^{13}u_1^6x_4x_2^2 \end{aligned}$$

Reduced to zero.

1855. Creating S-polynomial from the pair  $(p_{24}, p_{86})$ .

Forming S-pol of  $p_{24}$  and  $p_{86}$ :

$$\begin{aligned} p_{428} = & (-512u_3^{21}u_1^9 + 1024u_3^{19}u_1^{10})x_8x_4^2 + \\ & (512u_5u_3^{20}u_1^9 - 1024u_5u_3^{18}u_1^{10})x_8x_4x_2 + 2048u_3^{17}u_1^{11}x_6x_5x_4x_2 + \\ & (512u_3^{21}u_1^9 - 1024u_3^{19}u_1^{10})x_6x_5x_4 + \\ & (-512u_6u_3^{20}u_1^9 + 1024u_6u_3^{18}u_1^{10})x_6x_4x_2 + \\ & (-4096u_3^{16}u_1^{12} + 2048u_3^{16}u_1^{11})x_5x_4^2x_2^2 + \\ & (2048u_3^{18}u_1^{11} - 1024u_3^{18}u_1^{10})x_5x_4^2x_2 + 512u_5u_3^{19}u_1^9x_5x_4x_2^2 - \\ & 1024u_5u_3^{19}u_1^{10}x_5x_4x_2 + \\ & (-512u_6u_3^{19}u_1^9 - 2048u_6u_3^{17}u_1^{11} + 1024u_6u_3^{17}u_1^{10})x_4^2x_2^2 + \\ & 1024u_6u_3^{19}u_1^{10}x_4^2x_2 \end{aligned}$$

S-pol added.

1856. Creating S-polynomial from the pair  $(p_{24}, p_{87})$ .

Forming S-pol of  $p_{24}$  and  $p_{87}$ :

$$\begin{aligned} p_{429} = & 8u_3^{13}u_1^3x_8x_4 - 8u_5u_3^{12}u_1^3x_8x_2 + 16u_3^{11}u_1^4x_6x_5x_2 - \\ & 8u_3^{13}u_1^3x_6x_5 + 8u_6u_3^{12}u_1^3x_6x_2 - 8u_3^{12}u_1^3x_5x_4x_2 + \\ & 8u_6u_3^{11}u_1^3x_4x_2^2 - 16u_6u_3^{11}u_1^4x_4x_2 \end{aligned}$$

Reduced to zero.

1857. Creating S-polynomial from the pair  $(p_{24}, p_{88})$ .

Skipping pair  $p_{24}$  and  $p_{88}$  because gcd of their leading monoms is zero.

1858. Creating S-polynomial from the pair  $(p_{24}, p_{89})$ .

Skipping pair  $p_{24}$  and  $p_{89}$  because gcd of their leading monoms is zero.

1859. Creating S-polynomial from the pair  $(p_{24}, p_{90})$ .

Skipping pair  $p_{24}$  and  $p_{90}$  because gcd of their leading monoms is zero.

1860. Creating S-polynomial from the pair  $(p_{24}, p_{91})$ .

Skipping pair  $p_{24}$  and  $p_{91}$  because gcd of their leading monoms is zero.

1861. Creating S-polynomial from the pair  $(p_{24}, p_{92})$ .

Skipping pair  $p_{24}$  and  $p_{92}$  because gcd of their leading monoms is zero.

1862. Creating S-polynomial from the pair  $(p_{24}, p_{93})$ .

Forming S-pol of  $p_{24}$  and  $p_{93}$ :

$$\begin{aligned} p_{430} = & (-512u_4^{14}u_3^7u_1^9 + 1024u_4^{12}u_3^7u_1^{10})x_{16}x_8x_4 + \\ & (512u_5u_4^{14}u_3^6u_1^9 - 1024u_5u_4^{12}u_3^6u_1^{10})x_{16}x_8x_2 + \\ & (-1024u_4^{14}u_3^5u_1^{10} + 2048u_4^{12}u_3^5u_1^{11})x_{16}x_6x_5x_2 + \\ & (512u_4^{14}u_3^7u_1^9 - 1024u_4^{12}u_3^7u_1^{10})x_{16}x_6x_5 + \\ & (-512u_6u_4^{14}u_3^6u_1^9 + 1024u_6u_4^{12}u_3^6u_1^{10})x_{16}x_6x_2 + \\ & 1024u_4^{14}u_3^5u_1^{10}x_{14}x_8x_5x_2 + \\ & (-4096u_4^{11}u_3^5u_1^{12} + 2048u_4^{11}u_3^5u_1^{11})x_8x_5x_4x_3x_2 + \\ & (2048u_4^{13}u_3^5u_1^{11} - 1024u_4^{13}u_3^5u_1^{10})x_8x_5x_4x_2 + \\ & 512u_5u_4^{14}u_3^5u_1^9x_8x_5x_3x_2 - 1024u_5u_4^{14}u_3^5u_1^{10}x_8x_5x_2 + \\ & (-512u_6u_4^{14}u_3^5u_1^9 - 2048u_6u_4^{12}u_3^5u_1^{11} + \\ & 1024u_6u_4^{12}u_3^5u_1^{10})x_8x_4x_3x_2 + 1024u_6u_4^{14}u_3^5u_1^{10}x_8x_4x_2 \end{aligned}$$

S-pol added.

1863. Creating S-polynomial from the pair  $(p_{24}, p_{94})$ .

Skipping pair  $p_{24}$  and  $p_{94}$  because gcd of their leading monoms is zero.

1864. Creating S-polynomial from the pair  $(p_{24}, p_{95})$ .

Forming S-pol of  $p_{24}$  and  $p_{95}$ :

$$\begin{aligned}
p_{431} = & -524288u_5u_3^{22}u_1^{19}x_8x_6x_4x_2 + 524288u_3^{23}u_1^{19}x_8x_6x_4 - \\
& 524288u_5u_3^{22}u_1^{19}x_8x_6x_2 + \\
& (-1048576u_5u_3^{21}u_1^{20} - 1048576u_3^{22}u_1^{20})x_8x_4^2x_2 + \\
& (-131072u_5^2u_3^{24}u_1^{17} + 524288u_5^2u_3^{22}u_1^{19})x_8x_4x_2 + \\
& 1048576u_3^{21}u_1^{20}x_6^2x_5x_2 - 524288u_3^{23}u_1^{19}x_6^2x_5 + \\
& 524288u_6u_3^{22}u_1^{19}x_6^2x_4x_2 + 524288u_6u_3^{22}u_1^{19}x_6^2x_2 + \\
& 262144u_5u_3^{23}u_1^{18}x_6x_5x_4x_2 + 131072u_6u_5u_3^{24}u_1^{17}x_6x_4x_2 + \\
& 262144u_5u_3^{22}u_1^{18}x_5x_4^2x_2^2 + 65536u_5^2u_3^{25}u_1^{16}x_5x_4x_2 + \\
& 131072u_6u_5u_3^{23}u_1^{17}x_4^2x_2^2 + \\
& (-65536u_6u_5u_3^{25}u_1^{16} - 262144u_6u_3^{24}u_1^{18})x_4^2x_2 + \\
& 131072u_6u_5^2u_3^{24}u_1^{17}x_4x_2
\end{aligned}$$

S-pol added.

1865. Creating S-polynomial from the pair  $(p_{24}, p_{96})$ .

Forming S-pol of  $p_{24}$  and  $p_{96}$ :

$$\begin{aligned}
p_{432} = & -16u_3^{12}u_1^4x_8x_4^2 + \\
& (16u_5u_3^{11}u_1^4 - 64u_5u_3^9u_1^6)x_8x_4x_2 + 16u_3^{12}u_1^4x_6x_5x_4 + \\
& (-16u_6u_3^{11}u_1^4 + 64u_6u_3^9u_1^6)x_6x_4x_2 + 16u_5u_3^{10}u_1^4x_5x_4x_2^2 - \\
& 16u_6u_3^{10}u_1^4x_4^2x_2^2
\end{aligned}$$

Reduced to zero.

1866. Creating S-polynomial from the pair  $(p_{24}, p_{97})$ .

Forming S-pol of  $p_{24}$  and  $p_{97}$ :

$$\begin{aligned}
p_{433} = & -256u_3^{20}u_1^8x_8x_4^2 + 256u_5u_3^{19}u_1^8x_8x_4x_2 + 256u_3^{20}u_1^8x_6x_5x_4 - \\
& 256u_6u_3^{19}u_1^8x_6x_4x_2 + \\
& (-2048u_3^{15}u_1^{11} + 1024u_3^{15}u_1^{10})x_5x_4^2x_2^2 + 1024u_3^{17}u_1^{10}x_5x_4^2x_2 + \\
& 256u_5u_3^{18}u_1^8x_5x_4x_2^2 - 512u_5u_3^{18}u_1^9x_5x_4x_2 + \\
& (-256u_6u_3^{18}u_1^8 - 1024u_6u_3^{16}u_1^{10})x_4^2x_2^2 + \\
& (512u_6u_3^{18}u_1^9 + 1024u_6u_3^{16}u_1^{10})x_4^2x_2
\end{aligned}$$

S-pol added.

1867. Creating S-polynomial from the pair  $(p_{24}, p_{98})$ .

Forming S-pol of  $p_{24}$  and  $p_{98}$ : Polynomial too big for output (text size is 2945 characters, number of terms is 32)

Reduced to zero.

1868. Creating S-polynomial from the pair  $(p_{24}, p_{99})$ .

Forming S-pol of  $p_{24}$  and  $p_{99}$ : Polynomial too big for output (text size is 2943 characters, number of terms is 32)

Reduced to zero.

1869. Creating S-polynomial from the pair  $(p_{24}, p_{100})$ .

Forming S-pol of  $p_{24}$  and  $p_{100}$ : Polynomial too big for output (text size is 1102 characters, number of terms is 15)

Reduced to zero.

1870. Creating S-polynomial from the pair  $(p_{24}, p_{101})$ .

Forming S-pol of  $p_{24}$  and  $p_{101}$ :

$$\begin{aligned} p_{434} = & -16u_3^7u_2^5u_1^4x_{12}x_8x_4 + \\ & (16u_5u_3^6u_2^5u_1^4 - 64u_5u_3^5u_2^4u_1^6)x_{12}x_8x_2 - \\ & 32u_3^5u_2^5u_1^5x_{12}x_6x_5x_2 + 16u_3^7u_2^5u_1^4x_{12}x_6x_5 - \\ & 16u_6u_3^6u_2^5u_1^4x_{12}x_6x_2 + 32u_3^5u_2^5u_1^5x_{10}x_8x_5x_2 + \\ & 64u_6u_3^5u_2^4u_1^6x_{10}x_8x_2 + 16u_5u_3^5u_2^5u_1^4x_8x_5x_2x_1 - \\ & 16u_6u_3^5u_2^5u_1^4x_8x_4x_2x_1 \end{aligned}$$

Reduced to zero.

1871. Creating S-polynomial from the pair  $(p_{24}, p_{102})$ .

Forming S-pol of  $p_{24}$  and  $p_{102}$ :

$$\begin{aligned} p_{435} = & -256u_3^7u_2^{13}u_1^8x_{12}x_8x_4 + 256u_5u_3^6u_2^{13}u_1^8x_{12}x_8x_2 - \\ & 512u_3^5u_2^{13}u_1^9x_{12}x_6x_5x_2 + 256u_3^7u_2^{13}u_1^8x_{12}x_6x_5 - \\ & 256u_6u_3^6u_2^{13}u_1^8x_{12}x_6x_2 + 512u_3^5u_2^{13}u_1^9x_{10}x_8x_5x_2 + \\ & (-2048u_3^5u_2^{10}u_1^{11} + 1024u_3^5u_2^{10}u_1^{10})x_8x_5x_4x_2x_1 + \\ & 1024u_3^5u_2^{12}u_1^{10}x_8x_5x_4x_2 + 256u_5u_3^5u_2^{13}u_1^8x_8x_5x_2x_1 - \\ & 512u_5u_3^5u_2^{13}u_1^9x_8x_5x_2 + \\ & (-256u_6u_3^5u_2^{13}u_1^8 - 1024u_6u_3^5u_2^{11}u_1^{10})x_8x_4x_2x_1 + \\ & (512u_6u_3^5u_2^{13}u_1^9 + 1024u_6u_3^5u_2^{11}u_1^{10})x_8x_4x_2 \end{aligned}$$

S-pol added.

1872. Creating S-polynomial from the pair  $(p_{24}, p_{103})$ .

Skipping pair  $p_{24}$  and  $p_{103}$  because gcd of their leading monoms is zero.

1873. Creating S-polynomial from the pair  $(p_{24}, p_{104})$ .

Forming S-pol of  $p_{24}$  and  $p_{104}$ : Polynomial too big for output (text size is 1102 characters, number of terms is 15)

Reduced to zero.

1874. Creating S-polynomial from the pair  $(p_{24}, p_{105})$ .

Forming S-pol of  $p_{24}$  and  $p_{105}$ :

$$\begin{aligned} p_{436} = & -16u_4^5u_3^7u_1^4x_{16}x_8x_4 + \\ & (16u_5u_4^5u_3^6u_1^4 - 64u_5u_4^4u_3^5u_1^6)x_{16}x_8x_2 - \\ & 32u_4^5u_3^5u_1^5x_{16}x_6x_5x_2 + 16u_4^5u_3^7u_1^4x_{16}x_6x_5 - \\ & 16u_6u_4^5u_3^6u_1^4x_{16}x_6x_2 + 32u_4^5u_3^5u_1^5x_{14}x_8x_5x_2 + \\ & 64u_6u_4^4u_3^5u_1^6x_{14}x_8x_2 + 16u_5u_4^5u_3^5u_1^4x_8x_5x_3x_2 - \\ & 16u_6u_4^5u_3^5u_1^4x_8x_4x_3x_2 \end{aligned}$$

Reduced to zero.

1875. Creating S-polynomial from the pair  $(p_{24}, p_{106})$ .

Forming S-pol of  $p_{24}$  and  $p_{106}$ :

$$\begin{aligned} p_{437} = & -256u_4^{13}u_3^7u_1^8x_{16}x_8x_4 + 256u_5u_4^{13}u_3^6u_1^8x_{16}x_8x_2 - \\ & 512u_4^{13}u_3^5u_1^9x_{16}x_6x_5x_2 + 256u_4^{13}u_3^7u_1^8x_{16}x_6x_5 - \\ & 256u_6u_4^{13}u_3^6u_1^8x_{16}x_6x_2 + 512u_4^{13}u_3^5u_1^9x_{14}x_8x_5x_2 + \\ & (-2048u_4^{10}u_3^5u_1^{11} + 1024u_4^{10}u_3^5u_1^{10})x_8x_5x_4x_3x_2 + \\ & 1024u_4^{12}u_3^5u_1^{10}x_8x_5x_4x_2 + 256u_5u_4^{13}u_3^5u_1^8x_8x_5x_3x_2 - \\ & 512u_5u_4^{13}u_3^5u_1^9x_8x_5x_2 + \\ & (-256u_6u_4^{13}u_3^5u_1^8 - 1024u_6u_4^{11}u_3^5u_1^{10})x_8x_4x_3x_2 + \\ & (512u_6u_4^{13}u_3^5u_1^9 + 1024u_6u_4^{11}u_3^5u_1^{10})x_8x_4x_2 \end{aligned}$$

S-pol added.

1876. Creating S-polynomial from the pair  $(p_{25}, p_{32})$ .

Skipping pair  $p_{25}$  and  $p_{32}$  because gcd of their leading monoms is zero.

1877. Creating S-polynomial from the pair  $(p_{25}, p_{33})$ .

Skipping pair  $p_{25}$  and  $p_{33}$  because gcd of their leading monoms is zero.

1878. Creating S-polynomial from the pair  $(p_{25}, p_{34})$ .

Skipping pair  $p_{25}$  and  $p_{34}$  because gcd of their leading monoms is zero.

1879. Creating S-polynomial from the pair  $(p_{25}, p_{35})$ .

Skipping pair  $p_{25}$  and  $p_{35}$  because gcd of their leading monoms is zero.

1880. Creating S-polynomial from the pair  $(p_{25}, p_{36})$ .

Forming S-pol of  $p_{25}$  and  $p_{36}$ :

$$p_{438} = 4u_6u_3^6u_1^2x_2^2 - 8u_6u_3^6u_1^3x_2 + 4u_6u_3^8u_1^2$$

Reduced to zero.

1881. Creating S-polynomial from the pair  $(p_{25}, p_{37})$ .

Forming S-pol of  $p_{25}$  and  $p_{37}$ :

$$\begin{aligned} p_{439} = & 256u_3^{13}u_1^8x_6x_5x_2 - 128u_3^{14}u_1^7x_5x_4x_2 + 128u_5u_3^{13}u_1^7x_5x_2^2 - \\ & 256u_5u_3^{13}u_1^8x_5x_2 - 128u_6u_3^{13}u_1^7x_4x_2^2 + 256u_6u_3^{13}u_1^8x_4x_2 - \\ & 128u_6u_3^{15}u_1^7x_4 \end{aligned}$$

Reduced to zero.

1882. Creating S-polynomial from the pair  $(p_{25}, p_{38})$ .

Skipping pair  $p_{25}$  and  $p_{38}$  because gcd of their leading monoms is zero.

1883. Creating S-polynomial from the pair  $(p_{25}, p_{39})$ .

Skipping pair  $p_{25}$  and  $p_{39}$  because gcd of their leading monoms is zero.

1884. Creating S-polynomial from the pair  $(p_{25}, p_{40})$ .

Skipping pair  $p_{25}$  and  $p_{40}$  because gcd of their leading monoms is zero.

1885. Creating S-polynomial from the pair  $(p_{25}, p_{41})$ .

Forming S-pol of  $p_{25}$  and  $p_{41}$ :

$$\begin{aligned} p_{440} = & -256u_6u_3^{12}u_1^8x_6x_4x_2 + 256u_6u_3^{13}u_1^8x_4x_2 + 128u_6u_5u_3^{14}u_1^7x_4 - \\ & 128u_6u_5^2u_3^{13}u_1^7x_2 \end{aligned}$$

Reduced to zero.

1886. Creating S-polynomial from the pair  $(p_{25}, p_{42})$ .

Skipping pair  $p_{25}$  and  $p_{42}$  because gcd of their leading monoms is zero.

1887. Creating S-polynomial from the pair  $(p_{25}, p_{43})$ .

Skipping pair  $p_{25}$  and  $p_{43}$  because gcd of their leading monoms is zero.

1888. Creating S-polynomial from the pair  $(p_{25}, p_{44})$ .

Skipping pair  $p_{25}$  and  $p_{44}$  because gcd of their leading monoms is zero.

1889. Creating S-polynomial from the pair  $(p_{25}, p_{45})$ .

Forming S-pol of  $p_{25}$  and  $p_{45}$ :

$$\begin{aligned} p_{441} = & 4096u_3^{12}u_1^{12}x_8x_4x_2 + \\ & (-512u_5u_3^{15}u_1^9 + 8192u_5u_3^{11}u_1^{13})x_8x_2 - 4096u_3^{12}u_1^{12}x_6x_5x_2 + \\ & (-1024u_6u_3^{15}u_1^{10} - 4096u_6u_3^{13}u_1^{12})x_6 - 2048u_5u_3^{12}u_1^{11}x_5x_2^2 + \\ & 256u_5u_3^{16}u_1^8x_5x_2 - 512u_6u_3^{14}u_1^9x_4x_2^2 + 1024u_6u_3^{14}u_1^{10}x_4x_2 + \\ & (-256u_6u_5u_3^{15}u_1^8 - 1024u_6u_5u_3^{13}u_1^{10})x_2^2 \end{aligned}$$

Reduced to zero.

1890. Creating S-polynomial from the pair  $(p_{25}, p_{46})$ .

Skipping pair  $p_{25}$  and  $p_{46}$  because gcd of their leading monoms is zero.

1891. Creating S-polynomial from the pair  $(p_{25}, p_{47})$ .

Forming S-pol of  $p_{25}$  and  $p_{47}$ : Polynomial too big for output (text size is 1011 characters, number of terms is 14)

Reduced to zero.

1892. Creating S-polynomial from the pair  $(p_{25}, p_{48})$ .

Forming S-pol of  $p_{25}$  and  $p_{48}$ :

$$\begin{aligned} p_{442} = & -128u_3^7u_1^7x_8x_4x_2 - 256u_5u_3^6u_1^8x_8x_2 + 128u_3^7u_1^7x_6x_5x_2 + \\ & 64u_6u_3^8u_1^6x_6x_2 + 128u_6u_3^8u_1^7x_6 + 64u_5u_3^7u_1^6x_5x_2^2 - \\ & 32u_6u_3^9u_1^5x_4x_2 + 32u_6u_5u_3^8u_1^5x_2^2 \end{aligned}$$

Reduced to zero.

1893. Creating S-polynomial from the pair  $(p_{25}, p_{49})$ .

Forming S-pol of  $p_{25}$  and  $p_{49}$ :

$$\begin{aligned} p_{443} = & 256u_3^{13}u_1^8x_8x_4x_2 - 128u_5u_3^{14}u_1^7x_8x_2 - 256u_3^{13}u_1^8x_6x_5x_2 + \\ & 2048u_6u_3^{10}u_1^{11}x_6x_2 + \\ & (-256u_6u_3^{14}u_1^8 - 1024u_6u_3^{12}u_1^{10})x_6 - 128u_5u_3^{13}u_1^7x_5x_2^2 + \\ & (64u_5u_3^{15}u_1^6 + 256u_5u_3^{13}u_1^8)x_5x_2 - 512u_6u_3^{11}u_1^9x_4x_2^2 + \\ & (-64u_6u_5u_3^{14}u_1^6 - 256u_6u_5u_3^{12}u_1^8)x_2^2 \end{aligned}$$

Reduced to zero.

1894. Creating S-polynomial from the pair  $(p_{25}, p_{50})$ .

Forming S-pol of  $p_{25}$  and  $p_{50}$ :

$$\begin{aligned} p_{444} = & (-8u_6u_3^{12}u_1^3 + 128u_6u_3^8u_1^7)x_8x_2 + \\ & (-16u_6u_3^{12}u_1^4 - 64u_6u_3^{10}u_1^6)x_8 + \\ & (-8u_6u_3^{11}u_1^3 - 32u_6u_3^9u_1^5)x_5x_2^2 + \\ & (4u_6u_3^{13}u_1^2 + 16u_6u_3^{11}u_1^4)x_5x_2 + \\ & (-4u_6^2u_3^{12}u_1^2 - 16u_6^2u_3^{10}u_1^4)x_2^2 \end{aligned}$$

Reduced to zero.

1895. Creating S-polynomial from the pair  $(p_{25}, p_{51})$ .

Forming S-pol of  $p_{25}$  and  $p_{51}$ :

$$\begin{aligned} p_{445} = & 64u_5u_3^8u_1^6x_8x_2 - 256u_6u_3^6u_1^8x_6x_2 + 128u_6u_3^8u_1^7x_6 - \\ & 32u_5u_3^9u_1^5x_5x_2 + 64u_6u_3^7u_1^6x_4x_2^2 + 32u_6u_5u_3^8u_1^5x_2^2 \end{aligned}$$

Reduced to zero.

1896. Creating S-polynomial from the pair  $(p_{25}, p_{52})$ .

Forming S-pol of  $p_{25}$  and  $p_{52}$ :

$$\begin{aligned}
p_{446} = & 4096u_3^{19}u_1^{12}x_8x_6x_5x_2 - 2048u_3^{20}u_1^{11}x_8x_5x_4x_2 + \\
& (1024u_5u_3^{21}u_1^{10} - 4096u_5u_3^{19}u_1^{12})x_8x_5x_2 + \\
& (-1024u_6u_3^{21}u_1^{10} + 16384u_6u_3^{17}u_1^{14})x_8x_4x_2 + \\
& (-2048u_6u_3^{21}u_1^{11} - 8192u_6u_3^{19}u_1^{13})x_8x_4 + \\
& (-1024u_6u_3^{20}u_1^{10} - 4096u_6u_3^{18}u_1^{12})x_5x_4x_2^2 + \\
& (512u_6u_3^{22}u_1^9 + 2048u_6u_3^{20}u_1^{11})x_5x_4x_2 + \\
& (512u_6u_5u_3^{21}u_1^9 + 2048u_5u_3^{20}u_1^{11})x_5x_2^2 - 1024u_5u_3^{22}u_1^{10}x_5x_2 + \\
& (-512u_6^2u_3^{21}u_1^9 - 2048u_6^2u_3^{19}u_1^{11})x_4x_2^2 - \\
& 1024u_6^2u_5u_3^{20}u_1^{10}x_2^2 + 512u_6^2u_5u_3^{22}u_1^9x_2
\end{aligned}$$

Reduced to zero.

1897. Creating S-polynomial from the pair  $(p_{25}, p_{53})$ .

Forming S-pol of  $p_{25}$  and  $p_{53}$ :

$$\begin{aligned}
p_{447} = & (4u_6u_3^6u_1^2 - 16u_6u_3^4u_1^4)x_8x_2 + 8u_6u_3^6u_1^3x_8 + \\
& 4u_6u_3^5u_1^2x_5x_2^2 - 2u_6u_3^7u_1x_5x_2 + 2u_6^2u_3^6u_1x_2^2
\end{aligned}$$

Reduced to zero.

1898. Creating S-polynomial from the pair  $(p_{25}, p_{54})$ .

Skipping pair  $p_{25}$  and  $p_{54}$  because gcd of their leading monoms is zero.

1899. Creating S-polynomial from the pair  $(p_{25}, p_{55})$ .

Skipping pair  $p_{25}$  and  $p_{55}$  because gcd of their leading monoms is zero.

1900. Creating S-polynomial from the pair  $(p_{25}, p_{56})$ .

Skipping pair  $p_{25}$  and  $p_{56}$  because gcd of their leading monoms is zero.

1901. Creating S-polynomial from the pair  $(p_{25}, p_{57})$ .

Skipping pair  $p_{25}$  and  $p_{57}$  because gcd of their leading monoms is zero.

1902. Creating S-polynomial from the pair  $(p_{25}, p_{58})$ .

Skipping pair  $p_{25}$  and  $p_{58}$  because gcd of their leading monoms is zero.

1903. Creating S-polynomial from the pair  $(p_{25}, p_{59})$ .

Skipping pair  $p_{25}$  and  $p_{59}$  because gcd of their leading monoms is zero.

1904. Creating S-polynomial from the pair  $(p_{25}, p_{60})$ .

Skipping pair  $p_{25}$  and  $p_{60}$  because gcd of their leading monoms is zero.

1905. Creating S-polynomial from the pair  $(p_{25}, p_{61})$ .

Skipping pair  $p_{25}$  and  $p_{61}$  because gcd of their leading monoms is zero.



1906. Creating S-polynomial from the pair  $(p_{25}, p_{62})$ .  
 Skipping pair  $p_{25}$  and  $p_{62}$  because gcd of their leading monoms is zero.
1907. Creating S-polynomial from the pair  $(p_{25}, p_{63})$ .  
 Skipping pair  $p_{25}$  and  $p_{63}$  because gcd of their leading monoms is zero.
1908. Creating S-polynomial from the pair  $(p_{25}, p_{64})$ .  
 Skipping pair  $p_{25}$  and  $p_{64}$  because gcd of their leading monoms is zero.
1909. Creating S-polynomial from the pair  $(p_{25}, p_{65})$ .  
 Skipping pair  $p_{25}$  and  $p_{65}$  because gcd of their leading monoms is zero.
1910. Creating S-polynomial from the pair  $(p_{25}, p_{66})$ .  
 Skipping pair  $p_{25}$  and  $p_{66}$  because gcd of their leading monoms is zero.
1911. Creating S-polynomial from the pair  $(p_{25}, p_{67})$ .  
 Skipping pair  $p_{25}$  and  $p_{67}$  because gcd of their leading monoms is zero.
1912. Creating S-polynomial from the pair  $(p_{25}, p_{68})$ .  
 Skipping pair  $p_{25}$  and  $p_{68}$  because gcd of their leading monoms is zero.
1913. Creating S-polynomial from the pair  $(p_{25}, p_{69})$ .  
 Skipping pair  $p_{25}$  and  $p_{69}$  because gcd of their leading monoms is zero.
1914. Creating S-polynomial from the pair  $(p_{25}, p_{70})$ .  
 Skipping pair  $p_{25}$  and  $p_{70}$  because gcd of their leading monoms is zero.
1915. Creating S-polynomial from the pair  $(p_{25}, p_{71})$ .  
 Skipping pair  $p_{25}$  and  $p_{71}$  because gcd of their leading monoms is zero.
1916. Creating S-polynomial from the pair  $(p_{25}, p_{72})$ .  
 Skipping pair  $p_{25}$  and  $p_{72}$  because gcd of their leading monoms is zero.
1917. Creating S-polynomial from the pair  $(p_{25}, p_{73})$ .  
 Skipping pair  $p_{25}$  and  $p_{73}$  because gcd of their leading monoms is zero.
1918. Creating S-polynomial from the pair  $(p_{25}, p_{74})$ .  
 Skipping pair  $p_{25}$  and  $p_{74}$  because gcd of their leading monoms is zero.
1919. Creating S-polynomial from the pair  $(p_{25}, p_{75})$ .  
 Skipping pair  $p_{25}$  and  $p_{75}$  because gcd of their leading monoms is zero.
1920. Creating S-polynomial from the pair  $(p_{25}, p_{76})$ .  
 Skipping pair  $p_{25}$  and  $p_{76}$  because gcd of their leading monoms is zero.
1921. Creating S-polynomial from the pair  $(p_{25}, p_{77})$ .  
 Skipping pair  $p_{25}$  and  $p_{77}$  because gcd of their leading monoms is zero.
1922. Creating S-polynomial from the pair  $(p_{25}, p_{78})$ .  
 Skipping pair  $p_{25}$  and  $p_{78}$  because gcd of their leading monoms is zero.

1923. Creating S-polynomial from the pair  $(p_{25}, p_{79})$ .

Skipping pair  $p_{25}$  and  $p_{79}$  because gcd of their leading monoms is zero.

1924. Creating S-polynomial from the pair  $(p_{25}, p_{80})$ .

Skipping pair  $p_{25}$  and  $p_{80}$  because gcd of their leading monoms is zero.

1925. Creating S-polynomial from the pair  $(p_{25}, p_{81})$ .

Forming S-pol of  $p_{25}$  and  $p_{81}$ :

$$p_{448} = 1024u_6u_3^{10}u_1^{10}x_6x_2 - 512u_6u_3^{11}u_1^9x_4x_2 - 512u_6u_5u_3^{12}u_1^9$$

Reduced to zero.

1926. Creating S-polynomial from the pair  $(p_{25}, p_{82})$ .

Skipping pair  $p_{25}$  and  $p_{82}$  because gcd of their leading monoms is zero.

1927. Creating S-polynomial from the pair  $(p_{25}, p_{83})$ .

Forming S-pol of  $p_{25}$  and  $p_{83}$ :

$$\begin{aligned} p_{449} = & 524288u_5u_3^{19}u_1^{19}x_8x_4x_2 + 262144u_5^2u_3^{20}u_1^{18}x_8x_2 - \\ & 1048576u_6u_3^{18}u_1^{20}x_6^2x_2 - 262144u_6u_5u_3^{20}u_1^{18}x_6x_2 + \\ & 524288u_6u_5u_3^{20}u_1^{19}x_6 - 262144u_5u_3^{20}u_1^{18}x_5x_4x_2 - \\ & 131072u_5^2u_3^{21}u_1^{17}x_5x_2 + \\ & (131072u_6u_5u_3^{21}u_1^{17} + 524288u_6u_3^{20}u_1^{19})x_4x_2 - \\ & 262144u_6u_5^2u_3^{20}u_1^{18}x_2 \end{aligned}$$

Reduced to zero.

1928. Creating S-polynomial from the pair  $(p_{25}, p_{84})$ .

Forming S-pol of  $p_{25}$  and  $p_{84}$ :

$$\begin{aligned} p_{450} = & 128u_5u_3^8u_1^7x_8x_2 - 512u_6u_3^6u_1^9x_6x_2 + 256u_6u_3^8u_1^8x_6 - \\ & 64u_5u_3^9u_1^6x_5x_2 + 128u_6u_3^7u_1^7x_4x_2^2 + 64u_6u_5u_3^8u_1^6x_2^2 \end{aligned}$$

Reduced to zero.

1929. Creating S-polynomial from the pair  $(p_{25}, p_{85})$ .

Forming S-pol of  $p_{25}$  and  $p_{85}$ :

$$\begin{aligned} p_{451} = & -256u_3^7u_1^8x_8x_4x_2 - 512u_5u_3^6u_1^9x_8x_2 + 256u_3^7u_1^8x_6x_5x_2 + \\ & 128u_6u_3^8u_1^7x_6x_2 + 256u_6u_3^8u_1^8x_6 + 128u_5u_3^7u_1^7x_5x_2^2 - \\ & 64u_6u_3^9u_1^6x_4x_2 + 64u_6u_5u_3^8u_1^6x_2^2 \end{aligned}$$

Reduced to zero.

1930. Creating S-polynomial from the pair  $(p_{25}, p_{86})$ .

Forming S-pol of  $p_{25}$  and  $p_{86}$ :

$$\begin{aligned} p_{452} = & 1024u_3^{14}u_1^{10}x_6x_5x_2 + (-4096u_3^{11}u_1^{12} + 2048u_3^{11}u_1^{11})x_5x_4x_2^2 + \\ & (-512u_3^{15}u_1^9 + 2048u_3^{13}u_1^{11})x_5x_4x_2 + 512u_5u_3^{14}u_1^9x_5x_2^2 - \\ & 1024u_5u_3^{14}u_1^{10}x_5x_2 + \\ & (-512u_6u_3^{14}u_1^9 - 2048u_6u_3^{12}u_1^{11} + 1024u_6u_3^{12}u_1^{10})x_4x_2^2 + \\ & 1024u_6u_3^{14}u_1^{10}x_4x_2 + (-512u_6u_3^{16}u_1^9 + 1024u_6u_3^{14}u_1^{10})x_4 \end{aligned}$$

S-pol added.

1931. Creating S-polynomial from the pair  $(p_{25}, p_{87})$ .

Forming S-pol of  $p_{25}$  and  $p_{87}$ :

$$p_{453} = 8u_6u_3^6u_1^3x_2^2 - 16u_6u_3^6u_1^4x_2 + 8u_6u_3^8u_1^3$$

Reduced to zero.

1932. Creating S-polynomial from the pair  $(p_{25}, p_{88})$ .

Skipping pair  $p_{25}$  and  $p_{88}$  because gcd of their leading monoms is zero.

1933. Creating S-polynomial from the pair  $(p_{25}, p_{89})$ .

Skipping pair  $p_{25}$  and  $p_{89}$  because gcd of their leading monoms is zero.

1934. Creating S-polynomial from the pair  $(p_{25}, p_{90})$ .

Skipping pair  $p_{25}$  and  $p_{90}$  because gcd of their leading monoms is zero.

1935. Creating S-polynomial from the pair  $(p_{25}, p_{91})$ .

Skipping pair  $p_{25}$  and  $p_{91}$  because gcd of their leading monoms is zero.

1936. Creating S-polynomial from the pair  $(p_{25}, p_{92})$ .

Skipping pair  $p_{25}$  and  $p_{92}$  because gcd of their leading monoms is zero.

1937. Creating S-polynomial from the pair  $(p_{25}, p_{93})$ .

Skipping pair  $p_{25}$  and  $p_{93}$  because gcd of their leading monoms is zero.

1938. Creating S-polynomial from the pair  $(p_{25}, p_{94})$ .

Skipping pair  $p_{25}$  and  $p_{94}$  because gcd of their leading monoms is zero.

1939. Creating S-polynomial from the pair  $(p_{25}, p_{95})$ .

Forming S-pol of  $p_{25}$  and  $p_{95}$ :

$$\begin{aligned} p_{454} = & -524288u_5u_3^{17}u_1^{19}x_8x_6x_2 + \\ & (-1048576u_5u_3^{16}u_1^{20} - 1048576u_3^{17}u_1^{20})x_8x_4x_2 + \\ & (-131072u_5^2u_3^{19}u_1^{17} + 524288u_5^2u_3^{17}u_1^{19})x_8x_2 + \\ & 524288u_6u_3^{17}u_1^{19}x_6^2x_2 + 524288u_3^{17}u_1^{19}x_6x_5x_4x_2 + \\ & 262144u_5u_3^{18}u_1^{18}x_6x_5x_2 + 524288u_6u_3^{18}u_1^{19}x_6x_4 + \end{aligned}$$

$$\begin{aligned}
&131072u_6u_5u_3^{19}u_1^{17}x_6x_2 + 262144u_5u_3^{17}u_1^{18}x_5x_4x_2^2 + \\
&65536u_5^2u_3^{20}u_1^{16}x_5x_2 + 131072u_6u_5u_3^{18}u_1^{17}x_4x_2^2 + \\
&(-65536u_6u_5u_3^{20}u_1^{16} - 262144u_6u_3^{19}u_1^{18})x_4x_2 + \\
&131072u_6u_5^2u_3^{19}u_1^{17}x_2
\end{aligned}$$

Reduced to zero.

1940. Creating S-polynomial from the pair  $(p_{25}, p_{96})$ .

Forming S-pol of  $p_{25}$  and  $p_{96}$ :

$$\begin{aligned}
p_{455} = &-64u_5u_3^4u_1^6x_8x_2 + 32u_3^5u_1^5x_6x_5x_2 + 64u_6u_3^4u_1^6x_6x_2 - \\
&16u_3^6u_1^4x_5x_4x_2 + 16u_5u_3^5u_1^4x_5x_2^2 - 16u_6u_3^5u_1^4x_4x_2^2 - \\
&16u_6u_3^7u_1^4x_4
\end{aligned}$$

Reduced to zero.

1941. Creating S-polynomial from the pair  $(p_{25}, p_{97})$ .

Forming S-pol of  $p_{25}$  and  $p_{97}$ :

$$\begin{aligned}
p_{456} = &512u_3^{13}u_1^9x_6x_5x_2 + (-2048u_3^{10}u_1^{11} + 1024u_3^{10}u_1^{10})x_5x_4x_2^2 + \\
&(-256u_3^{14}u_1^8 + 1024u_3^{12}u_1^{10})x_5x_4x_2 + 256u_5u_3^{13}u_1^8x_5x_2^2 - \\
&512u_5u_3^{13}u_1^9x_5x_2 + (-256u_6u_3^{13}u_1^8 - 1024u_6u_3^{11}u_1^{10})x_4x_2^2 + \\
&(512u_6u_3^{13}u_1^9 + 1024u_6u_3^{11}u_1^{10})x_4x_2 - 256u_6u_3^{15}u_1^8x_4
\end{aligned}$$

S-pol added.

1942. Creating S-polynomial from the pair  $(p_{25}, p_{98})$ .

Forming S-pol of  $p_{25}$  and  $p_{98}$ : Polynomial too big for output (text size is 2202 characters, number of terms is 27)

Reduced to zero.

1943. Creating S-polynomial from the pair  $(p_{25}, p_{99})$ .

Forming S-pol of  $p_{25}$  and  $p_{99}$ : Polynomial too big for output (text size is 2201 characters, number of terms is 27)

Reduced to zero.

1944. Creating S-polynomial from the pair  $(p_{25}, p_{100})$ .

Skipping pair  $p_{25}$  and  $p_{100}$  because gcd of their leading monoms is zero.

1945. Creating S-polynomial from the pair  $(p_{25}, p_{101})$ .

Skipping pair  $p_{25}$  and  $p_{101}$  because gcd of their leading monoms is zero.

1946. Creating S-polynomial from the pair  $(p_{25}, p_{102})$ .

Skipping pair  $p_{25}$  and  $p_{102}$  because gcd of their leading monoms is zero.

1947. Creating S-polynomial from the pair  $(p_{25}, p_{103})$ .

Skipping pair  $p_{25}$  and  $p_{103}$  because gcd of their leading monoms is zero.

1948. Creating S-polynomial from the pair  $(p_{25}, p_{104})$ .  
 Skipping pair  $p_{25}$  and  $p_{104}$  because gcd of their leading monoms is zero.
1949. Creating S-polynomial from the pair  $(p_{25}, p_{105})$ .  
 Skipping pair  $p_{25}$  and  $p_{105}$  because gcd of their leading monoms is zero.
1950. Creating S-polynomial from the pair  $(p_{25}, p_{106})$ .  
 Skipping pair  $p_{25}$  and  $p_{106}$  because gcd of their leading monoms is zero.
1951. Creating S-polynomial from the pair  $(p_{26}, p_{32})$ .  
 Forming S-pol of  $p_{26}$  and  $p_{32}$ :
- $$p_{457} = 4u_5u_2^6u_1^2x_1^2 - 8u_5u_2^6u_1^3x_1 + 4u_5u_2^8u_1^2$$
- Reduced to zero.
1952. Creating S-polynomial from the pair  $(p_{26}, p_{33})$ .  
 Skipping pair  $p_{26}$  and  $p_{33}$  because gcd of their leading monoms is zero.
1953. Creating S-polynomial from the pair  $(p_{26}, p_{34})$ .  
 Skipping pair  $p_{26}$  and  $p_{34}$  because gcd of their leading monoms is zero.
1954. Creating S-polynomial from the pair  $(p_{26}, p_{35})$ .  
 Skipping pair  $p_{26}$  and  $p_{35}$  because gcd of their leading monoms is zero.
1955. Creating S-polynomial from the pair  $(p_{26}, p_{36})$ .  
 Skipping pair  $p_{26}$  and  $p_{36}$  because gcd of their leading monoms is zero.
1956. Creating S-polynomial from the pair  $(p_{26}, p_{37})$ .  
 Skipping pair  $p_{26}$  and  $p_{37}$  because gcd of their leading monoms is zero.
1957. Creating S-polynomial from the pair  $(p_{26}, p_{38})$ .  
 Skipping pair  $p_{26}$  and  $p_{38}$  because gcd of their leading monoms is zero.
1958. Creating S-polynomial from the pair  $(p_{26}, p_{39})$ .  
 Skipping pair  $p_{26}$  and  $p_{39}$  because gcd of their leading monoms is zero.
1959. Creating S-polynomial from the pair  $(p_{26}, p_{40})$ .  
 Skipping pair  $p_{26}$  and  $p_{40}$  because gcd of their leading monoms is zero.
1960. Creating S-polynomial from the pair  $(p_{26}, p_{41})$ .  
 Skipping pair  $p_{26}$  and  $p_{41}$  because gcd of their leading monoms is zero.
1961. Creating S-polynomial from the pair  $(p_{26}, p_{42})$ .  
 Skipping pair  $p_{26}$  and  $p_{42}$  because gcd of their leading monoms is zero.
1962. Creating S-polynomial from the pair  $(p_{26}, p_{43})$ .  
 Skipping pair  $p_{26}$  and  $p_{43}$  because gcd of their leading monoms is zero.
1963. Creating S-polynomial from the pair  $(p_{26}, p_{44})$ .  
 Skipping pair  $p_{26}$  and  $p_{44}$  because gcd of their leading monoms is zero.

1964. Creating S-polynomial from the pair  $(p_{26}, p_{45})$ .  
 Skipping pair  $p_{26}$  and  $p_{45}$  because gcd of their leading monoms is zero.
1965. Creating S-polynomial from the pair  $(p_{26}, p_{46})$ .  
 Skipping pair  $p_{26}$  and  $p_{46}$  because gcd of their leading monoms is zero.
1966. Creating S-polynomial from the pair  $(p_{26}, p_{47})$ .  
 Skipping pair  $p_{26}$  and  $p_{47}$  because gcd of their leading monoms is zero.
1967. Creating S-polynomial from the pair  $(p_{26}, p_{48})$ .  
 Skipping pair  $p_{26}$  and  $p_{48}$  because gcd of their leading monoms is zero.
1968. Creating S-polynomial from the pair  $(p_{26}, p_{49})$ .  
 Skipping pair  $p_{26}$  and  $p_{49}$  because gcd of their leading monoms is zero.
1969. Creating S-polynomial from the pair  $(p_{26}, p_{50})$ .  
 Skipping pair  $p_{26}$  and  $p_{50}$  because gcd of their leading monoms is zero.
1970. Creating S-polynomial from the pair  $(p_{26}, p_{51})$ .  
 Skipping pair  $p_{26}$  and  $p_{51}$  because gcd of their leading monoms is zero.
1971. Creating S-polynomial from the pair  $(p_{26}, p_{52})$ .  
 Skipping pair  $p_{26}$  and  $p_{52}$  because gcd of their leading monoms is zero.
1972. Creating S-polynomial from the pair  $(p_{26}, p_{53})$ .  
 Skipping pair  $p_{26}$  and  $p_{53}$  because gcd of their leading monoms is zero.
1973. Creating S-polynomial from the pair  $(p_{26}, p_{54})$ .  
 Forming S-pol of  $p_{26}$  and  $p_{54}$ :

$$\begin{aligned}
 p_{458} = & (-8u_5u_2^{12}u_1^3 + 128u_5u_2^8u_1^7)x_{10}x_1 + \\
 & (-16u_5u_2^{12}u_1^4 - 64u_5u_2^{10}u_1^6)x_{10} + \\
 & (-8u_5u_2^{11}u_1^3 - 32u_5u_2^9u_1^5)x_4x_1^2 + \\
 & (4u_5u_2^{13}u_1^2 + 16u_5u_2^{11}u_1^4)x_4x_1 + \\
 & (-4u_5^2u_2^{12}u_1^2 - 16u_5^2u_2^{10}u_1^4)x_1^2
 \end{aligned}$$

Reduced to zero.

1974. Creating S-polynomial from the pair  $(p_{26}, p_{55})$ .  
 Forming S-pol of  $p_{26}$  and  $p_{55}$ :

$$\begin{aligned}
 p_{459} = & -1024u_2^{14}u_1^{10}x_{12}x_4x_1 + (-512u_5u_2^{15}u_1^9 + 8192u_5u_2^{11}u_1^{13})x_{12}x_1 + \\
 & (-1024u_5u_2^{15}u_1^{10} - 4096u_5u_2^{13}u_1^{12})x_{12} + 1024u_2^{14}u_1^{10}x_{10}x_5x_1 - \\
 & 2048u_5u_2^{12}u_1^{11}x_5x_1^2 + 256u_5u_2^{16}u_1^8x_5x_1 - \\
 & 512u_6u_2^{14}u_1^9x_4x_1^2 + 1024u_6u_2^{14}u_1^{10}x_4x_1 + \\
 & (-256u_6u_5u_2^{15}u_1^8 - 1024u_6u_5u_2^{13}u_1^{10})x_1^2
 \end{aligned}$$

Reduced to zero.

1975. Creating S-polynomial from the pair  $(p_{26}, p_{56})$ .

Forming S-pol of  $p_{26}$  and  $p_{56}$ :

$$p_{460} = (4u_5u_2^6u_1^2 - 16u_5u_2^4u_1^4)x_{10}x_1 + 8u_5u_2^6u_1^3x_{10} + 4u_5u_2^5u_1^2x_4x_1^2 - 2u_5u_2^7u_1x_4x_1 + 2u_5^2u_2^6u_1x_1^2$$

Reduced to zero.

1976. Creating S-polynomial from the pair  $(p_{26}, p_{57})$ .

Forming S-pol of  $p_{26}$  and  $p_{57}$ : Polynomial too big for output (text size is 1017 characters, number of terms is 14)

Reduced to zero.

1977. Creating S-polynomial from the pair  $(p_{26}, p_{58})$ .

Forming S-pol of  $p_{26}$  and  $p_{58}$ :

$$p_{461} = -256u_5u_2^6u_1^8x_{12}x_1 + 128u_5u_2^8u_1^7x_{12} + 64u_6u_2^8u_1^6x_{10}x_1 + 64u_5u_2^7u_1^6x_5x_1^2 - 32u_6u_2^9u_1^5x_4x_1 + 32u_6u_5u_2^8u_1^5x_1^2$$

Reduced to zero.

1978. Creating S-polynomial from the pair  $(p_{26}, p_{59})$ .

Forming S-pol of  $p_{26}$  and  $p_{59}$ :

$$p_{462} = -1024u_2^{11}u_1^{10}x_{12}x_4x_1 - 128u_5u_2^{14}u_1^7x_{12}x_1 + (-256u_5u_2^{14}u_1^8 - 1024u_5u_2^{12}u_1^{10})x_{12} + 1024u_2^{11}u_1^{10}x_{10}x_5x_1 + 2048u_6u_2^{10}u_1^{11}x_{10}x_1 - 128u_5u_2^{13}u_1^7x_5x_1^2 + (64u_5u_2^{15}u_1^6 + 256u_5u_2^{13}u_1^8)x_5x_1 - 512u_6u_2^{11}u_1^9x_4x_1^2 + (-64u_6u_5u_2^{14}u_1^6 - 256u_6u_5u_2^{12}u_1^8)x_1^2$$

Reduced to zero.

1979. Creating S-polynomial from the pair  $(p_{26}, p_{60})$ .

Skipping pair  $p_{26}$  and  $p_{60}$  because gcd of their leading monoms is zero.

1980. Creating S-polynomial from the pair  $(p_{26}, p_{61})$ .

Forming S-pol of  $p_{26}$  and  $p_{61}$ :

$$p_{463} = 128u_2^7u_1^7x_{12}x_4x_1 + 64u_5u_2^8u_1^6x_{12}x_1 + 128u_5u_2^8u_1^7x_{12} - 128u_2^7u_1^7x_{10}x_5x_1 - 256u_6u_2^6u_1^8x_{10}x_1 - 32u_5u_2^9u_1^5x_5x_1 + 64u_6u_2^7u_1^6x_4x_1^2 + 32u_6u_5u_2^8u_1^5x_1^2$$

Reduced to zero.

1981. Creating S-polynomial from the pair  $(p_{26}, p_{62})$ .

Skipping pair  $p_{26}$  and  $p_{62}$  because gcd of their leading monoms is zero.

1982. Creating S-polynomial from the pair  $(p_{26}, p_{63})$ .  
 Skipping pair  $p_{26}$  and  $p_{63}$  because gcd of their leading monoms is zero.
1983. Creating S-polynomial from the pair  $(p_{26}, p_{64})$ .  
 Skipping pair  $p_{26}$  and  $p_{64}$  because gcd of their leading monoms is zero.
1984. Creating S-polynomial from the pair  $(p_{26}, p_{65})$ .  
 Skipping pair  $p_{26}$  and  $p_{65}$  because gcd of their leading monoms is zero.
1985. Creating S-polynomial from the pair  $(p_{26}, p_{66})$ .  
 Skipping pair  $p_{26}$  and  $p_{66}$  because gcd of their leading monoms is zero.
1986. Creating S-polynomial from the pair  $(p_{26}, p_{67})$ .  
 Skipping pair  $p_{26}$  and  $p_{67}$  because gcd of their leading monoms is zero.
1987. Creating S-polynomial from the pair  $(p_{26}, p_{68})$ .  
 Skipping pair  $p_{26}$  and  $p_{68}$  because gcd of their leading monoms is zero.
1988. Creating S-polynomial from the pair  $(p_{26}, p_{69})$ .  
 Skipping pair  $p_{26}$  and  $p_{69}$  because gcd of their leading monoms is zero.
1989. Creating S-polynomial from the pair  $(p_{26}, p_{70})$ .  
 Skipping pair  $p_{26}$  and  $p_{70}$  because gcd of their leading monoms is zero.
1990. Creating S-polynomial from the pair  $(p_{26}, p_{71})$ .  
 Skipping pair  $p_{26}$  and  $p_{71}$  because gcd of their leading monoms is zero.
1991. Creating S-polynomial from the pair  $(p_{26}, p_{72})$ .  
 Skipping pair  $p_{26}$  and  $p_{72}$  because gcd of their leading monoms is zero.
1992. Creating S-polynomial from the pair  $(p_{26}, p_{73})$ .  
 Skipping pair  $p_{26}$  and  $p_{73}$  because gcd of their leading monoms is zero.
1993. Creating S-polynomial from the pair  $(p_{26}, p_{74})$ .  
 Skipping pair  $p_{26}$  and  $p_{74}$  because gcd of their leading monoms is zero.
1994. Creating S-polynomial from the pair  $(p_{26}, p_{75})$ .  
 Forming S-pol of  $p_{26}$  and  $p_{75}$ :

$$p_{464} = 8u_5u_2^6u_1^3x_1^2 - 16u_5u_2^6u_1^4x_1 + 8u_5u_2^8u_1^3$$

Reduced to zero.

1995. Creating S-polynomial from the pair  $(p_{26}, p_{76})$ .  
 Forming S-pol of  $p_{26}$  and  $p_{76}$ :

$$\begin{aligned} p_{465} = & 1048576u_5u_2^{19}u_1^{19}x_{12}x_4x_1 + 262144u_5^2u_2^{20}u_1^{18}x_{12}x_1 + \\ & 524288u_5^2u_2^{20}u_1^{19}x_{12} - 1048576u_6u_2^{18}u_1^{20}x_{10}^2x_1 - \\ & 524288u_5u_2^{19}u_1^{19}x_{10}x_5x_1 - 262144u_6u_5u_2^{20}u_1^{18}x_{10}x_1 - \end{aligned}$$



$$\begin{aligned}
& 262144u_5u_2^{20}u_1^{18}x_5x_4x_1 - 131072u_5^2u_2^{21}u_1^{17}x_5x_1 + \\
& (131072u_6u_5u_2^{21}u_1^{17} + 524288u_6u_2^{20}u_1^{19})x_4x_1 - \\
& 262144u_6u_5^2u_2^{20}u_1^{18}x_1
\end{aligned}$$

Reduced to zero.

1996. Creating S-polynomial from the pair  $(p_{26}, p_{77})$ .

Forming S-pol of  $p_{26}$  and  $p_{77}$ :

$$\begin{aligned}
p_{466} = & 256u_2^7u_1^8x_{12}x_4x_1 + 128u_5u_2^8u_1^7x_{12}x_1 + 256u_5u_2^8u_1^8x_{12} - \\
& 256u_2^7u_1^8x_{10}x_5x_1 - 512u_6u_2^6u_1^9x_{10}x_1 - 64u_5u_2^9u_1^6x_5x_1 + \\
& 128u_6u_2^7u_1^7x_4x_1^2 + 64u_6u_5u_2^8u_1^6x_1^2
\end{aligned}$$

Reduced to zero.

1997. Creating S-polynomial from the pair  $(p_{26}, p_{78})$ .

Forming S-pol of  $p_{26}$  and  $p_{78}$ :

$$\begin{aligned}
p_{467} = & -512u_5u_2^6u_1^9x_{12}x_1 + 256u_5u_2^8u_1^8x_{12} + 128u_6u_2^8u_1^7x_{10}x_1 + \\
& 128u_5u_2^7u_1^7x_5x_1^2 - 64u_6u_2^9u_1^6x_4x_1 + 64u_6u_5u_2^8u_1^6x_1^2
\end{aligned}$$

Reduced to zero.

1998. Creating S-polynomial from the pair  $(p_{26}, p_{79})$ .

Skipping pair  $p_{26}$  and  $p_{79}$  because gcd of their leading monoms is zero.

1999. Creating S-polynomial from the pair  $(p_{26}, p_{80})$ .

Skipping pair  $p_{26}$  and  $p_{80}$  because gcd of their leading monoms is zero.

2000. Creating S-polynomial from the pair  $(p_{26}, p_{81})$ .

Skipping pair  $p_{26}$  and  $p_{81}$  because gcd of their leading monoms is zero.

2001. Creating S-polynomial from the pair  $(p_{26}, p_{82})$ .

Skipping pair  $p_{26}$  and  $p_{82}$  because gcd of their leading monoms is zero.

2002. Creating S-polynomial from the pair  $(p_{26}, p_{83})$ .

Skipping pair  $p_{26}$  and  $p_{83}$  because gcd of their leading monoms is zero.

2003. Creating S-polynomial from the pair  $(p_{26}, p_{84})$ .

Skipping pair  $p_{26}$  and  $p_{84}$  because gcd of their leading monoms is zero.

2004. Creating S-polynomial from the pair  $(p_{26}, p_{85})$ .

Skipping pair  $p_{26}$  and  $p_{85}$  because gcd of their leading monoms is zero.

2005. Creating S-polynomial from the pair  $(p_{26}, p_{86})$ .

Skipping pair  $p_{26}$  and  $p_{86}$  because gcd of their leading monoms is zero.

2006. Creating S-polynomial from the pair  $(p_{26}, p_{87})$ .

Skipping pair  $p_{26}$  and  $p_{87}$  because gcd of their leading monoms is zero.

2007. Creating S-polynomial from the pair  $(p_{26}, p_{88})$ .  
 Skipping pair  $p_{26}$  and  $p_{88}$  because gcd of their leading monoms is zero.
2008. Creating S-polynomial from the pair  $(p_{26}, p_{89})$ .  
 Skipping pair  $p_{26}$  and  $p_{89}$  because gcd of their leading monoms is zero.
2009. Creating S-polynomial from the pair  $(p_{26}, p_{90})$ .  
 Skipping pair  $p_{26}$  and  $p_{90}$  because gcd of their leading monoms is zero.
2010. Creating S-polynomial from the pair  $(p_{26}, p_{91})$ .  
 Skipping pair  $p_{26}$  and  $p_{91}$  because gcd of their leading monoms is zero.
2011. Creating S-polynomial from the pair  $(p_{26}, p_{92})$ .  
 Skipping pair  $p_{26}$  and  $p_{92}$  because gcd of their leading monoms is zero.
2012. Creating S-polynomial from the pair  $(p_{26}, p_{93})$ .  
 Skipping pair  $p_{26}$  and  $p_{93}$  because gcd of their leading monoms is zero.
2013. Creating S-polynomial from the pair  $(p_{26}, p_{94})$ .  
 Skipping pair  $p_{26}$  and  $p_{94}$  because gcd of their leading monoms is zero.
2014. Creating S-polynomial from the pair  $(p_{26}, p_{95})$ .  
 Skipping pair  $p_{26}$  and  $p_{95}$  because gcd of their leading monoms is zero.
2015. Creating S-polynomial from the pair  $(p_{26}, p_{96})$ .  
 Skipping pair  $p_{26}$  and  $p_{96}$  because gcd of their leading monoms is zero.
2016. Creating S-polynomial from the pair  $(p_{26}, p_{97})$ .  
 Skipping pair  $p_{26}$  and  $p_{97}$  because gcd of their leading monoms is zero.
2017. Creating S-polynomial from the pair  $(p_{26}, p_{98})$ .  
 Skipping pair  $p_{26}$  and  $p_{98}$  because gcd of their leading monoms is zero.
2018. Creating S-polynomial from the pair  $(p_{26}, p_{99})$ .  
 Skipping pair  $p_{26}$  and  $p_{99}$  because gcd of their leading monoms is zero.
2019. Creating S-polynomial from the pair  $(p_{26}, p_{100})$ .  
 Forming S-pol of  $p_{26}$  and  $p_{100}$ :

$$\begin{aligned}
 p_{468} = & -524288u_5u_2^{17}u_1^{19}x_{12}x_{10}x_1 + 524288u_2^{17}u_1^{19}x_{12}x_4^2x_1 + \\
 & (-1048576u_5u_2^{16}u_1^{20} - 1048576u_2^{17}u_1^{20})x_{12}x_4x_1 + \\
 & 524288u_5u_2^{18}u_1^{19}x_{12}x_4 + \\
 & (-131072u_5^2u_2^{19}u_1^{17} + 524288u_5^2u_2^{17}u_1^{19})x_{12}x_1 + \\
 & 524288u_6u_2^{17}u_1^{19}x_{10}^2x_1 + 262144u_5u_2^{18}u_1^{18}x_{10}x_5x_1 + \\
 & 131072u_6u_5u_2^{19}u_1^{17}x_{10}x_1 + 262144u_5u_2^{17}u_1^{18}x_5x_4x_1^2 + \\
 & 65536u_5^2u_2^{20}u_1^{16}x_5x_1 + 131072u_6u_5u_2^{18}u_1^{17}x_4x_1^2 + \\
 & (-65536u_6u_5u_2^{20}u_1^{16} - 262144u_6u_2^{19}u_1^{18})x_4x_1 + \\
 & 131072u_6u_5^2u_2^{19}u_1^{17}x_1
 \end{aligned}$$

Reduced to zero.

2020. Creating S-polynomial from the pair  $(p_{26}, p_{101})$ .  
 Skipping pair  $p_{26}$  and  $p_{101}$  because gcd of their leading monoms is zero.
2021. Creating S-polynomial from the pair  $(p_{26}, p_{102})$ .  
 Skipping pair  $p_{26}$  and  $p_{102}$  because gcd of their leading monoms is zero.
2022. Creating S-polynomial from the pair  $(p_{26}, p_{103})$ .  
 Skipping pair  $p_{26}$  and  $p_{103}$  because gcd of their leading monoms is zero.
2023. Creating S-polynomial from the pair  $(p_{26}, p_{104})$ .  
 Skipping pair  $p_{26}$  and  $p_{104}$  because gcd of their leading monoms is zero.
2024. Creating S-polynomial from the pair  $(p_{26}, p_{105})$ .  
 Skipping pair  $p_{26}$  and  $p_{105}$  because gcd of their leading monoms is zero.
2025. Creating S-polynomial from the pair  $(p_{26}, p_{106})$ .  
 Skipping pair  $p_{26}$  and  $p_{106}$  because gcd of their leading monoms is zero.
2026. Creating S-polynomial from the pair  $(p_{27}, p_{32})$ .  
 Skipping pair  $p_{27}$  and  $p_{32}$  because gcd of their leading monoms is zero.
2027. Creating S-polynomial from the pair  $(p_{27}, p_{33})$ .  
 Forming S-pol of  $p_{27}$  and  $p_{33}$ :

$$\begin{aligned}
 p_{469} = & 4u_2^{13}u_1^2x_{12}x_4 - 4u_5u_2^{12}u_1^2x_{12}x_1 + 8u_2^{11}u_1^3x_{10}x_5x_1 - \\
 & 4u_2^{13}u_1^2x_{10}x_5 + 4u_6u_2^{12}u_1^2x_{10}x_1 - 4u_2^{12}u_1^2x_5x_4x_1 + \\
 & 4u_6u_2^{11}u_1^2x_4x_1^2 - 8u_6u_2^{11}u_1^3x_4x_1
 \end{aligned}$$

Reduced to zero.

2028. Creating S-polynomial from the pair  $(p_{27}, p_{34})$ .  
 Forming S-pol of  $p_{27}$  and  $p_{34}$ :

$$\begin{aligned}
 p_{470} = & -128u_2^{20}u_1^7x_{12}x_4^2 + 128u_5u_2^{19}u_1^7x_{12}x_4x_1 + \\
 & 128u_2^{20}u_1^7x_{10}x_5x_4 - 128u_6u_2^{19}u_1^7x_{10}x_4x_1 + \\
 & 128u_5u_2^{18}u_1^7x_5x_4x_1^2 - 256u_5u_2^{18}u_1^8x_5x_4x_1 - \\
 & 128u_6u_2^{18}u_1^7x_4^2x_1^2 + 256u_6u_2^{18}u_1^8x_4^2x_1
 \end{aligned}$$

Reduced to zero.

2029. Creating S-polynomial from the pair  $(p_{27}, p_{35})$ .  
 Skipping pair  $p_{27}$  and  $p_{35}$  because gcd of their leading monoms is zero.
2030. Creating S-polynomial from the pair  $(p_{27}, p_{36})$ .  
 Skipping pair  $p_{27}$  and  $p_{36}$  because gcd of their leading monoms is zero.

2031. Creating S-polynomial from the pair  $(p_{27}, p_{37})$ .

Forming S-pol of  $p_{27}$  and  $p_{37}$ :

$$\begin{aligned} p_{471} = & -128u_3^{13}u_2^7u_1^7x_{12}x_8x_4 + 128u_5u_3^{13}u_2^6u_1^7x_{12}x_8x_1 + \\ & 256u_3^{13}u_2^5u_1^8x_{12}x_6x_5x_1 + 128u_5u_3^{13}u_2^5u_1^7x_{12}x_5x_2x_1 - \\ & 256u_5u_3^{13}u_2^5u_1^8x_{12}x_5x_1 - 128u_6u_3^{13}u_2^5u_1^7x_{12}x_4x_2x_1 + \\ & 256u_6u_3^{13}u_2^5u_1^8x_{12}x_4x_1 - 256u_3^{13}u_2^5u_1^8x_{10}x_8x_5x_1 + \\ & 128u_3^{13}u_2^7u_1^7x_{10}x_8x_5 - 128u_6u_3^{13}u_2^6u_1^7x_{10}x_8x_1 \end{aligned}$$

Reduced to zero.

2032. Creating S-polynomial from the pair  $(p_{27}, p_{38})$ .

Skipping pair  $p_{27}$  and  $p_{38}$  because gcd of their leading monoms is zero.

2033. Creating S-polynomial from the pair  $(p_{27}, p_{39})$ .

Skipping pair  $p_{27}$  and  $p_{39}$  because gcd of their leading monoms is zero.

2034. Creating S-polynomial from the pair  $(p_{27}, p_{40})$ .

Forming S-pol of  $p_{27}$  and  $p_{40}$ :

$$\begin{aligned} p_{472} = & -128u_4^{13}u_2^7u_1^7x_{16}x_{12}x_4 + 128u_5u_4^{13}u_2^6u_1^7x_{16}x_{12}x_1 - \\ & 256u_4^{13}u_2^5u_1^8x_{16}x_{10}x_5x_1 + 128u_4^{13}u_2^7u_1^7x_{16}x_{10}x_5 - \\ & 128u_6u_4^{13}u_2^6u_1^7x_{16}x_{10}x_1 + 256u_4^{13}u_2^5u_1^8x_{14}x_{12}x_5x_1 + \\ & 128u_5u_4^{13}u_2^5u_1^7x_{12}x_5x_3x_1 - 256u_5u_4^{13}u_2^5u_1^8x_{12}x_5x_1 - \\ & 128u_6u_4^{13}u_2^5u_1^7x_{12}x_4x_3x_1 + 256u_6u_4^{13}u_2^5u_1^8x_{12}x_4x_1 \end{aligned}$$

Reduced to zero.

2035. Creating S-polynomial from the pair  $(p_{27}, p_{41})$ .

Forming S-pol of  $p_{27}$  and  $p_{41}$ :

$$\begin{aligned} p_{473} = & 128u_5u_3^{12}u_2^7u_1^7x_{12}x_8x_4 - 128u_5^2u_3^{12}u_2^6u_1^7x_{12}x_8x_1 - \\ & 256u_6u_3^{12}u_2^5u_1^8x_{12}x_6x_4x_1 - 128u_5u_3^{13}u_2^5u_1^7x_{12}x_5x_4x_1 + \\ & 256u_6u_3^{13}u_2^5u_1^8x_{12}x_4x_1 - 128u_6u_5^2u_3^{13}u_2^5u_1^7x_{12}x_1 + \\ & 256u_5u_3^{12}u_2^5u_1^8x_{10}x_8x_5x_1 - 128u_5u_3^{12}u_2^7u_1^7x_{10}x_8x_5 + \\ & 128u_6u_5u_3^{12}u_2^6u_1^7x_{10}x_8x_1 \end{aligned}$$

Reduced to zero.

2036. Creating S-polynomial from the pair  $(p_{27}, p_{42})$ .

Forming S-pol of  $p_{27}$  and  $p_{42}$ :

$$\begin{aligned} p_{474} = & 128u_5u_2^{19}u_1^7x_{12}x_4^2 - 128u_5^2u_2^{18}u_1^7x_{12}x_4x_1 + \\ & 256u_5u_2^{17}u_1^8x_{10}x_5x_4x_1 - 128u_5u_2^{19}u_1^7x_{10}x_5x_4 - \\ & 256u_6u_2^{17}u_1^8x_{10}x_4^2x_1 + 128u_6u_5u_2^{18}u_1^7x_{10}x_4x_1 - \\ & 128u_5u_2^{18}u_1^7x_5x_4^2x_1 + 256u_6u_2^{18}u_1^8x_4^2x_1 - \\ & 128u_6u_5^2u_2^{18}u_1^7x_4x_1 \end{aligned}$$

Reduced to zero.

2037. Creating S-polynomial from the pair  $(p_{27}, p_{43})$ .

Forming S-pol of  $p_{27}$  and  $p_{43}$ :

$$\begin{aligned} p_{475} = & 128u_5u_4^{12}u_2^7u_1^7x_{16}x_{12}x_4 - 128u_5^2u_4^{12}u_2^6u_1^7x_{16}x_{12}x_1 + \\ & 256u_5u_4^{12}u_2^5u_1^8x_{16}x_{10}x_5x_1 - 128u_5u_4^{12}u_2^7u_1^7x_{16}x_{10}x_5 + \\ & 128u_6u_5u_4^{12}u_2^6u_1^7x_{16}x_{10}x_1 - 256u_6u_4^{12}u_2^5u_1^8x_{14}x_{12}x_4x_1 - \\ & 128u_5u_4^{13}u_2^5u_1^7x_{12}x_5x_4x_1 + 256u_6u_4^{13}u_2^5u_1^8x_{12}x_4x_1 - \\ & 128u_6u_5^2u_4^{13}u_2^5u_1^7x_{12}x_1 \end{aligned}$$

Reduced to zero.

2038. Creating S-polynomial from the pair  $(p_{27}, p_{44})$ .

Skipping pair  $p_{27}$  and  $p_{44}$  because gcd of their leading monoms is zero.

2039. Creating S-polynomial from the pair  $(p_{27}, p_{45})$ .

Skipping pair  $p_{27}$  and  $p_{45}$  because gcd of their leading monoms is zero.

2040. Creating S-polynomial from the pair  $(p_{27}, p_{46})$ .

Skipping pair  $p_{27}$  and  $p_{46}$  because gcd of their leading monoms is zero.

2041. Creating S-polynomial from the pair  $(p_{27}, p_{47})$ .

Forming S-pol of  $p_{27}$  and  $p_{47}$ : Polynomial too big for output (text size is 1620 characters, number of terms is 17)

Reduced to zero.

2042. Creating S-polynomial from the pair  $(p_{27}, p_{48})$ .

Skipping pair  $p_{27}$  and  $p_{48}$  because gcd of their leading monoms is zero.

2043. Creating S-polynomial from the pair  $(p_{27}, p_{49})$ .

Skipping pair  $p_{27}$  and  $p_{49}$  because gcd of their leading monoms is zero.

2044. Creating S-polynomial from the pair  $(p_{27}, p_{50})$ .

Skipping pair  $p_{27}$  and  $p_{50}$  because gcd of their leading monoms is zero.

2045. Creating S-polynomial from the pair  $(p_{27}, p_{51})$ .

Skipping pair  $p_{27}$  and  $p_{51}$  because gcd of their leading monoms is zero.

2046. Creating S-polynomial from the pair  $(p_{27}, p_{52})$ .

Forming S-pol of  $p_{27}$  and  $p_{52}$ : Polynomial too big for output (text size is 1397 characters, number of terms is 16)

Reduced to zero.

2047. Creating S-polynomial from the pair  $(p_{27}, p_{53})$ .

Skipping pair  $p_{27}$  and  $p_{53}$  because gcd of their leading monoms is zero.

2048. Creating S-polynomial from the pair  $(p_{27}, p_{54})$ .

Skipping pair  $p_{27}$  and  $p_{54}$  because gcd of their leading monoms is zero.

2049. Creating S-polynomial from the pair  $(p_{27}, p_{55})$ .

Forming S-pol of  $p_{27}$  and  $p_{55}$ :

$$\begin{aligned}
p_{476} = & (-1024u_2^{20}u_1^{10} - 4096u_2^{18}u_1^{12})x_{12}x_{10}x_4 + \\
& (1024u_5u_2^{19}u_1^{10} + 4096u_5u_2^{17}u_1^{12})x_{12}x_{10}x_1 + \\
& 4096u_2^{17}u_1^{12}x_{12}x_4^2x_1 + \\
& (-512u_5u_2^{20}u_1^9 + 8192u_5u_2^{16}u_1^{13})x_{12}x_4x_1 + \\
& (-2048u_2^{18}u_1^{11} - 8192u_2^{16}u_1^{13})x_{10}^2x_5x_1 + \\
& (1024u_2^{20}u_1^{10} + 4096u_2^{18}u_1^{12})x_{10}^2x_5 + \\
& (-1024u_6u_2^{19}u_1^{10} - 4096u_6u_2^{17}u_1^{12})x_{10}^2x_1 + \\
& 1024u_2^{19}u_1^{10}x_{10}x_5x_4x_1 - 2048u_5u_2^{17}u_1^{11}x_5x_4x_1^2 + \\
& 256u_5u_2^{21}u_1^8x_5x_4x_1 - 512u_6u_2^{19}u_1^9x_4^2x_1^2 + \\
& 1024u_6u_2^{19}u_1^{10}x_4^2x_1 + \\
& (-256u_6u_5u_2^{20}u_1^8 - 1024u_6u_5u_2^{18}u_1^{10})x_4x_1^2
\end{aligned}$$

Reduced to zero.

2050. Creating S-polynomial from the pair  $(p_{27}, p_{56})$ .

Skipping pair  $p_{27}$  and  $p_{56}$  because gcd of their leading monoms is zero.

2051. Creating S-polynomial from the pair  $(p_{27}, p_{57})$ .

Forming S-pol of  $p_{27}$  and  $p_{57}$ : Polynomial too big for output (text size is 1309 characters, number of terms is 17)

S-pol added.

2052. Creating S-polynomial from the pair  $(p_{27}, p_{58})$ .

Forming S-pol of  $p_{27}$  and  $p_{58}$ :

$$\begin{aligned}
p_{477} = & 128u_2^{13}u_1^7x_{12}x_{10}x_4 - 128u_5u_2^{12}u_1^7x_{12}x_{10}x_1 - \\
& 128u_2^{12}u_1^7x_{12}x_4^2x_1 - 256u_5u_2^{11}u_1^8x_{12}x_4x_1 + \\
& 256u_2^{11}u_1^8x_{10}^2x_5x_1 - 128u_2^{13}u_1^7x_{10}^2x_5 + \\
& 128u_6u_2^{12}u_1^7x_{10}^2x_1 + 64u_6u_2^{13}u_1^6x_{10}x_4x_1 + \\
& 64u_5u_2^{12}u_1^6x_5x_4x_1^2 - 32u_6u_2^{14}u_1^5x_4^2x_1 + \\
& 32u_6u_5u_2^{13}u_1^5x_4x_1^2
\end{aligned}$$

Reduced to zero.

2053. Creating S-polynomial from the pair  $(p_{27}, p_{59})$ .

Forming S-pol of  $p_{27}$  and  $p_{59}$ :

$$\begin{aligned}
p_{478} = & (-256u_2^{19}u_1^8 - 1024u_2^{17}u_1^{10})x_{12}x_{10}x_4 + \\
& (256u_5u_2^{18}u_1^8 + 1024u_5u_2^{16}u_1^{10})x_{12}x_{10}x_1 + 256u_2^{18}u_1^8x_{12}x_4^2x_1 - \\
& 128u_5u_2^{19}u_1^7x_{12}x_4x_1 + (-512u_2^{17}u_1^9 - 2048u_2^{15}u_1^{11})x_{10}^2x_5x_1 + \\
& (256u_2^{19}u_1^8 + 1024u_2^{17}u_1^{10})x_{10}^2x_5 + \\
& (-256u_6u_2^{18}u_1^8 - 1024u_6u_2^{16}u_1^{10})x_{10}^2x_1 + 1024u_2^{16}u_1^{10}x_{10}x_5x_4x_1 + \\
& 2048u_6u_2^{15}u_1^{11}x_{10}x_4x_1 - 128u_5u_2^{18}u_1^7x_5x_4x_1^2 + \\
& (64u_5u_2^{20}u_1^6 + 256u_5u_2^{18}u_1^8)x_5x_4x_1 - 512u_6u_2^{16}u_1^9x_4^2x_1^2 + \\
& (-64u_6u_5u_2^{19}u_1^6 - 256u_6u_5u_2^{17}u_1^8)x_4x_1^2
\end{aligned}$$

Reduced to zero.

2054. Creating S-polynomial from the pair  $(p_{27}, p_{60})$ .

Forming S-pol of  $p_{27}$  and  $p_{60}$ :

$$\begin{aligned}
p_{479} = & (-16u_2^{17}u_1^4 - 64u_2^{15}u_1^6)x_{12}^2x_4 + \\
& (16u_5u_2^{16}u_1^4 + 64u_5u_2^{14}u_1^6)x_{12}^2x_1 + \\
& (-32u_2^{15}u_1^5 - 128u_2^{13}u_1^7)x_{12}x_{10}x_5x_1 + \\
& (16u_2^{17}u_1^4 + 64u_2^{15}u_1^6)x_{12}x_{10}x_5 + \\
& (-16u_6u_2^{16}u_1^4 - 64u_6u_2^{14}u_1^6)x_{12}x_{10}x_1 + \\
& (16u_2^{16}u_1^4 + 64u_2^{14}u_1^6)x_{12}x_5x_4x_1 + \\
& (-8u_6u_2^{17}u_1^3 + 128u_6u_2^{13}u_1^7)x_{12}x_4x_1 + \\
& (-8u_6u_2^{16}u_1^3 - 32u_6u_2^{14}u_1^5)x_5x_4x_1^2 + \\
& (4u_6u_2^{18}u_1^2 + 16u_6u_2^{16}u_1^4)x_5x_4x_1 + \\
& (-4u_6^2u_2^{17}u_1^2 - 16u_6^2u_2^{15}u_1^4)x_4x_1^2
\end{aligned}$$

Reduced to zero.

2055. Creating S-polynomial from the pair  $(p_{27}, p_{61})$ .

Forming S-pol of  $p_{27}$  and  $p_{61}$ :

$$\begin{aligned}
p_{480} = & 128u_2^{13}u_1^7x_{12}x_{10}x_4 - 128u_5u_2^{12}u_1^7x_{12}x_{10}x_1 + \\
& 64u_5u_2^{13}u_1^6x_{12}x_4x_1 + 256u_2^{11}u_1^8x_{10}^2x_5x_1 - \\
& 128u_2^{13}u_1^7x_{10}^2x_5 + 128u_6u_2^{12}u_1^7x_{10}^2x_1 - \\
& 128u_2^{12}u_1^7x_{10}x_5x_4x_1 - 256u_6u_2^{11}u_1^8x_{10}x_4x_1 - \\
& 32u_5u_2^{14}u_1^5x_5x_4x_1 + 64u_6u_2^{12}u_1^6x_4^2x_1^2 + \\
& 32u_6u_5u_2^{13}u_1^5x_4x_1^2
\end{aligned}$$

Reduced to zero.

2056. Creating S-polynomial from the pair  $(p_{27}, p_{62})$ .  
 Forming S-pol of  $p_{27}$  and  $p_{62}$ : Polynomial too big for output (text size is 1120 characters, number of terms is 16)  
 S-pol added.
2057. Creating S-polynomial from the pair  $(p_{27}, p_{63})$ .  
 Forming S-pol of  $p_{27}$  and  $p_{63}$ :
- $$\begin{aligned}
 p_{481} = & 8u_2^{11}u_1^3x_{12}^2x_4 - 8u_5u_2^{10}u_1^3x_{12}^2x_1 + 16u_2^9u_1^4x_{12}x_{10}x_5x_1 - \\
 & 8u_2^{11}u_1^3x_{12}x_{10}x_5 + 8u_6u_2^{10}u_1^3x_{12}x_{10}x_1 - \\
 & 8u_2^{10}u_1^3x_{12}x_5x_4x_1 + \\
 & (4u_6u_2^{11}u_1^2 - 16u_6u_2^9u_1^4)x_{12}x_4x_1 + 4u_6u_2^{10}u_1^2x_5x_4x_1^2 - \\
 & 2u_6u_2^{12}u_1x_5x_4x_1 + 2u_6^2u_2^{11}u_1x_4x_1^2
 \end{aligned}$$
- Reduced to zero.
2058. Creating S-polynomial from the pair  $(p_{27}, p_{64})$ .  
 Skipping pair  $p_{27}$  and  $p_{64}$  because gcd of their leading monoms is zero.
2059. Creating S-polynomial from the pair  $(p_{27}, p_{65})$ .  
 Skipping pair  $p_{27}$  and  $p_{65}$  because gcd of their leading monoms is zero.
2060. Creating S-polynomial from the pair  $(p_{27}, p_{66})$ .  
 Skipping pair  $p_{27}$  and  $p_{66}$  because gcd of their leading monoms is zero.
2061. Creating S-polynomial from the pair  $(p_{27}, p_{67})$ .  
 Forming S-pol of  $p_{27}$  and  $p_{67}$ : Polynomial too big for output (text size is 1635 characters, number of terms is 17)  
 Reduced to zero.
2062. Creating S-polynomial from the pair  $(p_{27}, p_{68})$ .  
 Skipping pair  $p_{27}$  and  $p_{68}$  because gcd of their leading monoms is zero.
2063. Creating S-polynomial from the pair  $(p_{27}, p_{69})$ .  
 Skipping pair  $p_{27}$  and  $p_{69}$  because gcd of their leading monoms is zero.
2064. Creating S-polynomial from the pair  $(p_{27}, p_{70})$ .  
 Skipping pair  $p_{27}$  and  $p_{70}$  because gcd of their leading monoms is zero.
2065. Creating S-polynomial from the pair  $(p_{27}, p_{71})$ .  
 Skipping pair  $p_{27}$  and  $p_{71}$  because gcd of their leading monoms is zero.
2066. Creating S-polynomial from the pair  $(p_{27}, p_{72})$ .  
 Forming S-pol of  $p_{27}$  and  $p_{72}$ : Polynomial too big for output (text size is 1407 characters, number of terms is 16)  
 Reduced to zero.



2067. Creating S-polynomial from the pair  $(p_{27}, p_{73})$ .

Skipping pair  $p_{27}$  and  $p_{73}$  because gcd of their leading monoms is zero.

2068. Creating S-polynomial from the pair  $(p_{27}, p_{74})$ .

Forming S-pol of  $p_{27}$  and  $p_{74}$ :

$$\begin{aligned} p_{482} = & -512u_5u_2^{17}u_1^9x_{12}x_4 + 512u_5^2u_2^{16}u_1^9x_{12}x_1 - \\ & 1024u_5u_2^{15}u_1^{10}x_{10}x_5x_1 + 512u_5u_2^{17}u_1^9x_{10}x_5 + \\ & 1024u_6u_2^{15}u_1^{10}x_{10}x_4x_1 - 512u_6u_5u_2^{16}u_1^9x_{10}x_1 + \\ & 512u_5u_2^{16}u_1^9x_5x_4x_1 - 512u_6u_2^{16}u_1^9x_4^2x_1 \end{aligned}$$

Reduced to zero.

2069. Creating S-polynomial from the pair  $(p_{27}, p_{75})$ .

Skipping pair  $p_{27}$  and  $p_{75}$  because gcd of their leading monoms is zero.

2070. Creating S-polynomial from the pair  $(p_{27}, p_{76})$ .

Forming S-pol of  $p_{27}$  and  $p_{76}$ :

$$\begin{aligned} p_{483} = & 524288u_5u_2^{25}u_1^{19}x_{12}x_{10}x_4 - 524288u_5^2u_2^{24}u_1^{19}x_{12}x_{10}x_1 + \\ & 524288u_5u_2^{24}u_1^{19}x_{12}x_4^2x_1 + 262144u_5^2u_2^{25}u_1^{18}x_{12}x_4x_1 + \\ & 1048576u_5u_2^{23}u_1^{20}x_{10}^2x_5x_1 - 524288u_5u_2^{25}u_1^{19}x_{10}^2x_5 - \\ & 1048576u_6u_2^{23}u_1^{20}x_{10}^2x_4x_1 + 524288u_6u_5u_2^{24}u_1^{19}x_{10}^2x_1 - \\ & 524288u_5u_2^{24}u_1^{19}x_{10}x_5x_4x_1 - 262144u_6u_5u_2^{25}u_1^{18}x_{10}x_4x_1 - \\ & 262144u_5u_2^{25}u_1^{18}x_5x_4^2x_1 - 131072u_5^2u_2^{26}u_1^{17}x_5x_4x_1 + \\ & (131072u_6u_5u_2^{26}u_1^{17} + 524288u_6u_2^{25}u_1^{19})x_4^2x_1 - \\ & 262144u_6u_5^2u_2^{25}u_1^{18}x_4x_1 \end{aligned}$$

Reduced to zero.

2071. Creating S-polynomial from the pair  $(p_{27}, p_{77})$ .

Forming S-pol of  $p_{27}$  and  $p_{77}$ :

$$\begin{aligned} p_{484} = & 256u_2^{13}u_1^8x_{12}x_{10}x_4 - 256u_5u_2^{12}u_1^8x_{12}x_{10}x_1 + \\ & 128u_5u_2^{13}u_1^7x_{12}x_4x_1 + 512u_2^{11}u_1^9x_{10}^2x_5x_1 - \\ & 256u_2^{13}u_1^8x_{10}^2x_5 + 256u_6u_2^{12}u_1^8x_{10}^2x_1 - \\ & 256u_2^{12}u_1^8x_{10}x_5x_4x_1 - 512u_6u_2^{11}u_1^9x_{10}x_4x_1 - \\ & 64u_5u_2^{14}u_1^6x_5x_4x_1 + 128u_6u_2^{12}u_1^7x_4^2x_1 + \\ & 64u_6u_5u_2^{13}u_1^6x_4x_1^2 \end{aligned}$$

Reduced to zero.

2072. Creating S-polynomial from the pair  $(p_{27}, p_{78})$ .

Forming S-pol of  $p_{27}$  and  $p_{78}$ :

$$\begin{aligned} p_{485} = & 256u_2^{13}u_1^8x_{12}x_{10}x_4 - 256u_5u_2^{12}u_1^8x_{12}x_{10}x_1 - \\ & 256u_2^{12}u_1^8x_{12}x_4^2x_1 - 512u_5u_2^{11}u_1^9x_{12}x_4x_1 + \\ & 512u_2^{11}u_1^9x_{10}^2x_5x_1 - 256u_2^{13}u_1^8x_{10}^2x_5 + \\ & 256u_6u_2^{12}u_1^8x_{10}^2x_1 + 128u_6u_2^{13}u_1^7x_{10}x_4x_1 + \\ & 128u_5u_2^{12}u_1^7x_5x_4x_1^2 - 64u_6u_2^{14}u_1^6x_4^2x_1 + \\ & 64u_6u_5u_2^{13}u_1^6x_4x_1^2 \end{aligned}$$

Reduced to zero.

2073. Creating S-polynomial from the pair  $(p_{27}, p_{79})$ .

Forming S-pol of  $p_{27}$  and  $p_{79}$ :

$$\begin{aligned} p_{486} = & (-512u_2^{21}u_1^9 + 1024u_2^{19}u_1^{10})x_{12}x_4^2 + \\ & (512u_5u_2^{20}u_1^9 - 1024u_5u_2^{18}u_1^{10})x_{12}x_4x_1 + 2048u_2^{17}u_1^{11}x_{10}x_5x_4x_1 + \\ & (512u_2^{21}u_1^9 - 1024u_2^{19}u_1^{10})x_{10}x_5x_4 + \\ & (-512u_6u_2^{20}u_1^9 + 1024u_6u_2^{18}u_1^{10})x_{10}x_4x_1 + \\ & (-4096u_2^{16}u_1^{12} + 2048u_2^{16}u_1^{11})x_5x_4^2x_1^2 + \\ & (2048u_2^{18}u_1^{11} - 1024u_2^{18}u_1^{10})x_5x_4^2x_1 + 512u_5u_2^{19}u_1^9x_5x_4x_1^2 - \\ & 1024u_5u_2^{19}u_1^{10}x_5x_4x_1 + \\ & (-512u_6u_2^{19}u_1^9 - 2048u_6u_2^{17}u_1^{11} + 1024u_6u_2^{17}u_1^{10})x_4^2x_1^2 + \\ & 1024u_6u_2^{19}u_1^{10}x_4^2x_1 \end{aligned}$$

S-pol added.

2074. Creating S-polynomial from the pair  $(p_{27}, p_{80})$ .

Forming S-pol of  $p_{27}$  and  $p_{80}$ :

$$\begin{aligned} p_{487} = & 8u_2^{13}u_1^3x_{12}x_4 - 8u_5u_2^{12}u_1^3x_{12}x_1 + 16u_2^{11}u_1^4x_{10}x_5x_1 - \\ & 8u_2^{13}u_1^3x_{10}x_5 + 8u_6u_2^{12}u_1^3x_{10}x_1 - 8u_2^{12}u_1^3x_5x_4x_1 + \\ & 8u_6u_2^{11}u_1^3x_4x_1^2 - 16u_6u_2^{11}u_1^4x_4x_1 \end{aligned}$$

Reduced to zero.

2075. Creating S-polynomial from the pair  $(p_{27}, p_{81})$ .

Skipping pair  $p_{27}$  and  $p_{81}$  because gcd of their leading monoms is zero.

2076. Creating S-polynomial from the pair  $(p_{27}, p_{82})$ .

Skipping pair  $p_{27}$  and  $p_{82}$  because gcd of their leading monoms is zero.

2077. Creating S-polynomial from the pair  $(p_{27}, p_{83})$ .

Skipping pair  $p_{27}$  and  $p_{83}$  because gcd of their leading monoms is zero.

2078. Creating S-polynomial from the pair  $(p_{27}, p_{84})$ .

Skipping pair  $p_{27}$  and  $p_{84}$  because gcd of their leading monoms is zero.

2079. Creating S-polynomial from the pair  $(p_{27}, p_{85})$ .

Skipping pair  $p_{27}$  and  $p_{85}$  because gcd of their leading monoms is zero.

2080. Creating S-polynomial from the pair  $(p_{27}, p_{86})$ .

Forming S-pol of  $p_{27}$  and  $p_{86}$ :

$$\begin{aligned}
p_{488} = & (-512u_3^{14}u_2^7u_1^9 + 1024u_3^{12}u_2^7u_1^{10})x_{12}x_8x_4 + \\
& (512u_5u_3^{14}u_2^6u_1^9 - 1024u_5u_3^{12}u_2^6u_1^{10})x_{12}x_8x_1 + \\
& 1024u_3^{14}u_2^5u_1^{10}x_{12}x_6x_5x_1 + \\
& (-4096u_3^{11}u_2^5u_1^{12} + 2048u_3^{11}u_2^5u_1^{11})x_{12}x_5x_4x_2x_1 + \\
& (2048u_3^{13}u_2^5u_1^{11} - 1024u_3^{13}u_2^5u_1^{10})x_{12}x_5x_4x_1 + \\
& 512u_5u_3^{14}u_2^5u_1^9x_{12}x_5x_2x_1 - 1024u_5u_3^{14}u_2^5u_1^{10}x_{12}x_5x_1 + \\
& (-512u_6u_3^{14}u_2^5u_1^9 - 2048u_6u_3^{12}u_2^5u_1^{11} + \\
& 1024u_6u_3^{12}u_2^5u_1^{10})x_{12}x_4x_2x_1 + 1024u_6u_3^{14}u_2^5u_1^{10}x_{12}x_4x_1 + \\
& (-1024u_3^{14}u_2^5u_1^{10} + 2048u_3^{12}u_2^5u_1^{11})x_{10}x_8x_5x_1 + \\
& (512u_3^{14}u_2^7u_1^9 - 1024u_3^{12}u_2^7u_1^{10})x_{10}x_8x_5 + \\
& (-512u_6u_3^{14}u_2^6u_1^9 + 1024u_6u_3^{12}u_2^6u_1^{10})x_{10}x_8x_1
\end{aligned}$$

S-pol added.

2081. Creating S-polynomial from the pair  $(p_{27}, p_{87})$ .

Skipping pair  $p_{27}$  and  $p_{87}$  because gcd of their leading monoms is zero.

2082. Creating S-polynomial from the pair  $(p_{27}, p_{88})$ .

Skipping pair  $p_{27}$  and  $p_{88}$  because gcd of their leading monoms is zero.

2083. Creating S-polynomial from the pair  $(p_{27}, p_{89})$ .

Skipping pair  $p_{27}$  and  $p_{89}$  because gcd of their leading monoms is zero.

2084. Creating S-polynomial from the pair  $(p_{27}, p_{90})$ .

Skipping pair  $p_{27}$  and  $p_{90}$  because gcd of their leading monoms is zero.

2085. Creating S-polynomial from the pair  $(p_{27}, p_{91})$ .

Skipping pair  $p_{27}$  and  $p_{91}$  because gcd of their leading monoms is zero.

2086. Creating S-polynomial from the pair  $(p_{27}, p_{92})$ .

Skipping pair  $p_{27}$  and  $p_{92}$  because gcd of their leading monoms is zero.

2087. Creating S-polynomial from the pair  $(p_{27}, p_{93})$ .

Forming S-pol of  $p_{27}$  and  $p_{93}$ : Polynomial too big for output (text size is 1006 characters, number of terms is 12)

S-pol added.

2088. Creating S-polynomial from the pair  $(p_{27}, p_{94})$ .

Skipping pair  $p_{27}$  and  $p_{94}$  because gcd of their leading monoms is zero.

2089. Creating S-polynomial from the pair  $(p_{27}, p_{95})$ .

Forming S-pol of  $p_{27}$  and  $p_{95}$ : Polynomial too big for output (text size is 1102 characters, number of terms is 15)

Reduced to zero.

2090. Creating S-polynomial from the pair  $(p_{27}, p_{96})$ .

Forming S-pol of  $p_{27}$  and  $p_{96}$ :

$$\begin{aligned} p_{489} = & -16u_3^5u_2^7u_1^4x_{12}x_8x_4 + \\ & (16u_5u_3^5u_2^6u_1^4 - 64u_5u_3^4u_2^5u_1^6)x_{12}x_8x_1 + \\ & 32u_3^5u_2^5u_1^5x_{12}x_6x_5x_1 + 64u_6u_3^4u_2^5u_1^6x_{12}x_6x_1 + \\ & 16u_5u_3^5u_2^5u_1^4x_{12}x_5x_2x_1 - 16u_6u_3^5u_2^5u_1^4x_{12}x_4x_2x_1 - \\ & 32u_3^5u_2^5u_1^5x_{10}x_8x_5x_1 + 16u_3^5u_2^7u_1^4x_{10}x_8x_5 - \\ & 16u_6u_3^5u_2^6u_1^4x_{10}x_8x_1 \end{aligned}$$

Reduced to zero.

2091. Creating S-polynomial from the pair  $(p_{27}, p_{97})$ .

Forming S-pol of  $p_{27}$  and  $p_{97}$ :

$$\begin{aligned} p_{490} = & -256u_3^{13}u_2^7u_1^8x_{12}x_8x_4 + 256u_5u_3^{13}u_2^6u_1^8x_{12}x_8x_1 + \\ & 512u_3^{13}u_2^5u_1^9x_{12}x_6x_5x_1 + \\ & (-2048u_3^{10}u_2^5u_1^{11} + 1024u_3^{10}u_2^5u_1^{10})x_{12}x_5x_4x_2x_1 + \\ & 1024u_3^{12}u_2^5u_1^{10}x_{12}x_5x_4x_1 + 256u_5u_3^{13}u_2^5u_1^8x_{12}x_5x_2x_1 - \\ & 512u_5u_3^{13}u_2^5u_1^9x_{12}x_5x_1 + \\ & (-256u_6u_3^{13}u_2^5u_1^8 - 1024u_6u_3^{11}u_2^5u_1^{10})x_{12}x_4x_2x_1 + \\ & (512u_6u_3^{13}u_2^5u_1^9 + 1024u_6u_3^{11}u_2^5u_1^{10})x_{12}x_4x_1 - \\ & 512u_3^{13}u_2^5u_1^9x_{10}x_8x_5x_1 + 256u_3^{13}u_2^7u_1^8x_{10}x_8x_5 - \\ & 256u_6u_3^{13}u_2^6u_1^8x_{10}x_8x_1 \end{aligned}$$

S-pol added.

2092. Creating S-polynomial from the pair  $(p_{27}, p_{98})$ .

Forming S-pol of  $p_{27}$  and  $p_{98}$ : Polynomial too big for output (text size is 2945 characters, number of terms is 32)

Reduced to zero.

2093. Creating S-polynomial from the pair  $(p_{27}, p_{99})$ .

Skipping pair  $p_{27}$  and  $p_{99}$  because gcd of their leading monoms is zero.

2094. Creating S-polynomial from the pair  $(p_{27}, p_{100})$ .

Forming S-pol of  $p_{27}$  and  $p_{100}$ :

$$\begin{aligned}
p_{491} = & -524288u_5u_2^{22}u_1^{19}x_{12}x_{10}x_4x_1 + 524288u_2^{23}u_1^{19}x_{12}x_{10}x_4 - \\
& 524288u_5u_2^{22}u_1^{19}x_{12}x_{10}x_1 + \\
& (-1048576u_5u_2^{21}u_1^{20} - 1048576u_2^{22}u_1^{20})x_{12}x_4^2x_1 + \\
& (-131072u_5^2u_2^{24}u_1^{17} + 524288u_5^2u_2^{22}u_1^{19})x_{12}x_4x_1 + \\
& 1048576u_2^{21}u_1^{20}x_{10}^2x_5x_1 - 524288u_2^{23}u_1^{19}x_{10}^2x_5 + \\
& 524288u_6u_2^{22}u_1^{19}x_{10}^2x_4x_1 + 524288u_6u_2^{22}u_1^{19}x_{10}^2x_1 + \\
& 262144u_5u_2^{23}u_1^{18}x_{10}x_5x_4x_1 + 131072u_6u_5u_2^{24}u_1^{17}x_{10}x_4x_1 + \\
& 262144u_5u_2^{22}u_1^{18}x_5x_4^2x_1^2 + 65536u_5^2u_2^{25}u_1^{16}x_5x_4x_1 + \\
& 131072u_6u_5u_2^{23}u_1^{17}x_4^2x_1^2 + \\
& (-65536u_6u_5u_2^{25}u_1^{16} - 262144u_6u_2^{24}u_1^{18})x_4^2x_1 + \\
& 131072u_6u_5^2u_2^{24}u_1^{17}x_4x_1
\end{aligned}$$

S-pol added.

2095. Creating S-polynomial from the pair  $(p_{27}, p_{101})$ .

Forming S-pol of  $p_{27}$  and  $p_{101}$ :

$$\begin{aligned}
p_{492} = & -16u_2^{12}u_1^4x_{12}x_4^2 + \\
& (16u_5u_2^{11}u_1^4 - 64u_5u_2^9u_1^6)x_{12}x_4x_1 + 16u_2^{12}u_1^4x_{10}x_5x_4 + \\
& (-16u_6u_2^{11}u_1^4 + 64u_6u_2^9u_1^6)x_{10}x_4x_1 + 16u_5u_2^{10}u_1^4x_5x_4x_1^2 - \\
& 16u_6u_2^{10}u_1^4x_4^2x_1^2
\end{aligned}$$

Reduced to zero.

2096. Creating S-polynomial from the pair  $(p_{27}, p_{102})$ .

Forming S-pol of  $p_{27}$  and  $p_{102}$ :

$$\begin{aligned}
p_{493} = & -256u_2^{20}u_1^8x_{12}x_4^2 + 256u_5u_2^{19}u_1^8x_{12}x_4x_1 + \\
& 256u_2^{20}u_1^8x_{10}x_5x_4 - 256u_6u_2^{19}u_1^8x_{10}x_4x_1 + \\
& (-2048u_2^{15}u_1^{11} + 1024u_2^{15}u_1^{10})x_5x_4^2x_1^2 + 1024u_2^{17}u_1^{10}x_5x_4^2x_1 + \\
& 256u_5u_2^{18}u_1^8x_5x_4x_1^2 - 512u_5u_2^{18}u_1^9x_5x_4x_1 + \\
& (-256u_6u_2^{18}u_1^8 - 1024u_6u_2^{16}u_1^{10})x_4^2x_1^2 + \\
& (512u_6u_2^{18}u_1^9 + 1024u_6u_2^{16}u_1^{10})x_4^2x_1
\end{aligned}$$

S-pol added.

2097. Creating S-polynomial from the pair  $(p_{27}, p_{103})$ .

Forming S-pol of  $p_{27}$  and  $p_{103}$ : Polynomial too big for output (text size is 2957 characters, number of terms is 32)

Reduced to zero.

2098. Creating S-polynomial from the pair  $(p_{27}, p_{104})$ .

Forming S-pol of  $p_{27}$  and  $p_{104}$ : Polynomial too big for output (text size is 1117 characters, number of terms is 15)

Reduced to zero.

2099. Creating S-polynomial from the pair  $(p_{27}, p_{105})$ .

Forming S-pol of  $p_{27}$  and  $p_{105}$ :

$$\begin{aligned} p_{494} = & -16u_4^5u_2^7u_1^4x_{16}x_{12}x_4 + \\ & (16u_5u_4^5u_2^6u_1^4 - 64u_5u_4^4u_2^5u_1^6)x_{16}x_{12}x_1 - \\ & 32u_4^5u_2^5u_1^5x_{16}x_{10}x_5x_1 + 16u_4^5u_2^7u_1^4x_{16}x_{10}x_5 - \\ & 16u_6u_4^5u_2^6u_1^4x_{16}x_{10}x_1 + 32u_4^5u_2^5u_1^5x_{14}x_{12}x_5x_1 + \\ & 64u_6u_4^4u_2^5u_1^6x_{14}x_{12}x_1 + 16u_5u_4^5u_2^5u_1^4x_{12}x_5x_3x_1 - \\ & 16u_6u_4^5u_2^5u_1^4x_{12}x_4x_3x_1 \end{aligned}$$

Reduced to zero.

2100. Creating S-polynomial from the pair  $(p_{27}, p_{106})$ .

Forming S-pol of  $p_{27}$  and  $p_{106}$ :

$$\begin{aligned} p_{495} = & -256u_4^{13}u_2^7u_1^8x_{16}x_{12}x_4 + 256u_5u_4^{13}u_2^6u_1^8x_{16}x_{12}x_1 - \\ & 512u_4^{13}u_2^5u_1^9x_{16}x_{10}x_5x_1 + 256u_4^{13}u_2^7u_1^8x_{16}x_{10}x_5 - \\ & 256u_6u_4^{13}u_2^6u_1^8x_{16}x_{10}x_1 + 512u_4^{13}u_2^5u_1^9x_{14}x_{12}x_5x_1 + \\ & (-2048u_4^{10}u_2^5u_1^{11} + 1024u_4^{10}u_2^5u_1^{10})x_{12}x_5x_4x_3x_1 + \\ & 1024u_4^{12}u_2^5u_1^{10}x_{12}x_5x_4x_1 + 256u_5u_4^{13}u_2^5u_1^8x_{12}x_5x_3x_1 - \\ & 512u_5u_4^{13}u_2^5u_1^9x_{12}x_5x_1 + \\ & (-256u_6u_4^{13}u_2^5u_1^8 - 1024u_6u_4^{11}u_2^5u_1^{10})x_{12}x_4x_3x_1 + \\ & (512u_6u_4^{13}u_2^5u_1^9 + 1024u_6u_4^{11}u_2^5u_1^{10})x_{12}x_4x_1 \end{aligned}$$

S-pol added.

2101. Creating S-polynomial from the pair  $(p_{28}, p_{32})$ .

Skipping pair  $p_{28}$  and  $p_{32}$  because gcd of their leading monoms is zero.

2102. Creating S-polynomial from the pair  $(p_{28}, p_{33})$ .

Forming S-pol of  $p_{28}$  and  $p_{33}$ :

$$p_{496} = 4u_6u_2^6u_1^2x_1^2 - 8u_6u_2^6u_1^3x_1 + 4u_6u_2^8u_1^2$$

Reduced to zero.

2103. Creating S-polynomial from the pair  $(p_{28}, p_{34})$ .

Forming S-pol of  $p_{28}$  and  $p_{34}$ :

$$\begin{aligned} p_{497} = & 256u_2^{13}u_1^8x_{10}x_5x_1 - 128u_2^{14}u_1^7x_5x_4x_1 + 128u_5u_2^{13}u_1^7x_5x_1^2 - \\ & 256u_5u_2^{13}u_1^8x_5x_1 - 128u_6u_2^{13}u_1^7x_4x_1^2 + 256u_6u_2^{13}u_1^8x_4x_1 - \\ & 128u_6u_2^{15}u_1^7x_4 \end{aligned}$$

Reduced to zero.

2104. Creating S-polynomial from the pair  $(p_{28}, p_{35})$ .

Skipping pair  $p_{28}$  and  $p_{35}$  because gcd of their leading monoms is zero.

2105. Creating S-polynomial from the pair  $(p_{28}, p_{36})$ .

Skipping pair  $p_{28}$  and  $p_{36}$  because gcd of their leading monoms is zero.

2106. Creating S-polynomial from the pair  $(p_{28}, p_{37})$ .

Skipping pair  $p_{28}$  and  $p_{37}$  because gcd of their leading monoms is zero.

2107. Creating S-polynomial from the pair  $(p_{28}, p_{38})$ .

Skipping pair  $p_{28}$  and  $p_{38}$  because gcd of their leading monoms is zero.

2108. Creating S-polynomial from the pair  $(p_{28}, p_{39})$ .

Skipping pair  $p_{28}$  and  $p_{39}$  because gcd of their leading monoms is zero.

2109. Creating S-polynomial from the pair  $(p_{28}, p_{40})$ .

Skipping pair  $p_{28}$  and  $p_{40}$  because gcd of their leading monoms is zero.

2110. Creating S-polynomial from the pair  $(p_{28}, p_{41})$ .

Skipping pair  $p_{28}$  and  $p_{41}$  because gcd of their leading monoms is zero.

2111. Creating S-polynomial from the pair  $(p_{28}, p_{42})$ .

Forming S-pol of  $p_{28}$  and  $p_{42}$ :

$$\begin{aligned} p_{498} = & -256u_6u_2^{12}u_1^8x_{10}x_4x_1 + 256u_6u_2^{13}u_1^8x_4x_1 + 128u_6u_5u_2^{14}u_1^7x_4 - \\ & 128u_6u_5^2u_2^{13}u_1^7x_1 \end{aligned}$$

Reduced to zero.

2112. Creating S-polynomial from the pair  $(p_{28}, p_{43})$ .

Skipping pair  $p_{28}$  and  $p_{43}$  because gcd of their leading monoms is zero.

2113. Creating S-polynomial from the pair  $(p_{28}, p_{44})$ .

Skipping pair  $p_{28}$  and  $p_{44}$  because gcd of their leading monoms is zero.

2114. Creating S-polynomial from the pair  $(p_{28}, p_{45})$ .

Skipping pair  $p_{28}$  and  $p_{45}$  because gcd of their leading monoms is zero.

2115. Creating S-polynomial from the pair  $(p_{28}, p_{46})$ .

Skipping pair  $p_{28}$  and  $p_{46}$  because gcd of their leading monoms is zero.

2116. Creating S-polynomial from the pair  $(p_{28}, p_{47})$ .  
 Skipping pair  $p_{28}$  and  $p_{47}$  because gcd of their leading monoms is zero.
2117. Creating S-polynomial from the pair  $(p_{28}, p_{48})$ .  
 Skipping pair  $p_{28}$  and  $p_{48}$  because gcd of their leading monoms is zero.
2118. Creating S-polynomial from the pair  $(p_{28}, p_{49})$ .  
 Skipping pair  $p_{28}$  and  $p_{49}$  because gcd of their leading monoms is zero.
2119. Creating S-polynomial from the pair  $(p_{28}, p_{50})$ .  
 Skipping pair  $p_{28}$  and  $p_{50}$  because gcd of their leading monoms is zero.
2120. Creating S-polynomial from the pair  $(p_{28}, p_{51})$ .  
 Skipping pair  $p_{28}$  and  $p_{51}$  because gcd of their leading monoms is zero.
2121. Creating S-polynomial from the pair  $(p_{28}, p_{52})$ .  
 Skipping pair  $p_{28}$  and  $p_{52}$  because gcd of their leading monoms is zero.
2122. Creating S-polynomial from the pair  $(p_{28}, p_{53})$ .  
 Skipping pair  $p_{28}$  and  $p_{53}$  because gcd of their leading monoms is zero.
2123. Creating S-polynomial from the pair  $(p_{28}, p_{54})$ .  
 Skipping pair  $p_{28}$  and  $p_{54}$  because gcd of their leading monoms is zero.
2124. Creating S-polynomial from the pair  $(p_{28}, p_{55})$ .  
 Forming S-pol of  $p_{28}$  and  $p_{55}$ :

$$\begin{aligned}
 p_{499} = & 4096u_2^{12}u_1^{12}x_{12}x_4x_1 + \\
 & (-512u_5u_2^{15}u_1^9 + 8192u_5u_2^{11}u_1^{13})x_{12}x_1 - 4096u_2^{12}u_1^{12}x_{10}x_5x_1 + \\
 & (-1024u_6u_2^{15}u_1^{10} - 4096u_6u_2^{13}u_1^{12})x_{10} - 2048u_5u_2^{12}u_1^{11}x_5x_1^2 + \\
 & 256u_5u_2^{16}u_1^8x_5x_1 - 512u_6u_2^{14}u_1^9x_4x_1^2 + 1024u_6u_2^{14}u_1^{10}x_4x_1 + \\
 & (-256u_6u_5u_2^{15}u_1^8 - 1024u_6u_5u_2^{13}u_1^{10})x_1^2
 \end{aligned}$$

Reduced to zero.

2125. Creating S-polynomial from the pair  $(p_{28}, p_{56})$ .  
 Skipping pair  $p_{28}$  and  $p_{56}$  because gcd of their leading monoms is zero.
2126. Creating S-polynomial from the pair  $(p_{28}, p_{57})$ .  
 Forming S-pol of  $p_{28}$  and  $p_{57}$ : Polynomial too big for output (text size is 1018 characters, number of terms is 14)  
 Reduced to zero.
2127. Creating S-polynomial from the pair  $(p_{28}, p_{58})$ .  
 Forming S-pol of  $p_{28}$  and  $p_{58}$ :

$$\begin{aligned}
 p_{500} = & -128u_2^7u_1^7x_{12}x_4x_1 - 256u_5u_2^6u_1^8x_{12}x_1 + 128u_2^7u_1^7x_{10}x_5x_1 + \\
 & 64u_6u_2^8u_1^6x_{10}x_1 + 128u_6u_2^8u_1^7x_{10} + 64u_5u_2^7u_1^6x_5x_1^2 - \\
 & 32u_6u_2^9u_1^5x_4x_1 + 32u_6u_5u_2^8u_1^5x_1^2
 \end{aligned}$$

Reduced to zero.



2128. Creating S-polynomial from the pair  $(p_{28}, p_{59})$ .

Forming S-pol of  $p_{28}$  and  $p_{59}$ :

$$\begin{aligned} p_{501} = & 256u_2^{13}u_1^8x_{12}x_4x_1 - 128u_5u_2^{14}u_1^7x_{12}x_1 - 256u_2^{13}u_1^8x_{10}x_5x_1 + \\ & 2048u_6u_2^{10}u_1^{11}x_{10}x_1 + \\ & (-256u_6u_2^{14}u_1^8 - 1024u_6u_2^{12}u_1^{10})x_{10} - 128u_5u_2^{13}u_1^7x_5x_1^2 + \\ & (64u_5u_2^{15}u_1^6 + 256u_5u_2^{13}u_1^8)x_5x_1 - 512u_6u_2^{11}u_1^9x_4x_1^2 + \\ & (-64u_6u_5u_2^{14}u_1^6 - 256u_6u_5u_2^{12}u_1^8)x_1^2 \end{aligned}$$

Reduced to zero.

2129. Creating S-polynomial from the pair  $(p_{28}, p_{60})$ .

Forming S-pol of  $p_{28}$  and  $p_{60}$ :

$$\begin{aligned} p_{502} = & (-8u_6u_2^{12}u_1^3 + 128u_6u_2^8u_1^7)x_{12}x_1 + \\ & (-16u_6u_2^{12}u_1^4 - 64u_6u_2^{10}u_1^6)x_{12} + \\ & (-8u_6u_2^{11}u_1^3 - 32u_6u_2^9u_1^5)x_5x_1^2 + \\ & (4u_6u_2^{13}u_1^2 + 16u_6u_2^{11}u_1^4)x_5x_1 + \\ & (-4u_6^2u_2^{12}u_1^2 - 16u_6^2u_2^{10}u_1^4)x_1^2 \end{aligned}$$

Reduced to zero.

2130. Creating S-polynomial from the pair  $(p_{28}, p_{61})$ .

Forming S-pol of  $p_{28}$  and  $p_{61}$ :

$$\begin{aligned} p_{503} = & 64u_5u_2^8u_1^6x_{12}x_1 - 256u_6u_2^6u_1^8x_{10}x_1 + 128u_6u_2^8u_1^7x_{10} - \\ & 32u_5u_2^9u_1^5x_5x_1 + 64u_6u_2^7u_1^6x_4x_1^2 + 32u_6u_5u_2^8u_1^5x_1^2 \end{aligned}$$

Reduced to zero.

2131. Creating S-polynomial from the pair  $(p_{28}, p_{62})$ .

Forming S-pol of  $p_{28}$  and  $p_{62}$ :

$$\begin{aligned} p_{504} = & 4096u_2^{19}u_1^{12}x_{12}x_{10}x_5x_1 - 2048u_2^{20}u_1^{11}x_{12}x_5x_4x_1 + \\ & (1024u_5u_2^{21}u_1^{10} - 4096u_5u_2^{19}u_1^{12})x_{12}x_5x_1 + \\ & (-1024u_6u_2^{21}u_1^{10} + 16384u_6u_2^{17}u_1^{14})x_{12}x_4x_1 + \\ & (-2048u_6u_2^{21}u_1^{11} - 8192u_6u_2^{19}u_1^{13})x_{12}x_4 + \\ & (-1024u_6u_2^{20}u_1^{10} - 4096u_6u_2^{18}u_1^{12})x_5x_4x_1^2 + \\ & (512u_6u_2^{22}u_1^9 + 2048u_6u_2^{20}u_1^{11})x_5x_4x_1 + \\ & (512u_6u_5u_2^{21}u_1^9 + 2048u_5u_2^{20}u_1^{11})x_5x_1^2 - 1024u_5u_2^{22}u_1^{10}x_5x_1 + \\ & (-512u_6^2u_2^{21}u_1^9 - 2048u_6^2u_2^{19}u_1^{11})x_4x_1^2 - \\ & 1024u_6^2u_5u_2^{20}u_1^{10}x_1^2 + 512u_6^2u_5u_2^{22}u_1^9x_1 \end{aligned}$$

Reduced to zero.

2132. Creating S-polynomial from the pair  $(p_{28}, p_{63})$ .

Forming S-pol of  $p_{28}$  and  $p_{63}$ :

$$p_{505} = (4u_6u_2^6u_1^2 - 16u_6u_2^4u_1^4)x_{12}x_1 + 8u_6u_2^6u_1^3x_{12} + \\ 4u_6u_2^5u_1^2x_5x_1^2 - 2u_6u_2^7u_1x_5x_1 + 2u_6^2u_2^6u_1x_1^2$$

Reduced to zero.

2133. Creating S-polynomial from the pair  $(p_{28}, p_{64})$ .

Skipping pair  $p_{28}$  and  $p_{64}$  because gcd of their leading monoms is zero.

2134. Creating S-polynomial from the pair  $(p_{28}, p_{65})$ .

Skipping pair  $p_{28}$  and  $p_{65}$  because gcd of their leading monoms is zero.

2135. Creating S-polynomial from the pair  $(p_{28}, p_{66})$ .

Skipping pair  $p_{28}$  and  $p_{66}$  because gcd of their leading monoms is zero.

2136. Creating S-polynomial from the pair  $(p_{28}, p_{67})$ .

Skipping pair  $p_{28}$  and  $p_{67}$  because gcd of their leading monoms is zero.

2137. Creating S-polynomial from the pair  $(p_{28}, p_{68})$ .

Skipping pair  $p_{28}$  and  $p_{68}$  because gcd of their leading monoms is zero.

2138. Creating S-polynomial from the pair  $(p_{28}, p_{69})$ .

Skipping pair  $p_{28}$  and  $p_{69}$  because gcd of their leading monoms is zero.

2139. Creating S-polynomial from the pair  $(p_{28}, p_{70})$ .

Skipping pair  $p_{28}$  and  $p_{70}$  because gcd of their leading monoms is zero.

2140. Creating S-polynomial from the pair  $(p_{28}, p_{71})$ .

Skipping pair  $p_{28}$  and  $p_{71}$  because gcd of their leading monoms is zero.

2141. Creating S-polynomial from the pair  $(p_{28}, p_{72})$ .

Skipping pair  $p_{28}$  and  $p_{72}$  because gcd of their leading monoms is zero.

2142. Creating S-polynomial from the pair  $(p_{28}, p_{73})$ .

Skipping pair  $p_{28}$  and  $p_{73}$  because gcd of their leading monoms is zero.

2143. Creating S-polynomial from the pair  $(p_{28}, p_{74})$ .

Forming S-pol of  $p_{28}$  and  $p_{74}$ :

$$p_{506} = 1024u_6u_2^{10}u_1^{10}x_{10}x_1 - 512u_6u_2^{11}u_1^9x_4x_1 - 512u_6u_5u_2^{12}u_1^9$$

Reduced to zero.

2144. Creating S-polynomial from the pair  $(p_{28}, p_{75})$ .

Skipping pair  $p_{28}$  and  $p_{75}$  because gcd of their leading monoms is zero.

2145. Creating S-polynomial from the pair  $(p_{28}, p_{76})$ .

Forming S-pol of  $p_{28}$  and  $p_{76}$ :

$$\begin{aligned} p_{507} = & 524288u_5u_2^{19}u_1^{19}x_{12}x_4x_1 + 262144u_5^2u_2^{20}u_1^{18}x_{12}x_1 - \\ & 1048576u_6u_2^{18}u_1^{20}x_{10}^2x_1 - 262144u_6u_5u_2^{20}u_1^{18}x_{10}x_1 + \\ & 524288u_6u_5u_2^{20}u_1^{19}x_{10} - 262144u_5u_2^{20}u_1^{18}x_5x_4x_1 - \\ & 131072u_5^2u_2^{21}u_1^{17}x_5x_1 + \\ & (131072u_6u_5u_2^{21}u_1^{17} + 524288u_6u_2^{20}u_1^{19})x_4x_1 - \\ & 262144u_6u_5^2u_2^{20}u_1^{18}x_1 \end{aligned}$$

Reduced to zero.

2146. Creating S-polynomial from the pair  $(p_{28}, p_{77})$ .

Forming S-pol of  $p_{28}$  and  $p_{77}$ :

$$\begin{aligned} p_{508} = & 128u_5u_2^8u_1^7x_{12}x_1 - 512u_6u_2^6u_1^9x_{10}x_1 + 256u_6u_2^8u_1^8x_{10} - \\ & 64u_5u_2^9u_1^6x_5x_1 + 128u_6u_2^7u_1^7x_4x_1^2 + 64u_6u_5u_2^8u_1^6x_1^2 \end{aligned}$$

Reduced to zero.

2147. Creating S-polynomial from the pair  $(p_{28}, p_{78})$ .

Forming S-pol of  $p_{28}$  and  $p_{78}$ :

$$\begin{aligned} p_{509} = & -256u_2^7u_1^8x_{12}x_4x_1 - 512u_5u_2^6u_1^9x_{12}x_1 + 256u_2^7u_1^8x_{10}x_5x_1 + \\ & 128u_6u_2^8u_1^7x_{10}x_1 + 256u_6u_2^8u_1^8x_{10} + 128u_5u_2^7u_1^7x_5x_1^2 - \\ & 64u_6u_2^9u_1^6x_4x_1 + 64u_6u_5u_2^8u_1^6x_1^2 \end{aligned}$$

Reduced to zero.

2148. Creating S-polynomial from the pair  $(p_{28}, p_{79})$ .

Forming S-pol of  $p_{28}$  and  $p_{79}$ :

$$\begin{aligned} p_{510} = & 1024u_2^{14}u_1^{10}x_{10}x_5x_1 + (-4096u_2^{11}u_1^{12} + 2048u_2^{11}u_1^{11})x_5x_4x_1^2 + \\ & (-512u_2^{15}u_1^9 + 2048u_2^{13}u_1^{11})x_5x_4x_1 + 512u_5u_2^{14}u_1^9x_5x_1^2 - \\ & 1024u_5u_2^{14}u_1^{10}x_5x_1 + \\ & (-512u_6u_2^{14}u_1^9 - 2048u_6u_2^{12}u_1^{11} + 1024u_6u_2^{12}u_1^{10})x_4x_1^2 + \\ & 1024u_6u_2^{14}u_1^{10}x_4x_1 + (-512u_6u_2^{16}u_1^9 + 1024u_6u_2^{14}u_1^{10})x_4 \end{aligned}$$

S-pol added.

2149. Creating S-polynomial from the pair  $(p_{28}, p_{80})$ .

Forming S-pol of  $p_{28}$  and  $p_{80}$ :

$$p_{511} = 8u_6u_2^6u_1^3x_1^2 - 16u_6u_2^6u_1^4x_1 + 8u_6u_2^8u_1^3$$

Reduced to zero.

2150. Creating S-polynomial from the pair  $(p_{28}, p_{81})$ .  
 Skipping pair  $p_{28}$  and  $p_{81}$  because gcd of their leading monoms is zero.
2151. Creating S-polynomial from the pair  $(p_{28}, p_{82})$ .  
 Skipping pair  $p_{28}$  and  $p_{82}$  because gcd of their leading monoms is zero.
2152. Creating S-polynomial from the pair  $(p_{28}, p_{83})$ .  
 Skipping pair  $p_{28}$  and  $p_{83}$  because gcd of their leading monoms is zero.
2153. Creating S-polynomial from the pair  $(p_{28}, p_{84})$ .  
 Skipping pair  $p_{28}$  and  $p_{84}$  because gcd of their leading monoms is zero.
2154. Creating S-polynomial from the pair  $(p_{28}, p_{85})$ .  
 Skipping pair  $p_{28}$  and  $p_{85}$  because gcd of their leading monoms is zero.
2155. Creating S-polynomial from the pair  $(p_{28}, p_{86})$ .  
 Skipping pair  $p_{28}$  and  $p_{86}$  because gcd of their leading monoms is zero.
2156. Creating S-polynomial from the pair  $(p_{28}, p_{87})$ .  
 Skipping pair  $p_{28}$  and  $p_{87}$  because gcd of their leading monoms is zero.
2157. Creating S-polynomial from the pair  $(p_{28}, p_{88})$ .  
 Skipping pair  $p_{28}$  and  $p_{88}$  because gcd of their leading monoms is zero.
2158. Creating S-polynomial from the pair  $(p_{28}, p_{89})$ .  
 Skipping pair  $p_{28}$  and  $p_{89}$  because gcd of their leading monoms is zero.
2159. Creating S-polynomial from the pair  $(p_{28}, p_{90})$ .  
 Skipping pair  $p_{28}$  and  $p_{90}$  because gcd of their leading monoms is zero.
2160. Creating S-polynomial from the pair  $(p_{28}, p_{91})$ .  
 Skipping pair  $p_{28}$  and  $p_{91}$  because gcd of their leading monoms is zero.
2161. Creating S-polynomial from the pair  $(p_{28}, p_{92})$ .  
 Skipping pair  $p_{28}$  and  $p_{92}$  because gcd of their leading monoms is zero.
2162. Creating S-polynomial from the pair  $(p_{28}, p_{93})$ .  
 Skipping pair  $p_{28}$  and  $p_{93}$  because gcd of their leading monoms is zero.
2163. Creating S-polynomial from the pair  $(p_{28}, p_{94})$ .  
 Skipping pair  $p_{28}$  and  $p_{94}$  because gcd of their leading monoms is zero.
2164. Creating S-polynomial from the pair  $(p_{28}, p_{95})$ .  
 Skipping pair  $p_{28}$  and  $p_{95}$  because gcd of their leading monoms is zero.
2165. Creating S-polynomial from the pair  $(p_{28}, p_{96})$ .  
 Skipping pair  $p_{28}$  and  $p_{96}$  because gcd of their leading monoms is zero.
2166. Creating S-polynomial from the pair  $(p_{28}, p_{97})$ .  
 Skipping pair  $p_{28}$  and  $p_{97}$  because gcd of their leading monoms is zero.

2167. Creating S-polynomial from the pair  $(p_{28}, p_{98})$ .

Forming S-pol of  $p_{28}$  and  $p_{98}$ : Polynomial too big for output (text size is 2202 characters, number of terms is 27)

Reduced to zero.

2168. Creating S-polynomial from the pair  $(p_{28}, p_{99})$ .

Skipping pair  $p_{28}$  and  $p_{99}$  because gcd of their leading monoms is zero.

2169. Creating S-polynomial from the pair  $(p_{28}, p_{100})$ .

Forming S-pol of  $p_{28}$  and  $p_{100}$ :

$$\begin{aligned} p_{512} = & -524288u_5u_2^{17}u_1^{19}x_{12}x_{10}x_1 + \\ & (-1048576u_5u_2^{16}u_1^{20} - 1048576u_2^{17}u_1^{20})x_{12}x_4x_1 + \\ & (-131072u_5^2u_2^{19}u_1^{17} + 524288u_5^2u_2^{17}u_1^{19})x_{12}x_1 + \\ & 524288u_6u_2^{17}u_1^{19}x_{10}^2x_1 + 524288u_2^{17}u_1^{19}x_{10}x_5x_4x_1 + \\ & 262144u_5u_2^{18}u_1^{18}x_{10}x_5x_1 + 524288u_6u_2^{18}u_1^{19}x_{10}x_4 + \\ & 131072u_6u_5u_2^{19}u_1^{17}x_{10}x_1 + 262144u_5u_2^{17}u_1^{18}x_5x_4x_1^2 + \\ & 65536u_5^2u_2^{20}u_1^{16}x_5x_1 + 131072u_6u_5u_2^{18}u_1^{17}x_4x_1^2 + \\ & (-65536u_6u_5u_2^{20}u_1^{16} - 262144u_6u_2^{19}u_1^{18})x_4x_1 + \\ & 131072u_6u_5^2u_2^{19}u_1^{17}x_1 \end{aligned}$$

Reduced to zero.

2170. Creating S-polynomial from the pair  $(p_{28}, p_{101})$ .

Forming S-pol of  $p_{28}$  and  $p_{101}$ :

$$\begin{aligned} p_{513} = & -64u_5u_2^4u_1^6x_{12}x_1 + 32u_2^5u_1^5x_{10}x_5x_1 + 64u_6u_2^4u_1^6x_{10}x_1 - \\ & 16u_2^6u_1^4x_5x_4x_1 + 16u_5u_2^5u_1^4x_5x_1^2 - 16u_6u_2^5u_1^4x_4x_1^2 - \\ & 16u_6u_2^7u_1^4x_4 \end{aligned}$$

Reduced to zero.

2171. Creating S-polynomial from the pair  $(p_{28}, p_{102})$ .

Forming S-pol of  $p_{28}$  and  $p_{102}$ :

$$\begin{aligned} p_{514} = & 512u_2^{13}u_1^9x_{10}x_5x_1 + (-2048u_2^{10}u_1^{11} + 1024u_2^{10}u_1^{10})x_5x_4x_1^2 + \\ & (-256u_2^{14}u_1^8 + 1024u_2^{12}u_1^{10})x_5x_4x_1 + 256u_5u_2^{13}u_1^8x_5x_1^2 - \\ & 512u_5u_2^{13}u_1^9x_5x_1 + (-256u_6u_2^{13}u_1^8 - 1024u_6u_2^{11}u_1^{10})x_4x_1^2 + \\ & (512u_6u_2^{13}u_1^9 + 1024u_6u_2^{11}u_1^{10})x_4x_1 - 256u_6u_2^{15}u_1^8x_4 \end{aligned}$$

S-pol added.

2172. Creating S-polynomial from the pair  $(p_{28}, p_{103})$ .  
 Forming S-pol of  $p_{28}$  and  $p_{103}$ : Polynomial too big for output (text size is 2210 characters, number of terms is 27)  
 Reduced to zero.
2173. Creating S-polynomial from the pair  $(p_{28}, p_{104})$ .  
 Skipping pair  $p_{28}$  and  $p_{104}$  because gcd of their leading monoms is zero.
2174. Creating S-polynomial from the pair  $(p_{28}, p_{105})$ .  
 Skipping pair  $p_{28}$  and  $p_{105}$  because gcd of their leading monoms is zero.
2175. Creating S-polynomial from the pair  $(p_{28}, p_{106})$ .  
 Skipping pair  $p_{28}$  and  $p_{106}$  because gcd of their leading monoms is zero.
2176. Creating S-polynomial from the pair  $(p_{29}, p_{32})$ .  
 Skipping pair  $p_{29}$  and  $p_{32}$  because gcd of their leading monoms is zero.
2177. Creating S-polynomial from the pair  $(p_{29}, p_{33})$ .  
 Skipping pair  $p_{29}$  and  $p_{33}$  because gcd of their leading monoms is zero.
2178. Creating S-polynomial from the pair  $(p_{29}, p_{34})$ .  
 Skipping pair  $p_{29}$  and  $p_{34}$  because gcd of their leading monoms is zero.
2179. Creating S-polynomial from the pair  $(p_{29}, p_{35})$ .  
 Skipping pair  $p_{29}$  and  $p_{35}$  because gcd of their leading monoms is zero.
2180. Creating S-polynomial from the pair  $(p_{29}, p_{36})$ .  
 Skipping pair  $p_{29}$  and  $p_{36}$  because gcd of their leading monoms is zero.
2181. Creating S-polynomial from the pair  $(p_{29}, p_{37})$ .  
 Skipping pair  $p_{29}$  and  $p_{37}$  because gcd of their leading monoms is zero.
2182. Creating S-polynomial from the pair  $(p_{29}, p_{38})$ .  
 Forming S-pol of  $p_{29}$  and  $p_{38}$ :
- $$p_{515} = 4u_5u_4^6u_1^2x_3^2 - 8u_5u_4^6u_1^3x_3 + 4u_5u_4^8u_1^2$$
- Reduced to zero.
2183. Creating S-polynomial from the pair  $(p_{29}, p_{39})$ .  
 Skipping pair  $p_{29}$  and  $p_{39}$  because gcd of their leading monoms is zero.
2184. Creating S-polynomial from the pair  $(p_{29}, p_{40})$ .  
 Skipping pair  $p_{29}$  and  $p_{40}$  because gcd of their leading monoms is zero.
2185. Creating S-polynomial from the pair  $(p_{29}, p_{41})$ .  
 Skipping pair  $p_{29}$  and  $p_{41}$  because gcd of their leading monoms is zero.
2186. Creating S-polynomial from the pair  $(p_{29}, p_{42})$ .  
 Skipping pair  $p_{29}$  and  $p_{42}$  because gcd of their leading monoms is zero.

2187. Creating S-polynomial from the pair  $(p_{29}, p_{43})$ .  
 Skipping pair  $p_{29}$  and  $p_{43}$  because gcd of their leading monoms is zero.
2188. Creating S-polynomial from the pair  $(p_{29}, p_{44})$ .  
 Skipping pair  $p_{29}$  and  $p_{44}$  because gcd of their leading monoms is zero.
2189. Creating S-polynomial from the pair  $(p_{29}, p_{45})$ .  
 Skipping pair  $p_{29}$  and  $p_{45}$  because gcd of their leading monoms is zero.
2190. Creating S-polynomial from the pair  $(p_{29}, p_{46})$ .  
 Skipping pair  $p_{29}$  and  $p_{46}$  because gcd of their leading monoms is zero.
2191. Creating S-polynomial from the pair  $(p_{29}, p_{47})$ .  
 Skipping pair  $p_{29}$  and  $p_{47}$  because gcd of their leading monoms is zero.
2192. Creating S-polynomial from the pair  $(p_{29}, p_{48})$ .  
 Skipping pair  $p_{29}$  and  $p_{48}$  because gcd of their leading monoms is zero.
2193. Creating S-polynomial from the pair  $(p_{29}, p_{49})$ .  
 Skipping pair  $p_{29}$  and  $p_{49}$  because gcd of their leading monoms is zero.
2194. Creating S-polynomial from the pair  $(p_{29}, p_{50})$ .  
 Skipping pair  $p_{29}$  and  $p_{50}$  because gcd of their leading monoms is zero.
2195. Creating S-polynomial from the pair  $(p_{29}, p_{51})$ .  
 Skipping pair  $p_{29}$  and  $p_{51}$  because gcd of their leading monoms is zero.
2196. Creating S-polynomial from the pair  $(p_{29}, p_{52})$ .  
 Skipping pair  $p_{29}$  and  $p_{52}$  because gcd of their leading monoms is zero.
2197. Creating S-polynomial from the pair  $(p_{29}, p_{53})$ .  
 Skipping pair  $p_{29}$  and  $p_{53}$  because gcd of their leading monoms is zero.
2198. Creating S-polynomial from the pair  $(p_{29}, p_{54})$ .  
 Skipping pair  $p_{29}$  and  $p_{54}$  because gcd of their leading monoms is zero.
2199. Creating S-polynomial from the pair  $(p_{29}, p_{55})$ .  
 Skipping pair  $p_{29}$  and  $p_{55}$  because gcd of their leading monoms is zero.
2200. Creating S-polynomial from the pair  $(p_{29}, p_{56})$ .  
 Skipping pair  $p_{29}$  and  $p_{56}$  because gcd of their leading monoms is zero.
2201. Creating S-polynomial from the pair  $(p_{29}, p_{57})$ .  
 Skipping pair  $p_{29}$  and  $p_{57}$  because gcd of their leading monoms is zero.
2202. Creating S-polynomial from the pair  $(p_{29}, p_{58})$ .  
 Skipping pair  $p_{29}$  and  $p_{58}$  because gcd of their leading monoms is zero.
2203. Creating S-polynomial from the pair  $(p_{29}, p_{59})$ .  
 Skipping pair  $p_{29}$  and  $p_{59}$  because gcd of their leading monoms is zero.

2204. Creating S-polynomial from the pair  $(p_{29}, p_{60})$ .

Skipping pair  $p_{29}$  and  $p_{60}$  because gcd of their leading monoms is zero.

2205. Creating S-polynomial from the pair  $(p_{29}, p_{61})$ .

Skipping pair  $p_{29}$  and  $p_{61}$  because gcd of their leading monoms is zero.

2206. Creating S-polynomial from the pair  $(p_{29}, p_{62})$ .

Skipping pair  $p_{29}$  and  $p_{62}$  because gcd of their leading monoms is zero.

2207. Creating S-polynomial from the pair  $(p_{29}, p_{63})$ .

Skipping pair  $p_{29}$  and  $p_{63}$  because gcd of their leading monoms is zero.

2208. Creating S-polynomial from the pair  $(p_{29}, p_{64})$ .

Forming S-pol of  $p_{29}$  and  $p_{64}$ :

$$\begin{aligned} p_{516} = & (-8u_5u_4^{12}u_1^3 + 128u_5u_4^8u_1^7)x_{14}x_3 + \\ & (-16u_5u_4^{12}u_1^4 - 64u_5u_4^{10}u_1^6)x_{14} + \\ & (-8u_5u_4^{11}u_1^3 - 32u_5u_4^9u_1^5)x_4x_3^2 + \\ & (4u_5u_4^{13}u_1^2 + 16u_5u_4^{11}u_1^4)x_4x_3 + \\ & (-4u_5^2u_4^{12}u_1^2 - 16u_5^2u_4^{10}u_1^4)x_3^2 \end{aligned}$$

Reduced to zero.

2209. Creating S-polynomial from the pair  $(p_{29}, p_{65})$ .

Forming S-pol of  $p_{29}$  and  $p_{65}$ :

$$\begin{aligned} p_{517} = & -1024u_4^{14}u_1^{10}x_{16}x_4x_3 + (-512u_5u_4^{15}u_1^9 + 8192u_5u_4^{11}u_1^{13})x_{16}x_3 + \\ & (-1024u_5u_4^{15}u_1^{10} - 4096u_5u_4^{13}u_1^{12})x_{16} + 1024u_4^{14}u_1^{10}x_{14}x_5x_3 - \\ & 2048u_5u_4^{12}u_1^{11}x_5x_3^2 + 256u_5u_4^{16}u_1^8x_5x_3 - \\ & 512u_6u_4^{14}u_1^9x_4x_3^2 + 1024u_6u_4^{14}u_1^{10}x_4x_3 + \\ & (-256u_6u_5u_4^{15}u_1^8 - 1024u_6u_5u_4^{13}u_1^{10})x_3^2 \end{aligned}$$

Reduced to zero.

2210. Creating S-polynomial from the pair  $(p_{29}, p_{66})$ .

Forming S-pol of  $p_{29}$  and  $p_{66}$ :

$$\begin{aligned} p_{518} = & (4u_5u_4^6u_1^2 - 16u_5u_4^4u_1^4)x_{14}x_3 + 8u_5u_4^6u_1^3x_{14} + \\ & 4u_5u_4^5u_1^2x_4x_3^2 - 2u_5u_4^7u_1x_4x_3 + 2u_5^2u_4^6u_1x_3^2 \end{aligned}$$

Reduced to zero.

2211. Creating S-polynomial from the pair  $(p_{29}, p_{67})$ .

Forming S-pol of  $p_{29}$  and  $p_{67}$ : Polynomial too big for output (text size is 1017 characters, number of terms is 14)

Reduced to zero.



2212. Creating S-polynomial from the pair  $(p_{29}, p_{68})$ .

Forming S-pol of  $p_{29}$  and  $p_{68}$ :

$$p_{519} = -256u_5u_4^6u_1^8x_{16}x_3 + 128u_5u_4^8u_1^7x_{16} + 64u_6u_4^8u_1^6x_{14}x_3 + \\ 64u_5u_4^7u_1^6x_5x_3^2 - 32u_6u_4^9u_1^5x_4x_3 + 32u_6u_5u_4^8u_1^5x_3^2$$

Reduced to zero.

2213. Creating S-polynomial from the pair  $(p_{29}, p_{69})$ .

Forming S-pol of  $p_{29}$  and  $p_{69}$ :

$$p_{520} = -1024u_4^{11}u_1^{10}x_{16}x_4x_3 - 128u_5u_4^{14}u_1^7x_{16}x_3 + \\ (-256u_5u_4^{14}u_1^8 - 1024u_5u_4^{12}u_1^{10})x_{16} + 1024u_4^{11}u_1^{10}x_{14}x_5x_3 + \\ 2048u_6u_4^{10}u_1^{11}x_{14}x_3 - 128u_5u_4^{13}u_1^7x_5x_3^2 + \\ (64u_5u_4^{15}u_1^6 + 256u_5u_4^{13}u_1^8)x_5x_3 - 512u_6u_4^{11}u_1^9x_4x_3^2 + \\ (-64u_6u_5u_4^{14}u_1^6 - 256u_6u_5u_4^{12}u_1^8)x_3^2$$

Reduced to zero.

2214. Creating S-polynomial from the pair  $(p_{29}, p_{70})$ .

Skipping pair  $p_{29}$  and  $p_{70}$  because gcd of their leading monoms is zero.

2215. Creating S-polynomial from the pair  $(p_{29}, p_{71})$ .

Forming S-pol of  $p_{29}$  and  $p_{71}$ :

$$p_{521} = 128u_4^7u_1^7x_{16}x_4x_3 + 64u_5u_4^8u_1^6x_{16}x_3 + 128u_5u_4^8u_1^7x_{16} - \\ 128u_4^7u_1^7x_{14}x_5x_3 - 256u_6u_4^6u_1^8x_{14}x_3 - 32u_5u_4^9u_1^5x_5x_3 + \\ 64u_6u_4^7u_1^6x_4x_3^2 + 32u_6u_5u_4^8u_1^5x_3^2$$

Reduced to zero.

2216. Creating S-polynomial from the pair  $(p_{29}, p_{72})$ .

Skipping pair  $p_{29}$  and  $p_{72}$  because gcd of their leading monoms is zero.

2217. Creating S-polynomial from the pair  $(p_{29}, p_{73})$ .

Skipping pair  $p_{29}$  and  $p_{73}$  because gcd of their leading monoms is zero.

2218. Creating S-polynomial from the pair  $(p_{29}, p_{74})$ .

Skipping pair  $p_{29}$  and  $p_{74}$  because gcd of their leading monoms is zero.

2219. Creating S-polynomial from the pair  $(p_{29}, p_{75})$ .

Skipping pair  $p_{29}$  and  $p_{75}$  because gcd of their leading monoms is zero.

2220. Creating S-polynomial from the pair  $(p_{29}, p_{76})$ .

Skipping pair  $p_{29}$  and  $p_{76}$  because gcd of their leading monoms is zero.

2221. Creating S-polynomial from the pair  $(p_{29}, p_{77})$ .

Skipping pair  $p_{29}$  and  $p_{77}$  because gcd of their leading monoms is zero.

2222. Creating S-polynomial from the pair  $(p_{29}, p_{78})$ .  
 Skipping pair  $p_{29}$  and  $p_{78}$  because gcd of their leading monoms is zero.
2223. Creating S-polynomial from the pair  $(p_{29}, p_{79})$ .  
 Skipping pair  $p_{29}$  and  $p_{79}$  because gcd of their leading monoms is zero.
2224. Creating S-polynomial from the pair  $(p_{29}, p_{80})$ .  
 Skipping pair  $p_{29}$  and  $p_{80}$  because gcd of their leading monoms is zero.
2225. Creating S-polynomial from the pair  $(p_{29}, p_{81})$ .  
 Skipping pair  $p_{29}$  and  $p_{81}$  because gcd of their leading monoms is zero.
2226. Creating S-polynomial from the pair  $(p_{29}, p_{82})$ .  
 Skipping pair  $p_{29}$  and  $p_{82}$  because gcd of their leading monoms is zero.
2227. Creating S-polynomial from the pair  $(p_{29}, p_{83})$ .  
 Skipping pair  $p_{29}$  and  $p_{83}$  because gcd of their leading monoms is zero.
2228. Creating S-polynomial from the pair  $(p_{29}, p_{84})$ .  
 Skipping pair  $p_{29}$  and  $p_{84}$  because gcd of their leading monoms is zero.
2229. Creating S-polynomial from the pair  $(p_{29}, p_{85})$ .  
 Skipping pair  $p_{29}$  and  $p_{85}$  because gcd of their leading monoms is zero.
2230. Creating S-polynomial from the pair  $(p_{29}, p_{86})$ .  
 Skipping pair  $p_{29}$  and  $p_{86}$  because gcd of their leading monoms is zero.
2231. Creating S-polynomial from the pair  $(p_{29}, p_{87})$ .  
 Skipping pair  $p_{29}$  and  $p_{87}$  because gcd of their leading monoms is zero.
2232. Creating S-polynomial from the pair  $(p_{29}, p_{88})$ .  
 Skipping pair  $p_{29}$  and  $p_{88}$  because gcd of their leading monoms is zero.
2233. Creating S-polynomial from the pair  $(p_{29}, p_{89})$ .  
 Forming S-pol of  $p_{29}$  and  $p_{89}$ :

$$p_{522} = 8u_5u_4^6u_1^3x_3^2 - 16u_5u_4^6u_1^4x_3 + 8u_5u_4^8u_1^3$$

Reduced to zero.

2234. Creating S-polynomial from the pair  $(p_{29}, p_{90})$ .  
 Forming S-pol of  $p_{29}$  and  $p_{90}$ :

$$\begin{aligned} p_{523} = & 1048576u_5u_4^{19}u_1^{19}x_{16}x_4x_3 + 262144u_5^2u_4^{20}u_1^{18}x_{16}x_3 + \\ & 524288u_5^2u_4^{20}u_1^{19}x_{16} - 1048576u_6u_4^{18}u_1^{20}x_{14}^2x_3 - \\ & 524288u_5u_4^{19}u_1^{19}x_{14}x_5x_3 - 262144u_6u_5u_4^{20}u_1^{18}x_{14}x_3 - \\ & 262144u_5u_4^{20}u_1^{18}x_5x_4x_3 - 131072u_5^2u_4^{21}u_1^{17}x_5x_3 + \\ & (131072u_6u_5u_4^{21}u_1^{17} + 524288u_6u_4^{20}u_1^{19})x_4x_3 - \\ & 262144u_6u_5^2u_4^{20}u_1^{18}x_3 \end{aligned}$$

Reduced to zero.

2235. Creating S-polynomial from the pair  $(p_{29}, p_{91})$ .

Forming S-pol of  $p_{29}$  and  $p_{91}$ :

$$\begin{aligned} p_{524} = & 256u_4^7u_1^8x_{16}x_4x_3 + 128u_5u_4^8u_1^7x_{16}x_3 + 256u_5u_4^8u_1^8x_{16} - \\ & 256u_4^7u_1^8x_{14}x_5x_3 - 512u_6u_4^6u_1^9x_{14}x_3 - 64u_5u_4^9u_1^6x_5x_3 + \\ & 128u_6u_4^7u_1^7x_4x_3^2 + 64u_6u_5u_4^8u_1^6x_3^2 \end{aligned}$$

Reduced to zero.

2236. Creating S-polynomial from the pair  $(p_{29}, p_{92})$ .

Forming S-pol of  $p_{29}$  and  $p_{92}$ :

$$\begin{aligned} p_{525} = & -512u_5u_4^6u_1^9x_{16}x_3 + 256u_5u_4^8u_1^8x_{16} + 128u_6u_4^8u_1^7x_{14}x_3 + \\ & 128u_5u_4^7u_1^7x_5x_3^2 - 64u_6u_4^9u_1^6x_4x_3 + 64u_6u_5u_4^8u_1^6x_3^2 \end{aligned}$$

Reduced to zero.

2237. Creating S-polynomial from the pair  $(p_{29}, p_{93})$ .

Skipping pair  $p_{29}$  and  $p_{93}$  because gcd of their leading monoms is zero.

2238. Creating S-polynomial from the pair  $(p_{29}, p_{94})$ .

Skipping pair  $p_{29}$  and  $p_{94}$  because gcd of their leading monoms is zero.

2239. Creating S-polynomial from the pair  $(p_{29}, p_{95})$ .

Skipping pair  $p_{29}$  and  $p_{95}$  because gcd of their leading monoms is zero.

2240. Creating S-polynomial from the pair  $(p_{29}, p_{96})$ .

Skipping pair  $p_{29}$  and  $p_{96}$  because gcd of their leading monoms is zero.

2241. Creating S-polynomial from the pair  $(p_{29}, p_{97})$ .

Skipping pair  $p_{29}$  and  $p_{97}$  because gcd of their leading monoms is zero.

2242. Creating S-polynomial from the pair  $(p_{29}, p_{98})$ .

Skipping pair  $p_{29}$  and  $p_{98}$  because gcd of their leading monoms is zero.

2243. Creating S-polynomial from the pair  $(p_{29}, p_{99})$ .

Skipping pair  $p_{29}$  and  $p_{99}$  because gcd of their leading monoms is zero.

2244. Creating S-polynomial from the pair  $(p_{29}, p_{100})$ .

Skipping pair  $p_{29}$  and  $p_{100}$  because gcd of their leading monoms is zero.

2245. Creating S-polynomial from the pair  $(p_{29}, p_{101})$ .

Skipping pair  $p_{29}$  and  $p_{101}$  because gcd of their leading monoms is zero.

2246. Creating S-polynomial from the pair  $(p_{29}, p_{102})$ .

Skipping pair  $p_{29}$  and  $p_{102}$  because gcd of their leading monoms is zero.

2247. Creating S-polynomial from the pair  $(p_{29}, p_{103})$ .

Skipping pair  $p_{29}$  and  $p_{103}$  because gcd of their leading monoms is zero.

2248. Creating S-polynomial from the pair  $(p_{29}, p_{104})$ .

Forming S-pol of  $p_{29}$  and  $p_{104}$ :

$$\begin{aligned}
p_{526} = & -524288u_5u_4^{17}u_1^{19}x_{16}x_{14}x_3 + 524288u_4^{17}u_1^{19}x_{16}x_4^2x_3 + \\
& (-1048576u_5u_4^{16}u_1^{20} - 1048576u_4^{17}u_1^{20})x_{16}x_4x_3 + \\
& 524288u_5u_4^{18}u_1^{19}x_{16}x_4 + \\
& (-131072u_5^2u_4^{19}u_1^{17} + 524288u_5^2u_4^{17}u_1^{19})x_{16}x_3 + \\
& 524288u_6u_4^{17}u_1^{19}x_{14}^2x_3 + 262144u_5u_4^{18}u_1^{18}x_{14}x_5x_3 + \\
& 131072u_6u_5u_4^{19}u_1^{17}x_{14}x_3 + 262144u_5u_4^{17}u_1^{18}x_5x_4x_3^2 + \\
& 65536u_5^2u_4^{20}u_1^{16}x_5x_3 + 131072u_6u_5u_4^{18}u_1^{17}x_4x_3^2 + \\
& (-65536u_6u_5u_4^{20}u_1^{16} - 262144u_6u_4^{19}u_1^{18})x_4x_3 + \\
& 131072u_6u_5^2u_4^{19}u_1^{17}x_3
\end{aligned}$$

Reduced to zero.

2249. Creating S-polynomial from the pair  $(p_{29}, p_{105})$ .

Skipping pair  $p_{29}$  and  $p_{105}$  because gcd of their leading monoms is zero.

2250. Creating S-polynomial from the pair  $(p_{29}, p_{106})$ .

Skipping pair  $p_{29}$  and  $p_{106}$  because gcd of their leading monoms is zero.

2251. Creating S-polynomial from the pair  $(p_{30}, p_{32})$ .

Skipping pair  $p_{30}$  and  $p_{32}$  because gcd of their leading monoms is zero.

2252. Creating S-polynomial from the pair  $(p_{30}, p_{33})$ .

Skipping pair  $p_{30}$  and  $p_{33}$  because gcd of their leading monoms is zero.

2253. Creating S-polynomial from the pair  $(p_{30}, p_{34})$ .

Forming S-pol of  $p_{30}$  and  $p_{34}$ :

$$\begin{aligned}
p_{527} = & -128u_4^7u_2^{13}u_1^7x_{16}x_{12}x_4 + 128u_5u_4^6u_2^{13}u_1^7x_{16}x_{12}x_3 + \\
& 256u_4^5u_2^{13}u_1^8x_{16}x_{10}x_5x_3 + 128u_5u_4^5u_2^{13}u_1^7x_{16}x_5x_3x_1 - \\
& 256u_5u_4^5u_2^{13}u_1^8x_{16}x_5x_3 - 128u_6u_4^5u_2^{13}u_1^7x_{16}x_4x_3x_1 + \\
& 256u_6u_4^5u_2^{13}u_1^8x_{16}x_4x_3 - 256u_4^5u_2^{13}u_1^8x_{14}x_{12}x_5x_3 + \\
& 128u_4^7u_2^{13}u_1^7x_{14}x_{12}x_5 - 128u_6u_4^6u_2^{13}u_1^7x_{14}x_{12}x_3
\end{aligned}$$

Reduced to zero.

2254. Creating S-polynomial from the pair  $(p_{30}, p_{35})$ .

Skipping pair  $p_{30}$  and  $p_{35}$  because gcd of their leading monoms is zero.

2255. Creating S-polynomial from the pair  $(p_{30}, p_{36})$ .

Skipping pair  $p_{30}$  and  $p_{36}$  because gcd of their leading monoms is zero.

2256. Creating S-polynomial from the pair  $(p_{30}, p_{37})$ .

Forming S-pol of  $p_{30}$  and  $p_{37}$ :

$$\begin{aligned} p_{528} = & -128u_4^7u_3^{13}u_1^7x_{16}x_8x_4 + 128u_5u_4^6u_3^{13}u_1^7x_{16}x_8x_3 + \\ & 256u_4^5u_3^{13}u_1^8x_{16}x_6x_5x_3 + 128u_5u_4^5u_3^{13}u_1^7x_{16}x_5x_3x_2 - \\ & 256u_5u_4^5u_3^{13}u_1^8x_{16}x_5x_3 - 128u_6u_4^5u_3^{13}u_1^7x_{16}x_4x_3x_2 + \\ & 256u_6u_4^5u_3^{13}u_1^8x_{16}x_4x_3 - 256u_4^5u_3^{13}u_1^8x_{14}x_8x_5x_3 + \\ & 128u_4^7u_3^{13}u_1^7x_{14}x_8x_5 - 128u_6u_4^6u_3^{13}u_1^7x_{14}x_8x_3 \end{aligned}$$

Reduced to zero.

2257. Creating S-polynomial from the pair  $(p_{30}, p_{38})$ .

Skipping pair  $p_{30}$  and  $p_{38}$  because gcd of their leading monoms is zero.

2258. Creating S-polynomial from the pair  $(p_{30}, p_{39})$ .

Forming S-pol of  $p_{30}$  and  $p_{39}$ :

$$\begin{aligned} p_{529} = & 4u_4^{13}u_1^2x_{16}x_4 - 4u_5u_4^{12}u_1^2x_{16}x_3 + 8u_4^{11}u_1^3x_{14}x_5x_3 - \\ & 4u_4^{13}u_1^2x_{14}x_5 + 4u_6u_4^{12}u_1^2x_{14}x_3 - 4u_4^{12}u_1^2x_5x_4x_3 + \\ & 4u_6u_4^{11}u_1^2x_4x_3^2 - 8u_6u_4^{11}u_1^3x_4x_3 \end{aligned}$$

Reduced to zero.

2259. Creating S-polynomial from the pair  $(p_{30}, p_{40})$ .

Forming S-pol of  $p_{30}$  and  $p_{40}$ :

$$\begin{aligned} p_{530} = & -128u_4^{20}u_1^7x_{16}x_4^2 + 128u_5u_4^{19}u_1^7x_{16}x_4x_3 + \\ & 128u_4^{20}u_1^7x_{14}x_5x_4 - 128u_6u_4^{19}u_1^7x_{14}x_4x_3 + \\ & 128u_5u_4^{18}u_1^7x_5x_4x_3^2 - 256u_5u_4^{18}u_1^8x_5x_4x_3 - \\ & 128u_6u_4^{18}u_1^7x_4^2x_3^2 + 256u_6u_4^{18}u_1^8x_4^2x_3 \end{aligned}$$

Reduced to zero.

2260. Creating S-polynomial from the pair  $(p_{30}, p_{41})$ .

Forming S-pol of  $p_{30}$  and  $p_{41}$ :

$$\begin{aligned} p_{531} = & 128u_5u_4^7u_3^{12}u_1^7x_{16}x_8x_4 - 128u_5^2u_4^6u_3^{12}u_1^7x_{16}x_8x_3 - \\ & 256u_6u_4^5u_3^{12}u_1^8x_{16}x_6x_4x_3 - 128u_5u_4^5u_3^{13}u_1^7x_{16}x_5x_4x_3 + \\ & 256u_6u_4^5u_3^{13}u_1^8x_{16}x_4x_3 - 128u_6u_5^2u_4^5u_3^{13}u_1^7x_{16}x_3 + \\ & 256u_5u_4^5u_3^{12}u_1^8x_{14}x_8x_5x_3 - 128u_5u_4^7u_3^{12}u_1^7x_{14}x_8x_5 + \\ & 128u_6u_5u_4^6u_3^{12}u_1^7x_{14}x_8x_3 \end{aligned}$$

Reduced to zero.

2261. Creating S-polynomial from the pair  $(p_{30}, p_{42})$ .

Forming S-pol of  $p_{30}$  and  $p_{42}$ :

$$\begin{aligned} p_{532} = & 128u_5u_4^7u_2^{12}u_1^7x_{16}x_{12}x_4 - 128u_5^2u_4^6u_2^{12}u_1^7x_{16}x_{12}x_3 - \\ & 256u_6u_4^5u_2^{12}u_1^8x_{16}x_{10}x_4x_3 - 128u_5u_4^5u_2^{13}u_1^7x_{16}x_5x_4x_3 + \\ & 256u_6u_4^5u_2^{13}u_1^8x_{16}x_4x_3 - 128u_6u_5^2u_4^5u_2^{13}u_1^7x_{16}x_3 + \\ & 256u_5u_4^5u_2^{12}u_1^8x_{14}x_{12}x_5x_3 - 128u_5u_4^7u_2^{12}u_1^7x_{14}x_{12}x_5 + \\ & 128u_6u_5u_4^6u_2^{12}u_1^7x_{14}x_{12}x_3 \end{aligned}$$

Reduced to zero.

2262. Creating S-polynomial from the pair  $(p_{30}, p_{43})$ .

Forming S-pol of  $p_{30}$  and  $p_{43}$ :

$$\begin{aligned} p_{533} = & 128u_5u_4^{19}u_1^7x_{16}x_4^2 - 128u_5^2u_4^{18}u_1^7x_{16}x_4x_3 + \\ & 256u_5u_4^{17}u_1^8x_{14}x_5x_4x_3 - 128u_5u_4^{19}u_1^7x_{14}x_5x_4 - \\ & 256u_6u_4^{17}u_1^8x_{14}x_4^2x_3 + 128u_6u_5u_4^{18}u_1^7x_{14}x_4x_3 - \\ & 128u_5u_4^{18}u_1^7x_5x_4^2x_3 + 256u_6u_4^{18}u_1^8x_4^2x_3 - \\ & 128u_6u_5^2u_4^{18}u_1^7x_4x_3 \end{aligned}$$

Reduced to zero.

2263. Creating S-polynomial from the pair  $(p_{30}, p_{44})$ .

Skipping pair  $p_{30}$  and  $p_{44}$  because gcd of their leading monoms is zero.

2264. Creating S-polynomial from the pair  $(p_{30}, p_{45})$ .

Skipping pair  $p_{30}$  and  $p_{45}$  because gcd of their leading monoms is zero.

2265. Creating S-polynomial from the pair  $(p_{30}, p_{46})$ .

Skipping pair  $p_{30}$  and  $p_{46}$  because gcd of their leading monoms is zero.

2266. Creating S-polynomial from the pair  $(p_{30}, p_{47})$ .

Forming S-pol of  $p_{30}$  and  $p_{47}$ : Polynomial too big for output (text size is 1620 characters, number of terms is 17)

Reduced to zero.

2267. Creating S-polynomial from the pair  $(p_{30}, p_{48})$ .

Skipping pair  $p_{30}$  and  $p_{48}$  because gcd of their leading monoms is zero.

2268. Creating S-polynomial from the pair  $(p_{30}, p_{49})$ .

Skipping pair  $p_{30}$  and  $p_{49}$  because gcd of their leading monoms is zero.

2269. Creating S-polynomial from the pair  $(p_{30}, p_{50})$ .

Skipping pair  $p_{30}$  and  $p_{50}$  because gcd of their leading monoms is zero.

2270. Creating S-polynomial from the pair  $(p_{30}, p_{51})$ .

Skipping pair  $p_{30}$  and  $p_{51}$  because gcd of their leading monoms is zero.

2271. Creating S-polynomial from the pair  $(p_{30}, p_{52})$ .  
 Forming S-pol of  $p_{30}$  and  $p_{52}$ : Polynomial too big for output (text size is 1397 characters, number of terms is 16)  
 Reduced to zero.
2272. Creating S-polynomial from the pair  $(p_{30}, p_{53})$ .  
 Skipping pair  $p_{30}$  and  $p_{53}$  because gcd of their leading monoms is zero.
2273. Creating S-polynomial from the pair  $(p_{30}, p_{54})$ .  
 Skipping pair  $p_{30}$  and  $p_{54}$  because gcd of their leading monoms is zero.
2274. Creating S-polynomial from the pair  $(p_{30}, p_{55})$ .  
 Skipping pair  $p_{30}$  and  $p_{55}$  because gcd of their leading monoms is zero.
2275. Creating S-polynomial from the pair  $(p_{30}, p_{56})$ .  
 Skipping pair  $p_{30}$  and  $p_{56}$  because gcd of their leading monoms is zero.
2276. Creating S-polynomial from the pair  $(p_{30}, p_{57})$ .  
 Forming S-pol of  $p_{30}$  and  $p_{57}$ : Polynomial too big for output (text size is 1635 characters, number of terms is 17)  
 Reduced to zero.
2277. Creating S-polynomial from the pair  $(p_{30}, p_{58})$ .  
 Skipping pair  $p_{30}$  and  $p_{58}$  because gcd of their leading monoms is zero.
2278. Creating S-polynomial from the pair  $(p_{30}, p_{59})$ .  
 Skipping pair  $p_{30}$  and  $p_{59}$  because gcd of their leading monoms is zero.
2279. Creating S-polynomial from the pair  $(p_{30}, p_{60})$ .  
 Skipping pair  $p_{30}$  and  $p_{60}$  because gcd of their leading monoms is zero.
2280. Creating S-polynomial from the pair  $(p_{30}, p_{61})$ .  
 Skipping pair  $p_{30}$  and  $p_{61}$  because gcd of their leading monoms is zero.
2281. Creating S-polynomial from the pair  $(p_{30}, p_{62})$ .  
 Forming S-pol of  $p_{30}$  and  $p_{62}$ : Polynomial too big for output (text size is 1407 characters, number of terms is 16)  
 Reduced to zero.
2282. Creating S-polynomial from the pair  $(p_{30}, p_{63})$ .  
 Skipping pair  $p_{30}$  and  $p_{63}$  because gcd of their leading monoms is zero.
2283. Creating S-polynomial from the pair  $(p_{30}, p_{64})$ .  
 Skipping pair  $p_{30}$  and  $p_{64}$  because gcd of their leading monoms is zero.

2284. Creating S-polynomial from the pair  $(p_{30}, p_{65})$ .

Forming S-pol of  $p_{30}$  and  $p_{65}$ :

$$\begin{aligned}
p_{534} = & (-1024u_4^{20}u_1^{10} - 4096u_4^{18}u_1^{12})x_{16}x_{14}x_4 + \\
& (1024u_5u_4^{19}u_1^{10} + 4096u_5u_4^{17}u_1^{12})x_{16}x_{14}x_3 + \\
& 4096u_4^{17}u_1^{12}x_{16}x_4^2x_3 + \\
& (-512u_5u_4^{20}u_1^9 + 8192u_5u_4^{16}u_1^{13})x_{16}x_4x_3 + \\
& (-2048u_4^{18}u_1^{11} - 8192u_4^{16}u_1^{13})x_{14}^2x_5x_3 + \\
& (1024u_4^{20}u_1^{10} + 4096u_4^{18}u_1^{12})x_{14}^2x_5 + \\
& (-1024u_6u_4^{19}u_1^{10} - 4096u_6u_4^{17}u_1^{12})x_{14}^2x_3 + \\
& 1024u_4^{19}u_1^{10}x_{14}x_5x_4x_3 - 2048u_5u_4^{17}u_1^{11}x_5x_4x_3^2 + \\
& 256u_5u_4^{21}u_1^8x_5x_4x_3 - 512u_6u_4^{19}u_1^9x_4^2x_3^2 + \\
& 1024u_6u_4^{19}u_1^{10}x_4^2x_3 + \\
& (-256u_6u_5u_4^{20}u_1^8 - 1024u_6u_5u_4^{18}u_1^{10})x_4x_3^2
\end{aligned}$$

Reduced to zero.

2285. Creating S-polynomial from the pair  $(p_{30}, p_{66})$ .

Skipping pair  $p_{30}$  and  $p_{66}$  because gcd of their leading monoms is zero.

2286. Creating S-polynomial from the pair  $(p_{30}, p_{67})$ .

Forming S-pol of  $p_{30}$  and  $p_{67}$ : Polynomial too big for output (text size is 1309 characters, number of terms is 17)

S-pol added.

2287. Creating S-polynomial from the pair  $(p_{30}, p_{68})$ .

Forming S-pol of  $p_{30}$  and  $p_{68}$ :

$$\begin{aligned}
p_{535} = & 128u_4^{13}u_1^7x_{16}x_{14}x_4 - 128u_5u_4^{12}u_1^7x_{16}x_{14}x_3 - \\
& 128u_4^{12}u_1^7x_{16}x_4^2x_3 - 256u_5u_4^{11}u_1^8x_{16}x_4x_3 + \\
& 256u_4^{11}u_1^8x_{14}^2x_5x_3 - 128u_4^{13}u_1^7x_{14}^2x_5 + \\
& 128u_6u_4^{12}u_1^7x_{14}^2x_3 + 64u_6u_4^{13}u_1^6x_{14}x_4x_3 + \\
& 64u_5u_4^{12}u_1^6x_5x_4x_3^2 - 32u_6u_4^{14}u_1^5x_4^2x_3 + \\
& 32u_6u_5u_4^{13}u_1^5x_4x_3^2
\end{aligned}$$

Reduced to zero.



2288. Creating S-polynomial from the pair  $(p_{30}, p_{69})$ .

Forming S-pol of  $p_{30}$  and  $p_{69}$ :

$$\begin{aligned}
p_{536} = & (-256u_4^{19}u_1^8 - 1024u_4^{17}u_1^{10})x_{16}x_{14}x_4 + \\
& (256u_5u_4^{18}u_1^8 + 1024u_5u_4^{16}u_1^{10})x_{16}x_{14}x_3 + 256u_4^{18}u_1^8x_{16}x_4^2x_3 - \\
& 128u_5u_4^{19}u_1^7x_{16}x_4x_3 + (-512u_4^{17}u_1^9 - 2048u_4^{15}u_1^{11})x_{14}^2x_5x_3 + \\
& (256u_4^{19}u_1^8 + 1024u_4^{17}u_1^{10})x_{14}^2x_5 + \\
& (-256u_6u_4^{18}u_1^8 - 1024u_6u_4^{16}u_1^{10})x_{14}^2x_3 + 1024u_4^{16}u_1^{10}x_{14}x_5x_4x_3 + \\
& 2048u_6u_4^{15}u_1^{11}x_{14}x_4x_3 - 128u_5u_4^{18}u_1^7x_5x_4x_3^2 + \\
& (64u_5u_4^{20}u_1^6 + 256u_5u_4^{18}u_1^8)x_5x_4x_3 - 512u_6u_4^{16}u_1^9x_4^2x_3^2 + \\
& (-64u_6u_5u_4^{19}u_1^6 - 256u_6u_5u_4^{17}u_1^8)x_4x_3^2
\end{aligned}$$

Reduced to zero.

2289. Creating S-polynomial from the pair  $(p_{30}, p_{70})$ .

Forming S-pol of  $p_{30}$  and  $p_{70}$ :

$$\begin{aligned}
p_{537} = & (-16u_4^{17}u_1^4 - 64u_4^{15}u_1^6)x_{16}^2x_4 + \\
& (16u_5u_4^{16}u_1^4 + 64u_5u_4^{14}u_1^6)x_{16}^2x_3 + \\
& (-32u_4^{15}u_1^5 - 128u_4^{13}u_1^7)x_{16}x_{14}x_5x_3 + \\
& (16u_4^{17}u_1^4 + 64u_4^{15}u_1^6)x_{16}x_{14}x_5 + \\
& (-16u_6u_4^{16}u_1^4 - 64u_6u_4^{14}u_1^6)x_{16}x_{14}x_3 + \\
& (16u_4^{16}u_1^4 + 64u_4^{14}u_1^6)x_{16}x_5x_4x_3 + \\
& (-8u_6u_4^{17}u_1^3 + 128u_6u_4^{13}u_1^7)x_{16}x_4x_3 + \\
& (-8u_6u_4^{16}u_1^3 - 32u_6u_4^{14}u_1^5)x_5x_4x_3^2 + \\
& (4u_6u_4^{18}u_1^2 + 16u_6u_4^{16}u_1^4)x_5x_4x_3 + \\
& (-4u_6^2u_4^{17}u_1^2 - 16u_6^2u_4^{15}u_1^4)x_4x_3^2
\end{aligned}$$

Reduced to zero.

2290. Creating S-polynomial from the pair  $(p_{30}, p_{71})$ .

Forming S-pol of  $p_{30}$  and  $p_{71}$ :

$$\begin{aligned}
p_{538} = & 128u_4^{13}u_1^7x_{16}x_{14}x_4 - 128u_5u_4^{12}u_1^7x_{16}x_{14}x_3 + \\
& 64u_5u_4^{13}u_1^6x_{16}x_4x_3 + 256u_4^{11}u_1^8x_{14}^2x_5x_3 - \\
& 128u_4^{13}u_1^7x_{14}^2x_5 + 128u_6u_4^{12}u_1^7x_{14}^2x_3 - \\
& 128u_4^{12}u_1^7x_{14}x_5x_4x_3 - 256u_6u_4^{11}u_1^8x_{14}x_4x_3 - \\
& 32u_5u_4^{14}u_1^5x_5x_4x_3 + 64u_6u_4^{12}u_1^6x_4^2x_3^2 + \\
& 32u_6u_5u_4^{13}u_1^5x_4x_3^2
\end{aligned}$$

Reduced to zero.

2291. Creating S-polynomial from the pair  $(p_{30}, p_{72})$ .  
Forming S-pol of  $p_{30}$  and  $p_{72}$ : Polynomial too big for output (text size is 1120 characters, number of terms is 16)  
S-pol added.
2292. Creating S-polynomial from the pair  $(p_{30}, p_{73})$ .  
Forming S-pol of  $p_{30}$  and  $p_{73}$ :  

$$p_{539} = 8u_4^{11}u_1^3x_{16}^2x_4 - 8u_5u_4^{10}u_1^3x_{16}^2x_3 + 16u_4^9u_1^4x_{16}x_{14}x_5x_3 -$$

$$8u_4^{11}u_1^3x_{16}x_{14}x_5 + 8u_6u_4^{10}u_1^3x_{16}x_{14}x_3 -$$

$$8u_4^{10}u_1^3x_{16}x_5x_4x_3 +$$

$$(4u_6u_4^{11}u_1^2 - 16u_6u_4^9u_1^4)x_{16}x_4x_3 + 4u_6u_4^{10}u_1^2x_5x_4x_3^2 -$$

$$2u_6u_4^{12}u_1x_5x_4x_3 + 2u_6^2u_4^{11}u_1x_4x_3^2$$
  
Reduced to zero.
2293. Creating S-polynomial from the pair  $(p_{30}, p_{74})$ .  
Skipping pair  $p_{30}$  and  $p_{74}$  because gcd of their leading monoms is zero.
2294. Creating S-polynomial from the pair  $(p_{30}, p_{75})$ .  
Skipping pair  $p_{30}$  and  $p_{75}$  because gcd of their leading monoms is zero.
2295. Creating S-polynomial from the pair  $(p_{30}, p_{76})$ .  
Skipping pair  $p_{30}$  and  $p_{76}$  because gcd of their leading monoms is zero.
2296. Creating S-polynomial from the pair  $(p_{30}, p_{77})$ .  
Skipping pair  $p_{30}$  and  $p_{77}$  because gcd of their leading monoms is zero.
2297. Creating S-polynomial from the pair  $(p_{30}, p_{78})$ .  
Skipping pair  $p_{30}$  and  $p_{78}$  because gcd of their leading monoms is zero.
2298. Creating S-polynomial from the pair  $(p_{30}, p_{79})$ .  
Forming S-pol of  $p_{30}$  and  $p_{79}$ : Polynomial too big for output (text size is 1006 characters, number of terms is 12)  
S-pol added.
2299. Creating S-polynomial from the pair  $(p_{30}, p_{80})$ .  
Skipping pair  $p_{30}$  and  $p_{80}$  because gcd of their leading monoms is zero.
2300. Creating S-polynomial from the pair  $(p_{30}, p_{81})$ .  
Skipping pair  $p_{30}$  and  $p_{81}$  because gcd of their leading monoms is zero.
2301. Creating S-polynomial from the pair  $(p_{30}, p_{82})$ .  
Skipping pair  $p_{30}$  and  $p_{82}$  because gcd of their leading monoms is zero.
2302. Creating S-polynomial from the pair  $(p_{30}, p_{83})$ .  
Skipping pair  $p_{30}$  and  $p_{83}$  because gcd of their leading monoms is zero.

2303. Creating S-polynomial from the pair  $(p_{30}, p_{84})$ .

Skipping pair  $p_{30}$  and  $p_{84}$  because gcd of their leading monoms is zero.

2304. Creating S-polynomial from the pair  $(p_{30}, p_{85})$ .

Skipping pair  $p_{30}$  and  $p_{85}$  because gcd of their leading monoms is zero.

2305. Creating S-polynomial from the pair  $(p_{30}, p_{86})$ .

Forming S-pol of  $p_{30}$  and  $p_{86}$ :

$$\begin{aligned}
p_{540} = & (-512u_4^7u_3^{14}u_1^9 + 1024u_4^7u_3^{12}u_1^{10})x_{16}x_8x_4 + \\
& (512u_5u_4^6u_3^{14}u_1^9 - 1024u_5u_4^6u_3^{12}u_1^{10})x_{16}x_8x_3 + \\
& 1024u_4^5u_3^{14}u_1^{10}x_{16}x_6x_5x_3 + \\
& (-4096u_4^5u_3^{11}u_1^{12} + 2048u_4^5u_3^{11}u_1^{11})x_{16}x_5x_4x_3x_2 + \\
& (2048u_4^5u_3^{13}u_1^{11} - 1024u_4^5u_3^{13}u_1^{10})x_{16}x_5x_4x_3 + \\
& 512u_5u_4^5u_3^{14}u_1^9x_{16}x_5x_3x_2 - 1024u_5u_4^5u_3^{14}u_1^{10}x_{16}x_5x_3 + \\
& (-512u_6u_4^5u_3^{14}u_1^9 - 2048u_6u_4^5u_3^{12}u_1^{11} + \\
& 1024u_6u_4^5u_3^{12}u_1^{10})x_{16}x_4x_3x_2 + 1024u_6u_4^5u_3^{14}u_1^{10}x_{16}x_4x_3 + \\
& (-1024u_4^5u_3^{14}u_1^{10} + 2048u_4^5u_3^{12}u_1^{11})x_{14}x_8x_5x_3 + \\
& (512u_4^7u_3^{14}u_1^9 - 1024u_4^7u_3^{12}u_1^{10})x_{14}x_8x_5 + \\
& (-512u_6u_4^6u_3^{14}u_1^9 + 1024u_6u_4^6u_3^{12}u_1^{10})x_{14}x_8x_3
\end{aligned}$$

S-pol added.

2306. Creating S-polynomial from the pair  $(p_{30}, p_{87})$ .

Skipping pair  $p_{30}$  and  $p_{87}$  because gcd of their leading monoms is zero.

2307. Creating S-polynomial from the pair  $(p_{30}, p_{88})$ .

Forming S-pol of  $p_{30}$  and  $p_{88}$ :

$$\begin{aligned}
p_{541} = & -512u_5u_4^{17}u_1^9x_{16}x_4 + 512u_5^2u_4^{16}u_1^9x_{16}x_3 - \\
& 1024u_5u_4^{15}u_1^{10}x_{14}x_5x_3 + 512u_5u_4^{17}u_1^9x_{14}x_5 + \\
& 1024u_6u_4^{15}u_1^{10}x_{14}x_4x_3 - 512u_6u_5u_4^{16}u_1^9x_{14}x_3 + \\
& 512u_5u_4^{16}u_1^9x_5x_4x_3 - 512u_6u_4^{16}u_1^9x_4^2x_3
\end{aligned}$$

Reduced to zero.

2308. Creating S-polynomial from the pair  $(p_{30}, p_{89})$ .

Skipping pair  $p_{30}$  and  $p_{89}$  because gcd of their leading monoms is zero.

2309. Creating S-polynomial from the pair  $(p_{30}, p_{90})$ .

Forming S-pol of  $p_{30}$  and  $p_{90}$ :

$$\begin{aligned}
p_{542} = & 524288u_5u_4^{25}u_1^{19}x_{16}x_{14}x_4 - 524288u_5^2u_4^{24}u_1^{19}x_{16}x_{14}x_3 + \\
& 524288u_5u_4^{24}u_1^{19}x_{16}x_4^2x_3 + 262144u_5^2u_4^{25}u_1^{18}x_{16}x_4x_3 + \\
& 1048576u_5u_4^{23}u_1^{20}x_{14}^2x_5x_3 - 524288u_5u_4^{25}u_1^{19}x_{14}^2x_5 - \\
& 1048576u_6u_4^{23}u_1^{20}x_{14}^2x_4x_3 + 524288u_6u_5u_4^{24}u_1^{19}x_{14}^2x_3 - \\
& 524288u_5u_4^{24}u_1^{19}x_{14}x_5x_4x_3 - 262144u_6u_5u_4^{25}u_1^{18}x_{14}x_4x_3 - \\
& 262144u_5u_4^{25}u_1^{18}x_5x_4^2x_3 - 131072u_5^2u_4^{26}u_1^{17}x_5x_4x_3 + \\
& (131072u_6u_5u_4^{26}u_1^{17} + 524288u_6u_4^{25}u_1^{19})x_4^2x_3 - \\
& 262144u_6u_5^2u_4^{25}u_1^{18}x_4x_3
\end{aligned}$$

Reduced to zero.

2310. Creating S-polynomial from the pair  $(p_{30}, p_{91})$ .

Forming S-pol of  $p_{30}$  and  $p_{91}$ :

$$\begin{aligned}
p_{543} = & 256u_4^{13}u_1^8x_{16}x_{14}x_4 - 256u_5u_4^{12}u_1^8x_{16}x_{14}x_3 + \\
& 128u_5u_4^{13}u_1^7x_{16}x_4x_3 + 512u_4^{11}u_1^9x_{14}^2x_5x_3 - \\
& 256u_4^{13}u_1^8x_{14}^2x_5 + 256u_6u_4^{12}u_1^8x_{14}^2x_3 - \\
& 256u_4^{12}u_1^8x_{14}x_5x_4x_3 - 512u_6u_4^{11}u_1^9x_{14}x_4x_3 - \\
& 64u_5u_4^{14}u_1^6x_5x_4x_3 + 128u_6u_4^{12}u_1^7x_4^2x_3^2 + \\
& 64u_6u_5u_4^{13}u_1^6x_4x_3^2
\end{aligned}$$

Reduced to zero.

2311. Creating S-polynomial from the pair  $(p_{30}, p_{92})$ .

Forming S-pol of  $p_{30}$  and  $p_{92}$ :

$$\begin{aligned}
p_{544} = & 256u_4^{13}u_1^8x_{16}x_{14}x_4 - 256u_5u_4^{12}u_1^8x_{16}x_{14}x_3 - \\
& 256u_4^{12}u_1^8x_{16}x_4^2x_3 - 512u_5u_4^{11}u_1^9x_{16}x_4x_3 + \\
& 512u_4^{11}u_1^9x_{14}^2x_5x_3 - 256u_4^{13}u_1^8x_{14}^2x_5 + \\
& 256u_6u_4^{12}u_1^8x_{14}^2x_3 + 128u_6u_4^{13}u_1^7x_{14}x_4x_3 + \\
& 128u_5u_4^{12}u_1^7x_5x_4x_3^2 - 64u_6u_4^{14}u_1^6x_4^2x_3 + \\
& 64u_6u_5u_4^{13}u_1^6x_4x_3^2
\end{aligned}$$

Reduced to zero.

2312. Creating S-polynomial from the pair  $(p_{30}, p_{93})$ .

Forming S-pol of  $p_{30}$  and  $p_{93}$ :

$$\begin{aligned}
p_{545} = & (-512u_4^{21}u_1^9 + 1024u_4^{19}u_1^{10})x_{16}x_4^2 + \\
& (512u_5u_4^{20}u_1^9 - 1024u_5u_4^{18}u_1^{10})x_{16}x_4x_3 + 2048u_4^{17}u_1^{11}x_{14}x_5x_4x_3 + \\
& (512u_4^{21}u_1^9 - 1024u_4^{19}u_1^{10})x_{14}x_5x_4 + \\
& (-512u_6u_4^{20}u_1^9 + 1024u_6u_4^{18}u_1^{10})x_{14}x_4x_3 + \\
& (-4096u_4^{16}u_1^{12} + 2048u_4^{16}u_1^{11})x_5x_4^2x_3^2 + \\
& (2048u_4^{18}u_1^{11} - 1024u_4^{18}u_1^{10})x_5x_4^2x_3 + 512u_5u_4^{19}u_1^9x_5x_4x_3^2 - \\
& 1024u_5u_4^{19}u_1^{10}x_5x_4x_3 + \\
& (-512u_6u_4^{19}u_1^9 - 2048u_6u_4^{17}u_1^{11} + 1024u_6u_4^{17}u_1^{10})x_4^2x_3^2 + \\
& 1024u_6u_4^{19}u_1^{10}x_4^2x_3
\end{aligned}$$

S-pol added.

2313. Creating S-polynomial from the pair  $(p_{30}, p_{94})$ .

Forming S-pol of  $p_{30}$  and  $p_{94}$ :

$$\begin{aligned}
p_{546} = & 8u_4^{13}u_1^3x_{16}x_4 - 8u_5u_4^{12}u_1^3x_{16}x_3 + 16u_4^{11}u_1^4x_{14}x_5x_3 - \\
& 8u_4^{13}u_1^3x_{14}x_5 + 8u_6u_4^{12}u_1^3x_{14}x_3 - 8u_4^{12}u_1^3x_5x_4x_3 + \\
& 8u_6u_4^{11}u_1^3x_4x_3^2 - 16u_6u_4^{11}u_1^4x_4x_3
\end{aligned}$$

Reduced to zero.

2314. Creating S-polynomial from the pair  $(p_{30}, p_{95})$ .

Forming S-pol of  $p_{30}$  and  $p_{95}$ : Polynomial too big for output (text size is 1102 characters, number of terms is 15)

Reduced to zero.

2315. Creating S-polynomial from the pair  $(p_{30}, p_{96})$ .

Forming S-pol of  $p_{30}$  and  $p_{96}$ :

$$\begin{aligned}
p_{547} = & -16u_4^7u_3^5u_1^4x_{16}x_8x_4 + \\
& (16u_5u_4^6u_3^5u_1^4 - 64u_5u_4^5u_3^4u_1^6)x_{16}x_8x_3 + \\
& 32u_4^5u_3^5u_1^5x_{16}x_6x_5x_3 + 64u_6u_4^5u_3^4u_1^6x_{16}x_6x_3 + \\
& 16u_5u_4^5u_3^5u_1^4x_{16}x_5x_3x_2 - 16u_6u_4^5u_3^5u_1^4x_{16}x_4x_3x_2 - \\
& 32u_4^5u_3^5u_1^5x_{14}x_8x_5x_3 + 16u_4^7u_3^5u_1^4x_{14}x_8x_5 - \\
& 16u_6u_4^6u_3^5u_1^4x_{14}x_8x_3
\end{aligned}$$

Reduced to zero.

2316. Creating S-polynomial from the pair  $(p_{30}, p_{97})$ .

Forming S-pol of  $p_{30}$  and  $p_{97}$ :

$$\begin{aligned}
p_{548} = & -256u_4^7u_3^{13}u_1^8x_{16}x_8x_4 + 256u_5u_4^6u_3^{13}u_1^8x_{16}x_8x_3 + \\
& 512u_4^5u_3^{13}u_1^9x_{16}x_6x_5x_3 + \\
& (-2048u_4^5u_3^{10}u_1^{11} + 1024u_4^5u_3^{10}u_1^{10})x_{16}x_5x_4x_3x_2 + \\
& 1024u_4^5u_3^{12}u_1^{10}x_{16}x_5x_4x_3 + 256u_5u_4^5u_3^{13}u_1^8x_{16}x_5x_3x_2 - \\
& 512u_5u_4^5u_3^{13}u_1^9x_{16}x_5x_3 + \\
& (-256u_6u_4^5u_3^{13}u_1^8 - 1024u_6u_4^5u_3^{11}u_1^{10})x_{16}x_4x_3x_2 + \\
& (512u_6u_4^5u_3^{13}u_1^9 + 1024u_6u_4^5u_3^{11}u_1^{10})x_{16}x_4x_3 - \\
& 512u_4^5u_3^{13}u_1^9x_{14}x_8x_5x_3 + 256u_4^7u_3^{13}u_1^8x_{14}x_8x_5 - \\
& 256u_6u_4^6u_3^{13}u_1^8x_{14}x_8x_3
\end{aligned}$$

S-pol added.

2317. Creating S-polynomial from the pair  $(p_{30}, p_{98})$ .

Skipping pair  $p_{30}$  and  $p_{98}$  because gcd of their leading monoms is zero.

2318. Creating S-polynomial from the pair  $(p_{30}, p_{99})$ .

Forming S-pol of  $p_{30}$  and  $p_{99}$ : Polynomial too big for output (text size is 2943 characters, number of terms is 32)

Reduced to zero.

2319. Creating S-polynomial from the pair  $(p_{30}, p_{100})$ .

Forming S-pol of  $p_{30}$  and  $p_{100}$ : Polynomial too big for output (text size is 1117 characters, number of terms is 15)

Reduced to zero.

2320. Creating S-polynomial from the pair  $(p_{30}, p_{101})$ .

Forming S-pol of  $p_{30}$  and  $p_{101}$ :

$$\begin{aligned}
p_{549} = & -16u_4^7u_2^5u_1^4x_{16}x_{12}x_4 + \\
& (16u_5u_4^6u_2^5u_1^4 - 64u_5u_4^5u_2^4u_1^6)x_{16}x_{12}x_3 + \\
& 32u_4^5u_2^5u_1^5x_{16}x_{10}x_5x_3 + 64u_6u_4^5u_2^4u_1^6x_{16}x_{10}x_3 + \\
& 16u_5u_4^5u_2^5u_1^4x_{16}x_5x_3x_1 - 16u_6u_4^5u_2^5u_1^4x_{16}x_4x_3x_1 - \\
& 32u_4^5u_2^5u_1^5x_{14}x_{12}x_5x_3 + 16u_4^7u_2^5u_1^4x_{14}x_{12}x_5 - \\
& 16u_6u_4^6u_2^5u_1^4x_{14}x_{12}x_3
\end{aligned}$$

Reduced to zero.

2321. Creating S-polynomial from the pair  $(p_{30}, p_{102})$ .

Forming S-pol of  $p_{30}$  and  $p_{102}$ :

$$\begin{aligned}
p_{550} = & -256u_4^7u_2^{13}u_1^8x_{16}x_{12}x_4 + 256u_5u_4^6u_2^{13}u_1^8x_{16}x_{12}x_3 + \\
& 512u_4^5u_2^{13}u_1^9x_{16}x_{10}x_5x_3 + \\
& (-2048u_4^5u_2^{10}u_1^{11} + 1024u_4^5u_2^{10}u_1^{10})x_{16}x_5x_4x_3x_1 + \\
& 1024u_4^5u_2^{12}u_1^{10}x_{16}x_5x_4x_3 + 256u_5u_4^5u_2^{13}u_1^8x_{16}x_5x_3x_1 - \\
& 512u_5u_4^5u_2^{13}u_1^9x_{16}x_5x_3 + \\
& (-256u_6u_4^5u_2^{13}u_1^8 - 1024u_6u_4^5u_2^{11}u_1^{10})x_{16}x_4x_3x_1 + \\
& (512u_6u_4^5u_2^{13}u_1^9 + 1024u_6u_4^5u_2^{11}u_1^{10})x_{16}x_4x_3 - \\
& 512u_4^5u_2^{13}u_1^9x_{14}x_{12}x_5x_3 + 256u_4^7u_2^{13}u_1^8x_{14}x_{12}x_5 - \\
& 256u_6u_4^6u_2^{13}u_1^8x_{14}x_{12}x_3
\end{aligned}$$

S-pol added.

2322. Creating S-polynomial from the pair  $(p_{30}, p_{103})$ .

Forming S-pol of  $p_{30}$  and  $p_{103}$ : Polynomial too big for output (text size is 2957 characters, number of terms is 32)

Reduced to zero.

2323. Creating S-polynomial from the pair  $(p_{30}, p_{104})$ .

Forming S-pol of  $p_{30}$  and  $p_{104}$ :

$$\begin{aligned}
p_{551} = & -524288u_5u_4^{22}u_1^{19}x_{16}x_{14}x_4x_3 + 524288u_4^{23}u_1^{19}x_{16}x_{14}x_4 - \\
& 524288u_5u_4^{22}u_1^{19}x_{16}x_{14}x_3 + \\
& (-1048576u_5u_4^{21}u_1^{20} - 1048576u_4^{22}u_1^{20})x_{16}x_4^2x_3 + \\
& (-131072u_5^2u_4^{24}u_1^{17} + 524288u_5^2u_4^{22}u_1^{19})x_{16}x_4x_3 + \\
& 1048576u_4^{21}u_1^{20}x_{14}^2x_5x_3 - 524288u_4^{23}u_1^{19}x_{14}^2x_5 + \\
& 524288u_6u_4^{22}u_1^{19}x_{14}^2x_4x_3 + 524288u_6u_4^{22}u_1^{19}x_{14}^2x_3 + \\
& 262144u_5u_4^{23}u_1^{18}x_{14}x_5x_4x_3 + 131072u_6u_5u_4^{24}u_1^{17}x_{14}x_4x_3 + \\
& 262144u_5u_4^{22}u_1^{18}x_5x_4^2x_3^2 + 65536u_5^2u_4^{25}u_1^{16}x_5x_4x_3 + \\
& 131072u_6u_5u_4^{23}u_1^{17}x_4^2x_3^2 + \\
& (-65536u_6u_5u_4^{25}u_1^{16} - 262144u_6u_4^{24}u_1^{18})x_4^2x_3 + \\
& 131072u_6u_5^2u_4^{24}u_1^{17}x_4x_3
\end{aligned}$$

S-pol added.

2324. Creating S-polynomial from the pair  $(p_{30}, p_{105})$ .

Forming S-pol of  $p_{30}$  and  $p_{105}$ :

$$\begin{aligned} p_{552} = & -16u_4^{12}u_1^4x_{16}x_4^2 + \\ & (16u_5u_4^{11}u_1^4 - 64u_5u_4^9u_1^6)x_{16}x_4x_3 + 16u_4^{12}u_1^4x_{14}x_5x_4 + \\ & (-16u_6u_4^{11}u_1^4 + 64u_6u_4^9u_1^6)x_{14}x_4x_3 + 16u_5u_4^{10}u_1^4x_5x_4x_3^2 - \\ & 16u_6u_4^{10}u_1^4x_4^2x_3^2 \end{aligned}$$

Reduced to zero.

2325. Creating S-polynomial from the pair  $(p_{30}, p_{106})$ .

Forming S-pol of  $p_{30}$  and  $p_{106}$ :

$$\begin{aligned} p_{553} = & -256u_4^{20}u_1^8x_{16}x_4^2 + 256u_5u_4^{19}u_1^8x_{16}x_4x_3 + \\ & 256u_4^{20}u_1^8x_{14}x_5x_4 - 256u_6u_4^{19}u_1^8x_{14}x_4x_3 + \\ & (-2048u_4^{15}u_1^{11} + 1024u_4^{15}u_1^{10})x_5x_4^2x_3^2 + 1024u_4^{17}u_1^{10}x_5x_4^2x_3 + \\ & 256u_5u_4^{18}u_1^8x_5x_4x_3^2 - 512u_5u_4^{18}u_1^9x_5x_4x_3 + \\ & (-256u_6u_4^{18}u_1^8 - 1024u_6u_4^{16}u_1^{10})x_4^2x_3^2 + \\ & (512u_6u_4^{18}u_1^9 + 1024u_6u_4^{16}u_1^{10})x_4^2x_3 \end{aligned}$$

S-pol added.

2326. Creating S-polynomial from the pair  $(p_{31}, p_{32})$ .

Skipping pair  $p_{31}$  and  $p_{32}$  because gcd of their leading monoms is zero.

2327. Creating S-polynomial from the pair  $(p_{31}, p_{33})$ .

Skipping pair  $p_{31}$  and  $p_{33}$  because gcd of their leading monoms is zero.

2328. Creating S-polynomial from the pair  $(p_{31}, p_{34})$ .

Skipping pair  $p_{31}$  and  $p_{34}$  because gcd of their leading monoms is zero.

2329. Creating S-polynomial from the pair  $(p_{31}, p_{35})$ .

Skipping pair  $p_{31}$  and  $p_{35}$  because gcd of their leading monoms is zero.

2330. Creating S-polynomial from the pair  $(p_{31}, p_{36})$ .

Skipping pair  $p_{31}$  and  $p_{36}$  because gcd of their leading monoms is zero.

2331. Creating S-polynomial from the pair  $(p_{31}, p_{37})$ .

Skipping pair  $p_{31}$  and  $p_{37}$  because gcd of their leading monoms is zero.

2332. Creating S-polynomial from the pair  $(p_{31}, p_{38})$ .

Skipping pair  $p_{31}$  and  $p_{38}$  because gcd of their leading monoms is zero.

2333. Creating S-polynomial from the pair  $(p_{31}, p_{39})$ .

Forming S-pol of  $p_{31}$  and  $p_{39}$ :

$$p_{554} = 4u_6u_4^6u_1^2x_3^2 - 8u_6u_4^6u_1^3x_3 + 4u_6u_4^8u_1^2$$

Reduced to zero.



2334. Creating S-polynomial from the pair  $(p_{31}, p_{40})$ .

Forming S-pol of  $p_{31}$  and  $p_{40}$ :

$$\begin{aligned} p_{555} = & 256u_4^{13}u_1^8x_{14}x_5x_3 - 128u_4^{14}u_1^7x_5x_4x_3 + 128u_5u_4^{13}u_1^7x_5x_3^2 - \\ & 256u_5u_4^{13}u_1^8x_5x_3 - 128u_6u_4^{13}u_1^7x_4x_3^2 + 256u_6u_4^{13}u_1^8x_4x_3 - \\ & 128u_6u_4^{15}u_1^7x_4 \end{aligned}$$

Reduced to zero.

2335. Creating S-polynomial from the pair  $(p_{31}, p_{41})$ .

Skipping pair  $p_{31}$  and  $p_{41}$  because gcd of their leading monoms is zero.

2336. Creating S-polynomial from the pair  $(p_{31}, p_{42})$ .

Skipping pair  $p_{31}$  and  $p_{42}$  because gcd of their leading monoms is zero.

2337. Creating S-polynomial from the pair  $(p_{31}, p_{43})$ .

Forming S-pol of  $p_{31}$  and  $p_{43}$ :

$$\begin{aligned} p_{556} = & -256u_6u_4^{12}u_1^8x_{14}x_4x_3 + 256u_6u_4^{13}u_1^8x_4x_3 + 128u_6u_5u_4^{14}u_1^7x_4 - \\ & 128u_6u_5^2u_4^{13}u_1^7x_3 \end{aligned}$$

Reduced to zero.

2338. Creating S-polynomial from the pair  $(p_{31}, p_{44})$ .

Skipping pair  $p_{31}$  and  $p_{44}$  because gcd of their leading monoms is zero.

2339. Creating S-polynomial from the pair  $(p_{31}, p_{45})$ .

Skipping pair  $p_{31}$  and  $p_{45}$  because gcd of their leading monoms is zero.

2340. Creating S-polynomial from the pair  $(p_{31}, p_{46})$ .

Skipping pair  $p_{31}$  and  $p_{46}$  because gcd of their leading monoms is zero.

2341. Creating S-polynomial from the pair  $(p_{31}, p_{47})$ .

Skipping pair  $p_{31}$  and  $p_{47}$  because gcd of their leading monoms is zero.

2342. Creating S-polynomial from the pair  $(p_{31}, p_{48})$ .

Skipping pair  $p_{31}$  and  $p_{48}$  because gcd of their leading monoms is zero.

2343. Creating S-polynomial from the pair  $(p_{31}, p_{49})$ .

Skipping pair  $p_{31}$  and  $p_{49}$  because gcd of their leading monoms is zero.

2344. Creating S-polynomial from the pair  $(p_{31}, p_{50})$ .

Skipping pair  $p_{31}$  and  $p_{50}$  because gcd of their leading monoms is zero.

2345. Creating S-polynomial from the pair  $(p_{31}, p_{51})$ .

Skipping pair  $p_{31}$  and  $p_{51}$  because gcd of their leading monoms is zero.

2346. Creating S-polynomial from the pair  $(p_{31}, p_{52})$ .

Skipping pair  $p_{31}$  and  $p_{52}$  because gcd of their leading monoms is zero.

2347. Creating S-polynomial from the pair  $(p_{31}, p_{53})$ .  
 Skipping pair  $p_{31}$  and  $p_{53}$  because gcd of their leading monoms is zero.
2348. Creating S-polynomial from the pair  $(p_{31}, p_{54})$ .  
 Skipping pair  $p_{31}$  and  $p_{54}$  because gcd of their leading monoms is zero.
2349. Creating S-polynomial from the pair  $(p_{31}, p_{55})$ .  
 Skipping pair  $p_{31}$  and  $p_{55}$  because gcd of their leading monoms is zero.
2350. Creating S-polynomial from the pair  $(p_{31}, p_{56})$ .  
 Skipping pair  $p_{31}$  and  $p_{56}$  because gcd of their leading monoms is zero.
2351. Creating S-polynomial from the pair  $(p_{31}, p_{57})$ .  
 Skipping pair  $p_{31}$  and  $p_{57}$  because gcd of their leading monoms is zero.
2352. Creating S-polynomial from the pair  $(p_{31}, p_{58})$ .  
 Skipping pair  $p_{31}$  and  $p_{58}$  because gcd of their leading monoms is zero.
2353. Creating S-polynomial from the pair  $(p_{31}, p_{59})$ .  
 Skipping pair  $p_{31}$  and  $p_{59}$  because gcd of their leading monoms is zero.
2354. Creating S-polynomial from the pair  $(p_{31}, p_{60})$ .  
 Skipping pair  $p_{31}$  and  $p_{60}$  because gcd of their leading monoms is zero.
2355. Creating S-polynomial from the pair  $(p_{31}, p_{61})$ .  
 Skipping pair  $p_{31}$  and  $p_{61}$  because gcd of their leading monoms is zero.
2356. Creating S-polynomial from the pair  $(p_{31}, p_{62})$ .  
 Skipping pair  $p_{31}$  and  $p_{62}$  because gcd of their leading monoms is zero.
2357. Creating S-polynomial from the pair  $(p_{31}, p_{63})$ .  
 Skipping pair  $p_{31}$  and  $p_{63}$  because gcd of their leading monoms is zero.
2358. Creating S-polynomial from the pair  $(p_{31}, p_{64})$ .  
 Skipping pair  $p_{31}$  and  $p_{64}$  because gcd of their leading monoms is zero.
2359. Creating S-polynomial from the pair  $(p_{31}, p_{65})$ .  
 Forming S-pol of  $p_{31}$  and  $p_{65}$ :

$$\begin{aligned}
 p_{557} = & 4096u_4^{12}u_1^{12}x_{16}x_4x_3 + \\
 & (-512u_5u_4^{15}u_1^9 + 8192u_5u_4^{11}u_1^{13})x_{16}x_3 - 4096u_4^{12}u_1^{12}x_{14}x_5x_3 + \\
 & (-1024u_6u_4^{15}u_1^{10} - 4096u_6u_4^{13}u_1^{12})x_{14} - 2048u_5u_4^{12}u_1^{11}x_5x_3^2 + \\
 & 256u_5u_4^{16}u_1^8x_5x_3 - 512u_6u_4^{14}u_1^9x_4x_3^2 + 1024u_6u_4^{14}u_1^{10}x_4x_3 + \\
 & (-256u_6u_5u_4^{15}u_1^8 - 1024u_6u_5u_4^{13}u_1^{10})x_3^2
 \end{aligned}$$

Reduced to zero.

2360. Creating S-polynomial from the pair  $(p_{31}, p_{66})$ .  
 Skipping pair  $p_{31}$  and  $p_{66}$  because gcd of their leading monoms is zero.

2361. Creating S-polynomial from the pair  $(p_{31}, p_{67})$ .

Forming S-pol of  $p_{31}$  and  $p_{67}$ : Polynomial too big for output (text size is 1018 characters, number of terms is 14)

Reduced to zero.

2362. Creating S-polynomial from the pair  $(p_{31}, p_{68})$ .

Forming S-pol of  $p_{31}$  and  $p_{68}$ :

$$\begin{aligned} p_{558} = & -128u_4^7u_1^7x_{16}x_4x_3 - 256u_5u_4^6u_1^8x_{16}x_3 + 128u_4^7u_1^7x_{14}x_5x_3 + \\ & 64u_6u_4^8u_1^6x_{14}x_3 + 128u_6u_4^8u_1^7x_{14} + 64u_5u_4^7u_1^6x_5x_3^2 - \\ & 32u_6u_4^9u_1^5x_4x_3 + 32u_6u_5u_4^8u_1^5x_3^2 \end{aligned}$$

Reduced to zero.

2363. Creating S-polynomial from the pair  $(p_{31}, p_{69})$ .

Forming S-pol of  $p_{31}$  and  $p_{69}$ :

$$\begin{aligned} p_{559} = & 256u_4^{13}u_1^8x_{16}x_4x_3 - 128u_5u_4^{14}u_1^7x_{16}x_3 - 256u_4^{13}u_1^8x_{14}x_5x_3 + \\ & 2048u_6u_4^{10}u_1^{11}x_{14}x_3 + \\ & (-256u_6u_4^{14}u_1^8 - 1024u_6u_4^{12}u_1^{10})x_{14} - 128u_5u_4^{13}u_1^7x_5x_3^2 + \\ & (64u_5u_4^{15}u_1^6 + 256u_5u_4^{13}u_1^8)x_5x_3 - 512u_6u_4^{11}u_1^9x_4x_3^2 + \\ & (-64u_6u_5u_4^{14}u_1^6 - 256u_6u_5u_4^{12}u_1^8)x_3^2 \end{aligned}$$

Reduced to zero.

2364. Creating S-polynomial from the pair  $(p_{31}, p_{70})$ .

Forming S-pol of  $p_{31}$  and  $p_{70}$ :

$$\begin{aligned} p_{560} = & (-8u_6u_4^{12}u_1^3 + 128u_6u_4^8u_1^7)x_{16}x_3 + \\ & (-16u_6u_4^{12}u_1^4 - 64u_6u_4^{10}u_1^6)x_{16} + \\ & (-8u_6u_4^{11}u_1^3 - 32u_6u_4^9u_1^5)x_5x_3^2 + \\ & (4u_6u_4^{13}u_1^2 + 16u_6u_4^{11}u_1^4)x_5x_3 + \\ & (-4u_6^2u_4^{12}u_1^2 - 16u_6^2u_4^{10}u_1^4)x_3^2 \end{aligned}$$

Reduced to zero.

2365. Creating S-polynomial from the pair  $(p_{31}, p_{71})$ .

Forming S-pol of  $p_{31}$  and  $p_{71}$ :

$$\begin{aligned} p_{561} = & 64u_5u_4^8u_1^6x_{16}x_3 - 256u_6u_4^6u_1^8x_{14}x_3 + 128u_6u_4^8u_1^7x_{14} - \\ & 32u_5u_4^9u_1^5x_5x_3 + 64u_6u_4^7u_1^6x_4x_3^2 + 32u_6u_5u_4^8u_1^5x_3^2 \end{aligned}$$

Reduced to zero.

2366. Creating S-polynomial from the pair  $(p_{31}, p_{72})$ .

Forming S-pol of  $p_{31}$  and  $p_{72}$ :

$$\begin{aligned}
p_{562} = & 4096u_4^{19}u_1^{12}x_{16}x_{14}x_5x_3 - 2048u_4^{20}u_1^{11}x_{16}x_5x_4x_3 + \\
& (1024u_5u_4^{21}u_1^{10} - 4096u_5u_4^{19}u_1^{12})x_{16}x_5x_3 + \\
& (-1024u_6u_4^{21}u_1^{10} + 16384u_6u_4^{17}u_1^{14})x_{16}x_4x_3 + \\
& (-2048u_6u_4^{21}u_1^{11} - 8192u_6u_4^{19}u_1^{13})x_{16}x_4 + \\
& (-1024u_6u_4^{20}u_1^{10} - 4096u_6u_4^{18}u_1^{12})x_5x_4x_3^2 + \\
& (512u_6u_4^{22}u_1^9 + 2048u_6u_4^{20}u_1^{11})x_5x_4x_3 + \\
& (512u_6u_5u_4^{21}u_1^9 + 2048u_5u_4^{20}u_1^{11})x_5x_3^2 - 1024u_5u_4^{22}u_1^{10}x_5x_3 + \\
& (-512u_6^2u_4^{21}u_1^9 - 2048u_6^2u_4^{19}u_1^{11})x_4x_3^2 - \\
& 1024u_6^2u_5u_4^{20}u_1^{10}x_3^2 + 512u_6^2u_5u_4^{22}u_1^9x_3
\end{aligned}$$

Reduced to zero.

2367. Creating S-polynomial from the pair  $(p_{31}, p_{73})$ .

Forming S-pol of  $p_{31}$  and  $p_{73}$ :

$$\begin{aligned}
p_{563} = & (4u_6u_4^6u_1^2 - 16u_6u_4^4u_1^4)x_{16}x_3 + 8u_6u_4^6u_1^3x_{16} + \\
& 4u_6u_4^5u_1^2x_5x_3^2 - 2u_6u_4^7u_1x_5x_3 + 2u_6^2u_4^6u_1x_3^2
\end{aligned}$$

Reduced to zero.

2368. Creating S-polynomial from the pair  $(p_{31}, p_{74})$ .

Skipping pair  $p_{31}$  and  $p_{74}$  because gcd of their leading monoms is zero.

2369. Creating S-polynomial from the pair  $(p_{31}, p_{75})$ .

Skipping pair  $p_{31}$  and  $p_{75}$  because gcd of their leading monoms is zero.

2370. Creating S-polynomial from the pair  $(p_{31}, p_{76})$ .

Skipping pair  $p_{31}$  and  $p_{76}$  because gcd of their leading monoms is zero.

2371. Creating S-polynomial from the pair  $(p_{31}, p_{77})$ .

Skipping pair  $p_{31}$  and  $p_{77}$  because gcd of their leading monoms is zero.

2372. Creating S-polynomial from the pair  $(p_{31}, p_{78})$ .

Skipping pair  $p_{31}$  and  $p_{78}$  because gcd of their leading monoms is zero.

2373. Creating S-polynomial from the pair  $(p_{31}, p_{79})$ .

Skipping pair  $p_{31}$  and  $p_{79}$  because gcd of their leading monoms is zero.

2374. Creating S-polynomial from the pair  $(p_{31}, p_{80})$ .

Skipping pair  $p_{31}$  and  $p_{80}$  because gcd of their leading monoms is zero.

2375. Creating S-polynomial from the pair  $(p_{31}, p_{81})$ .

Skipping pair  $p_{31}$  and  $p_{81}$  because gcd of their leading monoms is zero.

2376. Creating S-polynomial from the pair  $(p_{31}, p_{82})$ .  
 Skipping pair  $p_{31}$  and  $p_{82}$  because gcd of their leading monoms is zero.
2377. Creating S-polynomial from the pair  $(p_{31}, p_{83})$ .  
 Skipping pair  $p_{31}$  and  $p_{83}$  because gcd of their leading monoms is zero.
2378. Creating S-polynomial from the pair  $(p_{31}, p_{84})$ .  
 Skipping pair  $p_{31}$  and  $p_{84}$  because gcd of their leading monoms is zero.
2379. Creating S-polynomial from the pair  $(p_{31}, p_{85})$ .  
 Skipping pair  $p_{31}$  and  $p_{85}$  because gcd of their leading monoms is zero.
2380. Creating S-polynomial from the pair  $(p_{31}, p_{86})$ .  
 Skipping pair  $p_{31}$  and  $p_{86}$  because gcd of their leading monoms is zero.
2381. Creating S-polynomial from the pair  $(p_{31}, p_{87})$ .  
 Skipping pair  $p_{31}$  and  $p_{87}$  because gcd of their leading monoms is zero.
2382. Creating S-polynomial from the pair  $(p_{31}, p_{88})$ .  
 Forming S-pol of  $p_{31}$  and  $p_{88}$ :

$$p_{564} = 1024u_6u_4^{10}u_1^{10}x_{14}x_3 - 512u_6u_4^{11}u_1^9x_4x_3 - 512u_6u_5u_4^{12}u_1^9$$

Reduced to zero.

2383. Creating S-polynomial from the pair  $(p_{31}, p_{89})$ .  
 Skipping pair  $p_{31}$  and  $p_{89}$  because gcd of their leading monoms is zero.
2384. Creating S-polynomial from the pair  $(p_{31}, p_{90})$ .  
 Forming S-pol of  $p_{31}$  and  $p_{90}$ :

$$\begin{aligned} p_{565} = & 524288u_5u_4^{19}u_1^{19}x_{16}x_4x_3 + 262144u_5^2u_4^{20}u_1^{18}x_{16}x_3 - \\ & 1048576u_6u_4^{18}u_1^{20}x_{14}^2x_3 - 262144u_6u_5u_4^{20}u_1^{18}x_{14}x_3 + \\ & 524288u_6u_5u_4^{20}u_1^{19}x_{14} - 262144u_5u_4^{20}u_1^{18}x_5x_4x_3 - \\ & 131072u_5^2u_4^{21}u_1^{17}x_5x_3 + \\ & (131072u_6u_5u_4^{21}u_1^{17} + 524288u_6u_4^{20}u_1^{19})x_4x_3 - \\ & 262144u_6u_5^2u_4^{20}u_1^{18}x_3 \end{aligned}$$

Reduced to zero.

2385. Creating S-polynomial from the pair  $(p_{31}, p_{91})$ .  
 Forming S-pol of  $p_{31}$  and  $p_{91}$ :

$$\begin{aligned} p_{566} = & 128u_5u_4^8u_1^7x_{16}x_3 - 512u_6u_4^6u_1^9x_{14}x_3 + 256u_6u_4^8u_1^8x_{14} - \\ & 64u_5u_4^9u_1^6x_5x_3 + 128u_6u_4^7u_1^7x_4x_3^2 + 64u_6u_5u_4^8u_1^6x_3^2 \end{aligned}$$

Reduced to zero.

2386. Creating S-polynomial from the pair  $(p_{31}, p_{92})$ .

Forming S-pol of  $p_{31}$  and  $p_{92}$ :

$$\begin{aligned} p_{567} = & -256u_4^7u_1^8x_{16}x_4x_3 - 512u_5u_4^6u_1^9x_{16}x_3 + 256u_4^7u_1^8x_{14}x_5x_3 + \\ & 128u_6u_4^8u_1^7x_{14}x_3 + 256u_6u_4^8u_1^8x_{14} + 128u_5u_4^7u_1^7x_5x_3^2 - \\ & 64u_6u_4^9u_1^6x_4x_3 + 64u_6u_5u_4^8u_1^6x_3^2 \end{aligned}$$

Reduced to zero.

2387. Creating S-polynomial from the pair  $(p_{31}, p_{93})$ .

Forming S-pol of  $p_{31}$  and  $p_{93}$ :

$$\begin{aligned} p_{568} = & 1024u_4^{14}u_1^{10}x_{14}x_5x_3 + (-4096u_4^{11}u_1^{12} + 2048u_4^{11}u_1^{11})x_5x_4x_3^2 + \\ & (-512u_4^{15}u_1^9 + 2048u_4^{13}u_1^{11})x_5x_4x_3 + 512u_5u_4^{14}u_1^9x_5x_3^2 - \\ & 1024u_5u_4^{14}u_1^{10}x_5x_3 + \\ & (-512u_6u_4^{14}u_1^9 - 2048u_6u_4^{12}u_1^{11} + 1024u_6u_4^{12}u_1^{10})x_4x_3^2 + \\ & 1024u_6u_4^{14}u_1^{10}x_4x_3 + (-512u_6u_4^{16}u_1^9 + 1024u_6u_4^{14}u_1^{10})x_4 \end{aligned}$$

S-pol added.

2388. Creating S-polynomial from the pair  $(p_{31}, p_{94})$ .

Forming S-pol of  $p_{31}$  and  $p_{94}$ :

$$p_{569} = 8u_6u_4^6u_1^3x_3^2 - 16u_6u_4^6u_1^4x_3 + 8u_6u_4^8u_1^3$$

Reduced to zero.

2389. Creating S-polynomial from the pair  $(p_{31}, p_{95})$ .

Skipping pair  $p_{31}$  and  $p_{95}$  because gcd of their leading monoms is zero.

2390. Creating S-polynomial from the pair  $(p_{31}, p_{96})$ .

Skipping pair  $p_{31}$  and  $p_{96}$  because gcd of their leading monoms is zero.

2391. Creating S-polynomial from the pair  $(p_{31}, p_{97})$ .

Skipping pair  $p_{31}$  and  $p_{97}$  because gcd of their leading monoms is zero.

2392. Creating S-polynomial from the pair  $(p_{31}, p_{98})$ .

Skipping pair  $p_{31}$  and  $p_{98}$  because gcd of their leading monoms is zero.

2393. Creating S-polynomial from the pair  $(p_{31}, p_{99})$ .

Forming S-pol of  $p_{31}$  and  $p_{99}$ : Polynomial too big for output (text size is 2201 characters, number of terms is 27)

Reduced to zero.

2394. Creating S-polynomial from the pair  $(p_{31}, p_{100})$ .

Skipping pair  $p_{31}$  and  $p_{100}$  because gcd of their leading monoms is zero.

2395. Creating S-polynomial from the pair  $(p_{31}, p_{101})$ .  
 Skipping pair  $p_{31}$  and  $p_{101}$  because gcd of their leading monoms is zero.
2396. Creating S-polynomial from the pair  $(p_{31}, p_{102})$ .  
 Skipping pair  $p_{31}$  and  $p_{102}$  because gcd of their leading monoms is zero.
2397. Creating S-polynomial from the pair  $(p_{31}, p_{103})$ .  
 Forming S-pol of  $p_{31}$  and  $p_{103}$ : Polynomial too big for output (text size is 2210 characters, number of terms is 27)  
 Reduced to zero.
2398. Creating S-polynomial from the pair  $(p_{31}, p_{104})$ .  
 Forming S-pol of  $p_{31}$  and  $p_{104}$ :

$$\begin{aligned}
 p_{570} = & -524288u_5u_4^{17}u_1^{19}x_{16}x_{14}x_3 + \\
 & (-1048576u_5u_4^{16}u_1^{20} - 1048576u_4^{17}u_1^{20})x_{16}x_4x_3 + \\
 & (-131072u_5^2u_4^{19}u_1^{17} + 524288u_5^2u_4^{17}u_1^{19})x_{16}x_3 + \\
 & 524288u_6u_4^{17}u_1^{19}x_{14}^2x_3 + 524288u_4^{17}u_1^{19}x_{14}x_5x_4x_3 + \\
 & 262144u_5u_4^{18}u_1^{18}x_{14}x_5x_3 + 524288u_6u_4^{18}u_1^{19}x_{14}x_4 + \\
 & 131072u_6u_5u_4^{19}u_1^{17}x_{14}x_3 + 262144u_5u_4^{17}u_1^{18}x_5x_4x_3^2 + \\
 & 65536u_5^2u_4^{20}u_1^{16}x_5x_3 + 131072u_6u_5u_4^{18}u_1^{17}x_4x_3^2 + \\
 & (-65536u_6u_5u_4^{20}u_1^{16} - 262144u_6u_4^{19}u_1^{18})x_4x_3 + \\
 & 131072u_6u_5^2u_4^{19}u_1^{17}x_3
 \end{aligned}$$

Reduced to zero.

2399. Creating S-polynomial from the pair  $(p_{31}, p_{105})$ .  
 Forming S-pol of  $p_{31}$  and  $p_{105}$ :

$$\begin{aligned}
 p_{571} = & -64u_5u_4^4u_1^6x_{16}x_3 + 32u_4^5u_1^5x_{14}x_5x_3 + 64u_6u_4^4u_1^6x_{14}x_3 - \\
 & 16u_4^6u_1^4x_5x_4x_3 + 16u_5u_4^5u_1^4x_5x_3^2 - 16u_6u_4^5u_1^4x_4x_3^2 - \\
 & 16u_6u_4^7u_1^4x_4
 \end{aligned}$$

Reduced to zero.

2400. Creating S-polynomial from the pair  $(p_{31}, p_{106})$ .  
 Forming S-pol of  $p_{31}$  and  $p_{106}$ :

$$\begin{aligned}
 p_{572} = & 512u_4^{13}u_1^9x_{14}x_5x_3 + (-2048u_4^{10}u_1^{11} + 1024u_4^{10}u_1^{10})x_5x_4x_3^2 + \\
 & (-256u_4^{14}u_1^8 + 1024u_4^{12}u_1^{10})x_5x_4x_3 + 256u_5u_4^{13}u_1^8x_5x_3^2 - \\
 & 512u_5u_4^{13}u_1^9x_5x_3 + (-256u_6u_4^{13}u_1^8 - 1024u_6u_4^{11}u_1^{10})x_4x_3^2 + \\
 & (512u_6u_4^{13}u_1^9 + 1024u_6u_4^{11}u_1^{10})x_4x_3 - 256u_6u_4^{15}u_1^8x_4
 \end{aligned}$$

S-pol added.

2401. Creating S-polynomial from the pair  $(p_{32}, p_{33})$ .  
 Skipping pair  $p_{32}$  and  $p_{33}$  because gcd of their leading monoms is zero.
2402. Creating S-polynomial from the pair  $(p_{32}, p_{34})$ .  
 Skipping pair  $p_{32}$  and  $p_{34}$  because gcd of their leading monoms is zero.
2403. Creating S-polynomial from the pair  $(p_{32}, p_{35})$ .  
 Skipping pair  $p_{32}$  and  $p_{35}$  because gcd of their leading monoms is zero.
2404. Creating S-polynomial from the pair  $(p_{32}, p_{36})$ .  
 Skipping pair  $p_{32}$  and  $p_{36}$  because gcd of their leading monoms is zero.
2405. Creating S-polynomial from the pair  $(p_{32}, p_{37})$ .  
 Skipping pair  $p_{32}$  and  $p_{37}$  because gcd of their leading monoms is zero.
2406. Creating S-polynomial from the pair  $(p_{32}, p_{38})$ .  
 Skipping pair  $p_{32}$  and  $p_{38}$  because gcd of their leading monoms is zero.
2407. Creating S-polynomial from the pair  $(p_{32}, p_{39})$ .  
 Skipping pair  $p_{32}$  and  $p_{39}$  because gcd of their leading monoms is zero.
2408. Creating S-polynomial from the pair  $(p_{32}, p_{40})$ .  
 Skipping pair  $p_{32}$  and  $p_{40}$  because gcd of their leading monoms is zero.
2409. Creating S-polynomial from the pair  $(p_{32}, p_{41})$ .  
 Skipping pair  $p_{32}$  and  $p_{41}$  because gcd of their leading monoms is zero.
2410. Creating S-polynomial from the pair  $(p_{32}, p_{42})$ .  
 Skipping pair  $p_{32}$  and  $p_{42}$  because gcd of their leading monoms is zero.
2411. Creating S-polynomial from the pair  $(p_{32}, p_{43})$ .  
 Skipping pair  $p_{32}$  and  $p_{43}$  because gcd of their leading monoms is zero.
2412. Creating S-polynomial from the pair  $(p_{32}, p_{44})$ .  
 Skipping pair  $p_{32}$  and  $p_{44}$  because gcd of their leading monoms is zero.
2413. Creating S-polynomial from the pair  $(p_{32}, p_{45})$ .  
 Skipping pair  $p_{32}$  and  $p_{45}$  because gcd of their leading monoms is zero.
2414. Creating S-polynomial from the pair  $(p_{32}, p_{46})$ .  
 Skipping pair  $p_{32}$  and  $p_{46}$  because gcd of their leading monoms is zero.
2415. Creating S-polynomial from the pair  $(p_{32}, p_{47})$ .  
 Skipping pair  $p_{32}$  and  $p_{47}$  because gcd of their leading monoms is zero.
2416. Creating S-polynomial from the pair  $(p_{32}, p_{48})$ .  
 Skipping pair  $p_{32}$  and  $p_{48}$  because gcd of their leading monoms is zero.
2417. Creating S-polynomial from the pair  $(p_{32}, p_{49})$ .  
 Skipping pair  $p_{32}$  and  $p_{49}$  because gcd of their leading monoms is zero.



2418. Creating S-polynomial from the pair  $(p_{32}, p_{50})$ .

Skipping pair  $p_{32}$  and  $p_{50}$  because gcd of their leading monoms is zero.

2419. Creating S-polynomial from the pair  $(p_{32}, p_{51})$ .

Skipping pair  $p_{32}$  and  $p_{51}$  because gcd of their leading monoms is zero.

2420. Creating S-polynomial from the pair  $(p_{32}, p_{52})$ .

Skipping pair  $p_{32}$  and  $p_{52}$  because gcd of their leading monoms is zero.

2421. Creating S-polynomial from the pair  $(p_{32}, p_{53})$ .

Skipping pair  $p_{32}$  and  $p_{53}$  because gcd of their leading monoms is zero.

2422. Creating S-polynomial from the pair  $(p_{32}, p_{54})$ .

Forming S-pol of  $p_{32}$  and  $p_{54}$ :

$$\begin{aligned} p_{573} = & (-32u_5u_2^{16}u_1^5 - 128u_5u_2^{14}u_1^7)x_{10}x_1 + \\ & (16u_5u_2^{18}u_1^4 + 64u_5u_2^{16}u_1^6)x_{10} + \\ & (16u_5u_2^{17}u_1^4 + 64u_5u_2^{15}u_1^6)x_4x_1 + \\ & (-8u_5u_2^{19}u_1^3 - 32u_5u_2^{17}u_1^5)x_4 + \\ & (8u_5^2u_2^{18}u_1^3 + 32u_5^2u_2^{16}u_1^5)x_1 \end{aligned}$$

Reduced to zero.

2423. Creating S-polynomial from the pair  $(p_{32}, p_{55})$ .

Forming S-pol of  $p_{32}$  and  $p_{55}$ :

$$\begin{aligned} p_{574} = & 2048u_2^{20}u_1^{11}x_{12}x_4 + (-2048u_5u_2^{19}u_1^{11} - 8192u_5u_2^{17}u_1^{13})x_{12}x_1 + \\ & (1024u_5u_2^{21}u_1^{10} + 4096u_5u_2^{19}u_1^{12})x_{12} - 2048u_2^{20}u_1^{11}x_{10}x_5 + \\ & 4096u_5u_2^{18}u_1^{12}x_5x_1 - 512u_5u_2^{22}u_1^9x_5 + 1024u_6u_2^{20}u_1^{10}x_4x_1 - \\ & 2048u_6u_2^{20}u_1^{11}x_4 + (512u_6u_5u_2^{21}u_1^9 + 2048u_6u_5u_2^{19}u_1^{11})x_1 \end{aligned}$$

Reduced to zero.

2424. Creating S-polynomial from the pair  $(p_{32}, p_{56})$ .

Forming S-pol of  $p_{32}$  and  $p_{56}$ :

$$\begin{aligned} p_{575} = & 16u_5u_2^{10}u_1^4x_{10}x_1 - 8u_5u_2^{12}u_1^3x_{10} - 8u_5u_2^{11}u_1^3x_4x_1 + \\ & 4u_5u_2^{13}u_1^2x_4 - 4u_5^2u_2^{12}u_1^2x_1 \end{aligned}$$

Reduced to zero.

2425. Creating S-polynomial from the pair  $(p_{32}, p_{57})$ .

Forming S-pol of  $p_{32}$  and  $p_{57}$ :

$$\begin{aligned} p_{576} = & (1048576u_2^{30}u_1^{20} + 4194304u_2^{28}u_1^{22})x_{12}x_4^2 + \\ & (-1048576u_5u_2^{29}u_1^{20} - 4194304u_5u_2^{27}u_1^{22})x_{12}x_4x_1 + \end{aligned}$$

$$\begin{aligned}
& (524288u_5u_2^{31}u_1^{19} + 2097152u_5u_2^{29}u_1^{21} - 8388608u_2^{28}u_1^{23})x_{12}x_4 + \\
& (-1048576u_5^2u_2^{30}u_1^{20} + 4194304u_5^2u_2^{28}u_1^{22})x_{12} - \\
& 2097152u_2^{29}u_1^{21}x_{10}^2x_5 + \\
& (-524288u_5u_2^{31}u_1^{19} + 2097152u_5u_2^{29}u_1^{21})x_{10}x_5 + \\
& 1048576u_6u_5u_2^{30}u_1^{20}x_{10} + \\
& (-524288u_5u_2^{30}u_1^{19} + 2097152u_5u_2^{28}u_1^{21})x_5x_4x_1 - \\
& 262144u_5^2u_2^{31}u_1^{18}x_5x_1 + 524288u_5^2u_2^{31}u_1^{19}x_5 + \\
& (262144u_6u_5u_2^{31}u_1^{18} + 1048576u_6u_5u_2^{29}u_1^{20} + 1048576u_6u_2^{30}u_1^{20})x_4x_1 + \\
& (-524288u_6u_5u_2^{31}u_1^{19} - 2097152u_6u_2^{30}u_1^{21})x_4 - \\
& 524288u_6u_5^2u_2^{30}u_1^{19}x_1 + 1048576u_6u_5^2u_2^{30}u_1^{20}
\end{aligned}$$

Reduced to zero.

2426. Creating S-polynomial from the pair  $(p_{32}, p_{58})$ .

Forming S-pol of  $p_{32}$  and  $p_{58}$ :

$$\begin{aligned}
p_{577} = & 256u_5u_2^{12}u_1^8x_{12}x_1 - 128u_6u_2^{14}u_1^7x_{10} - 128u_5u_2^{13}u_1^7x_5x_1 + \\
& 64u_6u_2^{15}u_1^6x_4 - 64u_6u_5u_2^{14}u_1^6x_1
\end{aligned}$$

Reduced to zero.

2427. Creating S-polynomial from the pair  $(p_{32}, p_{59})$ .

Forming S-pol of  $p_{32}$  and  $p_{59}$ :

$$\begin{aligned}
p_{578} = & 2048u_2^{17}u_1^{11}x_{12}x_4 + (-512u_5u_2^{18}u_1^9 - 2048u_5u_2^{16}u_1^{11})x_{12}x_1 + \\
& (256u_5u_2^{20}u_1^8 + 1024u_5u_2^{18}u_1^{10} + 4096u_5u_2^{16}u_1^{12})x_{12} - \\
& 2048u_2^{17}u_1^{11}x_{10}x_5 - 4096u_6u_2^{16}u_1^{12}x_{10} + 256u_5u_2^{19}u_1^8x_5x_1 + \\
& (-128u_5u_2^{21}u_1^7 - 512u_5u_2^{19}u_1^9)x_5 + 1024u_6u_2^{17}u_1^{10}x_4x_1 + \\
& (128u_6u_5u_2^{20}u_1^7 + 512u_6u_5u_2^{18}u_1^9)x_1
\end{aligned}$$

Reduced to zero.

2428. Creating S-polynomial from the pair  $(p_{32}, p_{60})$ .

Skipping pair  $p_{32}$  and  $p_{60}$  because gcd of their leading monoms is zero.

2429. Creating S-polynomial from the pair  $(p_{32}, p_{61})$ .

Forming S-pol of  $p_{32}$  and  $p_{61}$ :

$$\begin{aligned}
p_{579} = & -256u_2^{13}u_1^8x_{12}x_4 + 256u_5u_2^{12}u_1^8x_{12}x_1 + \\
& (-128u_5u_2^{14}u_1^7 - 512u_5u_2^{12}u_1^9)x_{12} + 256u_2^{13}u_1^8x_{10}x_5 + \\
& 512u_6u_2^{12}u_1^9x_{10} + 64u_5u_2^{15}u_1^6x_5 - 128u_6u_2^{13}u_1^7x_4x_1 - \\
& 64u_6u_5u_2^{14}u_1^6x_1
\end{aligned}$$

Reduced to zero.

2430. Creating S-polynomial from the pair  $(p_{32}, p_{62})$ .  
 Skipping pair  $p_{32}$  and  $p_{62}$  because gcd of their leading monoms is zero.
2431. Creating S-polynomial from the pair  $(p_{32}, p_{63})$ .  
 Skipping pair  $p_{32}$  and  $p_{63}$  because gcd of their leading monoms is zero.
2432. Creating S-polynomial from the pair  $(p_{32}, p_{64})$ .  
 Skipping pair  $p_{32}$  and  $p_{64}$  because gcd of their leading monoms is zero.
2433. Creating S-polynomial from the pair  $(p_{32}, p_{65})$ .  
 Skipping pair  $p_{32}$  and  $p_{65}$  because gcd of their leading monoms is zero.
2434. Creating S-polynomial from the pair  $(p_{32}, p_{66})$ .  
 Skipping pair  $p_{32}$  and  $p_{66}$  because gcd of their leading monoms is zero.
2435. Creating S-polynomial from the pair  $(p_{32}, p_{67})$ .  
 Skipping pair  $p_{32}$  and  $p_{67}$  because gcd of their leading monoms is zero.
2436. Creating S-polynomial from the pair  $(p_{32}, p_{68})$ .  
 Skipping pair  $p_{32}$  and  $p_{68}$  because gcd of their leading monoms is zero.
2437. Creating S-polynomial from the pair  $(p_{32}, p_{69})$ .  
 Skipping pair  $p_{32}$  and  $p_{69}$  because gcd of their leading monoms is zero.
2438. Creating S-polynomial from the pair  $(p_{32}, p_{70})$ .  
 Skipping pair  $p_{32}$  and  $p_{70}$  because gcd of their leading monoms is zero.
2439. Creating S-polynomial from the pair  $(p_{32}, p_{71})$ .  
 Skipping pair  $p_{32}$  and  $p_{71}$  because gcd of their leading monoms is zero.
2440. Creating S-polynomial from the pair  $(p_{32}, p_{72})$ .  
 Skipping pair  $p_{32}$  and  $p_{72}$  because gcd of their leading monoms is zero.
2441. Creating S-polynomial from the pair  $(p_{32}, p_{73})$ .  
 Skipping pair  $p_{32}$  and  $p_{73}$  because gcd of their leading monoms is zero.
2442. Creating S-polynomial from the pair  $(p_{32}, p_{74})$ .  
 Skipping pair  $p_{32}$  and  $p_{74}$  because gcd of their leading monoms is zero.
2443. Creating S-polynomial from the pair  $(p_{32}, p_{75})$ .  
 Forming S-pol of  $p_{32}$  and  $p_{75}$ :

$$p_{580} = 0$$

Reduced to zero.

2444. Creating S-polynomial from the pair  $(p_{32}, p_{76})$ .

Forming S-pol of  $p_{32}$  and  $p_{76}$ :

$$\begin{aligned} p_{581} = & -2097152u_5u_2^{25}u_1^{20}x_{12}x_4 + 1048576u_5^2u_2^{24}u_1^{20}x_{12}x_1 + \\ & (-524288u_5^2u_2^{26}u_1^{19} - 2097152u_5^2u_2^{24}u_1^{21})x_{12} + \\ & 2097152u_6u_2^{24}u_1^{21}x_{10}^2 + 1048576u_5u_2^{25}u_1^{20}x_{10}x_5 + \\ & 524288u_6u_5u_2^{26}u_1^{19}x_{10} + 524288u_5u_2^{26}u_1^{19}x_5x_4 + \\ & 262144u_5^2u_2^{27}u_1^{18}x_5 + \\ & (-262144u_6u_5u_2^{27}u_1^{18} - 1048576u_6u_2^{26}u_1^{20})x_4 + 524288u_6u_5^2u_2^{26}u_1^{19} \end{aligned}$$

Reduced to zero.

2445. Creating S-polynomial from the pair  $(p_{32}, p_{77})$ .

Forming S-pol of  $p_{32}$  and  $p_{77}$ :

$$\begin{aligned} p_{582} = & -512u_2^{13}u_1^9x_{12}x_4 + 512u_5u_2^{12}u_1^9x_{12}x_1 + \\ & (-256u_5u_2^{14}u_1^8 - 1024u_5u_2^{12}u_1^{10})x_{12} + 512u_2^{13}u_1^9x_{10}x_5 + \\ & 1024u_6u_2^{12}u_1^{10}x_{10} + 128u_5u_2^{15}u_1^7x_5 - 256u_6u_2^{13}u_1^8x_4x_1 - \\ & 128u_6u_5u_2^{14}u_1^7x_1 \end{aligned}$$

Reduced to zero.

2446. Creating S-polynomial from the pair  $(p_{32}, p_{78})$ .

Forming S-pol of  $p_{32}$  and  $p_{78}$ :

$$\begin{aligned} p_{583} = & 512u_5u_2^{12}u_1^9x_{12}x_1 - 256u_6u_2^{14}u_1^8x_{10} - 256u_5u_2^{13}u_1^8x_5x_1 + \\ & 128u_6u_2^{15}u_1^7x_4 - 128u_6u_5u_2^{14}u_1^7x_1 \end{aligned}$$

Reduced to zero.

2447. Creating S-polynomial from the pair  $(p_{32}, p_{79})$ .

Skipping pair  $p_{32}$  and  $p_{79}$  because gcd of their leading monoms is zero.

2448. Creating S-polynomial from the pair  $(p_{32}, p_{80})$ .

Skipping pair  $p_{32}$  and  $p_{80}$  because gcd of their leading monoms is zero.

2449. Creating S-polynomial from the pair  $(p_{32}, p_{81})$ .

Skipping pair  $p_{32}$  and  $p_{81}$  because gcd of their leading monoms is zero.

2450. Creating S-polynomial from the pair  $(p_{32}, p_{82})$ .

Skipping pair  $p_{32}$  and  $p_{82}$  because gcd of their leading monoms is zero.

2451. Creating S-polynomial from the pair  $(p_{32}, p_{83})$ .

Skipping pair  $p_{32}$  and  $p_{83}$  because gcd of their leading monoms is zero.

2452. Creating S-polynomial from the pair  $(p_{32}, p_{84})$ .

Skipping pair  $p_{32}$  and  $p_{84}$  because gcd of their leading monoms is zero.

2453. Creating S-polynomial from the pair  $(p_{32}, p_{85})$ .  
 Skipping pair  $p_{32}$  and  $p_{85}$  because gcd of their leading monoms is zero.
2454. Creating S-polynomial from the pair  $(p_{32}, p_{86})$ .  
 Skipping pair  $p_{32}$  and  $p_{86}$  because gcd of their leading monoms is zero.
2455. Creating S-polynomial from the pair  $(p_{32}, p_{87})$ .  
 Skipping pair  $p_{32}$  and  $p_{87}$  because gcd of their leading monoms is zero.
2456. Creating S-polynomial from the pair  $(p_{32}, p_{88})$ .  
 Skipping pair  $p_{32}$  and  $p_{88}$  because gcd of their leading monoms is zero.
2457. Creating S-polynomial from the pair  $(p_{32}, p_{89})$ .  
 Skipping pair  $p_{32}$  and  $p_{89}$  because gcd of their leading monoms is zero.
2458. Creating S-polynomial from the pair  $(p_{32}, p_{90})$ .  
 Skipping pair  $p_{32}$  and  $p_{90}$  because gcd of their leading monoms is zero.
2459. Creating S-polynomial from the pair  $(p_{32}, p_{91})$ .  
 Skipping pair  $p_{32}$  and  $p_{91}$  because gcd of their leading monoms is zero.
2460. Creating S-polynomial from the pair  $(p_{32}, p_{92})$ .  
 Skipping pair  $p_{32}$  and  $p_{92}$  because gcd of their leading monoms is zero.
2461. Creating S-polynomial from the pair  $(p_{32}, p_{93})$ .  
 Skipping pair  $p_{32}$  and  $p_{93}$  because gcd of their leading monoms is zero.
2462. Creating S-polynomial from the pair  $(p_{32}, p_{94})$ .  
 Skipping pair  $p_{32}$  and  $p_{94}$  because gcd of their leading monoms is zero.
2463. Creating S-polynomial from the pair  $(p_{32}, p_{95})$ .  
 Skipping pair  $p_{32}$  and  $p_{95}$  because gcd of their leading monoms is zero.
2464. Creating S-polynomial from the pair  $(p_{32}, p_{96})$ .  
 Skipping pair  $p_{32}$  and  $p_{96}$  because gcd of their leading monoms is zero.
2465. Creating S-polynomial from the pair  $(p_{32}, p_{97})$ .  
 Skipping pair  $p_{32}$  and  $p_{97}$  because gcd of their leading monoms is zero.
2466. Creating S-polynomial from the pair  $(p_{32}, p_{98})$ .  
 Skipping pair  $p_{32}$  and  $p_{98}$  because gcd of their leading monoms is zero.
2467. Creating S-polynomial from the pair  $(p_{32}, p_{99})$ .  
 Skipping pair  $p_{32}$  and  $p_{99}$  because gcd of their leading monoms is zero.

2468. Creating S-polynomial from the pair  $(p_{32}, p_{100})$ .

Forming S-pol of  $p_{32}$  and  $p_{100}$ :

$$\begin{aligned} p_{584} = & 1048576u_5u_2^{23}u_1^{20}x_{12}x_{10} - 1048576u_2^{23}u_1^{20}x_{12}x_4^2 + \\ & 1048576u_5u_2^{22}u_1^{20}x_{12}x_4x_1 + 2097152u_2^{23}u_1^{21}x_{12}x_4 + \\ & (262144u_5^2u_2^{25}u_1^{18} - 1048576u_5^2u_2^{23}u_1^{20})x_{12} - \\ & 1048576u_6u_2^{23}u_1^{20}x_{10}^2 - 524288u_5u_2^{24}u_1^{19}x_{10}x_5 - \\ & 262144u_6u_5u_2^{25}u_1^{18}x_{10} - 524288u_5u_2^{23}u_1^{19}x_5x_4x_1 - \\ & 131072u_5^2u_2^{26}u_1^{17}x_5 - 262144u_6u_5u_2^{24}u_1^{18}x_4x_1 + \\ & (131072u_6u_5u_2^{26}u_1^{17} + 524288u_6u_2^{25}u_1^{19})x_4 - 262144u_6u_5^2u_2^{25}u_1^{18} \end{aligned}$$

Reduced to zero.

2469. Creating S-polynomial from the pair  $(p_{32}, p_{101})$ .

Skipping pair  $p_{32}$  and  $p_{101}$  because gcd of their leading monoms is zero.

2470. Creating S-polynomial from the pair  $(p_{32}, p_{102})$ .

Skipping pair  $p_{32}$  and  $p_{102}$  because gcd of their leading monoms is zero.

2471. Creating S-polynomial from the pair  $(p_{32}, p_{103})$ .

Skipping pair  $p_{32}$  and  $p_{103}$  because gcd of their leading monoms is zero.

2472. Creating S-polynomial from the pair  $(p_{32}, p_{104})$ .

Skipping pair  $p_{32}$  and  $p_{104}$  because gcd of their leading monoms is zero.

2473. Creating S-polynomial from the pair  $(p_{32}, p_{105})$ .

Skipping pair  $p_{32}$  and  $p_{105}$  because gcd of their leading monoms is zero.

2474. Creating S-polynomial from the pair  $(p_{32}, p_{106})$ .

Skipping pair  $p_{32}$  and  $p_{106}$  because gcd of their leading monoms is zero.

2475. Creating S-polynomial from the pair  $(p_{33}, p_{34})$ .

Forming S-pol of  $p_{33}$  and  $p_{34}$ :

$$\begin{aligned} p_{585} = & -512u_2^{19}u_1^9x_{10}x_5 + 256u_2^{20}u_1^8x_5x_4 - 256u_5u_2^{19}u_1^8x_5x_1 + \\ & 512u_5u_2^{19}u_1^9x_5 \end{aligned}$$

Reduced to zero.

2476. Creating S-polynomial from the pair  $(p_{33}, p_{35})$ .

Skipping pair  $p_{33}$  and  $p_{35}$  because gcd of their leading monoms is zero.

2477. Creating S-polynomial from the pair  $(p_{33}, p_{36})$ .

Skipping pair  $p_{33}$  and  $p_{36}$  because gcd of their leading monoms is zero.

2478. Creating S-polynomial from the pair  $(p_{33}, p_{37})$ .

Skipping pair  $p_{33}$  and  $p_{37}$  because gcd of their leading monoms is zero.

2479. Creating S-polynomial from the pair  $(p_{33}, p_{38})$ .  
 Skipping pair  $p_{33}$  and  $p_{38}$  because gcd of their leading monoms is zero.
2480. Creating S-polynomial from the pair  $(p_{33}, p_{39})$ .  
 Skipping pair  $p_{33}$  and  $p_{39}$  because gcd of their leading monoms is zero.
2481. Creating S-polynomial from the pair  $(p_{33}, p_{40})$ .  
 Skipping pair  $p_{33}$  and  $p_{40}$  because gcd of their leading monoms is zero.
2482. Creating S-polynomial from the pair  $(p_{33}, p_{41})$ .  
 Skipping pair  $p_{33}$  and  $p_{41}$  because gcd of their leading monoms is zero.
2483. Creating S-polynomial from the pair  $(p_{33}, p_{42})$ .  
 Forming S-pol of  $p_{33}$  and  $p_{42}$ :
- $$p_{586} = 512u_6u_2^{18}u_1^9x_{10}x_4 + 256u_6u_5u_2^{18}u_1^8x_4x_1 +$$
- $$(-512u_6u_5u_2^{18}u_1^9 - 512u_6u_2^{19}u_1^9)x_4 + 256u_6u_5^2u_2^{19}u_1^8$$
- Reduced to zero.
2484. Creating S-polynomial from the pair  $(p_{33}, p_{43})$ .  
 Skipping pair  $p_{33}$  and  $p_{43}$  because gcd of their leading monoms is zero.
2485. Creating S-polynomial from the pair  $(p_{33}, p_{44})$ .  
 Skipping pair  $p_{33}$  and  $p_{44}$  because gcd of their leading monoms is zero.
2486. Creating S-polynomial from the pair  $(p_{33}, p_{45})$ .  
 Skipping pair  $p_{33}$  and  $p_{45}$  because gcd of their leading monoms is zero.
2487. Creating S-polynomial from the pair  $(p_{33}, p_{46})$ .  
 Skipping pair  $p_{33}$  and  $p_{46}$  because gcd of their leading monoms is zero.
2488. Creating S-polynomial from the pair  $(p_{33}, p_{47})$ .  
 Skipping pair  $p_{33}$  and  $p_{47}$  because gcd of their leading monoms is zero.
2489. Creating S-polynomial from the pair  $(p_{33}, p_{48})$ .  
 Skipping pair  $p_{33}$  and  $p_{48}$  because gcd of their leading monoms is zero.
2490. Creating S-polynomial from the pair  $(p_{33}, p_{49})$ .  
 Skipping pair  $p_{33}$  and  $p_{49}$  because gcd of their leading monoms is zero.
2491. Creating S-polynomial from the pair  $(p_{33}, p_{50})$ .  
 Skipping pair  $p_{33}$  and  $p_{50}$  because gcd of their leading monoms is zero.
2492. Creating S-polynomial from the pair  $(p_{33}, p_{51})$ .  
 Skipping pair  $p_{33}$  and  $p_{51}$  because gcd of their leading monoms is zero.
2493. Creating S-polynomial from the pair  $(p_{33}, p_{52})$ .  
 Skipping pair  $p_{33}$  and  $p_{52}$  because gcd of their leading monoms is zero.

2494. Creating S-polynomial from the pair  $(p_{33}, p_{53})$ .

Skipping pair  $p_{33}$  and  $p_{53}$  because gcd of their leading monoms is zero.

2495. Creating S-polynomial from the pair  $(p_{33}, p_{54})$ .

Skipping pair  $p_{33}$  and  $p_{54}$  because gcd of their leading monoms is zero.

2496. Creating S-polynomial from the pair  $(p_{33}, p_{55})$ .

Forming S-pol of  $p_{33}$  and  $p_{55}$ :

$$\begin{aligned} p_{587} = & -8192u_2^{18}u_1^{13}x_{12}x_4 + \\ & (1024u_5u_2^{21}u_1^{10} - 16384u_5u_2^{17}u_1^{14})x_{12} + 8192u_2^{18}u_1^{13}x_{10}x_5 + \\ & (-2048u_6u_2^{19}u_1^{11} - 8192u_6u_2^{17}u_1^{13})x_{10}x_1 + \\ & (4096u_6u_2^{19}u_1^{12} + 16384u_6u_2^{17}u_1^{14})x_{10} + 4096u_5u_2^{18}u_1^{12}x_5x_1 - \\ & 512u_5u_2^{22}u_1^9x_5 + 1024u_6u_2^{20}u_1^{10}x_4x_1 - 2048u_6u_2^{20}u_1^{11}x_4 + \\ & (512u_6u_5u_2^{21}u_1^9 + 2048u_6u_5u_2^{19}u_1^{11})x_1 \end{aligned}$$

Reduced to zero.

2497. Creating S-polynomial from the pair  $(p_{33}, p_{56})$ .

Skipping pair  $p_{33}$  and  $p_{56}$  because gcd of their leading monoms is zero.

2498. Creating S-polynomial from the pair  $(p_{33}, p_{57})$ .

Forming S-pol of  $p_{33}$  and  $p_{57}$ : Polynomial too big for output (text size is 1049 characters, number of terms is 15)

Reduced to zero.

2499. Creating S-polynomial from the pair  $(p_{33}, p_{58})$ .

Forming S-pol of  $p_{33}$  and  $p_{58}$ :

$$\begin{aligned} p_{588} = & 256u_2^{13}u_1^8x_{12}x_4 + 512u_5u_2^{12}u_1^9x_{12} - 256u_2^{13}u_1^8x_{10}x_5 + \\ & 256u_6u_2^{12}u_1^8x_{10}x_1 + \\ & (-128u_6u_2^{14}u_1^7 - 512u_6u_2^{12}u_1^9)x_{10} - 128u_5u_2^{13}u_1^7x_5x_1 + \\ & 64u_6u_2^{15}u_1^6x_4 - 64u_6u_5u_2^{14}u_1^6x_1 \end{aligned}$$

Reduced to zero.

2500. Creating S-polynomial from the pair  $(p_{33}, p_{59})$ .

Forming S-pol of  $p_{33}$  and  $p_{59}$ :

$$\begin{aligned} p_{589} = & -512u_2^{19}u_1^9x_{12}x_4 + 256u_5u_2^{20}u_1^8x_{12} + 512u_2^{19}u_1^9x_{10}x_5 + \\ & (-512u_6u_2^{18}u_1^9 - 2048u_6u_2^{16}u_1^{11})x_{10}x_1 + 1024u_6u_2^{18}u_1^{10}x_{10} + \\ & 256u_5u_2^{19}u_1^8x_5x_1 + \\ & (-128u_5u_2^{21}u_1^7 - 512u_5u_2^{19}u_1^9)x_5 + 1024u_6u_2^{17}u_1^{10}x_4x_1 + \\ & (128u_6u_5u_2^{20}u_1^7 + 512u_6u_5u_2^{18}u_1^9)x_1 \end{aligned}$$

Reduced to zero.



2501. Creating S-polynomial from the pair  $(p_{33}, p_{60})$ .

Forming S-pol of  $p_{33}$  and  $p_{60}$ :

$$\begin{aligned} p_{590} = & (-32u_6u_2^{16}u_1^5 - 128u_6u_2^{14}u_1^7)x_{12}x_1 + \\ & (16u_6u_2^{18}u_1^4 + 64u_6u_2^{16}u_1^6)x_{12} + \\ & (16u_6u_2^{17}u_1^4 + 64u_6u_2^{15}u_1^6)x_5x_1 + \\ & (-8u_6u_2^{19}u_1^3 - 32u_6u_2^{17}u_1^5)x_5 + \\ & (8u_6^2u_2^{18}u_1^3 + 32u_6^2u_2^{16}u_1^5)x_1 \end{aligned}$$

Reduced to zero.

2502. Creating S-polynomial from the pair  $(p_{33}, p_{61})$ .

Forming S-pol of  $p_{33}$  and  $p_{61}$ :

$$\begin{aligned} p_{591} = & -128u_5u_2^{14}u_1^7x_{12} + 256u_6u_2^{12}u_1^8x_{10}x_1 + 64u_5u_2^{15}u_1^6x_5 - \\ & 128u_6u_2^{13}u_1^7x_4x_1 - 64u_6u_5u_2^{14}u_1^6x_1 \end{aligned}$$

Reduced to zero.

2503. Creating S-polynomial from the pair  $(p_{33}, p_{62})$ .

Forming S-pol of  $p_{33}$  and  $p_{62}$ :

$$\begin{aligned} p_{592} = & -8192u_2^{25}u_1^{13}x_{12}x_{10}x_5 + 4096u_2^{26}u_1^{12}x_{12}x_5x_4 + \\ & (-2048u_5u_2^{27}u_1^{11} + 8192u_5u_2^{25}u_1^{13})x_{12}x_5 + \\ & (-4096u_6u_2^{25}u_1^{12} - 16384u_6u_2^{23}u_1^{14})x_{12}x_4x_1 + \\ & (2048u_6u_2^{27}u_1^{11} + 8192u_6u_2^{25}u_1^{13})x_{12}x_4 + \\ & (2048u_6u_2^{26}u_1^{11} + 8192u_6u_2^{24}u_1^{13})x_5x_4x_1 + \\ & (-1024u_6u_2^{28}u_1^{10} - 4096u_6u_2^{26}u_1^{12})x_5x_4 + \\ & (-1024u_6u_5u_2^{27}u_1^{10} - 4096u_5u_2^{26}u_1^{12})x_5x_1 + 2048u_5u_2^{28}u_1^{11}x_5 + \\ & (1024u_6^2u_2^{27}u_1^{10} + 4096u_6^2u_2^{25}u_1^{12})x_4x_1 + \\ & 2048u_6^2u_5u_2^{26}u_1^{11}x_1 - 1024u_6^2u_5u_2^{28}u_1^{10} \end{aligned}$$

Reduced to zero.

2504. Creating S-polynomial from the pair  $(p_{33}, p_{63})$ .

Forming S-pol of  $p_{33}$  and  $p_{63}$ :

$$\begin{aligned} p_{593} = & 16u_6u_2^{10}u_1^4x_{12}x_1 - 8u_6u_2^{12}u_1^3x_{12} - 8u_6u_2^{11}u_1^3x_5x_1 + \\ & 4u_6u_2^{13}u_1^2x_5 - 4u_6^2u_2^{12}u_1^2x_1 \end{aligned}$$

Reduced to zero.

2505. Creating S-polynomial from the pair  $(p_{33}, p_{64})$ .

Skipping pair  $p_{33}$  and  $p_{64}$  because gcd of their leading monoms is zero.

2506. Creating S-polynomial from the pair  $(p_{33}, p_{65})$ .  
 Skipping pair  $p_{33}$  and  $p_{65}$  because gcd of their leading monoms is zero.
2507. Creating S-polynomial from the pair  $(p_{33}, p_{66})$ .  
 Skipping pair  $p_{33}$  and  $p_{66}$  because gcd of their leading monoms is zero.
2508. Creating S-polynomial from the pair  $(p_{33}, p_{67})$ .  
 Skipping pair  $p_{33}$  and  $p_{67}$  because gcd of their leading monoms is zero.
2509. Creating S-polynomial from the pair  $(p_{33}, p_{68})$ .  
 Skipping pair  $p_{33}$  and  $p_{68}$  because gcd of their leading monoms is zero.
2510. Creating S-polynomial from the pair  $(p_{33}, p_{69})$ .  
 Skipping pair  $p_{33}$  and  $p_{69}$  because gcd of their leading monoms is zero.
2511. Creating S-polynomial from the pair  $(p_{33}, p_{70})$ .  
 Skipping pair  $p_{33}$  and  $p_{70}$  because gcd of their leading monoms is zero.
2512. Creating S-polynomial from the pair  $(p_{33}, p_{71})$ .  
 Skipping pair  $p_{33}$  and  $p_{71}$  because gcd of their leading monoms is zero.
2513. Creating S-polynomial from the pair  $(p_{33}, p_{72})$ .  
 Skipping pair  $p_{33}$  and  $p_{72}$  because gcd of their leading monoms is zero.
2514. Creating S-polynomial from the pair  $(p_{33}, p_{73})$ .  
 Skipping pair  $p_{33}$  and  $p_{73}$  because gcd of their leading monoms is zero.
2515. Creating S-polynomial from the pair  $(p_{33}, p_{74})$ .  
 Forming S-pol of  $p_{33}$  and  $p_{74}$ :

$$p_{594} = -2048u_6u_2^{16}u_1^{11}x_{10} + 1024u_6u_2^{17}u_1^{10}x_4 - 1024u_6u_5u_2^{16}u_1^{10}x_1 + 2048u_6u_5u_2^{16}u_1^{11}$$

Reduced to zero.

2516. Creating S-polynomial from the pair  $(p_{33}, p_{75})$ .  
 Skipping pair  $p_{33}$  and  $p_{75}$  because gcd of their leading monoms is zero.
2517. Creating S-polynomial from the pair  $(p_{33}, p_{76})$ .  
 Forming S-pol of  $p_{33}$  and  $p_{76}$ :

$$\begin{aligned} p_{595} = & -1048576u_5u_2^{25}u_1^{20}x_{12}x_4 - 524288u_5^2u_2^{26}u_1^{19}x_{12} + \\ & 2097152u_6u_2^{24}u_1^{21}x_{10}^2 + 1048576u_6u_5u_2^{24}u_1^{20}x_{10}x_1 + \\ & (524288u_6u_5u_2^{26}u_1^{19} - 2097152u_6u_5u_2^{24}u_1^{21})x_{10} + \\ & 524288u_5u_2^{26}u_1^{19}x_5x_4 + 262144u_5^2u_2^{27}u_1^{18}x_5 + \\ & (-262144u_6u_5u_2^{27}u_1^{18} - 1048576u_6u_2^{26}u_1^{20})x_4 + 524288u_6u_5^2u_2^{26}u_1^{19} \end{aligned}$$

Reduced to zero.

2518. Creating S-polynomial from the pair  $(p_{33}, p_{77})$ .

Forming S-pol of  $p_{33}$  and  $p_{77}$ :

$$p_{596} = -256u_5u_2^{14}u_1^8x_{12} + 512u_6u_2^{12}u_1^9x_{10}x_1 + 128u_5u_2^{15}u_1^7x_5 - \\ 256u_6u_2^{13}u_1^8x_4x_1 - 128u_6u_5u_2^{14}u_1^7x_1$$

Reduced to zero.

2519. Creating S-polynomial from the pair  $(p_{33}, p_{78})$ .

Forming S-pol of  $p_{33}$  and  $p_{78}$ :

$$p_{597} = 512u_2^{13}u_1^9x_{12}x_4 + 1024u_5u_2^{12}u_1^{10}x_{12} - 512u_2^{13}u_1^9x_{10}x_5 + \\ 512u_6u_2^{12}u_1^9x_{10}x_1 + \\ (-256u_6u_2^{14}u_1^8 - 1024u_6u_2^{12}u_1^{10})x_{10} - 256u_5u_2^{13}u_1^8x_5x_1 + \\ 128u_6u_2^{15}u_1^7x_4 - 128u_6u_5u_2^{14}u_1^7x_1$$

Reduced to zero.

2520. Creating S-polynomial from the pair  $(p_{33}, p_{79})$ .

Forming S-pol of  $p_{33}$  and  $p_{79}$ :

$$p_{598} = -2048u_2^{20}u_1^{11}x_{10}x_5 + (8192u_2^{17}u_1^{13} - 4096u_2^{17}u_1^{12})x_5x_4x_1 + \\ (1024u_2^{21}u_1^{10} - 4096u_2^{19}u_1^{12})x_5x_4 - 1024u_5u_2^{20}u_1^{10}x_5x_1 + \\ 2048u_5u_2^{20}u_1^{11}x_5 + 4096u_6u_2^{18}u_1^{12}x_4x_1 - 4096u_6u_2^{18}u_1^{12}x_4$$

S-pol added.

2521. Creating S-polynomial from the pair  $(p_{33}, p_{80})$ .

Forming S-pol of  $p_{33}$  and  $p_{80}$ :

$$p_{599} = 0$$

Reduced to zero.

2522. Creating S-polynomial from the pair  $(p_{33}, p_{81})$ .

Skipping pair  $p_{33}$  and  $p_{81}$  because gcd of their leading monoms is zero.

2523. Creating S-polynomial from the pair  $(p_{33}, p_{82})$ .

Skipping pair  $p_{33}$  and  $p_{82}$  because gcd of their leading monoms is zero.

2524. Creating S-polynomial from the pair  $(p_{33}, p_{83})$ .

Skipping pair  $p_{33}$  and  $p_{83}$  because gcd of their leading monoms is zero.

2525. Creating S-polynomial from the pair  $(p_{33}, p_{84})$ .

Skipping pair  $p_{33}$  and  $p_{84}$  because gcd of their leading monoms is zero.

2526. Creating S-polynomial from the pair  $(p_{33}, p_{85})$ .

Skipping pair  $p_{33}$  and  $p_{85}$  because gcd of their leading monoms is zero.

2527. Creating S-polynomial from the pair  $(p_{33}, p_{86})$ .  
 Skipping pair  $p_{33}$  and  $p_{86}$  because gcd of their leading monoms is zero.
2528. Creating S-polynomial from the pair  $(p_{33}, p_{87})$ .  
 Skipping pair  $p_{33}$  and  $p_{87}$  because gcd of their leading monoms is zero.
2529. Creating S-polynomial from the pair  $(p_{33}, p_{88})$ .  
 Skipping pair  $p_{33}$  and  $p_{88}$  because gcd of their leading monoms is zero.
2530. Creating S-polynomial from the pair  $(p_{33}, p_{89})$ .  
 Skipping pair  $p_{33}$  and  $p_{89}$  because gcd of their leading monoms is zero.
2531. Creating S-polynomial from the pair  $(p_{33}, p_{90})$ .  
 Skipping pair  $p_{33}$  and  $p_{90}$  because gcd of their leading monoms is zero.
2532. Creating S-polynomial from the pair  $(p_{33}, p_{91})$ .  
 Skipping pair  $p_{33}$  and  $p_{91}$  because gcd of their leading monoms is zero.
2533. Creating S-polynomial from the pair  $(p_{33}, p_{92})$ .  
 Skipping pair  $p_{33}$  and  $p_{92}$  because gcd of their leading monoms is zero.
2534. Creating S-polynomial from the pair  $(p_{33}, p_{93})$ .  
 Skipping pair  $p_{33}$  and  $p_{93}$  because gcd of their leading monoms is zero.
2535. Creating S-polynomial from the pair  $(p_{33}, p_{94})$ .  
 Skipping pair  $p_{33}$  and  $p_{94}$  because gcd of their leading monoms is zero.
2536. Creating S-polynomial from the pair  $(p_{33}, p_{95})$ .  
 Skipping pair  $p_{33}$  and  $p_{95}$  because gcd of their leading monoms is zero.
2537. Creating S-polynomial from the pair  $(p_{33}, p_{96})$ .  
 Skipping pair  $p_{33}$  and  $p_{96}$  because gcd of their leading monoms is zero.
2538. Creating S-polynomial from the pair  $(p_{33}, p_{97})$ .  
 Skipping pair  $p_{33}$  and  $p_{97}$  because gcd of their leading monoms is zero.
2539. Creating S-polynomial from the pair  $(p_{33}, p_{98})$ .  
 Forming S-pol of  $p_{33}$  and  $p_{98}$ : Polynomial too big for output (text size is 2088 characters, number of terms is 27)  
 Reduced to zero.
2540. Creating S-polynomial from the pair  $(p_{33}, p_{99})$ .  
 Skipping pair  $p_{33}$  and  $p_{99}$  because gcd of their leading monoms is zero.
2541. Creating S-polynomial from the pair  $(p_{33}, p_{100})$ .  
 Forming S-pol of  $p_{33}$  and  $p_{100}$ :
- $$p_{600} = 1048576u_5u_2^{23}u_1^{20}x_{12}x_{10} + (2097152u_5u_2^{22}u_1^{21} + 2097152u_2^{23}u_1^{21})x_{12}x_4 + \\
 (262144u_5^2u_2^{25}u_1^{18} - 1048576u_5^2u_2^{23}u_1^{20})x_{12} -$$

$$\begin{aligned}
& 1048576u_6u_2^{23}u_1^{20}x_{10}^2 - 1048576u_2^{23}u_1^{20}x_{10}x_5x_4 - \\
& 524288u_5u_2^{24}u_1^{19}x_{10}x_5 + 1048576u_6u_2^{22}u_1^{20}x_{10}x_4x_1 - \\
& 2097152u_6u_2^{22}u_1^{21}x_{10}x_4 - 262144u_6u_5u_2^{25}u_1^{18}x_{10} - \\
& 524288u_5u_2^{23}u_1^{19}x_5x_4x_1 - 131072u_5^2u_2^{26}u_1^{17}x_5 - \\
& 262144u_6u_5u_2^{24}u_1^{18}x_4x_1 + \\
& (131072u_6u_5u_2^{26}u_1^{17} + 524288u_6u_2^{25}u_1^{19})x_4 - 262144u_6u_5^2u_2^{25}u_1^{18}
\end{aligned}$$

Reduced to zero.

2542. Creating S-polynomial from the pair  $(p_{33}, p_{101})$ .

Forming S-pol of  $p_{33}$  and  $p_{101}$ :

$$\begin{aligned}
p_{601} = & 128u_5u_2^{10}u_1^7x_{12} - 64u_2^{11}u_1^6x_{10}x_5 - 128u_6u_2^{10}u_1^7x_{10} + \\
& 32u_2^{12}u_1^5x_5x_4 - 32u_5u_2^{11}u_1^5x_5x_1 + 64u_6u_2^{11}u_1^6x_4
\end{aligned}$$

Reduced to zero.

2543. Creating S-polynomial from the pair  $(p_{33}, p_{102})$ .

Forming S-pol of  $p_{33}$  and  $p_{102}$ :

$$\begin{aligned}
p_{602} = & -1024u_2^{19}u_1^{10}x_{10}x_5 + (4096u_2^{16}u_1^{12} - 2048u_2^{16}u_1^{11})x_5x_4x_1 + \\
& (512u_2^{20}u_1^9 - 2048u_2^{18}u_1^{11})x_5x_4 - 512u_5u_2^{19}u_1^9x_5x_1 + \\
& 1024u_5u_2^{19}u_1^{10}x_5 + 2048u_6u_2^{17}u_1^{11}x_4x_1 - 2048u_6u_2^{17}u_1^{11}x_4
\end{aligned}$$

S-pol added.

2544. Creating S-polynomial from the pair  $(p_{33}, p_{103})$ .

Forming S-pol of  $p_{33}$  and  $p_{103}$ : Polynomial too big for output (text size is 2098 characters, number of terms is 27)

Reduced to zero.

2545. Creating S-polynomial from the pair  $(p_{33}, p_{104})$ .

Skipping pair  $p_{33}$  and  $p_{104}$  because gcd of their leading monoms is zero.

2546. Creating S-polynomial from the pair  $(p_{33}, p_{105})$ .

Skipping pair  $p_{33}$  and  $p_{105}$  because gcd of their leading monoms is zero.

2547. Creating S-polynomial from the pair  $(p_{33}, p_{106})$ .

Skipping pair  $p_{33}$  and  $p_{106}$  because gcd of their leading monoms is zero.

2548. Creating S-polynomial from the pair  $(p_{34}, p_{35})$ .

Skipping pair  $p_{34}$  and  $p_{35}$  because gcd of their leading monoms is zero.

2549. Creating S-polynomial from the pair  $(p_{34}, p_{36})$ .

Skipping pair  $p_{34}$  and  $p_{36}$  because gcd of their leading monoms is zero.

2550. Creating S-polynomial from the pair  $(p_{34}, p_{37})$ .

Forming S-pol of  $p_{34}$  and  $p_{37}$ :

$$\begin{aligned} p_{603} = & 16384u_3^{13}u_2^{13}u_1^{14}x_{12}x_6x_5 + 8192u_5u_3^{13}u_2^{13}u_1^{13}x_{12}x_5x_2 - \\ & 16384u_5u_3^{13}u_2^{13}u_1^{14}x_{12}x_5 - 8192u_6u_3^{13}u_2^{13}u_1^{13}x_{12}x_4x_2 + \\ & 16384u_6u_3^{13}u_2^{13}u_1^{14}x_{12}x_4 - 16384u_3^{13}u_2^{13}u_1^{14}x_{10}x_8x_5 - \\ & 8192u_5u_3^{13}u_2^{13}u_1^{13}x_8x_5x_1 + 16384u_5u_3^{13}u_2^{13}u_1^{14}x_8x_5 + \\ & 8192u_6u_3^{13}u_2^{13}u_1^{13}x_8x_4x_1 - 16384u_6u_3^{13}u_2^{13}u_1^{14}x_8x_4 \end{aligned}$$

Reduced to zero.

2551. Creating S-polynomial from the pair  $(p_{34}, p_{38})$ .

Skipping pair  $p_{34}$  and  $p_{38}$  because gcd of their leading monoms is zero.

2552. Creating S-polynomial from the pair  $(p_{34}, p_{39})$ .

Skipping pair  $p_{34}$  and  $p_{39}$  because gcd of their leading monoms is zero.

2553. Creating S-polynomial from the pair  $(p_{34}, p_{40})$ .

Forming S-pol of  $p_{34}$  and  $p_{40}$ :

$$\begin{aligned} p_{604} = & -16384u_4^{13}u_2^{13}u_1^{14}x_{16}x_{10}x_5 - 8192u_5u_4^{13}u_2^{13}u_1^{13}x_{16}x_5x_1 + \\ & 16384u_5u_4^{13}u_2^{13}u_1^{14}x_{16}x_5 + 8192u_6u_4^{13}u_2^{13}u_1^{13}x_{16}x_4x_1 - \\ & 16384u_6u_4^{13}u_2^{13}u_1^{14}x_{16}x_4 + 16384u_4^{13}u_2^{13}u_1^{14}x_{14}x_{12}x_5 + \\ & 8192u_5u_4^{13}u_2^{13}u_1^{13}x_{12}x_5x_3 - 16384u_5u_4^{13}u_2^{13}u_1^{14}x_{12}x_5 - \\ & 8192u_6u_4^{13}u_2^{13}u_1^{13}x_{12}x_4x_3 + 16384u_6u_4^{13}u_2^{13}u_1^{14}x_{12}x_4 \end{aligned}$$

Reduced to zero.

2554. Creating S-polynomial from the pair  $(p_{34}, p_{41})$ .

Forming S-pol of  $p_{34}$  and  $p_{41}$ :

$$\begin{aligned} p_{605} = & -16384u_6u_3^{12}u_2^{13}u_1^{14}x_{12}x_6x_4 - 8192u_5u_3^{13}u_2^{13}u_1^{13}x_{12}x_5x_4 + \\ & 16384u_6u_3^{13}u_2^{13}u_1^{14}x_{12}x_4 - 8192u_6u_5^2u_3^{13}u_2^{13}u_1^{13}x_{12} + \\ & 16384u_5u_3^{12}u_2^{13}u_1^{14}x_{10}x_8x_5 + 8192u_5^2u_3^{12}u_2^{13}u_1^{13}x_8x_5x_1 - \\ & 16384u_5^2u_3^{12}u_2^{13}u_1^{14}x_8x_5 - 8192u_6u_5u_3^{12}u_2^{13}u_1^{13}x_8x_4x_1 + \\ & 16384u_6u_5u_3^{12}u_2^{13}u_1^{14}x_8x_4 \end{aligned}$$

Reduced to zero.

2555. Creating S-polynomial from the pair  $(p_{34}, p_{42})$ .

Forming S-pol of  $p_{34}$  and  $p_{42}$ :

$$\begin{aligned} p_{606} = & 16384u_5u_2^{25}u_1^{14}x_{10}x_5x_4 - 16384u_6u_2^{25}u_1^{14}x_{10}x_4^2 - \\ & 8192u_5u_2^{26}u_1^{13}x_5x_4^2 + 8192u_5^2u_2^{25}u_1^{13}x_5x_4x_1 - \\ & 16384u_5^2u_2^{25}u_1^{14}x_5x_4 - 8192u_6u_5u_2^{25}u_1^{13}x_4^2x_1 + \\ & (16384u_6u_5u_2^{25}u_1^{14} + 16384u_6u_2^{26}u_1^{14})x_4^2 - 8192u_6u_5^2u_2^{26}u_1^{13}x_4 \end{aligned}$$

Reduced to zero.

2556. Creating S-polynomial from the pair  $(p_{34}, p_{43})$ .

Forming S-pol of  $p_{34}$  and  $p_{43}$ :

$$\begin{aligned} p_{607} = & 16384u_5u_4^{12}u_2^{13}u_1^{14}x_{16}x_{10}x_5 + 8192u_5^2u_4^{12}u_2^{13}u_1^{13}x_{16}x_5x_1 - \\ & 16384u_5^2u_4^{12}u_2^{13}u_1^{14}x_{16}x_5 - 8192u_6u_5u_4^{12}u_2^{13}u_1^{13}x_{16}x_4x_1 + \\ & 16384u_6u_5u_4^{12}u_2^{13}u_1^{14}x_{16}x_4 - 16384u_6u_4^{12}u_2^{13}u_1^{14}x_{14}x_{12}x_4 - \\ & 8192u_5u_4^{13}u_2^{13}u_1^{13}x_{12}x_5x_4 + 16384u_6u_4^{13}u_2^{13}u_1^{14}x_{12}x_4 - \\ & 8192u_6u_5^2u_4^{13}u_2^{13}u_1^{13}x_{12} \end{aligned}$$

Reduced to zero.

2557. Creating S-polynomial from the pair  $(p_{34}, p_{44})$ .

Skipping pair  $p_{34}$  and  $p_{44}$  because gcd of their leading monoms is zero.

2558. Creating S-polynomial from the pair  $(p_{34}, p_{45})$ .

Skipping pair  $p_{34}$  and  $p_{45}$  because gcd of their leading monoms is zero.

2559. Creating S-polynomial from the pair  $(p_{34}, p_{46})$ .

Skipping pair  $p_{34}$  and  $p_{46}$  because gcd of their leading monoms is zero.

2560. Creating S-polynomial from the pair  $(p_{34}, p_{47})$ .

Forming S-pol of  $p_{34}$  and  $p_{47}$ : Polynomial too big for output (text size is 1644 characters, number of terms is 17)

Reduced to zero.

2561. Creating S-polynomial from the pair  $(p_{34}, p_{48})$ .

Skipping pair  $p_{34}$  and  $p_{48}$  because gcd of their leading monoms is zero.

2562. Creating S-polynomial from the pair  $(p_{34}, p_{49})$ .

Skipping pair  $p_{34}$  and  $p_{49}$  because gcd of their leading monoms is zero.

2563. Creating S-polynomial from the pair  $(p_{34}, p_{50})$ .

Skipping pair  $p_{34}$  and  $p_{50}$  because gcd of their leading monoms is zero.

2564. Creating S-polynomial from the pair  $(p_{34}, p_{51})$ .

Skipping pair  $p_{34}$  and  $p_{51}$  because gcd of their leading monoms is zero.

2565. Creating S-polynomial from the pair  $(p_{34}, p_{52})$ .

Forming S-pol of  $p_{34}$  and  $p_{52}$ : Polynomial too big for output (text size is 1425 characters, number of terms is 16)

Reduced to zero.

2566. Creating S-polynomial from the pair  $(p_{34}, p_{53})$ .

Skipping pair  $p_{34}$  and  $p_{53}$  because gcd of their leading monoms is zero.

2567. Creating S-polynomial from the pair  $(p_{34}, p_{54})$ .

Skipping pair  $p_{34}$  and  $p_{54}$  because gcd of their leading monoms is zero.

2568. Creating S-polynomial from the pair  $(p_{34}, p_{55})$ .

Forming S-pol of  $p_{34}$  and  $p_{55}$ :

$$\begin{aligned} p_{608} = & 262144u_2^{25}u_1^{18}x_{12}x_4^2 + (-32768u_5u_2^{28}u_1^{15} + 524288u_5u_2^{24}u_1^{19})x_{12}x_4 + \\ & (-131072u_2^{26}u_1^{17} - 524288u_2^{24}u_1^{19})x_{10}^2x_5 + 65536u_2^{27}u_1^{16}x_{10}x_5x_4 + \\ & (-65536u_5u_2^{26}u_1^{16} - 262144u_5u_2^{24}u_1^{18})x_{10}x_5x_1 + \\ & (131072u_5u_2^{26}u_1^{17} + 524288u_5u_2^{24}u_1^{19})x_{10}x_5 + \\ & (65536u_6u_2^{26}u_1^{16} + 262144u_6u_2^{24}u_1^{18})x_{10}x_4x_1 + \\ & (-131072u_6u_2^{26}u_1^{17} - 524288u_6u_2^{24}u_1^{19})x_{10}x_4 - \\ & 131072u_5u_2^{25}u_1^{17}x_5x_4x_1 + 16384u_5u_2^{29}u_1^{14}x_5x_4 - \\ & 32768u_6u_2^{27}u_1^{15}x_4^2x_1 + 65536u_6u_2^{27}u_1^{16}x_4^2 + \\ & (-16384u_6u_5u_2^{28}u_1^{14} - 65536u_6u_5u_2^{26}u_1^{16})x_4x_1 \end{aligned}$$

Reduced to zero.

2569. Creating S-polynomial from the pair  $(p_{34}, p_{56})$ .

Skipping pair  $p_{34}$  and  $p_{56}$  because gcd of their leading monoms is zero.

2570. Creating S-polynomial from the pair  $(p_{34}, p_{57})$ .

Forming S-pol of  $p_{34}$  and  $p_{57}$ : Polynomial too big for output (text size is 1300 characters, number of terms is 16)

S-pol added.

2571. Creating S-polynomial from the pair  $(p_{34}, p_{58})$ .

Forming S-pol of  $p_{34}$  and  $p_{58}$ :

$$\begin{aligned} p_{609} = & -8192u_2^{20}u_1^{13}x_{12}x_4^2 - 16384u_5u_2^{19}u_1^{14}x_{12}x_4 + \\ & 16384u_2^{19}u_1^{14}x_{10}^2x_5 + 8192u_5u_2^{19}u_1^{13}x_{10}x_5x_1 - \\ & 16384u_5u_2^{19}u_1^{14}x_{10}x_5 - 8192u_6u_2^{19}u_1^{13}x_{10}x_4x_1 + \\ & (4096u_6u_2^{21}u_1^{12} + 16384u_6u_2^{19}u_1^{14})x_{10}x_4 + 4096u_5u_2^{20}u_1^{12}x_5x_4x_1 - \\ & 2048u_6u_2^{22}u_1^{11}x_4^2 + 2048u_6u_5u_2^{21}u_1^{11}x_4x_1 \end{aligned}$$

Reduced to zero.

2572. Creating S-polynomial from the pair  $(p_{34}, p_{59})$ .

Forming S-pol of  $p_{34}$  and  $p_{59}$ :

$$\begin{aligned} p_{610} = & 16384u_2^{26}u_1^{14}x_{12}x_4^2 - 8192u_5u_2^{27}u_1^{13}x_{12}x_4 + \\ & (-32768u_2^{25}u_1^{15} - 131072u_2^{23}u_1^{17})x_{10}^2x_5 + 65536u_2^{24}u_1^{16}x_{10}x_5x_4 + \\ & (-16384u_5u_2^{25}u_1^{14} - 65536u_5u_2^{23}u_1^{16})x_{10}x_5x_1 + \\ & (32768u_5u_2^{25}u_1^{15} + 131072u_5u_2^{23}u_1^{17})x_{10}x_5 + \\ & (16384u_6u_2^{25}u_1^{14} + 65536u_6u_2^{23}u_1^{16})x_{10}x_4x_1 - 32768u_6u_2^{25}u_1^{15}x_{10}x_4 - \\ & 8192u_5u_2^{26}u_1^{13}x_5x_4x_1 + \\ & (4096u_5u_2^{28}u_1^{12} + 16384u_5u_2^{26}u_1^{14})x_5x_4 - 32768u_6u_2^{24}u_1^{15}x_4^2x_1 + \\ & (-4096u_6u_5u_2^{27}u_1^{12} - 16384u_6u_5u_2^{25}u_1^{14})x_4x_1 \end{aligned}$$

Reduced to zero.



2573. Creating S-polynomial from the pair  $(p_{34}, p_{60})$ .

Forming S-pol of  $p_{34}$  and  $p_{60}$ :

$$\begin{aligned} p_{611} = & (-2048u_2^{23}u_1^{11} - 8192u_2^{21}u_1^{13})x_{12}x_{10}x_5 + \\ & (1024u_2^{24}u_1^{10} + 4096u_2^{22}u_1^{12})x_{12}x_5x_4 + \\ & (-1024u_5u_2^{23}u_1^{10} - 4096u_5u_2^{21}u_1^{12})x_{12}x_5x_1 + \\ & (2048u_5u_2^{23}u_1^{11} + 8192u_5u_2^{21}u_1^{13})x_{12}x_5 + \\ & (1024u_6u_2^{23}u_1^{10} + 4096u_6u_2^{21}u_1^{12})x_{12}x_4x_1 + \\ & (-512u_6u_2^{25}u_1^9 - 2048u_6u_2^{23}u_1^{11})x_{12}x_4 + \\ & (-512u_6u_2^{24}u_1^9 - 2048u_6u_2^{22}u_1^{11})x_5x_4x_1 + \\ & (256u_6u_2^{26}u_1^8 + 1024u_6u_2^{24}u_1^{10})x_5x_4 + \\ & (-256u_6^2u_2^{25}u_1^8 - 1024u_6^2u_2^{23}u_1^{10})x_4x_1 \end{aligned}$$

Reduced to zero.

2574. Creating S-polynomial from the pair  $(p_{34}, p_{61})$ .

Forming S-pol of  $p_{34}$  and  $p_{61}$ :

$$\begin{aligned} p_{612} = & 4096u_5u_2^{21}u_1^{12}x_{12}x_4 + 16384u_2^{19}u_1^{14}x_{10}^2x_5 - \\ & 8192u_2^{20}u_1^{13}x_{10}x_5x_4 + 8192u_5u_2^{19}u_1^{13}x_{10}x_5x_1 - \\ & 16384u_5u_2^{19}u_1^{14}x_{10}x_5 - 8192u_6u_2^{19}u_1^{13}x_{10}x_4x_1 - \\ & 2048u_5u_2^{22}u_1^{11}x_5x_4 + 4096u_6u_2^{20}u_1^{12}x_4^2x_1 + \\ & 2048u_6u_5u_2^{21}u_1^{11}x_4x_1 \end{aligned}$$

Reduced to zero.

2575. Creating S-polynomial from the pair  $(p_{34}, p_{62})$ .

Forming S-pol of  $p_{34}$  and  $p_{62}$ : Polynomial too big for output (text size is 1129 characters, number of terms is 16)

S-pol added.

2576. Creating S-polynomial from the pair  $(p_{34}, p_{63})$ .

Forming S-pol of  $p_{34}$  and  $p_{63}$ :

$$\begin{aligned} p_{613} = & 1024u_2^{17}u_1^{10}x_{12}x_{10}x_5 - 512u_2^{18}u_1^9x_{12}x_5x_4 + \\ & 512u_5u_2^{17}u_1^9x_{12}x_5x_1 - 1024u_5u_2^{17}u_1^{10}x_{12}x_5 - \\ & 512u_6u_2^{17}u_1^9x_{12}x_4x_1 + 256u_6u_2^{19}u_1^8x_{12}x_4 + \\ & 256u_6u_2^{18}u_1^8x_5x_4x_1 - 128u_6u_2^{20}u_1^7x_5x_4 + \\ & 128u_6^2u_2^{19}u_1^7x_4x_1 \end{aligned}$$

Reduced to zero.

2577. Creating S-polynomial from the pair  $(p_{34}, p_{64})$ .  
 Skipping pair  $p_{34}$  and  $p_{64}$  because gcd of their leading monoms is zero.
2578. Creating S-polynomial from the pair  $(p_{34}, p_{65})$ .  
 Skipping pair  $p_{34}$  and  $p_{65}$  because gcd of their leading monoms is zero.
2579. Creating S-polynomial from the pair  $(p_{34}, p_{66})$ .  
 Skipping pair  $p_{34}$  and  $p_{66}$  because gcd of their leading monoms is zero.
2580. Creating S-polynomial from the pair  $(p_{34}, p_{67})$ .  
 Forming S-pol of  $p_{34}$  and  $p_{67}$ : Polynomial too big for output (text size is 1659 characters, number of terms is 17)  
 Reduced to zero.
2581. Creating S-polynomial from the pair  $(p_{34}, p_{68})$ .  
 Skipping pair  $p_{34}$  and  $p_{68}$  because gcd of their leading monoms is zero.
2582. Creating S-polynomial from the pair  $(p_{34}, p_{69})$ .  
 Skipping pair  $p_{34}$  and  $p_{69}$  because gcd of their leading monoms is zero.
2583. Creating S-polynomial from the pair  $(p_{34}, p_{70})$ .  
 Skipping pair  $p_{34}$  and  $p_{70}$  because gcd of their leading monoms is zero.
2584. Creating S-polynomial from the pair  $(p_{34}, p_{71})$ .  
 Skipping pair  $p_{34}$  and  $p_{71}$  because gcd of their leading monoms is zero.
2585. Creating S-polynomial from the pair  $(p_{34}, p_{72})$ .  
 Forming S-pol of  $p_{34}$  and  $p_{72}$ : Polynomial too big for output (text size is 1435 characters, number of terms is 16)  
 Reduced to zero.
2586. Creating S-polynomial from the pair  $(p_{34}, p_{73})$ .  
 Skipping pair  $p_{34}$  and  $p_{73}$  because gcd of their leading monoms is zero.
2587. Creating S-polynomial from the pair  $(p_{34}, p_{74})$ .  
 Forming S-pol of  $p_{34}$  and  $p_{74}$ :
- $$\begin{aligned}
 p_{614} = & -65536u_5u_2^{23}u_1^{16}x_{10}x_5 + 65536u_6u_2^{23}u_1^{16}x_{10}x_4 + \\
 & 32768u_5u_2^{24}u_1^{15}x_5x_4 - 32768u_5^2u_2^{23}u_1^{15}x_5x_1 + \\
 & 65536u_5^2u_2^{23}u_1^{16}x_5 - 32768u_6u_2^{24}u_1^{15}x_4^2 + \\
 & 32768u_6u_5u_2^{23}u_1^{15}x_4x_1 - 65536u_6u_5u_2^{23}u_1^{16}x_4
 \end{aligned}$$
- Reduced to zero.
2588. Creating S-polynomial from the pair  $(p_{34}, p_{75})$ .  
 Skipping pair  $p_{34}$  and  $p_{75}$  because gcd of their leading monoms is zero.

2589. Creating S-polynomial from the pair  $(p_{34}, p_{76})$ .

Forming S-pol of  $p_{34}$  and  $p_{76}$ :

$$\begin{aligned} p_{615} = & 33554432u_5u_2^{32}u_1^{25}x_{12}x_4^2 + 16777216u_5^2u_2^{33}u_1^{24}x_{12}x_4 + \\ & 67108864u_5u_2^{31}u_1^{26}x_{10}x_5 - 67108864u_6u_2^{31}u_1^{26}x_{10}x_4 - \\ & 33554432u_5u_2^{32}u_1^{25}x_{10}x_5x_4 + 33554432u_5^2u_2^{31}u_1^{25}x_{10}x_5x_1 - \\ & 67108864u_5^2u_2^{31}u_1^{26}x_{10}x_5 - 33554432u_6u_5u_2^{31}u_1^{25}x_{10}x_4x_1 + \\ & (-16777216u_6u_5u_2^{33}u_1^{24} + 67108864u_6u_5u_2^{31}u_1^{26})x_{10}x_4 - \\ & 16777216u_5u_2^{33}u_1^{24}x_5x_4^2 - 8388608u_5^2u_2^{34}u_1^{23}x_5x_4 + \\ & (8388608u_6u_5u_2^{34}u_1^{23} + 33554432u_6u_2^{33}u_1^{25})x_4^2 - \\ & 16777216u_6u_5^2u_2^{33}u_1^{24}x_4 \end{aligned}$$

Reduced to zero.

2590. Creating S-polynomial from the pair  $(p_{34}, p_{77})$ .

Forming S-pol of  $p_{34}$  and  $p_{77}$ :

$$\begin{aligned} p_{616} = & 8192u_5u_2^{21}u_1^{13}x_{12}x_4 + 32768u_2^{19}u_1^{15}x_{10}x_5 - \\ & 16384u_2^{20}u_1^{14}x_{10}x_5x_4 + 16384u_5u_2^{19}u_1^{14}x_{10}x_5x_1 - \\ & 32768u_5u_2^{19}u_1^{15}x_{10}x_5 - 16384u_6u_2^{19}u_1^{14}x_{10}x_4x_1 - \\ & 4096u_5u_2^{22}u_1^{12}x_5x_4 + 8192u_6u_2^{20}u_1^{13}x_4^2x_1 + \\ & 4096u_6u_5u_2^{21}u_1^{12}x_4x_1 \end{aligned}$$

Reduced to zero.

2591. Creating S-polynomial from the pair  $(p_{34}, p_{78})$ .

Forming S-pol of  $p_{34}$  and  $p_{78}$ :

$$\begin{aligned} p_{617} = & -16384u_2^{20}u_1^{14}x_{12}x_4^2 - 32768u_5u_2^{19}u_1^{15}x_{12}x_4 + \\ & 32768u_2^{19}u_1^{15}x_{10}x_5 + 16384u_5u_2^{19}u_1^{14}x_{10}x_5x_1 - \\ & 32768u_5u_2^{19}u_1^{15}x_{10}x_5 - 16384u_6u_2^{19}u_1^{14}x_{10}x_4x_1 + \\ & (8192u_6u_2^{21}u_1^{13} + 32768u_6u_2^{19}u_1^{15})x_{10}x_4 + 8192u_5u_2^{20}u_1^{13}x_5x_4x_1 - \\ & 4096u_6u_2^{22}u_1^{12}x_4^2 + 4096u_6u_5u_2^{21}u_1^{12}x_4x_1 \end{aligned}$$

Reduced to zero.

2592. Creating S-polynomial from the pair  $(p_{34}, p_{79})$ .

Forming S-pol of  $p_{34}$  and  $p_{79}$ :

$$\begin{aligned} p_{618} = & 131072u_2^{25}u_1^{17}x_{10}x_5x_4 + (-262144u_2^{24}u_1^{18} + 131072u_2^{24}u_1^{17})x_5x_4^2x_1 + \\ & (131072u_2^{26}u_1^{17} - 65536u_2^{26}u_1^{16})x_5x_4^2 + 65536u_5u_2^{25}u_1^{16}x_5x_4x_1 - \\ & 131072u_5u_2^{25}u_1^{17}x_5x_4 - 131072u_6u_2^{25}u_1^{17}x_4^2x_1 + \\ & 131072u_6u_2^{25}u_1^{17}x_4^2 \end{aligned}$$

S-pol added.

2593. Creating S-polynomial from the pair  $(p_{34}, p_{80})$ .

Forming S-pol of  $p_{34}$  and  $p_{80}$ :

$$p_{619} = 1024u_2^{19}u_1^{10}x_{10}x_5 - 512u_2^{20}u_1^9x_5x_4 + 512u_5u_2^{19}u_1^9x_5x_1 - \\ 1024u_5u_2^{19}u_1^{10}x_5$$

Reduced to zero.

2594. Creating S-polynomial from the pair  $(p_{34}, p_{81})$ .

Skipping pair  $p_{34}$  and  $p_{81}$  because gcd of their leading monoms is zero.

2595. Creating S-polynomial from the pair  $(p_{34}, p_{82})$ .

Skipping pair  $p_{34}$  and  $p_{82}$  because gcd of their leading monoms is zero.

2596. Creating S-polynomial from the pair  $(p_{34}, p_{83})$ .

Skipping pair  $p_{34}$  and  $p_{83}$  because gcd of their leading monoms is zero.

2597. Creating S-polynomial from the pair  $(p_{34}, p_{84})$ .

Skipping pair  $p_{34}$  and  $p_{84}$  because gcd of their leading monoms is zero.

2598. Creating S-polynomial from the pair  $(p_{34}, p_{85})$ .

Skipping pair  $p_{34}$  and  $p_{85}$  because gcd of their leading monoms is zero.

2599. Creating S-polynomial from the pair  $(p_{34}, p_{86})$ .

Forming S-pol of  $p_{34}$  and  $p_{86}$ : Polynomial too big for output (text size is 1027 characters, number of terms is 12)

S-pol added.

2600. Creating S-polynomial from the pair  $(p_{34}, p_{87})$ .

Skipping pair  $p_{34}$  and  $p_{87}$  because gcd of their leading monoms is zero.

2601. Creating S-polynomial from the pair  $(p_{34}, p_{88})$ .

Skipping pair  $p_{34}$  and  $p_{88}$  because gcd of their leading monoms is zero.

2602. Creating S-polynomial from the pair  $(p_{34}, p_{89})$ .

Skipping pair  $p_{34}$  and  $p_{89}$  because gcd of their leading monoms is zero.

2603. Creating S-polynomial from the pair  $(p_{34}, p_{90})$ .

Skipping pair  $p_{34}$  and  $p_{90}$  because gcd of their leading monoms is zero.

2604. Creating S-polynomial from the pair  $(p_{34}, p_{91})$ .

Skipping pair  $p_{34}$  and  $p_{91}$  because gcd of their leading monoms is zero.

2605. Creating S-polynomial from the pair  $(p_{34}, p_{92})$ .

Skipping pair  $p_{34}$  and  $p_{92}$  because gcd of their leading monoms is zero.

2606. Creating S-polynomial from the pair  $(p_{34}, p_{93})$ .

Forming S-pol of  $p_{34}$  and  $p_{93}$ : Polynomial too big for output (text size is 1033 characters, number of terms is 12)

S-pol added.

2607. Creating S-polynomial from the pair  $(p_{34}, p_{94})$ .

Skipping pair  $p_{34}$  and  $p_{94}$  because gcd of their leading monoms is zero.

2608. Creating S-polynomial from the pair  $(p_{34}, p_{95})$ .

Forming S-pol of  $p_{34}$  and  $p_{95}$ : Polynomial too big for output (text size is 1107 characters, number of terms is 16)

Reduced to zero.

2609. Creating S-polynomial from the pair  $(p_{34}, p_{96})$ .

Forming S-pol of  $p_{34}$  and  $p_{96}$ :

$$\begin{aligned} p_{620} = & -4096u_5u_3^4u_2^{13}u_1^{12}x_{12}x_8 + 2048u_5^5u_3^{13}u_1^{11}x_{12}x_6x_5 + \\ & 4096u_6u_3^4u_2^{13}u_1^{12}x_{12}x_6 + 1024u_5u_3^5u_2^{13}u_1^{10}x_{12}x_5x_2 - \\ & 1024u_6u_3^5u_2^{13}u_1^{10}x_{12}x_4x_2 - 2048u_3^5u_2^{13}u_1^{11}x_{10}x_8x_5 - \\ & 1024u_5u_3^5u_2^{13}u_1^{10}x_8x_5x_1 + 2048u_5u_3^5u_2^{13}u_1^{11}x_8x_5 + \\ & 1024u_6u_3^5u_2^{13}u_1^{10}x_8x_4x_1 - 2048u_6u_3^5u_2^{13}u_1^{11}x_8x_4 \end{aligned}$$

Reduced to zero.

2610. Creating S-polynomial from the pair  $(p_{34}, p_{97})$ .

Forming S-pol of  $p_{34}$  and  $p_{97}$ :

$$\begin{aligned} p_{621} = & 32768u_3^{13}u_2^{13}u_1^{15}x_{12}x_6x_5 + \\ & (-131072u_3^{10}u_2^{13}u_1^{17} + 65536u_3^{10}u_2^{13}u_1^{16})x_{12}x_5x_4x_2 + \\ & 65536u_3^{12}u_2^{13}u_1^{16}x_{12}x_5x_4 + 16384u_5u_3^{13}u_2^{13}u_1^{14}x_{12}x_5x_2 - \\ & 32768u_5u_3^{13}u_2^{13}u_1^{15}x_{12}x_5 + \\ & (-16384u_6u_3^{13}u_2^{13}u_1^{14} - 65536u_6u_3^{11}u_2^{13}u_1^{16})x_{12}x_4x_2 + \\ & (32768u_6u_3^{13}u_2^{13}u_1^{15} + 65536u_6u_3^{11}u_2^{13}u_1^{16})x_{12}x_4 - \\ & 32768u_3^{13}u_2^{13}u_1^{15}x_{10}x_8x_5 - 16384u_5u_3^{13}u_2^{13}u_1^{14}x_8x_5x_1 + \\ & 32768u_5u_3^{13}u_2^{13}u_1^{15}x_8x_5 + 16384u_6u_3^{13}u_2^{13}u_1^{14}x_8x_4x_1 - \\ & 32768u_6u_3^{13}u_2^{13}u_1^{15}x_8x_4 \end{aligned}$$

S-pol added.

2611. Creating S-polynomial from the pair  $(p_{34}, p_{98})$ .

Forming S-pol of  $p_{34}$  and  $p_{98}$ : Polynomial too big for output (text size is 2774 characters, number of terms is 31)

Reduced to zero.

2612. Creating S-polynomial from the pair  $(p_{34}, p_{99})$ .

Skipping pair  $p_{34}$  and  $p_{99}$  because gcd of their leading monoms is zero.

2613. Creating S-polynomial from the pair  $(p_{34}, p_{100})$ .

Forming S-pol of  $p_{34}$  and  $p_{100}$ :

$$\begin{aligned}
p_{622} = & -33554432u_5u_2^{30}u_1^{25}x_{12}x_{10}x_4 + \\
& (-67108864u_5u_2^{29}u_1^{26} - 67108864u_2^{30}u_1^{26})x_{12}x_4^2 + \\
& (-8388608u_5^2u_2^{32}u_1^{23} + 33554432u_5^2u_2^{30}u_1^{25})x_{12}x_4 + \\
& 67108864u_2^{29}u_1^{26}x_{10}^2x_5 + 33554432u_6u_2^{30}u_1^{25}x_{10}^2x_4 + \\
& 16777216u_5u_2^{31}u_1^{24}x_{10}x_5x_4 + 33554432u_5u_2^{29}u_1^{25}x_{10}x_5x_1 - \\
& 67108864u_5u_2^{29}u_1^{26}x_{10}x_5 - 33554432u_6u_2^{29}u_1^{25}x_{10}x_4x_1 + \\
& (8388608u_6u_5u_2^{32}u_1^{23} + 67108864u_6u_2^{29}u_1^{26})x_{10}x_4 + \\
& 16777216u_5u_2^{30}u_1^{24}x_5x_4^2x_1 + 4194304u_5^2u_2^{33}u_1^{22}x_5x_4 + \\
& 8388608u_6u_5u_2^{31}u_1^{23}x_4^2x_1 + \\
& (-4194304u_6u_5u_2^{33}u_1^{22} - 16777216u_6u_2^{32}u_1^{24})x_4^2 + \\
& 8388608u_6u_5^2u_2^{32}u_1^{23}x_4
\end{aligned}$$

S-pol added.

2614. Creating S-polynomial from the pair  $(p_{34}, p_{101})$ .

Forming S-pol of  $p_{34}$  and  $p_{101}$ :

$$\begin{aligned}
p_{623} = & -4096u_5u_2^{17}u_1^{12}x_{12}x_4 + 4096u_6u_2^{17}u_1^{12}x_{10}x_4 + \\
& 2048u_5u_2^{18}u_1^{11}x_5x_4 - 2048u_6u_2^{18}u_1^{11}x_4^2
\end{aligned}$$

Reduced to zero.

2615. Creating S-polynomial from the pair  $(p_{34}, p_{102})$ .

Forming S-pol of  $p_{34}$  and  $p_{102}$ :

$$\begin{aligned}
p_{624} = & (-131072u_2^{23}u_1^{17} + 65536u_2^{23}u_1^{16})x_5x_4^2x_1 + 65536u_2^{25}u_1^{16}x_5x_4^2 - \\
& 65536u_6u_2^{24}u_1^{16}x_4^2x_1 + 65536u_6u_2^{24}u_1^{16}x_4^2
\end{aligned}$$

S-pol added.

2616. Creating S-polynomial from the pair  $(p_{34}, p_{103})$ .

Forming S-pol of  $p_{34}$  and  $p_{103}$ : Polynomial too big for output (text size is 2785 characters, number of terms is 31)

Reduced to zero.

2617. Creating S-polynomial from the pair  $(p_{34}, p_{104})$ .

Forming S-pol of  $p_{34}$  and  $p_{104}$ : Polynomial too big for output (text size is 1124 characters, number of terms is 16)

Reduced to zero.

2618. Creating S-polynomial from the pair  $(p_{34}, p_{105})$ .

Forming S-pol of  $p_{34}$  and  $p_{105}$ :

$$\begin{aligned} p_{625} = & -4096u_5u_4^4u_2^{13}u_1^{12}x_{16}x_{12} - 2048u_4^5u_2^{13}u_1^{11}x_{16}x_{10}x_5 - \\ & 1024u_5u_4^5u_2^{13}u_1^{10}x_{16}x_5x_1 + 2048u_5u_4^5u_2^{13}u_1^{11}x_{16}x_5 + \\ & 1024u_6u_4^5u_2^{13}u_1^{10}x_{16}x_4x_1 - 2048u_6u_4^5u_2^{13}u_1^{11}x_{16}x_4 + \\ & 2048u_4^5u_2^{13}u_1^{11}x_{14}x_{12}x_5 + 4096u_6u_4^4u_2^{13}u_1^{12}x_{14}x_{12} + \\ & 1024u_5u_4^5u_2^{13}u_1^{10}x_{12}x_5x_3 - 1024u_6u_4^5u_2^{13}u_1^{10}x_{12}x_4x_3 \end{aligned}$$

Reduced to zero.

2619. Creating S-polynomial from the pair  $(p_{34}, p_{106})$ .

Forming S-pol of  $p_{34}$  and  $p_{106}$ :

$$\begin{aligned} p_{626} = & -32768u_4^{13}u_2^{13}u_1^{15}x_{16}x_{10}x_5 - 16384u_5u_4^{13}u_2^{13}u_1^{14}x_{16}x_5x_1 + \\ & 32768u_5u_4^{13}u_2^{13}u_1^{15}x_{16}x_5 + 16384u_6u_4^{13}u_2^{13}u_1^{14}x_{16}x_4x_1 - \\ & 32768u_6u_4^{13}u_2^{13}u_1^{15}x_{16}x_4 + 32768u_4^{13}u_2^{13}u_1^{15}x_{14}x_{12}x_5 + \\ & (-131072u_4^{10}u_2^{13}u_1^{17} + 65536u_4^{10}u_2^{13}u_1^{16})x_{12}x_5x_4x_3 + \\ & 65536u_4^{12}u_2^{13}u_1^{16}x_{12}x_5x_4 + 16384u_5u_4^{13}u_2^{13}u_1^{14}x_{12}x_5x_3 - \\ & 32768u_5u_4^{13}u_2^{13}u_1^{15}x_{12}x_5 + \\ & (-16384u_6u_4^{13}u_2^{13}u_1^{14} - 65536u_6u_4^{11}u_2^{13}u_1^{16})x_{12}x_4x_3 + \\ & (32768u_6u_4^{13}u_2^{13}u_1^{15} + 65536u_6u_4^{11}u_2^{13}u_1^{16})x_{12}x_4 \end{aligned}$$

S-pol added.

2620. Creating S-polynomial from the pair  $(p_{35}, p_{36})$ .

Skipping pair  $p_{35}$  and  $p_{36}$  because gcd of their leading monoms is zero.

2621. Creating S-polynomial from the pair  $(p_{35}, p_{37})$ .

Skipping pair  $p_{35}$  and  $p_{37}$  because gcd of their leading monoms is zero.

2622. Creating S-polynomial from the pair  $(p_{35}, p_{38})$ .

Skipping pair  $p_{35}$  and  $p_{38}$  because gcd of their leading monoms is zero.

2623. Creating S-polynomial from the pair  $(p_{35}, p_{39})$ .

Skipping pair  $p_{35}$  and  $p_{39}$  because gcd of their leading monoms is zero.

2624. Creating S-polynomial from the pair  $(p_{35}, p_{40})$ .

Skipping pair  $p_{35}$  and  $p_{40}$  because gcd of their leading monoms is zero.

2625. Creating S-polynomial from the pair  $(p_{35}, p_{41})$ .

Skipping pair  $p_{35}$  and  $p_{41}$  because gcd of their leading monoms is zero.

2626. Creating S-polynomial from the pair  $(p_{35}, p_{42})$ .

Skipping pair  $p_{35}$  and  $p_{42}$  because gcd of their leading monoms is zero.

2627. Creating S-polynomial from the pair  $(p_{35}, p_{43})$ .

Skipping pair  $p_{35}$  and  $p_{43}$  because gcd of their leading monoms is zero.

2628. Creating S-polynomial from the pair  $(p_{35}, p_{44})$ .

Forming S-pol of  $p_{35}$  and  $p_{44}$ :

$$\begin{aligned} p_{627} = & (-32u_5u_3^{16}u_1^5 - 128u_5u_3^{14}u_1^7)x_6x_2 + \\ & (16u_5u_3^{18}u_1^4 + 64u_5u_3^{16}u_1^6)x_6 + \\ & (16u_5u_3^{17}u_1^4 + 64u_5u_3^{15}u_1^6)x_4x_2 + \\ & (-8u_5u_3^{19}u_1^3 - 32u_5u_3^{17}u_1^5)x_4 + \\ & (8u_5^2u_3^{18}u_1^3 + 32u_5^2u_3^{16}u_1^5)x_2 \end{aligned}$$

Reduced to zero.

2629. Creating S-polynomial from the pair  $(p_{35}, p_{45})$ .

Forming S-pol of  $p_{35}$  and  $p_{45}$ :

$$\begin{aligned} p_{628} = & 2048u_3^{20}u_1^{11}x_8x_4 + (-2048u_5u_3^{19}u_1^{11} - 8192u_5u_3^{17}u_1^{13})x_8x_2 + \\ & (1024u_5u_3^{21}u_1^{10} + 4096u_5u_3^{19}u_1^{12})x_8 - 2048u_3^{20}u_1^{11}x_6x_5 + \\ & 4096u_5u_3^{18}u_1^{12}x_5x_2 - 512u_5u_3^{22}u_1^9x_5 + 1024u_6u_3^{20}u_1^{10}x_4x_2 - \\ & 2048u_6u_3^{20}u_1^{11}x_4 + (512u_6u_5u_3^{21}u_1^9 + 2048u_6u_5u_3^{19}u_1^{11})x_2 \end{aligned}$$

Reduced to zero.

2630. Creating S-polynomial from the pair  $(p_{35}, p_{46})$ .

Forming S-pol of  $p_{35}$  and  $p_{46}$ :

$$\begin{aligned} p_{629} = & 16u_5u_3^{10}u_1^4x_6x_2 - 8u_5u_3^{12}u_1^3x_6 - 8u_5u_3^{11}u_1^3x_4x_2 + \\ & 4u_5u_3^{13}u_1^2x_4 - 4u_5^2u_3^{12}u_1^2x_2 \end{aligned}$$

Reduced to zero.

2631. Creating S-polynomial from the pair  $(p_{35}, p_{47})$ .

Forming S-pol of  $p_{35}$  and  $p_{47}$ :

$$\begin{aligned} p_{630} = & (1048576u_3^{30}u_1^{20} + 4194304u_3^{28}u_1^{22})x_8x_4^2 + \\ & (-1048576u_5u_3^{29}u_1^{20} - 4194304u_5u_3^{27}u_1^{22})x_8x_4x_2 + \\ & (524288u_5u_3^{31}u_1^{19} + 2097152u_5u_3^{29}u_1^{21} - 8388608u_3^{28}u_1^{23})x_8x_4 + \\ & (-1048576u_5^2u_3^{30}u_1^{20} + 4194304u_5^2u_3^{28}u_1^{22})x_8 - \\ & 2097152u_3^{29}u_1^{21}x_6^2x_5 + \\ & (-524288u_5u_3^{31}u_1^{19} + 2097152u_5u_3^{29}u_1^{21})x_6x_5 + 1048576u_6u_5u_3^{30}u_1^{20}x_6 + \\ & (-524288u_5u_3^{30}u_1^{19} + 2097152u_5u_3^{28}u_1^{21})x_5x_4x_2 - \\ & 262144u_5^2u_3^{31}u_1^{18}x_5x_2 + 524288u_5^2u_3^{31}u_1^{19}x_5 + \\ & (262144u_6u_5u_3^{31}u_1^{18} + 1048576u_6u_5u_3^{29}u_1^{20} + 1048576u_6u_3^{30}u_1^{20})x_4x_2 + \\ & (-524288u_6u_5u_3^{31}u_1^{19} - 2097152u_6u_3^{30}u_1^{21})x_4 - \\ & 524288u_6u_5^2u_3^{30}u_1^{19}x_2 + 1048576u_6u_5^2u_3^{30}u_1^{20} \end{aligned}$$

Reduced to zero.



2632. Creating S-polynomial from the pair  $(p_{35}, p_{48})$ .

Forming S-pol of  $p_{35}$  and  $p_{48}$ :

$$p_{631} = 256u_5u_3^{12}u_1^8x_8x_2 - 128u_6u_3^{14}u_1^7x_6 - 128u_5u_3^{13}u_1^7x_5x_2 + \\ 64u_6u_3^{15}u_1^6x_4 - 64u_6u_5u_3^{14}u_1^6x_2$$

Reduced to zero.

2633. Creating S-polynomial from the pair  $(p_{35}, p_{49})$ .

Forming S-pol of  $p_{35}$  and  $p_{49}$ :

$$p_{632} = 2048u_3^{17}u_1^{11}x_8x_4 + (-512u_5u_3^{18}u_1^9 - 2048u_5u_3^{16}u_1^{11})x_8x_2 + \\ (256u_5u_3^{20}u_1^8 + 1024u_5u_3^{18}u_1^{10} + 4096u_5u_3^{16}u_1^{12})x_8 - \\ 2048u_3^{17}u_1^{11}x_6x_5 - 4096u_6u_3^{16}u_1^{12}x_6 + 256u_5u_3^{19}u_1^8x_5x_2 + \\ (-128u_5u_3^{21}u_1^7 - 512u_5u_3^{19}u_1^9)x_5 + 1024u_6u_3^{17}u_1^{10}x_4x_2 + \\ (128u_6u_5u_3^{20}u_1^7 + 512u_6u_5u_3^{18}u_1^9)x_2$$

Reduced to zero.

2634. Creating S-polynomial from the pair  $(p_{35}, p_{50})$ .

Skipping pair  $p_{35}$  and  $p_{50}$  because gcd of their leading monoms is zero.

2635. Creating S-polynomial from the pair  $(p_{35}, p_{51})$ .

Forming S-pol of  $p_{35}$  and  $p_{51}$ :

$$p_{633} = -256u_3^{13}u_1^8x_8x_4 + 256u_5u_3^{12}u_1^8x_8x_2 + \\ (-128u_5u_3^{14}u_1^7 - 512u_5u_3^{12}u_1^9)x_8 + 256u_3^{13}u_1^8x_6x_5 + \\ 512u_6u_3^{12}u_1^9x_6 + 64u_5u_3^{15}u_1^6x_5 - 128u_6u_3^{13}u_1^7x_4x_2 - \\ 64u_6u_5u_3^{14}u_1^6x_2$$

Reduced to zero.

2636. Creating S-polynomial from the pair  $(p_{35}, p_{52})$ .

Skipping pair  $p_{35}$  and  $p_{52}$  because gcd of their leading monoms is zero.

2637. Creating S-polynomial from the pair  $(p_{35}, p_{53})$ .

Skipping pair  $p_{35}$  and  $p_{53}$  because gcd of their leading monoms is zero.

2638. Creating S-polynomial from the pair  $(p_{35}, p_{54})$ .

Skipping pair  $p_{35}$  and  $p_{54}$  because gcd of their leading monoms is zero.

2639. Creating S-polynomial from the pair  $(p_{35}, p_{55})$ .

Skipping pair  $p_{35}$  and  $p_{55}$  because gcd of their leading monoms is zero.

2640. Creating S-polynomial from the pair  $(p_{35}, p_{56})$ .

Skipping pair  $p_{35}$  and  $p_{56}$  because gcd of their leading monoms is zero.

2641. Creating S-polynomial from the pair  $(p_{35}, p_{57})$ .  
 Skipping pair  $p_{35}$  and  $p_{57}$  because gcd of their leading monoms is zero.
2642. Creating S-polynomial from the pair  $(p_{35}, p_{58})$ .  
 Skipping pair  $p_{35}$  and  $p_{58}$  because gcd of their leading monoms is zero.
2643. Creating S-polynomial from the pair  $(p_{35}, p_{59})$ .  
 Skipping pair  $p_{35}$  and  $p_{59}$  because gcd of their leading monoms is zero.
2644. Creating S-polynomial from the pair  $(p_{35}, p_{60})$ .  
 Skipping pair  $p_{35}$  and  $p_{60}$  because gcd of their leading monoms is zero.
2645. Creating S-polynomial from the pair  $(p_{35}, p_{61})$ .  
 Skipping pair  $p_{35}$  and  $p_{61}$  because gcd of their leading monoms is zero.
2646. Creating S-polynomial from the pair  $(p_{35}, p_{62})$ .  
 Skipping pair  $p_{35}$  and  $p_{62}$  because gcd of their leading monoms is zero.
2647. Creating S-polynomial from the pair  $(p_{35}, p_{63})$ .  
 Skipping pair  $p_{35}$  and  $p_{63}$  because gcd of their leading monoms is zero.
2648. Creating S-polynomial from the pair  $(p_{35}, p_{64})$ .  
 Skipping pair  $p_{35}$  and  $p_{64}$  because gcd of their leading monoms is zero.
2649. Creating S-polynomial from the pair  $(p_{35}, p_{65})$ .  
 Skipping pair  $p_{35}$  and  $p_{65}$  because gcd of their leading monoms is zero.
2650. Creating S-polynomial from the pair  $(p_{35}, p_{66})$ .  
 Skipping pair  $p_{35}$  and  $p_{66}$  because gcd of their leading monoms is zero.
2651. Creating S-polynomial from the pair  $(p_{35}, p_{67})$ .  
 Skipping pair  $p_{35}$  and  $p_{67}$  because gcd of their leading monoms is zero.
2652. Creating S-polynomial from the pair  $(p_{35}, p_{68})$ .  
 Skipping pair  $p_{35}$  and  $p_{68}$  because gcd of their leading monoms is zero.
2653. Creating S-polynomial from the pair  $(p_{35}, p_{69})$ .  
 Skipping pair  $p_{35}$  and  $p_{69}$  because gcd of their leading monoms is zero.
2654. Creating S-polynomial from the pair  $(p_{35}, p_{70})$ .  
 Skipping pair  $p_{35}$  and  $p_{70}$  because gcd of their leading monoms is zero.
2655. Creating S-polynomial from the pair  $(p_{35}, p_{71})$ .  
 Skipping pair  $p_{35}$  and  $p_{71}$  because gcd of their leading monoms is zero.
2656. Creating S-polynomial from the pair  $(p_{35}, p_{72})$ .  
 Skipping pair  $p_{35}$  and  $p_{72}$  because gcd of their leading monoms is zero.
2657. Creating S-polynomial from the pair  $(p_{35}, p_{73})$ .  
 Skipping pair  $p_{35}$  and  $p_{73}$  because gcd of their leading monoms is zero.

2658. Creating S-polynomial from the pair  $(p_{35}, p_{74})$ .  
 Skipping pair  $p_{35}$  and  $p_{74}$  because gcd of their leading monoms is zero.
2659. Creating S-polynomial from the pair  $(p_{35}, p_{75})$ .  
 Skipping pair  $p_{35}$  and  $p_{75}$  because gcd of their leading monoms is zero.
2660. Creating S-polynomial from the pair  $(p_{35}, p_{76})$ .  
 Skipping pair  $p_{35}$  and  $p_{76}$  because gcd of their leading monoms is zero.
2661. Creating S-polynomial from the pair  $(p_{35}, p_{77})$ .  
 Skipping pair  $p_{35}$  and  $p_{77}$  because gcd of their leading monoms is zero.
2662. Creating S-polynomial from the pair  $(p_{35}, p_{78})$ .  
 Skipping pair  $p_{35}$  and  $p_{78}$  because gcd of their leading monoms is zero.
2663. Creating S-polynomial from the pair  $(p_{35}, p_{79})$ .  
 Skipping pair  $p_{35}$  and  $p_{79}$  because gcd of their leading monoms is zero.
2664. Creating S-polynomial from the pair  $(p_{35}, p_{80})$ .  
 Skipping pair  $p_{35}$  and  $p_{80}$  because gcd of their leading monoms is zero.
2665. Creating S-polynomial from the pair  $(p_{35}, p_{81})$ .  
 Skipping pair  $p_{35}$  and  $p_{81}$  because gcd of their leading monoms is zero.
2666. Creating S-polynomial from the pair  $(p_{35}, p_{82})$ .  
 Forming S-pol of  $p_{35}$  and  $p_{82}$ :

$$p_{634} = 0$$

Reduced to zero.

2667. Creating S-polynomial from the pair  $(p_{35}, p_{83})$ .  
 Forming S-pol of  $p_{35}$  and  $p_{83}$ :

$$\begin{aligned}
 p_{635} = & -2097152u_5u_3^{25}u_1^{20}x_8x_4 + 1048576u_5^2u_3^{24}u_1^{20}x_8x_2 + \\
 & (-524288u_5^2u_3^{26}u_1^{19} - 2097152u_5^2u_3^{24}u_1^{21})x_8 + \\
 & 2097152u_6u_3^{24}u_1^{21}x_6^2 + 1048576u_5u_3^{25}u_1^{20}x_6x_5 + \\
 & 524288u_6u_5u_3^{26}u_1^{19}x_6 + 524288u_5u_3^{26}u_1^{19}x_5x_4 + \\
 & 262144u_5^2u_3^{27}u_1^{18}x_5 + \\
 & (-262144u_6u_5u_3^{27}u_1^{18} - 1048576u_6u_3^{26}u_1^{20})x_4 + 524288u_6u_5^2u_3^{26}u_1^{19}
 \end{aligned}$$

Reduced to zero.

2668. Creating S-polynomial from the pair  $(p_{35}, p_{84})$ .

Forming S-pol of  $p_{35}$  and  $p_{84}$ :

$$\begin{aligned} p_{636} = & -512u_3^{13}u_1^9x_8x_4 + 512u_5u_3^{12}u_1^9x_8x_2 + \\ & (-256u_5u_3^{14}u_1^8 - 1024u_5u_3^{12}u_1^{10})x_8 + 512u_3^{13}u_1^9x_6x_5 + \\ & 1024u_6u_3^{12}u_1^{10}x_6 + 128u_5u_3^{15}u_1^7x_5 - 256u_6u_3^{13}u_1^8x_4x_2 - \\ & 128u_6u_5u_3^{14}u_1^7x_2 \end{aligned}$$

Reduced to zero.

2669. Creating S-polynomial from the pair  $(p_{35}, p_{85})$ .

Forming S-pol of  $p_{35}$  and  $p_{85}$ :

$$\begin{aligned} p_{637} = & 512u_5u_3^{12}u_1^9x_8x_2 - 256u_6u_3^{14}u_1^8x_6 - 256u_5u_3^{13}u_1^8x_5x_2 + \\ & 128u_6u_3^{15}u_1^7x_4 - 128u_6u_5u_3^{14}u_1^7x_2 \end{aligned}$$

Reduced to zero.

2670. Creating S-polynomial from the pair  $(p_{35}, p_{86})$ .

Skipping pair  $p_{35}$  and  $p_{86}$  because gcd of their leading monoms is zero.

2671. Creating S-polynomial from the pair  $(p_{35}, p_{87})$ .

Skipping pair  $p_{35}$  and  $p_{87}$  because gcd of their leading monoms is zero.

2672. Creating S-polynomial from the pair  $(p_{35}, p_{88})$ .

Skipping pair  $p_{35}$  and  $p_{88}$  because gcd of their leading monoms is zero.

2673. Creating S-polynomial from the pair  $(p_{35}, p_{89})$ .

Skipping pair  $p_{35}$  and  $p_{89}$  because gcd of their leading monoms is zero.

2674. Creating S-polynomial from the pair  $(p_{35}, p_{90})$ .

Skipping pair  $p_{35}$  and  $p_{90}$  because gcd of their leading monoms is zero.

2675. Creating S-polynomial from the pair  $(p_{35}, p_{91})$ .

Skipping pair  $p_{35}$  and  $p_{91}$  because gcd of their leading monoms is zero.

2676. Creating S-polynomial from the pair  $(p_{35}, p_{92})$ .

Skipping pair  $p_{35}$  and  $p_{92}$  because gcd of their leading monoms is zero.

2677. Creating S-polynomial from the pair  $(p_{35}, p_{93})$ .

Skipping pair  $p_{35}$  and  $p_{93}$  because gcd of their leading monoms is zero.

2678. Creating S-polynomial from the pair  $(p_{35}, p_{94})$ .

Skipping pair  $p_{35}$  and  $p_{94}$  because gcd of their leading monoms is zero.

2679. Creating S-polynomial from the pair  $(p_{35}, p_{95})$ .

Forming S-pol of  $p_{35}$  and  $p_{95}$ :

$$\begin{aligned}
p_{638} = & 1048576u_5u_3^{23}u_1^{20}x_8x_6 - 1048576u_3^{23}u_1^{20}x_8x_4^2 + \\
& 1048576u_5u_3^{22}u_1^{20}x_8x_4x_2 + 2097152u_3^{23}u_1^{21}x_8x_4 + \\
& (262144u_5^2u_3^{25}u_1^{18} - 1048576u_5^2u_3^{23}u_1^{20})x_8 - 1048576u_6u_3^{23}u_1^{20}x_6^2 - \\
& 524288u_5u_3^{24}u_1^{19}x_6x_5 - 262144u_6u_5u_3^{25}u_1^{18}x_6 - \\
& 524288u_5u_3^{23}u_1^{19}x_5x_4x_2 - 131072u_5^2u_3^{26}u_1^{17}x_5 - \\
& 262144u_6u_5u_3^{24}u_1^{18}x_4x_2 + \\
& (131072u_6u_5u_3^{26}u_1^{17} + 524288u_6u_3^{25}u_1^{19})x_4 - 262144u_6u_5^2u_3^{25}u_1^{18}
\end{aligned}$$

Reduced to zero.

2680. Creating S-polynomial from the pair  $(p_{35}, p_{96})$ .

Skipping pair  $p_{35}$  and  $p_{96}$  because gcd of their leading monoms is zero.

2681. Creating S-polynomial from the pair  $(p_{35}, p_{97})$ .

Skipping pair  $p_{35}$  and  $p_{97}$  because gcd of their leading monoms is zero.

2682. Creating S-polynomial from the pair  $(p_{35}, p_{98})$ .

Skipping pair  $p_{35}$  and  $p_{98}$  because gcd of their leading monoms is zero.

2683. Creating S-polynomial from the pair  $(p_{35}, p_{99})$ .

Skipping pair  $p_{35}$  and  $p_{99}$  because gcd of their leading monoms is zero.

2684. Creating S-polynomial from the pair  $(p_{35}, p_{100})$ .

Skipping pair  $p_{35}$  and  $p_{100}$  because gcd of their leading monoms is zero.

2685. Creating S-polynomial from the pair  $(p_{35}, p_{101})$ .

Skipping pair  $p_{35}$  and  $p_{101}$  because gcd of their leading monoms is zero.

2686. Creating S-polynomial from the pair  $(p_{35}, p_{102})$ .

Skipping pair  $p_{35}$  and  $p_{102}$  because gcd of their leading monoms is zero.

2687. Creating S-polynomial from the pair  $(p_{35}, p_{103})$ .

Skipping pair  $p_{35}$  and  $p_{103}$  because gcd of their leading monoms is zero.

2688. Creating S-polynomial from the pair  $(p_{35}, p_{104})$ .

Skipping pair  $p_{35}$  and  $p_{104}$  because gcd of their leading monoms is zero.

2689. Creating S-polynomial from the pair  $(p_{35}, p_{105})$ .

Skipping pair  $p_{35}$  and  $p_{105}$  because gcd of their leading monoms is zero.

2690. Creating S-polynomial from the pair  $(p_{35}, p_{106})$ .

Skipping pair  $p_{35}$  and  $p_{106}$  because gcd of their leading monoms is zero.

2691. Creating S-polynomial from the pair  $(p_{36}, p_{37})$ .

Forming S-pol of  $p_{36}$  and  $p_{37}$ :

$$p_{639} = -512u_3^{19}u_1^9x_6x_5 + 256u_3^{20}u_1^8x_5x_4 - 256u_5u_3^{19}u_1^8x_5x_2 + \\ 512u_5u_3^{19}u_1^9x_5$$

Reduced to zero.

2692. Creating S-polynomial from the pair  $(p_{36}, p_{38})$ .

Skipping pair  $p_{36}$  and  $p_{38}$  because gcd of their leading monoms is zero.

2693. Creating S-polynomial from the pair  $(p_{36}, p_{39})$ .

Skipping pair  $p_{36}$  and  $p_{39}$  because gcd of their leading monoms is zero.

2694. Creating S-polynomial from the pair  $(p_{36}, p_{40})$ .

Skipping pair  $p_{36}$  and  $p_{40}$  because gcd of their leading monoms is zero.

2695. Creating S-polynomial from the pair  $(p_{36}, p_{41})$ .

Forming S-pol of  $p_{36}$  and  $p_{41}$ :

$$p_{640} = 512u_6u_3^{18}u_1^9x_6x_4 + 256u_6u_5u_3^{18}u_1^8x_4x_2 + \\ (-512u_6u_5u_3^{18}u_1^9 - 512u_6u_3^{19}u_1^9)x_4 + 256u_6u_5^2u_3^{19}u_1^8$$

Reduced to zero.

2696. Creating S-polynomial from the pair  $(p_{36}, p_{42})$ .

Skipping pair  $p_{36}$  and  $p_{42}$  because gcd of their leading monoms is zero.

2697. Creating S-polynomial from the pair  $(p_{36}, p_{43})$ .

Skipping pair  $p_{36}$  and  $p_{43}$  because gcd of their leading monoms is zero.

2698. Creating S-polynomial from the pair  $(p_{36}, p_{44})$ .

Skipping pair  $p_{36}$  and  $p_{44}$  because gcd of their leading monoms is zero.

2699. Creating S-polynomial from the pair  $(p_{36}, p_{45})$ .

Forming S-pol of  $p_{36}$  and  $p_{45}$ :

$$p_{641} = -8192u_3^{18}u_1^{13}x_8x_4 + \\ (1024u_5u_3^{21}u_1^{10} - 16384u_5u_3^{17}u_1^{14})x_8 + 8192u_3^{18}u_1^{13}x_6x_5 + \\ (-2048u_6u_3^{19}u_1^{11} - 8192u_6u_3^{17}u_1^{13})x_6x_2 + \\ (4096u_6u_3^{19}u_1^{12} + 16384u_6u_3^{17}u_1^{14})x_6 + 4096u_5u_3^{18}u_1^{12}x_5x_2 - \\ 512u_5u_3^{22}u_1^9x_5 + 1024u_6u_3^{20}u_1^{10}x_4x_2 - 2048u_6u_3^{20}u_1^{11}x_4 + \\ (512u_6u_5u_3^{21}u_1^9 + 2048u_6u_5u_3^{19}u_1^{11})x_2$$

Reduced to zero.

2700. Creating S-polynomial from the pair  $(p_{36}, p_{46})$ .

Skipping pair  $p_{36}$  and  $p_{46}$  because gcd of their leading monoms is zero.

2701. Creating S-polynomial from the pair  $(p_{36}, p_{47})$ .

Forming S-pol of  $p_{36}$  and  $p_{47}$ : Polynomial too big for output (text size is 1041 characters, number of terms is 15)

Reduced to zero.

2702. Creating S-polynomial from the pair  $(p_{36}, p_{48})$ .

Forming S-pol of  $p_{36}$  and  $p_{48}$ :

$$\begin{aligned} p_{642} = & 256u_3^{13}u_1^8x_8x_4 + 512u_5u_3^{12}u_1^9x_8 - 256u_3^{13}u_1^8x_6x_5 + \\ & 256u_6u_3^{12}u_1^8x_6x_2 + \\ & (-128u_6u_3^{14}u_1^7 - 512u_6u_3^{12}u_1^9)x_6 - 128u_5u_3^{13}u_1^7x_5x_2 + \\ & 64u_6u_3^{15}u_1^6x_4 - 64u_6u_5u_3^{14}u_1^6x_2 \end{aligned}$$

Reduced to zero.

2703. Creating S-polynomial from the pair  $(p_{36}, p_{49})$ .

Forming S-pol of  $p_{36}$  and  $p_{49}$ :

$$\begin{aligned} p_{643} = & -512u_3^{19}u_1^9x_8x_4 + 256u_5u_3^{20}u_1^8x_8 + 512u_3^{19}u_1^9x_6x_5 + \\ & (-512u_6u_3^{18}u_1^9 - 2048u_6u_3^{16}u_1^{11})x_6x_2 + 1024u_6u_3^{18}u_1^{10}x_6 + \\ & 256u_5u_3^{19}u_1^8x_5x_2 + \\ & (-128u_5u_3^{21}u_1^7 - 512u_5u_3^{19}u_1^9)x_5 + 1024u_6u_3^{17}u_1^{10}x_4x_2 + \\ & (128u_6u_5u_3^{20}u_1^7 + 512u_6u_5u_3^{18}u_1^9)x_2 \end{aligned}$$

Reduced to zero.

2704. Creating S-polynomial from the pair  $(p_{36}, p_{50})$ .

Forming S-pol of  $p_{36}$  and  $p_{50}$ :

$$\begin{aligned} p_{644} = & (-32u_6u_3^{16}u_1^5 - 128u_6u_3^{14}u_1^7)x_8x_2 + \\ & (16u_6u_3^{18}u_1^4 + 64u_6u_3^{16}u_1^6)x_8 + \\ & (16u_6u_3^{17}u_1^4 + 64u_6u_3^{15}u_1^6)x_5x_2 + \\ & (-8u_6u_3^{19}u_1^3 - 32u_6u_3^{17}u_1^5)x_5 + \\ & (8u_6^2u_3^{18}u_1^3 + 32u_6^2u_3^{16}u_1^5)x_2 \end{aligned}$$

Reduced to zero.

2705. Creating S-polynomial from the pair  $(p_{36}, p_{51})$ .

Forming S-pol of  $p_{36}$  and  $p_{51}$ :

$$\begin{aligned} p_{645} = & -128u_5u_3^{14}u_1^7x_8 + 256u_6u_3^{12}u_1^8x_6x_2 + 64u_5u_3^{15}u_1^6x_5 - \\ & 128u_6u_3^{13}u_1^7x_4x_2 - 64u_6u_5u_3^{14}u_1^6x_2 \end{aligned}$$

Reduced to zero.

2706. Creating S-polynomial from the pair  $(p_{36}, p_{52})$ .

Forming S-pol of  $p_{36}$  and  $p_{52}$ :

$$\begin{aligned}
p_{646} = & -8192u_3^{25}u_1^{13}x_8x_6x_5 + 4096u_3^{26}u_1^{12}x_8x_5x_4 + \\
& (-2048u_5u_3^{27}u_1^{11} + 8192u_5u_3^{25}u_1^{13})x_8x_5 + \\
& (-4096u_6u_3^{25}u_1^{12} - 16384u_6u_3^{23}u_1^{14})x_8x_4x_2 + \\
& (2048u_6u_3^{27}u_1^{11} + 8192u_6u_3^{25}u_1^{13})x_8x_4 + \\
& (2048u_6u_3^{26}u_1^{11} + 8192u_6u_3^{24}u_1^{13})x_5x_4x_2 + \\
& (-1024u_6u_3^{28}u_1^{10} - 4096u_6u_3^{26}u_1^{12})x_5x_4 + \\
& (-1024u_6u_5u_3^{27}u_1^{10} - 4096u_5u_3^{26}u_1^{12})x_5x_2 + 2048u_5u_3^{28}u_1^{11}x_5 + \\
& (1024u_6^2u_3^{27}u_1^{10} + 4096u_6^2u_3^{25}u_1^{12})x_4x_2 + \\
& 2048u_6^2u_5u_3^{26}u_1^{11}x_2 - 1024u_6^2u_5u_3^{28}u_1^{10}
\end{aligned}$$

Reduced to zero.

2707. Creating S-polynomial from the pair  $(p_{36}, p_{53})$ .

Forming S-pol of  $p_{36}$  and  $p_{53}$ :

$$\begin{aligned}
p_{647} = & 16u_6u_3^{10}u_1^4x_8x_2 - 8u_6u_3^{12}u_1^3x_8 - 8u_6u_3^{11}u_1^3x_5x_2 + \\
& 4u_6u_3^{13}u_1^2x_5 - 4u_6^2u_3^{12}u_1^2x_2
\end{aligned}$$

Reduced to zero.

2708. Creating S-polynomial from the pair  $(p_{36}, p_{54})$ .

Skipping pair  $p_{36}$  and  $p_{54}$  because gcd of their leading monoms is zero.

2709. Creating S-polynomial from the pair  $(p_{36}, p_{55})$ .

Skipping pair  $p_{36}$  and  $p_{55}$  because gcd of their leading monoms is zero.

2710. Creating S-polynomial from the pair  $(p_{36}, p_{56})$ .

Skipping pair  $p_{36}$  and  $p_{56}$  because gcd of their leading monoms is zero.

2711. Creating S-polynomial from the pair  $(p_{36}, p_{57})$ .

Skipping pair  $p_{36}$  and  $p_{57}$  because gcd of their leading monoms is zero.

2712. Creating S-polynomial from the pair  $(p_{36}, p_{58})$ .

Skipping pair  $p_{36}$  and  $p_{58}$  because gcd of their leading monoms is zero.

2713. Creating S-polynomial from the pair  $(p_{36}, p_{59})$ .

Skipping pair  $p_{36}$  and  $p_{59}$  because gcd of their leading monoms is zero.

2714. Creating S-polynomial from the pair  $(p_{36}, p_{60})$ .

Skipping pair  $p_{36}$  and  $p_{60}$  because gcd of their leading monoms is zero.

2715. Creating S-polynomial from the pair  $(p_{36}, p_{61})$ .

Skipping pair  $p_{36}$  and  $p_{61}$  because gcd of their leading monoms is zero.



2716. Creating S-polynomial from the pair  $(p_{36}, p_{62})$ .  
 Skipping pair  $p_{36}$  and  $p_{62}$  because gcd of their leading monoms is zero.
2717. Creating S-polynomial from the pair  $(p_{36}, p_{63})$ .  
 Skipping pair  $p_{36}$  and  $p_{63}$  because gcd of their leading monoms is zero.
2718. Creating S-polynomial from the pair  $(p_{36}, p_{64})$ .  
 Skipping pair  $p_{36}$  and  $p_{64}$  because gcd of their leading monoms is zero.
2719. Creating S-polynomial from the pair  $(p_{36}, p_{65})$ .  
 Skipping pair  $p_{36}$  and  $p_{65}$  because gcd of their leading monoms is zero.
2720. Creating S-polynomial from the pair  $(p_{36}, p_{66})$ .  
 Skipping pair  $p_{36}$  and  $p_{66}$  because gcd of their leading monoms is zero.
2721. Creating S-polynomial from the pair  $(p_{36}, p_{67})$ .  
 Skipping pair  $p_{36}$  and  $p_{67}$  because gcd of their leading monoms is zero.
2722. Creating S-polynomial from the pair  $(p_{36}, p_{68})$ .  
 Skipping pair  $p_{36}$  and  $p_{68}$  because gcd of their leading monoms is zero.
2723. Creating S-polynomial from the pair  $(p_{36}, p_{69})$ .  
 Skipping pair  $p_{36}$  and  $p_{69}$  because gcd of their leading monoms is zero.
2724. Creating S-polynomial from the pair  $(p_{36}, p_{70})$ .  
 Skipping pair  $p_{36}$  and  $p_{70}$  because gcd of their leading monoms is zero.
2725. Creating S-polynomial from the pair  $(p_{36}, p_{71})$ .  
 Skipping pair  $p_{36}$  and  $p_{71}$  because gcd of their leading monoms is zero.
2726. Creating S-polynomial from the pair  $(p_{36}, p_{72})$ .  
 Skipping pair  $p_{36}$  and  $p_{72}$  because gcd of their leading monoms is zero.
2727. Creating S-polynomial from the pair  $(p_{36}, p_{73})$ .  
 Skipping pair  $p_{36}$  and  $p_{73}$  because gcd of their leading monoms is zero.
2728. Creating S-polynomial from the pair  $(p_{36}, p_{74})$ .  
 Skipping pair  $p_{36}$  and  $p_{74}$  because gcd of their leading monoms is zero.
2729. Creating S-polynomial from the pair  $(p_{36}, p_{75})$ .  
 Skipping pair  $p_{36}$  and  $p_{75}$  because gcd of their leading monoms is zero.
2730. Creating S-polynomial from the pair  $(p_{36}, p_{76})$ .  
 Skipping pair  $p_{36}$  and  $p_{76}$  because gcd of their leading monoms is zero.
2731. Creating S-polynomial from the pair  $(p_{36}, p_{77})$ .  
 Skipping pair  $p_{36}$  and  $p_{77}$  because gcd of their leading monoms is zero.
2732. Creating S-polynomial from the pair  $(p_{36}, p_{78})$ .  
 Skipping pair  $p_{36}$  and  $p_{78}$  because gcd of their leading monoms is zero.

2733. Creating S-polynomial from the pair  $(p_{36}, p_{79})$ .

Skipping pair  $p_{36}$  and  $p_{79}$  because gcd of their leading monoms is zero.

2734. Creating S-polynomial from the pair  $(p_{36}, p_{80})$ .

Skipping pair  $p_{36}$  and  $p_{80}$  because gcd of their leading monoms is zero.

2735. Creating S-polynomial from the pair  $(p_{36}, p_{81})$ .

Forming S-pol of  $p_{36}$  and  $p_{81}$ :

$$p_{648} = -2048u_6u_3^{16}u_1^{11}x_6 + 1024u_6u_3^{17}u_1^{10}x_4 - 1024u_6u_5u_3^{16}u_1^{10}x_2 + \\ 2048u_6u_5u_3^{16}u_1^{11}$$

Reduced to zero.

2736. Creating S-polynomial from the pair  $(p_{36}, p_{82})$ .

Skipping pair  $p_{36}$  and  $p_{82}$  because gcd of their leading monoms is zero.

2737. Creating S-polynomial from the pair  $(p_{36}, p_{83})$ .

Forming S-pol of  $p_{36}$  and  $p_{83}$ :

$$p_{649} = -1048576u_5u_3^{25}u_1^{20}x_8x_4 - 524288u_5^2u_3^{26}u_1^{19}x_8 + \\ 2097152u_6u_3^{24}u_1^{21}x_6^2 + 1048576u_6u_5u_3^{24}u_1^{20}x_6x_2 + \\ (524288u_6u_5u_3^{26}u_1^{19} - 2097152u_6u_5u_3^{24}u_1^{21})x_6 + \\ 524288u_5u_3^{26}u_1^{19}x_5x_4 + 262144u_5^2u_3^{27}u_1^{18}x_5 + \\ (-262144u_6u_5u_3^{27}u_1^{18} - 1048576u_6u_3^{26}u_1^{20})x_4 + 524288u_6u_5^2u_3^{26}u_1^{19}$$

Reduced to zero.

2738. Creating S-polynomial from the pair  $(p_{36}, p_{84})$ .

Forming S-pol of  $p_{36}$  and  $p_{84}$ :

$$p_{650} = -256u_5u_3^{14}u_1^8x_8 + 512u_6u_3^{12}u_1^9x_6x_2 + 128u_5u_3^{15}u_1^7x_5 - \\ 256u_6u_3^{13}u_1^8x_4x_2 - 128u_6u_5u_3^{14}u_1^7x_2$$

Reduced to zero.

2739. Creating S-polynomial from the pair  $(p_{36}, p_{85})$ .

Forming S-pol of  $p_{36}$  and  $p_{85}$ :

$$p_{651} = 512u_3^{13}u_1^9x_8x_4 + 1024u_5u_3^{12}u_1^{10}x_8 - 512u_3^{13}u_1^9x_6x_5 + \\ 512u_6u_3^{12}u_1^9x_6x_2 + \\ (-256u_6u_3^{14}u_1^8 - 1024u_6u_3^{12}u_1^{10})x_6 - 256u_5u_3^{13}u_1^8x_5x_2 + \\ 128u_6u_3^{15}u_1^7x_4 - 128u_6u_5u_3^{14}u_1^7x_2$$

Reduced to zero.

2740. Creating S-polynomial from the pair  $(p_{36}, p_{86})$ .

Forming S-pol of  $p_{36}$  and  $p_{86}$ :

$$\begin{aligned} p_{652} = & -2048u_3^{20}u_1^{11}x_6x_5 + (8192u_3^{17}u_1^{13} - 4096u_3^{17}u_1^{12})x_5x_4x_2 + \\ & (1024u_3^{21}u_1^{10} - 4096u_3^{19}u_1^{12})x_5x_4 - 1024u_5u_3^{20}u_1^{10}x_5x_2 + \\ & 2048u_5u_3^{20}u_1^{11}x_5 + 4096u_6u_3^{18}u_1^{12}x_4x_2 - 4096u_6u_3^{18}u_1^{12}x_4 \end{aligned}$$

S-pol added.

2741. Creating S-polynomial from the pair  $(p_{36}, p_{87})$ .

Forming S-pol of  $p_{36}$  and  $p_{87}$ :

$$p_{653} = 0$$

Reduced to zero.

2742. Creating S-polynomial from the pair  $(p_{36}, p_{88})$ .

Skipping pair  $p_{36}$  and  $p_{88}$  because gcd of their leading monoms is zero.

2743. Creating S-polynomial from the pair  $(p_{36}, p_{89})$ .

Skipping pair  $p_{36}$  and  $p_{89}$  because gcd of their leading monoms is zero.

2744. Creating S-polynomial from the pair  $(p_{36}, p_{90})$ .

Skipping pair  $p_{36}$  and  $p_{90}$  because gcd of their leading monoms is zero.

2745. Creating S-polynomial from the pair  $(p_{36}, p_{91})$ .

Skipping pair  $p_{36}$  and  $p_{91}$  because gcd of their leading monoms is zero.

2746. Creating S-polynomial from the pair  $(p_{36}, p_{92})$ .

Skipping pair  $p_{36}$  and  $p_{92}$  because gcd of their leading monoms is zero.

2747. Creating S-polynomial from the pair  $(p_{36}, p_{93})$ .

Skipping pair  $p_{36}$  and  $p_{93}$  because gcd of their leading monoms is zero.

2748. Creating S-polynomial from the pair  $(p_{36}, p_{94})$ .

Skipping pair  $p_{36}$  and  $p_{94}$  because gcd of their leading monoms is zero.

2749. Creating S-polynomial from the pair  $(p_{36}, p_{95})$ .

Forming S-pol of  $p_{36}$  and  $p_{95}$ :

$$\begin{aligned} p_{654} = & 1048576u_5u_3^{23}u_1^{20}x_8x_6 + (2097152u_5u_3^{22}u_1^{21} + 2097152u_3^{23}u_1^{21})x_8x_4 + \\ & (262144u_5^2u_3^{25}u_1^{18} - 1048576u_5^2u_3^{23}u_1^{20})x_8 - 1048576u_6u_3^{23}u_1^{20}x_6^2 - \\ & 1048576u_3^{23}u_1^{20}x_6x_5x_4 - 524288u_5u_3^{24}u_1^{19}x_6x_5 + \\ & 1048576u_6u_3^{22}u_1^{20}x_6x_4x_2 - 2097152u_6u_3^{22}u_1^{21}x_6x_4 - \\ & 262144u_6u_5u_3^{25}u_1^{18}x_6 - 524288u_5u_3^{23}u_1^{19}x_5x_4x_2 - \\ & 131072u_5^2u_3^{26}u_1^{17}x_5 - 262144u_6u_5u_3^{24}u_1^{18}x_4x_2 + \\ & (131072u_6u_5u_3^{26}u_1^{17} + 524288u_6u_3^{25}u_1^{19})x_4 - 262144u_6u_5^2u_3^{25}u_1^{18} \end{aligned}$$

Reduced to zero.

2750. Creating S-polynomial from the pair  $(p_{36}, p_{96})$ .

Forming S-pol of  $p_{36}$  and  $p_{96}$ :

$$p_{655} = 128u_5u_3^{10}u_1^7x_8 - 64u_3^{11}u_1^6x_6x_5 - 128u_6u_3^{10}u_1^7x_6 + \\ 32u_3^{12}u_1^5x_5x_4 - 32u_5u_3^{11}u_1^5x_5x_2 + 64u_6u_3^{11}u_1^6x_4$$

Reduced to zero.

2751. Creating S-polynomial from the pair  $(p_{36}, p_{97})$ .

Forming S-pol of  $p_{36}$  and  $p_{97}$ :

$$p_{656} = -1024u_3^{19}u_1^{10}x_6x_5 + (4096u_3^{16}u_1^{12} - 2048u_3^{16}u_1^{11})x_5x_4x_2 + \\ (512u_3^{20}u_1^9 - 2048u_3^{18}u_1^{11})x_5x_4 - 512u_5u_3^{19}u_1^9x_5x_2 + \\ 1024u_5u_3^{19}u_1^{10}x_5 + 2048u_6u_3^{17}u_1^{11}x_4x_2 - 2048u_6u_3^{17}u_1^{11}x_4$$

S-pol added.

2752. Creating S-polynomial from the pair  $(p_{36}, p_{98})$ .

Forming S-pol of  $p_{36}$  and  $p_{98}$ : Polynomial too big for output (text size is 2088 characters, number of terms is 27)

Reduced to zero.

2753. Creating S-polynomial from the pair  $(p_{36}, p_{99})$ .

Forming S-pol of  $p_{36}$  and  $p_{99}$ : Polynomial too big for output (text size is 2089 characters, number of terms is 27)

Reduced to zero.

2754. Creating S-polynomial from the pair  $(p_{36}, p_{100})$ .

Skipping pair  $p_{36}$  and  $p_{100}$  because gcd of their leading monoms is zero.

2755. Creating S-polynomial from the pair  $(p_{36}, p_{101})$ .

Skipping pair  $p_{36}$  and  $p_{101}$  because gcd of their leading monoms is zero.

2756. Creating S-polynomial from the pair  $(p_{36}, p_{102})$ .

Skipping pair  $p_{36}$  and  $p_{102}$  because gcd of their leading monoms is zero.

2757. Creating S-polynomial from the pair  $(p_{36}, p_{103})$ .

Skipping pair  $p_{36}$  and  $p_{103}$  because gcd of their leading monoms is zero.

2758. Creating S-polynomial from the pair  $(p_{36}, p_{104})$ .

Skipping pair  $p_{36}$  and  $p_{104}$  because gcd of their leading monoms is zero.

2759. Creating S-polynomial from the pair  $(p_{36}, p_{105})$ .

Skipping pair  $p_{36}$  and  $p_{105}$  because gcd of their leading monoms is zero.

2760. Creating S-polynomial from the pair  $(p_{36}, p_{106})$ .

Skipping pair  $p_{36}$  and  $p_{106}$  because gcd of their leading monoms is zero.

2761. Creating S-polynomial from the pair  $(p_{37}, p_{38})$ .

Skipping pair  $p_{37}$  and  $p_{38}$  because gcd of their leading monoms is zero.

2762. Creating S-polynomial from the pair  $(p_{37}, p_{39})$ .

Skipping pair  $p_{37}$  and  $p_{39}$  because gcd of their leading monoms is zero.

2763. Creating S-polynomial from the pair  $(p_{37}, p_{40})$ .

Forming S-pol of  $p_{37}$  and  $p_{40}$ :

$$\begin{aligned} p_{657} = & -16384u_4^{13}u_3^{13}u_1^{14}x_{16}x_6x_5 - 8192u_5u_4^{13}u_3^{13}u_1^{13}x_{16}x_5x_2 + \\ & 16384u_5u_4^{13}u_3^{13}u_1^{14}x_{16}x_5 + 8192u_6u_4^{13}u_3^{13}u_1^{13}x_{16}x_4x_2 - \\ & 16384u_6u_4^{13}u_3^{13}u_1^{14}x_{16}x_4 + 16384u_4^{13}u_3^{13}u_1^{14}x_{14}x_8x_5 + \\ & 8192u_5u_4^{13}u_3^{13}u_1^{13}x_8x_5x_3 - 16384u_5u_4^{13}u_3^{13}u_1^{14}x_8x_5 - \\ & 8192u_6u_4^{13}u_3^{13}u_1^{13}x_8x_4x_3 + 16384u_6u_4^{13}u_3^{13}u_1^{14}x_8x_4 \end{aligned}$$

Reduced to zero.

2764. Creating S-polynomial from the pair  $(p_{37}, p_{41})$ .

Forming S-pol of  $p_{37}$  and  $p_{41}$ :

$$\begin{aligned} p_{658} = & 16384u_5u_3^{25}u_1^{14}x_6x_5x_4 - 16384u_6u_3^{25}u_1^{14}x_6x_4^2 - \\ & 8192u_5u_3^{26}u_1^{13}x_5x_4^2 + 8192u_5^2u_3^{25}u_1^{13}x_5x_4x_2 - \\ & 16384u_5^2u_3^{25}u_1^{14}x_5x_4 - 8192u_6u_5u_3^{25}u_1^{13}x_4^2x_2 + \\ & (16384u_6u_5u_3^{25}u_1^{14} + 16384u_6u_3^{26}u_1^{14})x_4^2 - 8192u_6u_5^2u_3^{26}u_1^{13}x_4 \end{aligned}$$

Reduced to zero.

2765. Creating S-polynomial from the pair  $(p_{37}, p_{42})$ .

Forming S-pol of  $p_{37}$  and  $p_{42}$ :

$$\begin{aligned} p_{659} = & 16384u_5u_3^{13}u_2^{12}u_1^{14}x_{12}x_6x_5 + 8192u_5^2u_3^{13}u_2^{12}u_1^{13}x_{12}x_5x_2 - \\ & 16384u_5^2u_3^{13}u_2^{12}u_1^{14}x_{12}x_5 - 8192u_6u_5u_3^{13}u_2^{12}u_1^{13}x_{12}x_4x_2 + \\ & 16384u_6u_5u_3^{13}u_2^{12}u_1^{14}x_{12}x_4 - 16384u_6u_3^{13}u_2^{12}u_1^{14}x_{10}x_8x_4 - \\ & 8192u_5u_3^{13}u_2^{13}u_1^{13}x_8x_5x_4 + 16384u_6u_3^{13}u_2^{13}u_1^{14}x_8x_4 - \\ & 8192u_6u_5^2u_3^{13}u_2^{13}u_1^{13}x_8 \end{aligned}$$

Reduced to zero.

2766. Creating S-polynomial from the pair  $(p_{37}, p_{43})$ .

Forming S-pol of  $p_{37}$  and  $p_{43}$ :

$$\begin{aligned} p_{660} = & 16384u_5u_4^{12}u_3^{13}u_1^{14}x_{16}x_6x_5 + 8192u_5^2u_4^{12}u_3^{13}u_1^{13}x_{16}x_5x_2 - \\ & 16384u_5^2u_4^{12}u_3^{13}u_1^{14}x_{16}x_5 - 8192u_6u_5u_4^{12}u_3^{13}u_1^{13}x_{16}x_4x_2 + \\ & 16384u_6u_5u_4^{12}u_3^{13}u_1^{14}x_{16}x_4 - 16384u_6u_4^{12}u_3^{13}u_1^{14}x_{14}x_8x_4 - \\ & 8192u_5u_4^{13}u_3^{13}u_1^{13}x_8x_5x_4 + 16384u_6u_4^{13}u_3^{13}u_1^{14}x_8x_4 - \\ & 8192u_6u_5^2u_4^{13}u_3^{13}u_1^{13}x_8 \end{aligned}$$

Reduced to zero.

2767. Creating S-polynomial from the pair  $(p_{37}, p_{44})$ .

Skipping pair  $p_{37}$  and  $p_{44}$  because gcd of their leading monoms is zero.

2768. Creating S-polynomial from the pair  $(p_{37}, p_{45})$ .

Forming S-pol of  $p_{37}$  and  $p_{45}$ :

$$\begin{aligned} p_{661} = & 262144u_3^{25}u_1^{18}x_8x_4^2 + (-32768u_5u_3^{28}u_1^{15} + 524288u_5u_3^{24}u_1^{19})x_8x_4 + \\ & (-131072u_3^{26}u_1^{17} - 524288u_3^{24}u_1^{19})x_6^2x_5 + 65536u_3^{27}u_1^{16}x_6x_5x_4 + \\ & (-65536u_5u_3^{26}u_1^{16} - 262144u_5u_3^{24}u_1^{18})x_6x_5x_2 + \\ & (131072u_5u_3^{26}u_1^{17} + 524288u_5u_3^{24}u_1^{19})x_6x_5 + \\ & (65536u_6u_3^{26}u_1^{16} + 262144u_6u_3^{24}u_1^{18})x_6x_4x_2 + \\ & (-131072u_6u_3^{26}u_1^{17} - 524288u_6u_3^{24}u_1^{19})x_6x_4 - \\ & 131072u_5u_3^{25}u_1^{17}x_5x_4x_2 + 16384u_5u_3^{29}u_1^{14}x_5x_4 - \\ & 32768u_6u_3^{27}u_1^{15}x_4^2x_2 + 65536u_6u_3^{27}u_1^{16}x_4^2 + \\ & (-16384u_6u_5u_3^{28}u_1^{14} - 65536u_6u_5u_3^{26}u_1^{16})x_4x_2 \end{aligned}$$

Reduced to zero.

2769. Creating S-polynomial from the pair  $(p_{37}, p_{46})$ .

Skipping pair  $p_{37}$  and  $p_{46}$  because gcd of their leading monoms is zero.

2770. Creating S-polynomial from the pair  $(p_{37}, p_{47})$ .

Forming S-pol of  $p_{37}$  and  $p_{47}$ : Polynomial too big for output (text size is 1291 characters, number of terms is 16)

S-pol added.

2771. Creating S-polynomial from the pair  $(p_{37}, p_{48})$ .

Forming S-pol of  $p_{37}$  and  $p_{48}$ :

$$\begin{aligned} p_{662} = & -8192u_3^{20}u_1^{13}x_8x_4^2 - 16384u_5u_3^{19}u_1^{14}x_8x_4 + 16384u_3^{19}u_1^{14}x_6^2x_5 + \\ & 8192u_5u_3^{19}u_1^{13}x_6x_5x_2 - 16384u_5u_3^{19}u_1^{14}x_6x_5 - \\ & 8192u_6u_3^{19}u_1^{13}x_6x_4x_2 + \\ & (4096u_6u_3^{21}u_1^{12} + 16384u_6u_3^{19}u_1^{14})x_6x_4 + 4096u_5u_3^{20}u_1^{12}x_5x_4x_2 - \\ & 2048u_6u_3^{22}u_1^{11}x_4^2 + 2048u_6u_5u_3^{21}u_1^{11}x_4x_2 \end{aligned}$$

Reduced to zero.

2772. Creating S-polynomial from the pair  $(p_{37}, p_{49})$ .

Forming S-pol of  $p_{37}$  and  $p_{49}$ :

$$\begin{aligned} p_{663} = & 16384u_3^{26}u_1^{14}x_8x_4^2 - 8192u_5u_3^{27}u_1^{13}x_8x_4 + \\ & (-32768u_3^{25}u_1^{15} - 131072u_3^{23}u_1^{17})x_6^2x_5 + 65536u_3^{24}u_1^{16}x_6x_5x_4 + \\ & (-16384u_5u_3^{25}u_1^{14} - 65536u_5u_3^{23}u_1^{16})x_6x_5x_2 + \end{aligned}$$

$$\begin{aligned}
& (32768u_5u_3^{25}u_1^{15} + 131072u_5u_3^{23}u_1^{17})x_6x_5 + \\
& (16384u_6u_3^{25}u_1^{14} + 65536u_6u_3^{23}u_1^{16})x_6x_4x_2 - 32768u_6u_3^{25}u_1^{15}x_6x_4 - \\
& 8192u_5u_3^{26}u_1^{13}x_5x_4x_2 + \\
& (4096u_5u_3^{28}u_1^{12} + 16384u_5u_3^{26}u_1^{14})x_5x_4 - 32768u_6u_3^{24}u_1^{15}x_4^2x_2 + \\
& (-4096u_6u_5u_3^{27}u_1^{12} - 16384u_6u_5u_3^{25}u_1^{14})x_4x_2
\end{aligned}$$

Reduced to zero.

2773. Creating S-polynomial from the pair  $(p_{37}, p_{50})$ .

Forming S-pol of  $p_{37}$  and  $p_{50}$ :

$$\begin{aligned}
p_{664} = & (-2048u_3^{23}u_1^{11} - 8192u_3^{21}u_1^{13})x_8x_6x_5 + \\
& (1024u_3^{24}u_1^{10} + 4096u_3^{22}u_1^{12})x_8x_5x_4 + \\
& (-1024u_5u_3^{23}u_1^{10} - 4096u_5u_3^{21}u_1^{12})x_8x_5x_2 + \\
& (2048u_5u_3^{23}u_1^{11} + 8192u_5u_3^{21}u_1^{13})x_8x_5 + \\
& (1024u_6u_3^{23}u_1^{10} + 4096u_6u_3^{21}u_1^{12})x_8x_4x_2 + \\
& (-512u_6u_3^{25}u_1^9 - 2048u_6u_3^{23}u_1^{11})x_8x_4 + \\
& (-512u_6u_3^{24}u_1^9 - 2048u_6u_3^{22}u_1^{11})x_5x_4x_2 + \\
& (256u_6u_3^{26}u_1^8 + 1024u_6u_3^{24}u_1^{10})x_5x_4 + \\
& (-256u_6^2u_3^{25}u_1^8 - 1024u_6^2u_3^{23}u_1^{10})x_4x_2
\end{aligned}$$

Reduced to zero.

2774. Creating S-polynomial from the pair  $(p_{37}, p_{51})$ .

Forming S-pol of  $p_{37}$  and  $p_{51}$ :

$$\begin{aligned}
p_{665} = & 4096u_5u_3^{21}u_1^{12}x_8x_4 + 16384u_3^{19}u_1^{14}x_6^2x_5 - 8192u_3^{20}u_1^{13}x_6x_5x_4 + \\
& 8192u_5u_3^{19}u_1^{13}x_6x_5x_2 - 16384u_5u_3^{19}u_1^{14}x_6x_5 - \\
& 8192u_6u_3^{19}u_1^{13}x_6x_4x_2 - 2048u_5u_3^{22}u_1^{11}x_5x_4 + \\
& 4096u_6u_3^{20}u_1^{12}x_4^2x_2 + 2048u_6u_5u_3^{21}u_1^{11}x_4x_2
\end{aligned}$$

Reduced to zero.

2775. Creating S-polynomial from the pair  $(p_{37}, p_{52})$ .

Forming S-pol of  $p_{37}$  and  $p_{52}$ : Polynomial too big for output (text size is 1118 characters, number of terms is 16)

S-pol added.

2776. Creating S-polynomial from the pair  $(p_{37}, p_{53})$ .

Forming S-pol of  $p_{37}$  and  $p_{53}$ :

$$\begin{aligned}
p_{666} = & 1024u_3^{17}u_1^{10}x_8x_6x_5 - 512u_3^{18}u_1^9x_8x_5x_4 + 512u_5u_3^{17}u_1^9x_8x_5x_2 - \\
& 1024u_5u_3^{17}u_1^{10}x_8x_5 - 512u_6u_3^{17}u_1^9x_8x_4x_2 + 256u_6u_3^{19}u_1^8x_8x_4 + \\
& 256u_6u_3^{18}u_1^8x_5x_4x_2 - 128u_6u_3^{20}u_1^7x_5x_4 + \\
& 128u_6^2u_3^{19}u_1^7x_4x_2
\end{aligned}$$

Reduced to zero.

2777. Creating S-polynomial from the pair  $(p_{37}, p_{54})$ .  
 Skipping pair  $p_{37}$  and  $p_{54}$  because gcd of their leading monoms is zero.
2778. Creating S-polynomial from the pair  $(p_{37}, p_{55})$ .  
 Skipping pair  $p_{37}$  and  $p_{55}$  because gcd of their leading monoms is zero.
2779. Creating S-polynomial from the pair  $(p_{37}, p_{56})$ .  
 Skipping pair  $p_{37}$  and  $p_{56}$  because gcd of their leading monoms is zero.
2780. Creating S-polynomial from the pair  $(p_{37}, p_{57})$ .  
 Forming S-pol of  $p_{37}$  and  $p_{57}$ : Polynomial too big for output (text size is 1646 characters, number of terms is 17)  
 Reduced to zero.
2781. Creating S-polynomial from the pair  $(p_{37}, p_{58})$ .  
 Skipping pair  $p_{37}$  and  $p_{58}$  because gcd of their leading monoms is zero.
2782. Creating S-polynomial from the pair  $(p_{37}, p_{59})$ .  
 Skipping pair  $p_{37}$  and  $p_{59}$  because gcd of their leading monoms is zero.
2783. Creating S-polynomial from the pair  $(p_{37}, p_{60})$ .  
 Skipping pair  $p_{37}$  and  $p_{60}$  because gcd of their leading monoms is zero.
2784. Creating S-polynomial from the pair  $(p_{37}, p_{61})$ .  
 Skipping pair  $p_{37}$  and  $p_{61}$  because gcd of their leading monoms is zero.
2785. Creating S-polynomial from the pair  $(p_{37}, p_{62})$ .  
 Forming S-pol of  $p_{37}$  and  $p_{62}$ : Polynomial too big for output (text size is 1423 characters, number of terms is 16)  
 Reduced to zero.
2786. Creating S-polynomial from the pair  $(p_{37}, p_{63})$ .  
 Skipping pair  $p_{37}$  and  $p_{63}$  because gcd of their leading monoms is zero.
2787. Creating S-polynomial from the pair  $(p_{37}, p_{64})$ .  
 Skipping pair  $p_{37}$  and  $p_{64}$  because gcd of their leading monoms is zero.
2788. Creating S-polynomial from the pair  $(p_{37}, p_{65})$ .  
 Skipping pair  $p_{37}$  and  $p_{65}$  because gcd of their leading monoms is zero.
2789. Creating S-polynomial from the pair  $(p_{37}, p_{66})$ .  
 Skipping pair  $p_{37}$  and  $p_{66}$  because gcd of their leading monoms is zero.
2790. Creating S-polynomial from the pair  $(p_{37}, p_{67})$ .  
 Forming S-pol of  $p_{37}$  and  $p_{67}$ : Polynomial too big for output (text size is 1646 characters, number of terms is 17)  
 Reduced to zero.



2791. Creating S-polynomial from the pair  $(p_{37}, p_{68})$ .  
 Skipping pair  $p_{37}$  and  $p_{68}$  because gcd of their leading monoms is zero.
2792. Creating S-polynomial from the pair  $(p_{37}, p_{69})$ .  
 Skipping pair  $p_{37}$  and  $p_{69}$  because gcd of their leading monoms is zero.
2793. Creating S-polynomial from the pair  $(p_{37}, p_{70})$ .  
 Skipping pair  $p_{37}$  and  $p_{70}$  because gcd of their leading monoms is zero.
2794. Creating S-polynomial from the pair  $(p_{37}, p_{71})$ .  
 Skipping pair  $p_{37}$  and  $p_{71}$  because gcd of their leading monoms is zero.
2795. Creating S-polynomial from the pair  $(p_{37}, p_{72})$ .  
 Forming S-pol of  $p_{37}$  and  $p_{72}$ : Polynomial too big for output (text size is 1423 characters, number of terms is 16)  
 Reduced to zero.
2796. Creating S-polynomial from the pair  $(p_{37}, p_{73})$ .  
 Skipping pair  $p_{37}$  and  $p_{73}$  because gcd of their leading monoms is zero.
2797. Creating S-polynomial from the pair  $(p_{37}, p_{74})$ .  
 Skipping pair  $p_{37}$  and  $p_{74}$  because gcd of their leading monoms is zero.
2798. Creating S-polynomial from the pair  $(p_{37}, p_{75})$ .  
 Skipping pair  $p_{37}$  and  $p_{75}$  because gcd of their leading monoms is zero.
2799. Creating S-polynomial from the pair  $(p_{37}, p_{76})$ .  
 Skipping pair  $p_{37}$  and  $p_{76}$  because gcd of their leading monoms is zero.
2800. Creating S-polynomial from the pair  $(p_{37}, p_{77})$ .  
 Skipping pair  $p_{37}$  and  $p_{77}$  because gcd of their leading monoms is zero.
2801. Creating S-polynomial from the pair  $(p_{37}, p_{78})$ .  
 Skipping pair  $p_{37}$  and  $p_{78}$  because gcd of their leading monoms is zero.
2802. Creating S-polynomial from the pair  $(p_{37}, p_{79})$ .  
 Forming S-pol of  $p_{37}$  and  $p_{79}$ : Polynomial too big for output (text size is 1025 characters, number of terms is 12)  
 S-pol added.
2803. Creating S-polynomial from the pair  $(p_{37}, p_{80})$ .  
 Skipping pair  $p_{37}$  and  $p_{80}$  because gcd of their leading monoms is zero.
2804. Creating S-polynomial from the pair  $(p_{37}, p_{81})$ .  
 Forming S-pol of  $p_{37}$  and  $p_{81}$ :

$$p_{667} = -65536u_5u_3^{23}u_1^{16}x_6x_5 + 65536u_6u_3^{23}u_1^{16}x_6x_4 + \\ 32768u_5u_3^{24}u_1^{15}x_5x_4 - 32768u_5^2u_3^{23}u_1^{15}x_5x_2 +$$

$$65536u_5^2u_3^{23}u_1^{16}x_5 - 32768u_6u_3^{24}u_1^{15}x_4^2 + \\ 32768u_6u_5u_3^{23}u_1^{15}x_4x_2 - 65536u_6u_5u_3^{23}u_1^{16}x_4$$

Reduced to zero.

2805. Creating S-polynomial from the pair  $(p_{37}, p_{82})$ .

Skipping pair  $p_{37}$  and  $p_{82}$  because gcd of their leading monoms is zero.

2806. Creating S-polynomial from the pair  $(p_{37}, p_{83})$ .

Forming S-pol of  $p_{37}$  and  $p_{83}$ :

$$p_{668} = 33554432u_5u_3^{32}u_1^{25}x_8x_4^2 + 16777216u_5^2u_3^{33}u_1^{24}x_8x_4 + \\ 67108864u_5u_3^{31}u_1^{26}x_6^2x_5 - 67108864u_6u_3^{31}u_1^{26}x_6^2x_4 - \\ 33554432u_5u_3^{32}u_1^{25}x_6x_5x_4 + 33554432u_5^2u_3^{31}u_1^{25}x_6x_5x_2 - \\ 67108864u_5^2u_3^{31}u_1^{26}x_6x_5 - 33554432u_6u_5u_3^{31}u_1^{25}x_6x_4x_2 + \\ (-16777216u_6u_5u_3^{33}u_1^{24} + 67108864u_6u_5u_3^{31}u_1^{26})x_6x_4 - \\ 16777216u_5u_3^{33}u_1^{24}x_5x_4^2 - 8388608u_5^2u_3^{34}u_1^{23}x_5x_4 + \\ (8388608u_6u_5u_3^{34}u_1^{23} + 33554432u_6u_3^{33}u_1^{25})x_4^2 - \\ 16777216u_6u_5^2u_3^{33}u_1^{24}x_4$$

Reduced to zero.

2807. Creating S-polynomial from the pair  $(p_{37}, p_{84})$ .

Forming S-pol of  $p_{37}$  and  $p_{84}$ :

$$p_{669} = 8192u_5u_3^{21}u_1^{13}x_8x_4 + 32768u_3^{19}u_1^{15}x_6^2x_5 - 16384u_3^{20}u_1^{14}x_6x_5x_4 + \\ 16384u_5u_3^{19}u_1^{14}x_6x_5x_2 - 32768u_5u_3^{19}u_1^{15}x_6x_5 - \\ 16384u_6u_3^{19}u_1^{14}x_6x_4x_2 - 4096u_5u_3^{22}u_1^{12}x_5x_4 + \\ 8192u_6u_3^{20}u_1^{13}x_4^2x_2 + 4096u_6u_5u_3^{21}u_1^{12}x_4x_2$$

Reduced to zero.

2808. Creating S-polynomial from the pair  $(p_{37}, p_{85})$ .

Forming S-pol of  $p_{37}$  and  $p_{85}$ :

$$p_{670} = -16384u_3^{20}u_1^{14}x_8x_4^2 - 32768u_5u_3^{19}u_1^{15}x_8x_4 + \\ 32768u_3^{19}u_1^{15}x_6^2x_5 + 16384u_5u_3^{19}u_1^{14}x_6x_5x_2 - \\ 32768u_5u_3^{19}u_1^{15}x_6x_5 - 16384u_6u_3^{19}u_1^{14}x_6x_4x_2 + \\ (8192u_6u_3^{21}u_1^{13} + 32768u_6u_3^{19}u_1^{15})x_6x_4 + 8192u_5u_3^{20}u_1^{13}x_5x_4x_2 - \\ 4096u_6u_3^{22}u_1^{12}x_4^2 + 4096u_6u_5u_3^{21}u_1^{12}x_4x_2$$

Reduced to zero.

2809. Creating S-polynomial from the pair  $(p_{37}, p_{86})$ .

Forming S-pol of  $p_{37}$  and  $p_{86}$ :

$$\begin{aligned} p_{671} = & 131072u_3^{25}u_1^{17}x_6x_5x_4 + (-262144u_3^{24}u_1^{18} + 131072u_3^{24}u_1^{17})x_5x_4^2x_2 + \\ & (131072u_3^{26}u_1^{17} - 65536u_3^{26}u_1^{16})x_5x_4^2 + 65536u_5u_3^{25}u_1^{16}x_5x_4x_2 - \\ & 131072u_5u_3^{25}u_1^{17}x_5x_4 - 131072u_6u_3^{25}u_1^{17}x_4^2x_2 + \\ & 131072u_6u_3^{25}u_1^{17}x_4^2 \end{aligned}$$

S-pol added.

2810. Creating S-polynomial from the pair  $(p_{37}, p_{87})$ .

Forming S-pol of  $p_{37}$  and  $p_{87}$ :

$$\begin{aligned} p_{672} = & 1024u_3^{19}u_1^{10}x_6x_5 - 512u_3^{20}u_1^9x_5x_4 + 512u_5u_3^{19}u_1^9x_5x_2 - \\ & 1024u_5u_3^{19}u_1^{10}x_5 \end{aligned}$$

Reduced to zero.

2811. Creating S-polynomial from the pair  $(p_{37}, p_{88})$ .

Skipping pair  $p_{37}$  and  $p_{88}$  because gcd of their leading monoms is zero.

2812. Creating S-polynomial from the pair  $(p_{37}, p_{89})$ .

Skipping pair  $p_{37}$  and  $p_{89}$  because gcd of their leading monoms is zero.

2813. Creating S-polynomial from the pair  $(p_{37}, p_{90})$ .

Skipping pair  $p_{37}$  and  $p_{90}$  because gcd of their leading monoms is zero.

2814. Creating S-polynomial from the pair  $(p_{37}, p_{91})$ .

Skipping pair  $p_{37}$  and  $p_{91}$  because gcd of their leading monoms is zero.

2815. Creating S-polynomial from the pair  $(p_{37}, p_{92})$ .

Skipping pair  $p_{37}$  and  $p_{92}$  because gcd of their leading monoms is zero.

2816. Creating S-polynomial from the pair  $(p_{37}, p_{93})$ .

Forming S-pol of  $p_{37}$  and  $p_{93}$ : Polynomial too big for output (text size is 1025 characters, number of terms is 12)

S-pol added.

2817. Creating S-polynomial from the pair  $(p_{37}, p_{94})$ .

Skipping pair  $p_{37}$  and  $p_{94}$  because gcd of their leading monoms is zero.

2818. Creating S-polynomial from the pair  $(p_{37}, p_{95})$ .

Forming S-pol of  $p_{37}$  and  $p_{95}$ :

$$\begin{aligned} p_{673} = & -33554432u_5u_3^{30}u_1^{25}x_8x_6x_4 + \\ & (-67108864u_5u_3^{29}u_1^{26} - 67108864u_3^{30}u_1^{26})x_8x_4^2 + \\ & (-8388608u_5^2u_3^{32}u_1^{23} + 33554432u_5^2u_3^{30}u_1^{25})x_8x_4 + \end{aligned}$$

$$\begin{aligned}
& 67108864u_3^{29}u_1^{26}x_6^2x_5 + 33554432u_6u_3^{30}u_1^{25}x_6^2x_4 + \\
& 16777216u_5u_3^{31}u_1^{24}x_6x_5x_4 + 33554432u_5u_3^{29}u_1^{25}x_6x_5x_2 - \\
& 67108864u_5u_3^{29}u_1^{26}x_6x_5 - 33554432u_6u_3^{29}u_1^{25}x_6x_4x_2 + \\
& (8388608u_6u_5u_3^{32}u_1^{23} + 67108864u_6u_3^{29}u_1^{26})x_6x_4 + \\
& 16777216u_5u_3^{30}u_1^{24}x_5x_4^2x_2 + 4194304u_5^2u_3^{33}u_1^{22}x_5x_4 + \\
& 8388608u_6u_5u_3^{31}u_1^{23}x_4^2x_2 + \\
& (-4194304u_6u_5u_3^{33}u_1^{22} - 16777216u_6u_3^{32}u_1^{24})x_4^2 + \\
& 8388608u_6u_5^2u_3^{32}u_1^{23}x_4
\end{aligned}$$

S-pol added.

2819. Creating S-polynomial from the pair  $(p_{37}, p_{96})$ .

Forming S-pol of  $p_{37}$  and  $p_{96}$ :

$$\begin{aligned}
p_{674} = & -4096u_5u_3^{17}u_1^{12}x_8x_4 + 4096u_6u_3^{17}u_1^{12}x_6x_4 + 2048u_5u_3^{18}u_1^{11}x_5x_4 - \\
& 2048u_6u_3^{18}u_1^{11}x_4^2
\end{aligned}$$

Reduced to zero.

2820. Creating S-polynomial from the pair  $(p_{37}, p_{97})$ .

Forming S-pol of  $p_{37}$  and  $p_{97}$ :

$$\begin{aligned}
p_{675} = & (-131072u_3^{23}u_1^{17} + 65536u_3^{23}u_1^{16})x_5x_4^2x_2 + 65536u_3^{25}u_1^{16}x_5x_4^2 - \\
& 65536u_6u_3^{24}u_1^{16}x_4^2x_2 + 65536u_6u_3^{24}u_1^{16}x_4^2
\end{aligned}$$

S-pol added.

2821. Creating S-polynomial from the pair  $(p_{37}, p_{98})$ .

Forming S-pol of  $p_{37}$  and  $p_{98}$ : Polynomial too big for output (text size is 2776 characters, number of terms is 31)

Reduced to zero.

2822. Creating S-polynomial from the pair  $(p_{37}, p_{99})$ .

Forming S-pol of  $p_{37}$  and  $p_{99}$ : Polynomial too big for output (text size is 2775 characters, number of terms is 31)

Reduced to zero.

2823. Creating S-polynomial from the pair  $(p_{37}, p_{100})$ .

Forming S-pol of  $p_{37}$  and  $p_{100}$ : Polynomial too big for output (text size is 1112 characters, number of terms is 16)

Reduced to zero.

2824. Creating S-polynomial from the pair  $(p_{37}, p_{101})$ .

Forming S-pol of  $p_{37}$  and  $p_{101}$ :

$$\begin{aligned} p_{676} = & -4096u_5u_3^{13}u_2^4u_1^{12}x_{12}x_8 - 2048u_3^{13}u_2^5u_1^{11}x_{12}x_6x_5 - \\ & 1024u_5u_3^{13}u_2^5u_1^{10}x_{12}x_5x_2 + 2048u_5u_3^{13}u_2^5u_1^{11}x_{12}x_5 + \\ & 1024u_6u_3^{13}u_2^5u_1^{10}x_{12}x_4x_2 - 2048u_6u_3^{13}u_2^5u_1^{11}x_{12}x_4 + \\ & 2048u_3^{13}u_2^5u_1^{11}x_{10}x_8x_5 + 4096u_6u_3^{13}u_2^4u_1^{12}x_{10}x_8 + \\ & 1024u_5u_3^{13}u_2^5u_1^{10}x_8x_5x_1 - 1024u_6u_3^{13}u_2^5u_1^{10}x_8x_4x_1 \end{aligned}$$

Reduced to zero.

2825. Creating S-polynomial from the pair  $(p_{37}, p_{102})$ .

Forming S-pol of  $p_{37}$  and  $p_{102}$ :

$$\begin{aligned} p_{677} = & -32768u_3^{13}u_2^{13}u_1^{15}x_{12}x_6x_5 - 16384u_5u_3^{13}u_2^{13}u_1^{14}x_{12}x_5x_2 + \\ & 32768u_5u_3^{13}u_2^{13}u_1^{15}x_{12}x_5 + 16384u_6u_3^{13}u_2^{13}u_1^{14}x_{12}x_4x_2 - \\ & 32768u_6u_3^{13}u_2^{13}u_1^{15}x_{12}x_4 + 32768u_3^{13}u_2^{13}u_1^{15}x_{10}x_8x_5 + \\ & (-131072u_3^{13}u_2^{10}u_1^{17} + 65536u_3^{13}u_2^{10}u_1^{16})x_8x_5x_4x_1 + \\ & 65536u_3^{13}u_2^{12}u_1^{16}x_8x_5x_4 + 16384u_5u_3^{13}u_2^{13}u_1^{14}x_8x_5x_1 - \\ & 32768u_5u_3^{13}u_2^{13}u_1^{15}x_8x_5 + \\ & (-16384u_6u_3^{13}u_2^{13}u_1^{14} - 65536u_6u_3^{13}u_2^{11}u_1^{16})x_8x_4x_1 + \\ & (32768u_6u_3^{13}u_2^{13}u_1^{15} + 65536u_6u_3^{13}u_2^{11}u_1^{16})x_8x_4 \end{aligned}$$

S-pol added.

2826. Creating S-polynomial from the pair  $(p_{37}, p_{103})$ .

Skipping pair  $p_{37}$  and  $p_{103}$  because gcd of their leading monoms is zero.

2827. Creating S-polynomial from the pair  $(p_{37}, p_{104})$ .

Forming S-pol of  $p_{37}$  and  $p_{104}$ : Polynomial too big for output (text size is 1112 characters, number of terms is 16)

Reduced to zero.

2828. Creating S-polynomial from the pair  $(p_{37}, p_{105})$ .

Forming S-pol of  $p_{37}$  and  $p_{105}$ :

$$\begin{aligned} p_{678} = & -4096u_5u_4^4u_3^{13}u_1^{12}x_{16}x_8 - 2048u_4^5u_3^{13}u_1^{11}x_{16}x_6x_5 - \\ & 1024u_5u_4^5u_3^{13}u_1^{10}x_{16}x_5x_2 + 2048u_5u_4^5u_3^{13}u_1^{11}x_{16}x_5 + \\ & 1024u_6u_4^5u_3^{13}u_1^{10}x_{16}x_4x_2 - 2048u_6u_4^5u_3^{13}u_1^{11}x_{16}x_4 + \\ & 2048u_4^5u_3^{13}u_1^{11}x_{14}x_8x_5 + 4096u_6u_4^4u_3^{13}u_1^{12}x_{14}x_8 + \\ & 1024u_5u_4^5u_3^{13}u_1^{10}x_8x_5x_3 - 1024u_6u_4^5u_3^{13}u_1^{10}x_8x_4x_3 \end{aligned}$$

Reduced to zero.

2829. Creating S-polynomial from the pair  $(p_{37}, p_{106})$ .

Forming S-pol of  $p_{37}$  and  $p_{106}$ :

$$\begin{aligned}
p_{679} = & -32768u_4^{13}u_3^{13}u_1^{15}x_{16}x_6x_5 - 16384u_5u_4^{13}u_3^{13}u_1^{14}x_{16}x_5x_2 + \\
& 32768u_5u_4^{13}u_3^{13}u_1^{15}x_{16}x_5 + 16384u_6u_4^{13}u_3^{13}u_1^{14}x_{16}x_4x_2 - \\
& 32768u_6u_4^{13}u_3^{13}u_1^{15}x_{16}x_4 + 32768u_4^{13}u_3^{13}u_1^{15}x_{14}x_8x_5 + \\
& (-131072u_4^{10}u_3^{13}u_1^{17} + 65536u_4^{10}u_3^{13}u_1^{16})x_8x_5x_4x_3 + \\
& 65536u_4^{12}u_3^{13}u_1^{16}x_8x_5x_4 + 16384u_5u_4^{13}u_3^{13}u_1^{14}x_8x_5x_3 - \\
& 32768u_5u_4^{13}u_3^{13}u_1^{15}x_8x_5 + \\
& (-16384u_6u_4^{13}u_3^{13}u_1^{14} - 65536u_6u_4^{11}u_3^{13}u_1^{16})x_8x_4x_3 + \\
& (32768u_6u_4^{13}u_3^{13}u_1^{15} + 65536u_6u_4^{11}u_3^{13}u_1^{16})x_8x_4
\end{aligned}$$

S-pol added.

2830. Creating S-polynomial from the pair  $(p_{38}, p_{39})$ .

Skipping pair  $p_{38}$  and  $p_{39}$  because gcd of their leading monoms is zero.

2831. Creating S-polynomial from the pair  $(p_{38}, p_{40})$ .

Skipping pair  $p_{38}$  and  $p_{40}$  because gcd of their leading monoms is zero.

2832. Creating S-polynomial from the pair  $(p_{38}, p_{41})$ .

Skipping pair  $p_{38}$  and  $p_{41}$  because gcd of their leading monoms is zero.

2833. Creating S-polynomial from the pair  $(p_{38}, p_{42})$ .

Skipping pair  $p_{38}$  and  $p_{42}$  because gcd of their leading monoms is zero.

2834. Creating S-polynomial from the pair  $(p_{38}, p_{43})$ .

Skipping pair  $p_{38}$  and  $p_{43}$  because gcd of their leading monoms is zero.

2835. Creating S-polynomial from the pair  $(p_{38}, p_{44})$ .

Skipping pair  $p_{38}$  and  $p_{44}$  because gcd of their leading monoms is zero.

2836. Creating S-polynomial from the pair  $(p_{38}, p_{45})$ .

Skipping pair  $p_{38}$  and  $p_{45}$  because gcd of their leading monoms is zero.

2837. Creating S-polynomial from the pair  $(p_{38}, p_{46})$ .

Skipping pair  $p_{38}$  and  $p_{46}$  because gcd of their leading monoms is zero.

2838. Creating S-polynomial from the pair  $(p_{38}, p_{47})$ .

Skipping pair  $p_{38}$  and  $p_{47}$  because gcd of their leading monoms is zero.

2839. Creating S-polynomial from the pair  $(p_{38}, p_{48})$ .

Skipping pair  $p_{38}$  and  $p_{48}$  because gcd of their leading monoms is zero.

2840. Creating S-polynomial from the pair  $(p_{38}, p_{49})$ .

Skipping pair  $p_{38}$  and  $p_{49}$  because gcd of their leading monoms is zero.

2841. Creating S-polynomial from the pair  $(p_{38}, p_{50})$ .  
 Skipping pair  $p_{38}$  and  $p_{50}$  because gcd of their leading monoms is zero.
2842. Creating S-polynomial from the pair  $(p_{38}, p_{51})$ .  
 Skipping pair  $p_{38}$  and  $p_{51}$  because gcd of their leading monoms is zero.
2843. Creating S-polynomial from the pair  $(p_{38}, p_{52})$ .  
 Skipping pair  $p_{38}$  and  $p_{52}$  because gcd of their leading monoms is zero.
2844. Creating S-polynomial from the pair  $(p_{38}, p_{53})$ .  
 Skipping pair  $p_{38}$  and  $p_{53}$  because gcd of their leading monoms is zero.
2845. Creating S-polynomial from the pair  $(p_{38}, p_{54})$ .  
 Skipping pair  $p_{38}$  and  $p_{54}$  because gcd of their leading monoms is zero.
2846. Creating S-polynomial from the pair  $(p_{38}, p_{55})$ .  
 Skipping pair  $p_{38}$  and  $p_{55}$  because gcd of their leading monoms is zero.
2847. Creating S-polynomial from the pair  $(p_{38}, p_{56})$ .  
 Skipping pair  $p_{38}$  and  $p_{56}$  because gcd of their leading monoms is zero.
2848. Creating S-polynomial from the pair  $(p_{38}, p_{57})$ .  
 Skipping pair  $p_{38}$  and  $p_{57}$  because gcd of their leading monoms is zero.
2849. Creating S-polynomial from the pair  $(p_{38}, p_{58})$ .  
 Skipping pair  $p_{38}$  and  $p_{58}$  because gcd of their leading monoms is zero.
2850. Creating S-polynomial from the pair  $(p_{38}, p_{59})$ .  
 Skipping pair  $p_{38}$  and  $p_{59}$  because gcd of their leading monoms is zero.
2851. Creating S-polynomial from the pair  $(p_{38}, p_{60})$ .  
 Skipping pair  $p_{38}$  and  $p_{60}$  because gcd of their leading monoms is zero.
2852. Creating S-polynomial from the pair  $(p_{38}, p_{61})$ .  
 Skipping pair  $p_{38}$  and  $p_{61}$  because gcd of their leading monoms is zero.
2853. Creating S-polynomial from the pair  $(p_{38}, p_{62})$ .  
 Skipping pair  $p_{38}$  and  $p_{62}$  because gcd of their leading monoms is zero.
2854. Creating S-polynomial from the pair  $(p_{38}, p_{63})$ .  
 Skipping pair  $p_{38}$  and  $p_{63}$  because gcd of their leading monoms is zero.
2855. Creating S-polynomial from the pair  $(p_{38}, p_{64})$ .  
 Forming S-pol of  $p_{38}$  and  $p_{64}$ :

$$\begin{aligned}
 p_{680} = & (-32u_5u_4^{16}u_1^5 - 128u_5u_4^{14}u_1^7)x_{14}x_3 + \\
 & (16u_5u_4^{18}u_1^4 + 64u_5u_4^{16}u_1^6)x_{14} + \\
 & (16u_5u_4^{17}u_1^4 + 64u_5u_4^{15}u_1^6)x_4x_3 + \\
 & (-8u_5u_4^{19}u_1^3 - 32u_5u_4^{17}u_1^5)x_4 + \\
 & (8u_5^2u_4^{18}u_1^3 + 32u_5^2u_4^{16}u_1^5)x_3
 \end{aligned}$$

Reduced to zero.

2856. Creating S-polynomial from the pair  $(p_{38}, p_{65})$ .

Forming S-pol of  $p_{38}$  and  $p_{65}$ :

$$\begin{aligned} p_{681} = & 2048u_4^{20}u_1^{11}x_{16}x_4 + (-2048u_5u_4^{19}u_1^{11} - 8192u_5u_4^{17}u_1^{13})x_{16}x_3 + \\ & (1024u_5u_4^{21}u_1^{10} + 4096u_5u_4^{19}u_1^{12})x_{16} - 2048u_4^{20}u_1^{11}x_{14}x_5 + \\ & 4096u_5u_4^{18}u_1^{12}x_5x_3 - 512u_5u_4^{22}u_1^9x_5 + 1024u_6u_4^{20}u_1^{10}x_4x_3 - \\ & 2048u_6u_4^{20}u_1^{11}x_4 + (512u_6u_5u_4^{21}u_1^9 + 2048u_6u_5u_4^{19}u_1^{11})x_3 \end{aligned}$$

Reduced to zero.

2857. Creating S-polynomial from the pair  $(p_{38}, p_{66})$ .

Forming S-pol of  $p_{38}$  and  $p_{66}$ :

$$\begin{aligned} p_{682} = & 16u_5u_4^{10}u_1^4x_{14}x_3 - 8u_5u_4^{12}u_1^3x_{14} - 8u_5u_4^{11}u_1^3x_4x_3 + \\ & 4u_5u_4^{13}u_1^2x_4 - 4u_5^2u_4^{12}u_1^2x_3 \end{aligned}$$

Reduced to zero.

2858. Creating S-polynomial from the pair  $(p_{38}, p_{67})$ .

Forming S-pol of  $p_{38}$  and  $p_{67}$ :

$$\begin{aligned} p_{683} = & (1048576u_4^{30}u_1^{20} + 4194304u_4^{28}u_1^{22})x_{16}x_4^2 + \\ & (-1048576u_5u_4^{29}u_1^{20} - 4194304u_5u_4^{27}u_1^{22})x_{16}x_4x_3 + \\ & (524288u_5u_4^{31}u_1^{19} + 2097152u_5u_4^{29}u_1^{21} - 8388608u_4^{28}u_1^{23})x_{16}x_4 + \\ & (-1048576u_5^2u_4^{30}u_1^{20} + 4194304u_5^2u_4^{28}u_1^{22})x_{16} - \\ & 2097152u_4^{29}u_1^{21}x_{14}^2x_5 + \\ & (-524288u_5u_4^{31}u_1^{19} + 2097152u_5u_4^{29}u_1^{21})x_{14}x_5 + \\ & 1048576u_6u_5u_4^{30}u_1^{20}x_{14} + \\ & (-524288u_5u_4^{30}u_1^{19} + 2097152u_5u_4^{28}u_1^{21})x_5x_4x_3 - \\ & 262144u_5^2u_4^{31}u_1^{18}x_5x_3 + 524288u_5^2u_4^{31}u_1^{19}x_5 + \\ & (262144u_6u_5u_4^{31}u_1^{18} + 1048576u_6u_5u_4^{29}u_1^{20} + 1048576u_6u_4^{30}u_1^{20})x_4x_3 + \\ & (-524288u_6u_5u_4^{31}u_1^{19} - 2097152u_6u_4^{30}u_1^{21})x_4 - \\ & 524288u_6u_5^2u_4^{30}u_1^{19}x_3 + 1048576u_6u_5^2u_4^{30}u_1^{20} \end{aligned}$$

Reduced to zero.

2859. Creating S-polynomial from the pair  $(p_{38}, p_{68})$ .

Forming S-pol of  $p_{38}$  and  $p_{68}$ :

$$\begin{aligned} p_{684} = & 256u_5u_4^{12}u_1^8x_{16}x_3 - 128u_6u_4^{14}u_1^7x_{14} - 128u_5u_4^{13}u_1^7x_5x_3 + \\ & 64u_6u_4^{15}u_1^6x_4 - 64u_6u_5u_4^{14}u_1^6x_3 \end{aligned}$$

Reduced to zero.



2860. Creating S-polynomial from the pair  $(p_{38}, p_{69})$ .

Forming S-pol of  $p_{38}$  and  $p_{69}$ :

$$\begin{aligned} p_{685} = & 2048u_4^{17}u_1^{11}x_{16}x_4 + (-512u_5u_4^{18}u_1^9 - 2048u_5u_4^{16}u_1^{11})x_{16}x_3 + \\ & (256u_5u_4^{20}u_1^8 + 1024u_5u_4^{18}u_1^{10} + 4096u_5u_4^{16}u_1^{12})x_{16} - \\ & 2048u_4^{17}u_1^{11}x_{14}x_5 - 4096u_6u_4^{16}u_1^{12}x_{14} + 256u_5u_4^{19}u_1^8x_5x_3 + \\ & (-128u_5u_4^{21}u_1^7 - 512u_5u_4^{19}u_1^9)x_5 + 1024u_6u_4^{17}u_1^{10}x_4x_3 + \\ & (128u_6u_5u_4^{20}u_1^7 + 512u_6u_5u_4^{18}u_1^9)x_3 \end{aligned}$$

Reduced to zero.

2861. Creating S-polynomial from the pair  $(p_{38}, p_{70})$ .

Skipping pair  $p_{38}$  and  $p_{70}$  because gcd of their leading monoms is zero.

2862. Creating S-polynomial from the pair  $(p_{38}, p_{71})$ .

Forming S-pol of  $p_{38}$  and  $p_{71}$ :

$$\begin{aligned} p_{686} = & -256u_4^{13}u_1^8x_{16}x_4 + 256u_5u_4^{12}u_1^8x_{16}x_3 + \\ & (-128u_5u_4^{14}u_1^7 - 512u_5u_4^{12}u_1^9)x_{16} + 256u_4^{13}u_1^8x_{14}x_5 + \\ & 512u_6u_4^{12}u_1^9x_{14} + 64u_5u_4^{15}u_1^6x_5 - 128u_6u_4^{13}u_1^7x_4x_3 - \\ & 64u_6u_5u_4^{14}u_1^6x_3 \end{aligned}$$

Reduced to zero.

2863. Creating S-polynomial from the pair  $(p_{38}, p_{72})$ .

Skipping pair  $p_{38}$  and  $p_{72}$  because gcd of their leading monoms is zero.

2864. Creating S-polynomial from the pair  $(p_{38}, p_{73})$ .

Skipping pair  $p_{38}$  and  $p_{73}$  because gcd of their leading monoms is zero.

2865. Creating S-polynomial from the pair  $(p_{38}, p_{74})$ .

Skipping pair  $p_{38}$  and  $p_{74}$  because gcd of their leading monoms is zero.

2866. Creating S-polynomial from the pair  $(p_{38}, p_{75})$ .

Skipping pair  $p_{38}$  and  $p_{75}$  because gcd of their leading monoms is zero.

2867. Creating S-polynomial from the pair  $(p_{38}, p_{76})$ .

Skipping pair  $p_{38}$  and  $p_{76}$  because gcd of their leading monoms is zero.

2868. Creating S-polynomial from the pair  $(p_{38}, p_{77})$ .

Skipping pair  $p_{38}$  and  $p_{77}$  because gcd of their leading monoms is zero.

2869. Creating S-polynomial from the pair  $(p_{38}, p_{78})$ .

Skipping pair  $p_{38}$  and  $p_{78}$  because gcd of their leading monoms is zero.

2870. Creating S-polynomial from the pair  $(p_{38}, p_{79})$ .

Skipping pair  $p_{38}$  and  $p_{79}$  because gcd of their leading monoms is zero.

2871. Creating S-polynomial from the pair  $(p_{38}, p_{80})$ .  
 Skipping pair  $p_{38}$  and  $p_{80}$  because gcd of their leading monoms is zero.
2872. Creating S-polynomial from the pair  $(p_{38}, p_{81})$ .  
 Skipping pair  $p_{38}$  and  $p_{81}$  because gcd of their leading monoms is zero.
2873. Creating S-polynomial from the pair  $(p_{38}, p_{82})$ .  
 Skipping pair  $p_{38}$  and  $p_{82}$  because gcd of their leading monoms is zero.
2874. Creating S-polynomial from the pair  $(p_{38}, p_{83})$ .  
 Skipping pair  $p_{38}$  and  $p_{83}$  because gcd of their leading monoms is zero.
2875. Creating S-polynomial from the pair  $(p_{38}, p_{84})$ .  
 Skipping pair  $p_{38}$  and  $p_{84}$  because gcd of their leading monoms is zero.
2876. Creating S-polynomial from the pair  $(p_{38}, p_{85})$ .  
 Skipping pair  $p_{38}$  and  $p_{85}$  because gcd of their leading monoms is zero.
2877. Creating S-polynomial from the pair  $(p_{38}, p_{86})$ .  
 Skipping pair  $p_{38}$  and  $p_{86}$  because gcd of their leading monoms is zero.
2878. Creating S-polynomial from the pair  $(p_{38}, p_{87})$ .  
 Skipping pair  $p_{38}$  and  $p_{87}$  because gcd of their leading monoms is zero.
2879. Creating S-polynomial from the pair  $(p_{38}, p_{88})$ .  
 Skipping pair  $p_{38}$  and  $p_{88}$  because gcd of their leading monoms is zero.
2880. Creating S-polynomial from the pair  $(p_{38}, p_{89})$ .  
 Forming S-pol of  $p_{38}$  and  $p_{89}$ :

$$p_{687} = 0$$

Reduced to zero.

2881. Creating S-polynomial from the pair  $(p_{38}, p_{90})$ .  
 Forming S-pol of  $p_{38}$  and  $p_{90}$ :

$$\begin{aligned}
 p_{688} = & -2097152u_5u_4^{25}u_1^{20}x_{16}x_4 + 1048576u_5^2u_4^{24}u_1^{20}x_{16}x_3 + \\
 & (-524288u_5^2u_4^{26}u_1^{19} - 2097152u_5^2u_4^{24}u_1^{21})x_{16} + \\
 & 2097152u_6u_4^{24}u_1^{21}x_{14}^2 + 1048576u_5u_4^{25}u_1^{20}x_{14}x_5 + \\
 & 524288u_6u_5u_4^{26}u_1^{19}x_{14} + 524288u_5u_4^{26}u_1^{19}x_5x_4 + \\
 & 262144u_5^2u_4^{27}u_1^{18}x_5 + \\
 & (-262144u_6u_5u_4^{27}u_1^{18} - 1048576u_6u_4^{26}u_1^{20})x_4 + 524288u_6u_5^2u_4^{26}u_1^{19}
 \end{aligned}$$

Reduced to zero.

2882. Creating S-polynomial from the pair  $(p_{38}, p_{91})$ .

Forming S-pol of  $p_{38}$  and  $p_{91}$ :

$$\begin{aligned} p_{689} = & -512u_4^{13}u_1^9x_{16}x_4 + 512u_5u_4^{12}u_1^9x_{16}x_3 + \\ & (-256u_5u_4^{14}u_1^8 - 1024u_5u_4^{12}u_1^{10})x_{16} + 512u_4^{13}u_1^9x_{14}x_5 + \\ & 1024u_6u_4^{12}u_1^{10}x_{14} + 128u_5u_4^{15}u_1^7x_5 - 256u_6u_4^{13}u_1^8x_4x_3 - \\ & 128u_6u_5u_4^{14}u_1^7x_3 \end{aligned}$$

Reduced to zero.

2883. Creating S-polynomial from the pair  $(p_{38}, p_{92})$ .

Forming S-pol of  $p_{38}$  and  $p_{92}$ :

$$\begin{aligned} p_{690} = & 512u_5u_4^{12}u_1^9x_{16}x_3 - 256u_6u_4^{14}u_1^8x_{14} - 256u_5u_4^{13}u_1^8x_5x_3 + \\ & 128u_6u_4^{15}u_1^7x_4 - 128u_6u_5u_4^{14}u_1^7x_3 \end{aligned}$$

Reduced to zero.

2884. Creating S-polynomial from the pair  $(p_{38}, p_{93})$ .

Skipping pair  $p_{38}$  and  $p_{93}$  because gcd of their leading monoms is zero.

2885. Creating S-polynomial from the pair  $(p_{38}, p_{94})$ .

Skipping pair  $p_{38}$  and  $p_{94}$  because gcd of their leading monoms is zero.

2886. Creating S-polynomial from the pair  $(p_{38}, p_{95})$ .

Skipping pair  $p_{38}$  and  $p_{95}$  because gcd of their leading monoms is zero.

2887. Creating S-polynomial from the pair  $(p_{38}, p_{96})$ .

Skipping pair  $p_{38}$  and  $p_{96}$  because gcd of their leading monoms is zero.

2888. Creating S-polynomial from the pair  $(p_{38}, p_{97})$ .

Skipping pair  $p_{38}$  and  $p_{97}$  because gcd of their leading monoms is zero.

2889. Creating S-polynomial from the pair  $(p_{38}, p_{98})$ .

Skipping pair  $p_{38}$  and  $p_{98}$  because gcd of their leading monoms is zero.

2890. Creating S-polynomial from the pair  $(p_{38}, p_{99})$ .

Skipping pair  $p_{38}$  and  $p_{99}$  because gcd of their leading monoms is zero.

2891. Creating S-polynomial from the pair  $(p_{38}, p_{100})$ .

Skipping pair  $p_{38}$  and  $p_{100}$  because gcd of their leading monoms is zero.

2892. Creating S-polynomial from the pair  $(p_{38}, p_{101})$ .

Skipping pair  $p_{38}$  and  $p_{101}$  because gcd of their leading monoms is zero.

2893. Creating S-polynomial from the pair  $(p_{38}, p_{102})$ .

Skipping pair  $p_{38}$  and  $p_{102}$  because gcd of their leading monoms is zero.

2894. Creating S-polynomial from the pair  $(p_{38}, p_{103})$ .

Skipping pair  $p_{38}$  and  $p_{103}$  because gcd of their leading monoms is zero.

2895. Creating S-polynomial from the pair  $(p_{38}, p_{104})$ .

Forming S-pol of  $p_{38}$  and  $p_{104}$ :

$$\begin{aligned} p_{691} = & 1048576u_5u_4^{23}u_1^{20}x_{16}x_{14} - 1048576u_4^{23}u_1^{20}x_{16}x_4^2 + \\ & 1048576u_5u_4^{22}u_1^{20}x_{16}x_4x_3 + 2097152u_4^{23}u_1^{21}x_{16}x_4 + \\ & (262144u_5^2u_4^{25}u_1^{18} - 1048576u_5^2u_4^{23}u_1^{20})x_{16} - \\ & 1048576u_6u_4^{23}u_1^{20}x_{14}^2 - 524288u_5u_4^{24}u_1^{19}x_{14}x_5 - \\ & 262144u_6u_5u_4^{25}u_1^{18}x_{14} - 524288u_5u_4^{23}u_1^{19}x_5x_4x_3 - \\ & 131072u_5^2u_4^{26}u_1^{17}x_5 - 262144u_6u_5u_4^{24}u_1^{18}x_4x_3 + \\ & (131072u_6u_5u_4^{26}u_1^{17} + 524288u_6u_4^{25}u_1^{19})x_4 - 262144u_6u_5^2u_4^{25}u_1^{18} \end{aligned}$$

Reduced to zero.

2896. Creating S-polynomial from the pair  $(p_{38}, p_{105})$ .

Skipping pair  $p_{38}$  and  $p_{105}$  because gcd of their leading monoms is zero.

2897. Creating S-polynomial from the pair  $(p_{38}, p_{106})$ .

Skipping pair  $p_{38}$  and  $p_{106}$  because gcd of their leading monoms is zero.

2898. Creating S-polynomial from the pair  $(p_{39}, p_{40})$ .

Forming S-pol of  $p_{39}$  and  $p_{40}$ :

$$\begin{aligned} p_{692} = & -512u_4^{19}u_1^9x_{14}x_5 + 256u_4^{20}u_1^8x_5x_4 - 256u_5u_4^{19}u_1^8x_5x_3 + \\ & 512u_5u_4^{19}u_1^9x_5 \end{aligned}$$

Reduced to zero.

2899. Creating S-polynomial from the pair  $(p_{39}, p_{41})$ .

Skipping pair  $p_{39}$  and  $p_{41}$  because gcd of their leading monoms is zero.

2900. Creating S-polynomial from the pair  $(p_{39}, p_{42})$ .

Skipping pair  $p_{39}$  and  $p_{42}$  because gcd of their leading monoms is zero.

2901. Creating S-polynomial from the pair  $(p_{39}, p_{43})$ .

Forming S-pol of  $p_{39}$  and  $p_{43}$ :

$$\begin{aligned} p_{693} = & 512u_6u_4^{18}u_1^9x_{14}x_4 + 256u_6u_5u_4^{18}u_1^8x_4x_3 + \\ & (-512u_6u_5u_4^{18}u_1^9 - 512u_6u_4^{19}u_1^9)x_4 + 256u_6u_5^2u_4^{19}u_1^8 \end{aligned}$$

Reduced to zero.

2902. Creating S-polynomial from the pair  $(p_{39}, p_{44})$ .

Skipping pair  $p_{39}$  and  $p_{44}$  because gcd of their leading monoms is zero.

2903. Creating S-polynomial from the pair  $(p_{39}, p_{45})$ .  
 Skipping pair  $p_{39}$  and  $p_{45}$  because gcd of their leading monoms is zero.
2904. Creating S-polynomial from the pair  $(p_{39}, p_{46})$ .  
 Skipping pair  $p_{39}$  and  $p_{46}$  because gcd of their leading monoms is zero.
2905. Creating S-polynomial from the pair  $(p_{39}, p_{47})$ .  
 Skipping pair  $p_{39}$  and  $p_{47}$  because gcd of their leading monoms is zero.
2906. Creating S-polynomial from the pair  $(p_{39}, p_{48})$ .  
 Skipping pair  $p_{39}$  and  $p_{48}$  because gcd of their leading monoms is zero.
2907. Creating S-polynomial from the pair  $(p_{39}, p_{49})$ .  
 Skipping pair  $p_{39}$  and  $p_{49}$  because gcd of their leading monoms is zero.
2908. Creating S-polynomial from the pair  $(p_{39}, p_{50})$ .  
 Skipping pair  $p_{39}$  and  $p_{50}$  because gcd of their leading monoms is zero.
2909. Creating S-polynomial from the pair  $(p_{39}, p_{51})$ .  
 Skipping pair  $p_{39}$  and  $p_{51}$  because gcd of their leading monoms is zero.
2910. Creating S-polynomial from the pair  $(p_{39}, p_{52})$ .  
 Skipping pair  $p_{39}$  and  $p_{52}$  because gcd of their leading monoms is zero.
2911. Creating S-polynomial from the pair  $(p_{39}, p_{53})$ .  
 Skipping pair  $p_{39}$  and  $p_{53}$  because gcd of their leading monoms is zero.
2912. Creating S-polynomial from the pair  $(p_{39}, p_{54})$ .  
 Skipping pair  $p_{39}$  and  $p_{54}$  because gcd of their leading monoms is zero.
2913. Creating S-polynomial from the pair  $(p_{39}, p_{55})$ .  
 Skipping pair  $p_{39}$  and  $p_{55}$  because gcd of their leading monoms is zero.
2914. Creating S-polynomial from the pair  $(p_{39}, p_{56})$ .  
 Skipping pair  $p_{39}$  and  $p_{56}$  because gcd of their leading monoms is zero.
2915. Creating S-polynomial from the pair  $(p_{39}, p_{57})$ .  
 Skipping pair  $p_{39}$  and  $p_{57}$  because gcd of their leading monoms is zero.
2916. Creating S-polynomial from the pair  $(p_{39}, p_{58})$ .  
 Skipping pair  $p_{39}$  and  $p_{58}$  because gcd of their leading monoms is zero.
2917. Creating S-polynomial from the pair  $(p_{39}, p_{59})$ .  
 Skipping pair  $p_{39}$  and  $p_{59}$  because gcd of their leading monoms is zero.
2918. Creating S-polynomial from the pair  $(p_{39}, p_{60})$ .  
 Skipping pair  $p_{39}$  and  $p_{60}$  because gcd of their leading monoms is zero.
2919. Creating S-polynomial from the pair  $(p_{39}, p_{61})$ .  
 Skipping pair  $p_{39}$  and  $p_{61}$  because gcd of their leading monoms is zero.

2920. Creating S-polynomial from the pair  $(p_{39}, p_{62})$ .

Skipping pair  $p_{39}$  and  $p_{62}$  because gcd of their leading monoms is zero.

2921. Creating S-polynomial from the pair  $(p_{39}, p_{63})$ .

Skipping pair  $p_{39}$  and  $p_{63}$  because gcd of their leading monoms is zero.

2922. Creating S-polynomial from the pair  $(p_{39}, p_{64})$ .

Skipping pair  $p_{39}$  and  $p_{64}$  because gcd of their leading monoms is zero.

2923. Creating S-polynomial from the pair  $(p_{39}, p_{65})$ .

Forming S-pol of  $p_{39}$  and  $p_{65}$ :

$$\begin{aligned} p_{694} = & -8192u_4^{18}u_1^{13}x_{16}x_4 + \\ & (1024u_5u_4^{21}u_1^{10} - 16384u_5u_4^{17}u_1^{14})x_{16} + 8192u_4^{18}u_1^{13}x_{14}x_5 + \\ & (-2048u_6u_4^{19}u_1^{11} - 8192u_6u_4^{17}u_1^{13})x_{14}x_3 + \\ & (4096u_6u_4^{19}u_1^{12} + 16384u_6u_4^{17}u_1^{14})x_{14} + 4096u_5u_4^{18}u_1^{12}x_5x_3 - \\ & 512u_5u_4^{22}u_1^9x_5 + 1024u_6u_4^{20}u_1^{10}x_4x_3 - 2048u_6u_4^{20}u_1^{11}x_4 + \\ & (512u_6u_5u_4^{21}u_1^9 + 2048u_6u_5u_4^{19}u_1^{11})x_3 \end{aligned}$$

Reduced to zero.

2924. Creating S-polynomial from the pair  $(p_{39}, p_{66})$ .

Skipping pair  $p_{39}$  and  $p_{66}$  because gcd of their leading monoms is zero.

2925. Creating S-polynomial from the pair  $(p_{39}, p_{67})$ .

Forming S-pol of  $p_{39}$  and  $p_{67}$ : Polynomial too big for output (text size is 1049 characters, number of terms is 15)

Reduced to zero.

2926. Creating S-polynomial from the pair  $(p_{39}, p_{68})$ .

Forming S-pol of  $p_{39}$  and  $p_{68}$ :

$$\begin{aligned} p_{695} = & 256u_4^{13}u_1^8x_{16}x_4 + 512u_5u_4^{12}u_1^9x_{16} - 256u_4^{13}u_1^8x_{14}x_5 + \\ & 256u_6u_4^{12}u_1^8x_{14}x_3 + \\ & (-128u_6u_4^{14}u_1^7 - 512u_6u_4^{12}u_1^9)x_{14} - 128u_5u_4^{13}u_1^7x_5x_3 + \\ & 64u_6u_4^{15}u_1^6x_4 - 64u_6u_5u_4^{14}u_1^6x_3 \end{aligned}$$

Reduced to zero.

2927. Creating S-polynomial from the pair  $(p_{39}, p_{69})$ .

Forming S-pol of  $p_{39}$  and  $p_{69}$ :

$$\begin{aligned} p_{696} = & -512u_4^{19}u_1^9x_{16}x_4 + 256u_5u_4^{20}u_1^8x_{16} + 512u_4^{19}u_1^9x_{14}x_5 + \\ & (-512u_6u_4^{18}u_1^9 - 2048u_6u_4^{16}u_1^{11})x_{14}x_3 + 1024u_6u_4^{18}u_1^{10}x_{14} + \\ & 256u_5u_4^{19}u_1^8x_5x_3 + \\ & (-128u_5u_4^{21}u_1^7 - 512u_5u_4^{19}u_1^9)x_5 + 1024u_6u_4^{17}u_1^{10}x_4x_3 + \\ & (128u_6u_5u_4^{20}u_1^7 + 512u_6u_5u_4^{18}u_1^9)x_3 \end{aligned}$$

Reduced to zero.

2928. Creating S-polynomial from the pair  $(p_{39}, p_{70})$ .

Forming S-pol of  $p_{39}$  and  $p_{70}$ :

$$\begin{aligned} p_{697} = & (-32u_6u_4^{16}u_1^5 - 128u_6u_4^{14}u_1^7)x_{16}x_3 + \\ & (16u_6u_4^{18}u_1^4 + 64u_6u_4^{16}u_1^6)x_{16} + \\ & (16u_6u_4^{17}u_1^4 + 64u_6u_4^{15}u_1^6)x_5x_3 + \\ & (-8u_6u_4^{19}u_1^3 - 32u_6u_4^{17}u_1^5)x_5 + \\ & (8u_6^2u_4^{18}u_1^3 + 32u_6^2u_4^{16}u_1^5)x_3 \end{aligned}$$

Reduced to zero.

2929. Creating S-polynomial from the pair  $(p_{39}, p_{71})$ .

Forming S-pol of  $p_{39}$  and  $p_{71}$ :

$$\begin{aligned} p_{698} = & -128u_5u_4^{14}u_1^7x_{16} + 256u_6u_4^{12}u_1^8x_{14}x_3 + 64u_5u_4^{15}u_1^6x_5 - \\ & 128u_6u_4^{13}u_1^7x_4x_3 - 64u_6u_5u_4^{14}u_1^6x_3 \end{aligned}$$

Reduced to zero.

2930. Creating S-polynomial from the pair  $(p_{39}, p_{72})$ .

Forming S-pol of  $p_{39}$  and  $p_{72}$ :

$$\begin{aligned} p_{699} = & -8192u_4^{25}u_1^{13}x_{16}x_{14}x_5 + 4096u_4^{26}u_1^{12}x_{16}x_5x_4 + \\ & (-2048u_5u_4^{27}u_1^{11} + 8192u_5u_4^{25}u_1^{13})x_{16}x_5 + \\ & (-4096u_6u_4^{25}u_1^{12} - 16384u_6u_4^{23}u_1^{14})x_{16}x_4x_3 + \\ & (2048u_6u_4^{27}u_1^{11} + 8192u_6u_4^{25}u_1^{13})x_{16}x_4 + \\ & (2048u_6u_4^{26}u_1^{11} + 8192u_6u_4^{24}u_1^{13})x_5x_4x_3 + \\ & (-1024u_6u_4^{28}u_1^{10} - 4096u_6u_4^{26}u_1^{12})x_5x_4 + \\ & (-1024u_6u_5u_4^{27}u_1^{10} - 4096u_5u_4^{26}u_1^{12})x_5x_3 + 2048u_5u_4^{28}u_1^{11}x_5 + \\ & (1024u_6^2u_4^{27}u_1^{10} + 4096u_6^2u_4^{25}u_1^{12})x_4x_3 + \\ & 2048u_6^2u_5u_4^{26}u_1^{11}x_3 - 1024u_6^2u_5u_4^{28}u_1^{10} \end{aligned}$$

Reduced to zero.

2931. Creating S-polynomial from the pair  $(p_{39}, p_{73})$ .

Forming S-pol of  $p_{39}$  and  $p_{73}$ :

$$\begin{aligned} p_{700} = & 16u_6u_4^{10}u_1^4x_{16}x_3 - 8u_6u_4^{12}u_1^3x_{16} - 8u_6u_4^{11}u_1^3x_5x_3 + \\ & 4u_6u_4^{13}u_1^2x_5 - 4u_6^2u_4^{12}u_1^2x_3 \end{aligned}$$

Reduced to zero.

2932. Creating S-polynomial from the pair  $(p_{39}, p_{74})$ .

Skipping pair  $p_{39}$  and  $p_{74}$  because gcd of their leading monoms is zero.

2933. Creating S-polynomial from the pair  $(p_{39}, p_{75})$ .  
 Skipping pair  $p_{39}$  and  $p_{75}$  because gcd of their leading monoms is zero.
2934. Creating S-polynomial from the pair  $(p_{39}, p_{76})$ .  
 Skipping pair  $p_{39}$  and  $p_{76}$  because gcd of their leading monoms is zero.
2935. Creating S-polynomial from the pair  $(p_{39}, p_{77})$ .  
 Skipping pair  $p_{39}$  and  $p_{77}$  because gcd of their leading monoms is zero.
2936. Creating S-polynomial from the pair  $(p_{39}, p_{78})$ .  
 Skipping pair  $p_{39}$  and  $p_{78}$  because gcd of their leading monoms is zero.
2937. Creating S-polynomial from the pair  $(p_{39}, p_{79})$ .  
 Skipping pair  $p_{39}$  and  $p_{79}$  because gcd of their leading monoms is zero.
2938. Creating S-polynomial from the pair  $(p_{39}, p_{80})$ .  
 Skipping pair  $p_{39}$  and  $p_{80}$  because gcd of their leading monoms is zero.
2939. Creating S-polynomial from the pair  $(p_{39}, p_{81})$ .  
 Skipping pair  $p_{39}$  and  $p_{81}$  because gcd of their leading monoms is zero.
2940. Creating S-polynomial from the pair  $(p_{39}, p_{82})$ .  
 Skipping pair  $p_{39}$  and  $p_{82}$  because gcd of their leading monoms is zero.
2941. Creating S-polynomial from the pair  $(p_{39}, p_{83})$ .  
 Skipping pair  $p_{39}$  and  $p_{83}$  because gcd of their leading monoms is zero.
2942. Creating S-polynomial from the pair  $(p_{39}, p_{84})$ .  
 Skipping pair  $p_{39}$  and  $p_{84}$  because gcd of their leading monoms is zero.
2943. Creating S-polynomial from the pair  $(p_{39}, p_{85})$ .  
 Skipping pair  $p_{39}$  and  $p_{85}$  because gcd of their leading monoms is zero.
2944. Creating S-polynomial from the pair  $(p_{39}, p_{86})$ .  
 Skipping pair  $p_{39}$  and  $p_{86}$  because gcd of their leading monoms is zero.
2945. Creating S-polynomial from the pair  $(p_{39}, p_{87})$ .  
 Skipping pair  $p_{39}$  and  $p_{87}$  because gcd of their leading monoms is zero.
2946. Creating S-polynomial from the pair  $(p_{39}, p_{88})$ .  
 Forming S-pol of  $p_{39}$  and  $p_{88}$ :
- $$p_{701} = -2048u_6u_4^{16}u_1^{11}x_{14} + 1024u_6u_4^{17}u_1^{10}x_4 - 1024u_6u_5u_4^{16}u_1^{10}x_3 + \\ 2048u_6u_5u_4^{16}u_1^{11}$$
- Reduced to zero.
2947. Creating S-polynomial from the pair  $(p_{39}, p_{89})$ .  
 Skipping pair  $p_{39}$  and  $p_{89}$  because gcd of their leading monoms is zero.



2948. Creating S-polynomial from the pair  $(p_{39}, p_{90})$ .

Forming S-pol of  $p_{39}$  and  $p_{90}$ :

$$\begin{aligned} p_{702} = & -1048576u_5u_4^{25}u_1^{20}x_{16}x_4 - 524288u_5^2u_4^{26}u_1^{19}x_{16} + \\ & 2097152u_6u_4^{24}u_1^{21}x_{14}^2 + 1048576u_6u_5u_4^{24}u_1^{20}x_{14}x_3 + \\ & (524288u_6u_5u_4^{26}u_1^{19} - 2097152u_6u_5u_4^{24}u_1^{21})x_{14} + \\ & 524288u_5u_4^{26}u_1^{19}x_5x_4 + 262144u_5^2u_4^{27}u_1^{18}x_5 + \\ & (-262144u_6u_5u_4^{27}u_1^{18} - 1048576u_6u_4^{26}u_1^{20})x_4 + 524288u_6u_5^2u_4^{26}u_1^{19} \end{aligned}$$

Reduced to zero.

2949. Creating S-polynomial from the pair  $(p_{39}, p_{91})$ .

Forming S-pol of  $p_{39}$  and  $p_{91}$ :

$$\begin{aligned} p_{703} = & -256u_5u_4^{14}u_1^8x_{16} + 512u_6u_4^{12}u_1^9x_{14}x_3 + 128u_5u_4^{15}u_1^7x_5 - \\ & 256u_6u_4^{13}u_1^8x_4x_3 - 128u_6u_5u_4^{14}u_1^7x_3 \end{aligned}$$

Reduced to zero.

2950. Creating S-polynomial from the pair  $(p_{39}, p_{92})$ .

Forming S-pol of  $p_{39}$  and  $p_{92}$ :

$$\begin{aligned} p_{704} = & 512u_4^{13}u_1^9x_{16}x_4 + 1024u_5u_4^{12}u_1^{10}x_{16} - 512u_4^{13}u_1^9x_{14}x_5 + \\ & 512u_6u_4^{12}u_1^9x_{14}x_3 + \\ & (-256u_6u_4^{14}u_1^8 - 1024u_6u_4^{12}u_1^{10})x_{14} - 256u_5u_4^{13}u_1^8x_5x_3 + \\ & 128u_6u_4^{15}u_1^7x_4 - 128u_6u_5u_4^{14}u_1^7x_3 \end{aligned}$$

Reduced to zero.

2951. Creating S-polynomial from the pair  $(p_{39}, p_{93})$ .

Forming S-pol of  $p_{39}$  and  $p_{93}$ :

$$\begin{aligned} p_{705} = & -2048u_4^{20}u_1^{11}x_{14}x_5 + (8192u_4^{17}u_1^{13} - 4096u_4^{17}u_1^{12})x_5x_4x_3 + \\ & (1024u_4^{21}u_1^{10} - 4096u_4^{19}u_1^{12})x_5x_4 - 1024u_5u_4^{20}u_1^{10}x_5x_3 + \\ & 2048u_5u_4^{20}u_1^{11}x_5 + 4096u_6u_4^{18}u_1^{12}x_4x_3 - 4096u_6u_4^{18}u_1^{12}x_4 \end{aligned}$$

S-pol added.

2952. Creating S-polynomial from the pair  $(p_{39}, p_{94})$ .

Forming S-pol of  $p_{39}$  and  $p_{94}$ :

$$p_{706} = 0$$

Reduced to zero.

2953. Creating S-polynomial from the pair  $(p_{39}, p_{95})$ .

Skipping pair  $p_{39}$  and  $p_{95}$  because gcd of their leading monoms is zero.

2954. Creating S-polynomial from the pair  $(p_{39}, p_{96})$ .  
 Skipping pair  $p_{39}$  and  $p_{96}$  because gcd of their leading monoms is zero.
2955. Creating S-polynomial from the pair  $(p_{39}, p_{97})$ .  
 Skipping pair  $p_{39}$  and  $p_{97}$  because gcd of their leading monoms is zero.
2956. Creating S-polynomial from the pair  $(p_{39}, p_{98})$ .  
 Skipping pair  $p_{39}$  and  $p_{98}$  because gcd of their leading monoms is zero.
2957. Creating S-polynomial from the pair  $(p_{39}, p_{99})$ .  
 Forming S-pol of  $p_{39}$  and  $p_{99}$ : Polynomial too big for output (text size is 2089 characters, number of terms is 27)  
 Reduced to zero.
2958. Creating S-polynomial from the pair  $(p_{39}, p_{100})$ .  
 Skipping pair  $p_{39}$  and  $p_{100}$  because gcd of their leading monoms is zero.
2959. Creating S-polynomial from the pair  $(p_{39}, p_{101})$ .  
 Skipping pair  $p_{39}$  and  $p_{101}$  because gcd of their leading monoms is zero.
2960. Creating S-polynomial from the pair  $(p_{39}, p_{102})$ .  
 Skipping pair  $p_{39}$  and  $p_{102}$  because gcd of their leading monoms is zero.
2961. Creating S-polynomial from the pair  $(p_{39}, p_{103})$ .  
 Forming S-pol of  $p_{39}$  and  $p_{103}$ : Polynomial too big for output (text size is 2098 characters, number of terms is 27)  
 Reduced to zero.
2962. Creating S-polynomial from the pair  $(p_{39}, p_{104})$ .  
 Forming S-pol of  $p_{39}$  and  $p_{104}$ :  

$$p_{707} = 1048576u_5u_4^{23}u_1^{20}x_{16}x_{14} + (2097152u_5u_4^{22}u_1^{21} + 2097152u_4^{23}u_1^{21})x_{16}x_4 +$$

$$(262144u_5^2u_4^{25}u_1^{18} - 1048576u_5^2u_4^{23}u_1^{20})x_{16} -$$

$$1048576u_6u_4^{23}u_1^{20}x_{14}^2 - 1048576u_4^{23}u_1^{20}x_{14}x_5x_4 -$$

$$524288u_5u_4^{24}u_1^{19}x_{14}x_5 + 1048576u_6u_4^{22}u_1^{20}x_{14}x_4x_3 -$$

$$2097152u_6u_4^{22}u_1^{21}x_{14}x_4 - 262144u_6u_5u_4^{25}u_1^{18}x_{14} -$$

$$524288u_5u_4^{23}u_1^{19}x_5x_4x_3 - 131072u_5^2u_4^{26}u_1^{17}x_5 -$$

$$262144u_6u_5u_4^{24}u_1^{18}x_4x_3 +$$

$$(131072u_6u_5u_4^{26}u_1^{17} + 524288u_6u_4^{25}u_1^{19})x_4 - 262144u_6u_5^2u_4^{25}u_1^{18}$$
 Reduced to zero.
2963. Creating S-polynomial from the pair  $(p_{39}, p_{105})$ .  
 Forming S-pol of  $p_{39}$  and  $p_{105}$ :  

$$p_{708} = 128u_5u_4^{10}u_1^7x_{16} - 64u_4^{11}u_1^6x_{14}x_5 - 128u_6u_4^{10}u_1^7x_{14} +$$

$$32u_4^{12}u_1^5x_5x_4 - 32u_5u_4^{11}u_1^5x_5x_3 + 64u_6u_4^{11}u_1^6x_4$$
 Reduced to zero.

2964. Creating S-polynomial from the pair  $(p_{39}, p_{106})$ .

Forming S-pol of  $p_{39}$  and  $p_{106}$ :

$$\begin{aligned} p_{709} = & -1024u_4^{19}u_1^{10}x_{14}x_5 + (4096u_4^{16}u_1^{12} - 2048u_4^{16}u_1^{11})x_5x_4x_3 + \\ & (512u_4^{20}u_1^9 - 2048u_4^{18}u_1^{11})x_5x_4 - 512u_5u_4^{19}u_1^9x_5x_3 + \\ & 1024u_5u_4^{19}u_1^{10}x_5 + 2048u_6u_4^{17}u_1^{11}x_4x_3 - 2048u_6u_4^{17}u_1^{11}x_4 \end{aligned}$$

S-pol added.

2965. Creating S-polynomial from the pair  $(p_{40}, p_{41})$ .

Forming S-pol of  $p_{40}$  and  $p_{41}$ :

$$\begin{aligned} p_{710} = & -16384u_6u_4^{13}u_3^{12}u_1^{14}x_{16}x_6x_4 - 8192u_5u_4^{13}u_3^{13}u_1^{13}x_{16}x_5x_4 + \\ & 16384u_6u_4^{13}u_3^{13}u_1^{14}x_{16}x_4 - 8192u_6u_5^2u_4^{13}u_3^{13}u_1^{13}x_{16} + \\ & 16384u_5u_4^{13}u_3^{12}u_1^{14}x_{14}x_8x_5 + 8192u_5^2u_4^{13}u_3^{12}u_1^{13}x_8x_5x_3 - \\ & 16384u_5^2u_4^{13}u_3^{12}u_1^{14}x_8x_5 - 8192u_6u_5u_4^{13}u_3^{12}u_1^{13}x_8x_4x_3 + \\ & 16384u_6u_5u_4^{13}u_3^{12}u_1^{14}x_8x_4 \end{aligned}$$

Reduced to zero.

2966. Creating S-polynomial from the pair  $(p_{40}, p_{42})$ .

Forming S-pol of  $p_{40}$  and  $p_{42}$ :

$$\begin{aligned} p_{711} = & -16384u_6u_4^{13}u_2^{12}u_1^{14}x_{16}x_{10}x_4 - 8192u_5u_4^{13}u_2^{13}u_1^{13}x_{16}x_5x_4 + \\ & 16384u_6u_4^{13}u_2^{13}u_1^{14}x_{16}x_4 - 8192u_6u_5^2u_4^{13}u_2^{13}u_1^{13}x_{16} + \\ & 16384u_5u_4^{13}u_2^{12}u_1^{14}x_{14}x_{12}x_5 + 8192u_5^2u_4^{13}u_2^{12}u_1^{13}x_{12}x_5x_3 - \\ & 16384u_5^2u_4^{13}u_2^{12}u_1^{14}x_{12}x_5 - 8192u_6u_5u_4^{13}u_2^{12}u_1^{13}x_{12}x_4x_3 + \\ & 16384u_6u_5u_4^{13}u_2^{12}u_1^{14}x_{12}x_4 \end{aligned}$$

Reduced to zero.

2967. Creating S-polynomial from the pair  $(p_{40}, p_{43})$ .

Forming S-pol of  $p_{40}$  and  $p_{43}$ :

$$\begin{aligned} p_{712} = & 16384u_5u_4^{25}u_1^{14}x_{14}x_5x_4 - 16384u_6u_4^{25}u_1^{14}x_{14}x_4^2 - \\ & 8192u_5u_4^{26}u_1^{13}x_5x_4^2 + 8192u_5^2u_4^{25}u_1^{13}x_5x_4x_3 - \\ & 16384u_5^2u_4^{25}u_1^{14}x_5x_4 - 8192u_6u_5u_4^{25}u_1^{13}x_4^2x_3 + \\ & (16384u_6u_5u_4^{25}u_1^{14} + 16384u_6u_4^{26}u_1^{14})x_4^2 - 8192u_6u_5^2u_4^{26}u_1^{13}x_4 \end{aligned}$$

Reduced to zero.

2968. Creating S-polynomial from the pair  $(p_{40}, p_{44})$ .

Skipping pair  $p_{40}$  and  $p_{44}$  because gcd of their leading monoms is zero.

2969. Creating S-polynomial from the pair  $(p_{40}, p_{45})$ .  
 Skipping pair  $p_{40}$  and  $p_{45}$  because gcd of their leading monoms is zero.
2970. Creating S-polynomial from the pair  $(p_{40}, p_{46})$ .  
 Skipping pair  $p_{40}$  and  $p_{46}$  because gcd of their leading monoms is zero.
2971. Creating S-polynomial from the pair  $(p_{40}, p_{47})$ .  
 Forming S-pol of  $p_{40}$  and  $p_{47}$ : Polynomial too big for output (text size is 1644 characters, number of terms is 17)  
 Reduced to zero.
2972. Creating S-polynomial from the pair  $(p_{40}, p_{48})$ .  
 Skipping pair  $p_{40}$  and  $p_{48}$  because gcd of their leading monoms is zero.
2973. Creating S-polynomial from the pair  $(p_{40}, p_{49})$ .  
 Skipping pair  $p_{40}$  and  $p_{49}$  because gcd of their leading monoms is zero.
2974. Creating S-polynomial from the pair  $(p_{40}, p_{50})$ .  
 Skipping pair  $p_{40}$  and  $p_{50}$  because gcd of their leading monoms is zero.
2975. Creating S-polynomial from the pair  $(p_{40}, p_{51})$ .  
 Skipping pair  $p_{40}$  and  $p_{51}$  because gcd of their leading monoms is zero.
2976. Creating S-polynomial from the pair  $(p_{40}, p_{52})$ .  
 Forming S-pol of  $p_{40}$  and  $p_{52}$ : Polynomial too big for output (text size is 1425 characters, number of terms is 16)  
 Reduced to zero.
2977. Creating S-polynomial from the pair  $(p_{40}, p_{53})$ .  
 Skipping pair  $p_{40}$  and  $p_{53}$  because gcd of their leading monoms is zero.
2978. Creating S-polynomial from the pair  $(p_{40}, p_{54})$ .  
 Skipping pair  $p_{40}$  and  $p_{54}$  because gcd of their leading monoms is zero.
2979. Creating S-polynomial from the pair  $(p_{40}, p_{55})$ .  
 Skipping pair  $p_{40}$  and  $p_{55}$  because gcd of their leading monoms is zero.
2980. Creating S-polynomial from the pair  $(p_{40}, p_{56})$ .  
 Skipping pair  $p_{40}$  and  $p_{56}$  because gcd of their leading monoms is zero.
2981. Creating S-polynomial from the pair  $(p_{40}, p_{57})$ .  
 Forming S-pol of  $p_{40}$  and  $p_{57}$ : Polynomial too big for output (text size is 1659 characters, number of terms is 17)  
 Reduced to zero.
2982. Creating S-polynomial from the pair  $(p_{40}, p_{58})$ .  
 Skipping pair  $p_{40}$  and  $p_{58}$  because gcd of their leading monoms is zero.

2983. Creating S-polynomial from the pair  $(p_{40}, p_{59})$ .  
 Skipping pair  $p_{40}$  and  $p_{59}$  because gcd of their leading monoms is zero.
2984. Creating S-polynomial from the pair  $(p_{40}, p_{60})$ .  
 Skipping pair  $p_{40}$  and  $p_{60}$  because gcd of their leading monoms is zero.
2985. Creating S-polynomial from the pair  $(p_{40}, p_{61})$ .  
 Skipping pair  $p_{40}$  and  $p_{61}$  because gcd of their leading monoms is zero.
2986. Creating S-polynomial from the pair  $(p_{40}, p_{62})$ .  
 Forming S-pol of  $p_{40}$  and  $p_{62}$ : Polynomial too big for output (text size is 1435 characters, number of terms is 16)  
 Reduced to zero.
2987. Creating S-polynomial from the pair  $(p_{40}, p_{63})$ .  
 Skipping pair  $p_{40}$  and  $p_{63}$  because gcd of their leading monoms is zero.
2988. Creating S-polynomial from the pair  $(p_{40}, p_{64})$ .  
 Skipping pair  $p_{40}$  and  $p_{64}$  because gcd of their leading monoms is zero.
2989. Creating S-polynomial from the pair  $(p_{40}, p_{65})$ .  
 Forming S-pol of  $p_{40}$  and  $p_{65}$ :
- $$\begin{aligned}
 p_{713} = & 262144u_4^{25}u_1^{18}x_{16}x_4^2 + (-32768u_5u_4^{28}u_1^{15} + 524288u_5u_4^{24}u_1^{19})x_{16}x_4 + \\
 & (-131072u_4^{26}u_1^{17} - 524288u_4^{24}u_1^{19})x_{14}x_5 + 65536u_4^{27}u_1^{16}x_{14}x_5x_4 + \\
 & (-65536u_5u_4^{26}u_1^{16} - 262144u_5u_4^{24}u_1^{18})x_{14}x_5x_3 + \\
 & (131072u_5u_4^{26}u_1^{17} + 524288u_5u_4^{24}u_1^{19})x_{14}x_5 + \\
 & (65536u_6u_4^{26}u_1^{16} + 262144u_6u_4^{24}u_1^{18})x_{14}x_4x_3 + \\
 & (-131072u_6u_4^{26}u_1^{17} - 524288u_6u_4^{24}u_1^{19})x_{14}x_4 - \\
 & 131072u_5u_4^{25}u_1^{17}x_5x_4x_3 + 16384u_5u_4^{29}u_1^{14}x_5x_4 - \\
 & 32768u_6u_4^{27}u_1^{15}x_4^2x_3 + 65536u_6u_4^{27}u_1^{16}x_4^2 + \\
 & (-16384u_6u_5u_4^{28}u_1^{14} - 65536u_6u_5u_4^{26}u_1^{16})x_4x_3
 \end{aligned}$$
- Reduced to zero.
2990. Creating S-polynomial from the pair  $(p_{40}, p_{66})$ .  
 Skipping pair  $p_{40}$  and  $p_{66}$  because gcd of their leading monoms is zero.
2991. Creating S-polynomial from the pair  $(p_{40}, p_{67})$ .  
 Forming S-pol of  $p_{40}$  and  $p_{67}$ : Polynomial too big for output (text size is 1300 characters, number of terms is 16)  
 S-pol added.

2992. Creating S-polynomial from the pair  $(p_{40}, p_{68})$ .

Forming S-pol of  $p_{40}$  and  $p_{68}$ :

$$\begin{aligned} p_{714} = & -8192u_4^{20}u_1^{13}x_{16}x_4^2 - 16384u_5u_4^{19}u_1^{14}x_{16}x_4 + \\ & 16384u_4^{19}u_1^{14}x_{14}x_5^2 + 8192u_5u_4^{19}u_1^{13}x_{14}x_5x_3 - \\ & 16384u_5u_4^{19}u_1^{14}x_{14}x_5 - 8192u_6u_4^{19}u_1^{13}x_{14}x_4x_3 + \\ & (4096u_6u_4^{21}u_1^{12} + 16384u_6u_4^{19}u_1^{14})x_{14}x_4 + 4096u_5u_4^{20}u_1^{12}x_5x_4x_3 - \\ & 2048u_6u_4^{22}u_1^{11}x_4^2 + 2048u_6u_5u_4^{21}u_1^{11}x_4x_3 \end{aligned}$$

Reduced to zero.

2993. Creating S-polynomial from the pair  $(p_{40}, p_{69})$ .

Forming S-pol of  $p_{40}$  and  $p_{69}$ :

$$\begin{aligned} p_{715} = & 16384u_4^{26}u_1^{14}x_{16}x_4^2 - 8192u_5u_4^{27}u_1^{13}x_{16}x_4 + \\ & (-32768u_4^{25}u_1^{15} - 131072u_4^{23}u_1^{17})x_{14}x_5^2 + 65536u_4^{24}u_1^{16}x_{14}x_5x_4 + \\ & (-16384u_5u_4^{25}u_1^{14} - 65536u_5u_4^{23}u_1^{16})x_{14}x_5x_3 + \\ & (32768u_5u_4^{25}u_1^{15} + 131072u_5u_4^{23}u_1^{17})x_{14}x_5 + \\ & (16384u_6u_4^{25}u_1^{14} + 65536u_6u_4^{23}u_1^{16})x_{14}x_4x_3 - 32768u_6u_4^{25}u_1^{15}x_{14}x_4 - \\ & 8192u_5u_4^{26}u_1^{13}x_5x_4x_3 + \\ & (4096u_5u_4^{28}u_1^{12} + 16384u_5u_4^{26}u_1^{14})x_5x_4 - 32768u_6u_4^{24}u_1^{15}x_4^2x_3 + \\ & (-4096u_6u_5u_4^{27}u_1^{12} - 16384u_6u_5u_4^{25}u_1^{14})x_4x_3 \end{aligned}$$

Reduced to zero.

2994. Creating S-polynomial from the pair  $(p_{40}, p_{70})$ .

Forming S-pol of  $p_{40}$  and  $p_{70}$ :

$$\begin{aligned} p_{716} = & (-2048u_4^{23}u_1^{11} - 8192u_4^{21}u_1^{13})x_{16}x_{14}x_5 + \\ & (1024u_4^{24}u_1^{10} + 4096u_4^{22}u_1^{12})x_{16}x_5x_4 + \\ & (-1024u_5u_4^{23}u_1^{10} - 4096u_5u_4^{21}u_1^{12})x_{16}x_5x_3 + \\ & (2048u_5u_4^{23}u_1^{11} + 8192u_5u_4^{21}u_1^{13})x_{16}x_5 + \\ & (1024u_6u_4^{23}u_1^{10} + 4096u_6u_4^{21}u_1^{12})x_{16}x_4x_3 + \\ & (-512u_6u_4^{25}u_1^9 - 2048u_6u_4^{23}u_1^{11})x_{16}x_4 + \\ & (-512u_6u_4^{24}u_1^9 - 2048u_6u_4^{22}u_1^{11})x_5x_4x_3 + \\ & (256u_6u_4^{26}u_1^8 + 1024u_6u_4^{24}u_1^{10})x_5x_4 + \\ & (-256u_6^2u_4^{25}u_1^8 - 1024u_6^2u_4^{23}u_1^{10})x_4x_3 \end{aligned}$$

Reduced to zero.

2995. Creating S-polynomial from the pair  $(p_{40}, p_{71})$ .

Forming S-pol of  $p_{40}$  and  $p_{71}$ :

$$\begin{aligned} p_{717} = & 4096u_5u_4^{21}u_1^{12}x_{16}x_4 + 16384u_4^{19}u_1^{14}x_{14}^2x_5 - \\ & 8192u_4^{20}u_1^{13}x_{14}x_5x_4 + 8192u_5u_4^{19}u_1^{13}x_{14}x_5x_3 - \\ & 16384u_5u_4^{19}u_1^{14}x_{14}x_5 - 8192u_6u_4^{19}u_1^{13}x_{14}x_4x_3 - \\ & 2048u_5u_4^{22}u_1^{11}x_5x_4 + 4096u_6u_4^{20}u_1^{12}x_4^2x_3 + \\ & 2048u_6u_5u_4^{21}u_1^{11}x_4x_3 \end{aligned}$$

Reduced to zero.

2996. Creating S-polynomial from the pair  $(p_{40}, p_{72})$ .

Forming S-pol of  $p_{40}$  and  $p_{72}$ : Polynomial too big for output (text size is 1129 characters, number of terms is 16)

S-pol added.

2997. Creating S-polynomial from the pair  $(p_{40}, p_{73})$ .

Forming S-pol of  $p_{40}$  and  $p_{73}$ :

$$\begin{aligned} p_{718} = & 1024u_4^{17}u_1^{10}x_{16}x_{14}x_5 - 512u_4^{18}u_1^9x_{16}x_5x_4 + \\ & 512u_5u_4^{17}u_1^9x_{16}x_5x_3 - 1024u_5u_4^{17}u_1^{10}x_{16}x_5 - \\ & 512u_6u_4^{17}u_1^9x_{16}x_4x_3 + 256u_6u_4^{19}u_1^8x_{16}x_4 + \\ & 256u_6u_4^{18}u_1^8x_5x_4x_3 - 128u_6u_4^{20}u_1^7x_5x_4 + \\ & 128u_6^2u_4^{19}u_1^7x_4x_3 \end{aligned}$$

Reduced to zero.

2998. Creating S-polynomial from the pair  $(p_{40}, p_{74})$ .

Skipping pair  $p_{40}$  and  $p_{74}$  because gcd of their leading monoms is zero.

2999. Creating S-polynomial from the pair  $(p_{40}, p_{75})$ .

Skipping pair  $p_{40}$  and  $p_{75}$  because gcd of their leading monoms is zero.

3000. Creating S-polynomial from the pair  $(p_{40}, p_{76})$ .

Skipping pair  $p_{40}$  and  $p_{76}$  because gcd of their leading monoms is zero.

3001. Creating S-polynomial from the pair  $(p_{40}, p_{77})$ .

Skipping pair  $p_{40}$  and  $p_{77}$  because gcd of their leading monoms is zero.

3002. Creating S-polynomial from the pair  $(p_{40}, p_{78})$ .

Skipping pair  $p_{40}$  and  $p_{78}$  because gcd of their leading monoms is zero.

3003. Creating S-polynomial from the pair  $(p_{40}, p_{79})$ .

Forming S-pol of  $p_{40}$  and  $p_{79}$ : Polynomial too big for output (text size is 1033 characters, number of terms is 12)

S-pol added.

3004. Creating S-polynomial from the pair  $(p_{40}, p_{80})$ .  
 Skipping pair  $p_{40}$  and  $p_{80}$  because gcd of their leading monoms is zero.
3005. Creating S-polynomial from the pair  $(p_{40}, p_{81})$ .  
 Skipping pair  $p_{40}$  and  $p_{81}$  because gcd of their leading monoms is zero.
3006. Creating S-polynomial from the pair  $(p_{40}, p_{82})$ .  
 Skipping pair  $p_{40}$  and  $p_{82}$  because gcd of their leading monoms is zero.
3007. Creating S-polynomial from the pair  $(p_{40}, p_{83})$ .  
 Skipping pair  $p_{40}$  and  $p_{83}$  because gcd of their leading monoms is zero.
3008. Creating S-polynomial from the pair  $(p_{40}, p_{84})$ .  
 Skipping pair  $p_{40}$  and  $p_{84}$  because gcd of their leading monoms is zero.
3009. Creating S-polynomial from the pair  $(p_{40}, p_{85})$ .  
 Skipping pair  $p_{40}$  and  $p_{85}$  because gcd of their leading monoms is zero.
3010. Creating S-polynomial from the pair  $(p_{40}, p_{86})$ .  
 Forming S-pol of  $p_{40}$  and  $p_{86}$ : Polynomial too big for output (text size is 1027 characters, number of terms is 12)  
 S-pol added.
3011. Creating S-polynomial from the pair  $(p_{40}, p_{87})$ .  
 Skipping pair  $p_{40}$  and  $p_{87}$  because gcd of their leading monoms is zero.
3012. Creating S-polynomial from the pair  $(p_{40}, p_{88})$ .  
 Forming S-pol of  $p_{40}$  and  $p_{88}$ :

$$\begin{aligned}
 p_{719} = & -65536u_5u_4^{23}u_1^{16}x_{14}x_5 + 65536u_6u_4^{23}u_1^{16}x_{14}x_4 + \\
 & 32768u_5u_4^{24}u_1^{15}x_5x_4 - 32768u_5^2u_4^{23}u_1^{15}x_5x_3 + \\
 & 65536u_5^2u_4^{23}u_1^{16}x_5 - 32768u_6u_4^{24}u_1^{15}x_4^2 + \\
 & 32768u_6u_5u_4^{23}u_1^{15}x_4x_3 - 65536u_6u_5u_4^{23}u_1^{16}x_4
 \end{aligned}$$

Reduced to zero.

3013. Creating S-polynomial from the pair  $(p_{40}, p_{89})$ .  
 Skipping pair  $p_{40}$  and  $p_{89}$  because gcd of their leading monoms is zero.
3014. Creating S-polynomial from the pair  $(p_{40}, p_{90})$ .  
 Forming S-pol of  $p_{40}$  and  $p_{90}$ :

$$\begin{aligned}
 p_{720} = & 33554432u_5u_4^{32}u_1^{25}x_{16}x_4^2 + 16777216u_5^2u_4^{33}u_1^{24}x_{16}x_4 + \\
 & 67108864u_5u_4^{31}u_1^{26}x_{14}^2x_5 - 67108864u_6u_4^{31}u_1^{26}x_{14}^2x_4 - \\
 & 33554432u_5u_4^{32}u_1^{25}x_{14}x_5x_4 + 33554432u_5^2u_4^{31}u_1^{25}x_{14}x_5x_3 - \\
 & 67108864u_5^2u_4^{31}u_1^{26}x_{14}x_5 - 33554432u_6u_5u_4^{31}u_1^{25}x_{14}x_4x_3 + \\
 & (-16777216u_6u_5u_4^{33}u_1^{24} + 67108864u_6u_5u_4^{31}u_1^{26})x_{14}x_4 -
 \end{aligned}$$



$$\begin{aligned}
& 16777216u_5u_4^{33}u_1^{24}x_5x_4^2 - 8388608u_5^2u_4^{34}u_1^{23}x_5x_4 + \\
& (8388608u_6u_5u_4^{34}u_1^{23} + 33554432u_6u_4^{33}u_1^{25})x_4^2 - \\
& 16777216u_6u_5^2u_4^{33}u_1^{24}x_4
\end{aligned}$$

Reduced to zero.

3015. Creating S-polynomial from the pair  $(p_{40}, p_{91})$ .

Forming S-pol of  $p_{40}$  and  $p_{91}$ :

$$\begin{aligned}
p_{721} = & 8192u_5u_4^{21}u_1^{13}x_{16}x_4 + 32768u_4^{19}u_1^{15}x_{14}^2x_5 - \\
& 16384u_4^{20}u_1^{14}x_{14}x_5x_4 + 16384u_5u_4^{19}u_1^{14}x_{14}x_5x_3 - \\
& 32768u_5u_4^{19}u_1^{15}x_{14}x_5 - 16384u_6u_4^{19}u_1^{14}x_{14}x_4x_3 - \\
& 4096u_5u_4^{22}u_1^{12}x_5x_4 + 8192u_6u_4^{20}u_1^{13}x_4^2x_3 + \\
& 4096u_6u_5u_4^{21}u_1^{12}x_4x_3
\end{aligned}$$

Reduced to zero.

3016. Creating S-polynomial from the pair  $(p_{40}, p_{92})$ .

Forming S-pol of  $p_{40}$  and  $p_{92}$ :

$$\begin{aligned}
p_{722} = & -16384u_4^{20}u_1^{14}x_{16}x_4^2 - 32768u_5u_4^{19}u_1^{15}x_{16}x_4 + \\
& 32768u_4^{19}u_1^{15}x_{14}^2x_5 + 16384u_5u_4^{19}u_1^{14}x_{14}x_5x_3 - \\
& 32768u_5u_4^{19}u_1^{15}x_{14}x_5 - 16384u_6u_4^{19}u_1^{14}x_{14}x_4x_3 + \\
& (8192u_6u_4^{21}u_1^{13} + 32768u_6u_4^{19}u_1^{15})x_{14}x_4 + 8192u_5u_4^{20}u_1^{13}x_5x_4x_3 - \\
& 4096u_6u_4^{22}u_1^{12}x_4^2 + 4096u_6u_5u_4^{21}u_1^{12}x_4x_3
\end{aligned}$$

Reduced to zero.

3017. Creating S-polynomial from the pair  $(p_{40}, p_{93})$ .

Forming S-pol of  $p_{40}$  and  $p_{93}$ :

$$\begin{aligned}
p_{723} = & 131072u_4^{25}u_1^{17}x_{14}x_5x_4 + (-262144u_4^{24}u_1^{18} + 131072u_4^{24}u_1^{17})x_5x_4^2x_3 + \\
& (131072u_4^{26}u_1^{17} - 65536u_4^{26}u_1^{16})x_5x_4^2 + 65536u_5u_4^{25}u_1^{16}x_5x_4x_3 - \\
& 131072u_5u_4^{25}u_1^{17}x_5x_4 - 131072u_6u_4^{25}u_1^{17}x_4^2x_3 + \\
& 131072u_6u_4^{25}u_1^{17}x_4^2
\end{aligned}$$

S-pol added.

3018. Creating S-polynomial from the pair  $(p_{40}, p_{94})$ .

Forming S-pol of  $p_{40}$  and  $p_{94}$ :

$$\begin{aligned}
p_{724} = & 1024u_4^{19}u_1^{10}x_{14}x_5 - 512u_4^{20}u_1^9x_5x_4 + 512u_5u_4^{19}u_1^9x_5x_3 - \\
& 1024u_5u_4^{19}u_1^{10}x_5
\end{aligned}$$

Reduced to zero.

3019. Creating S-polynomial from the pair  $(p_{40}, p_{95})$ .

Forming S-pol of  $p_{40}$  and  $p_{95}$ : Polynomial too big for output (text size is 1107 characters, number of terms is 16)

Reduced to zero.

3020. Creating S-polynomial from the pair  $(p_{40}, p_{96})$ .

Forming S-pol of  $p_{40}$  and  $p_{96}$ :

$$\begin{aligned} p_{725} = & -4096u_5u_4^{13}u_3^4u_1^{12}x_{16}x_8 + 2048u_4^{13}u_3^5u_1^{11}x_{16}x_6x_5 + \\ & 4096u_6u_4^{13}u_3^4u_1^{12}x_{16}x_6 + 1024u_5u_4^{13}u_3^5u_1^{10}x_{16}x_5x_2 - \\ & 1024u_6u_4^{13}u_3^5u_1^{10}x_{16}x_4x_2 - 2048u_4^{13}u_3^5u_1^{11}x_{14}x_8x_5 - \\ & 1024u_5u_4^{13}u_3^5u_1^{10}x_8x_5x_3 + 2048u_5u_4^{13}u_3^5u_1^{11}x_8x_5 + \\ & 1024u_6u_4^{13}u_3^5u_1^{10}x_8x_4x_3 - 2048u_6u_4^{13}u_3^5u_1^{11}x_8x_4 \end{aligned}$$

Reduced to zero.

3021. Creating S-polynomial from the pair  $(p_{40}, p_{97})$ .

Forming S-pol of  $p_{40}$  and  $p_{97}$ :

$$\begin{aligned} p_{726} = & 32768u_4^{13}u_3^{13}u_1^{15}x_{16}x_6x_5 + \\ & (-131072u_4^{13}u_3^{10}u_1^{17} + 65536u_4^{13}u_3^{10}u_1^{16})x_{16}x_5x_4x_2 + \\ & 65536u_4^{13}u_3^{12}u_1^{16}x_{16}x_5x_4 + 16384u_5u_4^{13}u_3^{13}u_1^{14}x_{16}x_5x_2 - \\ & 32768u_5u_4^{13}u_3^{13}u_1^{15}x_{16}x_5 + \\ & (-16384u_6u_4^{13}u_3^{13}u_1^{14} - 65536u_6u_4^{13}u_3^{11}u_1^{16})x_{16}x_4x_2 + \\ & (32768u_6u_4^{13}u_3^{13}u_1^{15} + 65536u_6u_4^{13}u_3^{11}u_1^{16})x_{16}x_4 - \\ & 32768u_4^{13}u_3^{13}u_1^{15}x_{14}x_8x_5 - 16384u_5u_4^{13}u_3^{13}u_1^{14}x_8x_5x_3 + \\ & 32768u_5u_4^{13}u_3^{13}u_1^{15}x_8x_5 + 16384u_6u_4^{13}u_3^{13}u_1^{14}x_8x_4x_3 - \\ & 32768u_6u_4^{13}u_3^{13}u_1^{15}x_8x_4 \end{aligned}$$

S-pol added.

3022. Creating S-polynomial from the pair  $(p_{40}, p_{98})$ .

Skipping pair  $p_{40}$  and  $p_{98}$  because gcd of their leading monoms is zero.

3023. Creating S-polynomial from the pair  $(p_{40}, p_{99})$ .

Forming S-pol of  $p_{40}$  and  $p_{99}$ : Polynomial too big for output (text size is 2773 characters, number of terms is 31)

Reduced to zero.

3024. Creating S-polynomial from the pair  $(p_{40}, p_{100})$ .

Forming S-pol of  $p_{40}$  and  $p_{100}$ : Polynomial too big for output (text size is 1124 characters, number of terms is 16)

Reduced to zero.

3025. Creating S-polynomial from the pair  $(p_{40}, p_{101})$ .

Forming S-pol of  $p_{40}$  and  $p_{101}$ :

$$\begin{aligned} p_{727} = & -4096u_5u_4^{13}u_2^4u_1^{12}x_{16}x_{12} + 2048u_4^{13}u_2^5u_1^{11}x_{16}x_{10}x_5 + \\ & 4096u_6u_4^{13}u_2^4u_1^{12}x_{16}x_{10} + 1024u_5u_4^{13}u_2^5u_1^{10}x_{16}x_5x_1 - \\ & 1024u_6u_4^{13}u_2^5u_1^{10}x_{16}x_4x_1 - 2048u_4^{13}u_2^5u_1^{11}x_{14}x_{12}x_5 - \\ & 1024u_5u_4^{13}u_2^5u_1^{10}x_{12}x_5x_3 + 2048u_5u_4^{13}u_2^5u_1^{11}x_{12}x_5 + \\ & 1024u_6u_4^{13}u_2^5u_1^{10}x_{12}x_4x_3 - 2048u_6u_4^{13}u_2^5u_1^{11}x_{12}x_4 \end{aligned}$$

Reduced to zero.

3026. Creating S-polynomial from the pair  $(p_{40}, p_{102})$ .

Forming S-pol of  $p_{40}$  and  $p_{102}$ :

$$\begin{aligned} p_{728} = & 32768u_4^{13}u_2^{13}u_1^{15}x_{16}x_{10}x_5 + \\ & (-131072u_4^{13}u_2^{10}u_1^{17} + 65536u_4^{13}u_2^{10}u_1^{16})x_{16}x_5x_4x_1 + \\ & 65536u_4^{13}u_2^{12}u_1^{16}x_{16}x_5x_4 + 16384u_5u_4^{13}u_2^{13}u_1^{14}x_{16}x_5x_1 - \\ & 32768u_5u_4^{13}u_2^{13}u_1^{15}x_{16}x_5 + \\ & (-16384u_6u_4^{13}u_2^{13}u_1^{14} - 65536u_6u_4^{13}u_2^{11}u_1^{16})x_{16}x_4x_1 + \\ & (32768u_6u_4^{13}u_2^{13}u_1^{15} + 65536u_6u_4^{13}u_2^{11}u_1^{16})x_{16}x_4 - \\ & 32768u_4^{13}u_2^{13}u_1^{15}x_{14}x_{12}x_5 - 16384u_5u_4^{13}u_2^{13}u_1^{14}x_{12}x_5x_3 + \\ & 32768u_5u_4^{13}u_2^{13}u_1^{15}x_{12}x_5 + 16384u_6u_4^{13}u_2^{13}u_1^{14}x_{12}x_4x_3 - \\ & 32768u_6u_4^{13}u_2^{13}u_1^{15}x_{12}x_4 \end{aligned}$$

S-pol added.

3027. Creating S-polynomial from the pair  $(p_{40}, p_{103})$ .

Forming S-pol of  $p_{40}$  and  $p_{103}$ : Polynomial too big for output (text size is 2786 characters, number of terms is 31)

Reduced to zero.

3028. Creating S-polynomial from the pair  $(p_{40}, p_{104})$ .

Forming S-pol of  $p_{40}$  and  $p_{104}$ :

$$\begin{aligned} p_{729} = & -33554432u_5u_4^{30}u_1^{25}x_{16}x_{14}x_4 + \\ & (-67108864u_5u_4^{29}u_1^{26} - 67108864u_4^{30}u_1^{26})x_{16}x_4^2 + \\ & (-8388608u_5^2u_4^{32}u_1^{23} + 33554432u_5^2u_4^{30}u_1^{25})x_{16}x_4 + \\ & 67108864u_4^{29}u_1^{26}x_{14}x_5 + 33554432u_6u_4^{30}u_1^{25}x_{14}x_4 + \\ & 16777216u_5u_4^{31}u_1^{24}x_{14}x_5x_4 + 33554432u_5u_4^{29}u_1^{25}x_{14}x_5x_3 - \\ & 67108864u_5u_4^{29}u_1^{26}x_{14}x_5 - 33554432u_6u_4^{29}u_1^{25}x_{14}x_4x_3 + \\ & (8388608u_6u_5u_4^{32}u_1^{23} + 67108864u_6u_4^{29}u_1^{26})x_{14}x_4 + \end{aligned}$$

$$\begin{aligned}
& 16777216u_5u_4^{30}u_1^{24}x_5x_4^2x_3 + 4194304u_5^2u_4^{33}u_1^{22}x_5x_4 + \\
& 8388608u_6u_5u_4^{31}u_1^{23}x_4^2x_3 + \\
& (-4194304u_6u_5u_4^{33}u_1^{22} - 16777216u_6u_4^{32}u_1^{24})x_4^2 + \\
& 8388608u_6u_5^2u_4^{32}u_1^{23}x_4
\end{aligned}$$

S-pol added.

3029. Creating S-polynomial from the pair  $(p_{40}, p_{105})$ .

Forming S-pol of  $p_{40}$  and  $p_{105}$ :

$$\begin{aligned}
p_{730} = & -4096u_5u_4^{17}u_1^{12}x_{16}x_4 + 4096u_6u_4^{17}u_1^{12}x_{14}x_4 + \\
& 2048u_5u_4^{18}u_1^{11}x_5x_4 - 2048u_6u_4^{18}u_1^{11}x_4^2
\end{aligned}$$

Reduced to zero.

3030. Creating S-polynomial from the pair  $(p_{40}, p_{106})$ .

Forming S-pol of  $p_{40}$  and  $p_{106}$ :

$$\begin{aligned}
p_{731} = & (-131072u_4^{23}u_1^{17} + 65536u_4^{23}u_1^{16})x_5x_4^2x_3 + 65536u_4^{25}u_1^{16}x_5x_4^2 - \\
& 65536u_6u_4^{24}u_1^{16}x_4^2x_3 + 65536u_6u_4^{24}u_1^{16}x_4^2
\end{aligned}$$

S-pol added.

3031. Creating S-polynomial from the pair  $(p_{41}, p_{42})$ .

Forming S-pol of  $p_{41}$  and  $p_{42}$ :

$$\begin{aligned}
p_{732} = & -16384u_6u_5u_3^{12}u_2^{12}u_1^{14}x_{12}x_6x_4 - \\
& 8192u_5^2u_3^{13}u_2^{12}u_1^{13}x_{12}x_5x_4 + 16384u_6u_5u_3^{13}u_2^{12}u_1^{14}x_{12}x_4 - \\
& 8192u_6u_5^3u_3^{13}u_2^{12}u_1^{13}x_{12} + 16384u_6u_5u_3^{12}u_2^{12}u_1^{14}x_{10}x_8x_4 + \\
& 8192u_5^2u_3^{12}u_2^{13}u_1^{13}x_8x_5x_4 - 16384u_6u_5u_3^{12}u_2^{13}u_1^{14}x_8x_4 + \\
& 8192u_6u_5^3u_3^{12}u_2^{13}u_1^{13}x_8
\end{aligned}$$

Reduced to zero.

3032. Creating S-polynomial from the pair  $(p_{41}, p_{43})$ .

Forming S-pol of  $p_{41}$  and  $p_{43}$ :

$$\begin{aligned}
p_{733} = & -16384u_6u_5u_4^{12}u_3^{12}u_1^{14}x_{16}x_6x_4 - \\
& 8192u_5^2u_4^{12}u_3^{13}u_1^{13}x_{16}x_5x_4 + 16384u_6u_5u_4^{12}u_3^{13}u_1^{14}x_{16}x_4 - \\
& 8192u_6u_5^3u_4^{12}u_3^{13}u_1^{13}x_{16} + 16384u_6u_5u_4^{12}u_3^{12}u_1^{14}x_{14}x_8x_4 + \\
& 8192u_5^2u_4^{13}u_3^{12}u_1^{13}x_8x_5x_4 - 16384u_6u_5u_4^{13}u_3^{12}u_1^{14}x_8x_4 + \\
& 8192u_6u_5^3u_4^{13}u_3^{12}u_1^{13}x_8
\end{aligned}$$

Reduced to zero.

3033. Creating S-polynomial from the pair  $(p_{41}, p_{44})$ .

Skipping pair  $p_{41}$  and  $p_{44}$  because gcd of their leading monoms is zero.

3034. Creating S-polynomial from the pair  $(p_{41}, p_{45})$ .

Forming S-pol of  $p_{41}$  and  $p_{45}$ :

$$\begin{aligned} p_{734} = & -262144u_5u_3^{24}u_1^{18}x_8x_4^2 + \\ & (32768u_5^2u_3^{27}u_1^{15} - 524288u_5^2u_3^{23}u_1^{19})x_8x_4 + \\ & (131072u_6u_3^{25}u_1^{17} + 524288u_6u_3^{23}u_1^{19})x_6^2x_4 + \\ & 262144u_5u_3^{24}u_1^{18}x_6x_5x_4 + \\ & (-131072u_6u_3^{26}u_1^{17} - 524288u_6u_3^{24}u_1^{19})x_6x_4 + \\ & (65536u_6u_5^2u_3^{26}u_1^{16} + 262144u_6u_5^2u_3^{24}u_1^{18})x_6 + \\ & 131072u_5^2u_3^{24}u_1^{17}x_5x_4x_2 - 16384u_5^2u_3^{28}u_1^{14}x_5x_4 + \\ & 32768u_6u_5u_3^{26}u_1^{15}x_4^2x_2 - 65536u_6u_5u_3^{26}u_1^{16}x_4^2 + \\ & (16384u_6u_5^2u_3^{27}u_1^{14} + 65536u_6u_5^2u_3^{25}u_1^{16})x_4x_2 \end{aligned}$$

Reduced to zero.

3035. Creating S-polynomial from the pair  $(p_{41}, p_{46})$ .

Skipping pair  $p_{41}$  and  $p_{46}$  because gcd of their leading monoms is zero.

3036. Creating S-polynomial from the pair  $(p_{41}, p_{47})$ .

Forming S-pol of  $p_{41}$  and  $p_{47}$ : Polynomial too big for output (text size is 1270 characters, number of terms is 14)

S-pol added.

3037. Creating S-polynomial from the pair  $(p_{41}, p_{48})$ .

Forming S-pol of  $p_{41}$  and  $p_{48}$ :

$$\begin{aligned} p_{735} = & 8192u_5u_3^{19}u_1^{13}x_8x_4^2 + 16384u_5^2u_3^{18}u_1^{14}x_8x_4 - \\ & 16384u_6u_3^{18}u_1^{14}x_6^2x_4 - 8192u_5u_3^{19}u_1^{13}x_6x_5x_4 + \\ & (-4096u_6u_5u_3^{20}u_1^{12} + 16384u_6u_3^{19}u_1^{14})x_6x_4 - \\ & 8192u_6u_5^2u_3^{19}u_1^{13}x_6 - 4096u_5^2u_3^{19}u_1^{12}x_5x_4x_2 + \\ & 2048u_6u_5u_3^{21}u_1^{11}x_4^2 - 2048u_6u_5^2u_3^{20}u_1^{11}x_4x_2 \end{aligned}$$

Reduced to zero.

3038. Creating S-polynomial from the pair  $(p_{41}, p_{49})$ .

Forming S-pol of  $p_{41}$  and  $p_{49}$ :

$$\begin{aligned} p_{736} = & -16384u_5u_3^{25}u_1^{14}x_8x_4^2 + 8192u_5^2u_3^{26}u_1^{13}x_8x_4 + \\ & (32768u_6u_3^{24}u_1^{15} + 131072u_6u_3^{22}u_1^{17})x_6^2x_4 + \\ & 16384u_5u_3^{25}u_1^{14}x_6x_5x_4 + \end{aligned}$$

$$\begin{aligned}
& (-131072u_6u_5u_3^{22}u_1^{17} - 32768u_6u_3^{25}u_1^{15} - 131072u_6u_3^{23}u_1^{17})x_6x_4 + \\
& (16384u_6u_5^2u_3^{25}u_1^{14} + 65536u_6u_5^2u_3^{23}u_1^{16})x_6 + \\
& 8192u_5^2u_3^{25}u_1^{13}x_5x_4x_2 + \\
& (-4096u_5^2u_3^{27}u_1^{12} - 16384u_5^2u_3^{25}u_1^{14})x_5x_4 + \\
& 32768u_6u_5u_3^{23}u_1^{15}x_4^2x_2 + \\
& (4096u_6u_5^2u_3^{26}u_1^{12} + 16384u_6u_5^2u_3^{24}u_1^{14})x_4x_2
\end{aligned}$$

Reduced to zero.

3039. Creating S-polynomial from the pair  $(p_{41}, p_{50})$ .

Forming S-pol of  $p_{41}$  and  $p_{50}$ :

$$\begin{aligned}
p_{737} = & (2048u_6u_3^{22}u_1^{11} + 8192u_6u_3^{20}u_1^{13})x_8x_6x_4 + \\
& (512u_6u_5u_3^{24}u_1^9 - 8192u_6u_5u_3^{20}u_1^{13} - 2048u_6u_3^{23}u_1^{11} - \\
& 8192u_6u_3^{21}u_1^{13})x_8x_4 + \\
& (1024u_6u_5^2u_3^{23}u_1^{10} + 4096u_6u_5^2u_3^{21}u_1^{12})x_8 + \\
& (512u_6u_5u_3^{23}u_1^9 + 2048u_6u_5u_3^{21}u_1^{11})x_5x_4x_2 + \\
& (-256u_6u_5u_3^{25}u_1^8 - 1024u_6u_5u_3^{23}u_1^{10})x_5x_4 + \\
& (256u_6^2u_5u_3^{24}u_1^8 + 1024u_6^2u_5u_3^{22}u_1^{10})x_4x_2
\end{aligned}$$

Reduced to zero.

3040. Creating S-polynomial from the pair  $(p_{41}, p_{51})$ .

Forming S-pol of  $p_{41}$  and  $p_{51}$ :

$$\begin{aligned}
p_{738} = & -4096u_5^2u_3^{20}u_1^{12}x_8x_4 - 16384u_6u_3^{18}u_1^{14}x_6^2x_4 + \\
& (16384u_6u_5u_3^{18}u_1^{14} + 16384u_6u_3^{19}u_1^{14})x_6x_4 - \\
& 8192u_6u_5^2u_3^{19}u_1^{13}x_6 + 2048u_5^2u_3^{21}u_1^{11}x_5x_4 - \\
& 4096u_6u_5u_3^{19}u_1^{12}x_4^2x_2 - 2048u_6u_5^2u_3^{20}u_1^{11}x_4x_2
\end{aligned}$$

Reduced to zero.

3041. Creating S-polynomial from the pair  $(p_{41}, p_{52})$ .

Forming S-pol of  $p_{41}$  and  $p_{52}$ : Polynomial too big for output (text size is 1119 characters, number of terms is 14)

S-pol added.

3042. Creating S-polynomial from the pair  $(p_{41}, p_{53})$ .

Forming S-pol of  $p_{41}$  and  $p_{53}$ :

$$\begin{aligned}
p_{739} = & -1024u_6u_3^{16}u_1^{10}x_8x_6x_4 + \\
& (-256u_6u_5u_3^{18}u_1^8 + 1024u_6u_5u_3^{16}u_1^{10} + 1024u_6u_3^{17}u_1^{10})x_8x_4 - \\
& 512u_6u_5^2u_3^{17}u_1^9x_8 - 256u_6u_5u_3^{17}u_1^8x_5x_4x_2 + \\
& 128u_6u_5u_3^{19}u_1^7x_5x_4 - 128u_6^2u_5u_3^{18}u_1^7x_4x_2
\end{aligned}$$

Reduced to zero.

3043. Creating S-polynomial from the pair  $(p_{41}, p_{54})$ .  
 Skipping pair  $p_{41}$  and  $p_{54}$  because gcd of their leading monoms is zero.
3044. Creating S-polynomial from the pair  $(p_{41}, p_{55})$ .  
 Skipping pair  $p_{41}$  and  $p_{55}$  because gcd of their leading monoms is zero.
3045. Creating S-polynomial from the pair  $(p_{41}, p_{56})$ .  
 Skipping pair  $p_{41}$  and  $p_{56}$  because gcd of their leading monoms is zero.
3046. Creating S-polynomial from the pair  $(p_{41}, p_{57})$ .  
 Forming S-pol of  $p_{41}$  and  $p_{57}$ : Polynomial too big for output (text size is 1616 characters, number of terms is 16)  
 Reduced to zero.
3047. Creating S-polynomial from the pair  $(p_{41}, p_{58})$ .  
 Skipping pair  $p_{41}$  and  $p_{58}$  because gcd of their leading monoms is zero.
3048. Creating S-polynomial from the pair  $(p_{41}, p_{59})$ .  
 Skipping pair  $p_{41}$  and  $p_{59}$  because gcd of their leading monoms is zero.
3049. Creating S-polynomial from the pair  $(p_{41}, p_{60})$ .  
 Skipping pair  $p_{41}$  and  $p_{60}$  because gcd of their leading monoms is zero.
3050. Creating S-polynomial from the pair  $(p_{41}, p_{61})$ .  
 Skipping pair  $p_{41}$  and  $p_{61}$  because gcd of their leading monoms is zero.
3051. Creating S-polynomial from the pair  $(p_{41}, p_{62})$ .  
 Forming S-pol of  $p_{41}$  and  $p_{62}$ : Polynomial too big for output (text size is 1415 characters, number of terms is 15)  
 Reduced to zero.
3052. Creating S-polynomial from the pair  $(p_{41}, p_{63})$ .  
 Skipping pair  $p_{41}$  and  $p_{63}$  because gcd of their leading monoms is zero.
3053. Creating S-polynomial from the pair  $(p_{41}, p_{64})$ .  
 Skipping pair  $p_{41}$  and  $p_{64}$  because gcd of their leading monoms is zero.
3054. Creating S-polynomial from the pair  $(p_{41}, p_{65})$ .  
 Skipping pair  $p_{41}$  and  $p_{65}$  because gcd of their leading monoms is zero.
3055. Creating S-polynomial from the pair  $(p_{41}, p_{66})$ .  
 Skipping pair  $p_{41}$  and  $p_{66}$  because gcd of their leading monoms is zero.
3056. Creating S-polynomial from the pair  $(p_{41}, p_{67})$ .  
 Forming S-pol of  $p_{41}$  and  $p_{67}$ : Polynomial too big for output (text size is 1616 characters, number of terms is 16)  
 Reduced to zero.

3057. Creating S-polynomial from the pair  $(p_{41}, p_{68})$ .  
 Skipping pair  $p_{41}$  and  $p_{68}$  because gcd of their leading monoms is zero.
3058. Creating S-polynomial from the pair  $(p_{41}, p_{69})$ .  
 Skipping pair  $p_{41}$  and  $p_{69}$  because gcd of their leading monoms is zero.
3059. Creating S-polynomial from the pair  $(p_{41}, p_{70})$ .  
 Skipping pair  $p_{41}$  and  $p_{70}$  because gcd of their leading monoms is zero.
3060. Creating S-polynomial from the pair  $(p_{41}, p_{71})$ .  
 Skipping pair  $p_{41}$  and  $p_{71}$  because gcd of their leading monoms is zero.
3061. Creating S-polynomial from the pair  $(p_{41}, p_{72})$ .  
 Forming S-pol of  $p_{41}$  and  $p_{72}$ : Polynomial too big for output (text size is 1415 characters, number of terms is 15)  
 Reduced to zero.
3062. Creating S-polynomial from the pair  $(p_{41}, p_{73})$ .  
 Skipping pair  $p_{41}$  and  $p_{73}$  because gcd of their leading monoms is zero.
3063. Creating S-polynomial from the pair  $(p_{41}, p_{74})$ .  
 Skipping pair  $p_{41}$  and  $p_{74}$  because gcd of their leading monoms is zero.
3064. Creating S-polynomial from the pair  $(p_{41}, p_{75})$ .  
 Skipping pair  $p_{41}$  and  $p_{75}$  because gcd of their leading monoms is zero.
3065. Creating S-polynomial from the pair  $(p_{41}, p_{76})$ .  
 Skipping pair  $p_{41}$  and  $p_{76}$  because gcd of their leading monoms is zero.
3066. Creating S-polynomial from the pair  $(p_{41}, p_{77})$ .  
 Skipping pair  $p_{41}$  and  $p_{77}$  because gcd of their leading monoms is zero.
3067. Creating S-polynomial from the pair  $(p_{41}, p_{78})$ .  
 Skipping pair  $p_{41}$  and  $p_{78}$  because gcd of their leading monoms is zero.
3068. Creating S-polynomial from the pair  $(p_{41}, p_{79})$ .  
 Forming S-pol of  $p_{41}$  and  $p_{79}$ :

$$\begin{aligned}
 p_{740} = & (65536u_6u_3^{12}u_2^{14}u_1^{16} - 131072u_6u_3^{12}u_2^{12}u_1^{17})x_{12}x_6x_4 + \\
 & (32768u_5u_3^{13}u_2^{14}u_1^{15} - 65536u_5u_3^{13}u_2^{12}u_1^{16})x_{12}x_5x_4 + \\
 & (-65536u_6u_3^{13}u_2^{14}u_1^{16} + 131072u_6u_3^{13}u_2^{12}u_1^{17})x_{12}x_4 + \\
 & (32768u_6u_5^2u_3^{13}u_2^{14}u_1^{15} - 65536u_6u_5^2u_3^{13}u_2^{12}u_1^{16})x_{12} - \\
 & 65536u_5u_3^{12}u_2^{14}u_1^{16}x_{10}x_8x_5 + \\
 & (262144u_5u_3^{12}u_2^{11}u_1^{18} - 131072u_5u_3^{12}u_2^{11}u_1^{17})x_8x_5x_4x_1 + \\
 & (-131072u_5u_3^{12}u_2^{13}u_1^{17} + 65536u_5u_3^{12}u_2^{13}u_1^{16})x_8x_5x_4 - \\
 & 32768u_5^2u_3^{12}u_2^{14}u_1^{15}x_8x_5x_1 + 65536u_5^2u_3^{12}u_2^{14}u_1^{16}x_8x_5 +
 \end{aligned}$$



$$(32768u_6u_5u_3^{12}u_2^{14}u_1^{15} + 131072u_6u_5u_3^{12}u_2^{12}u_1^{17} - 65536u_6u_5u_3^{12}u_2^{12}u_1^{16})x_8x_4x_1 - 65536u_6u_5u_3^{12}u_2^{14}u_1^{16}x_8x_4$$

S-pol added.

3069. Creating S-polynomial from the pair  $(p_{41}, p_{80})$ .

Skipping pair  $p_{41}$  and  $p_{80}$  because gcd of their leading monoms is zero.

3070. Creating S-polynomial from the pair  $(p_{41}, p_{81})$ .

Forming S-pol of  $p_{41}$  and  $p_{81}$ :

$$p_{741} = 32768u_6u_5u_3^{23}u_1^{15}x_4^2 - 65536u_6u_5u_3^{23}u_1^{16}x_4 + 32768u_6u_5^3u_3^{23}u_1^{15}$$

Reduced to zero.

3071. Creating S-polynomial from the pair  $(p_{41}, p_{82})$ .

Skipping pair  $p_{41}$  and  $p_{82}$  because gcd of their leading monoms is zero.

3072. Creating S-polynomial from the pair  $(p_{41}, p_{83})$ .

Forming S-pol of  $p_{41}$  and  $p_{83}$ :

$$\begin{aligned} p_{742} = & -33554432u_5^2u_3^{31}u_1^{25}x_8x_4^2 - 16777216u_5^3u_3^{32}u_1^{24}x_8x_4 + \\ & (16777216u_6u_5^2u_3^{32}u_1^{24} + 67108864u_6u_5u_3^{31}u_1^{26})x_6x_4 - \\ & 33554432u_6u_5^3u_3^{31}u_1^{25}x_6 + 16777216u_5^2u_3^{32}u_1^{24}x_5x_4^2 + \\ & 8388608u_5^3u_3^{33}u_1^{23}x_5x_4 + \\ & (-8388608u_6u_5^2u_3^{33}u_1^{23} - 33554432u_6u_5u_3^{32}u_1^{25})x_4^2 + \\ & 16777216u_6u_5^3u_3^{32}u_1^{24}x_4 \end{aligned}$$

Reduced to zero.

3073. Creating S-polynomial from the pair  $(p_{41}, p_{84})$ .

Forming S-pol of  $p_{41}$  and  $p_{84}$ :

$$\begin{aligned} p_{743} = & -8192u_5^2u_3^{20}u_1^{13}x_8x_4 - 32768u_6u_3^{18}u_1^{15}x_6^2x_4 + \\ & (32768u_6u_5u_3^{18}u_1^{15} + 32768u_6u_3^{19}u_1^{15})x_6x_4 - \\ & 16384u_6u_5^2u_3^{19}u_1^{14}x_6 + 4096u_5^2u_3^{21}u_1^{12}x_5x_4 - \\ & 8192u_6u_5u_3^{19}u_1^{13}x_4^2x_2 - 4096u_6u_5^2u_3^{20}u_1^{12}x_4x_2 \end{aligned}$$

Reduced to zero.

3074. Creating S-polynomial from the pair  $(p_{41}, p_{85})$ .

Forming S-pol of  $p_{41}$  and  $p_{85}$ :

$$\begin{aligned} p_{744} = & 16384u_5u_3^{19}u_1^{14}x_8x_4^2 + 32768u_5^2u_3^{18}u_1^{15}x_8x_4 - \\ & 32768u_6u_3^{18}u_1^{15}x_6^2x_4 - 16384u_5u_3^{19}u_1^{14}x_6x_5x_4 + \\ & (-8192u_6u_5u_3^{20}u_1^{13} + 32768u_6u_3^{19}u_1^{15})x_6x_4 - \\ & 16384u_6u_5^2u_3^{19}u_1^{14}x_6 - 8192u_5^2u_3^{19}u_1^{13}x_5x_4x_2 + \\ & 4096u_6u_5u_3^{21}u_1^{12}x_4^2 - 4096u_6u_5^2u_3^{20}u_1^{12}x_4x_2 \end{aligned}$$

Reduced to zero.

3075. Creating S-polynomial from the pair  $(p_{41}, p_{86})$ .

Forming S-pol of  $p_{41}$  and  $p_{86}$ :

$$\begin{aligned}
p_{745} = & -65536u_5u_3^{26}u_1^{16}x_6x_5x_4 + \\
& (65536u_6u_3^{26}u_1^{16} - 131072u_6u_3^{24}u_1^{17})x_6x_4^2 + \\
& (262144u_5u_3^{23}u_1^{18} - 131072u_5u_3^{23}u_1^{17})x_5x_4^2x_2 + \\
& (32768u_5u_3^{27}u_1^{15} - 131072u_5u_3^{25}u_1^{17})x_5x_4^2 - \\
& 32768u_5^2u_3^{26}u_1^{15}x_5x_4x_2 + 65536u_5^2u_3^{26}u_1^{16}x_5x_4 + \\
& (32768u_6u_5u_3^{26}u_1^{15} + 131072u_6u_5u_3^{24}u_1^{17} - \\
& 65536u_6u_5u_3^{24}u_1^{16})x_4^2x_2 + \\
& (-65536u_6u_5u_3^{26}u_1^{16} - 65536u_6u_3^{27}u_1^{16} + 131072u_6u_3^{25}u_1^{17})x_4^2 + \\
& (32768u_6u_5^2u_3^{27}u_1^{15} - 65536u_6u_5^2u_3^{25}u_1^{16})x_4
\end{aligned}$$

S-pol added.

3076. Creating S-polynomial from the pair  $(p_{41}, p_{87})$ .

Forming S-pol of  $p_{41}$  and  $p_{87}$ :

$$\begin{aligned}
p_{746} = & -1024u_6u_3^{18}u_1^{10}x_6x_4 - 512u_6u_5u_3^{18}u_1^9x_4x_2 + \\
& (1024u_6u_5u_3^{18}u_1^{10} + 1024u_6u_3^{19}u_1^{10})x_4 - 512u_6u_5^2u_3^{19}u_1^9
\end{aligned}$$

Reduced to zero.

3077. Creating S-polynomial from the pair  $(p_{41}, p_{88})$ .

Skipping pair  $p_{41}$  and  $p_{88}$  because gcd of their leading monoms is zero.

3078. Creating S-polynomial from the pair  $(p_{41}, p_{89})$ .

Skipping pair  $p_{41}$  and  $p_{89}$  because gcd of their leading monoms is zero.

3079. Creating S-polynomial from the pair  $(p_{41}, p_{90})$ .

Skipping pair  $p_{41}$  and  $p_{90}$  because gcd of their leading monoms is zero.

3080. Creating S-polynomial from the pair  $(p_{41}, p_{91})$ .

Skipping pair  $p_{41}$  and  $p_{91}$  because gcd of their leading monoms is zero.

3081. Creating S-polynomial from the pair  $(p_{41}, p_{92})$ .

Skipping pair  $p_{41}$  and  $p_{92}$  because gcd of their leading monoms is zero.

3082. Creating S-polynomial from the pair  $(p_{41}, p_{93})$ .

Forming S-pol of  $p_{41}$  and  $p_{93}$ :

$$\begin{aligned}
p_{747} = & (65536u_6u_4^{14}u_3^{12}u_1^{16} - 131072u_6u_4^{12}u_3^{12}u_1^{17})x_{16}x_6x_4 + \\
& (32768u_5u_4^{14}u_3^{13}u_1^{15} - 65536u_5u_4^{12}u_3^{13}u_1^{16})x_{16}x_5x_4 + \\
& (-65536u_6u_4^{14}u_3^{13}u_1^{16} + 131072u_6u_4^{12}u_3^{13}u_1^{17})x_{16}x_4 + \\
& (32768u_6u_5^2u_4^{14}u_3^{13}u_1^{15} - 65536u_6u_5^2u_4^{12}u_3^{13}u_1^{16})x_{16} -
\end{aligned}$$

$$\begin{aligned}
& 65536u_5u_4^{14}u_3^{12}u_1^{16}x_{14}x_8x_5 + \\
& (262144u_5u_4^{11}u_3^{12}u_1^{18} - 131072u_5u_4^{11}u_3^{12}u_1^{17})x_8x_5x_4x_3 + \\
& (-131072u_5u_4^{13}u_3^{12}u_1^{17} + 65536u_5u_4^{13}u_3^{12}u_1^{16})x_8x_5x_4 - \\
& 32768u_5^2u_4^{14}u_3^{12}u_1^{15}x_8x_5x_3 + 65536u_5^2u_4^{14}u_3^{12}u_1^{16}x_8x_5 + \\
& (32768u_6u_5u_4^{14}u_3^{12}u_1^{15} + 131072u_6u_5u_4^{12}u_3^{12}u_1^{17} - \\
& 65536u_6u_5u_4^{12}u_3^{12}u_1^{16})x_8x_4x_3 - 65536u_6u_5u_4^{14}u_3^{12}u_1^{16}x_8x_4
\end{aligned}$$

S-pol added.

3083. Creating S-polynomial from the pair  $(p_{41}, p_{94})$ .

Skipping pair  $p_{41}$  and  $p_{94}$  because gcd of their leading monoms is zero.

3084. Creating S-polynomial from the pair  $(p_{41}, p_{95})$ .

Forming S-pol of  $p_{41}$  and  $p_{95}$ :

$$\begin{aligned}
p_{748} = & 33554432u_5^2u_3^{29}u_1^{25}x_8x_6x_4 + \\
& (67108864u_5^2u_3^{28}u_1^{26} + 67108864u_5u_3^{29}u_1^{26})x_8x_4^2 + \\
& (8388608u_5^3u_3^{31}u_1^{23} - 33554432u_5^3u_3^{29}u_1^{25})x_8x_4 + \\
& (-33554432u_6u_5u_3^{29}u_1^{25} - 67108864u_6u_3^{28}u_1^{26})x_6^2x_4 + \\
& (-16777216u_5^2u_3^{30}u_1^{24} - 33554432u_5u_3^{29}u_1^{25})x_6x_5x_4 + \\
& (-8388608u_6u_5^2u_3^{31}u_1^{23} + 67108864u_6u_3^{29}u_1^{26})x_6x_4 - \\
& 33554432u_6u_5^2u_3^{29}u_1^{25}x_6 - 16777216u_5^2u_3^{29}u_1^{24}x_5x_4^2x_2 - \\
& 4194304u_5^3u_3^{32}u_1^{22}x_5x_4 - 8388608u_6u_5^2u_3^{30}u_1^{23}x_4^2x_2 + \\
& (4194304u_6u_5^2u_3^{32}u_1^{22} + 16777216u_6u_5u_3^{31}u_1^{24})x_4^2 - \\
& 8388608u_6u_5^3u_3^{31}u_1^{23}x_4
\end{aligned}$$

S-pol added.

3085. Creating S-polynomial from the pair  $(p_{41}, p_{96})$ .

Forming S-pol of  $p_{41}$  and  $p_{96}$ :

$$\begin{aligned}
p_{749} = & 4096u_5^2u_3^{16}u_1^{12}x_8x_4 - 2048u_5u_3^{17}u_1^{11}x_6x_5x_4 + \\
& 2048u_6u_3^{17}u_1^{11}x_6x_4^2 - 4096u_6u_5u_3^{16}u_1^{12}x_6x_4 + \\
& 1024u_5u_3^{18}u_1^{10}x_5x_4^2 - 1024u_5^2u_3^{17}u_1^{10}x_5x_4x_2 + \\
& 1024u_6u_5u_3^{17}u_1^{10}x_4^2x_2 - 2048u_6u_3^{18}u_1^{11}x_4^2 + \\
& 1024u_6u_5^2u_3^{18}u_1^{10}x_4
\end{aligned}$$

Reduced to zero.

3086. Creating S-polynomial from the pair  $(p_{41}, p_{97})$ .

Forming S-pol of  $p_{41}$  and  $p_{97}$ :

$$\begin{aligned} p_{750} = & -32768u_5u_3^{25}u_1^{15}x_6x_5x_4 + 32768u_6u_3^{25}u_1^{15}x_6x_4^2 + \\ & (131072u_5u_3^{22}u_1^{17} - 65536u_5u_3^{22}u_1^{16})x_5x_4^2x_2 + \\ & (16384u_5u_3^{26}u_1^{14} - 65536u_5u_3^{24}u_1^{16})x_5x_4^2 - \\ & 16384u_5^2u_3^{25}u_1^{14}x_5x_4x_2 + 32768u_5^2u_3^{25}u_1^{15}x_5x_4 + \\ & (16384u_6u_5u_3^{25}u_1^{14} + 65536u_6u_5u_3^{23}u_1^{16})x_4^2x_2 + \\ & (-32768u_6u_5u_3^{25}u_1^{15} - 65536u_6u_5u_3^{23}u_1^{16} - 32768u_6u_3^{26}u_1^{15})x_4^2 + \\ & 16384u_6u_5^2u_3^{26}u_1^{14}x_4 \end{aligned}$$

S-pol added.

3087. Creating S-polynomial from the pair  $(p_{41}, p_{98})$ .

Forming S-pol of  $p_{41}$  and  $p_{98}$ : Polynomial too big for output (text size is 2548 characters, number of terms is 28)

Reduced to zero.

3088. Creating S-polynomial from the pair  $(p_{41}, p_{99})$ .

Forming S-pol of  $p_{41}$  and  $p_{99}$ : Polynomial too big for output (text size is 2550 characters, number of terms is 28)

Reduced to zero.

3089. Creating S-polynomial from the pair  $(p_{41}, p_{100})$ .

Forming S-pol of  $p_{41}$  and  $p_{100}$ : Polynomial too big for output (text size is 1094 characters, number of terms is 15)

Reduced to zero.

3090. Creating S-polynomial from the pair  $(p_{41}, p_{101})$ .

Forming S-pol of  $p_{41}$  and  $p_{101}$ :

$$\begin{aligned} p_{751} = & 4096u_5^2u_3^{12}u_2^4u_1^{12}x_{12}x_8 + 2048u_6u_3^{12}u_2^5u_1^{11}x_{12}x_6x_4 + \\ & 1024u_5u_3^{13}u_2^5u_1^{10}x_{12}x_5x_4 - 2048u_6u_3^{13}u_2^5u_1^{11}x_{12}x_4 + \\ & 1024u_6u_5^2u_3^{13}u_2^5u_1^{10}x_{12} - 2048u_5u_3^{12}u_2^5u_1^{11}x_{10}x_8x_5 - \\ & 4096u_6u_5u_3^{12}u_2^4u_1^{12}x_{10}x_8 - 1024u_5^2u_3^{12}u_2^5u_1^{10}x_8x_5x_1 + \\ & 1024u_6u_5u_3^{12}u_2^5u_1^{10}x_8x_4x_1 \end{aligned}$$

Reduced to zero.

3091. Creating S-polynomial from the pair  $(p_{41}, p_{102})$ .

Forming S-pol of  $p_{41}$  and  $p_{102}$ :

$$\begin{aligned} p_{752} = & 32768u_6u_3^{12}u_2^{13}u_1^{15}x_{12}x_6x_4 + 16384u_5u_3^{13}u_2^{13}u_1^{14}x_{12}x_5x_4 - \\ & 32768u_6u_3^{13}u_2^{13}u_1^{15}x_{12}x_4 + 16384u_6u_5^2u_3^{13}u_2^{13}u_1^{14}x_{12} - \\ & 32768u_5u_3^{12}u_2^{13}u_1^{15}x_{10}x_8x_5 + \\ & (131072u_5u_3^{12}u_2^{10}u_1^{17} - 65536u_5u_3^{12}u_2^{10}u_1^{16})x_8x_5x_4x_1 - \\ & 65536u_5u_3^{12}u_2^{12}u_1^{16}x_8x_5x_4 - 16384u_5^2u_3^{12}u_2^{13}u_1^{14}x_8x_5x_1 + \\ & 32768u_5^2u_3^{12}u_2^{13}u_1^{15}x_8x_5 + \\ & (16384u_6u_5u_3^{12}u_2^{13}u_1^{14} + 65536u_6u_5u_3^{12}u_2^{11}u_1^{16})x_8x_4x_1 + \\ & (-32768u_6u_5u_3^{12}u_2^{13}u_1^{15} - 65536u_6u_5u_3^{12}u_2^{11}u_1^{16})x_8x_4 \end{aligned}$$

S-pol added.

3092. Creating S-polynomial from the pair  $(p_{41}, p_{103})$ .

Skipping pair  $p_{41}$  and  $p_{103}$  because gcd of their leading monoms is zero.

3093. Creating S-polynomial from the pair  $(p_{41}, p_{104})$ .

Forming S-pol of  $p_{41}$  and  $p_{104}$ : Polynomial too big for output (text size is 1094 characters, number of terms is 15)

Reduced to zero.

3094. Creating S-polynomial from the pair  $(p_{41}, p_{105})$ .

Forming S-pol of  $p_{41}$  and  $p_{105}$ :

$$\begin{aligned} p_{753} = & 4096u_5^2u_4^4u_3^{12}u_1^{12}x_{16}x_8 + 2048u_6u_4^5u_3^{12}u_1^{11}x_{16}x_6x_4 + \\ & 1024u_5u_4^5u_3^{13}u_1^{10}x_{16}x_5x_4 - 2048u_6u_4^5u_3^{13}u_1^{11}x_{16}x_4 + \\ & 1024u_6u_5^2u_4^5u_3^{13}u_1^{10}x_{16} - 2048u_5u_4^5u_3^{12}u_1^{11}x_{14}x_8x_5 - \\ & 4096u_6u_5u_4^4u_3^{12}u_1^{12}x_{14}x_8 - 1024u_5^2u_4^5u_3^{12}u_1^{10}x_8x_5x_3 + \\ & 1024u_6u_5u_4^5u_3^{12}u_1^{10}x_8x_4x_3 \end{aligned}$$

Reduced to zero.

3095. Creating S-polynomial from the pair  $(p_{41}, p_{106})$ .

Forming S-pol of  $p_{41}$  and  $p_{106}$ :

$$\begin{aligned} p_{754} = & 32768u_6u_4^{13}u_3^{12}u_1^{15}x_{16}x_6x_4 + 16384u_5u_4^{13}u_3^{13}u_1^{14}x_{16}x_5x_4 - \\ & 32768u_6u_4^{13}u_3^{13}u_1^{15}x_{16}x_4 + 16384u_6u_5^2u_4^{13}u_3^{13}u_1^{14}x_{16} - \\ & 32768u_5u_4^{13}u_3^{12}u_1^{15}x_{14}x_8x_5 + \\ & (131072u_5u_4^{10}u_3^{12}u_1^{17} - 65536u_5u_4^{10}u_3^{12}u_1^{16})x_8x_5x_4x_3 - \\ & 65536u_5u_4^{12}u_3^{12}u_1^{16}x_8x_5x_4 - 16384u_5^2u_4^{13}u_3^{12}u_1^{14}x_8x_5x_3 + \\ & 32768u_5^2u_4^{13}u_3^{12}u_1^{15}x_8x_5 + \\ & (16384u_6u_5u_4^{13}u_3^{12}u_1^{14} + 65536u_6u_5u_4^{11}u_3^{12}u_1^{16})x_8x_4x_3 + \\ & (-32768u_6u_5u_4^{13}u_3^{12}u_1^{15} - 65536u_6u_5u_4^{11}u_3^{12}u_1^{16})x_8x_4 \end{aligned}$$

S-pol added.

3096. Creating S-polynomial from the pair  $(p_{42}, p_{43})$ .

Forming S-pol of  $p_{42}$  and  $p_{43}$ :

$$\begin{aligned} p_{755} = & -16384u_6u_5u_4^{12}u_2^{12}u_1^{14}x_{16}x_{10}x_4 - \\ & 8192u_5^2u_4^{12}u_2^{13}u_1^{13}x_{16}x_5x_4 + 16384u_6u_5u_4^{12}u_2^{13}u_1^{14}x_{16}x_4 - \\ & 8192u_6u_5^3u_4^{12}u_2^{13}u_1^{13}x_{16} + 16384u_6u_5u_4^{12}u_2^{12}u_1^{14}x_{14}x_{12}x_4 + \\ & 8192u_5^2u_4^{13}u_2^{12}u_1^{13}x_{12}x_5x_4 - 16384u_6u_5u_4^{13}u_2^{12}u_1^{14}x_{12}x_4 + \\ & 8192u_6u_5^3u_4^{13}u_2^{12}u_1^{13}x_{12} \end{aligned}$$

Reduced to zero.

3097. Creating S-polynomial from the pair  $(p_{42}, p_{44})$ .

Skipping pair  $p_{42}$  and  $p_{44}$  because gcd of their leading monoms is zero.

3098. Creating S-polynomial from the pair  $(p_{42}, p_{45})$ .

Skipping pair  $p_{42}$  and  $p_{45}$  because gcd of their leading monoms is zero.

3099. Creating S-polynomial from the pair  $(p_{42}, p_{46})$ .

Skipping pair  $p_{42}$  and  $p_{46}$  because gcd of their leading monoms is zero.

3100. Creating S-polynomial from the pair  $(p_{42}, p_{47})$ .

Forming S-pol of  $p_{42}$  and  $p_{47}$ : Polynomial too big for output (text size is 1616 characters, number of terms is 16)

Reduced to zero.

3101. Creating S-polynomial from the pair  $(p_{42}, p_{48})$ .

Skipping pair  $p_{42}$  and  $p_{48}$  because gcd of their leading monoms is zero.

3102. Creating S-polynomial from the pair  $(p_{42}, p_{49})$ .

Skipping pair  $p_{42}$  and  $p_{49}$  because gcd of their leading monoms is zero.

3103. Creating S-polynomial from the pair  $(p_{42}, p_{50})$ .

Skipping pair  $p_{42}$  and  $p_{50}$  because gcd of their leading monoms is zero.

3104. Creating S-polynomial from the pair  $(p_{42}, p_{51})$ .

Skipping pair  $p_{42}$  and  $p_{51}$  because gcd of their leading monoms is zero.

3105. Creating S-polynomial from the pair  $(p_{42}, p_{52})$ .

Forming S-pol of  $p_{42}$  and  $p_{52}$ : Polynomial too big for output (text size is 1419 characters, number of terms is 15)

Reduced to zero.

3106. Creating S-polynomial from the pair  $(p_{42}, p_{53})$ .

Skipping pair  $p_{42}$  and  $p_{53}$  because gcd of their leading monoms is zero.

3107. Creating S-polynomial from the pair  $(p_{42}, p_{54})$ .

Skipping pair  $p_{42}$  and  $p_{54}$  because gcd of their leading monoms is zero.

3108. Creating S-polynomial from the pair  $(p_{42}, p_{55})$ .

Forming S-pol of  $p_{42}$  and  $p_{55}$ :

$$\begin{aligned} p_{756} = & -262144u_5u_2^{24}u_1^{18}x_{12}x_4^2 + \\ & (32768u_5^2u_2^{27}u_1^{15} - 524288u_5^2u_2^{23}u_1^{19})x_{12}x_4 + \\ & (131072u_6u_2^{25}u_1^{17} + 524288u_6u_2^{23}u_1^{19})x_{10}^2x_4 + \\ & 262144u_5u_2^{24}u_1^{18}x_{10}x_5x_4 + \\ & (-131072u_6u_2^{26}u_1^{17} - 524288u_6u_2^{24}u_1^{19})x_{10}x_4 + \\ & (65536u_6u_5^2u_2^{26}u_1^{16} + 262144u_6u_5^2u_2^{24}u_1^{18})x_{10} + \\ & 131072u_5^2u_2^{24}u_1^{17}x_5x_4x_1 - 16384u_5^2u_2^{28}u_1^{14}x_5x_4 + \\ & 32768u_6u_5u_2^{26}u_1^{15}x_4^2x_1 - 65536u_6u_5u_2^{26}u_1^{16}x_4^2 + \\ & (16384u_6u_5^2u_2^{27}u_1^{14} + 65536u_6u_5^2u_2^{25}u_1^{16})x_4x_1 \end{aligned}$$

Reduced to zero.

3109. Creating S-polynomial from the pair  $(p_{42}, p_{56})$ .

Skipping pair  $p_{42}$  and  $p_{56}$  because gcd of their leading monoms is zero.

3110. Creating S-polynomial from the pair  $(p_{42}, p_{57})$ .

Forming S-pol of  $p_{42}$  and  $p_{57}$ : Polynomial too big for output (text size is 1277 characters, number of terms is 14)

S-pol added.

3111. Creating S-polynomial from the pair  $(p_{42}, p_{58})$ .

Forming S-pol of  $p_{42}$  and  $p_{58}$ :

$$\begin{aligned} p_{757} = & 8192u_5u_2^{19}u_1^{13}x_{12}x_4^2 + 16384u_5^2u_2^{18}u_1^{14}x_{12}x_4 - \\ & 16384u_6u_2^{18}u_1^{14}x_{10}^2x_4 - 8192u_5u_2^{19}u_1^{13}x_{10}x_5x_4 + \\ & (-4096u_6u_5u_2^{20}u_1^{12} + 16384u_6u_2^{19}u_1^{14})x_{10}x_4 - \\ & 8192u_6u_5^2u_2^{19}u_1^{13}x_{10} - 4096u_5^2u_2^{19}u_1^{12}x_5x_4x_1 + \\ & 2048u_6u_5u_2^{21}u_1^{11}x_4^2 - 2048u_6u_5^2u_2^{20}u_1^{11}x_4x_1 \end{aligned}$$

Reduced to zero.

3112. Creating S-polynomial from the pair  $(p_{42}, p_{59})$ .

Forming S-pol of  $p_{42}$  and  $p_{59}$ :

$$\begin{aligned} p_{758} = & -16384u_5u_2^{25}u_1^{14}x_{12}x_4^2 + 8192u_5^2u_2^{26}u_1^{13}x_{12}x_4 + \\ & (32768u_6u_2^{24}u_1^{15} + 131072u_6u_2^{22}u_1^{17})x_{10}^2x_4 + \\ & 16384u_5u_2^{25}u_1^{14}x_{10}x_5x_4 + \\ & (-131072u_6u_5u_2^{22}u_1^{17} - 32768u_6u_2^{25}u_1^{15} - 131072u_6u_2^{23}u_1^{17})x_{10}x_4 + \\ & (16384u_6u_5^2u_2^{25}u_1^{14} + 65536u_6u_5^2u_2^{23}u_1^{16})x_{10} + \end{aligned}$$

$$\begin{aligned}
& 8192u_5^2u_2^{25}u_1^{13}x_5x_4x_1+ \\
& (-4096u_5^2u_2^{27}u_1^{12} - 16384u_5^2u_2^{25}u_1^{14})x_5x_4+ \\
& 32768u_6u_5u_2^{23}u_1^{15}x_4^2x_1+ \\
& (4096u_6u_5^2u_2^{26}u_1^{12} + 16384u_6u_5^2u_2^{24}u_1^{14})x_4x_1
\end{aligned}$$

Reduced to zero.

3113. Creating S-polynomial from the pair  $(p_{42}, p_{60})$ .

Forming S-pol of  $p_{42}$  and  $p_{60}$ :

$$\begin{aligned}
p_{759} = & (2048u_6u_2^{22}u_1^{11} + 8192u_6u_2^{20}u_1^{13})x_{12}x_{10}x_4+ \\
& (512u_6u_5u_2^{24}u_1^9 - 8192u_6u_5u_2^{20}u_1^{13} - 2048u_6u_2^{23}u_1^{11}- \\
& 8192u_6u_2^{21}u_1^{13})x_{12}x_4+ \\
& (1024u_6u_5^2u_2^{23}u_1^{10} + 4096u_6u_5^2u_2^{21}u_1^{12})x_{12}+ \\
& (512u_6u_5u_2^{23}u_1^9 + 2048u_6u_5u_2^{21}u_1^{11})x_5x_4x_1+ \\
& (-256u_6u_5u_2^{25}u_1^8 - 1024u_6u_5u_2^{23}u_1^{10})x_5x_4+ \\
& (256u_6^2u_5u_2^{24}u_1^8 + 1024u_6^2u_5u_2^{22}u_1^{10})x_4x_1
\end{aligned}$$

Reduced to zero.

3114. Creating S-polynomial from the pair  $(p_{42}, p_{61})$ .

Forming S-pol of  $p_{42}$  and  $p_{61}$ :

$$\begin{aligned}
p_{760} = & -4096u_5^2u_2^{20}u_1^{12}x_{12}x_4 - 16384u_6u_2^{18}u_1^{14}x_{10}^2x_4+ \\
& (16384u_6u_5u_2^{18}u_1^{14} + 16384u_6u_2^{19}u_1^{14})x_{10}x_4- \\
& 8192u_6u_5^2u_2^{19}u_1^{13}x_{10} + 2048u_5^2u_2^{21}u_1^{11}x_5x_4- \\
& 4096u_6u_5u_2^{19}u_1^{12}x_4^2x_1 - 2048u_6u_5^2u_2^{20}u_1^{11}x_4x_1
\end{aligned}$$

Reduced to zero.

3115. Creating S-polynomial from the pair  $(p_{42}, p_{62})$ .

Forming S-pol of  $p_{42}$  and  $p_{62}$ : Polynomial too big for output (text size is 1128 characters, number of terms is 14)

S-pol added.

3116. Creating S-polynomial from the pair  $(p_{42}, p_{63})$ .

Forming S-pol of  $p_{42}$  and  $p_{63}$ :

$$\begin{aligned}
p_{761} = & -1024u_6u_2^{16}u_1^{10}x_{12}x_{10}x_4+ \\
& (-256u_6u_5u_2^{18}u_1^8 + 1024u_6u_5u_2^{16}u_1^{10} + 1024u_6u_2^{17}u_1^{10})x_{12}x_4- \\
& 512u_6u_5^2u_2^{17}u_1^9x_{12} - 256u_6u_5u_2^{17}u_1^8x_5x_4x_1+ \\
& 128u_6u_5u_2^{19}u_1^7x_5x_4 - 128u_6^2u_5u_2^{18}u_1^7x_4x_1
\end{aligned}$$

Reduced to zero.



3117. Creating S-polynomial from the pair  $(p_{42}, p_{64})$ .  
 Skipping pair  $p_{42}$  and  $p_{64}$  because gcd of their leading monoms is zero.
3118. Creating S-polynomial from the pair  $(p_{42}, p_{65})$ .  
 Skipping pair  $p_{42}$  and  $p_{65}$  because gcd of their leading monoms is zero.
3119. Creating S-polynomial from the pair  $(p_{42}, p_{66})$ .  
 Skipping pair  $p_{42}$  and  $p_{66}$  because gcd of their leading monoms is zero.
3120. Creating S-polynomial from the pair  $(p_{42}, p_{67})$ .  
 Forming S-pol of  $p_{42}$  and  $p_{67}$ : Polynomial too big for output (text size is 1629 characters, number of terms is 16)  
 Reduced to zero.
3121. Creating S-polynomial from the pair  $(p_{42}, p_{68})$ .  
 Skipping pair  $p_{42}$  and  $p_{68}$  because gcd of their leading monoms is zero.
3122. Creating S-polynomial from the pair  $(p_{42}, p_{69})$ .  
 Skipping pair  $p_{42}$  and  $p_{69}$  because gcd of their leading monoms is zero.
3123. Creating S-polynomial from the pair  $(p_{42}, p_{70})$ .  
 Skipping pair  $p_{42}$  and  $p_{70}$  because gcd of their leading monoms is zero.
3124. Creating S-polynomial from the pair  $(p_{42}, p_{71})$ .  
 Skipping pair  $p_{42}$  and  $p_{71}$  because gcd of their leading monoms is zero.
3125. Creating S-polynomial from the pair  $(p_{42}, p_{72})$ .  
 Forming S-pol of  $p_{42}$  and  $p_{72}$ : Polynomial too big for output (text size is 1427 characters, number of terms is 15)  
 Reduced to zero.
3126. Creating S-polynomial from the pair  $(p_{42}, p_{73})$ .  
 Skipping pair  $p_{42}$  and  $p_{73}$  because gcd of their leading monoms is zero.
3127. Creating S-polynomial from the pair  $(p_{42}, p_{74})$ .  
 Forming S-pol of  $p_{42}$  and  $p_{74}$ :  

$$p_{762} = 32768u_6u_5u_2^{23}u_1^{15}x_4^2 - 65536u_6u_5u_2^{23}u_1^{16}x_4 +$$

$$32768u_6u_5^3u_2^{23}u_1^{15}$$
 Reduced to zero.
3128. Creating S-polynomial from the pair  $(p_{42}, p_{75})$ .  
 Skipping pair  $p_{42}$  and  $p_{75}$  because gcd of their leading monoms is zero.

3129. Creating S-polynomial from the pair  $(p_{42}, p_{76})$ .

Forming S-pol of  $p_{42}$  and  $p_{76}$ :

$$\begin{aligned} p_{763} = & -33554432u_5^2u_2^{31}u_1^{25}x_{12}x_4^2 - 16777216u_5^3u_2^{32}u_1^{24}x_{12}x_4 + \\ & (16777216u_6u_5^2u_2^{32}u_1^{24} + 67108864u_6u_5u_2^{31}u_1^{26})x_{10}x_4 - \\ & 33554432u_6u_5^3u_2^{31}u_1^{25}x_{10} + 16777216u_5^2u_2^{32}u_1^{24}x_5x_4^2 + \\ & 8388608u_5^3u_2^{33}u_1^{23}x_5x_4 + \\ & (-8388608u_6u_5^2u_2^{33}u_1^{23} - 33554432u_6u_5u_2^{32}u_1^{25})x_4^2 + \\ & 16777216u_6u_5^3u_2^{32}u_1^{24}x_4 \end{aligned}$$

Reduced to zero.

3130. Creating S-polynomial from the pair  $(p_{42}, p_{77})$ .

Forming S-pol of  $p_{42}$  and  $p_{77}$ :

$$\begin{aligned} p_{764} = & -8192u_5^2u_2^{20}u_1^{13}x_{12}x_4 - 32768u_6u_2^{18}u_1^{15}x_{10}x_4 + \\ & (32768u_6u_5u_2^{18}u_1^{15} + 32768u_6u_2^{19}u_1^{15})x_{10}x_4 - \\ & 16384u_6u_5^2u_2^{19}u_1^{14}x_{10} + 4096u_5^2u_2^{21}u_1^{12}x_5x_4 - \\ & 8192u_6u_5u_2^{19}u_1^{13}x_4^2x_1 - 4096u_6u_5^2u_2^{20}u_1^{12}x_4x_1 \end{aligned}$$

Reduced to zero.

3131. Creating S-polynomial from the pair  $(p_{42}, p_{78})$ .

Forming S-pol of  $p_{42}$  and  $p_{78}$ :

$$\begin{aligned} p_{765} = & 16384u_5u_2^{19}u_1^{14}x_{12}x_4^2 + 32768u_5^2u_2^{18}u_1^{15}x_{12}x_4 - \\ & 32768u_6u_2^{18}u_1^{15}x_{10}x_4 - 16384u_5u_2^{19}u_1^{14}x_{10}x_5x_4 + \\ & (-8192u_6u_5u_2^{20}u_1^{13} + 32768u_6u_2^{19}u_1^{15})x_{10}x_4 - \\ & 16384u_6u_5^2u_2^{19}u_1^{14}x_{10} - 8192u_5^2u_2^{19}u_1^{13}x_5x_4x_1 + \\ & 4096u_6u_5u_2^{21}u_1^{12}x_4^2 - 4096u_6u_5^2u_2^{20}u_1^{12}x_4x_1 \end{aligned}$$

Reduced to zero.

3132. Creating S-polynomial from the pair  $(p_{42}, p_{79})$ .

Forming S-pol of  $p_{42}$  and  $p_{79}$ :

$$\begin{aligned} p_{766} = & -65536u_5u_2^{26}u_1^{16}x_{10}x_5x_4 + \\ & (65536u_6u_2^{26}u_1^{16} - 131072u_6u_2^{24}u_1^{17})x_{10}x_4^2 + \\ & (262144u_5u_2^{23}u_1^{18} - 131072u_5u_2^{23}u_1^{17})x_5x_4^2x_1 + \\ & (32768u_5u_2^{27}u_1^{15} - 131072u_5u_2^{25}u_1^{17})x_5x_4^2 - \\ & 32768u_5^2u_2^{26}u_1^{15}x_5x_4x_1 + 65536u_5^2u_2^{26}u_1^{16}x_5x_4 + \\ & (32768u_6u_5u_2^{26}u_1^{15} + 131072u_6u_5u_2^{24}u_1^{17} - \\ & 65536u_6u_5u_2^{24}u_1^{16})x_4^2x_1 + \\ & (-65536u_6u_5u_2^{26}u_1^{16} - 65536u_6u_2^{27}u_1^{16} + 131072u_6u_2^{25}u_1^{17})x_4^2 + \\ & (32768u_6u_5^2u_2^{27}u_1^{15} - 65536u_6u_5^2u_2^{25}u_1^{16})x_4 \end{aligned}$$

S-pol added.

3133. Creating S-polynomial from the pair  $(p_{42}, p_{80})$ .

Forming S-pol of  $p_{42}$  and  $p_{80}$ :

$$p_{767} = -1024u_6u_2^{18}u_1^{10}x_{10}x_4 - 512u_6u_5u_2^{18}u_1^9x_4x_1 + \\ (1024u_6u_5u_2^{18}u_1^{10} + 1024u_6u_2^{19}u_1^{10})x_4 - 512u_6u_5^2u_2^{19}u_1^9$$

Reduced to zero.

3134. Creating S-polynomial from the pair  $(p_{42}, p_{81})$ .

Skipping pair  $p_{42}$  and  $p_{81}$  because gcd of their leading monoms is zero.

3135. Creating S-polynomial from the pair  $(p_{42}, p_{82})$ .

Skipping pair  $p_{42}$  and  $p_{82}$  because gcd of their leading monoms is zero.

3136. Creating S-polynomial from the pair  $(p_{42}, p_{83})$ .

Skipping pair  $p_{42}$  and  $p_{83}$  because gcd of their leading monoms is zero.

3137. Creating S-polynomial from the pair  $(p_{42}, p_{84})$ .

Skipping pair  $p_{42}$  and  $p_{84}$  because gcd of their leading monoms is zero.

3138. Creating S-polynomial from the pair  $(p_{42}, p_{85})$ .

Skipping pair  $p_{42}$  and  $p_{85}$  because gcd of their leading monoms is zero.

3139. Creating S-polynomial from the pair  $(p_{42}, p_{86})$ .

Forming S-pol of  $p_{42}$  and  $p_{86}$ : Polynomial too big for output (text size is 1001 characters, number of terms is 11)

S-pol added.

3140. Creating S-polynomial from the pair  $(p_{42}, p_{87})$ .

Skipping pair  $p_{42}$  and  $p_{87}$  because gcd of their leading monoms is zero.

3141. Creating S-polynomial from the pair  $(p_{42}, p_{88})$ .

Skipping pair  $p_{42}$  and  $p_{88}$  because gcd of their leading monoms is zero.

3142. Creating S-polynomial from the pair  $(p_{42}, p_{89})$ .

Skipping pair  $p_{42}$  and  $p_{89}$  because gcd of their leading monoms is zero.

3143. Creating S-polynomial from the pair  $(p_{42}, p_{90})$ .

Skipping pair  $p_{42}$  and  $p_{90}$  because gcd of their leading monoms is zero.

3144. Creating S-polynomial from the pair  $(p_{42}, p_{91})$ .

Skipping pair  $p_{42}$  and  $p_{91}$  because gcd of their leading monoms is zero.

3145. Creating S-polynomial from the pair  $(p_{42}, p_{92})$ .

Skipping pair  $p_{42}$  and  $p_{92}$  because gcd of their leading monoms is zero.

3146. Creating S-polynomial from the pair  $(p_{42}, p_{93})$ .

Forming S-pol of  $p_{42}$  and  $p_{93}$ : Polynomial too big for output (text size is 1005 characters, number of terms is 11)

S-pol added.

3147. Creating S-polynomial from the pair  $(p_{42}, p_{94})$ .

Skipping pair  $p_{42}$  and  $p_{94}$  because gcd of their leading monoms is zero.

3148. Creating S-polynomial from the pair  $(p_{42}, p_{95})$ .

Forming S-pol of  $p_{42}$  and  $p_{95}$ : Polynomial too big for output (text size is 1091 characters, number of terms is 15)

Reduced to zero.

3149. Creating S-polynomial from the pair  $(p_{42}, p_{96})$ .

Forming S-pol of  $p_{42}$  and  $p_{96}$ :

$$\begin{aligned} p_{768} = & 4096u_5^2u_3^4u_2^{12}u_1^{12}x_{12}x_8 - 2048u_5u_3^5u_2^{12}u_1^{11}x_{12}x_6x_5 - \\ & 4096u_6u_5u_3^4u_2^{12}u_1^{12}x_{12}x_6 - 1024u_5^2u_3^5u_2^{12}u_1^{10}x_{12}x_5x_2 + \\ & 1024u_6u_5u_3^5u_2^{12}u_1^{10}x_{12}x_4x_2 + 2048u_6u_3^5u_2^{12}u_1^{11}x_{10}x_8x_4 + \\ & 1024u_5u_3^5u_2^{13}u_1^{10}x_8x_5x_4 - 2048u_6u_3^5u_2^{13}u_1^{11}x_8x_4 + \\ & 1024u_6u_5^2u_3^5u_2^{13}u_1^{10}x_8 \end{aligned}$$

Reduced to zero.

3150. Creating S-polynomial from the pair  $(p_{42}, p_{97})$ .

Forming S-pol of  $p_{42}$  and  $p_{97}$ :

$$\begin{aligned} p_{769} = & -32768u_5u_3^{13}u_2^{12}u_1^{15}x_{12}x_6x_5 + \\ & (131072u_5u_3^{10}u_2^{12}u_1^{17} - 65536u_5u_3^{10}u_2^{12}u_1^{16})x_{12}x_5x_4x_2 - \\ & 65536u_5u_3^{12}u_2^{12}u_1^{16}x_{12}x_5x_4 - 16384u_5^2u_3^{13}u_2^{12}u_1^{14}x_{12}x_5x_2 + \\ & 32768u_5^2u_3^{13}u_2^{12}u_1^{15}x_{12}x_5 + \\ & (16384u_6u_5u_3^{13}u_2^{12}u_1^{14} + 65536u_6u_5u_3^{11}u_2^{12}u_1^{16})x_{12}x_4x_2 + \\ & (-32768u_6u_5u_3^{13}u_2^{12}u_1^{15} - 65536u_6u_5u_3^{11}u_2^{12}u_1^{16})x_{12}x_4 + \\ & 32768u_6u_3^{13}u_2^{12}u_1^{15}x_{10}x_8x_4 + 16384u_5u_3^{13}u_2^{13}u_1^{14}x_8x_5x_4 - \\ & 32768u_6u_3^{13}u_2^{13}u_1^{15}x_8x_4 + 16384u_6u_5^2u_3^{13}u_2^{13}u_1^{14}x_8 \end{aligned}$$

S-pol added.

3151. Creating S-polynomial from the pair  $(p_{42}, p_{98})$ .

Forming S-pol of  $p_{42}$  and  $p_{98}$ : Polynomial too big for output (text size is 2547 characters, number of terms is 28)

Reduced to zero.

3152. Creating S-polynomial from the pair  $(p_{42}, p_{99})$ .

Skipping pair  $p_{42}$  and  $p_{99}$  because gcd of their leading monoms is zero.

3153. Creating S-polynomial from the pair  $(p_{42}, p_{100})$ .

Forming S-pol of  $p_{42}$  and  $p_{100}$ :

$$\begin{aligned}
p_{770} = & 33554432u_5^2u_2^{29}u_1^{25}x_{12}x_{10}x_4 + \\
& (67108864u_5^2u_2^{28}u_1^{26} + 67108864u_5u_2^{29}u_1^{26})x_{12}x_4^2 + \\
& (8388608u_5^3u_2^{31}u_1^{23} - 33554432u_5^3u_2^{29}u_1^{25})x_{12}x_4 + \\
& (-33554432u_6u_5u_2^{29}u_1^{25} - 67108864u_6u_2^{28}u_1^{26})x_{10}^2x_4 + \\
& (-16777216u_5^2u_2^{30}u_1^{24} - 33554432u_5u_2^{29}u_1^{25})x_{10}x_5x_4 + \\
& (-8388608u_6u_5^2u_2^{31}u_1^{23} + 67108864u_6u_2^{29}u_1^{26})x_{10}x_4 - \\
& 33554432u_6u_5^2u_2^{29}u_1^{25}x_{10} - 16777216u_5^2u_2^{29}u_1^{24}x_5x_4^2x_1 - \\
& 4194304u_5^3u_2^{32}u_1^{22}x_5x_4 - 8388608u_6u_5^2u_2^{30}u_1^{23}x_4^2x_1 + \\
& (4194304u_6u_5^2u_2^{32}u_1^{22} + 16777216u_6u_5u_2^{31}u_1^{24})x_4^2 - \\
& 8388608u_6u_5^3u_2^{31}u_1^{23}x_4
\end{aligned}$$

S-pol added.

3154. Creating S-polynomial from the pair  $(p_{42}, p_{101})$ .

Forming S-pol of  $p_{42}$  and  $p_{101}$ :

$$\begin{aligned}
p_{771} = & 4096u_5^2u_2^{16}u_1^{12}x_{12}x_4 - 2048u_5u_2^{17}u_1^{11}x_{10}x_5x_4 + \\
& 2048u_6u_2^{17}u_1^{11}x_{10}x_4^2 - 4096u_6u_5u_2^{16}u_1^{12}x_{10}x_4 + \\
& 1024u_5u_2^{18}u_1^{10}x_5x_4^2 - 1024u_5^2u_2^{17}u_1^{10}x_5x_4x_1 + \\
& 1024u_6u_5u_2^{17}u_1^{10}x_4^2x_1 - 2048u_6u_2^{18}u_1^{11}x_4^2 + \\
& 1024u_6u_5^2u_2^{18}u_1^{10}x_4
\end{aligned}$$

Reduced to zero.

3155. Creating S-polynomial from the pair  $(p_{42}, p_{102})$ .

Forming S-pol of  $p_{42}$  and  $p_{102}$ :

$$\begin{aligned}
p_{772} = & -32768u_5u_2^{25}u_1^{15}x_{10}x_5x_4 + 32768u_6u_2^{25}u_1^{15}x_{10}x_4^2 + \\
& (131072u_5u_2^{22}u_1^{17} - 65536u_5u_2^{22}u_1^{16})x_5x_4^2x_1 + \\
& (16384u_5u_2^{26}u_1^{14} - 65536u_5u_2^{24}u_1^{16})x_5x_4^2 - \\
& 16384u_5^2u_2^{25}u_1^{14}x_5x_4x_1 + 32768u_5^2u_2^{25}u_1^{15}x_5x_4 + \\
& (16384u_6u_5u_2^{25}u_1^{14} + 65536u_6u_5u_2^{23}u_1^{16})x_4^2x_1 + \\
& (-32768u_6u_5u_2^{25}u_1^{15} - 65536u_6u_5u_2^{23}u_1^{16} - 32768u_6u_2^{26}u_1^{15})x_4^2 + \\
& 16384u_6u_5^2u_2^{26}u_1^{14}x_4
\end{aligned}$$

S-pol added.

3156. Creating S-polynomial from the pair  $(p_{42}, p_{103})$ .  
Forming S-pol of  $p_{42}$  and  $p_{103}$ : Polynomial too big for output (text size is 2559 characters, number of terms is 28)  
Reduced to zero.
3157. Creating S-polynomial from the pair  $(p_{42}, p_{104})$ .  
Forming S-pol of  $p_{42}$  and  $p_{104}$ : Polynomial too big for output (text size is 1106 characters, number of terms is 15)  
Reduced to zero.
3158. Creating S-polynomial from the pair  $(p_{42}, p_{105})$ .  
Forming S-pol of  $p_{42}$  and  $p_{105}$ :  

$$p_{773} = 4096u_5^2u_4^4u_2^{12}u_1^{12}x_{16}x_{12} + 2048u_6u_5^5u_4^{12}u_1^{11}x_{16}x_{10}x_4 +$$

$$1024u_5u_4^5u_2^{13}u_1^{10}x_{16}x_5x_4 - 2048u_6u_4^5u_2^{13}u_1^{11}x_{16}x_4 +$$

$$1024u_6u_5^2u_4^5u_2^{13}u_1^{10}x_{16} - 2048u_5u_4^5u_2^{12}u_1^{11}x_{14}x_{12}x_5 -$$

$$4096u_6u_5u_4^4u_2^{12}u_1^{12}x_{14}x_{12} - 1024u_5^2u_4^5u_2^{12}u_1^{10}x_{12}x_5x_3 +$$

$$1024u_6u_5u_4^5u_2^{12}u_1^{10}x_{12}x_4x_3$$
  
Reduced to zero.
3159. Creating S-polynomial from the pair  $(p_{42}, p_{106})$ .  
Forming S-pol of  $p_{42}$  and  $p_{106}$ :  

$$p_{774} = 32768u_6u_4^{13}u_2^{12}u_1^{15}x_{16}x_{10}x_4 + 16384u_5u_4^{13}u_2^{13}u_1^{14}x_{16}x_5x_4 -$$

$$32768u_6u_4^{13}u_2^{13}u_1^{15}x_{16}x_4 + 16384u_6u_5^2u_4^{13}u_2^{13}u_1^{14}x_{16} -$$

$$32768u_5u_4^{13}u_2^{12}u_1^{15}x_{14}x_{12}x_5 +$$

$$(131072u_5u_4^{10}u_2^{12}u_1^{17} - 65536u_5u_4^{10}u_2^{12}u_1^{16})x_{12}x_5x_4x_3 -$$

$$65536u_5u_4^{12}u_2^{12}u_1^{16}x_{12}x_5x_4 - 16384u_5^2u_4^{13}u_2^{12}u_1^{14}x_{12}x_5x_3 +$$

$$32768u_5^2u_4^{13}u_2^{12}u_1^{15}x_{12}x_5 +$$

$$(16384u_6u_5u_4^{13}u_2^{12}u_1^{14} + 65536u_6u_5u_4^{11}u_2^{12}u_1^{16})x_{12}x_4x_3 +$$

$$(-32768u_6u_5u_4^{13}u_2^{12}u_1^{15} - 65536u_6u_5u_4^{11}u_2^{12}u_1^{16})x_{12}x_4$$
  
S-pol added.
3160. Creating S-polynomial from the pair  $(p_{43}, p_{44})$ .  
Skipping pair  $p_{43}$  and  $p_{44}$  because gcd of their leading monoms is zero.
3161. Creating S-polynomial from the pair  $(p_{43}, p_{45})$ .  
Skipping pair  $p_{43}$  and  $p_{45}$  because gcd of their leading monoms is zero.
3162. Creating S-polynomial from the pair  $(p_{43}, p_{46})$ .  
Skipping pair  $p_{43}$  and  $p_{46}$  because gcd of their leading monoms is zero.

3163. Creating S-polynomial from the pair  $(p_{43}, p_{47})$ .  
Forming S-pol of  $p_{43}$  and  $p_{47}$ : Polynomial too big for output (text size is 1616 characters, number of terms is 16)  
Reduced to zero.
3164. Creating S-polynomial from the pair  $(p_{43}, p_{48})$ .  
Skipping pair  $p_{43}$  and  $p_{48}$  because gcd of their leading monoms is zero.
3165. Creating S-polynomial from the pair  $(p_{43}, p_{49})$ .  
Skipping pair  $p_{43}$  and  $p_{49}$  because gcd of their leading monoms is zero.
3166. Creating S-polynomial from the pair  $(p_{43}, p_{50})$ .  
Skipping pair  $p_{43}$  and  $p_{50}$  because gcd of their leading monoms is zero.
3167. Creating S-polynomial from the pair  $(p_{43}, p_{51})$ .  
Skipping pair  $p_{43}$  and  $p_{51}$  because gcd of their leading monoms is zero.
3168. Creating S-polynomial from the pair  $(p_{43}, p_{52})$ .  
Forming S-pol of  $p_{43}$  and  $p_{52}$ : Polynomial too big for output (text size is 1419 characters, number of terms is 15)  
Reduced to zero.
3169. Creating S-polynomial from the pair  $(p_{43}, p_{53})$ .  
Skipping pair  $p_{43}$  and  $p_{53}$  because gcd of their leading monoms is zero.
3170. Creating S-polynomial from the pair  $(p_{43}, p_{54})$ .  
Skipping pair  $p_{43}$  and  $p_{54}$  because gcd of their leading monoms is zero.
3171. Creating S-polynomial from the pair  $(p_{43}, p_{55})$ .  
Skipping pair  $p_{43}$  and  $p_{55}$  because gcd of their leading monoms is zero.
3172. Creating S-polynomial from the pair  $(p_{43}, p_{56})$ .  
Skipping pair  $p_{43}$  and  $p_{56}$  because gcd of their leading monoms is zero.
3173. Creating S-polynomial from the pair  $(p_{43}, p_{57})$ .  
Forming S-pol of  $p_{43}$  and  $p_{57}$ : Polynomial too big for output (text size is 1629 characters, number of terms is 16)  
Reduced to zero.
3174. Creating S-polynomial from the pair  $(p_{43}, p_{58})$ .  
Skipping pair  $p_{43}$  and  $p_{58}$  because gcd of their leading monoms is zero.
3175. Creating S-polynomial from the pair  $(p_{43}, p_{59})$ .  
Skipping pair  $p_{43}$  and  $p_{59}$  because gcd of their leading monoms is zero.
3176. Creating S-polynomial from the pair  $(p_{43}, p_{60})$ .  
Skipping pair  $p_{43}$  and  $p_{60}$  because gcd of their leading monoms is zero.

3177. Creating S-polynomial from the pair  $(p_{43}, p_{61})$ .  
 Skipping pair  $p_{43}$  and  $p_{61}$  because gcd of their leading monoms is zero.
3178. Creating S-polynomial from the pair  $(p_{43}, p_{62})$ .  
 Forming S-pol of  $p_{43}$  and  $p_{62}$ : Polynomial too big for output (text size is 1428 characters, number of terms is 15)  
 Reduced to zero.
3179. Creating S-polynomial from the pair  $(p_{43}, p_{63})$ .  
 Skipping pair  $p_{43}$  and  $p_{63}$  because gcd of their leading monoms is zero.
3180. Creating S-polynomial from the pair  $(p_{43}, p_{64})$ .  
 Skipping pair  $p_{43}$  and  $p_{64}$  because gcd of their leading monoms is zero.
3181. Creating S-polynomial from the pair  $(p_{43}, p_{65})$ .  
 Forming S-pol of  $p_{43}$  and  $p_{65}$ :

$$\begin{aligned}
 p_{775} = & -262144u_5u_4^{24}u_1^{18}x_{16}x_4^2 + \\
 & (32768u_5^2u_4^{27}u_1^{15} - 524288u_5^2u_4^{23}u_1^{19})x_{16}x_4 + \\
 & (131072u_6u_4^{25}u_1^{17} + 524288u_6u_4^{23}u_1^{19})x_{14}x_4 + \\
 & 262144u_5u_4^{24}u_1^{18}x_{14}x_5x_4 + \\
 & (-131072u_6u_4^{26}u_1^{17} - 524288u_6u_4^{24}u_1^{19})x_{14}x_4 + \\
 & (65536u_6u_5^2u_4^{26}u_1^{16} + 262144u_6u_5^2u_4^{24}u_1^{18})x_{14} + \\
 & 131072u_5^2u_4^{24}u_1^{17}x_5x_4x_3 - 16384u_5^2u_4^{28}u_1^{14}x_5x_4 + \\
 & 32768u_6u_5u_4^{26}u_1^{15}x_4^2x_3 - 65536u_6u_5u_4^{26}u_1^{16}x_4^2 + \\
 & (16384u_6u_5^2u_4^{27}u_1^{14} + 65536u_6u_5^2u_4^{25}u_1^{16})x_4x_3
 \end{aligned}$$

Reduced to zero.

3182. Creating S-polynomial from the pair  $(p_{43}, p_{66})$ .  
 Skipping pair  $p_{43}$  and  $p_{66}$  because gcd of their leading monoms is zero.
3183. Creating S-polynomial from the pair  $(p_{43}, p_{67})$ .  
 Forming S-pol of  $p_{43}$  and  $p_{67}$ : Polynomial too big for output (text size is 1277 characters, number of terms is 14)  
 S-pol added.
3184. Creating S-polynomial from the pair  $(p_{43}, p_{68})$ .  
 Forming S-pol of  $p_{43}$  and  $p_{68}$ :

$$\begin{aligned}
 p_{776} = & 8192u_5u_4^{19}u_1^{13}x_{16}x_4^2 + 16384u_5^2u_4^{18}u_1^{14}x_{16}x_4 - \\
 & 16384u_6u_4^{18}u_1^{14}x_{14}^2x_4 - 8192u_5u_4^{19}u_1^{13}x_{14}x_5x_4 + \\
 & (-4096u_6u_5u_4^{20}u_1^{12} + 16384u_6u_4^{19}u_1^{14})x_{14}x_4 - \\
 & 8192u_6u_5^2u_4^{19}u_1^{13}x_{14} - 4096u_5^2u_4^{19}u_1^{12}x_5x_4x_3 + \\
 & 2048u_6u_5u_4^{21}u_1^{11}x_4^2 - 2048u_6u_5^2u_4^{20}u_1^{11}x_4x_3
 \end{aligned}$$

Reduced to zero.



3185. Creating S-polynomial from the pair  $(p_{43}, p_{69})$ .

Forming S-pol of  $p_{43}$  and  $p_{69}$ :

$$\begin{aligned}
p_{777} = & -16384u_5u_4^{25}u_1^{14}x_{16}x_4^2 + 8192u_5^2u_4^{26}u_1^{13}x_{16}x_4 + \\
& (32768u_6u_4^{24}u_1^{15} + 131072u_6u_4^{22}u_1^{17})x_{14}^2x_4 + \\
& 16384u_5u_4^{25}u_1^{14}x_{14}x_5x_4 + \\
& (-131072u_6u_5u_4^{22}u_1^{17} - 32768u_6u_4^{25}u_1^{15} - 131072u_6u_4^{23}u_1^{17})x_{14}x_4 + \\
& (16384u_6u_5^2u_4^{25}u_1^{14} + 65536u_6u_5^2u_4^{23}u_1^{16})x_{14} + \\
& 8192u_5^2u_4^{25}u_1^{13}x_5x_4x_3 + \\
& (-4096u_5^2u_4^{27}u_1^{12} - 16384u_5^2u_4^{25}u_1^{14})x_5x_4 + \\
& 32768u_6u_5u_4^{23}u_1^{15}x_4^2x_3 + \\
& (4096u_6u_5^2u_4^{26}u_1^{12} + 16384u_6u_5^2u_4^{24}u_1^{14})x_4x_3
\end{aligned}$$

Reduced to zero.

3186. Creating S-polynomial from the pair  $(p_{43}, p_{70})$ .

Forming S-pol of  $p_{43}$  and  $p_{70}$ :

$$\begin{aligned}
p_{778} = & (2048u_6u_4^{22}u_1^{11} + 8192u_6u_4^{20}u_1^{13})x_{16}x_{14}x_4 + \\
& (512u_6u_5u_4^{24}u_1^9 - 8192u_6u_5u_4^{20}u_1^{13} - 2048u_6u_4^{23}u_1^{11} - \\
& 8192u_6u_4^{21}u_1^{13})x_{16}x_4 + \\
& (1024u_6u_5^2u_4^{23}u_1^{10} + 4096u_6u_5^2u_4^{21}u_1^{12})x_{16} + \\
& (512u_6u_5u_4^{23}u_1^9 + 2048u_6u_5u_4^{21}u_1^{11})x_5x_4x_3 + \\
& (-256u_6u_5u_4^{25}u_1^8 - 1024u_6u_5u_4^{23}u_1^{10})x_5x_4 + \\
& (256u_6^2u_5u_4^{24}u_1^8 + 1024u_6^2u_5u_4^{22}u_1^{10})x_4x_3
\end{aligned}$$

Reduced to zero.

3187. Creating S-polynomial from the pair  $(p_{43}, p_{71})$ .

Forming S-pol of  $p_{43}$  and  $p_{71}$ :

$$\begin{aligned}
p_{779} = & -4096u_5^2u_4^{20}u_1^{12}x_{16}x_4 - 16384u_6u_4^{18}u_1^{14}x_{14}^2x_4 + \\
& (16384u_6u_5u_4^{18}u_1^{14} + 16384u_6u_4^{19}u_1^{14})x_{14}x_4 - \\
& 8192u_6u_5^2u_4^{19}u_1^{13}x_{14} + 2048u_5^2u_4^{21}u_1^{11}x_5x_4 - \\
& 4096u_6u_5u_4^{19}u_1^{12}x_4^2x_3 - 2048u_6u_5^2u_4^{20}u_1^{11}x_4x_3
\end{aligned}$$

Reduced to zero.

3188. Creating S-polynomial from the pair  $(p_{43}, p_{72})$ .

Forming S-pol of  $p_{43}$  and  $p_{72}$ : Polynomial too big for output (text size is 1128 characters, number of terms is 14)

S-pol added.

3189. Creating S-polynomial from the pair  $(p_{43}, p_{73})$ .

Forming S-pol of  $p_{43}$  and  $p_{73}$ :

$$\begin{aligned} p_{780} = & -1024u_6u_4^{16}u_1^{10}x_{16}x_{14}x_4 + \\ & (-256u_6u_5u_4^{18}u_1^8 + 1024u_6u_5u_4^{16}u_1^{10} + 1024u_6u_4^{17}u_1^{10})x_{16}x_4 - \\ & 512u_6u_5^2u_4^{17}u_1^9x_{16} - 256u_6u_5u_4^{17}u_1^8x_5x_4x_3 + \\ & 128u_6u_5u_4^{19}u_1^7x_5x_4 - 128u_6^2u_5u_4^{18}u_1^7x_4x_3 \end{aligned}$$

Reduced to zero.

3190. Creating S-polynomial from the pair  $(p_{43}, p_{74})$ .

Skipping pair  $p_{43}$  and  $p_{74}$  because gcd of their leading monoms is zero.

3191. Creating S-polynomial from the pair  $(p_{43}, p_{75})$ .

Skipping pair  $p_{43}$  and  $p_{75}$  because gcd of their leading monoms is zero.

3192. Creating S-polynomial from the pair  $(p_{43}, p_{76})$ .

Skipping pair  $p_{43}$  and  $p_{76}$  because gcd of their leading monoms is zero.

3193. Creating S-polynomial from the pair  $(p_{43}, p_{77})$ .

Skipping pair  $p_{43}$  and  $p_{77}$  because gcd of their leading monoms is zero.

3194. Creating S-polynomial from the pair  $(p_{43}, p_{78})$ .

Skipping pair  $p_{43}$  and  $p_{78}$  because gcd of their leading monoms is zero.

3195. Creating S-polynomial from the pair  $(p_{43}, p_{79})$ .

Forming S-pol of  $p_{43}$  and  $p_{79}$ : Polynomial too big for output (text size is 1006 characters, number of terms is 11)

S-pol added.

3196. Creating S-polynomial from the pair  $(p_{43}, p_{80})$ .

Skipping pair  $p_{43}$  and  $p_{80}$  because gcd of their leading monoms is zero.

3197. Creating S-polynomial from the pair  $(p_{43}, p_{81})$ .

Skipping pair  $p_{43}$  and  $p_{81}$  because gcd of their leading monoms is zero.

3198. Creating S-polynomial from the pair  $(p_{43}, p_{82})$ .

Skipping pair  $p_{43}$  and  $p_{82}$  because gcd of their leading monoms is zero.

3199. Creating S-polynomial from the pair  $(p_{43}, p_{83})$ .

Skipping pair  $p_{43}$  and  $p_{83}$  because gcd of their leading monoms is zero.

3200. Creating S-polynomial from the pair  $(p_{43}, p_{84})$ .

Skipping pair  $p_{43}$  and  $p_{84}$  because gcd of their leading monoms is zero.

3201. Creating S-polynomial from the pair  $(p_{43}, p_{85})$ .

Skipping pair  $p_{43}$  and  $p_{85}$  because gcd of their leading monoms is zero.

3202. Creating S-polynomial from the pair  $(p_{43}, p_{86})$ .

Forming S-pol of  $p_{43}$  and  $p_{86}$ : Polynomial too big for output (text size is 1001 characters, number of terms is 11)

S-pol added.

3203. Creating S-polynomial from the pair  $(p_{43}, p_{87})$ .

Skipping pair  $p_{43}$  and  $p_{87}$  because gcd of their leading monoms is zero.

3204. Creating S-polynomial from the pair  $(p_{43}, p_{88})$ .

Forming S-pol of  $p_{43}$  and  $p_{88}$ :

$$p_{781} = 32768u_6u_5u_4^{23}u_1^{15}x_4^2 - 65536u_6u_5u_4^{23}u_1^{16}x_4 + \\ 32768u_6u_5^3u_4^{23}u_1^{15}$$

Reduced to zero.

3205. Creating S-polynomial from the pair  $(p_{43}, p_{89})$ .

Skipping pair  $p_{43}$  and  $p_{89}$  because gcd of their leading monoms is zero.

3206. Creating S-polynomial from the pair  $(p_{43}, p_{90})$ .

Forming S-pol of  $p_{43}$  and  $p_{90}$ :

$$p_{782} = -33554432u_5^2u_4^{31}u_1^{25}x_{16}x_4^2 - 16777216u_5^3u_4^{32}u_1^{24}x_{16}x_4 + \\ (16777216u_6u_5^2u_4^{32}u_1^{24} + 67108864u_6u_5u_4^{31}u_1^{26})x_{14}x_4 - \\ 33554432u_6u_5^3u_4^{31}u_1^{25}x_{14} + 16777216u_5^2u_4^{32}u_1^{24}x_5x_4^2 + \\ 8388608u_5^3u_4^{33}u_1^{23}x_5x_4 + \\ (-8388608u_6u_5^2u_4^{33}u_1^{23} - 33554432u_6u_5u_4^{32}u_1^{25})x_4^2 + \\ 16777216u_6u_5^3u_4^{32}u_1^{24}x_4$$

Reduced to zero.

3207. Creating S-polynomial from the pair  $(p_{43}, p_{91})$ .

Forming S-pol of  $p_{43}$  and  $p_{91}$ :

$$p_{783} = -8192u_5^2u_4^{20}u_1^{13}x_{16}x_4 - 32768u_6u_4^{18}u_1^{15}x_{14}x_4 + \\ (32768u_6u_5u_4^{18}u_1^{15} + 32768u_6u_4^{19}u_1^{15})x_{14}x_4 - \\ 16384u_6u_5^2u_4^{19}u_1^{14}x_{14} + 4096u_5^2u_4^{21}u_1^{12}x_5x_4 - \\ 8192u_6u_5u_4^{19}u_1^{13}x_4^2x_3 - 4096u_6u_5^2u_4^{20}u_1^{12}x_4x_3$$

Reduced to zero.

3208. Creating S-polynomial from the pair  $(p_{43}, p_{92})$ .

Forming S-pol of  $p_{43}$  and  $p_{92}$ :

$$\begin{aligned} p_{784} = & 16384u_5u_4^{19}u_1^{14}x_{16}x_4^2 + 32768u_5^2u_4^{18}u_1^{15}x_{16}x_4 - \\ & 32768u_6u_4^{18}u_1^{15}x_{14}x_4 - 16384u_5u_4^{19}u_1^{14}x_{14}x_5x_4 + \\ & (-8192u_6u_5u_4^{20}u_1^{13} + 32768u_6u_4^{19}u_1^{15})x_{14}x_4 - \\ & 16384u_6u_5^2u_4^{19}u_1^{14}x_{14} - 8192u_5^2u_4^{19}u_1^{13}x_5x_4x_3 + \\ & 4096u_6u_5u_4^{21}u_1^{12}x_4^2 - 4096u_6u_5^2u_4^{20}u_1^{12}x_4x_3 \end{aligned}$$

Reduced to zero.

3209. Creating S-polynomial from the pair  $(p_{43}, p_{93})$ .

Forming S-pol of  $p_{43}$  and  $p_{93}$ :

$$\begin{aligned} p_{785} = & -65536u_5u_4^{26}u_1^{16}x_{14}x_5x_4 + \\ & (65536u_6u_4^{26}u_1^{16} - 131072u_6u_4^{24}u_1^{17})x_{14}x_4^2 + \\ & (262144u_5u_4^{23}u_1^{18} - 131072u_5u_4^{23}u_1^{17})x_5x_4^2x_3 + \\ & (32768u_5u_4^{27}u_1^{15} - 131072u_5u_4^{25}u_1^{17})x_5x_4^2 - \\ & 32768u_5^2u_4^{26}u_1^{15}x_5x_4x_3 + 65536u_5^2u_4^{26}u_1^{16}x_5x_4 + \\ & (32768u_6u_5u_4^{26}u_1^{15} + 131072u_6u_5u_4^{24}u_1^{17} - \\ & 65536u_6u_5u_4^{24}u_1^{16})x_4^2x_3 + \\ & (-65536u_6u_5u_4^{26}u_1^{16} - 65536u_6u_4^{27}u_1^{16} + 131072u_6u_4^{25}u_1^{17})x_4^2 + \\ & (32768u_6u_5^2u_4^{27}u_1^{15} - 65536u_6u_5^2u_4^{25}u_1^{16})x_4 \end{aligned}$$

S-pol added.

3210. Creating S-polynomial from the pair  $(p_{43}, p_{94})$ .

Forming S-pol of  $p_{43}$  and  $p_{94}$ :

$$\begin{aligned} p_{786} = & -1024u_6u_4^{18}u_1^{10}x_{14}x_4 - 512u_6u_5u_4^{18}u_1^9x_4x_3 + \\ & (1024u_6u_5u_4^{18}u_1^{10} + 1024u_6u_4^{19}u_1^{10})x_4 - 512u_6u_5^2u_4^{19}u_1^9 \end{aligned}$$

Reduced to zero.

3211. Creating S-polynomial from the pair  $(p_{43}, p_{95})$ .

Forming S-pol of  $p_{43}$  and  $p_{95}$ : Polynomial too big for output (text size is 1091 characters, number of terms is 15)

Reduced to zero.

3212. Creating S-polynomial from the pair  $(p_{43}, p_{96})$ .

Forming S-pol of  $p_{43}$  and  $p_{96}$ :

$$\begin{aligned} p_{787} = & 4096u_5^2u_4^{12}u_3^4u_1^{12}x_{16}x_8 - 2048u_5u_4^{12}u_3^5u_1^{11}x_{16}x_6x_5 - \\ & 4096u_6u_5u_4^{12}u_3^4u_1^{12}x_{16}x_6 - 1024u_5^2u_4^{12}u_3^5u_1^{10}x_{16}x_5x_2 + \\ & 1024u_6u_5u_4^{12}u_3^5u_1^{10}x_{16}x_4x_2 + 2048u_6u_4^{12}u_3^5u_1^{11}x_{14}x_8x_4 + \\ & 1024u_5u_4^{13}u_3^5u_1^{10}x_8x_5x_4 - 2048u_6u_4^{13}u_3^5u_1^{11}x_8x_4 + \\ & 1024u_6u_5^2u_4^{13}u_3^5u_1^{10}x_8 \end{aligned}$$

Reduced to zero.

3213. Creating S-polynomial from the pair  $(p_{43}, p_{97})$ .

Forming S-pol of  $p_{43}$  and  $p_{97}$ :

$$\begin{aligned} p_{788} = & -32768u_5u_4^{12}u_3^{13}u_1^{15}x_{16}x_6x_5 + \\ & (131072u_5u_4^{12}u_3^{10}u_1^{17} - 65536u_5u_4^{12}u_3^{10}u_1^{16})x_{16}x_5x_4x_2 - \\ & 65536u_5u_4^{12}u_3^{12}u_1^{16}x_{16}x_5x_4 - 16384u_5^2u_4^{12}u_3^{13}u_1^{14}x_{16}x_5x_2 + \\ & 32768u_5^2u_4^{12}u_3^{13}u_1^{15}x_{16}x_5 + \\ & (16384u_6u_5u_4^{12}u_3^{13}u_1^{14} + 65536u_6u_5u_4^{12}u_3^{11}u_1^{16})x_{16}x_4x_2 + \\ & (-32768u_6u_5u_4^{12}u_3^{13}u_1^{15} - 65536u_6u_5u_4^{12}u_3^{11}u_1^{16})x_{16}x_4 + \\ & 32768u_6u_4^{12}u_3^{13}u_1^{15}x_{14}x_8x_4 + 16384u_5u_4^{13}u_3^{13}u_1^{14}x_8x_5x_4 - \\ & 32768u_6u_4^{13}u_3^{13}u_1^{15}x_8x_4 + 16384u_6u_5^2u_4^{13}u_3^{13}u_1^{14}x_8 \end{aligned}$$

S-pol added.

3214. Creating S-polynomial from the pair  $(p_{43}, p_{98})$ .

Skipping pair  $p_{43}$  and  $p_{98}$  because gcd of their leading monoms is zero.

3215. Creating S-polynomial from the pair  $(p_{43}, p_{99})$ .

Forming S-pol of  $p_{43}$  and  $p_{99}$ : Polynomial too big for output (text size is 2549 characters, number of terms is 28)

Reduced to zero.

3216. Creating S-polynomial from the pair  $(p_{43}, p_{100})$ .

Forming S-pol of  $p_{43}$  and  $p_{100}$ : Polynomial too big for output (text size is 1106 characters, number of terms is 15)

Reduced to zero.

3217. Creating S-polynomial from the pair  $(p_{43}, p_{101})$ .

Forming S-pol of  $p_{43}$  and  $p_{101}$ :

$$\begin{aligned} p_{789} = & 4096u_5^2u_4^{12}u_2^4u_1^{12}x_{16}x_{12} - 2048u_5u_4^{12}u_2^5u_1^{11}x_{16}x_{10}x_5 - \\ & 4096u_6u_5u_4^{12}u_2^4u_1^{12}x_{16}x_{10} - 1024u_5^2u_4^{12}u_2^5u_1^{10}x_{16}x_5x_1 + \\ & 1024u_6u_5u_4^{12}u_2^5u_1^{10}x_{16}x_4x_1 + 2048u_6u_4^{12}u_2^5u_1^{11}x_{14}x_{12}x_4 + \\ & 1024u_5u_4^{13}u_2^5u_1^{10}x_{12}x_5x_4 - 2048u_6u_4^{13}u_2^5u_1^{11}x_{12}x_4 + \\ & 1024u_6u_5^2u_4^{13}u_2^5u_1^{10}x_{12} \end{aligned}$$

Reduced to zero.

3218. Creating S-polynomial from the pair  $(p_{43}, p_{102})$ .

Forming S-pol of  $p_{43}$  and  $p_{102}$ :

$$\begin{aligned} p_{790} = & -32768u_5u_4^{12}u_2^{13}u_1^{15}x_{16}x_{10}x_5 + \\ & (131072u_5u_4^{12}u_2^{10}u_1^{17} - 65536u_5u_4^{12}u_2^{10}u_1^{16})x_{16}x_5x_4x_1 - \\ & 65536u_5u_4^{12}u_2^{12}u_1^{16}x_{16}x_5x_4 - 16384u_5^2u_4^{12}u_2^{13}u_1^{14}x_{16}x_5x_1 + \\ & 32768u_5^2u_4^{12}u_2^{13}u_1^{15}x_{16}x_5 + \\ & (16384u_6u_5u_4^{12}u_2^{13}u_1^{14} + 65536u_6u_5u_4^{12}u_2^{11}u_1^{16})x_{16}x_4x_1 + \\ & (-32768u_6u_5u_4^{12}u_2^{13}u_1^{15} - 65536u_6u_5u_4^{12}u_2^{11}u_1^{16})x_{16}x_4 + \\ & 32768u_6u_4^{12}u_2^{13}u_1^{15}x_{14}x_{12}x_4 + 16384u_5u_4^{13}u_2^{13}u_1^{14}x_{12}x_5x_4 - \\ & 32768u_6u_4^{13}u_2^{13}u_1^{15}x_{12}x_4 + 16384u_6u_5^2u_4^{13}u_2^{13}u_1^{14}x_{12} \end{aligned}$$

S-pol added.

3219. Creating S-polynomial from the pair  $(p_{43}, p_{103})$ .

Forming S-pol of  $p_{43}$  and  $p_{103}$ : Polynomial too big for output (text size is 2559 characters, number of terms is 28)

Reduced to zero.

3220. Creating S-polynomial from the pair  $(p_{43}, p_{104})$ .

Forming S-pol of  $p_{43}$  and  $p_{104}$ :

$$\begin{aligned} p_{791} = & 33554432u_5^2u_4^{29}u_1^{25}x_{16}x_{14}x_4 + \\ & (67108864u_5^2u_4^{28}u_1^{26} + 67108864u_5u_4^{29}u_1^{26})x_{16}x_4^2 + \\ & (8388608u_5^3u_4^{31}u_1^{23} - 33554432u_5^3u_4^{29}u_1^{25})x_{16}x_4 + \\ & (-33554432u_6u_5u_4^{29}u_1^{25} - 67108864u_6u_4^{28}u_1^{26})x_{14}^2x_4 + \\ & (-16777216u_5^2u_4^{30}u_1^{24} - 33554432u_5u_4^{29}u_1^{25})x_{14}x_5x_4 + \\ & (-8388608u_6u_5^2u_4^{31}u_1^{23} + 67108864u_6u_4^{29}u_1^{26})x_{14}x_4 - \\ & 33554432u_6u_5^2u_4^{29}u_1^{25}x_{14} - 16777216u_5^2u_4^{29}u_1^{24}x_5x_4^2x_3 - \\ & 4194304u_5^3u_4^{32}u_1^{22}x_5x_4 - 8388608u_6u_5^2u_4^{30}u_1^{23}x_4^2x_3 + \\ & (4194304u_6u_5^2u_4^{32}u_1^{22} + 16777216u_6u_5u_4^{31}u_1^{24})x_4^2 - \\ & 8388608u_6u_5^3u_4^{31}u_1^{23}x_4 \end{aligned}$$

S-pol added.

3221. Creating S-polynomial from the pair  $(p_{43}, p_{105})$ .

Forming S-pol of  $p_{43}$  and  $p_{105}$ :

$$\begin{aligned} p_{792} = & 4096u_5^2u_4^{16}u_1^{12}x_{16}x_4 - 2048u_5u_4^{17}u_1^{11}x_{14}x_5x_4 + \\ & 2048u_6u_4^{17}u_1^{11}x_{14}x_4^2 - 4096u_6u_5u_4^{16}u_1^{12}x_{14}x_4 + \\ & 1024u_5u_4^{18}u_1^{10}x_5x_4^2 - 1024u_5^2u_4^{17}u_1^{10}x_5x_4x_3 + \\ & 1024u_6u_5u_4^{17}u_1^{10}x_4^2x_3 - 2048u_6u_4^{18}u_1^{11}x_4^2 + \\ & 1024u_6u_5^2u_4^{18}u_1^{10}x_4 \end{aligned}$$

Reduced to zero.

3222. Creating S-polynomial from the pair  $(p_{43}, p_{106})$ .

Forming S-pol of  $p_{43}$  and  $p_{106}$ :

$$\begin{aligned} p_{793} = & -32768u_5u_4^{25}u_1^{15}x_{14}x_5x_4 + 32768u_6u_4^{25}u_1^{15}x_{14}x_4^2 + \\ & (131072u_5u_4^{22}u_1^{17} - 65536u_5u_4^{22}u_1^{16})x_5x_4^2x_3 + \\ & (16384u_5u_4^{26}u_1^{14} - 65536u_5u_4^{24}u_1^{16})x_5x_4^2 - \\ & 16384u_5^2u_4^{25}u_1^{14}x_5x_4x_3 + 32768u_5^2u_4^{25}u_1^{15}x_5x_4 + \\ & (16384u_6u_5u_4^{25}u_1^{14} + 65536u_6u_5u_4^{23}u_1^{16})x_4^2x_3 + \\ & (-32768u_6u_5u_4^{25}u_1^{15} - 65536u_6u_5u_4^{23}u_1^{16} - 32768u_6u_4^{26}u_1^{15})x_4^2 + \\ & 16384u_6u_5^2u_4^{26}u_1^{14}x_4 \end{aligned}$$

S-pol added.

3223. Creating S-polynomial from the pair  $(p_{44}, p_{45})$ .

Forming S-pol of  $p_{44}$  and  $p_{45}$ :

$$\begin{aligned} p_{794} = & (-8192u_3^{24}u_1^{13} - 32768u_3^{22}u_1^{15})x_8x_6x_4 + \\ & (4096u_5u_3^{24}u_1^{12} + 32768u_5u_3^{22}u_1^{14} + 65536u_5u_3^{20}u_1^{16})x_8x_4x_2 + \\ & (-2048u_5u_3^{26}u_1^{11} - 16384u_5u_3^{24}u_1^{13} - 32768u_5u_3^{22}u_1^{15})x_8x_4 + \\ & (2048u_5^2u_3^{25}u_1^{11} + 16384u_5^2u_3^{23}u_1^{13} + 32768u_5^2u_3^{21}u_1^{15})x_8x_2 + \\ & (8192u_3^{24}u_1^{13} + 32768u_3^{22}u_1^{15})x_6^2x_5 + \\ & (-16384u_5u_3^{22}u_1^{14} - 65536u_5u_3^{20}u_1^{16})x_6x_5x_2 + \\ & (2048u_5u_3^{26}u_1^{11} + 8192u_5u_3^{24}u_1^{13})x_6x_5 + \\ & (-4096u_6u_3^{24}u_1^{12} - 16384u_6u_3^{22}u_1^{14})x_6x_4x_2 + \\ & (8192u_6u_3^{24}u_1^{13} + 32768u_6u_3^{22}u_1^{15})x_6x_4 + \\ & (-2048u_6u_5u_3^{25}u_1^{11} - 16384u_6u_5u_3^{23}u_1^{13} - 32768u_6u_5u_3^{21}u_1^{15})x_6x_2 \end{aligned}$$

Reduced to zero.

3224. Creating S-polynomial from the pair  $(p_{44}, p_{46})$ .

Forming S-pol of  $p_{44}$  and  $p_{46}$ :

$$p_{795} = 0$$

Reduced to zero.

3225. Creating S-polynomial from the pair  $(p_{44}, p_{47})$ .

Forming S-pol of  $p_{44}$  and  $p_{47}$ : Polynomial too big for output (text size is 1695 characters, number of terms is 16)

Reduced to zero.

3226. Creating S-polynomial from the pair  $(p_{44}, p_{48})$ .

Forming S-pol of  $p_{44}$  and  $p_{48}$ :

$$\begin{aligned} p_{796} = & (-512u_5u_3^{18}u_1^9 - 2048u_5u_3^{16}u_1^{11})x_8x_6 + \\ & (-512u_5u_3^{17}u_1^9 - 2048u_5u_3^{15}u_1^{11})x_8x_4x_2 + \\ & (256u_5u_3^{19}u_1^8 + 1024u_5u_3^{17}u_1^{10})x_8x_4 + \\ & (-256u_5^2u_3^{18}u_1^8 - 1024u_5^2u_3^{16}u_1^{10})x_8x_2 + \\ & (512u_6u_3^{18}u_1^9 + 2048u_6u_3^{16}u_1^{11})x_6^2 + \\ & (512u_5u_3^{17}u_1^9 + 2048u_5u_3^{15}u_1^{11})x_6x_5x_2 + \\ & (-256u_6u_3^{19}u_1^8 - 1024u_6u_3^{17}u_1^{10})x_6x_4 + \\ & (256u_6u_5u_3^{18}u_1^8 + 1024u_6u_5u_3^{16}u_1^{10})x_6x_2 \end{aligned}$$

Reduced to zero.

3227. Creating S-polynomial from the pair  $(p_{44}, p_{49})$ .

Forming S-pol of  $p_{44}$  and  $p_{49}$ :

$$\begin{aligned} p_{797} = & (-8192u_3^{21}u_1^{13} - 32768u_3^{19}u_1^{15})x_8x_6x_4 + \\ & (-16384u_5u_3^{20}u_1^{14} - 65536u_5u_3^{18}u_1^{16})x_8x_6 + \\ & (1024u_5u_3^{23}u_1^{10} + 8192u_5u_3^{21}u_1^{12} + 16384u_5u_3^{19}u_1^{14})x_8x_4x_2 + \\ & (-512u_5u_3^{25}u_1^9 - 4096u_5u_3^{23}u_1^{11} - 8192u_5u_3^{21}u_1^{13})x_8x_4 + \\ & (512u_5^2u_3^{24}u_1^9 + 4096u_5^2u_3^{22}u_1^{11} + 8192u_5^2u_3^{20}u_1^{13})x_8x_2 + \\ & (8192u_3^{21}u_1^{13} + 32768u_3^{19}u_1^{15})x_6^2x_5 + \\ & (16384u_6u_3^{20}u_1^{14} + 65536u_6u_3^{18}u_1^{16})x_6^2 + \\ & (-1024u_5u_3^{23}u_1^{10} - 4096u_5u_3^{21}u_1^{12})x_6x_5x_2 + \\ & (512u_5u_3^{25}u_1^9 + 4096u_5u_3^{23}u_1^{11} + 8192u_5u_3^{21}u_1^{13})x_6x_5 + \\ & (-4096u_6u_3^{21}u_1^{12} - 16384u_6u_3^{19}u_1^{14})x_6x_4x_2 + \\ & (-512u_6u_5u_3^{24}u_1^9 - 4096u_6u_5u_3^{22}u_1^{11} - 8192u_6u_5u_3^{20}u_1^{13})x_6x_2 \end{aligned}$$

Reduced to zero.

3228. Creating S-polynomial from the pair  $(p_{44}, p_{50})$ .

Skipping pair  $p_{44}$  and  $p_{50}$  because gcd of their leading monoms is zero.

3229. Creating S-polynomial from the pair  $(p_{44}, p_{51})$ .

Forming S-pol of  $p_{44}$  and  $p_{51}$ :

$$\begin{aligned} p_{798} = & (1024u_3^{17}u_1^{10} + 4096u_3^{15}u_1^{12})x_8x_6x_4 + \\ & (2048u_5u_3^{16}u_1^{11} + 8192u_5u_3^{14}u_1^{13})x_8x_6 + \\ & (-512u_5u_3^{17}u_1^9 - 2048u_5u_3^{15}u_1^{11})x_8x_4x_2 + \\ & (256u_5u_3^{19}u_1^8 + 1024u_5u_3^{17}u_1^{10})x_8x_4 + \end{aligned}$$



$$\begin{aligned}
& (-256u_5^2u_3^{18}u_1^8 - 1024u_5^2u_3^{16}u_1^{10})x_8x_2 + \\
& (-1024u_3^{17}u_1^{10} - 4096u_3^{15}u_1^{12})x_6^2x_5 + \\
& (-2048u_6u_3^{16}u_1^{11} - 8192u_6u_3^{14}u_1^{13})x_6^2 + \\
& (-256u_5u_3^{19}u_1^8 - 1024u_5u_3^{17}u_1^{10})x_6x_5 + \\
& (512u_6u_3^{17}u_1^9 + 2048u_6u_3^{15}u_1^{11})x_6x_4x_2 + \\
& (256u_6u_5u_3^{18}u_1^8 + 1024u_6u_5u_3^{16}u_1^{10})x_6x_2
\end{aligned}$$

Reduced to zero.

- 3230. Creating S-polynomial from the pair  $(p_{44}, p_{52})$ .  
 Skipping pair  $p_{44}$  and  $p_{52}$  because gcd of their leading monoms is zero.
- 3231. Creating S-polynomial from the pair  $(p_{44}, p_{53})$ .  
 Skipping pair  $p_{44}$  and  $p_{53}$  because gcd of their leading monoms is zero.
- 3232. Creating S-polynomial from the pair  $(p_{44}, p_{54})$ .  
 Skipping pair  $p_{44}$  and  $p_{54}$  because gcd of their leading monoms is zero.
- 3233. Creating S-polynomial from the pair  $(p_{44}, p_{55})$ .  
 Skipping pair  $p_{44}$  and  $p_{55}$  because gcd of their leading monoms is zero.
- 3234. Creating S-polynomial from the pair  $(p_{44}, p_{56})$ .  
 Skipping pair  $p_{44}$  and  $p_{56}$  because gcd of their leading monoms is zero.
- 3235. Creating S-polynomial from the pair  $(p_{44}, p_{57})$ .  
 Skipping pair  $p_{44}$  and  $p_{57}$  because gcd of their leading monoms is zero.
- 3236. Creating S-polynomial from the pair  $(p_{44}, p_{58})$ .  
 Skipping pair  $p_{44}$  and  $p_{58}$  because gcd of their leading monoms is zero.
- 3237. Creating S-polynomial from the pair  $(p_{44}, p_{59})$ .  
 Skipping pair  $p_{44}$  and  $p_{59}$  because gcd of their leading monoms is zero.
- 3238. Creating S-polynomial from the pair  $(p_{44}, p_{60})$ .  
 Skipping pair  $p_{44}$  and  $p_{60}$  because gcd of their leading monoms is zero.
- 3239. Creating S-polynomial from the pair  $(p_{44}, p_{61})$ .  
 Skipping pair  $p_{44}$  and  $p_{61}$  because gcd of their leading monoms is zero.
- 3240. Creating S-polynomial from the pair  $(p_{44}, p_{62})$ .  
 Skipping pair  $p_{44}$  and  $p_{62}$  because gcd of their leading monoms is zero.
- 3241. Creating S-polynomial from the pair  $(p_{44}, p_{63})$ .  
 Skipping pair  $p_{44}$  and  $p_{63}$  because gcd of their leading monoms is zero.
- 3242. Creating S-polynomial from the pair  $(p_{44}, p_{64})$ .  
 Skipping pair  $p_{44}$  and  $p_{64}$  because gcd of their leading monoms is zero.

3243. Creating S-polynomial from the pair  $(p_{44}, p_{65})$ .  
 Skipping pair  $p_{44}$  and  $p_{65}$  because gcd of their leading monoms is zero.
3244. Creating S-polynomial from the pair  $(p_{44}, p_{66})$ .  
 Skipping pair  $p_{44}$  and  $p_{66}$  because gcd of their leading monoms is zero.
3245. Creating S-polynomial from the pair  $(p_{44}, p_{67})$ .  
 Skipping pair  $p_{44}$  and  $p_{67}$  because gcd of their leading monoms is zero.
3246. Creating S-polynomial from the pair  $(p_{44}, p_{68})$ .  
 Skipping pair  $p_{44}$  and  $p_{68}$  because gcd of their leading monoms is zero.
3247. Creating S-polynomial from the pair  $(p_{44}, p_{69})$ .  
 Skipping pair  $p_{44}$  and  $p_{69}$  because gcd of their leading monoms is zero.
3248. Creating S-polynomial from the pair  $(p_{44}, p_{70})$ .  
 Skipping pair  $p_{44}$  and  $p_{70}$  because gcd of their leading monoms is zero.
3249. Creating S-polynomial from the pair  $(p_{44}, p_{71})$ .  
 Skipping pair  $p_{44}$  and  $p_{71}$  because gcd of their leading monoms is zero.
3250. Creating S-polynomial from the pair  $(p_{44}, p_{72})$ .  
 Skipping pair  $p_{44}$  and  $p_{72}$  because gcd of their leading monoms is zero.
3251. Creating S-polynomial from the pair  $(p_{44}, p_{73})$ .  
 Skipping pair  $p_{44}$  and  $p_{73}$  because gcd of their leading monoms is zero.
3252. Creating S-polynomial from the pair  $(p_{44}, p_{74})$ .  
 Skipping pair  $p_{44}$  and  $p_{74}$  because gcd of their leading monoms is zero.
3253. Creating S-polynomial from the pair  $(p_{44}, p_{75})$ .  
 Skipping pair  $p_{44}$  and  $p_{75}$  because gcd of their leading monoms is zero.
3254. Creating S-polynomial from the pair  $(p_{44}, p_{76})$ .  
 Skipping pair  $p_{44}$  and  $p_{76}$  because gcd of their leading monoms is zero.
3255. Creating S-polynomial from the pair  $(p_{44}, p_{77})$ .  
 Skipping pair  $p_{44}$  and  $p_{77}$  because gcd of their leading monoms is zero.
3256. Creating S-polynomial from the pair  $(p_{44}, p_{78})$ .  
 Skipping pair  $p_{44}$  and  $p_{78}$  because gcd of their leading monoms is zero.
3257. Creating S-polynomial from the pair  $(p_{44}, p_{79})$ .  
 Skipping pair  $p_{44}$  and  $p_{79}$  because gcd of their leading monoms is zero.
3258. Creating S-polynomial from the pair  $(p_{44}, p_{80})$ .  
 Skipping pair  $p_{44}$  and  $p_{80}$  because gcd of their leading monoms is zero.
3259. Creating S-polynomial from the pair  $(p_{44}, p_{81})$ .  
 Skipping pair  $p_{44}$  and  $p_{81}$  because gcd of their leading monoms is zero.

3260. Creating S-polynomial from the pair  $(p_{44}, p_{82})$ .

Forming S-pol of  $p_{44}$  and  $p_{82}$ :

$$\begin{aligned} p_{799} = & (64u_5u_3^{16}u_1^6 + 256u_5u_3^{14}u_1^8)x_6x_2 + \\ & (-32u_5u_3^{18}u_1^5 - 128u_5u_3^{16}u_1^7)x_6 + \\ & (-32u_5u_3^{17}u_1^5 - 128u_5u_3^{15}u_1^7)x_4x_2 + \\ & (16u_5u_3^{19}u_1^4 + 64u_5u_3^{17}u_1^6)x_4 + \\ & (-16u_5^2u_3^{18}u_1^4 - 64u_5^2u_3^{16}u_1^6)x_2 \end{aligned}$$

Reduced to zero.

3261. Creating S-polynomial from the pair  $(p_{44}, p_{83})$ .

Forming S-pol of  $p_{44}$  and  $p_{83}$ : Polynomial too big for output (text size is 1105 characters, number of terms is 12)

Reduced to zero.

3262. Creating S-polynomial from the pair  $(p_{44}, p_{84})$ .

Forming S-pol of  $p_{44}$  and  $p_{84}$ :

$$\begin{aligned} p_{800} = & (2048u_3^{17}u_1^{11} + 8192u_3^{15}u_1^{13})x_8x_6x_4 + \\ & (4096u_5u_3^{16}u_1^{12} + 16384u_5u_3^{14}u_1^{14})x_8x_6 + \\ & (-1024u_5u_3^{17}u_1^{10} - 4096u_5u_3^{15}u_1^{12})x_8x_4x_2 + \\ & (512u_5u_3^{19}u_1^9 + 2048u_5u_3^{17}u_1^{11})x_8x_4 + \\ & (-512u_5^2u_3^{18}u_1^9 - 2048u_5^2u_3^{16}u_1^{11})x_8x_2 + \\ & (-2048u_3^{17}u_1^{11} - 8192u_3^{15}u_1^{13})x_6^2x_5 + \\ & (-4096u_6u_3^{16}u_1^{12} - 16384u_6u_3^{14}u_1^{14})x_6^2 + \\ & (-512u_5u_3^{19}u_1^9 - 2048u_5u_3^{17}u_1^{11})x_6x_5 + \\ & (1024u_6u_3^{17}u_1^{10} + 4096u_6u_3^{15}u_1^{12})x_6x_4x_2 + \\ & (512u_6u_5u_3^{18}u_1^9 + 2048u_6u_5u_3^{16}u_1^{11})x_6x_2 \end{aligned}$$

Reduced to zero.

3263. Creating S-polynomial from the pair  $(p_{44}, p_{85})$ .

Forming S-pol of  $p_{44}$  and  $p_{85}$ :

$$\begin{aligned} p_{801} = & (-1024u_5u_3^{18}u_1^{10} - 4096u_5u_3^{16}u_1^{12})x_8x_6 + \\ & (-1024u_5u_3^{17}u_1^{10} - 4096u_5u_3^{15}u_1^{12})x_8x_4x_2 + \\ & (512u_5u_3^{19}u_1^9 + 2048u_5u_3^{17}u_1^{11})x_8x_4 + \\ & (-512u_5^2u_3^{18}u_1^9 - 2048u_5^2u_3^{16}u_1^{11})x_8x_2 + \\ & (1024u_6u_3^{18}u_1^{10} + 4096u_6u_3^{16}u_1^{12})x_6^2 + \\ & (1024u_5u_3^{17}u_1^{10} + 4096u_5u_3^{15}u_1^{12})x_6x_5x_2 + \\ & (-512u_6u_3^{19}u_1^9 - 2048u_6u_3^{17}u_1^{11})x_6x_4 + \\ & (512u_6u_5u_3^{18}u_1^9 + 2048u_6u_5u_3^{16}u_1^{11})x_6x_2 \end{aligned}$$

Reduced to zero.

3264. Creating S-polynomial from the pair  $(p_{44}, p_{86})$ .  
 Skipping pair  $p_{44}$  and  $p_{86}$  because gcd of their leading monoms is zero.
3265. Creating S-polynomial from the pair  $(p_{44}, p_{87})$ .  
 Skipping pair  $p_{44}$  and  $p_{87}$  because gcd of their leading monoms is zero.
3266. Creating S-polynomial from the pair  $(p_{44}, p_{88})$ .  
 Skipping pair  $p_{44}$  and  $p_{88}$  because gcd of their leading monoms is zero.
3267. Creating S-polynomial from the pair  $(p_{44}, p_{89})$ .  
 Skipping pair  $p_{44}$  and  $p_{89}$  because gcd of their leading monoms is zero.
3268. Creating S-polynomial from the pair  $(p_{44}, p_{90})$ .  
 Skipping pair  $p_{44}$  and  $p_{90}$  because gcd of their leading monoms is zero.
3269. Creating S-polynomial from the pair  $(p_{44}, p_{91})$ .  
 Skipping pair  $p_{44}$  and  $p_{91}$  because gcd of their leading monoms is zero.
3270. Creating S-polynomial from the pair  $(p_{44}, p_{92})$ .  
 Skipping pair  $p_{44}$  and  $p_{92}$  because gcd of their leading monoms is zero.
3271. Creating S-polynomial from the pair  $(p_{44}, p_{93})$ .  
 Skipping pair  $p_{44}$  and  $p_{93}$  because gcd of their leading monoms is zero.
3272. Creating S-polynomial from the pair  $(p_{44}, p_{94})$ .  
 Skipping pair  $p_{44}$  and  $p_{94}$  because gcd of their leading monoms is zero.
3273. Creating S-polynomial from the pair  $(p_{44}, p_{95})$ .  
 Forming S-pol of  $p_{44}$  and  $p_{95}$ : Polynomial too big for output (text size is 1411 characters, number of terms is 15)  
 Reduced to zero.
3274. Creating S-polynomial from the pair  $(p_{44}, p_{96})$ .  
 Skipping pair  $p_{44}$  and  $p_{96}$  because gcd of their leading monoms is zero.
3275. Creating S-polynomial from the pair  $(p_{44}, p_{97})$ .  
 Skipping pair  $p_{44}$  and  $p_{97}$  because gcd of their leading monoms is zero.
3276. Creating S-polynomial from the pair  $(p_{44}, p_{98})$ .  
 Skipping pair  $p_{44}$  and  $p_{98}$  because gcd of their leading monoms is zero.
3277. Creating S-polynomial from the pair  $(p_{44}, p_{99})$ .  
 Skipping pair  $p_{44}$  and  $p_{99}$  because gcd of their leading monoms is zero.
3278. Creating S-polynomial from the pair  $(p_{44}, p_{100})$ .  
 Skipping pair  $p_{44}$  and  $p_{100}$  because gcd of their leading monoms is zero.
3279. Creating S-polynomial from the pair  $(p_{44}, p_{101})$ .  
 Skipping pair  $p_{44}$  and  $p_{101}$  because gcd of their leading monoms is zero.

3280. Creating S-polynomial from the pair  $(p_{44}, p_{102})$ .

Skipping pair  $p_{44}$  and  $p_{102}$  because gcd of their leading monoms is zero.

3281. Creating S-polynomial from the pair  $(p_{44}, p_{103})$ .

Skipping pair  $p_{44}$  and  $p_{103}$  because gcd of their leading monoms is zero.

3282. Creating S-polynomial from the pair  $(p_{44}, p_{104})$ .

Skipping pair  $p_{44}$  and  $p_{104}$  because gcd of their leading monoms is zero.

3283. Creating S-polynomial from the pair  $(p_{44}, p_{105})$ .

Skipping pair  $p_{44}$  and  $p_{105}$  because gcd of their leading monoms is zero.

3284. Creating S-polynomial from the pair  $(p_{44}, p_{106})$ .

Skipping pair  $p_{44}$  and  $p_{106}$  because gcd of their leading monoms is zero.

3285. Creating S-polynomial from the pair  $(p_{45}, p_{46})$ .

Forming S-pol of  $p_{45}$  and  $p_{46}$ :

$$\begin{aligned} p_{802} = & -4096u_3^{18}u_1^{12}x_8x_6x_4 + (2048u_5u_3^{18}u_1^{11} + 8192u_5u_3^{16}u_1^{13})x_8x_4x_2 + \\ & (-1024u_5u_3^{20}u_1^{10} - 4096u_5u_3^{18}u_1^{12})x_8x_4 + \\ & (1024u_5^2u_3^{19}u_1^{10} + 4096u_5^2u_3^{17}u_1^{12})x_8x_2 + 4096u_3^{18}u_1^{12}x_6^2x_5 - \\ & 8192u_5u_3^{16}u_1^{13}x_6x_5x_2 + 1024u_5u_3^{20}u_1^{10}x_6x_5 - \\ & 2048u_6u_3^{18}u_1^{11}x_6x_4x_2 + 4096u_6u_3^{18}u_1^{12}x_6x_4 + \\ & (-1024u_6u_5u_3^{19}u_1^{10} - 4096u_6u_5u_3^{17}u_1^{12})x_6x_2 \end{aligned}$$

Reduced to zero.

3286. Creating S-polynomial from the pair  $(p_{45}, p_{47})$ .

Forming S-pol of  $p_{45}$  and  $p_{47}$ : Polynomial too big for output (text size is 1586 characters, number of terms is 17)

Reduced to zero.

3287. Creating S-polynomial from the pair  $(p_{45}, p_{48})$ .

Forming S-pol of  $p_{45}$  and  $p_{48}$ :

$$\begin{aligned} p_{803} = & -65536u_3^{20}u_1^{16}x_8x_6x_4 + \\ & (-32768u_5u_3^{21}u_1^{15} - 131072u_5u_3^{19}u_1^{17})x_8x_6 + 65536u_3^{20}u_1^{16}x_6^2x_5 + \\ & (32768u_6u_3^{21}u_1^{15} + 131072u_6u_3^{19}u_1^{17})x_6^2 + 32768u_5u_3^{20}u_1^{15}x_6x_5x_2 + \\ & 16384u_5u_3^{22}u_1^{14}x_6x_5 - 32768u_6u_3^{20}u_1^{15}x_6x_4x_2 - \\ & 16384u_6u_3^{22}u_1^{14}x_6x_4 \end{aligned}$$

Reduced to zero.

3288. Creating S-polynomial from the pair  $(p_{45}, p_{49})$ .

Forming S-pol of  $p_{45}$  and  $p_{49}$ :

$$\begin{aligned} p_{804} = & (131072u_3^{26}u_1^{17} - 2097152u_3^{22}u_1^{21})x_8x_6x_4 + \\ & (-1048576u_5u_3^{23}u_1^{20} - 4194304u_5u_3^{21}u_1^{22})x_8x_6 + \\ & (-131072u_3^{26}u_1^{17} + 2097152u_3^{22}u_1^{21})x_6^2x_5 + \\ & (1048576u_6u_3^{23}u_1^{20} + 4194304u_6u_3^{21}u_1^{22})x_6^2 + \\ & (-65536u_5u_3^{26}u_1^{16} + 1048576u_5u_3^{22}u_1^{20})x_6x_5x_2 + \\ & (131072u_5u_3^{26}u_1^{17} + 524288u_5u_3^{24}u_1^{19})x_6x_5 + \\ & (65536u_6u_3^{26}u_1^{16} - 1048576u_6u_3^{22}u_1^{20})x_6x_4x_2 + \\ & (-131072u_6u_3^{26}u_1^{17} - 524288u_6u_3^{24}u_1^{19})x_6x_4 \end{aligned}$$

Reduced to zero.

3289. Creating S-polynomial from the pair  $(p_{45}, p_{50})$ .

Forming S-pol of  $p_{45}$  and  $p_{50}$ : Polynomial too big for output (text size is 1166 characters, number of terms is 12)

Reduced to zero.

3290. Creating S-polynomial from the pair  $(p_{45}, p_{51})$ .

Forming S-pol of  $p_{45}$  and  $p_{51}$ :

$$\begin{aligned} p_{805} = & 262144u_3^{18}u_1^{18}x_8x_6x_4 + \\ & (131072u_5u_3^{19}u_1^{17} + 524288u_5u_3^{17}u_1^{19})x_8x_6 - 262144u_3^{18}u_1^{18}x_6^2x_5 + \\ & (-131072u_6u_3^{19}u_1^{17} - 524288u_6u_3^{17}u_1^{19})x_6^2 - \\ & 131072u_5u_3^{18}u_1^{17}x_6x_5x_2 - 65536u_5u_3^{20}u_1^{16}x_6x_5 + \\ & 131072u_6u_3^{18}u_1^{17}x_6x_4x_2 + 65536u_6u_3^{20}u_1^{16}x_6x_4 \end{aligned}$$

Reduced to zero.

3291. Creating S-polynomial from the pair  $(p_{45}, p_{52})$ .

Forming S-pol of  $p_{45}$  and  $p_{52}$ : Polynomial too big for output (text size is 1871 characters, number of terms is 18)

Reduced to zero.

3292. Creating S-polynomial from the pair  $(p_{45}, p_{53})$ .

Forming S-pol of  $p_{45}$  and  $p_{53}$ :

$$\begin{aligned} p_{806} = & 16384u_3^{16}u_1^{14}x_8^2x_4 + \\ & (-2048u_5u_3^{19}u_1^{11} + 32768u_5u_3^{15}u_1^{15})x_8^2 - 16384u_3^{16}u_1^{14}x_8x_6x_5 + \\ & (2048u_6u_3^{19}u_1^{11} - 32768u_6u_3^{15}u_1^{15})x_8x_6 - 8192u_5u_3^{16}u_1^{13}x_8x_5x_2 + \\ & 1024u_5u_3^{20}u_1^{10}x_8x_5 - 2048u_6u_3^{18}u_1^{11}x_8x_4x_2 + \\ & 4096u_6u_3^{18}u_1^{12}x_8x_4 + \end{aligned}$$

$$\begin{aligned}
& (-1024u_6u_5u_3^{19}u_1^{10} - 4096u_6u_5u_3^{17}u_1^{12})x_8x_2 + \\
& (2048u_6u_3^{18}u_1^{11} + 8192u_6u_3^{16}u_1^{13})x_6x_5x_2 + \\
& (-1024u_6u_3^{20}u_1^{10} - 4096u_6u_3^{18}u_1^{12})x_6x_5 + \\
& (1024u_6^2u_3^{19}u_1^{10} + 4096u_6^2u_3^{17}u_1^{12})x_6x_2
\end{aligned}$$

Reduced to zero.

- 3293. Creating S-polynomial from the pair  $(p_{45}, p_{54})$ .  
 Skipping pair  $p_{45}$  and  $p_{54}$  because gcd of their leading monoms is zero.
- 3294. Creating S-polynomial from the pair  $(p_{45}, p_{55})$ .  
 Skipping pair  $p_{45}$  and  $p_{55}$  because gcd of their leading monoms is zero.
- 3295. Creating S-polynomial from the pair  $(p_{45}, p_{56})$ .  
 Skipping pair  $p_{45}$  and  $p_{56}$  because gcd of their leading monoms is zero.
- 3296. Creating S-polynomial from the pair  $(p_{45}, p_{57})$ .  
 Skipping pair  $p_{45}$  and  $p_{57}$  because gcd of their leading monoms is zero.
- 3297. Creating S-polynomial from the pair  $(p_{45}, p_{58})$ .  
 Skipping pair  $p_{45}$  and  $p_{58}$  because gcd of their leading monoms is zero.
- 3298. Creating S-polynomial from the pair  $(p_{45}, p_{59})$ .  
 Skipping pair  $p_{45}$  and  $p_{59}$  because gcd of their leading monoms is zero.
- 3299. Creating S-polynomial from the pair  $(p_{45}, p_{60})$ .  
 Skipping pair  $p_{45}$  and  $p_{60}$  because gcd of their leading monoms is zero.
- 3300. Creating S-polynomial from the pair  $(p_{45}, p_{61})$ .  
 Skipping pair  $p_{45}$  and  $p_{61}$  because gcd of their leading monoms is zero.
- 3301. Creating S-polynomial from the pair  $(p_{45}, p_{62})$ .  
 Skipping pair  $p_{45}$  and  $p_{62}$  because gcd of their leading monoms is zero.
- 3302. Creating S-polynomial from the pair  $(p_{45}, p_{63})$ .  
 Skipping pair  $p_{45}$  and  $p_{63}$  because gcd of their leading monoms is zero.
- 3303. Creating S-polynomial from the pair  $(p_{45}, p_{64})$ .  
 Skipping pair  $p_{45}$  and  $p_{64}$  because gcd of their leading monoms is zero.
- 3304. Creating S-polynomial from the pair  $(p_{45}, p_{65})$ .  
 Skipping pair  $p_{45}$  and  $p_{65}$  because gcd of their leading monoms is zero.
- 3305. Creating S-polynomial from the pair  $(p_{45}, p_{66})$ .  
 Skipping pair  $p_{45}$  and  $p_{66}$  because gcd of their leading monoms is zero.
- 3306. Creating S-polynomial from the pair  $(p_{45}, p_{67})$ .  
 Skipping pair  $p_{45}$  and  $p_{67}$  because gcd of their leading monoms is zero.

3307. Creating S-polynomial from the pair  $(p_{45}, p_{68})$ .  
 Skipping pair  $p_{45}$  and  $p_{68}$  because gcd of their leading monoms is zero.
3308. Creating S-polynomial from the pair  $(p_{45}, p_{69})$ .  
 Skipping pair  $p_{45}$  and  $p_{69}$  because gcd of their leading monoms is zero.
3309. Creating S-polynomial from the pair  $(p_{45}, p_{70})$ .  
 Skipping pair  $p_{45}$  and  $p_{70}$  because gcd of their leading monoms is zero.
3310. Creating S-polynomial from the pair  $(p_{45}, p_{71})$ .  
 Skipping pair  $p_{45}$  and  $p_{71}$  because gcd of their leading monoms is zero.
3311. Creating S-polynomial from the pair  $(p_{45}, p_{72})$ .  
 Skipping pair  $p_{45}$  and  $p_{72}$  because gcd of their leading monoms is zero.
3312. Creating S-polynomial from the pair  $(p_{45}, p_{73})$ .  
 Skipping pair  $p_{45}$  and  $p_{73}$  because gcd of their leading monoms is zero.
3313. Creating S-polynomial from the pair  $(p_{45}, p_{74})$ .  
 Skipping pair  $p_{45}$  and  $p_{74}$  because gcd of their leading monoms is zero.
3314. Creating S-polynomial from the pair  $(p_{45}, p_{75})$ .  
 Skipping pair  $p_{45}$  and  $p_{75}$  because gcd of their leading monoms is zero.
3315. Creating S-polynomial from the pair  $(p_{45}, p_{76})$ .  
 Skipping pair  $p_{45}$  and  $p_{76}$  because gcd of their leading monoms is zero.
3316. Creating S-polynomial from the pair  $(p_{45}, p_{77})$ .  
 Skipping pair  $p_{45}$  and  $p_{77}$  because gcd of their leading monoms is zero.
3317. Creating S-polynomial from the pair  $(p_{45}, p_{78})$ .  
 Skipping pair  $p_{45}$  and  $p_{78}$  because gcd of their leading monoms is zero.
3318. Creating S-polynomial from the pair  $(p_{45}, p_{79})$ .  
 Skipping pair  $p_{45}$  and  $p_{79}$  because gcd of their leading monoms is zero.
3319. Creating S-polynomial from the pair  $(p_{45}, p_{80})$ .  
 Skipping pair  $p_{45}$  and  $p_{80}$  because gcd of their leading monoms is zero.
3320. Creating S-polynomial from the pair  $(p_{45}, p_{81})$ .  
 Forming S-pol of  $p_{45}$  and  $p_{81}$ :

$$\begin{aligned}
 p_{807} = & -1048576u_5u_3^{22}u_1^{20}x_8x_4 + \\
 & (131072u_5^2u_3^{25}u_1^{17} - 2097152u_5^2u_3^{21}u_1^{21})x_8 + \\
 & (524288u_6u_3^{23}u_1^{19} + 2097152u_6u_3^{21}u_1^{21})x_6^2 + 1048576u_5u_3^{22}u_1^{20}x_6x_5 + \\
 & (-262144u_6u_3^{24}u_1^{18} - 1048576u_6u_3^{22}u_1^{20})x_6x_4 + \\
 & 524288u_5^2u_3^{22}u_1^{19}x_5x_2 - 65536u_5^2u_3^{26}u_1^{16}x_5 + \\
 & 131072u_6u_5u_3^{24}u_1^{17}x_4x_2 - 262144u_6u_5u_3^{24}u_1^{18}x_4 + \\
 & (65536u_6u_5^2u_3^{25}u_1^{16} + 262144u_6u_5^2u_3^{23}u_1^{18})x_2
 \end{aligned}$$

Reduced to zero.



3321. Creating S-polynomial from the pair  $(p_{45}, p_{82})$ .

Forming S-pol of  $p_{45}$  and  $p_{82}$ :

$$\begin{aligned} p_{808} = & -4096u_3^{20}u_1^{12}x_8x_4 + (4096u_5u_3^{19}u_1^{12} + 16384u_5u_3^{17}u_1^{14})x_8x_2 + \\ & (-2048u_5u_3^{21}u_1^{11} - 8192u_5u_3^{19}u_1^{13})x_8 + 4096u_3^{20}u_1^{12}x_6x_5 - \\ & 8192u_5u_3^{18}u_1^{13}x_5x_2 + 1024u_5u_3^{22}u_1^{10}x_5 - 2048u_6u_3^{20}u_1^{11}x_4x_2 + \\ & 4096u_6u_3^{20}u_1^{12}x_4 + (-1024u_6u_5u_3^{21}u_1^{10} - 4096u_6u_5u_3^{19}u_1^{12})x_2 \end{aligned}$$

Reduced to zero.

3322. Creating S-polynomial from the pair  $(p_{45}, p_{83})$ .

Forming S-pol of  $p_{45}$  and  $p_{83}$ : Polynomial too big for output (text size is 1008 characters, number of terms is 12)

Reduced to zero.

3323. Creating S-polynomial from the pair  $(p_{45}, p_{84})$ .

Forming S-pol of  $p_{45}$  and  $p_{84}$ :

$$\begin{aligned} p_{809} = & 524288u_3^{18}u_1^{19}x_8x_6x_4 + \\ & (262144u_5u_3^{19}u_1^{18} + 1048576u_5u_3^{17}u_1^{20})x_8x_6 - 524288u_3^{18}u_1^{19}x_6^2x_5 + \\ & (-262144u_6u_3^{19}u_1^{18} - 1048576u_6u_3^{17}u_1^{20})x_6^2 - \\ & 262144u_5u_3^{18}u_1^{18}x_6x_5x_2 - 131072u_5u_3^{20}u_1^{17}x_6x_5 + \\ & 262144u_6u_3^{18}u_1^{18}x_6x_4x_2 + 131072u_6u_3^{20}u_1^{17}x_6x_4 \end{aligned}$$

Reduced to zero.

3324. Creating S-polynomial from the pair  $(p_{45}, p_{85})$ .

Forming S-pol of  $p_{45}$  and  $p_{85}$ :

$$\begin{aligned} p_{810} = & -131072u_3^{20}u_1^{17}x_8x_6x_4 + \\ & (-65536u_5u_3^{21}u_1^{16} - 262144u_5u_3^{19}u_1^{18})x_8x_6 + 131072u_3^{20}u_1^{17}x_6^2x_5 + \\ & (65536u_6u_3^{21}u_1^{16} + 262144u_6u_3^{19}u_1^{18})x_6^2 + 65536u_5u_3^{20}u_1^{16}x_6x_5x_2 + \\ & 32768u_5u_3^{22}u_1^{15}x_6x_5 - 65536u_6u_3^{20}u_1^{16}x_6x_4x_2 - \\ & 32768u_6u_3^{22}u_1^{15}x_6x_4 \end{aligned}$$

Reduced to zero.

3325. Creating S-polynomial from the pair  $(p_{45}, p_{86})$ .

Forming S-pol of  $p_{45}$  and  $p_{86}$ : Polynomial too big for output (text size is 1441 characters, number of terms is 14)

S-pol added.

3326. Creating S-polynomial from the pair  $(p_{45}, p_{87})$ .

Forming S-pol of  $p_{45}$  and  $p_{87}$ :

$$\begin{aligned} p_{811} = & 16384u_3^{18}u_1^{14}x_8x_4 + \\ & (-2048u_5u_3^{21}u_1^{11} + 32768u_5u_3^{17}u_1^{15})x_8 - 16384u_3^{18}u_1^{14}x_6x_5 + \\ & (4096u_6u_3^{19}u_1^{12} + 16384u_6u_3^{17}u_1^{14})x_6x_2 + \\ & (-8192u_6u_3^{19}u_1^{13} - 32768u_6u_3^{17}u_1^{15})x_6 - 8192u_5u_3^{18}u_1^{13}x_5x_2 + \\ & 1024u_5u_3^{22}u_1^{10}x_5 - 2048u_6u_3^{20}u_1^{11}x_4x_2 + 4096u_6u_3^{20}u_1^{12}x_4 + \\ & (-1024u_6u_5u_3^{21}u_1^{10} - 4096u_6u_5u_3^{19}u_1^{12})x_2 \end{aligned}$$

Reduced to zero.

3327. Creating S-polynomial from the pair  $(p_{45}, p_{88})$ .

Skipping pair  $p_{45}$  and  $p_{88}$  because gcd of their leading monoms is zero.

3328. Creating S-polynomial from the pair  $(p_{45}, p_{89})$ .

Skipping pair  $p_{45}$  and  $p_{89}$  because gcd of their leading monoms is zero.

3329. Creating S-polynomial from the pair  $(p_{45}, p_{90})$ .

Skipping pair  $p_{45}$  and  $p_{90}$  because gcd of their leading monoms is zero.

3330. Creating S-polynomial from the pair  $(p_{45}, p_{91})$ .

Skipping pair  $p_{45}$  and  $p_{91}$  because gcd of their leading monoms is zero.

3331. Creating S-polynomial from the pair  $(p_{45}, p_{92})$ .

Skipping pair  $p_{45}$  and  $p_{92}$  because gcd of their leading monoms is zero.

3332. Creating S-polynomial from the pair  $(p_{45}, p_{93})$ .

Skipping pair  $p_{45}$  and  $p_{93}$  because gcd of their leading monoms is zero.

3333. Creating S-polynomial from the pair  $(p_{45}, p_{94})$ .

Skipping pair  $p_{45}$  and  $p_{94}$  because gcd of their leading monoms is zero.

3334. Creating S-polynomial from the pair  $(p_{45}, p_{95})$ .

Forming S-pol of  $p_{45}$  and  $p_{95}$ : Polynomial too big for output (text size is 1237 characters, number of terms is 15)

Reduced to zero.

3335. Creating S-polynomial from the pair  $(p_{45}, p_{96})$ .

Forming S-pol of  $p_{45}$  and  $p_{96}$ :

$$\begin{aligned} p_{812} = & (-32768u_5u_3^{17}u_1^{15} - 131072u_5u_3^{15}u_1^{17})x_8x_6 - 32768u_3^{17}u_1^{15}x_8x_4^2 + \\ & (4096u_5u_3^{20}u_1^{12} - 65536u_5u_3^{16}u_1^{16})x_8x_4 + \\ & (16384u_3^{18}u_1^{14} + 65536u_3^{16}u_1^{16})x_6^2x_5 + \\ & (32768u_6u_3^{17}u_1^{15} + 131072u_6u_3^{15}u_1^{17})x_6^2 - 8192u_3^{19}u_1^{13}x_6x_5x_4 + \\ & (8192u_5u_3^{18}u_1^{13} + 32768u_5u_3^{16}u_1^{15})x_6x_5x_2 + \end{aligned}$$

$$\begin{aligned}
& (-8192u_6u_3^{18}u_1^{13} - 32768u_6u_3^{16}u_1^{15})x_6x_4x_2 + \\
& 16384u_5u_3^{17}u_1^{14}x_5x_4x_2 - 2048u_5u_3^{21}u_1^{11}x_5x_4 + \\
& 4096u_6u_3^{19}u_1^{12}x_4^2x_2 - 8192u_6u_3^{19}u_1^{13}x_4^2 + \\
& (2048u_6u_5u_3^{20}u_1^{11} + 8192u_6u_5u_3^{18}u_1^{13})x_4x_2
\end{aligned}$$

Reduced to zero.

3336. Creating S-polynomial from the pair  $(p_{45}, p_{97})$ .  
Forming S-pol of  $p_{45}$  and  $p_{97}$ : Polynomial too big for output (text size is 1099 characters, number of terms is 14)  
S-pol added.
3337. Creating S-polynomial from the pair  $(p_{45}, p_{98})$ .  
Forming S-pol of  $p_{45}$  and  $p_{98}$ : Polynomial too big for output (text size is 5272 characters, number of terms is 34)  
Reduced to zero.
3338. Creating S-polynomial from the pair  $(p_{45}, p_{99})$ .  
Forming S-pol of  $p_{45}$  and  $p_{99}$ : Polynomial too big for output (text size is 5268 characters, number of terms is 34)  
Reduced to zero.
3339. Creating S-polynomial from the pair  $(p_{45}, p_{100})$ .  
Skipping pair  $p_{45}$  and  $p_{100}$  because gcd of their leading monoms is zero.
3340. Creating S-polynomial from the pair  $(p_{45}, p_{101})$ .  
Skipping pair  $p_{45}$  and  $p_{101}$  because gcd of their leading monoms is zero.
3341. Creating S-polynomial from the pair  $(p_{45}, p_{102})$ .  
Skipping pair  $p_{45}$  and  $p_{102}$  because gcd of their leading monoms is zero.
3342. Creating S-polynomial from the pair  $(p_{45}, p_{103})$ .  
Skipping pair  $p_{45}$  and  $p_{103}$  because gcd of their leading monoms is zero.
3343. Creating S-polynomial from the pair  $(p_{45}, p_{104})$ .  
Skipping pair  $p_{45}$  and  $p_{104}$  because gcd of their leading monoms is zero.
3344. Creating S-polynomial from the pair  $(p_{45}, p_{105})$ .  
Skipping pair  $p_{45}$  and  $p_{105}$  because gcd of their leading monoms is zero.
3345. Creating S-polynomial from the pair  $(p_{45}, p_{106})$ .  
Skipping pair  $p_{45}$  and  $p_{106}$  because gcd of their leading monoms is zero.
3346. Creating S-polynomial from the pair  $(p_{46}, p_{47})$ .  
Forming S-pol of  $p_{46}$  and  $p_{47}$ : Polynomial too big for output (text size is 1135 characters, number of terms is 16)  
Reduced to zero.

3347. Creating S-polynomial from the pair  $(p_{46}, p_{48})$ .

Forming S-pol of  $p_{46}$  and  $p_{48}$ :

$$\begin{aligned} p_{813} = & 256u_5u_3^{12}u_1^8x_8x_6 + 256u_5u_3^{11}u_1^8x_8x_4x_2 - 128u_5u_3^{13}u_1^7x_8x_4 + \\ & 128u_5^2u_3^{12}u_1^7x_8x_2 - 256u_6u_3^{12}u_1^8x_6^2 - \\ & 256u_5u_3^{11}u_1^8x_6x_5x_2 + 128u_6u_3^{13}u_1^7x_6x_4 - \\ & 128u_6u_5u_3^{12}u_1^7x_6x_2 \end{aligned}$$

Reduced to zero.

3348. Creating S-polynomial from the pair  $(p_{46}, p_{49})$ .

Forming S-pol of  $p_{46}$  and  $p_{49}$ :

$$\begin{aligned} p_{814} = & 4096u_3^{15}u_1^{12}x_8x_6x_4 + 8192u_5u_3^{14}u_1^{13}x_8x_6 + \\ & (-512u_5u_3^{17}u_1^9 - 2048u_5u_3^{15}u_1^{11})x_8x_4x_2 + \\ & (256u_5u_3^{19}u_1^8 + 1024u_5u_3^{17}u_1^{10})x_8x_4 + \\ & (-256u_5^2u_3^{18}u_1^8 - 1024u_5^2u_3^{16}u_1^{10})x_8x_2 - 4096u_3^{15}u_1^{12}x_6^2x_5 - \\ & 8192u_6u_3^{14}u_1^{13}x_6^2 + 512u_5u_3^{17}u_1^9x_6x_5x_2 + \\ & (-256u_5u_3^{19}u_1^8 - 1024u_5u_3^{17}u_1^{10})x_6x_5 + 2048u_6u_3^{15}u_1^{11}x_6x_4x_2 + \\ & (256u_6u_5u_3^{18}u_1^8 + 1024u_6u_5u_3^{16}u_1^{10})x_6x_2 \end{aligned}$$

Reduced to zero.

3349. Creating S-polynomial from the pair  $(p_{46}, p_{50})$ .

Skipping pair  $p_{46}$  and  $p_{50}$  because gcd of their leading monoms is zero.

3350. Creating S-polynomial from the pair  $(p_{46}, p_{51})$ .

Forming S-pol of  $p_{46}$  and  $p_{51}$ :

$$\begin{aligned} p_{815} = & -512u_3^{11}u_1^9x_8x_6x_4 - 1024u_5u_3^{10}u_1^{10}x_8x_6 + \\ & 256u_5u_3^{11}u_1^8x_8x_4x_2 - 128u_5u_3^{13}u_1^7x_8x_4 + \\ & 128u_5^2u_3^{12}u_1^7x_8x_2 + 512u_3^{11}u_1^9x_6^2x_5 + 1024u_6u_3^{10}u_1^{10}x_6^2 + \\ & 128u_5u_3^{13}u_1^7x_6x_5 - 256u_6u_3^{11}u_1^8x_6x_4x_2 - \\ & 128u_6u_5u_3^{12}u_1^7x_6x_2 \end{aligned}$$

Reduced to zero.

3351. Creating S-polynomial from the pair  $(p_{46}, p_{52})$ .

Skipping pair  $p_{46}$  and  $p_{52}$  because gcd of their leading monoms is zero.

3352. Creating S-polynomial from the pair  $(p_{46}, p_{53})$ .

Skipping pair  $p_{46}$  and  $p_{53}$  because gcd of their leading monoms is zero.

3353. Creating S-polynomial from the pair  $(p_{46}, p_{54})$ .

Skipping pair  $p_{46}$  and  $p_{54}$  because gcd of their leading monoms is zero.

3354. Creating S-polynomial from the pair  $(p_{46}, p_{55})$ .  
 Skipping pair  $p_{46}$  and  $p_{55}$  because gcd of their leading monoms is zero.
3355. Creating S-polynomial from the pair  $(p_{46}, p_{56})$ .  
 Skipping pair  $p_{46}$  and  $p_{56}$  because gcd of their leading monoms is zero.
3356. Creating S-polynomial from the pair  $(p_{46}, p_{57})$ .  
 Skipping pair  $p_{46}$  and  $p_{57}$  because gcd of their leading monoms is zero.
3357. Creating S-polynomial from the pair  $(p_{46}, p_{58})$ .  
 Skipping pair  $p_{46}$  and  $p_{58}$  because gcd of their leading monoms is zero.
3358. Creating S-polynomial from the pair  $(p_{46}, p_{59})$ .  
 Skipping pair  $p_{46}$  and  $p_{59}$  because gcd of their leading monoms is zero.
3359. Creating S-polynomial from the pair  $(p_{46}, p_{60})$ .  
 Skipping pair  $p_{46}$  and  $p_{60}$  because gcd of their leading monoms is zero.
3360. Creating S-polynomial from the pair  $(p_{46}, p_{61})$ .  
 Skipping pair  $p_{46}$  and  $p_{61}$  because gcd of their leading monoms is zero.
3361. Creating S-polynomial from the pair  $(p_{46}, p_{62})$ .  
 Skipping pair  $p_{46}$  and  $p_{62}$  because gcd of their leading monoms is zero.
3362. Creating S-polynomial from the pair  $(p_{46}, p_{63})$ .  
 Skipping pair  $p_{46}$  and  $p_{63}$  because gcd of their leading monoms is zero.
3363. Creating S-polynomial from the pair  $(p_{46}, p_{64})$ .  
 Skipping pair  $p_{46}$  and  $p_{64}$  because gcd of their leading monoms is zero.
3364. Creating S-polynomial from the pair  $(p_{46}, p_{65})$ .  
 Skipping pair  $p_{46}$  and  $p_{65}$  because gcd of their leading monoms is zero.
3365. Creating S-polynomial from the pair  $(p_{46}, p_{66})$ .  
 Skipping pair  $p_{46}$  and  $p_{66}$  because gcd of their leading monoms is zero.
3366. Creating S-polynomial from the pair  $(p_{46}, p_{67})$ .  
 Skipping pair  $p_{46}$  and  $p_{67}$  because gcd of their leading monoms is zero.
3367. Creating S-polynomial from the pair  $(p_{46}, p_{68})$ .  
 Skipping pair  $p_{46}$  and  $p_{68}$  because gcd of their leading monoms is zero.
3368. Creating S-polynomial from the pair  $(p_{46}, p_{69})$ .  
 Skipping pair  $p_{46}$  and  $p_{69}$  because gcd of their leading monoms is zero.
3369. Creating S-polynomial from the pair  $(p_{46}, p_{70})$ .  
 Skipping pair  $p_{46}$  and  $p_{70}$  because gcd of their leading monoms is zero.
3370. Creating S-polynomial from the pair  $(p_{46}, p_{71})$ .  
 Skipping pair  $p_{46}$  and  $p_{71}$  because gcd of their leading monoms is zero.

3371. Creating S-polynomial from the pair  $(p_{46}, p_{72})$ .  
 Skipping pair  $p_{46}$  and  $p_{72}$  because gcd of their leading monoms is zero.
3372. Creating S-polynomial from the pair  $(p_{46}, p_{73})$ .  
 Skipping pair  $p_{46}$  and  $p_{73}$  because gcd of their leading monoms is zero.
3373. Creating S-polynomial from the pair  $(p_{46}, p_{74})$ .  
 Skipping pair  $p_{46}$  and  $p_{74}$  because gcd of their leading monoms is zero.
3374. Creating S-polynomial from the pair  $(p_{46}, p_{75})$ .  
 Skipping pair  $p_{46}$  and  $p_{75}$  because gcd of their leading monoms is zero.
3375. Creating S-polynomial from the pair  $(p_{46}, p_{76})$ .  
 Skipping pair  $p_{46}$  and  $p_{76}$  because gcd of their leading monoms is zero.
3376. Creating S-polynomial from the pair  $(p_{46}, p_{77})$ .  
 Skipping pair  $p_{46}$  and  $p_{77}$  because gcd of their leading monoms is zero.
3377. Creating S-polynomial from the pair  $(p_{46}, p_{78})$ .  
 Skipping pair  $p_{46}$  and  $p_{78}$  because gcd of their leading monoms is zero.
3378. Creating S-polynomial from the pair  $(p_{46}, p_{79})$ .  
 Skipping pair  $p_{46}$  and  $p_{79}$  because gcd of their leading monoms is zero.
3379. Creating S-polynomial from the pair  $(p_{46}, p_{80})$ .  
 Skipping pair  $p_{46}$  and  $p_{80}$  because gcd of their leading monoms is zero.
3380. Creating S-polynomial from the pair  $(p_{46}, p_{81})$ .  
 Skipping pair  $p_{46}$  and  $p_{81}$  because gcd of their leading monoms is zero.
3381. Creating S-polynomial from the pair  $(p_{46}, p_{82})$ .  
 Forming S-pol of  $p_{46}$  and  $p_{82}$ :

$$p_{816} = -32u_5u_3^{10}u_1^5x_6x_2 + 16u_5u_3^{12}u_1^4x_6 + 16u_5u_3^{11}u_1^4x_4x_2 - \\ 8u_5u_3^{13}u_1^3x_4 + 8u_5^2u_3^{12}u_1^3x_2$$

Reduced to zero.

3382. Creating S-polynomial from the pair  $(p_{46}, p_{83})$ .  
 Forming S-pol of  $p_{46}$  and  $p_{83}$ :

$$p_{817} = -4194304u_5u_3^{23}u_1^{21}x_8x_6x_4 - 4194304u_5^2u_3^{22}u_1^{22}x_8x_6 + \\ 1048576u_5^2u_3^{23}u_1^{20}x_8x_4x_2 - 524288u_5^2u_3^{25}u_1^{19}x_8x_4 + \\ 524288u_5^3u_3^{24}u_1^{19}x_8x_2 + 4194304u_6u_3^{22}u_1^{22}x_6^3 + \\ 2097152u_5u_3^{23}u_1^{21}x_6^2x_5 + 1048576u_6u_5u_3^{24}u_1^{20}x_6^2 + \\ 1048576u_5u_3^{24}u_1^{20}x_6x_5x_4 + 524288u_5^2u_3^{25}u_1^{19}x_6x_5 + \\ (-524288u_6u_5u_3^{25}u_1^{19} - 2097152u_6u_3^{24}u_1^{21})x_6x_4 + \\ 1048576u_6u_5^2u_3^{24}u_1^{20}x_6$$

Reduced to zero.

3383. Creating S-polynomial from the pair  $(p_{46}, p_{84})$ .

Forming S-pol of  $p_{46}$  and  $p_{84}$ :

$$\begin{aligned} p_{818} = & -1024u_3^{11}u_1^{10}x_8x_6x_4 - 2048u_5u_3^{10}u_1^{11}x_8x_6 + \\ & 512u_5u_3^{11}u_1^9x_8x_4x_2 - 256u_5u_3^{13}u_1^8x_8x_4 + \\ & 256u_5^2u_3^{12}u_1^8x_8x_2 + 1024u_3^{11}u_1^{10}x_6^2x_5 + 2048u_6u_3^{10}u_1^{11}x_6^2 + \\ & 256u_5u_3^{13}u_1^8x_6x_5 - 512u_6u_3^{11}u_1^9x_6x_4x_2 - \\ & 256u_6u_5u_3^{12}u_1^8x_6x_2 \end{aligned}$$

Reduced to zero.

3384. Creating S-polynomial from the pair  $(p_{46}, p_{85})$ .

Forming S-pol of  $p_{46}$  and  $p_{85}$ :

$$\begin{aligned} p_{819} = & 512u_5u_3^{12}u_1^9x_8x_6 + 512u_5u_3^{11}u_1^9x_8x_4x_2 - 256u_5u_3^{13}u_1^8x_8x_4 + \\ & 256u_5^2u_3^{12}u_1^8x_8x_2 - 512u_6u_3^{12}u_1^9x_6^2 - \\ & 512u_5u_3^{11}u_1^9x_6x_5x_2 + 256u_6u_3^{13}u_1^8x_6x_4 - \\ & 256u_6u_5u_3^{12}u_1^8x_6x_2 \end{aligned}$$

Reduced to zero.

3385. Creating S-polynomial from the pair  $(p_{46}, p_{86})$ .

Skipping pair  $p_{46}$  and  $p_{86}$  because gcd of their leading monoms is zero.

3386. Creating S-polynomial from the pair  $(p_{46}, p_{87})$ .

Skipping pair  $p_{46}$  and  $p_{87}$  because gcd of their leading monoms is zero.

3387. Creating S-polynomial from the pair  $(p_{46}, p_{88})$ .

Skipping pair  $p_{46}$  and  $p_{88}$  because gcd of their leading monoms is zero.

3388. Creating S-polynomial from the pair  $(p_{46}, p_{89})$ .

Skipping pair  $p_{46}$  and  $p_{89}$  because gcd of their leading monoms is zero.

3389. Creating S-polynomial from the pair  $(p_{46}, p_{90})$ .

Skipping pair  $p_{46}$  and  $p_{90}$  because gcd of their leading monoms is zero.

3390. Creating S-polynomial from the pair  $(p_{46}, p_{91})$ .

Skipping pair  $p_{46}$  and  $p_{91}$  because gcd of their leading monoms is zero.

3391. Creating S-polynomial from the pair  $(p_{46}, p_{92})$ .

Skipping pair  $p_{46}$  and  $p_{92}$  because gcd of their leading monoms is zero.

3392. Creating S-polynomial from the pair  $(p_{46}, p_{93})$ .

Skipping pair  $p_{46}$  and  $p_{93}$  because gcd of their leading monoms is zero.

3393. Creating S-polynomial from the pair  $(p_{46}, p_{94})$ .

Skipping pair  $p_{46}$  and  $p_{94}$  because gcd of their leading monoms is zero.

3394. Creating S-polynomial from the pair  $(p_{46}, p_{95})$ .

Forming S-pol of  $p_{46}$  and  $p_{95}$ :

$$\begin{aligned}
p_{820} = & 2097152u_5u_3^{21}u_1^{21}x_8x_6^2 - 2097152u_3^{21}u_1^{21}x_8x_6x_4^2 + \\
& (1048576u_5u_3^{22}u_1^{20} + 4194304u_3^{21}u_1^{22})x_8x_6x_4 + \\
& (524288u_5^2u_3^{23}u_1^{19} - 2097152u_5^2u_3^{21}u_1^{21})x_8x_6 + \\
& 1048576u_5u_3^{21}u_1^{20}x_8x_4^2x_2 - 524288u_5u_3^{23}u_1^{19}x_8x_4^2 + \\
& 524288u_5^2u_3^{22}u_1^{19}x_8x_4x_2 - 2097152u_6u_3^{21}u_1^{21}x_6^3 - \\
& 1048576u_5u_3^{22}u_1^{20}x_6^2x_5 - 524288u_6u_5u_3^{23}u_1^{19}x_6^2 - \\
& 1048576u_5u_3^{21}u_1^{20}x_6x_5x_4x_2 - 262144u_5^2u_3^{24}u_1^{18}x_6x_5 - \\
& 524288u_6u_5u_3^{22}u_1^{19}x_6x_4x_2 + \\
& (262144u_6u_5u_3^{24}u_1^{18} + 1048576u_6u_3^{23}u_1^{20})x_6x_4 - \\
& 524288u_6u_5^2u_3^{23}u_1^{19}x_6
\end{aligned}$$

Reduced to zero.

3395. Creating S-polynomial from the pair  $(p_{46}, p_{96})$ .

Skipping pair  $p_{46}$  and  $p_{96}$  because gcd of their leading monoms is zero.

3396. Creating S-polynomial from the pair  $(p_{46}, p_{97})$ .

Skipping pair  $p_{46}$  and  $p_{97}$  because gcd of their leading monoms is zero.

3397. Creating S-polynomial from the pair  $(p_{46}, p_{98})$ .

Skipping pair  $p_{46}$  and  $p_{98}$  because gcd of their leading monoms is zero.

3398. Creating S-polynomial from the pair  $(p_{46}, p_{99})$ .

Skipping pair  $p_{46}$  and  $p_{99}$  because gcd of their leading monoms is zero.

3399. Creating S-polynomial from the pair  $(p_{46}, p_{100})$ .

Skipping pair  $p_{46}$  and  $p_{100}$  because gcd of their leading monoms is zero.

3400. Creating S-polynomial from the pair  $(p_{46}, p_{101})$ .

Skipping pair  $p_{46}$  and  $p_{101}$  because gcd of their leading monoms is zero.

3401. Creating S-polynomial from the pair  $(p_{46}, p_{102})$ .

Skipping pair  $p_{46}$  and  $p_{102}$  because gcd of their leading monoms is zero.

3402. Creating S-polynomial from the pair  $(p_{46}, p_{103})$ .

Skipping pair  $p_{46}$  and  $p_{103}$  because gcd of their leading monoms is zero.

3403. Creating S-polynomial from the pair  $(p_{46}, p_{104})$ .

Skipping pair  $p_{46}$  and  $p_{104}$  because gcd of their leading monoms is zero.

3404. Creating S-polynomial from the pair  $(p_{46}, p_{105})$ .

Skipping pair  $p_{46}$  and  $p_{105}$  because gcd of their leading monoms is zero.



3405. Creating S-polynomial from the pair  $(p_{46}, p_{106})$ .  
 Skipping pair  $p_{46}$  and  $p_{106}$  because gcd of their leading monoms is zero.
3406. Creating S-polynomial from the pair  $(p_{47}, p_{48})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{48}$ : Polynomial too big for output (text size is 1018 characters, number of terms is 15)  
 Reduced to zero.
3407. Creating S-polynomial from the pair  $(p_{47}, p_{49})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{49}$ : Polynomial too big for output (text size is 1708 characters, number of terms is 17)  
 Reduced to zero.
3408. Creating S-polynomial from the pair  $(p_{47}, p_{50})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{50}$ : Polynomial too big for output (text size is 1994 characters, number of terms is 17)  
 Reduced to zero.
3409. Creating S-polynomial from the pair  $(p_{47}, p_{51})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{51}$ : Polynomial too big for output (text size is 1146 characters, number of terms is 16)  
 Reduced to zero.
3410. Creating S-polynomial from the pair  $(p_{47}, p_{52})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{52}$ : Polynomial too big for output (text size is 2348 characters, number of terms is 19)  
 Reduced to zero.
3411. Creating S-polynomial from the pair  $(p_{47}, p_{53})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{53}$ : Polynomial too big for output (text size is 1294 characters, number of terms is 17)  
 Reduced to zero.
3412. Creating S-polynomial from the pair  $(p_{47}, p_{54})$ .  
 Skipping pair  $p_{47}$  and  $p_{54}$  because gcd of their leading monoms is zero.
3413. Creating S-polynomial from the pair  $(p_{47}, p_{55})$ .  
 Skipping pair  $p_{47}$  and  $p_{55}$  because gcd of their leading monoms is zero.
3414. Creating S-polynomial from the pair  $(p_{47}, p_{56})$ .  
 Skipping pair  $p_{47}$  and  $p_{56}$  because gcd of their leading monoms is zero.
3415. Creating S-polynomial from the pair  $(p_{47}, p_{57})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{57}$ : Polynomial too big for output (text size is 4535 characters, number of terms is 24)  
 Reduced to zero.

3416. Creating S-polynomial from the pair  $(p_{47}, p_{58})$ .  
 Skipping pair  $p_{47}$  and  $p_{58}$  because gcd of their leading monoms is zero.
3417. Creating S-polynomial from the pair  $(p_{47}, p_{59})$ .  
 Skipping pair  $p_{47}$  and  $p_{59}$  because gcd of their leading monoms is zero.
3418. Creating S-polynomial from the pair  $(p_{47}, p_{60})$ .  
 Skipping pair  $p_{47}$  and  $p_{60}$  because gcd of their leading monoms is zero.
3419. Creating S-polynomial from the pair  $(p_{47}, p_{61})$ .  
 Skipping pair  $p_{47}$  and  $p_{61}$  because gcd of their leading monoms is zero.
3420. Creating S-polynomial from the pair  $(p_{47}, p_{62})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{62}$ : Polynomial too big for output (text size is 3998 characters, number of terms is 23)  
 Reduced to zero.
3421. Creating S-polynomial from the pair  $(p_{47}, p_{63})$ .  
 Skipping pair  $p_{47}$  and  $p_{63}$  because gcd of their leading monoms is zero.
3422. Creating S-polynomial from the pair  $(p_{47}, p_{64})$ .  
 Skipping pair  $p_{47}$  and  $p_{64}$  because gcd of their leading monoms is zero.
3423. Creating S-polynomial from the pair  $(p_{47}, p_{65})$ .  
 Skipping pair  $p_{47}$  and  $p_{65}$  because gcd of their leading monoms is zero.
3424. Creating S-polynomial from the pair  $(p_{47}, p_{66})$ .  
 Skipping pair  $p_{47}$  and  $p_{66}$  because gcd of their leading monoms is zero.
3425. Creating S-polynomial from the pair  $(p_{47}, p_{67})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{67}$ : Polynomial too big for output (text size is 4535 characters, number of terms is 24)  
 Reduced to zero.
3426. Creating S-polynomial from the pair  $(p_{47}, p_{68})$ .  
 Skipping pair  $p_{47}$  and  $p_{68}$  because gcd of their leading monoms is zero.
3427. Creating S-polynomial from the pair  $(p_{47}, p_{69})$ .  
 Skipping pair  $p_{47}$  and  $p_{69}$  because gcd of their leading monoms is zero.
3428. Creating S-polynomial from the pair  $(p_{47}, p_{70})$ .  
 Skipping pair  $p_{47}$  and  $p_{70}$  because gcd of their leading monoms is zero.
3429. Creating S-polynomial from the pair  $(p_{47}, p_{71})$ .  
 Skipping pair  $p_{47}$  and  $p_{71}$  because gcd of their leading monoms is zero.
3430. Creating S-polynomial from the pair  $(p_{47}, p_{72})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{72}$ : Polynomial too big for output (text size is 3998 characters, number of terms is 23)  
 Reduced to zero.

3431. Creating S-polynomial from the pair  $(p_{47}, p_{73})$ .  
 Skipping pair  $p_{47}$  and  $p_{73}$  because gcd of their leading monoms is zero.
3432. Creating S-polynomial from the pair  $(p_{47}, p_{74})$ .  
 Skipping pair  $p_{47}$  and  $p_{74}$  because gcd of their leading monoms is zero.
3433. Creating S-polynomial from the pair  $(p_{47}, p_{75})$ .  
 Skipping pair  $p_{47}$  and  $p_{75}$  because gcd of their leading monoms is zero.
3434. Creating S-polynomial from the pair  $(p_{47}, p_{76})$ .  
 Skipping pair  $p_{47}$  and  $p_{76}$  because gcd of their leading monoms is zero.
3435. Creating S-polynomial from the pair  $(p_{47}, p_{77})$ .  
 Skipping pair  $p_{47}$  and  $p_{77}$  because gcd of their leading monoms is zero.
3436. Creating S-polynomial from the pair  $(p_{47}, p_{78})$ .  
 Skipping pair  $p_{47}$  and  $p_{78}$  because gcd of their leading monoms is zero.
3437. Creating S-polynomial from the pair  $(p_{47}, p_{79})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{79}$ : Polynomial too big for output (text size is 3183 characters, number of terms is 19)  
 S-pol added.
3438. Creating S-polynomial from the pair  $(p_{47}, p_{80})$ .  
 Skipping pair  $p_{47}$  and  $p_{80}$  because gcd of their leading monoms is zero.
3439. Creating S-polynomial from the pair  $(p_{47}, p_{81})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{81}$ : Polynomial too big for output (text size is 1169 characters, number of terms is 15)  
 Reduced to zero.
3440. Creating S-polynomial from the pair  $(p_{47}, p_{82})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{82}$ :

$$\begin{aligned}
 p_{821} = & (-2097152u_3^{30}u_1^{21} - 8388608u_3^{28}u_1^{23})x_8x_4^2 + \\
 & (2097152u_5^{29}u_3^{21} + 8388608u_5^{27}u_3^{23})x_8x_4x_2 + \\
 & (-1048576u_5^{31}u_3^{20} - 4194304u_5^{29}u_3^{22} + 16777216u_3^{28}u_1^{24})x_8x_4 + \\
 & (2097152u_5^2u_3^{30}u_1^{21} - 8388608u_5^2u_3^{28}u_1^{23})x_8 + \\
 & 4194304u_3^{29}u_1^{22}x_6^2x_5 + \\
 & (1048576u_5^{31}u_3^{20} - 4194304u_5^{29}u_3^{22})x_6x_5 - 2097152u_6u_5u_3^{30}u_1^{21}x_6 + \\
 & (1048576u_5^{30}u_3^{20} - 4194304u_5^{28}u_3^{22})x_5x_4x_2 + \\
 & 524288u_5^2u_3^{31}u_1^{19}x_5x_2 - 1048576u_5^2u_3^{31}u_1^{20}x_5 + \\
 & (-524288u_6u_5u_3^{31}u_1^{19} - 2097152u_6u_5u_3^{29}u_1^{21} - 2097152u_6u_3^{30}u_1^{21})x_4x_2 + \\
 & (1048576u_6u_5u_3^{31}u_1^{20} + 4194304u_6u_3^{30}u_1^{22})x_4 + \\
 & 1048576u_6u_5^2u_3^{30}u_1^{20}x_2 - 2097152u_6u_5^2u_3^{30}u_1^{21}
 \end{aligned}$$

Reduced to zero.

3441. Creating S-polynomial from the pair  $(p_{47}, p_{83})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{83}$ : Polynomial too big for output (text size is 1787 characters, number of terms is 19)  
 Reduced to zero.
3442. Creating S-polynomial from the pair  $(p_{47}, p_{84})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{84}$ : Polynomial too big for output (text size is 1155 characters, number of terms is 16)  
 Reduced to zero.
3443. Creating S-polynomial from the pair  $(p_{47}, p_{85})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{85}$ : Polynomial too big for output (text size is 1025 characters, number of terms is 15)  
 Reduced to zero.
3444. Creating S-polynomial from the pair  $(p_{47}, p_{86})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{86}$ : Polynomial too big for output (text size is 2447 characters, number of terms is 17)  
 S-pol added.
3445. Creating S-polynomial from the pair  $(p_{47}, p_{87})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{87}$ : Polynomial too big for output (text size is 1049 characters, number of terms is 15)  
 Reduced to zero.
3446. Creating S-polynomial from the pair  $(p_{47}, p_{88})$ .  
 Skipping pair  $p_{47}$  and  $p_{88}$  because gcd of their leading monoms is zero.
3447. Creating S-polynomial from the pair  $(p_{47}, p_{89})$ .  
 Skipping pair  $p_{47}$  and  $p_{89}$  because gcd of their leading monoms is zero.
3448. Creating S-polynomial from the pair  $(p_{47}, p_{90})$ .  
 Skipping pair  $p_{47}$  and  $p_{90}$  because gcd of their leading monoms is zero.
3449. Creating S-polynomial from the pair  $(p_{47}, p_{91})$ .  
 Skipping pair  $p_{47}$  and  $p_{91}$  because gcd of their leading monoms is zero.
3450. Creating S-polynomial from the pair  $(p_{47}, p_{92})$ .  
 Skipping pair  $p_{47}$  and  $p_{92}$  because gcd of their leading monoms is zero.
3451. Creating S-polynomial from the pair  $(p_{47}, p_{93})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{93}$ : Polynomial too big for output (text size is 3183 characters, number of terms is 19)  
 S-pol added.
3452. Creating S-polynomial from the pair  $(p_{47}, p_{94})$ .  
 Skipping pair  $p_{47}$  and  $p_{94}$  because gcd of their leading monoms is zero.

3453. Creating S-polynomial from the pair  $(p_{47}, p_{95})$ .

Forming S-pol of  $p_{47}$  and  $p_{95}$ :

$$\begin{aligned}
p_{822} = & (-137438953472u_5u_3^{40}u_1^{37} - 549755813888u_5u_3^{38}u_1^{39})x_8x_6^2 + \\
& (-68719476736u_5u_3^{41}u_1^{36} - 274877906944u_5u_3^{39}u_1^{38} - \\
& 274877906944u_3^{40}u_1^{38})x_8x_6x_4 + \\
& (-34359738368u_5^2u_3^{42}u_1^{35} + 137438953472u_5^2u_3^{40}u_1^{37})x_8x_6 + \\
& 274877906944u_3^{39}u_1^{38}x_6^3x_5 + \\
& (137438953472u_6u_3^{40}u_1^{37} + 549755813888u_6u_3^{38}u_1^{39})x_6^3 + \\
& 137438953472u_5u_3^{41}u_1^{36}x_6^2x_5 + 34359738368u_6u_5u_3^{42}u_1^{35}x_6^2 + \\
& 137438953472u_5u_3^{40}u_1^{36}x_6x_5x_4x_2 + 34359738368u_5^2u_3^{41}u_1^{35}x_6x_5x_2 + \\
& 17179869184u_5^2u_3^{43}u_1^{34}x_6x_5 - 137438953472u_6u_3^{40}u_1^{37}x_6x_4x_2 + \\
& (-17179869184u_6u_5u_3^{43}u_1^{34} - 68719476736u_6u_3^{42}u_1^{36})x_6x_4 + \\
& 68719476736u_6u_5^2u_3^{40}u_1^{36}x_6x_2 + 34359738368u_6u_5^2u_3^{42}u_1^{35}x_6
\end{aligned}$$

Reduced to zero.

3454. Creating S-polynomial from the pair  $(p_{47}, p_{96})$ .

Forming S-pol of  $p_{47}$  and  $p_{96}$ : Polynomial too big for output (text size is 1275 characters, number of terms is 17)

S-pol added.

3455. Creating S-polynomial from the pair  $(p_{47}, p_{97})$ .

Forming S-pol of  $p_{47}$  and  $p_{97}$ : Polynomial too big for output (text size is 1614 characters, number of terms is 17)

S-pol added.

3456. Creating S-polynomial from the pair  $(p_{47}, p_{98})$ .

Forming S-pol of  $p_{47}$  and  $p_{98}$ : Polynomial too big for output (text size is 7155 characters, number of terms is 39)

Reduced to zero.

3457. Creating S-polynomial from the pair  $(p_{47}, p_{99})$ .

Forming S-pol of  $p_{47}$  and  $p_{99}$ : Polynomial too big for output (text size is 7154 characters, number of terms is 39)

Reduced to zero.

3458. Creating S-polynomial from the pair  $(p_{47}, p_{100})$ .

Forming S-pol of  $p_{47}$  and  $p_{100}$ : Polynomial too big for output (text size is 2874 characters, number of terms is 23)

Reduced to zero.

3459. Creating S-polynomial from the pair  $(p_{47}, p_{101})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{101}$ : Polynomial too big for output (text size is 1591 characters, number of terms is 17)  
 Reduced to zero.
3460. Creating S-polynomial from the pair  $(p_{47}, p_{102})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{102}$ : Polynomial too big for output (text size is 2129 characters, number of terms is 19)  
 S-pol added.
3461. Creating S-polynomial from the pair  $(p_{47}, p_{103})$ .  
 Skipping pair  $p_{47}$  and  $p_{103}$  because gcd of their leading monoms is zero.
3462. Creating S-polynomial from the pair  $(p_{47}, p_{104})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{104}$ : Polynomial too big for output (text size is 2874 characters, number of terms is 23)  
 Reduced to zero.
3463. Creating S-polynomial from the pair  $(p_{47}, p_{105})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{105}$ : Polynomial too big for output (text size is 1591 characters, number of terms is 17)  
 Reduced to zero.
3464. Creating S-polynomial from the pair  $(p_{47}, p_{106})$ .  
 Forming S-pol of  $p_{47}$  and  $p_{106}$ : Polynomial too big for output (text size is 2129 characters, number of terms is 19)  
 S-pol added.
3465. Creating S-polynomial from the pair  $(p_{48}, p_{49})$ .  
 Forming S-pol of  $p_{48}$  and  $p_{49}$ :

$$\begin{aligned}
 p_{823} = & 65536u_3^{17}u_1^{16}x_8x_6x_4 + \\
 & (8192u_5u_3^{20}u_1^{13} + 32768u_5u_3^{18}u_1^{15} + 131072u_5u_3^{16}u_1^{17})x_8x_6 - \\
 & 65536u_3^{17}u_1^{16}x_6^2x_5 + \\
 & (-8192u_6u_3^{20}u_1^{13} - 32768u_6u_3^{18}u_1^{15} - 131072u_6u_3^{16}u_1^{17})x_6^2 - \\
 & 32768u_5u_3^{17}u_1^{15}x_6x_5x_2 + \\
 & (-4096u_5u_3^{21}u_1^{12} - 16384u_5u_3^{19}u_1^{14})x_6x_5 + 32768u_6u_3^{17}u_1^{15}x_6x_4x_2 + \\
 & (4096u_6u_3^{21}u_1^{12} + 16384u_6u_3^{19}u_1^{14})x_6x_4
 \end{aligned}$$

Reduced to zero.

3466. Creating S-polynomial from the pair  $(p_{48}, p_{50})$ .

Forming S-pol of  $p_{48}$  and  $p_{50}$ :

$$\begin{aligned} p_{824} = & (1024u_3^{17}u_1^{10} + 4096u_3^{15}u_1^{12})x_8^2x_4 + \\ & (2048u_5u_3^{16}u_1^{11} + 8192u_5u_3^{14}u_1^{13})x_8^2 + \\ & (-1024u_3^{17}u_1^{10} - 4096u_3^{15}u_1^{12})x_8x_6x_5 + \\ & (-2048u_6u_3^{16}u_1^{11} - 8192u_6u_3^{14}u_1^{13})x_8x_6 + \\ & (-512u_5u_3^{17}u_1^9 - 2048u_5u_3^{15}u_1^{11})x_8x_5x_2 + \\ & (256u_6u_3^{19}u_1^8 + 1024u_6u_3^{17}u_1^{10})x_8x_4 + \\ & (-256u_6u_5u_3^{18}u_1^8 - 1024u_6u_5u_3^{16}u_1^{10})x_8x_2 + \\ & (512u_6u_3^{17}u_1^9 + 2048u_6u_3^{15}u_1^{11})x_6x_5x_2 + \\ & (-256u_6u_3^{19}u_1^8 - 1024u_6u_3^{17}u_1^{10})x_6x_5 + \\ & (256u_6^2u_3^{18}u_1^8 + 1024u_6^2u_3^{16}u_1^{10})x_6x_2 \end{aligned}$$

Reduced to zero.

3467. Creating S-polynomial from the pair  $(p_{48}, p_{51})$ .

Forming S-pol of  $p_{48}$  and  $p_{51}$ :

$$\begin{aligned} p_{825} = & -8192u_3^{13}u_1^{13}x_8x_6x_4 + \\ & (-4096u_5u_3^{14}u_1^{12} - 16384u_5u_3^{12}u_1^{14})x_8x_6 + 8192u_3^{13}u_1^{13}x_6^2x_5 + \\ & (4096u_6u_3^{14}u_1^{12} + 16384u_6u_3^{12}u_1^{14})x_6^2 + 4096u_5u_3^{13}u_1^{12}x_6x_5x_2 + \\ & 2048u_5u_3^{15}u_1^{11}x_6x_5 - 4096u_6u_3^{13}u_1^{12}x_6x_4x_2 - \\ & 2048u_6u_3^{15}u_1^{11}x_6x_4 \end{aligned}$$

Reduced to zero.

3468. Creating S-polynomial from the pair  $(p_{48}, p_{52})$ .

Forming S-pol of  $p_{48}$  and  $p_{52}$ : Polynomial too big for output (text size is 1144 characters, number of terms is 16)

Reduced to zero.

3469. Creating S-polynomial from the pair  $(p_{48}, p_{53})$ .

Forming S-pol of  $p_{48}$  and  $p_{53}$ :

$$\begin{aligned} p_{826} = & -512u_3^{11}u_1^9x_8^2x_4 - 1024u_5u_3^{10}u_1^{10}x_8^2 + 512u_3^{11}u_1^9x_8x_6x_5 + \\ & 1024u_6u_3^{10}u_1^{10}x_8x_6 + 256u_5u_3^{11}u_1^8x_8x_5x_2 - 128u_6u_3^{13}u_1^7x_8x_4 + \\ & 128u_6u_5u_3^{12}u_1^7x_8x_2 - 256u_6u_3^{11}u_1^8x_6x_5x_2 + \\ & 128u_6u_3^{13}u_1^7x_6x_5 - 128u_6^2u_3^{12}u_1^7x_6x_2 \end{aligned}$$

Reduced to zero.

3470. Creating S-polynomial from the pair  $(p_{48}, p_{54})$ .  
 Skipping pair  $p_{48}$  and  $p_{54}$  because gcd of their leading monoms is zero.
3471. Creating S-polynomial from the pair  $(p_{48}, p_{55})$ .  
 Skipping pair  $p_{48}$  and  $p_{55}$  because gcd of their leading monoms is zero.
3472. Creating S-polynomial from the pair  $(p_{48}, p_{56})$ .  
 Skipping pair  $p_{48}$  and  $p_{56}$  because gcd of their leading monoms is zero.
3473. Creating S-polynomial from the pair  $(p_{48}, p_{57})$ .  
 Skipping pair  $p_{48}$  and  $p_{57}$  because gcd of their leading monoms is zero.
3474. Creating S-polynomial from the pair  $(p_{48}, p_{58})$ .  
 Skipping pair  $p_{48}$  and  $p_{58}$  because gcd of their leading monoms is zero.
3475. Creating S-polynomial from the pair  $(p_{48}, p_{59})$ .  
 Skipping pair  $p_{48}$  and  $p_{59}$  because gcd of their leading monoms is zero.
3476. Creating S-polynomial from the pair  $(p_{48}, p_{60})$ .  
 Skipping pair  $p_{48}$  and  $p_{60}$  because gcd of their leading monoms is zero.
3477. Creating S-polynomial from the pair  $(p_{48}, p_{61})$ .  
 Skipping pair  $p_{48}$  and  $p_{61}$  because gcd of their leading monoms is zero.
3478. Creating S-polynomial from the pair  $(p_{48}, p_{62})$ .  
 Skipping pair  $p_{48}$  and  $p_{62}$  because gcd of their leading monoms is zero.
3479. Creating S-polynomial from the pair  $(p_{48}, p_{63})$ .  
 Skipping pair  $p_{48}$  and  $p_{63}$  because gcd of their leading monoms is zero.
3480. Creating S-polynomial from the pair  $(p_{48}, p_{64})$ .  
 Skipping pair  $p_{48}$  and  $p_{64}$  because gcd of their leading monoms is zero.
3481. Creating S-polynomial from the pair  $(p_{48}, p_{65})$ .  
 Skipping pair  $p_{48}$  and  $p_{65}$  because gcd of their leading monoms is zero.
3482. Creating S-polynomial from the pair  $(p_{48}, p_{66})$ .  
 Skipping pair  $p_{48}$  and  $p_{66}$  because gcd of their leading monoms is zero.
3483. Creating S-polynomial from the pair  $(p_{48}, p_{67})$ .  
 Skipping pair  $p_{48}$  and  $p_{67}$  because gcd of their leading monoms is zero.
3484. Creating S-polynomial from the pair  $(p_{48}, p_{68})$ .  
 Skipping pair  $p_{48}$  and  $p_{68}$  because gcd of their leading monoms is zero.
3485. Creating S-polynomial from the pair  $(p_{48}, p_{69})$ .  
 Skipping pair  $p_{48}$  and  $p_{69}$  because gcd of their leading monoms is zero.
3486. Creating S-polynomial from the pair  $(p_{48}, p_{70})$ .  
 Skipping pair  $p_{48}$  and  $p_{70}$  because gcd of their leading monoms is zero.



3487. Creating S-polynomial from the pair  $(p_{48}, p_{71})$ .  
 Skipping pair  $p_{48}$  and  $p_{71}$  because gcd of their leading monoms is zero.
3488. Creating S-polynomial from the pair  $(p_{48}, p_{72})$ .  
 Skipping pair  $p_{48}$  and  $p_{72}$  because gcd of their leading monoms is zero.
3489. Creating S-polynomial from the pair  $(p_{48}, p_{73})$ .  
 Skipping pair  $p_{48}$  and  $p_{73}$  because gcd of their leading monoms is zero.
3490. Creating S-polynomial from the pair  $(p_{48}, p_{74})$ .  
 Skipping pair  $p_{48}$  and  $p_{74}$  because gcd of their leading monoms is zero.
3491. Creating S-polynomial from the pair  $(p_{48}, p_{75})$ .  
 Skipping pair  $p_{48}$  and  $p_{75}$  because gcd of their leading monoms is zero.
3492. Creating S-polynomial from the pair  $(p_{48}, p_{76})$ .  
 Skipping pair  $p_{48}$  and  $p_{76}$  because gcd of their leading monoms is zero.
3493. Creating S-polynomial from the pair  $(p_{48}, p_{77})$ .  
 Skipping pair  $p_{48}$  and  $p_{77}$  because gcd of their leading monoms is zero.
3494. Creating S-polynomial from the pair  $(p_{48}, p_{78})$ .  
 Skipping pair  $p_{48}$  and  $p_{78}$  because gcd of their leading monoms is zero.
3495. Creating S-polynomial from the pair  $(p_{48}, p_{79})$ .  
 Skipping pair  $p_{48}$  and  $p_{79}$  because gcd of their leading monoms is zero.
3496. Creating S-polynomial from the pair  $(p_{48}, p_{80})$ .  
 Skipping pair  $p_{48}$  and  $p_{80}$  because gcd of their leading monoms is zero.
3497. Creating S-polynomial from the pair  $(p_{48}, p_{81})$ .  
 Forming S-pol of  $p_{48}$  and  $p_{81}$ :

$$\begin{aligned}
 p_{827} = & 32768u_5u_3^{17}u_1^{15}x_8x_4 + 65536u_5^2u_3^{16}u_1^{16}x_8 - 65536u_6u_3^{16}u_1^{16}x_6^2 - \\
 & 32768u_5u_3^{17}u_1^{15}x_6x_5 + 32768u_6u_3^{17}u_1^{15}x_6x_4 - \\
 & 16384u_6u_5u_3^{18}u_1^{14}x_6 - 16384u_5^2u_3^{17}u_1^{14}x_5x_2 + \\
 & 8192u_6u_5u_3^{19}u_1^{13}x_4 - 8192u_6u_5^2u_3^{18}u_1^{13}x_2
 \end{aligned}$$

Reduced to zero.

3498. Creating S-polynomial from the pair  $(p_{48}, p_{82})$ .  
 Forming S-pol of  $p_{48}$  and  $p_{82}$ :

$$\begin{aligned}
 p_{828} = & -512u_5u_3^{12}u_1^9x_8x_2 + 256u_6u_3^{14}u_1^8x_6 + 256u_5u_3^{13}u_1^8x_5x_2 - \\
 & 128u_6u_3^{15}u_1^7x_4 + 128u_6u_5u_3^{14}u_1^7x_2
 \end{aligned}$$

Reduced to zero.

3499. Creating S-polynomial from the pair  $(p_{48}, p_{83})$ .

Forming S-pol of  $p_{48}$  and  $p_{83}$ :

$$\begin{aligned} p_{829} = & -67108864u_5u_3^{25}u_1^{25}x_8x_6x_4 + \\ & (-16777216u_5^2u_3^{26}u_1^{24} - 67108864u_5^2u_3^{24}u_1^{26})x_8x_6 + \\ & 67108864u_6u_3^{24}u_1^{26}x_6^3 + 33554432u_5u_3^{25}u_1^{25}x_6^2x_5 + \\ & 33554432u_6u_5u_3^{26}u_1^{24}x_6^2 + 16777216u_5u_3^{26}u_1^{24}x_6x_5x_4 + \\ & 16777216u_5^2u_3^{25}u_1^{24}x_6x_5x_2 + 8388608u_5^2u_3^{27}u_1^{23}x_6x_5 + \\ & (-16777216u_6u_5u_3^{27}u_1^{23} - 33554432u_6u_3^{26}u_1^{25})x_6x_4 + \\ & 8388608u_6u_5^2u_3^{26}u_1^{23}x_6x_2 + 16777216u_6u_5^2u_3^{26}u_1^{24}x_6 \end{aligned}$$

Reduced to zero.

3500. Creating S-polynomial from the pair  $(p_{48}, p_{84})$ .

Forming S-pol of  $p_{48}$  and  $p_{84}$ :

$$\begin{aligned} p_{830} = & -16384u_3^{13}u_1^{14}x_8x_6x_4 + \\ & (-8192u_5u_3^{14}u_1^{13} - 32768u_5u_3^{12}u_1^{15})x_8x_6 + 16384u_3^{13}u_1^{14}x_6^2x_5 + \\ & (8192u_6u_3^{14}u_1^{13} + 32768u_6u_3^{12}u_1^{15})x_6^2 + 8192u_5u_3^{13}u_1^{13}x_6x_5x_2 + \\ & 4096u_5u_3^{15}u_1^{12}x_6x_5 - 8192u_6u_3^{13}u_1^{13}x_6x_4x_2 - \\ & 4096u_6u_3^{15}u_1^{12}x_6x_4 \end{aligned}$$

Reduced to zero.

3501. Creating S-polynomial from the pair  $(p_{48}, p_{85})$ .

Forming S-pol of  $p_{48}$  and  $p_{85}$ :

$$p_{831} = 0$$

Reduced to zero.

3502. Creating S-polynomial from the pair  $(p_{48}, p_{86})$ .

Forming S-pol of  $p_{48}$  and  $p_{86}$ :

$$\begin{aligned} p_{832} = & (32768u_3^{21}u_1^{15} - 65536u_3^{19}u_1^{16})x_8x_4^2 + \\ & (65536u_5u_3^{20}u_1^{16} - 131072u_5u_3^{18}u_1^{17})x_8x_4 - 65536u_3^{20}u_1^{16}x_6^2x_5 + \\ & (262144u_3^{17}u_1^{18} - 131072u_3^{17}u_1^{17})x_6x_5x_4x_2 + \\ & (-131072u_3^{19}u_1^{17} + 65536u_3^{19}u_1^{16})x_6x_5x_4 - 32768u_5u_3^{20}u_1^{15}x_6x_5x_2 + \\ & 65536u_5u_3^{20}u_1^{16}x_6x_5 + \\ & (32768u_6u_3^{20}u_1^{15} + 131072u_6u_3^{18}u_1^{17} - 65536u_6u_3^{18}u_1^{16})x_6x_4x_2 + \\ & (-16384u_6u_3^{22}u_1^{14} - 65536u_6u_3^{20}u_1^{16} + 32768u_6u_3^{20}u_1^{15})x_6x_4 + \\ & (-16384u_5u_3^{21}u_1^{14} + 32768u_5u_3^{19}u_1^{15})x_5x_4x_2 + \\ & (8192u_6u_3^{23}u_1^{13} - 16384u_6u_3^{21}u_1^{14})x_4^2 + \\ & (-8192u_6u_5u_3^{22}u_1^{13} + 16384u_6u_5u_3^{20}u_1^{14})x_4x_2 \end{aligned}$$

S-pol added.

3503. Creating S-polynomial from the pair  $(p_{48}, p_{87})$ .

Forming S-pol of  $p_{48}$  and  $p_{87}$ :

$$\begin{aligned} p_{833} = & -512u_3^{13}u_1^9x_8x_4 - 1024u_5u_3^{12}u_1^{10}x_8 + 512u_3^{13}u_1^9x_6x_5 - \\ & 512u_6u_3^{12}u_1^9x_6x_2 + \\ & (256u_6u_3^{14}u_1^8 + 1024u_6u_3^{12}u_1^{10})x_6 + 256u_5u_3^{13}u_1^8x_5x_2 - \\ & 128u_6u_3^{15}u_1^7x_4 + 128u_6u_5u_3^{14}u_1^7x_2 \end{aligned}$$

Reduced to zero.

3504. Creating S-polynomial from the pair  $(p_{48}, p_{88})$ .

Skipping pair  $p_{48}$  and  $p_{88}$  because gcd of their leading monoms is zero.

3505. Creating S-polynomial from the pair  $(p_{48}, p_{89})$ .

Skipping pair  $p_{48}$  and  $p_{89}$  because gcd of their leading monoms is zero.

3506. Creating S-polynomial from the pair  $(p_{48}, p_{90})$ .

Skipping pair  $p_{48}$  and  $p_{90}$  because gcd of their leading monoms is zero.

3507. Creating S-polynomial from the pair  $(p_{48}, p_{91})$ .

Skipping pair  $p_{48}$  and  $p_{91}$  because gcd of their leading monoms is zero.

3508. Creating S-polynomial from the pair  $(p_{48}, p_{92})$ .

Skipping pair  $p_{48}$  and  $p_{92}$  because gcd of their leading monoms is zero.

3509. Creating S-polynomial from the pair  $(p_{48}, p_{93})$ .

Skipping pair  $p_{48}$  and  $p_{93}$  because gcd of their leading monoms is zero.

3510. Creating S-polynomial from the pair  $(p_{48}, p_{94})$ .

Skipping pair  $p_{48}$  and  $p_{94}$  because gcd of their leading monoms is zero.

3511. Creating S-polynomial from the pair  $(p_{48}, p_{95})$ .

Forming S-pol of  $p_{48}$  and  $p_{95}$ :

$$\begin{aligned} p_{834} = & 33554432u_5u_3^{23}u_1^{25}x_8x_6^2 - 33554432u_3^{23}u_1^{25}x_8x_6x_4^2 + \\ & 67108864u_3^{23}u_1^{26}x_8x_6x_4 + \\ & (8388608u_5^2u_3^{25}u_1^{23} - 33554432u_5^2u_3^{23}u_1^{25})x_8x_6 - \\ & 33554432u_6u_3^{23}u_1^{25}x_6^3 - 16777216u_5u_3^{24}u_1^{24}x_6^2x_5 + \\ & 16777216u_6u_3^{24}u_1^{24}x_6^2x_4 - 8388608u_6u_5u_3^{25}u_1^{23}x_6^2 - \\ & 4194304u_5^2u_3^{26}u_1^{22}x_6x_5 - 8388608u_6u_3^{25}u_1^{23}x_6x_4^2 + \\ & (4194304u_6u_5u_3^{26}u_1^{22} + 16777216u_6u_3^{25}u_1^{24})x_6x_4 - \\ & 8388608u_6u_5^2u_3^{25}u_1^{23}x_6 \end{aligned}$$

Reduced to zero.

3512. Creating S-polynomial from the pair  $(p_{48}, p_{96})$ .

Forming S-pol of  $p_{48}$  and  $p_{96}$ :

$$\begin{aligned} p_{835} = & 4096u_5u_3^{10}u_1^{12}x_8x_6 + 1024u_3^{12}u_1^{10}x_8x_4^2 + 2048u_5u_3^{11}u_1^{11}x_8x_4 - \\ & 2048u_3^{11}u_1^{11}x_6^2x_5 - 4096u_6u_3^{10}u_1^{12}x_6^2 - \\ & 1024u_5u_3^{11}u_1^{10}x_6x_5x_2 + 1024u_6u_3^{11}u_1^{10}x_6x_4x_2 - \\ & 512u_6u_3^{13}u_1^9x_6x_4 - 512u_5u_3^{12}u_1^9x_5x_4x_2 + 256u_6u_3^{14}u_1^8x_4^2 - \\ & 256u_6u_5u_3^{13}u_1^8x_4x_2 \end{aligned}$$

Reduced to zero.

3513. Creating S-polynomial from the pair  $(p_{48}, p_{97})$ .

Forming S-pol of  $p_{48}$  and  $p_{97}$ :

$$\begin{aligned} p_{836} = & 16384u_3^{20}u_1^{14}x_8x_4^2 + 32768u_5u_3^{19}u_1^{15}x_8x_4 - 32768u_3^{19}u_1^{15}x_6^2x_5 + \\ & (131072u_3^{16}u_1^{17} - 65536u_3^{16}u_1^{16})x_6x_5x_4x_2 - 65536u_3^{18}u_1^{16}x_6x_5x_4 - \\ & 16384u_5u_3^{19}u_1^{14}x_6x_5x_2 + 32768u_5u_3^{19}u_1^{15}x_6x_5 + \\ & (16384u_6u_3^{19}u_1^{14} + 65536u_6u_3^{17}u_1^{16})x_6x_4x_2 + \\ & (-8192u_6u_3^{21}u_1^{13} - 32768u_6u_3^{19}u_1^{15} - 65536u_6u_3^{17}u_1^{16})x_6x_4 - \\ & 8192u_5u_3^{20}u_1^{13}x_5x_4x_2 + 4096u_6u_3^{22}u_1^{12}x_4^2 - \\ & 4096u_6u_5u_3^{21}u_1^{12}x_4x_2 \end{aligned}$$

S-pol added.

3514. Creating S-polynomial from the pair  $(p_{48}, p_{98})$ .

Forming S-pol of  $p_{48}$  and  $p_{98}$ : Polynomial too big for output (text size is 3036 characters, number of terms is 33)

Reduced to zero.

3515. Creating S-polynomial from the pair  $(p_{48}, p_{99})$ .

Forming S-pol of  $p_{48}$  and  $p_{99}$ : Polynomial too big for output (text size is 3039 characters, number of terms is 33)

Reduced to zero.

3516. Creating S-polynomial from the pair  $(p_{48}, p_{100})$ .

Skipping pair  $p_{48}$  and  $p_{100}$  because gcd of their leading monoms is zero.

3517. Creating S-polynomial from the pair  $(p_{48}, p_{101})$ .

Skipping pair  $p_{48}$  and  $p_{101}$  because gcd of their leading monoms is zero.

3518. Creating S-polynomial from the pair  $(p_{48}, p_{102})$ .

Skipping pair  $p_{48}$  and  $p_{102}$  because gcd of their leading monoms is zero.

3519. Creating S-polynomial from the pair  $(p_{48}, p_{103})$ .

Skipping pair  $p_{48}$  and  $p_{103}$  because gcd of their leading monoms is zero.

3520. Creating S-polynomial from the pair  $(p_{48}, p_{104})$ .

Skipping pair  $p_{48}$  and  $p_{104}$  because gcd of their leading monoms is zero.

3521. Creating S-polynomial from the pair  $(p_{48}, p_{105})$ .

Skipping pair  $p_{48}$  and  $p_{105}$  because gcd of their leading monoms is zero.

3522. Creating S-polynomial from the pair  $(p_{48}, p_{106})$ .

Skipping pair  $p_{48}$  and  $p_{106}$  because gcd of their leading monoms is zero.

3523. Creating S-polynomial from the pair  $(p_{49}, p_{50})$ .

Forming S-pol of  $p_{49}$  and  $p_{50}$ :

$$\begin{aligned}
p_{837} = & (-2048u_3^{23}u_1^{11} - 8192u_3^{21}u_1^{13})x_8^2x_4 + \\
& (1024u_5u_3^{24}u_1^{10} + 4096u_5u_3^{22}u_1^{12})x_8^2 + \\
& (2048u_3^{23}u_1^{11} + 8192u_3^{21}u_1^{13})x_8x_6x_5 + \\
& (-1024u_6u_3^{24}u_1^{10} - 4096u_6u_3^{22}u_1^{12})x_8x_6 + \\
& (1024u_5u_3^{23}u_1^{10} + 4096u_5u_3^{21}u_1^{12})x_8x_5x_2 + \\
& (-512u_5u_3^{25}u_1^9 - 4096u_5u_3^{23}u_1^{11} - 8192u_5u_3^{21}u_1^{13})x_8x_5 + \\
& (4096u_6u_3^{21}u_1^{12} + 16384u_6u_3^{19}u_1^{14})x_8x_4x_2 + \\
& (512u_6u_5u_3^{24}u_1^9 + 4096u_6u_5u_3^{22}u_1^{11} + 8192u_6u_5u_3^{20}u_1^{13})x_8x_2 + \\
& (-1024u_6u_3^{23}u_1^{10} - 8192u_6u_3^{21}u_1^{12} - 16384u_6u_3^{19}u_1^{14})x_6x_5x_2 + \\
& (512u_6u_3^{25}u_1^9 + 4096u_6u_3^{23}u_1^{11} + 8192u_6u_3^{21}u_1^{13})x_6x_5 + \\
& (-512u_6^2u_3^{24}u_1^9 - 4096u_6^2u_3^{22}u_1^{11} - 8192u_6^2u_3^{20}u_1^{13})x_6x_2
\end{aligned}$$

Reduced to zero.

3524. Creating S-polynomial from the pair  $(p_{49}, p_{51})$ .

Forming S-pol of  $p_{49}$  and  $p_{51}$ :

$$\begin{aligned}
p_{838} = & 16384u_3^{19}u_1^{14}x_8x_6x_4 + 32768u_5u_3^{18}u_1^{15}x_8x_6 - \\
& 16384u_3^{19}u_1^{14}x_6^2x_5 - 32768u_6u_3^{18}u_1^{15}x_6^2 - \\
& 8192u_5u_3^{19}u_1^{13}x_6x_5x_2 + 8192u_6u_3^{19}u_1^{13}x_6x_4x_2
\end{aligned}$$

Reduced to zero.

3525. Creating S-polynomial from the pair  $(p_{49}, p_{52})$ .

Forming S-pol of  $p_{49}$  and  $p_{52}$ : Polynomial too big for output (text size is 1585 characters, number of terms is 16)

Reduced to zero.

3526. Creating S-polynomial from the pair  $(p_{49}, p_{53})$ .

Forming S-pol of  $p_{49}$  and  $p_{53}$ :

$$\begin{aligned}
p_{839} = & 1024u_3^{17}u_1^{10}x_8^2x_4 - 512u_5u_3^{18}u_1^9x_8^2 - 1024u_3^{17}u_1^{10}x_8x_6x_5 + \\
& 512u_6u_3^{18}u_1^9x_8x_6 - 512u_5u_3^{17}u_1^9x_8x_5x_2 + \\
& (256u_5u_3^{19}u_1^8 + 1024u_5u_3^{17}u_1^{10})x_8x_5 - 2048u_6u_3^{15}u_1^{11}x_8x_4x_2 + \\
& (-256u_6u_5u_3^{18}u_1^8 - 1024u_6u_5u_3^{16}u_1^{10})x_8x_2 + \\
& (512u_6u_3^{17}u_1^9 + 2048u_6u_3^{15}u_1^{11})x_6x_5x_2 + \\
& (-256u_6u_3^{19}u_1^8 - 1024u_6u_3^{17}u_1^{10})x_6x_5 + \\
& (256u_6^2u_3^{18}u_1^8 + 1024u_6^2u_3^{16}u_1^{10})x_6x_2
\end{aligned}$$

Reduced to zero.

3527. Creating S-polynomial from the pair  $(p_{49}, p_{54})$ .

Skipping pair  $p_{49}$  and  $p_{54}$  because gcd of their leading monoms is zero.

3528. Creating S-polynomial from the pair  $(p_{49}, p_{55})$ .

Skipping pair  $p_{49}$  and  $p_{55}$  because gcd of their leading monoms is zero.

3529. Creating S-polynomial from the pair  $(p_{49}, p_{56})$ .

Skipping pair  $p_{49}$  and  $p_{56}$  because gcd of their leading monoms is zero.

3530. Creating S-polynomial from the pair  $(p_{49}, p_{57})$ .

Skipping pair  $p_{49}$  and  $p_{57}$  because gcd of their leading monoms is zero.

3531. Creating S-polynomial from the pair  $(p_{49}, p_{58})$ .

Skipping pair  $p_{49}$  and  $p_{58}$  because gcd of their leading monoms is zero.

3532. Creating S-polynomial from the pair  $(p_{49}, p_{59})$ .

Skipping pair  $p_{49}$  and  $p_{59}$  because gcd of their leading monoms is zero.

3533. Creating S-polynomial from the pair  $(p_{49}, p_{60})$ .

Skipping pair  $p_{49}$  and  $p_{60}$  because gcd of their leading monoms is zero.

3534. Creating S-polynomial from the pair  $(p_{49}, p_{61})$ .

Skipping pair  $p_{49}$  and  $p_{61}$  because gcd of their leading monoms is zero.

3535. Creating S-polynomial from the pair  $(p_{49}, p_{62})$ .

Skipping pair  $p_{49}$  and  $p_{62}$  because gcd of their leading monoms is zero.

3536. Creating S-polynomial from the pair  $(p_{49}, p_{63})$ .

Skipping pair  $p_{49}$  and  $p_{63}$  because gcd of their leading monoms is zero.

3537. Creating S-polynomial from the pair  $(p_{49}, p_{64})$ .

Skipping pair  $p_{49}$  and  $p_{64}$  because gcd of their leading monoms is zero.

3538. Creating S-polynomial from the pair  $(p_{49}, p_{65})$ .

Skipping pair  $p_{49}$  and  $p_{65}$  because gcd of their leading monoms is zero.

3539. Creating S-polynomial from the pair  $(p_{49}, p_{66})$ .  
 Skipping pair  $p_{49}$  and  $p_{66}$  because gcd of their leading monoms is zero.
3540. Creating S-polynomial from the pair  $(p_{49}, p_{67})$ .  
 Skipping pair  $p_{49}$  and  $p_{67}$  because gcd of their leading monoms is zero.
3541. Creating S-polynomial from the pair  $(p_{49}, p_{68})$ .  
 Skipping pair  $p_{49}$  and  $p_{68}$  because gcd of their leading monoms is zero.
3542. Creating S-polynomial from the pair  $(p_{49}, p_{69})$ .  
 Skipping pair  $p_{49}$  and  $p_{69}$  because gcd of their leading monoms is zero.
3543. Creating S-polynomial from the pair  $(p_{49}, p_{70})$ .  
 Skipping pair  $p_{49}$  and  $p_{70}$  because gcd of their leading monoms is zero.
3544. Creating S-polynomial from the pair  $(p_{49}, p_{71})$ .  
 Skipping pair  $p_{49}$  and  $p_{71}$  because gcd of their leading monoms is zero.
3545. Creating S-polynomial from the pair  $(p_{49}, p_{72})$ .  
 Skipping pair  $p_{49}$  and  $p_{72}$  because gcd of their leading monoms is zero.
3546. Creating S-polynomial from the pair  $(p_{49}, p_{73})$ .  
 Skipping pair  $p_{49}$  and  $p_{73}$  because gcd of their leading monoms is zero.
3547. Creating S-polynomial from the pair  $(p_{49}, p_{74})$ .  
 Skipping pair  $p_{49}$  and  $p_{74}$  because gcd of their leading monoms is zero.
3548. Creating S-polynomial from the pair  $(p_{49}, p_{75})$ .  
 Skipping pair  $p_{49}$  and  $p_{75}$  because gcd of their leading monoms is zero.
3549. Creating S-polynomial from the pair  $(p_{49}, p_{76})$ .  
 Skipping pair  $p_{49}$  and  $p_{76}$  because gcd of their leading monoms is zero.
3550. Creating S-polynomial from the pair  $(p_{49}, p_{77})$ .  
 Skipping pair  $p_{49}$  and  $p_{77}$  because gcd of their leading monoms is zero.
3551. Creating S-polynomial from the pair  $(p_{49}, p_{78})$ .  
 Skipping pair  $p_{49}$  and  $p_{78}$  because gcd of their leading monoms is zero.
3552. Creating S-polynomial from the pair  $(p_{49}, p_{79})$ .  
 Skipping pair  $p_{49}$  and  $p_{79}$  because gcd of their leading monoms is zero.
3553. Creating S-polynomial from the pair  $(p_{49}, p_{80})$ .  
 Skipping pair  $p_{49}$  and  $p_{80}$  because gcd of their leading monoms is zero.

3554. Creating S-polynomial from the pair  $(p_{49}, p_{81})$ .

Forming S-pol of  $p_{49}$  and  $p_{81}$ :

$$\begin{aligned}
p_{840} = & -65536u_5u_3^{23}u_1^{16}x_8x_4 + 32768u_5^2u_3^{24}u_1^{15}x_8 + \\
& (131072u_6u_3^{22}u_1^{17} + 524288u_6u_3^{20}u_1^{19})x_6^2 + 65536u_5u_3^{23}u_1^{16}x_6x_5 + \\
& (-65536u_6u_3^{23}u_1^{16} - 262144u_6u_3^{21}u_1^{18})x_6x_4 - 524288u_6u_5u_3^{20}u_1^{19}x_6 + \\
& 32768u_5^2u_3^{23}u_1^{15}x_5x_2 + \\
& (-16384u_5^2u_3^{25}u_1^{14} - 65536u_5^2u_3^{23}u_1^{16})x_5 + \\
& 131072u_6u_5u_3^{21}u_1^{17}x_4x_2 + \\
& (16384u_6u_5^2u_3^{24}u_1^{14} + 65536u_6u_5^2u_3^{22}u_1^{16})x_2
\end{aligned}$$

Reduced to zero.

3555. Creating S-polynomial from the pair  $(p_{49}, p_{82})$ .

Forming S-pol of  $p_{49}$  and  $p_{82}$ :

$$\begin{aligned}
p_{841} = & -4096u_3^{17}u_1^{12}x_8x_4 + (1024u_5u_3^{18}u_1^{10} + 4096u_5u_3^{16}u_1^{12})x_8x_2 + \\
& (-512u_5u_3^{20}u_1^9 - 2048u_5u_3^{18}u_1^{11} - 8192u_5u_3^{16}u_1^{13})x_8 + \\
& 4096u_3^{17}u_1^{12}x_6x_5 + 8192u_6u_3^{16}u_1^{13}x_6 - 512u_5u_3^{19}u_1^9x_5x_2 + \\
& (256u_5u_3^{21}u_1^8 + 1024u_5u_3^{19}u_1^{10})x_5 - 2048u_6u_3^{17}u_1^{11}x_4x_2 + \\
& (-256u_6u_5u_3^{20}u_1^8 - 1024u_6u_5u_3^{18}u_1^{10})x_2
\end{aligned}$$

Reduced to zero.

3556. Creating S-polynomial from the pair  $(p_{49}, p_{83})$ .

Forming S-pol of  $p_{49}$  and  $p_{83}$ :

$$\begin{aligned}
p_{842} = & (134217728u_5u_3^{31}u_1^{26} + 268435456u_5u_3^{29}u_1^{28})x_8x_6x_4 + \\
& 134217728u_5^2u_3^{30}u_1^{27}x_8x_6 + \\
& (-134217728u_6u_3^{30}u_1^{27} - 536870912u_6u_3^{28}u_1^{29})x_6^3 - \\
& 67108864u_5u_3^{31}u_1^{26}x_6^2x_5 + \\
& (-33554432u_6u_5u_3^{32}u_1^{25} - 134217728u_6u_5u_3^{30}u_1^{27} + \\
& 536870912u_6u_5u_3^{28}u_1^{29})x_6^2 + \\
& (-33554432u_5u_3^{32}u_1^{25} - 134217728u_5u_3^{30}u_1^{27})x_6x_5x_4 - \\
& 33554432u_5^2u_3^{31}u_1^{25}x_6x_5x_2 - 134217728u_6u_5u_3^{29}u_1^{27}x_6x_4x_2 + \\
& (16777216u_6u_5u_3^{33}u_1^{24} + 67108864u_6u_5u_3^{31}u_1^{26} + 67108864u_6u_3^{32}u_1^{26} + \\
& 268435456u_6u_3^{30}u_1^{28})x_6x_4 + \\
& (-16777216u_6u_5^2u_3^{32}u_1^{24} - 67108864u_6u_5^2u_3^{30}u_1^{26})x_6x_2 + \\
& (-33554432u_6u_5^2u_3^{32}u_1^{25} - 134217728u_6u_5^2u_3^{30}u_1^{27})x_6
\end{aligned}$$

Reduced to zero.



3557. Creating S-polynomial from the pair  $(p_{49}, p_{84})$ .

Forming S-pol of  $p_{49}$  and  $p_{84}$ :

$$\begin{aligned} p_{843} = & 32768u_3^{19}u_1^{15}x_8x_6x_4 + 65536u_5u_3^{18}u_1^{16}x_8x_6 - \\ & 32768u_3^{19}u_1^{15}x_6^2x_5 - 65536u_6u_3^{18}u_1^{16}x_6^2 - \\ & 16384u_5u_3^{19}u_1^{14}x_6x_5x_2 + 16384u_6u_3^{19}u_1^{14}x_6x_4x_2 \end{aligned}$$

Reduced to zero.

3558. Creating S-polynomial from the pair  $(p_{49}, p_{85})$ .

Forming S-pol of  $p_{49}$  and  $p_{85}$ :

$$\begin{aligned} p_{844} = & -131072u_3^{17}u_1^{17}x_8x_6x_4 + \\ & (-16384u_5u_3^{20}u_1^{14} - 65536u_5u_3^{18}u_1^{16} - 262144u_5u_3^{16}u_1^{18})x_8x_6 + \\ & 131072u_3^{17}u_1^{17}x_6^2x_5 + \\ & (16384u_6u_3^{20}u_1^{14} + 65536u_6u_3^{18}u_1^{16} + 262144u_6u_3^{16}u_1^{18})x_6^2 + \\ & 65536u_5u_3^{17}u_1^{16}x_6x_5x_2 + \\ & (8192u_5u_3^{21}u_1^{13} + 32768u_5u_3^{19}u_1^{15})x_6x_5 - 65536u_6u_3^{17}u_1^{16}x_6x_4x_2 + \\ & (-8192u_6u_3^{21}u_1^{13} - 32768u_6u_3^{19}u_1^{15})x_6x_4 \end{aligned}$$

Reduced to zero.

3559. Creating S-polynomial from the pair  $(p_{49}, p_{86})$ .

Forming S-pol of  $p_{49}$  and  $p_{86}$ : Polynomial too big for output (text size is 1286 characters, number of terms is 13)

S-pol added.

3560. Creating S-polynomial from the pair  $(p_{49}, p_{87})$ .

Forming S-pol of  $p_{49}$  and  $p_{87}$ :

$$\begin{aligned} p_{845} = & 1024u_3^{19}u_1^{10}x_8x_4 - 512u_5u_3^{20}u_1^9x_8 - 1024u_3^{19}u_1^{10}x_6x_5 + \\ & (1024u_6u_3^{18}u_1^{10} + 4096u_6u_3^{16}u_1^{12})x_6x_2 - 2048u_6u_3^{18}u_1^{11}x_6 - \\ & 512u_5u_3^{19}u_1^9x_5x_2 + \\ & (256u_5u_3^{21}u_1^8 + 1024u_5u_3^{19}u_1^{10})x_5 - 2048u_6u_3^{17}u_1^{11}x_4x_2 + \\ & (-256u_6u_5u_3^{20}u_1^8 - 1024u_6u_5u_3^{18}u_1^{10})x_2 \end{aligned}$$

Reduced to zero.

3561. Creating S-polynomial from the pair  $(p_{49}, p_{88})$ .

Skipping pair  $p_{49}$  and  $p_{88}$  because gcd of their leading monoms is zero.

3562. Creating S-polynomial from the pair  $(p_{49}, p_{89})$ .

Skipping pair  $p_{49}$  and  $p_{89}$  because gcd of their leading monoms is zero.

3563. Creating S-polynomial from the pair  $(p_{49}, p_{90})$ .  
 Skipping pair  $p_{49}$  and  $p_{90}$  because gcd of their leading monoms is zero.
3564. Creating S-polynomial from the pair  $(p_{49}, p_{91})$ .  
 Skipping pair  $p_{49}$  and  $p_{91}$  because gcd of their leading monoms is zero.
3565. Creating S-polynomial from the pair  $(p_{49}, p_{92})$ .  
 Skipping pair  $p_{49}$  and  $p_{92}$  because gcd of their leading monoms is zero.
3566. Creating S-polynomial from the pair  $(p_{49}, p_{93})$ .  
 Skipping pair  $p_{49}$  and  $p_{93}$  because gcd of their leading monoms is zero.
3567. Creating S-polynomial from the pair  $(p_{49}, p_{94})$ .  
 Skipping pair  $p_{49}$  and  $p_{94}$  because gcd of their leading monoms is zero.
3568. Creating S-polynomial from the pair  $(p_{49}, p_{95})$ .  
 Forming S-pol of  $p_{49}$  and  $p_{95}$ : Polynomial too big for output (text size is 1291 characters, number of terms is 15)  
 Reduced to zero.
3569. Creating S-polynomial from the pair  $(p_{49}, p_{96})$ .  
 Forming S-pol of  $p_{49}$  and  $p_{96}$ :

$$\begin{aligned}
 p_{846} = & (-8192u_5u_3^{16}u_1^{13} - 32768u_5u_3^{14}u_1^{15})x_8x_6 - 2048u_3^{18}u_1^{11}x_8x_4^2 + \\
 & 1024u_5u_3^{19}u_1^{10}x_8x_4 + (4096u_3^{17}u_1^{12} + 16384u_3^{15}u_1^{14})x_6^2x_5 + \\
 & (8192u_6u_3^{16}u_1^{13} + 32768u_6u_3^{14}u_1^{15})x_6^2 - 8192u_3^{16}u_1^{13}x_6x_5x_4 + \\
 & (2048u_5u_3^{17}u_1^{11} + 8192u_5u_3^{15}u_1^{13})x_6x_5x_2 + \\
 & (-2048u_6u_3^{17}u_1^{11} - 8192u_6u_3^{15}u_1^{13})x_6x_4x_2 - 16384u_6u_3^{15}u_1^{14}x_6x_4 + \\
 & 1024u_5u_3^{18}u_1^{10}x_5x_4x_2 + \\
 & (-512u_5u_3^{20}u_1^9 - 2048u_5u_3^{18}u_1^{11})x_5x_4 + 4096u_6u_3^{16}u_1^{12}x_4^2x_2 + \\
 & (512u_6u_5u_3^{19}u_1^9 + 2048u_6u_5u_3^{17}u_1^{11})x_4x_2
 \end{aligned}$$

Reduced to zero.

3570. Creating S-polynomial from the pair  $(p_{49}, p_{97})$ .  
 Forming S-pol of  $p_{49}$  and  $p_{97}$ :

$$\begin{aligned}
 p_{847} = & -32768u_3^{26}u_1^{15}x_8x_4^2 + 16384u_5u_3^{27}u_1^{14}x_8x_4 + \\
 & (65536u_3^{25}u_1^{16} + 262144u_3^{23}u_1^{18})x_6^2x_5 + \\
 & (-262144u_3^{22}u_1^{18} + 131072u_3^{22}u_1^{17} - 1048576u_3^{20}u_1^{20} + \\
 & 524288u_3^{20}u_1^{19})x_6x_5x_4x_2 + 524288u_3^{22}u_1^{19}x_6x_5x_4 + \\
 & (32768u_5u_3^{25}u_1^{15} + 131072u_5u_3^{23}u_1^{17})x_6x_5x_2 + \\
 & (-65536u_5u_3^{25}u_1^{16} - 262144u_5u_3^{23}u_1^{18})x_6x_5 + \\
 & (-32768u_6u_3^{25}u_1^{15} - 262144u_6u_3^{23}u_1^{17} - 524288u_6u_3^{21}u_1^{19})x_6x_4x_2 +
 \end{aligned}$$

$$\begin{aligned}
& (65536u_6u_3^{25}u_1^{16} + 131072u_6u_3^{23}u_1^{17} + 524288u_6u_3^{21}u_1^{19})x_6x_4 + \\
& 16384u_5u_3^{26}u_1^{14}x_5x_4x_2 + \\
& (-8192u_5u_3^{28}u_1^{13} - 32768u_5u_3^{26}u_1^{15})x_5x_4 + 65536u_6u_3^{24}u_1^{16}x_4^2x_2 + \\
& (8192u_6u_5u_3^{27}u_1^{13} + 32768u_6u_5u_3^{25}u_1^{15})x_4x_2
\end{aligned}$$

S-pol added.

3571. Creating S-polynomial from the pair  $(p_{49}, p_{98})$ .

Forming S-pol of  $p_{49}$  and  $p_{98}$ : Polynomial too big for output (text size is 5220 characters, number of terms is 34)

Reduced to zero.

3572. Creating S-polynomial from the pair  $(p_{49}, p_{99})$ .

Forming S-pol of  $p_{49}$  and  $p_{99}$ : Polynomial too big for output (text size is 5216 characters, number of terms is 34)

Reduced to zero.

3573. Creating S-polynomial from the pair  $(p_{49}, p_{100})$ .

Skipping pair  $p_{49}$  and  $p_{100}$  because gcd of their leading monoms is zero.

3574. Creating S-polynomial from the pair  $(p_{49}, p_{101})$ .

Skipping pair  $p_{49}$  and  $p_{101}$  because gcd of their leading monoms is zero.

3575. Creating S-polynomial from the pair  $(p_{49}, p_{102})$ .

Skipping pair  $p_{49}$  and  $p_{102}$  because gcd of their leading monoms is zero.

3576. Creating S-polynomial from the pair  $(p_{49}, p_{103})$ .

Skipping pair  $p_{49}$  and  $p_{103}$  because gcd of their leading monoms is zero.

3577. Creating S-polynomial from the pair  $(p_{49}, p_{104})$ .

Skipping pair  $p_{49}$  and  $p_{104}$  because gcd of their leading monoms is zero.

3578. Creating S-polynomial from the pair  $(p_{49}, p_{105})$ .

Skipping pair  $p_{49}$  and  $p_{105}$  because gcd of their leading monoms is zero.

3579. Creating S-polynomial from the pair  $(p_{49}, p_{106})$ .

Skipping pair  $p_{49}$  and  $p_{106}$  because gcd of their leading monoms is zero.

3580. Creating S-polynomial from the pair  $(p_{50}, p_{51})$ .

Forming S-pol of  $p_{50}$  and  $p_{51}$ :

$$\begin{aligned}
p_{848} = & (512u_5u_3^{18}u_1^9 + 2048u_5u_3^{16}u_1^{11})x_8^2 + \\
& (-512u_6u_3^{18}u_1^9 - 2048u_6u_3^{16}u_1^{11})x_8x_6 + \\
& (-256u_5u_3^{19}u_1^8 - 1024u_5u_3^{17}u_1^{10})x_8x_5 + \\
& (512u_6u_3^{17}u_1^9 + 2048u_6u_3^{15}u_1^{11})x_8x_4x_2 + \\
& (256u_6u_5u_3^{18}u_1^8 + 1024u_6u_5u_3^{16}u_1^{10})x_8x_2 +
\end{aligned}$$

$$\begin{aligned}
&(-512u_6u_3^{17}u_1^9 - 2048u_6u_3^{15}u_1^{11})x_6x_5x_2 + \\
&(256u_6u_3^{19}u_1^8 + 1024u_6u_3^{17}u_1^{10})x_6x_5 + \\
&(-256u_6^2u_3^{18}u_1^8 - 1024u_6^2u_3^{16}u_1^{10})x_6x_2
\end{aligned}$$

Reduced to zero.

3581. Creating S-polynomial from the pair  $(p_{50}, p_{52})$ .

Forming S-pol of  $p_{50}$  and  $p_{52}$ :

$$\begin{aligned}
p_{849} = &(32768u_3^{29}u_1^{15} + 131072u_3^{27}u_1^{17})x_8x_6x_5 + \\
&(-16384u_3^{30}u_1^{14} - 65536u_3^{28}u_1^{16})x_8x_5x_4 + \\
&(8192u_5u_3^{31}u_1^{13} - 131072u_5u_3^{27}u_1^{17})x_8x_5 + \\
&(4096u_6u_5u_3^{31}u_1^{12} + 16384u_6u_5u_3^{29}u_1^{14} + 16384u_5u_3^{30}u_1^{14} + \\
&65536u_5u_3^{28}u_1^{16})x_5x_2 + (-8192u_5u_3^{32}u_1^{13} - 32768u_5u_3^{30}u_1^{15})x_5 + \\
&(-8192u_6^2u_5u_3^{30}u_1^{13} - 32768u_6^2u_5u_3^{28}u_1^{15})x_2 + \\
&(4096u_6^2u_5u_3^{32}u_1^{12} + 16384u_6^2u_5u_3^{30}u_1^{14})
\end{aligned}$$

Reduced to zero.

3582. Creating S-polynomial from the pair  $(p_{50}, p_{53})$ .

Forming S-pol of  $p_{50}$  and  $p_{53}$ :

$$p_{850} = 0$$

Reduced to zero.

3583. Creating S-polynomial from the pair  $(p_{50}, p_{54})$ .

Skipping pair  $p_{50}$  and  $p_{54}$  because gcd of their leading monoms is zero.

3584. Creating S-polynomial from the pair  $(p_{50}, p_{55})$ .

Skipping pair  $p_{50}$  and  $p_{55}$  because gcd of their leading monoms is zero.

3585. Creating S-polynomial from the pair  $(p_{50}, p_{56})$ .

Skipping pair  $p_{50}$  and  $p_{56}$  because gcd of their leading monoms is zero.

3586. Creating S-polynomial from the pair  $(p_{50}, p_{57})$ .

Skipping pair  $p_{50}$  and  $p_{57}$  because gcd of their leading monoms is zero.

3587. Creating S-polynomial from the pair  $(p_{50}, p_{58})$ .

Skipping pair  $p_{50}$  and  $p_{58}$  because gcd of their leading monoms is zero.

3588. Creating S-polynomial from the pair  $(p_{50}, p_{59})$ .

Skipping pair  $p_{50}$  and  $p_{59}$  because gcd of their leading monoms is zero.

3589. Creating S-polynomial from the pair  $(p_{50}, p_{60})$ .

Skipping pair  $p_{50}$  and  $p_{60}$  because gcd of their leading monoms is zero.

3590. Creating S-polynomial from the pair  $(p_{50}, p_{61})$ .  
 Skipping pair  $p_{50}$  and  $p_{61}$  because gcd of their leading monoms is zero.
3591. Creating S-polynomial from the pair  $(p_{50}, p_{62})$ .  
 Skipping pair  $p_{50}$  and  $p_{62}$  because gcd of their leading monoms is zero.
3592. Creating S-polynomial from the pair  $(p_{50}, p_{63})$ .  
 Skipping pair  $p_{50}$  and  $p_{63}$  because gcd of their leading monoms is zero.
3593. Creating S-polynomial from the pair  $(p_{50}, p_{64})$ .  
 Skipping pair  $p_{50}$  and  $p_{64}$  because gcd of their leading monoms is zero.
3594. Creating S-polynomial from the pair  $(p_{50}, p_{65})$ .  
 Skipping pair  $p_{50}$  and  $p_{65}$  because gcd of their leading monoms is zero.
3595. Creating S-polynomial from the pair  $(p_{50}, p_{66})$ .  
 Skipping pair  $p_{50}$  and  $p_{66}$  because gcd of their leading monoms is zero.
3596. Creating S-polynomial from the pair  $(p_{50}, p_{67})$ .  
 Skipping pair  $p_{50}$  and  $p_{67}$  because gcd of their leading monoms is zero.
3597. Creating S-polynomial from the pair  $(p_{50}, p_{68})$ .  
 Skipping pair  $p_{50}$  and  $p_{68}$  because gcd of their leading monoms is zero.
3598. Creating S-polynomial from the pair  $(p_{50}, p_{69})$ .  
 Skipping pair  $p_{50}$  and  $p_{69}$  because gcd of their leading monoms is zero.
3599. Creating S-polynomial from the pair  $(p_{50}, p_{70})$ .  
 Skipping pair  $p_{50}$  and  $p_{70}$  because gcd of their leading monoms is zero.
3600. Creating S-polynomial from the pair  $(p_{50}, p_{71})$ .  
 Skipping pair  $p_{50}$  and  $p_{71}$  because gcd of their leading monoms is zero.
3601. Creating S-polynomial from the pair  $(p_{50}, p_{72})$ .  
 Skipping pair  $p_{50}$  and  $p_{72}$  because gcd of their leading monoms is zero.
3602. Creating S-polynomial from the pair  $(p_{50}, p_{73})$ .  
 Skipping pair  $p_{50}$  and  $p_{73}$  because gcd of their leading monoms is zero.
3603. Creating S-polynomial from the pair  $(p_{50}, p_{74})$ .  
 Skipping pair  $p_{50}$  and  $p_{74}$  because gcd of their leading monoms is zero.
3604. Creating S-polynomial from the pair  $(p_{50}, p_{75})$ .  
 Skipping pair  $p_{50}$  and  $p_{75}$  because gcd of their leading monoms is zero.
3605. Creating S-polynomial from the pair  $(p_{50}, p_{76})$ .  
 Skipping pair  $p_{50}$  and  $p_{76}$  because gcd of their leading monoms is zero.
3606. Creating S-polynomial from the pair  $(p_{50}, p_{77})$ .  
 Skipping pair  $p_{50}$  and  $p_{77}$  because gcd of their leading monoms is zero.

3607. Creating S-polynomial from the pair  $(p_{50}, p_{78})$ .

Skipping pair  $p_{50}$  and  $p_{78}$  because gcd of their leading monoms is zero.

3608. Creating S-polynomial from the pair  $(p_{50}, p_{79})$ .

Skipping pair  $p_{50}$  and  $p_{79}$  because gcd of their leading monoms is zero.

3609. Creating S-polynomial from the pair  $(p_{50}, p_{80})$ .

Skipping pair  $p_{50}$  and  $p_{80}$  because gcd of their leading monoms is zero.

3610. Creating S-polynomial from the pair  $(p_{50}, p_{81})$ .

Forming S-pol of  $p_{50}$  and  $p_{81}$ :

$$\begin{aligned} p_{851} = & (8192u_6u_3^{20}u_1^{13} + 32768u_6u_3^{18}u_1^{15})x_8x_6 + \\ & (-4096u_6u_3^{21}u_1^{12} - 16384u_6u_3^{19}u_1^{14})x_8x_4 + \\ & (2048u_6u_5u_3^{22}u_1^{11} - 32768u_6u_5u_3^{18}u_1^{15})x_8 + \\ & (2048u_6u_5u_3^{21}u_1^{11} + 8192u_6u_5u_3^{19}u_1^{13})x_5x_2 + \\ & (-1024u_6u_5u_3^{23}u_1^{10} - 4096u_6u_5u_3^{21}u_1^{12})x_5 + \\ & (1024u_6^2u_5u_3^{22}u_1^{10} + 4096u_6^2u_5u_3^{20}u_1^{12})x_2 \end{aligned}$$

Reduced to zero.

3611. Creating S-polynomial from the pair  $(p_{50}, p_{82})$ .

Skipping pair  $p_{50}$  and  $p_{82}$  because gcd of their leading monoms is zero.

3612. Creating S-polynomial from the pair  $(p_{50}, p_{83})$ .

Forming S-pol of  $p_{50}$  and  $p_{83}$ : Polynomial too big for output (text size is 1077 characters, number of terms is 11)

Reduced to zero.

3613. Creating S-polynomial from the pair  $(p_{50}, p_{84})$ .

Forming S-pol of  $p_{50}$  and  $p_{84}$ :

$$\begin{aligned} p_{852} = & (1024u_5u_3^{18}u_1^{10} + 4096u_5u_3^{16}u_1^{12})x_8^2 + \\ & (-1024u_6u_3^{18}u_1^{10} - 4096u_6u_3^{16}u_1^{12})x_8x_6 + \\ & (-512u_5u_3^{19}u_1^9 - 2048u_5u_3^{17}u_1^{11})x_8x_5 + \\ & (1024u_6u_3^{17}u_1^{10} + 4096u_6u_3^{15}u_1^{12})x_8x_4x_2 + \\ & (512u_6u_5u_3^{18}u_1^9 + 2048u_6u_5u_3^{16}u_1^{11})x_8x_2 + \\ & (-1024u_6u_3^{17}u_1^{10} - 4096u_6u_3^{15}u_1^{12})x_6x_5x_2 + \\ & (512u_6u_3^{19}u_1^9 + 2048u_6u_3^{17}u_1^{11})x_6x_5 + \\ & (-512u_6^2u_3^{18}u_1^9 - 2048u_6^2u_3^{16}u_1^{11})x_6x_2 \end{aligned}$$

Reduced to zero.

3614. Creating S-polynomial from the pair  $(p_{50}, p_{85})$ .

Forming S-pol of  $p_{50}$  and  $p_{85}$ :

$$\begin{aligned} p_{853} = & (-2048u_3^{17}u_1^{11} - 8192u_3^{15}u_1^{13})x_8^2x_4 + \\ & (-4096u_5u_3^{16}u_1^{12} - 16384u_5u_3^{14}u_1^{14})x_8^2 + \\ & (2048u_3^{17}u_1^{11} + 8192u_3^{15}u_1^{13})x_8x_6x_5 + \\ & (4096u_6u_3^{16}u_1^{12} + 16384u_6u_3^{14}u_1^{14})x_8x_6 + \\ & (1024u_5u_3^{17}u_1^{10} + 4096u_5u_3^{15}u_1^{12})x_8x_5x_2 + \\ & (-512u_6u_3^{19}u_1^9 - 2048u_6u_3^{17}u_1^{11})x_8x_4 + \\ & (512u_6u_5u_3^{18}u_1^9 + 2048u_6u_5u_3^{16}u_1^{11})x_8x_2 + \\ & (-1024u_6u_3^{17}u_1^{10} - 4096u_6u_3^{15}u_1^{12})x_6x_5x_2 + \\ & (512u_6u_3^{19}u_1^9 + 2048u_6u_3^{17}u_1^{11})x_6x_5 + \\ & (-512u_6^2u_3^{18}u_1^9 - 2048u_6^2u_3^{16}u_1^{11})x_6x_2 \end{aligned}$$

Reduced to zero.

3615. Creating S-polynomial from the pair  $(p_{50}, p_{86})$ .

Forming S-pol of  $p_{50}$  and  $p_{86}$ : Polynomial too big for output (text size is 1140 characters, number of terms is 10)

S-pol added.

3616. Creating S-polynomial from the pair  $(p_{50}, p_{87})$ .

Forming S-pol of  $p_{50}$  and  $p_{87}$ :

$$\begin{aligned} p_{854} = & (64u_6u_3^{16}u_1^6 + 256u_6u_3^{14}u_1^8)x_8x_2 + \\ & (-32u_6u_3^{18}u_1^5 - 128u_6u_3^{16}u_1^7)x_8 + \\ & (-32u_6u_3^{17}u_1^5 - 128u_6u_3^{15}u_1^7)x_5x_2 + \\ & (16u_6u_3^{19}u_1^4 + 64u_6u_3^{17}u_1^6)x_5 + \\ & (-16u_6^2u_3^{18}u_1^4 - 64u_6^2u_3^{16}u_1^6)x_2 \end{aligned}$$

Reduced to zero.

3617. Creating S-polynomial from the pair  $(p_{50}, p_{88})$ .

Skipping pair  $p_{50}$  and  $p_{88}$  because gcd of their leading monoms is zero.

3618. Creating S-polynomial from the pair  $(p_{50}, p_{89})$ .

Skipping pair  $p_{50}$  and  $p_{89}$  because gcd of their leading monoms is zero.

3619. Creating S-polynomial from the pair  $(p_{50}, p_{90})$ .

Skipping pair  $p_{50}$  and  $p_{90}$  because gcd of their leading monoms is zero.

3620. Creating S-polynomial from the pair  $(p_{50}, p_{91})$ .

Skipping pair  $p_{50}$  and  $p_{91}$  because gcd of their leading monoms is zero.

3621. Creating S-polynomial from the pair  $(p_{50}, p_{92})$ .  
 Skipping pair  $p_{50}$  and  $p_{92}$  because gcd of their leading monoms is zero.
3622. Creating S-polynomial from the pair  $(p_{50}, p_{93})$ .  
 Skipping pair  $p_{50}$  and  $p_{93}$  because gcd of their leading monoms is zero.
3623. Creating S-polynomial from the pair  $(p_{50}, p_{94})$ .  
 Skipping pair  $p_{50}$  and  $p_{94}$  because gcd of their leading monoms is zero.
3624. Creating S-polynomial from the pair  $(p_{50}, p_{95})$ .  
 Forming S-pol of  $p_{50}$  and  $p_{95}$ : Polynomial too big for output (text size is 1505 characters, number of terms is 16)  
 Reduced to zero.
3625. Creating S-polynomial from the pair  $(p_{50}, p_{96})$ .  
 Forming S-pol of  $p_{50}$  and  $p_{96}$ :

$$\begin{aligned}
 p_{855} = & (-512u_5u_3^{14}u_1^9 - 2048u_5u_3^{12}u_1^{11})x_8^2 + \\
 & (256u_3^{15}u_1^8 + 1024u_3^{13}u_1^{10})x_8x_6x_5 + \\
 & (512u_6u_3^{14}u_1^9 + 2048u_6u_3^{12}u_1^{11})x_8x_6 + \\
 & (-128u_3^{16}u_1^7 - 512u_3^{14}u_1^9)x_8x_5x_4 + \\
 & (128u_5u_3^{15}u_1^7 + 512u_5u_3^{13}u_1^9)x_8x_5x_2 + \\
 & (-128u_6u_3^{15}u_1^7 - 512u_6u_3^{13}u_1^9)x_8x_4x_2 + \\
 & (64u_6u_3^{17}u_1^6 - 1024u_6u_3^{13}u_1^{10})x_8x_4 + \\
 & (64u_6u_3^{16}u_1^6 + 256u_6u_3^{14}u_1^8)x_5x_4x_2 + \\
 & (-32u_6u_3^{18}u_1^5 - 128u_6u_3^{16}u_1^7)x_5x_4 + \\
 & (32u_6^2u_3^{17}u_1^5 + 128u_6^2u_3^{15}u_1^7)x_4x_2
 \end{aligned}$$

Reduced to zero.

3626. Creating S-polynomial from the pair  $(p_{50}, p_{97})$ .  
 Forming S-pol of  $p_{50}$  and  $p_{97}$ :

$$\begin{aligned}
 p_{856} = & (4096u_3^{23}u_1^{12} + 16384u_3^{21}u_1^{14})x_8x_6x_5 + \\
 & (-16384u_3^{20}u_1^{14} + 8192u_3^{20}u_1^{13} - 65536u_3^{18}u_1^{16} + \\
 & 32768u_3^{18}u_1^{15})x_8x_5x_4x_2 + (-2048u_3^{24}u_1^{11} + 32768u_3^{20}u_1^{15})x_8x_5x_4 + \\
 & (2048u_5u_3^{23}u_1^{11} + 8192u_5u_3^{21}u_1^{13})x_8x_5x_2 + \\
 & (-4096u_5u_3^{23}u_1^{12} - 16384u_5u_3^{21}u_1^{14})x_8x_5 + \\
 & (-2048u_6u_3^{23}u_1^{11} - 16384u_6u_3^{21}u_1^{13} - 32768u_6u_3^{19}u_1^{15})x_8x_4x_2 + \\
 & (1024u_6u_3^{25}u_1^{10} + 4096u_6u_3^{23}u_1^{12} + 8192u_6u_3^{21}u_1^{13} + \\
 & 32768u_6u_3^{19}u_1^{15})x_8x_4 + (1024u_6u_3^{24}u_1^{10} + 4096u_6u_3^{22}u_1^{12})x_5x_4x_2 + \\
 & (-512u_6u_3^{26}u_1^9 - 2048u_6u_3^{24}u_1^{11})x_5x_4 + \\
 & (512u_6^2u_3^{25}u_1^9 + 2048u_6^2u_3^{23}u_1^{11})x_4x_2
 \end{aligned}$$

S-pol added.



3627. Creating S-polynomial from the pair  $(p_{50}, p_{98})$ .  
 Forming S-pol of  $p_{50}$  and  $p_{98}$ : Polynomial too big for output (text size is 4866 characters, number of terms is 30)  
 Reduced to zero.
3628. Creating S-polynomial from the pair  $(p_{50}, p_{99})$ .  
 Forming S-pol of  $p_{50}$  and  $p_{99}$ : Polynomial too big for output (text size is 4862 characters, number of terms is 30)  
 Reduced to zero.
3629. Creating S-polynomial from the pair  $(p_{50}, p_{100})$ .  
 Skipping pair  $p_{50}$  and  $p_{100}$  because gcd of their leading monoms is zero.
3630. Creating S-polynomial from the pair  $(p_{50}, p_{101})$ .  
 Skipping pair  $p_{50}$  and  $p_{101}$  because gcd of their leading monoms is zero.
3631. Creating S-polynomial from the pair  $(p_{50}, p_{102})$ .  
 Skipping pair  $p_{50}$  and  $p_{102}$  because gcd of their leading monoms is zero.
3632. Creating S-polynomial from the pair  $(p_{50}, p_{103})$ .  
 Skipping pair  $p_{50}$  and  $p_{103}$  because gcd of their leading monoms is zero.
3633. Creating S-polynomial from the pair  $(p_{50}, p_{104})$ .  
 Skipping pair  $p_{50}$  and  $p_{104}$  because gcd of their leading monoms is zero.
3634. Creating S-polynomial from the pair  $(p_{50}, p_{105})$ .  
 Skipping pair  $p_{50}$  and  $p_{105}$  because gcd of their leading monoms is zero.
3635. Creating S-polynomial from the pair  $(p_{50}, p_{106})$ .  
 Skipping pair  $p_{50}$  and  $p_{106}$  because gcd of their leading monoms is zero.
3636. Creating S-polynomial from the pair  $(p_{51}, p_{52})$ .  
 Forming S-pol of  $p_{51}$  and  $p_{52}$ : Polynomial too big for output (text size is 1066 characters, number of terms is 15)  
 Reduced to zero.
3637. Creating S-polynomial from the pair  $(p_{51}, p_{53})$ .  
 Forming S-pol of  $p_{51}$  and  $p_{53}$ :  

$$p_{857} = 256u_5u_3^{12}u_1^8x_8^2 - 256u_6u_3^{12}u_1^8x_8x_6 - 128u_5u_3^{13}u_1^7x_8x_5 +$$

$$256u_6u_3^{11}u_1^8x_8x_4x_2 + 128u_6u_5u_3^{12}u_1^7x_8x_2 -$$

$$256u_6u_3^{11}u_1^8x_6x_5x_2 + 128u_6u_3^{13}u_1^7x_6x_5 -$$

$$128u_6^2u_3^{12}u_1^7x_6x_2$$
  
 Reduced to zero.
3638. Creating S-polynomial from the pair  $(p_{51}, p_{54})$ .  
 Skipping pair  $p_{51}$  and  $p_{54}$  because gcd of their leading monoms is zero.

3639. Creating S-polynomial from the pair  $(p_{51}, p_{55})$ .  
 Skipping pair  $p_{51}$  and  $p_{55}$  because gcd of their leading monoms is zero.
3640. Creating S-polynomial from the pair  $(p_{51}, p_{56})$ .  
 Skipping pair  $p_{51}$  and  $p_{56}$  because gcd of their leading monoms is zero.
3641. Creating S-polynomial from the pair  $(p_{51}, p_{57})$ .  
 Skipping pair  $p_{51}$  and  $p_{57}$  because gcd of their leading monoms is zero.
3642. Creating S-polynomial from the pair  $(p_{51}, p_{58})$ .  
 Skipping pair  $p_{51}$  and  $p_{58}$  because gcd of their leading monoms is zero.
3643. Creating S-polynomial from the pair  $(p_{51}, p_{59})$ .  
 Skipping pair  $p_{51}$  and  $p_{59}$  because gcd of their leading monoms is zero.
3644. Creating S-polynomial from the pair  $(p_{51}, p_{60})$ .  
 Skipping pair  $p_{51}$  and  $p_{60}$  because gcd of their leading monoms is zero.
3645. Creating S-polynomial from the pair  $(p_{51}, p_{61})$ .  
 Skipping pair  $p_{51}$  and  $p_{61}$  because gcd of their leading monoms is zero.
3646. Creating S-polynomial from the pair  $(p_{51}, p_{62})$ .  
 Skipping pair  $p_{51}$  and  $p_{62}$  because gcd of their leading monoms is zero.
3647. Creating S-polynomial from the pair  $(p_{51}, p_{63})$ .  
 Skipping pair  $p_{51}$  and  $p_{63}$  because gcd of their leading monoms is zero.
3648. Creating S-polynomial from the pair  $(p_{51}, p_{64})$ .  
 Skipping pair  $p_{51}$  and  $p_{64}$  because gcd of their leading monoms is zero.
3649. Creating S-polynomial from the pair  $(p_{51}, p_{65})$ .  
 Skipping pair  $p_{51}$  and  $p_{65}$  because gcd of their leading monoms is zero.
3650. Creating S-polynomial from the pair  $(p_{51}, p_{66})$ .  
 Skipping pair  $p_{51}$  and  $p_{66}$  because gcd of their leading monoms is zero.
3651. Creating S-polynomial from the pair  $(p_{51}, p_{67})$ .  
 Skipping pair  $p_{51}$  and  $p_{67}$  because gcd of their leading monoms is zero.
3652. Creating S-polynomial from the pair  $(p_{51}, p_{68})$ .  
 Skipping pair  $p_{51}$  and  $p_{68}$  because gcd of their leading monoms is zero.
3653. Creating S-polynomial from the pair  $(p_{51}, p_{69})$ .  
 Skipping pair  $p_{51}$  and  $p_{69}$  because gcd of their leading monoms is zero.
3654. Creating S-polynomial from the pair  $(p_{51}, p_{70})$ .  
 Skipping pair  $p_{51}$  and  $p_{70}$  because gcd of their leading monoms is zero.
3655. Creating S-polynomial from the pair  $(p_{51}, p_{71})$ .  
 Skipping pair  $p_{51}$  and  $p_{71}$  because gcd of their leading monoms is zero.

3656. Creating S-polynomial from the pair  $(p_{51}, p_{72})$ .  
 Skipping pair  $p_{51}$  and  $p_{72}$  because gcd of their leading monoms is zero.
3657. Creating S-polynomial from the pair  $(p_{51}, p_{73})$ .  
 Skipping pair  $p_{51}$  and  $p_{73}$  because gcd of their leading monoms is zero.
3658. Creating S-polynomial from the pair  $(p_{51}, p_{74})$ .  
 Skipping pair  $p_{51}$  and  $p_{74}$  because gcd of their leading monoms is zero.
3659. Creating S-polynomial from the pair  $(p_{51}, p_{75})$ .  
 Skipping pair  $p_{51}$  and  $p_{75}$  because gcd of their leading monoms is zero.
3660. Creating S-polynomial from the pair  $(p_{51}, p_{76})$ .  
 Skipping pair  $p_{51}$  and  $p_{76}$  because gcd of their leading monoms is zero.
3661. Creating S-polynomial from the pair  $(p_{51}, p_{77})$ .  
 Skipping pair  $p_{51}$  and  $p_{77}$  because gcd of their leading monoms is zero.
3662. Creating S-polynomial from the pair  $(p_{51}, p_{78})$ .  
 Skipping pair  $p_{51}$  and  $p_{78}$  because gcd of their leading monoms is zero.
3663. Creating S-polynomial from the pair  $(p_{51}, p_{79})$ .  
 Skipping pair  $p_{51}$  and  $p_{79}$  because gcd of their leading monoms is zero.
3664. Creating S-polynomial from the pair  $(p_{51}, p_{80})$ .  
 Skipping pair  $p_{51}$  and  $p_{80}$  because gcd of their leading monoms is zero.
3665. Creating S-polynomial from the pair  $(p_{51}, p_{81})$ .  
 Forming S-pol of  $p_{51}$  and  $p_{81}$ :

$$\begin{aligned} p_{858} = & -16384u_5^2u_3^{18}u_1^{14}x_8 - 65536u_6u_3^{16}u_1^{16}x_6^2 + \\ & 32768u_6u_3^{17}u_1^{15}x_6x_4 + 65536u_6u_5u_3^{16}u_1^{16}x_6 + 8192u_5^2u_3^{19}u_1^{13}x_5 - \\ & 16384u_6u_5u_3^{17}u_1^{14}x_4x_2 - 8192u_6u_5^2u_3^{18}u_1^{13}x_2 \end{aligned}$$

Reduced to zero.

3666. Creating S-polynomial from the pair  $(p_{51}, p_{82})$ .  
 Forming S-pol of  $p_{51}$  and  $p_{82}$ :

$$\begin{aligned} p_{859} = & 512u_3^{13}u_1^9x_8x_4 - 512u_5u_3^{12}u_1^9x_8x_2 + \\ & (256u_5u_3^{14}u_1^8 + 1024u_5u_3^{12}u_1^{10})x_8 - 512u_3^{13}u_1^9x_6x_5 - \\ & 1024u_6u_3^{12}u_1^{10}x_6 - 128u_5u_3^{15}u_1^7x_5 + 256u_6u_3^{13}u_1^8x_4x_2 + \\ & 128u_6u_5u_3^{14}u_1^7x_2 \end{aligned}$$

Reduced to zero.

3667. Creating S-polynomial from the pair  $(p_{51}, p_{83})$ .

Forming S-pol of  $p_{51}$  and  $p_{83}$ :

$$\begin{aligned} p_{860} = & -33554432u_5u_3^{25}u_1^{25}x_8x_6x_4 + 67108864u_6u_3^{24}u_1^{26}x_6^3 + \\ & (16777216u_6u_5u_3^{26}u_1^{24} - 67108864u_6u_5u_3^{24}u_1^{26})x_6^2 + \\ & 16777216u_5u_3^{26}u_1^{24}x_6x_5x_4 + 16777216u_6u_5u_3^{25}u_1^{24}x_6x_4x_2 + \\ & (-8388608u_6u_5u_3^{27}u_1^{23} - 33554432u_6u_3^{26}u_1^{25})x_6x_4 + \\ & 8388608u_6u_5^2u_3^{26}u_1^{23}x_6x_2 + 16777216u_6u_5^2u_3^{26}u_1^{24}x_6 \end{aligned}$$

Reduced to zero.

3668. Creating S-polynomial from the pair  $(p_{51}, p_{84})$ .

Forming S-pol of  $p_{51}$  and  $p_{84}$ :

$$p_{861} = 0$$

Reduced to zero.

3669. Creating S-polynomial from the pair  $(p_{51}, p_{85})$ .

Forming S-pol of  $p_{51}$  and  $p_{85}$ :

$$\begin{aligned} p_{862} = & 16384u_3^{13}u_1^{14}x_8x_6x_4 + \\ & (8192u_5u_3^{14}u_1^{13} + 32768u_5u_3^{12}u_1^{15})x_8x_6 - 16384u_3^{13}u_1^{14}x_6^2x_5 + \\ & (-8192u_6u_3^{14}u_1^{13} - 32768u_6u_3^{12}u_1^{15})x_6^2 - 8192u_5u_3^{13}u_1^{13}x_6x_5x_2 - \\ & 4096u_5u_3^{15}u_1^{12}x_6x_5 + 8192u_6u_3^{13}u_1^{13}x_6x_4x_2 + \\ & 4096u_6u_3^{15}u_1^{12}x_6x_4 \end{aligned}$$

Reduced to zero.

3670. Creating S-polynomial from the pair  $(p_{51}, p_{86})$ .

Forming S-pol of  $p_{51}$  and  $p_{86}$ :

$$\begin{aligned} p_{863} = & (-16384u_5u_3^{22}u_1^{14} + 32768u_5u_3^{20}u_1^{15})x_8x_4 - 65536u_3^{20}u_1^{16}x_6^2x_5 + \\ & (262144u_3^{17}u_1^{18} - 131072u_3^{17}u_1^{17})x_6x_5x_4x_2 + \\ & (32768u_3^{21}u_1^{15} - 131072u_3^{19}u_1^{17})x_6x_5x_4 - 32768u_5u_3^{20}u_1^{15}x_6x_5x_2 + \\ & 65536u_5u_3^{20}u_1^{16}x_6x_5 + \\ & (32768u_6u_3^{20}u_1^{15} + 131072u_6u_3^{18}u_1^{17} - 65536u_6u_3^{18}u_1^{16})x_6x_4x_2 - \\ & 131072u_6u_3^{18}u_1^{17}x_6x_4 + (8192u_5u_3^{23}u_1^{13} - 16384u_5u_3^{21}u_1^{14})x_5x_4 + \\ & (-16384u_6u_3^{21}u_1^{14} + 32768u_6u_3^{19}u_1^{15})x_4^2x_2 + \\ & (-8192u_6u_5u_3^{22}u_1^{13} + 16384u_6u_5u_3^{20}u_1^{14})x_4x_2 \end{aligned}$$

S-pol added.

3671. Creating S-polynomial from the pair  $(p_{51}, p_{87})$ .

Forming S-pol of  $p_{51}$  and  $p_{87}$ :

$$p_{864} = 256u_5u_3^{14}u_1^8x_8 - 512u_6u_3^{12}u_1^9x_6x_2 - 128u_5u_3^{15}u_1^7x_5 + \\ 256u_6u_3^{13}u_1^8x_4x_2 + 128u_6u_5u_3^{14}u_1^7x_2$$

Reduced to zero.

3672. Creating S-polynomial from the pair  $(p_{51}, p_{88})$ .

Skipping pair  $p_{51}$  and  $p_{88}$  because gcd of their leading monoms is zero.

3673. Creating S-polynomial from the pair  $(p_{51}, p_{89})$ .

Skipping pair  $p_{51}$  and  $p_{89}$  because gcd of their leading monoms is zero.

3674. Creating S-polynomial from the pair  $(p_{51}, p_{90})$ .

Skipping pair  $p_{51}$  and  $p_{90}$  because gcd of their leading monoms is zero.

3675. Creating S-polynomial from the pair  $(p_{51}, p_{91})$ .

Skipping pair  $p_{51}$  and  $p_{91}$  because gcd of their leading monoms is zero.

3676. Creating S-polynomial from the pair  $(p_{51}, p_{92})$ .

Skipping pair  $p_{51}$  and  $p_{92}$  because gcd of their leading monoms is zero.

3677. Creating S-polynomial from the pair  $(p_{51}, p_{93})$ .

Skipping pair  $p_{51}$  and  $p_{93}$  because gcd of their leading monoms is zero.

3678. Creating S-polynomial from the pair  $(p_{51}, p_{94})$ .

Skipping pair  $p_{51}$  and  $p_{94}$  because gcd of their leading monoms is zero.

3679. Creating S-polynomial from the pair  $(p_{51}, p_{95})$ .

Forming S-pol of  $p_{51}$  and  $p_{95}$ :

$$p_{865} = 33554432u_5u_3^{23}u_1^{25}x_8x_6^2 + \\ (16777216u_5u_3^{24}u_1^{24} + 67108864u_5u_3^{22}u_1^{26} + 67108864u_3^{23}u_1^{26})x_8x_6x_4 + \\ (8388608u_5^2u_3^{25}u_1^{23} - 33554432u_5^2u_3^{23}u_1^{25})x_8x_6 - \\ 33554432u_6u_3^{23}u_1^{25}x_6^3 - 33554432u_3^{23}u_1^{25}x_6^2x_5x_4 - \\ 16777216u_5u_3^{24}u_1^{24}x_6^2x_5 - 67108864u_6u_3^{22}u_1^{26}x_6^2x_4 - \\ 8388608u_6u_5u_3^{25}u_1^{23}x_6^2 - 16777216u_5u_3^{23}u_1^{24}x_6x_5x_4x_2 - \\ 8388608u_5u_3^{25}u_1^{23}x_6x_5x_4 - 4194304u_5^2u_3^{26}u_1^{22}x_6x_5 + \\ 16777216u_6u_3^{23}u_1^{24}x_6x_4^2x_2 + \\ (4194304u_6u_5u_3^{26}u_1^{22} + 16777216u_6u_3^{25}u_1^{24})x_6x_4 - \\ 8388608u_6u_5^2u_3^{25}u_1^{23}x_6$$

Reduced to zero.

3680. Creating S-polynomial from the pair  $(p_{51}, p_{96})$ .

Forming S-pol of  $p_{51}$  and  $p_{96}$ :

$$\begin{aligned} p_{866} = & 4096u_5u_3^{10}u_1^{12}x_8x_6 - 512u_5u_3^{13}u_1^9x_8x_4 - 2048u_3^{11}u_1^{11}x_6^2x_5 - \\ & 4096u_6u_3^{10}u_1^{12}x_6^2 + 1024u_3^{12}u_1^{10}x_6x_5x_4 - \\ & 1024u_5u_3^{11}u_1^{10}x_6x_5x_2 + 1024u_6u_3^{11}u_1^{10}x_6x_4x_2 + \\ & 2048u_6u_3^{11}u_1^{11}x_6x_4 + 256u_5u_3^{14}u_1^8x_5x_4 - 512u_6u_3^{12}u_1^9x_4^2x_2 - \\ & 256u_6u_5u_3^{13}u_1^8x_4x_2 \end{aligned}$$

Reduced to zero.

3681. Creating S-polynomial from the pair  $(p_{51}, p_{97})$ .

Forming S-pol of  $p_{51}$  and  $p_{97}$ :

$$\begin{aligned} p_{867} = & -8192u_5u_3^{21}u_1^{13}x_8x_4 - 32768u_3^{19}u_1^{15}x_6^2x_5 + \\ & (131072u_3^{16}u_1^{17} - 65536u_3^{16}u_1^{16})x_6x_5x_4x_2 + \\ & (16384u_3^{20}u_1^{14} - 65536u_3^{18}u_1^{16})x_6x_5x_4 - 16384u_5u_3^{19}u_1^{14}x_6x_5x_2 + \\ & 32768u_5u_3^{19}u_1^{15}x_6x_5 + \\ & (16384u_6u_3^{19}u_1^{14} + 65536u_6u_3^{17}u_1^{16})x_6x_4x_2 - 65536u_6u_3^{17}u_1^{16}x_6x_4 + \\ & 4096u_5u_3^{22}u_1^{12}x_5x_4 - 8192u_6u_3^{20}u_1^{13}x_4^2x_2 - \\ & 4096u_6u_5u_3^{21}u_1^{12}x_4x_2 \end{aligned}$$

S-pol added.

3682. Creating S-polynomial from the pair  $(p_{51}, p_{98})$ .

Forming S-pol of  $p_{51}$  and  $p_{98}$ : Polynomial too big for output (text size is 2791 characters, number of terms is 31)

Reduced to zero.

3683. Creating S-polynomial from the pair  $(p_{51}, p_{99})$ .

Forming S-pol of  $p_{51}$  and  $p_{99}$ : Polynomial too big for output (text size is 2794 characters, number of terms is 31)

Reduced to zero.

3684. Creating S-polynomial from the pair  $(p_{51}, p_{100})$ .

Skipping pair  $p_{51}$  and  $p_{100}$  because gcd of their leading monoms is zero.

3685. Creating S-polynomial from the pair  $(p_{51}, p_{101})$ .

Skipping pair  $p_{51}$  and  $p_{101}$  because gcd of their leading monoms is zero.

3686. Creating S-polynomial from the pair  $(p_{51}, p_{102})$ .

Skipping pair  $p_{51}$  and  $p_{102}$  because gcd of their leading monoms is zero.

3687. Creating S-polynomial from the pair  $(p_{51}, p_{103})$ .

Skipping pair  $p_{51}$  and  $p_{103}$  because gcd of their leading monoms is zero.

3688. Creating S-polynomial from the pair  $(p_{51}, p_{104})$ .  
 Skipping pair  $p_{51}$  and  $p_{104}$  because gcd of their leading monoms is zero.
3689. Creating S-polynomial from the pair  $(p_{51}, p_{105})$ .  
 Skipping pair  $p_{51}$  and  $p_{105}$  because gcd of their leading monoms is zero.
3690. Creating S-polynomial from the pair  $(p_{51}, p_{106})$ .  
 Skipping pair  $p_{51}$  and  $p_{106}$  because gcd of their leading monoms is zero.
3691. Creating S-polynomial from the pair  $(p_{52}, p_{53})$ .  
 Forming S-pol of  $p_{52}$  and  $p_{53}$ :
- $$\begin{aligned}
 p_{868} = & 16384u_3^{23}u_1^{14}x_8x_6x_5 - 8192u_3^{24}u_1^{13}x_8x_5x_4 + \\
 & (4096u_5u_3^{25}u_1^{12} - 16384u_5u_3^{23}u_1^{14})x_8x_5 + \\
 & (2048u_6u_5u_3^{25}u_1^{11} + 8192u_5u_3^{24}u_1^{13})x_5x_2 - 4096u_5u_3^{26}u_1^{12}x_5 - \\
 & 4096u_6^2u_5u_3^{24}u_1^{12}x_2 + 2048u_6^2u_5u_3^{26}u_1^{11}
 \end{aligned}$$
- Reduced to zero.
3692. Creating S-polynomial from the pair  $(p_{52}, p_{54})$ .  
 Skipping pair  $p_{52}$  and  $p_{54}$  because gcd of their leading monoms is zero.
3693. Creating S-polynomial from the pair  $(p_{52}, p_{55})$ .  
 Skipping pair  $p_{52}$  and  $p_{55}$  because gcd of their leading monoms is zero.
3694. Creating S-polynomial from the pair  $(p_{52}, p_{56})$ .  
 Skipping pair  $p_{52}$  and  $p_{56}$  because gcd of their leading monoms is zero.
3695. Creating S-polynomial from the pair  $(p_{52}, p_{57})$ .  
 Forming S-pol of  $p_{52}$  and  $p_{57}$ : Polynomial too big for output (text size is 4007 characters, number of terms is 23)  
 Reduced to zero.
3696. Creating S-polynomial from the pair  $(p_{52}, p_{58})$ .  
 Skipping pair  $p_{52}$  and  $p_{58}$  because gcd of their leading monoms is zero.
3697. Creating S-polynomial from the pair  $(p_{52}, p_{59})$ .  
 Skipping pair  $p_{52}$  and  $p_{59}$  because gcd of their leading monoms is zero.
3698. Creating S-polynomial from the pair  $(p_{52}, p_{60})$ .  
 Skipping pair  $p_{52}$  and  $p_{60}$  because gcd of their leading monoms is zero.
3699. Creating S-polynomial from the pair  $(p_{52}, p_{61})$ .  
 Skipping pair  $p_{52}$  and  $p_{61}$  because gcd of their leading monoms is zero.
3700. Creating S-polynomial from the pair  $(p_{52}, p_{62})$ .  
 Forming S-pol of  $p_{52}$  and  $p_{62}$ : Polynomial too big for output (text size is 3491 characters, number of terms is 22)  
 Reduced to zero.

3701. Creating S-polynomial from the pair  $(p_{52}, p_{63})$ .  
 Skipping pair  $p_{52}$  and  $p_{63}$  because gcd of their leading monoms is zero.
3702. Creating S-polynomial from the pair  $(p_{52}, p_{64})$ .  
 Skipping pair  $p_{52}$  and  $p_{64}$  because gcd of their leading monoms is zero.
3703. Creating S-polynomial from the pair  $(p_{52}, p_{65})$ .  
 Skipping pair  $p_{52}$  and  $p_{65}$  because gcd of their leading monoms is zero.
3704. Creating S-polynomial from the pair  $(p_{52}, p_{66})$ .  
 Skipping pair  $p_{52}$  and  $p_{66}$  because gcd of their leading monoms is zero.
3705. Creating S-polynomial from the pair  $(p_{52}, p_{67})$ .  
 Forming S-pol of  $p_{52}$  and  $p_{67}$ : Polynomial too big for output (text size is 4007 characters, number of terms is 23)  
 Reduced to zero.
3706. Creating S-polynomial from the pair  $(p_{52}, p_{68})$ .  
 Skipping pair  $p_{52}$  and  $p_{68}$  because gcd of their leading monoms is zero.
3707. Creating S-polynomial from the pair  $(p_{52}, p_{69})$ .  
 Skipping pair  $p_{52}$  and  $p_{69}$  because gcd of their leading monoms is zero.
3708. Creating S-polynomial from the pair  $(p_{52}, p_{70})$ .  
 Skipping pair  $p_{52}$  and  $p_{70}$  because gcd of their leading monoms is zero.
3709. Creating S-polynomial from the pair  $(p_{52}, p_{71})$ .  
 Skipping pair  $p_{52}$  and  $p_{71}$  because gcd of their leading monoms is zero.
3710. Creating S-polynomial from the pair  $(p_{52}, p_{72})$ .  
 Forming S-pol of  $p_{52}$  and  $p_{72}$ : Polynomial too big for output (text size is 3491 characters, number of terms is 22)  
 Reduced to zero.
3711. Creating S-polynomial from the pair  $(p_{52}, p_{73})$ .  
 Skipping pair  $p_{52}$  and  $p_{73}$  because gcd of their leading monoms is zero.
3712. Creating S-polynomial from the pair  $(p_{52}, p_{74})$ .  
 Skipping pair  $p_{52}$  and  $p_{74}$  because gcd of their leading monoms is zero.
3713. Creating S-polynomial from the pair  $(p_{52}, p_{75})$ .  
 Skipping pair  $p_{52}$  and  $p_{75}$  because gcd of their leading monoms is zero.
3714. Creating S-polynomial from the pair  $(p_{52}, p_{76})$ .  
 Skipping pair  $p_{52}$  and  $p_{76}$  because gcd of their leading monoms is zero.
3715. Creating S-polynomial from the pair  $(p_{52}, p_{77})$ .  
 Skipping pair  $p_{52}$  and  $p_{77}$  because gcd of their leading monoms is zero.



3716. Creating S-polynomial from the pair  $(p_{52}, p_{78})$ .  
 Skipping pair  $p_{52}$  and  $p_{78}$  because gcd of their leading monoms is zero.
3717. Creating S-polynomial from the pair  $(p_{52}, p_{79})$ .  
 Forming S-pol of  $p_{52}$  and  $p_{79}$ : Polynomial too big for output (text size is 2723 characters, number of terms is 18)  
 S-pol added.
3718. Creating S-polynomial from the pair  $(p_{52}, p_{80})$ .  
 Skipping pair  $p_{52}$  and  $p_{80}$  because gcd of their leading monoms is zero.
3719. Creating S-polynomial from the pair  $(p_{52}, p_{81})$ .  
 Forming S-pol of  $p_{52}$  and  $p_{81}$ :
- $$\begin{aligned}
 p_{869} = & -1048576u_5u_3^{29}u_1^{20}x_8x_6x_5 + \\
 & (1048576u_6u_3^{29}u_1^{20} + 4194304u_6u_3^{27}u_1^{22})x_8x_6x_4 + \\
 & 524288u_5u_3^{30}u_1^{19}x_8x_5x_4 + \\
 & (-262144u_5^2u_3^{31}u_1^{18} + 1048576u_5^2u_3^{29}u_1^{20})x_8x_5 + \\
 & (-524288u_6u_3^{30}u_1^{19} - 2097152u_6u_3^{28}u_1^{21})x_8x_4^2 + \\
 & (262144u_6u_5u_3^{31}u_1^{18} - 4194304u_6u_5u_3^{27}u_1^{22})x_8x_4 + \\
 & (262144u_6u_5u_3^{30}u_1^{18} + 1048576u_6u_5u_3^{28}u_1^{20})x_5x_4x_2 + \\
 & (-131072u_6u_5u_3^{32}u_1^{17} - 524288u_6u_5u_3^{30}u_1^{19})x_5x_4 + \\
 & (-131072u_6u_5^2u_3^{31}u_1^{17} - 524288u_5^2u_3^{30}u_1^{19})x_5x_2 + \\
 & 262144u_5^2u_3^{32}u_1^{18}x_5 + \\
 & (131072u_6^2u_5u_3^{31}u_1^{17} + 524288u_6^2u_5u_3^{29}u_1^{19})x_4x_2 + \\
 & 262144u_6^2u_5^2u_3^{30}u_1^{18}x_2 - 131072u_6^2u_5^2u_3^{32}u_1^{17}
 \end{aligned}$$
- Reduced to zero.
3720. Creating S-polynomial from the pair  $(p_{52}, p_{82})$ .  
 Skipping pair  $p_{52}$  and  $p_{82}$  because gcd of their leading monoms is zero.
3721. Creating S-polynomial from the pair  $(p_{52}, p_{83})$ .  
 Forming S-pol of  $p_{52}$  and  $p_{83}$ : Polynomial too big for output (text size is 1651 characters, number of terms is 18)  
 Reduced to zero.
3722. Creating S-polynomial from the pair  $(p_{52}, p_{84})$ .  
 Forming S-pol of  $p_{52}$  and  $p_{84}$ : Polynomial too big for output (text size is 1071 characters, number of terms is 15)  
 Reduced to zero.

3723. Creating S-polynomial from the pair  $(p_{52}, p_{85})$ .

Forming S-pol of  $p_{52}$  and  $p_{85}$ : Polynomial too big for output (text size is 1150 characters, number of terms is 16)

Reduced to zero.

3724. Creating S-polynomial from the pair  $(p_{52}, p_{86})$ .

Forming S-pol of  $p_{52}$  and  $p_{86}$ : Polynomial too big for output (text size is 2068 characters, number of terms is 17)

S-pol added.

3725. Creating S-polynomial from the pair  $(p_{52}, p_{87})$ .

Forming S-pol of  $p_{52}$  and  $p_{87}$ :

$$\begin{aligned} p_{870} = & 16384u_3^{25}u_1^{14}x_8x_6x_5 - 8192u_3^{26}u_1^{13}x_8x_5x_4 + \\ & (4096u_5u_3^{27}u_1^{12} - 16384u_5u_3^{25}u_1^{14})x_8x_5 + \\ & (8192u_6u_3^{25}u_1^{13} + 32768u_6u_3^{23}u_1^{15})x_8x_4x_2 + \\ & (-4096u_6u_3^{27}u_1^{12} - 16384u_6u_3^{25}u_1^{14})x_8x_4 + \\ & (-4096u_6u_3^{26}u_1^{12} - 16384u_6u_3^{24}u_1^{14})x_5x_4x_2 + \\ & (2048u_6u_3^{28}u_1^{11} + 8192u_6u_3^{26}u_1^{13})x_5x_4 + \\ & (2048u_6u_5u_3^{27}u_1^{11} + 8192u_5u_3^{26}u_1^{13})x_5x_2 - 4096u_5u_3^{28}u_1^{12}x_5 + \\ & (-2048u_6^2u_3^{27}u_1^{11} - 8192u_6^2u_3^{25}u_1^{13})x_4x_2 - \\ & 4096u_6^2u_5u_3^{26}u_1^{12}x_2 + 2048u_6^2u_5u_3^{28}u_1^{11} \end{aligned}$$

Reduced to zero.

3726. Creating S-polynomial from the pair  $(p_{52}, p_{88})$ .

Skipping pair  $p_{52}$  and  $p_{88}$  because gcd of their leading monoms is zero.

3727. Creating S-polynomial from the pair  $(p_{52}, p_{89})$ .

Skipping pair  $p_{52}$  and  $p_{89}$  because gcd of their leading monoms is zero.

3728. Creating S-polynomial from the pair  $(p_{52}, p_{90})$ .

Skipping pair  $p_{52}$  and  $p_{90}$  because gcd of their leading monoms is zero.

3729. Creating S-polynomial from the pair  $(p_{52}, p_{91})$ .

Skipping pair  $p_{52}$  and  $p_{91}$  because gcd of their leading monoms is zero.

3730. Creating S-polynomial from the pair  $(p_{52}, p_{92})$ .

Skipping pair  $p_{52}$  and  $p_{92}$  because gcd of their leading monoms is zero.

3731. Creating S-polynomial from the pair  $(p_{52}, p_{93})$ .

Forming S-pol of  $p_{52}$  and  $p_{93}$ : Polynomial too big for output (text size is 2723 characters, number of terms is 18)

S-pol added.

3732. Creating S-polynomial from the pair  $(p_{52}, p_{94})$ .  
 Skipping pair  $p_{52}$  and  $p_{94}$  because gcd of their leading monoms is zero.
3733. Creating S-polynomial from the pair  $(p_{52}, p_{95})$ .  
 Forming S-pol of  $p_{52}$  and  $p_{95}$ : Polynomial too big for output (text size is 1803 characters, number of terms is 21)  
 Reduced to zero.
3734. Creating S-polynomial from the pair  $(p_{52}, p_{96})$ .  
 Forming S-pol of  $p_{52}$  and  $p_{96}$ : Polynomial too big for output (text size is 1089 characters, number of terms is 16)  
 S-pol added.
3735. Creating S-polynomial from the pair  $(p_{52}, p_{97})$ .  
 Forming S-pol of  $p_{52}$  and  $p_{97}$ : Polynomial too big for output (text size is 1416 characters, number of terms is 17)  
 S-pol added.
3736. Creating S-polynomial from the pair  $(p_{52}, p_{98})$ .  
 Forming S-pol of  $p_{52}$  and  $p_{98}$ : Polynomial too big for output (text size is 6340 characters, number of terms is 37)  
 Reduced to zero.
3737. Creating S-polynomial from the pair  $(p_{52}, p_{99})$ .  
 Forming S-pol of  $p_{52}$  and  $p_{99}$ : Polynomial too big for output (text size is 6337 characters, number of terms is 37)  
 Reduced to zero.
3738. Creating S-polynomial from the pair  $(p_{52}, p_{100})$ .  
 Forming S-pol of  $p_{52}$  and  $p_{100}$ : Polynomial too big for output (text size is 2589 characters, number of terms is 22)  
 Reduced to zero.
3739. Creating S-polynomial from the pair  $(p_{52}, p_{101})$ .  
 Forming S-pol of  $p_{52}$  and  $p_{101}$ : Polynomial too big for output (text size is 1372 characters, number of terms is 16)  
 Reduced to zero.
3740. Creating S-polynomial from the pair  $(p_{52}, p_{102})$ .  
 Forming S-pol of  $p_{52}$  and  $p_{102}$ : Polynomial too big for output (text size is 1881 characters, number of terms is 18)  
 S-pol added.
3741. Creating S-polynomial from the pair  $(p_{52}, p_{103})$ .  
 Skipping pair  $p_{52}$  and  $p_{103}$  because gcd of their leading monoms is zero.

3742. Creating S-polynomial from the pair  $(p_{52}, p_{104})$ .  
 Forming S-pol of  $p_{52}$  and  $p_{104}$ : Polynomial too big for output (text size is 2589 characters, number of terms is 22)  
 Reduced to zero.
3743. Creating S-polynomial from the pair  $(p_{52}, p_{105})$ .  
 Forming S-pol of  $p_{52}$  and  $p_{105}$ : Polynomial too big for output (text size is 1372 characters, number of terms is 16)  
 Reduced to zero.
3744. Creating S-polynomial from the pair  $(p_{52}, p_{106})$ .  
 Forming S-pol of  $p_{52}$  and  $p_{106}$ : Polynomial too big for output (text size is 1881 characters, number of terms is 18)  
 S-pol added.
3745. Creating S-polynomial from the pair  $(p_{53}, p_{54})$ .  
 Skipping pair  $p_{53}$  and  $p_{54}$  because gcd of their leading monoms is zero.
3746. Creating S-polynomial from the pair  $(p_{53}, p_{55})$ .  
 Skipping pair  $p_{53}$  and  $p_{55}$  because gcd of their leading monoms is zero.
3747. Creating S-polynomial from the pair  $(p_{53}, p_{56})$ .  
 Skipping pair  $p_{53}$  and  $p_{56}$  because gcd of their leading monoms is zero.
3748. Creating S-polynomial from the pair  $(p_{53}, p_{57})$ .  
 Skipping pair  $p_{53}$  and  $p_{57}$  because gcd of their leading monoms is zero.
3749. Creating S-polynomial from the pair  $(p_{53}, p_{58})$ .  
 Skipping pair  $p_{53}$  and  $p_{58}$  because gcd of their leading monoms is zero.
3750. Creating S-polynomial from the pair  $(p_{53}, p_{59})$ .  
 Skipping pair  $p_{53}$  and  $p_{59}$  because gcd of their leading monoms is zero.
3751. Creating S-polynomial from the pair  $(p_{53}, p_{60})$ .  
 Skipping pair  $p_{53}$  and  $p_{60}$  because gcd of their leading monoms is zero.
3752. Creating S-polynomial from the pair  $(p_{53}, p_{61})$ .  
 Skipping pair  $p_{53}$  and  $p_{61}$  because gcd of their leading monoms is zero.
3753. Creating S-polynomial from the pair  $(p_{53}, p_{62})$ .  
 Skipping pair  $p_{53}$  and  $p_{62}$  because gcd of their leading monoms is zero.
3754. Creating S-polynomial from the pair  $(p_{53}, p_{63})$ .  
 Skipping pair  $p_{53}$  and  $p_{63}$  because gcd of their leading monoms is zero.
3755. Creating S-polynomial from the pair  $(p_{53}, p_{64})$ .  
 Skipping pair  $p_{53}$  and  $p_{64}$  because gcd of their leading monoms is zero.

3756. Creating S-polynomial from the pair  $(p_{53}, p_{65})$ .  
 Skipping pair  $p_{53}$  and  $p_{65}$  because gcd of their leading monoms is zero.
3757. Creating S-polynomial from the pair  $(p_{53}, p_{66})$ .  
 Skipping pair  $p_{53}$  and  $p_{66}$  because gcd of their leading monoms is zero.
3758. Creating S-polynomial from the pair  $(p_{53}, p_{67})$ .  
 Skipping pair  $p_{53}$  and  $p_{67}$  because gcd of their leading monoms is zero.
3759. Creating S-polynomial from the pair  $(p_{53}, p_{68})$ .  
 Skipping pair  $p_{53}$  and  $p_{68}$  because gcd of their leading monoms is zero.
3760. Creating S-polynomial from the pair  $(p_{53}, p_{69})$ .  
 Skipping pair  $p_{53}$  and  $p_{69}$  because gcd of their leading monoms is zero.
3761. Creating S-polynomial from the pair  $(p_{53}, p_{70})$ .  
 Skipping pair  $p_{53}$  and  $p_{70}$  because gcd of their leading monoms is zero.
3762. Creating S-polynomial from the pair  $(p_{53}, p_{71})$ .  
 Skipping pair  $p_{53}$  and  $p_{71}$  because gcd of their leading monoms is zero.
3763. Creating S-polynomial from the pair  $(p_{53}, p_{72})$ .  
 Skipping pair  $p_{53}$  and  $p_{72}$  because gcd of their leading monoms is zero.
3764. Creating S-polynomial from the pair  $(p_{53}, p_{73})$ .  
 Skipping pair  $p_{53}$  and  $p_{73}$  because gcd of their leading monoms is zero.
3765. Creating S-polynomial from the pair  $(p_{53}, p_{74})$ .  
 Skipping pair  $p_{53}$  and  $p_{74}$  because gcd of their leading monoms is zero.
3766. Creating S-polynomial from the pair  $(p_{53}, p_{75})$ .  
 Skipping pair  $p_{53}$  and  $p_{75}$  because gcd of their leading monoms is zero.
3767. Creating S-polynomial from the pair  $(p_{53}, p_{76})$ .  
 Skipping pair  $p_{53}$  and  $p_{76}$  because gcd of their leading monoms is zero.
3768. Creating S-polynomial from the pair  $(p_{53}, p_{77})$ .  
 Skipping pair  $p_{53}$  and  $p_{77}$  because gcd of their leading monoms is zero.
3769. Creating S-polynomial from the pair  $(p_{53}, p_{78})$ .  
 Skipping pair  $p_{53}$  and  $p_{78}$  because gcd of their leading monoms is zero.
3770. Creating S-polynomial from the pair  $(p_{53}, p_{79})$ .  
 Skipping pair  $p_{53}$  and  $p_{79}$  because gcd of their leading monoms is zero.
3771. Creating S-polynomial from the pair  $(p_{53}, p_{80})$ .  
 Skipping pair  $p_{53}$  and  $p_{80}$  because gcd of their leading monoms is zero.

3772. Creating S-polynomial from the pair  $(p_{53}, p_{81})$ .

Forming S-pol of  $p_{53}$  and  $p_{81}$ :

$$\begin{aligned} p_{871} = & -4096u_6u_3^{14}u_1^{12}x_8x_6 + 2048u_6u_3^{15}u_1^{11}x_8x_4 + \\ & (-1024u_6u_5u_3^{16}u_1^{10} + 4096u_6u_5u_3^{14}u_1^{12})x_8 - \\ & 1024u_6u_5u_3^{15}u_1^{10}x_5x_2 + 512u_6u_5u_3^{17}u_1^9x_5 - \\ & 512u_6^2u_5u_3^{16}u_1^9x_2 \end{aligned}$$

Reduced to zero.

3773. Creating S-polynomial from the pair  $(p_{53}, p_{82})$ .

Skipping pair  $p_{53}$  and  $p_{82}$  because gcd of their leading monoms is zero.

3774. Creating S-polynomial from the pair  $(p_{53}, p_{83})$ .

Forming S-pol of  $p_{53}$  and  $p_{83}$ :

$$\begin{aligned} p_{872} = & -2097152u_5u_3^{23}u_1^{21}x_8^2x_4 - 1048576u_5^2u_3^{24}u_1^{20}x_8^2 + \\ & 4194304u_6u_3^{22}u_1^{22}x_8x_6^2 + \\ & (2097152u_6u_5u_3^{24}u_1^{20} - 4194304u_6u_5u_3^{22}u_1^{22})x_8x_6 + \\ & 1048576u_5u_3^{24}u_1^{20}x_8x_5x_4 + 524288u_5^2u_3^{25}u_1^{19}x_8x_5 + \\ & (-524288u_6u_5u_3^{25}u_1^{19} - 2097152u_6u_3^{24}u_1^{21})x_8x_4 + \\ & 1048576u_6u_5^2u_3^{24}u_1^{20}x_8 + 1048576u_6u_5u_3^{23}u_1^{20}x_6x_5x_2 - \\ & 524288u_6u_5u_3^{25}u_1^{19}x_6x_5 + 524288u_6^2u_5u_3^{24}u_1^{19}x_6x_2 \end{aligned}$$

Reduced to zero.

3775. Creating S-polynomial from the pair  $(p_{53}, p_{84})$ .

Forming S-pol of  $p_{53}$  and  $p_{84}$ :

$$\begin{aligned} p_{873} = & -512u_5u_3^{12}u_1^9x_8^2 + 512u_6u_3^{12}u_1^9x_8x_6 + 256u_5u_3^{13}u_1^8x_8x_5 - \\ & 512u_6u_3^{11}u_1^9x_8x_4x_2 - 256u_6u_5u_3^{12}u_1^8x_8x_2 + \\ & 512u_6u_3^{11}u_1^9x_6x_5x_2 - 256u_6u_3^{13}u_1^8x_6x_5 + \\ & 256u_6^2u_3^{12}u_1^8x_6x_2 \end{aligned}$$

Reduced to zero.

3776. Creating S-polynomial from the pair  $(p_{53}, p_{85})$ .

Forming S-pol of  $p_{53}$  and  $p_{85}$ :

$$\begin{aligned} p_{874} = & 1024u_3^{11}u_1^{10}x_8^2x_4 + 2048u_5u_3^{10}u_1^{11}x_8^2 - 1024u_3^{11}u_1^{10}x_8x_6x_5 - \\ & 2048u_6u_3^{10}u_1^{11}x_8x_6 - 512u_5u_3^{11}u_1^9x_8x_5x_2 + 256u_6u_3^{13}u_1^8x_8x_4 - \\ & 256u_6u_5u_3^{12}u_1^8x_8x_2 + 512u_6u_3^{11}u_1^9x_6x_5x_2 - \\ & 256u_6u_3^{13}u_1^8x_6x_5 + 256u_6^2u_3^{12}u_1^8x_6x_2 \end{aligned}$$

Reduced to zero.

3777. Creating S-polynomial from the pair  $(p_{53}, p_{86})$ .

Forming S-pol of  $p_{53}$  and  $p_{86}$ :

$$\begin{aligned} p_{875} = & -4096u_3^{18}u_1^{12}x_8x_6x_5 + (16384u_3^{15}u_1^{14} - 8192u_3^{15}u_1^{13})x_8x_5x_4x_2 + \\ & (2048u_3^{19}u_1^{11} - 8192u_3^{17}u_1^{13})x_8x_5x_4 - 2048u_5u_3^{18}u_1^{11}x_8x_5x_2 + \\ & 4096u_5u_3^{18}u_1^{12}x_8x_5 + \\ & (2048u_6u_3^{18}u_1^{11} + 8192u_6u_3^{16}u_1^{13} - 4096u_6u_3^{16}u_1^{12})x_8x_4x_2 + \\ & (-1024u_6u_3^{20}u_1^{10} + 2048u_6u_3^{18}u_1^{11} - 8192u_6u_3^{16}u_1^{13})x_8x_4 + \\ & (-1024u_6u_3^{19}u_1^{10} + 2048u_6u_3^{17}u_1^{11})x_5x_4x_2 + \\ & (512u_6u_3^{21}u_1^9 - 1024u_6u_3^{19}u_1^{10})x_5x_4 + \\ & (-512u_6^2u_3^{20}u_1^9 + 1024u_6^2u_3^{18}u_1^{10})x_4x_2 \end{aligned}$$

S-pol added.

3778. Creating S-polynomial from the pair  $(p_{53}, p_{87})$ .

Forming S-pol of  $p_{53}$  and  $p_{87}$ :

$$\begin{aligned} p_{876} = & -32u_6u_3^{10}u_1^5x_8x_2 + 16u_6u_3^{12}u_1^4x_8 + 16u_6u_3^{11}u_1^4x_5x_2 - \\ & 8u_6u_3^{13}u_1^3x_5 + 8u_6^2u_3^{12}u_1^3x_2 \end{aligned}$$

Reduced to zero.

3779. Creating S-polynomial from the pair  $(p_{53}, p_{88})$ .

Skipping pair  $p_{53}$  and  $p_{88}$  because gcd of their leading monoms is zero.

3780. Creating S-polynomial from the pair  $(p_{53}, p_{89})$ .

Skipping pair  $p_{53}$  and  $p_{89}$  because gcd of their leading monoms is zero.

3781. Creating S-polynomial from the pair  $(p_{53}, p_{90})$ .

Skipping pair  $p_{53}$  and  $p_{90}$  because gcd of their leading monoms is zero.

3782. Creating S-polynomial from the pair  $(p_{53}, p_{91})$ .

Skipping pair  $p_{53}$  and  $p_{91}$  because gcd of their leading monoms is zero.

3783. Creating S-polynomial from the pair  $(p_{53}, p_{92})$ .

Skipping pair  $p_{53}$  and  $p_{92}$  because gcd of their leading monoms is zero.

3784. Creating S-polynomial from the pair  $(p_{53}, p_{93})$ .

Skipping pair  $p_{53}$  and  $p_{93}$  because gcd of their leading monoms is zero.

3785. Creating S-polynomial from the pair  $(p_{53}, p_{94})$ .

Skipping pair  $p_{53}$  and  $p_{94}$  because gcd of their leading monoms is zero.

3786. Creating S-polynomial from the pair  $(p_{53}, p_{95})$ .

Forming S-pol of  $p_{53}$  and  $p_{95}$ :

$$\begin{aligned}
p_{877} = & 2097152u_5u_3^{21}u_1^{21}x_8^2x_6 + \\
& (4194304u_5u_3^{20}u_1^{22} + 4194304u_3^{21}u_1^{22})x_8^2x_4 + \\
& (524288u_5^2u_3^{23}u_1^{19} - 2097152u_5^2u_3^{21}u_1^{21})x_8^2 - \\
& 2097152u_6u_3^{21}u_1^{21}x_8x_6^2 - 2097152u_3^{21}u_1^{21}x_8x_6x_5x_4 - \\
& 1048576u_5u_3^{22}u_1^{20}x_8x_6x_5 + \\
& (1048576u_6u_3^{22}u_1^{20} - 4194304u_6u_3^{20}u_1^{22})x_8x_6x_4 - \\
& 524288u_6u_5u_3^{23}u_1^{19}x_8x_6 - 1048576u_5u_3^{21}u_1^{20}x_8x_5x_4x_2 - \\
& 262144u_5^2u_3^{24}u_1^{18}x_8x_5 - 524288u_6u_5u_3^{22}u_1^{19}x_8x_4x_2 + \\
& (262144u_6u_5u_3^{24}u_1^{18} + 1048576u_6u_3^{23}u_1^{20})x_8x_4 - \\
& 524288u_6u_5^2u_3^{23}u_1^{19}x_8 + 1048576u_6u_3^{21}u_1^{20}x_6x_5x_4x_2 - \\
& 524288u_6u_3^{23}u_1^{19}x_6x_5x_4 + 524288u_6^2u_3^{22}u_1^{19}x_6x_4x_2
\end{aligned}$$

Reduced to zero.

3787. Creating S-polynomial from the pair  $(p_{53}, p_{96})$ .

Forming S-pol of  $p_{53}$  and  $p_{96}$ :

$$\begin{aligned}
p_{878} = & 256u_5u_3^8u_1^8x_8^2 - 128u_3^9u_1^7x_8x_6x_5 - 256u_6u_3^8u_1^8x_8x_6 + \\
& 64u_3^{10}u_1^6x_8x_5x_4 - 64u_5u_3^9u_1^6x_8x_5x_2 + 64u_6u_3^9u_1^6x_8x_4x_2 + \\
& (-32u_6u_3^{11}u_1^5 + 128u_6u_3^9u_1^7)x_8x_4 - 32u_6u_3^{10}u_1^5x_5x_4x_2 + \\
& 16u_6u_3^{12}u_1^4x_5x_4 - 16u_6^2u_3^{11}u_1^4x_4x_2
\end{aligned}$$

Reduced to zero.

3788. Creating S-polynomial from the pair  $(p_{53}, p_{97})$ .

Forming S-pol of  $p_{53}$  and  $p_{97}$ :

$$\begin{aligned}
p_{879} = & -2048u_3^{17}u_1^{11}x_8x_6x_5 + (8192u_3^{14}u_1^{13} - 4096u_3^{14}u_1^{12})x_8x_5x_4x_2 + \\
& (1024u_3^{18}u_1^{10} - 4096u_3^{16}u_1^{12})x_8x_5x_4 - 1024u_5u_3^{17}u_1^{10}x_8x_5x_2 + \\
& 2048u_5u_3^{17}u_1^{11}x_8x_5 + (1024u_6u_3^{17}u_1^{10} + 4096u_6u_3^{15}u_1^{12})x_8x_4x_2 + \\
& (-512u_6u_3^{19}u_1^9 - 4096u_6u_3^{15}u_1^{12})x_8x_4 - 512u_6u_3^{18}u_1^9x_5x_4x_2 + \\
& 256u_6u_3^{20}u_1^8x_5x_4 - 256u_6^2u_3^{19}u_1^8x_4x_2
\end{aligned}$$

S-pol added.

3789. Creating S-polynomial from the pair  $(p_{53}, p_{98})$ .

Forming S-pol of  $p_{53}$  and  $p_{98}$ : Polynomial too big for output (text size is 2726 characters, number of terms is 30)

Reduced to zero.



3790. Creating S-polynomial from the pair  $(p_{53}, p_{99})$ .  
 Forming S-pol of  $p_{53}$  and  $p_{99}$ : Polynomial too big for output (text size is 2730 characters, number of terms is 30)  
 Reduced to zero.
3791. Creating S-polynomial from the pair  $(p_{53}, p_{100})$ .  
 Skipping pair  $p_{53}$  and  $p_{100}$  because gcd of their leading monoms is zero.
3792. Creating S-polynomial from the pair  $(p_{53}, p_{101})$ .  
 Skipping pair  $p_{53}$  and  $p_{101}$  because gcd of their leading monoms is zero.
3793. Creating S-polynomial from the pair  $(p_{53}, p_{102})$ .  
 Skipping pair  $p_{53}$  and  $p_{102}$  because gcd of their leading monoms is zero.
3794. Creating S-polynomial from the pair  $(p_{53}, p_{103})$ .  
 Skipping pair  $p_{53}$  and  $p_{103}$  because gcd of their leading monoms is zero.
3795. Creating S-polynomial from the pair  $(p_{53}, p_{104})$ .  
 Skipping pair  $p_{53}$  and  $p_{104}$  because gcd of their leading monoms is zero.
3796. Creating S-polynomial from the pair  $(p_{53}, p_{105})$ .  
 Skipping pair  $p_{53}$  and  $p_{105}$  because gcd of their leading monoms is zero.
3797. Creating S-polynomial from the pair  $(p_{53}, p_{106})$ .  
 Skipping pair  $p_{53}$  and  $p_{106}$  because gcd of their leading monoms is zero.
3798. Creating S-polynomial from the pair  $(p_{54}, p_{55})$ .  
 Forming S-pol of  $p_{54}$  and  $p_{55}$ :

$$\begin{aligned}
 p_{880} = & (-8192u_2^{24}u_1^{13} - 32768u_2^{22}u_1^{15})x_{12}x_{10}x_4 + \\
 & (4096u_5u_2^{24}u_1^{12} + 32768u_5u_2^{22}u_1^{14} + 65536u_5u_2^{20}u_1^{16})x_{12}x_4x_1 + \\
 & (-2048u_5u_2^{26}u_1^{11} - 16384u_5u_2^{24}u_1^{13} - 32768u_5u_2^{22}u_1^{15})x_{12}x_4 + \\
 & (2048u_5^2u_2^{25}u_1^{11} + 16384u_5^2u_2^{23}u_1^{13} + 32768u_5^2u_2^{21}u_1^{15})x_{12}x_1 + \\
 & (8192u_2^{24}u_1^{13} + 32768u_2^{22}u_1^{15})x_{10}^2x_5 + \\
 & (-16384u_5u_2^{22}u_1^{14} - 65536u_5u_2^{20}u_1^{16})x_{10}x_5x_1 + \\
 & (2048u_5u_2^{26}u_1^{11} + 8192u_5u_2^{24}u_1^{13})x_{10}x_5 + \\
 & (-4096u_6u_2^{24}u_1^{12} - 16384u_6u_2^{22}u_1^{14})x_{10}x_4x_1 + \\
 & (8192u_6u_2^{24}u_1^{13} + 32768u_6u_2^{22}u_1^{15})x_{10}x_4 + \\
 & (-2048u_6u_5u_2^{25}u_1^{11} - 16384u_6u_5u_2^{23}u_1^{13} - 32768u_6u_5u_2^{21}u_1^{15})x_{10}x_1
 \end{aligned}$$

Reduced to zero.

3799. Creating S-polynomial from the pair  $(p_{54}, p_{56})$ .  
 Forming S-pol of  $p_{54}$  and  $p_{56}$ :

$$p_{881} = 0$$

Reduced to zero.

3800. Creating S-polynomial from the pair  $(p_{54}, p_{57})$ .

Forming S-pol of  $p_{54}$  and  $p_{57}$ : Polynomial too big for output (text size is 1714 characters, number of terms is 16)

Reduced to zero.

3801. Creating S-polynomial from the pair  $(p_{54}, p_{58})$ .

Forming S-pol of  $p_{54}$  and  $p_{58}$ :

$$\begin{aligned} p_{882} = & (-512u_5u_2^{18}u_1^9 - 2048u_5u_2^{16}u_1^{11})x_{12}x_{10} + \\ & (-512u_5u_2^{17}u_1^9 - 2048u_5u_2^{15}u_1^{11})x_{12}x_4x_1 + \\ & (256u_5u_2^{19}u_1^8 + 1024u_5u_2^{17}u_1^{10})x_{12}x_4 + \\ & (-256u_5^2u_2^{18}u_1^8 - 1024u_5^2u_2^{16}u_1^{10})x_{12}x_1 + \\ & (512u_6u_2^{18}u_1^9 + 2048u_6u_2^{16}u_1^{11})x_{10}^2 + \\ & (512u_5u_2^{17}u_1^9 + 2048u_5u_2^{15}u_1^{11})x_{10}x_5x_1 + \\ & (-256u_6u_2^{19}u_1^8 - 1024u_6u_2^{17}u_1^{10})x_{10}x_4 + \\ & (256u_6u_5u_2^{18}u_1^8 + 1024u_6u_5u_2^{16}u_1^{10})x_{10}x_1 \end{aligned}$$

Reduced to zero.

3802. Creating S-polynomial from the pair  $(p_{54}, p_{59})$ .

Forming S-pol of  $p_{54}$  and  $p_{59}$ :

$$\begin{aligned} p_{883} = & (-8192u_2^{21}u_1^{13} - 32768u_2^{19}u_1^{15})x_{12}x_{10}x_4 + \\ & (-16384u_5u_2^{20}u_1^{14} - 65536u_5u_2^{18}u_1^{16})x_{12}x_{10} + \\ & (1024u_5u_2^{23}u_1^{10} + 8192u_5u_2^{21}u_1^{12} + 16384u_5u_2^{19}u_1^{14})x_{12}x_4x_1 + \\ & (-512u_5u_2^{25}u_1^9 - 4096u_5u_2^{23}u_1^{11} - 8192u_5u_2^{21}u_1^{13})x_{12}x_4 + \\ & (512u_5^2u_2^{24}u_1^9 + 4096u_5^2u_2^{22}u_1^{11} + 8192u_5^2u_2^{20}u_1^{13})x_{12}x_1 + \\ & (8192u_2^{21}u_1^{13} + 32768u_2^{19}u_1^{15})x_{10}^2x_5 + \\ & (16384u_6u_2^{20}u_1^{14} + 65536u_6u_2^{18}u_1^{16})x_{10}^2 + \\ & (-1024u_5u_2^{23}u_1^{10} - 4096u_5u_2^{21}u_1^{12})x_{10}x_5x_1 + \\ & (512u_5u_2^{25}u_1^9 + 4096u_5u_2^{23}u_1^{11} + 8192u_5u_2^{21}u_1^{13})x_{10}x_5 + \\ & (-4096u_6u_2^{21}u_1^{12} - 16384u_6u_2^{19}u_1^{14})x_{10}x_4x_1 + \\ & (-512u_6u_5u_2^{24}u_1^9 - 4096u_6u_5u_2^{22}u_1^{11} - 8192u_6u_5u_2^{20}u_1^{13})x_{10}x_1 \end{aligned}$$

Reduced to zero.

3803. Creating S-polynomial from the pair  $(p_{54}, p_{60})$ .

Skipping pair  $p_{54}$  and  $p_{60}$  because gcd of their leading monoms is zero.

3804. Creating S-polynomial from the pair  $(p_{54}, p_{61})$ .

Forming S-pol of  $p_{54}$  and  $p_{61}$ :

$$\begin{aligned}
p_{884} = & (1024u_2^{17}u_1^{10} + 4096u_2^{15}u_1^{12})x_{12}x_{10}x_4 + \\
& (2048u_5u_2^{16}u_1^{11} + 8192u_5u_2^{14}u_1^{13})x_{12}x_{10} + \\
& (-512u_5u_2^{17}u_1^9 - 2048u_5u_2^{15}u_1^{11})x_{12}x_4x_1 + \\
& (256u_5u_2^{19}u_1^8 + 1024u_5u_2^{17}u_1^{10})x_{12}x_4 + \\
& (-256u_5^2u_2^{18}u_1^8 - 1024u_5^2u_2^{16}u_1^{10})x_{12}x_1 + \\
& (-1024u_2^{17}u_1^{10} - 4096u_2^{15}u_1^{12})x_{10}^2x_5 + \\
& (-2048u_6u_2^{16}u_1^{11} - 8192u_6u_2^{14}u_1^{13})x_{10}^2 + \\
& (-256u_5u_2^{19}u_1^8 - 1024u_5u_2^{17}u_1^{10})x_{10}x_5 + \\
& (512u_6u_2^{17}u_1^9 + 2048u_6u_2^{15}u_1^{11})x_{10}x_4x_1 + \\
& (256u_6u_5u_2^{18}u_1^8 + 1024u_6u_5u_2^{16}u_1^{10})x_{10}x_1
\end{aligned}$$

Reduced to zero.

3805. Creating S-polynomial from the pair  $(p_{54}, p_{62})$ .

Skipping pair  $p_{54}$  and  $p_{62}$  because gcd of their leading monoms is zero.

3806. Creating S-polynomial from the pair  $(p_{54}, p_{63})$ .

Skipping pair  $p_{54}$  and  $p_{63}$  because gcd of their leading monoms is zero.

3807. Creating S-polynomial from the pair  $(p_{54}, p_{64})$ .

Skipping pair  $p_{54}$  and  $p_{64}$  because gcd of their leading monoms is zero.

3808. Creating S-polynomial from the pair  $(p_{54}, p_{65})$ .

Skipping pair  $p_{54}$  and  $p_{65}$  because gcd of their leading monoms is zero.

3809. Creating S-polynomial from the pair  $(p_{54}, p_{66})$ .

Skipping pair  $p_{54}$  and  $p_{66}$  because gcd of their leading monoms is zero.

3810. Creating S-polynomial from the pair  $(p_{54}, p_{67})$ .

Skipping pair  $p_{54}$  and  $p_{67}$  because gcd of their leading monoms is zero.

3811. Creating S-polynomial from the pair  $(p_{54}, p_{68})$ .

Skipping pair  $p_{54}$  and  $p_{68}$  because gcd of their leading monoms is zero.

3812. Creating S-polynomial from the pair  $(p_{54}, p_{69})$ .

Skipping pair  $p_{54}$  and  $p_{69}$  because gcd of their leading monoms is zero.

3813. Creating S-polynomial from the pair  $(p_{54}, p_{70})$ .

Skipping pair  $p_{54}$  and  $p_{70}$  because gcd of their leading monoms is zero.

3814. Creating S-polynomial from the pair  $(p_{54}, p_{71})$ .

Skipping pair  $p_{54}$  and  $p_{71}$  because gcd of their leading monoms is zero.

3815. Creating S-polynomial from the pair  $(p_{54}, p_{72})$ .

Skipping pair  $p_{54}$  and  $p_{72}$  because gcd of their leading monoms is zero.

3816. Creating S-polynomial from the pair  $(p_{54}, p_{73})$ .

Skipping pair  $p_{54}$  and  $p_{73}$  because gcd of their leading monoms is zero.

3817. Creating S-polynomial from the pair  $(p_{54}, p_{74})$ .

Skipping pair  $p_{54}$  and  $p_{74}$  because gcd of their leading monoms is zero.

3818. Creating S-polynomial from the pair  $(p_{54}, p_{75})$ .

Forming S-pol of  $p_{54}$  and  $p_{75}$ :

$$\begin{aligned} p_{885} = & (64u_5u_2^{16}u_1^6 + 256u_5u_2^{14}u_1^8)x_{10}x_1 + \\ & (-32u_5u_2^{18}u_1^5 - 128u_5u_2^{16}u_1^7)x_{10} + \\ & (-32u_5u_2^{17}u_1^5 - 128u_5u_2^{15}u_1^7)x_4x_1 + \\ & (16u_5u_2^{19}u_1^4 + 64u_5u_2^{17}u_1^6)x_4 + \\ & (-16u_5^2u_2^{18}u_1^4 - 64u_5^2u_2^{16}u_1^6)x_1 \end{aligned}$$

Reduced to zero.

3819. Creating S-polynomial from the pair  $(p_{54}, p_{76})$ .

Forming S-pol of  $p_{54}$  and  $p_{76}$ : Polynomial too big for output (text size is 1119 characters, number of terms is 12)

Reduced to zero.

3820. Creating S-polynomial from the pair  $(p_{54}, p_{77})$ .

Forming S-pol of  $p_{54}$  and  $p_{77}$ :

$$\begin{aligned} p_{886} = & (2048u_2^{17}u_1^{11} + 8192u_2^{15}u_1^{13})x_{12}x_{10}x_4 + \\ & (4096u_5u_2^{16}u_1^{12} + 16384u_5u_2^{14}u_1^{14})x_{12}x_{10} + \\ & (-1024u_5u_2^{17}u_1^{10} - 4096u_5u_2^{15}u_1^{12})x_{12}x_4x_1 + \\ & (512u_5u_2^{19}u_1^9 + 2048u_5u_2^{17}u_1^{11})x_{12}x_4 + \\ & (-512u_5^2u_2^{18}u_1^9 - 2048u_5^2u_2^{16}u_1^{11})x_{12}x_1 + \\ & (-2048u_2^{17}u_1^{11} - 8192u_2^{15}u_1^{13})x_{10}^2x_5 + \\ & (-4096u_6u_2^{16}u_1^{12} - 16384u_6u_2^{14}u_1^{14})x_{10}^2 + \\ & (-512u_5u_2^{19}u_1^9 - 2048u_5u_2^{17}u_1^{11})x_{10}x_5 + \\ & (1024u_6u_2^{17}u_1^{10} + 4096u_6u_2^{15}u_1^{12})x_{10}x_4x_1 + \\ & (512u_6u_5u_2^{18}u_1^9 + 2048u_6u_5u_2^{16}u_1^{11})x_{10}x_1 \end{aligned}$$

Reduced to zero.

3821. Creating S-polynomial from the pair  $(p_{54}, p_{78})$ .

Forming S-pol of  $p_{54}$  and  $p_{78}$ :

$$\begin{aligned} p_{887} = & (-1024u_5u_2^{18}u_1^{10} - 4096u_5u_2^{16}u_1^{12})x_{12}x_{10} + \\ & (-1024u_5u_2^{17}u_1^{10} - 4096u_5u_2^{15}u_1^{12})x_{12}x_4x_1 + \\ & (512u_5u_2^{19}u_1^9 + 2048u_5u_2^{17}u_1^{11})x_{12}x_4 + \\ & (-512u_5^2u_2^{18}u_1^9 - 2048u_5^2u_2^{16}u_1^{11})x_{12}x_1 + \\ & (1024u_6u_2^{18}u_1^{10} + 4096u_6u_2^{16}u_1^{12})x_{10}^2 + \\ & (1024u_5u_2^{17}u_1^{10} + 4096u_5u_2^{15}u_1^{12})x_{10}x_5x_1 + \\ & (-512u_6u_2^{19}u_1^9 - 2048u_6u_2^{17}u_1^{11})x_{10}x_4 + \\ & (512u_6u_5u_2^{18}u_1^9 + 2048u_6u_5u_2^{16}u_1^{11})x_{10}x_1 \end{aligned}$$

Reduced to zero.

3822. Creating S-polynomial from the pair  $(p_{54}, p_{79})$ .

Skipping pair  $p_{54}$  and  $p_{79}$  because gcd of their leading monoms is zero.

3823. Creating S-polynomial from the pair  $(p_{54}, p_{80})$ .

Skipping pair  $p_{54}$  and  $p_{80}$  because gcd of their leading monoms is zero.

3824. Creating S-polynomial from the pair  $(p_{54}, p_{81})$ .

Skipping pair  $p_{54}$  and  $p_{81}$  because gcd of their leading monoms is zero.

3825. Creating S-polynomial from the pair  $(p_{54}, p_{82})$ .

Skipping pair  $p_{54}$  and  $p_{82}$  because gcd of their leading monoms is zero.

3826. Creating S-polynomial from the pair  $(p_{54}, p_{83})$ .

Skipping pair  $p_{54}$  and  $p_{83}$  because gcd of their leading monoms is zero.

3827. Creating S-polynomial from the pair  $(p_{54}, p_{84})$ .

Skipping pair  $p_{54}$  and  $p_{84}$  because gcd of their leading monoms is zero.

3828. Creating S-polynomial from the pair  $(p_{54}, p_{85})$ .

Skipping pair  $p_{54}$  and  $p_{85}$  because gcd of their leading monoms is zero.

3829. Creating S-polynomial from the pair  $(p_{54}, p_{86})$ .

Skipping pair  $p_{54}$  and  $p_{86}$  because gcd of their leading monoms is zero.

3830. Creating S-polynomial from the pair  $(p_{54}, p_{87})$ .

Skipping pair  $p_{54}$  and  $p_{87}$  because gcd of their leading monoms is zero.

3831. Creating S-polynomial from the pair  $(p_{54}, p_{88})$ .

Skipping pair  $p_{54}$  and  $p_{88}$  because gcd of their leading monoms is zero.

3832. Creating S-polynomial from the pair  $(p_{54}, p_{89})$ .

Skipping pair  $p_{54}$  and  $p_{89}$  because gcd of their leading monoms is zero.

3833. Creating S-polynomial from the pair  $(p_{54}, p_{90})$ .  
 Skipping pair  $p_{54}$  and  $p_{90}$  because gcd of their leading monoms is zero.
3834. Creating S-polynomial from the pair  $(p_{54}, p_{91})$ .  
 Skipping pair  $p_{54}$  and  $p_{91}$  because gcd of their leading monoms is zero.
3835. Creating S-polynomial from the pair  $(p_{54}, p_{92})$ .  
 Skipping pair  $p_{54}$  and  $p_{92}$  because gcd of their leading monoms is zero.
3836. Creating S-polynomial from the pair  $(p_{54}, p_{93})$ .  
 Skipping pair  $p_{54}$  and  $p_{93}$  because gcd of their leading monoms is zero.
3837. Creating S-polynomial from the pair  $(p_{54}, p_{94})$ .  
 Skipping pair  $p_{54}$  and  $p_{94}$  because gcd of their leading monoms is zero.
3838. Creating S-polynomial from the pair  $(p_{54}, p_{95})$ .  
 Skipping pair  $p_{54}$  and  $p_{95}$  because gcd of their leading monoms is zero.
3839. Creating S-polynomial from the pair  $(p_{54}, p_{96})$ .  
 Skipping pair  $p_{54}$  and  $p_{96}$  because gcd of their leading monoms is zero.
3840. Creating S-polynomial from the pair  $(p_{54}, p_{97})$ .  
 Skipping pair  $p_{54}$  and  $p_{97}$  because gcd of their leading monoms is zero.
3841. Creating S-polynomial from the pair  $(p_{54}, p_{98})$ .  
 Skipping pair  $p_{54}$  and  $p_{98}$  because gcd of their leading monoms is zero.
3842. Creating S-polynomial from the pair  $(p_{54}, p_{99})$ .  
 Skipping pair  $p_{54}$  and  $p_{99}$  because gcd of their leading monoms is zero.
3843. Creating S-polynomial from the pair  $(p_{54}, p_{100})$ .  
 Forming S-pol of  $p_{54}$  and  $p_{100}$ : Polynomial too big for output (text size is 1430 characters, number of terms is 15)  
 Reduced to zero.
3844. Creating S-polynomial from the pair  $(p_{54}, p_{101})$ .  
 Skipping pair  $p_{54}$  and  $p_{101}$  because gcd of their leading monoms is zero.
3845. Creating S-polynomial from the pair  $(p_{54}, p_{102})$ .  
 Skipping pair  $p_{54}$  and  $p_{102}$  because gcd of their leading monoms is zero.
3846. Creating S-polynomial from the pair  $(p_{54}, p_{103})$ .  
 Skipping pair  $p_{54}$  and  $p_{103}$  because gcd of their leading monoms is zero.
3847. Creating S-polynomial from the pair  $(p_{54}, p_{104})$ .  
 Skipping pair  $p_{54}$  and  $p_{104}$  because gcd of their leading monoms is zero.
3848. Creating S-polynomial from the pair  $(p_{54}, p_{105})$ .  
 Skipping pair  $p_{54}$  and  $p_{105}$  because gcd of their leading monoms is zero.

3849. Creating S-polynomial from the pair  $(p_{54}, p_{106})$ .

Skipping pair  $p_{54}$  and  $p_{106}$  because gcd of their leading monoms is zero.

3850. Creating S-polynomial from the pair  $(p_{55}, p_{56})$ .

Forming S-pol of  $p_{55}$  and  $p_{56}$ :

$$\begin{aligned} p_{888} = & -4096u_2^{18}u_1^{12}x_{12}x_{10}x_4 + (2048u_5u_2^{18}u_1^{11} + 8192u_5u_2^{16}u_1^{13})x_{12}x_4x_1 + \\ & (-1024u_5u_2^{20}u_1^{10} - 4096u_5u_2^{18}u_1^{12})x_{12}x_4 + \\ & (1024u_5^2u_2^{19}u_1^{10} + 4096u_5^2u_2^{17}u_1^{12})x_{12}x_1 + 4096u_2^{18}u_1^{12}x_{10}^2x_5 - \\ & 8192u_5u_2^{16}u_1^{13}x_{10}x_5x_1 + 1024u_5u_2^{20}u_1^{10}x_{10}x_5 - \\ & 2048u_6u_2^{18}u_1^{11}x_{10}x_4x_1 + 4096u_6u_2^{18}u_1^{12}x_{10}x_4 + \\ & (-1024u_6u_5u_2^{19}u_1^{10} - 4096u_6u_5u_2^{17}u_1^{12})x_{10}x_1 \end{aligned}$$

Reduced to zero.

3851. Creating S-polynomial from the pair  $(p_{55}, p_{57})$ .

Forming S-pol of  $p_{55}$  and  $p_{57}$ : Polynomial too big for output (text size is 1606 characters, number of terms is 17)

Reduced to zero.

3852. Creating S-polynomial from the pair  $(p_{55}, p_{58})$ .

Forming S-pol of  $p_{55}$  and  $p_{58}$ :

$$\begin{aligned} p_{889} = & -65536u_2^{20}u_1^{16}x_{12}x_{10}x_4 + \\ & (-32768u_5u_2^{21}u_1^{15} - 131072u_5u_2^{19}u_1^{17})x_{12}x_{10} + 65536u_2^{20}u_1^{16}x_{10}^2x_5 + \\ & (32768u_6u_2^{21}u_1^{15} + 131072u_6u_2^{19}u_1^{17})x_{10}^2 + 32768u_5u_2^{20}u_1^{15}x_{10}x_5x_1 + \\ & 16384u_5u_2^{22}u_1^{14}x_{10}x_5 - 32768u_6u_2^{20}u_1^{15}x_{10}x_4x_1 - \\ & 16384u_6u_2^{22}u_1^{14}x_{10}x_4 \end{aligned}$$

Reduced to zero.

3853. Creating S-polynomial from the pair  $(p_{55}, p_{59})$ .

Forming S-pol of  $p_{55}$  and  $p_{59}$ :

$$\begin{aligned} p_{890} = & (131072u_2^{26}u_1^{17} - 2097152u_2^{22}u_1^{21})x_{12}x_{10}x_4 + \\ & (-1048576u_5u_2^{23}u_1^{20} - 4194304u_5u_2^{21}u_1^{22})x_{12}x_{10} + \\ & (-131072u_2^{26}u_1^{17} + 2097152u_2^{22}u_1^{21})x_{10}^2x_5 + \\ & (1048576u_6u_2^{23}u_1^{20} + 4194304u_6u_2^{21}u_1^{22})x_{10}^2 + \\ & (-65536u_5u_2^{26}u_1^{16} + 1048576u_5u_2^{22}u_1^{20})x_{10}x_5x_1 + \\ & (131072u_5u_2^{26}u_1^{17} + 524288u_5u_2^{24}u_1^{19})x_{10}x_5 + \\ & (65536u_6u_2^{26}u_1^{16} - 1048576u_6u_2^{22}u_1^{20})x_{10}x_4x_1 + \\ & (-131072u_6u_2^{26}u_1^{17} - 524288u_6u_2^{24}u_1^{19})x_{10}x_4 \end{aligned}$$

Reduced to zero.

3854. Creating S-polynomial from the pair  $(p_{55}, p_{60})$ .

Forming S-pol of  $p_{55}$  and  $p_{60}$ : Polynomial too big for output (text size is 1180 characters, number of terms is 12)

Reduced to zero.

3855. Creating S-polynomial from the pair  $(p_{55}, p_{61})$ .

Forming S-pol of  $p_{55}$  and  $p_{61}$ :

$$\begin{aligned} p_{891} = & 262144u_2^{18}u_1^{18}x_{12}x_{10}x_4 + \\ & (131072u_5u_2^{19}u_1^{17} + 524288u_5u_2^{17}u_1^{19})x_{12}x_{10} - 262144u_2^{18}u_1^{18}x_{10}^2x_5 + \\ & (-131072u_6u_2^{19}u_1^{17} - 524288u_6u_2^{17}u_1^{19})x_{10}^2 - \\ & 131072u_5u_2^{18}u_1^{17}x_{10}x_5x_1 - 65536u_5u_2^{20}u_1^{16}x_{10}x_5 + \\ & 131072u_6u_2^{18}u_1^{17}x_{10}x_4x_1 + 65536u_6u_2^{20}u_1^{16}x_{10}x_4 \end{aligned}$$

Reduced to zero.

3856. Creating S-polynomial from the pair  $(p_{55}, p_{62})$ .

Forming S-pol of  $p_{55}$  and  $p_{62}$ : Polynomial too big for output (text size is 1893 characters, number of terms is 18)

Reduced to zero.

3857. Creating S-polynomial from the pair  $(p_{55}, p_{63})$ .

Forming S-pol of  $p_{55}$  and  $p_{63}$ :

$$\begin{aligned} p_{892} = & 16384u_2^{16}u_1^{14}x_{12}^2x_4 + \\ & (-2048u_5u_2^{19}u_1^{11} + 32768u_5u_2^{15}u_1^{15})x_{12}^2 - 16384u_2^{16}u_1^{14}x_{12}x_{10}x_5 + \\ & (2048u_6u_2^{19}u_1^{11} - 32768u_6u_2^{15}u_1^{15})x_{12}x_{10} - 8192u_5u_2^{16}u_1^{13}x_{12}x_5x_1 + \\ & 1024u_5u_2^{20}u_1^{10}x_{12}x_5 - 2048u_6u_2^{18}u_1^{11}x_{12}x_4x_1 + \\ & 4096u_6u_2^{18}u_1^{12}x_{12}x_4 + \\ & (-1024u_6u_5u_2^{19}u_1^{10} - 4096u_6u_5u_2^{17}u_1^{12})x_{12}x_1 + \\ & (2048u_6u_2^{18}u_1^{11} + 8192u_6u_2^{16}u_1^{13})x_{10}x_5x_1 + \\ & (-1024u_6u_2^{20}u_1^{10} - 4096u_6u_2^{18}u_1^{12})x_{10}x_5 + \\ & (1024u_6^2u_2^{19}u_1^{10} + 4096u_6^2u_2^{17}u_1^{12})x_{10}x_1 \end{aligned}$$

Reduced to zero.

3858. Creating S-polynomial from the pair  $(p_{55}, p_{64})$ .

Skipping pair  $p_{55}$  and  $p_{64}$  because gcd of their leading monoms is zero.

3859. Creating S-polynomial from the pair  $(p_{55}, p_{65})$ .

Skipping pair  $p_{55}$  and  $p_{65}$  because gcd of their leading monoms is zero.

3860. Creating S-polynomial from the pair  $(p_{55}, p_{66})$ .

Skipping pair  $p_{55}$  and  $p_{66}$  because gcd of their leading monoms is zero.



3861. Creating S-polynomial from the pair  $(p_{55}, p_{67})$ .  
 Skipping pair  $p_{55}$  and  $p_{67}$  because gcd of their leading monoms is zero.
3862. Creating S-polynomial from the pair  $(p_{55}, p_{68})$ .  
 Skipping pair  $p_{55}$  and  $p_{68}$  because gcd of their leading monoms is zero.
3863. Creating S-polynomial from the pair  $(p_{55}, p_{69})$ .  
 Skipping pair  $p_{55}$  and  $p_{69}$  because gcd of their leading monoms is zero.
3864. Creating S-polynomial from the pair  $(p_{55}, p_{70})$ .  
 Skipping pair  $p_{55}$  and  $p_{70}$  because gcd of their leading monoms is zero.
3865. Creating S-polynomial from the pair  $(p_{55}, p_{71})$ .  
 Skipping pair  $p_{55}$  and  $p_{71}$  because gcd of their leading monoms is zero.
3866. Creating S-polynomial from the pair  $(p_{55}, p_{72})$ .  
 Skipping pair  $p_{55}$  and  $p_{72}$  because gcd of their leading monoms is zero.
3867. Creating S-polynomial from the pair  $(p_{55}, p_{73})$ .  
 Skipping pair  $p_{55}$  and  $p_{73}$  because gcd of their leading monoms is zero.
3868. Creating S-polynomial from the pair  $(p_{55}, p_{74})$ .  
 Forming S-pol of  $p_{55}$  and  $p_{74}$ :

$$\begin{aligned}
 p_{893} = & -1048576u_5u_2^{22}u_1^{20}x_{12}x_4 + \\
 & (131072u_5^2u_2^{25}u_1^{17} - 2097152u_5^2u_2^{21}u_1^{21})x_{12} + \\
 & (524288u_6u_2^{23}u_1^{19} + 2097152u_6u_2^{21}u_1^{21})x_{10}^2 + 1048576u_5u_2^{22}u_1^{20}x_{10}x_5 + \\
 & (-262144u_6u_2^{24}u_1^{18} - 1048576u_6u_2^{22}u_1^{20})x_{10}x_4 + \\
 & 524288u_5^2u_2^{22}u_1^{19}x_5x_1 - 65536u_5^2u_2^{26}u_1^{16}x_5 + \\
 & 131072u_6u_5u_2^{24}u_1^{17}x_4x_1 - 262144u_6u_5u_2^{24}u_1^{18}x_4 + \\
 & (65536u_6u_5^2u_2^{25}u_1^{16} + 262144u_6u_5^2u_2^{23}u_1^{18})x_1
 \end{aligned}$$

Reduced to zero.

3869. Creating S-polynomial from the pair  $(p_{55}, p_{75})$ .  
 Forming S-pol of  $p_{55}$  and  $p_{75}$ :

$$\begin{aligned}
 p_{894} = & -4096u_2^{20}u_1^{12}x_{12}x_4 + (4096u_5u_2^{19}u_1^{12} + 16384u_5u_2^{17}u_1^{14})x_{12}x_1 + \\
 & (-2048u_5u_2^{21}u_1^{11} - 8192u_5u_2^{19}u_1^{13})x_{12} + 4096u_2^{20}u_1^{12}x_{10}x_5 - \\
 & 8192u_5u_2^{18}u_1^{13}x_5x_1 + 1024u_5u_2^{22}u_1^{10}x_5 - 2048u_6u_2^{20}u_1^{11}x_4x_1 + \\
 & 4096u_6u_2^{20}u_1^{12}x_4 + (-1024u_6u_5u_2^{21}u_1^{10} - 4096u_6u_5u_2^{19}u_1^{12})x_1
 \end{aligned}$$

Reduced to zero.

3870. Creating S-polynomial from the pair  $(p_{55}, p_{76})$ .

Forming S-pol of  $p_{55}$  and  $p_{76}$ : Polynomial too big for output (text size is 1022 characters, number of terms is 12)

Reduced to zero.

3871. Creating S-polynomial from the pair  $(p_{55}, p_{77})$ .

Forming S-pol of  $p_{55}$  and  $p_{77}$ :

$$\begin{aligned} p_{895} = & 524288u_2^{18}u_1^{19}x_{12}x_{10}x_4 + \\ & (262144u_5u_2^{19}u_1^{18} + 1048576u_5u_2^{17}u_1^{20})x_{12}x_{10} - 524288u_2^{18}u_1^{19}x_{10}^2x_5 + \\ & (-262144u_6u_2^{19}u_1^{18} - 1048576u_6u_2^{17}u_1^{20})x_{10}^2 - \\ & 262144u_5u_2^{18}u_1^{18}x_{10}x_5x_1 - 131072u_5u_2^{20}u_1^{17}x_{10}x_5 + \\ & 262144u_6u_2^{18}u_1^{18}x_{10}x_4x_1 + 131072u_6u_2^{20}u_1^{17}x_{10}x_4 \end{aligned}$$

Reduced to zero.

3872. Creating S-polynomial from the pair  $(p_{55}, p_{78})$ .

Forming S-pol of  $p_{55}$  and  $p_{78}$ :

$$\begin{aligned} p_{896} = & -131072u_2^{20}u_1^{17}x_{12}x_{10}x_4 + \\ & (-65536u_5u_2^{21}u_1^{16} - 262144u_5u_2^{19}u_1^{18})x_{12}x_{10} + 131072u_2^{20}u_1^{17}x_{10}^2x_5 + \\ & (65536u_6u_2^{21}u_1^{16} + 262144u_6u_2^{19}u_1^{18})x_{10}^2 + 65536u_5u_2^{20}u_1^{16}x_{10}x_5x_1 + \\ & 32768u_5u_2^{22}u_1^{15}x_{10}x_5 - 65536u_6u_2^{20}u_1^{16}x_{10}x_4x_1 - \\ & 32768u_6u_2^{22}u_1^{15}x_{10}x_4 \end{aligned}$$

Reduced to zero.

3873. Creating S-polynomial from the pair  $(p_{55}, p_{79})$ .

Forming S-pol of  $p_{55}$  and  $p_{79}$ : Polynomial too big for output (text size is 1450 characters, number of terms is 14)

S-pol added.

3874. Creating S-polynomial from the pair  $(p_{55}, p_{80})$ .

Forming S-pol of  $p_{55}$  and  $p_{80}$ :

$$\begin{aligned} p_{897} = & 16384u_2^{18}u_1^{14}x_{12}x_4 + \\ & (-2048u_5u_2^{21}u_1^{11} + 32768u_5u_2^{17}u_1^{15})x_{12} - 16384u_2^{18}u_1^{14}x_{10}x_5 + \\ & (4096u_6u_2^{19}u_1^{12} + 16384u_6u_2^{17}u_1^{14})x_{10}x_1 + \\ & (-8192u_6u_2^{19}u_1^{13} - 32768u_6u_2^{17}u_1^{15})x_{10} - 8192u_5u_2^{18}u_1^{13}x_5x_1 + \\ & 1024u_5u_2^{22}u_1^{10}x_5 - 2048u_6u_2^{20}u_1^{11}x_4x_1 + 4096u_6u_2^{20}u_1^{12}x_4 + \\ & (-1024u_6u_5u_2^{21}u_1^{10} - 4096u_6u_5u_2^{19}u_1^{12})x_1 \end{aligned}$$

Reduced to zero.

3875. Creating S-polynomial from the pair  $(p_{55}, p_{81})$ .  
 Skipping pair  $p_{55}$  and  $p_{81}$  because gcd of their leading monoms is zero.
3876. Creating S-polynomial from the pair  $(p_{55}, p_{82})$ .  
 Skipping pair  $p_{55}$  and  $p_{82}$  because gcd of their leading monoms is zero.
3877. Creating S-polynomial from the pair  $(p_{55}, p_{83})$ .  
 Skipping pair  $p_{55}$  and  $p_{83}$  because gcd of their leading monoms is zero.
3878. Creating S-polynomial from the pair  $(p_{55}, p_{84})$ .  
 Skipping pair  $p_{55}$  and  $p_{84}$  because gcd of their leading monoms is zero.
3879. Creating S-polynomial from the pair  $(p_{55}, p_{85})$ .  
 Skipping pair  $p_{55}$  and  $p_{85}$  because gcd of their leading monoms is zero.
3880. Creating S-polynomial from the pair  $(p_{55}, p_{86})$ .  
 Skipping pair  $p_{55}$  and  $p_{86}$  because gcd of their leading monoms is zero.
3881. Creating S-polynomial from the pair  $(p_{55}, p_{87})$ .  
 Skipping pair  $p_{55}$  and  $p_{87}$  because gcd of their leading monoms is zero.
3882. Creating S-polynomial from the pair  $(p_{55}, p_{88})$ .  
 Skipping pair  $p_{55}$  and  $p_{88}$  because gcd of their leading monoms is zero.
3883. Creating S-polynomial from the pair  $(p_{55}, p_{89})$ .  
 Skipping pair  $p_{55}$  and  $p_{89}$  because gcd of their leading monoms is zero.
3884. Creating S-polynomial from the pair  $(p_{55}, p_{90})$ .  
 Skipping pair  $p_{55}$  and  $p_{90}$  because gcd of their leading monoms is zero.
3885. Creating S-polynomial from the pair  $(p_{55}, p_{91})$ .  
 Skipping pair  $p_{55}$  and  $p_{91}$  because gcd of their leading monoms is zero.
3886. Creating S-polynomial from the pair  $(p_{55}, p_{92})$ .  
 Skipping pair  $p_{55}$  and  $p_{92}$  because gcd of their leading monoms is zero.
3887. Creating S-polynomial from the pair  $(p_{55}, p_{93})$ .  
 Skipping pair  $p_{55}$  and  $p_{93}$  because gcd of their leading monoms is zero.
3888. Creating S-polynomial from the pair  $(p_{55}, p_{94})$ .  
 Skipping pair  $p_{55}$  and  $p_{94}$  because gcd of their leading monoms is zero.
3889. Creating S-polynomial from the pair  $(p_{55}, p_{95})$ .  
 Skipping pair  $p_{55}$  and  $p_{95}$  because gcd of their leading monoms is zero.
3890. Creating S-polynomial from the pair  $(p_{55}, p_{96})$ .  
 Skipping pair  $p_{55}$  and  $p_{96}$  because gcd of their leading monoms is zero.
3891. Creating S-polynomial from the pair  $(p_{55}, p_{97})$ .  
 Skipping pair  $p_{55}$  and  $p_{97}$  because gcd of their leading monoms is zero.

3892. Creating S-polynomial from the pair  $(p_{55}, p_{98})$ .  
Forming S-pol of  $p_{55}$  and  $p_{98}$ : Polynomial too big for output (text size is 5290 characters, number of terms is 34)  
Reduced to zero.
3893. Creating S-polynomial from the pair  $(p_{55}, p_{99})$ .  
Skipping pair  $p_{55}$  and  $p_{99}$  because gcd of their leading monoms is zero.
3894. Creating S-polynomial from the pair  $(p_{55}, p_{100})$ .  
Forming S-pol of  $p_{55}$  and  $p_{100}$ : Polynomial too big for output (text size is 1256 characters, number of terms is 15)  
Reduced to zero.
3895. Creating S-polynomial from the pair  $(p_{55}, p_{101})$ .  
Forming S-pol of  $p_{55}$  and  $p_{101}$ :  

$$p_{898} = (-32768u_5u_2^{17}u_1^{15} - 131072u_5u_2^{15}u_1^{17})x_{12}x_{10} - 32768u_2^{17}u_1^{15}x_{12}x_4^2 +$$

$$(4096u_5u_2^{20}u_1^{12} - 65536u_5u_2^{16}u_1^{16})x_{12}x_4 +$$

$$(16384u_2^{18}u_1^{14} + 65536u_2^{16}u_1^{16})x_{10}^2x_5 +$$

$$(32768u_6u_2^{17}u_1^{15} + 131072u_6u_2^{15}u_1^{17})x_{10}^2 - 8192u_2^{19}u_1^{13}x_{10}x_5x_4 +$$

$$(8192u_5u_2^{18}u_1^{13} + 32768u_5u_2^{16}u_1^{15})x_{10}x_5x_1 +$$

$$(-8192u_6u_2^{18}u_1^{13} - 32768u_6u_2^{16}u_1^{15})x_{10}x_4x_1 +$$

$$16384u_5u_2^{17}u_1^{14}x_5x_4x_1 - 2048u_5u_2^{21}u_1^{11}x_5x_4 +$$

$$4096u_6u_2^{19}u_1^{12}x_4^2x_1 - 8192u_6u_2^{19}u_1^{13}x_4^2 +$$

$$(2048u_6u_5u_2^{20}u_1^{11} + 8192u_6u_5u_2^{18}u_1^{13})x_4x_1$$
  
Reduced to zero.
3896. Creating S-polynomial from the pair  $(p_{55}, p_{102})$ .  
Forming S-pol of  $p_{55}$  and  $p_{102}$ : Polynomial too big for output (text size is 1108 characters, number of terms is 14)  
S-pol added.
3897. Creating S-polynomial from the pair  $(p_{55}, p_{103})$ .  
Forming S-pol of  $p_{55}$  and  $p_{103}$ : Polynomial too big for output (text size is 5302 characters, number of terms is 34)  
Reduced to zero.
3898. Creating S-polynomial from the pair  $(p_{55}, p_{104})$ .  
Skipping pair  $p_{55}$  and  $p_{104}$  because gcd of their leading monoms is zero.
3899. Creating S-polynomial from the pair  $(p_{55}, p_{105})$ .  
Skipping pair  $p_{55}$  and  $p_{105}$  because gcd of their leading monoms is zero.

3900. Creating S-polynomial from the pair  $(p_{55}, p_{106})$ .

Skipping pair  $p_{55}$  and  $p_{106}$  because gcd of their leading monoms is zero.

3901. Creating S-polynomial from the pair  $(p_{56}, p_{57})$ .

Forming S-pol of  $p_{56}$  and  $p_{57}$ : Polynomial too big for output (text size is 1154 characters, number of terms is 16)

Reduced to zero.

3902. Creating S-polynomial from the pair  $(p_{56}, p_{58})$ .

Forming S-pol of  $p_{56}$  and  $p_{58}$ :

$$\begin{aligned} p_{899} = & 256u_5u_2^{12}u_1^8x_{12}x_{10} + 256u_5u_2^{11}u_1^8x_{12}x_4x_1 - \\ & 128u_5u_2^{13}u_1^7x_{12}x_4 + 128u_5^2u_2^{12}u_1^7x_{12}x_1 - 256u_6u_2^{12}u_1^8x_{10}^2 - \\ & 256u_5u_2^{11}u_1^8x_{10}x_5x_1 + 128u_6u_2^{13}u_1^7x_{10}x_4 - \\ & 128u_6u_5u_2^{12}u_1^7x_{10}x_1 \end{aligned}$$

Reduced to zero.

3903. Creating S-polynomial from the pair  $(p_{56}, p_{59})$ .

Forming S-pol of  $p_{56}$  and  $p_{59}$ :

$$\begin{aligned} p_{900} = & 4096u_2^{15}u_1^{12}x_{12}x_{10}x_4 + 8192u_5u_2^{14}u_1^{13}x_{12}x_{10} + \\ & (-512u_5u_2^{17}u_1^9 - 2048u_5u_2^{15}u_1^{11})x_{12}x_4x_1 + \\ & (256u_5u_2^{19}u_1^8 + 1024u_5u_2^{17}u_1^{10})x_{12}x_4 + \\ & (-256u_5^2u_2^{18}u_1^8 - 1024u_5^2u_2^{16}u_1^{10})x_{12}x_1 - 4096u_2^{15}u_1^{12}x_{10}^2x_5 - \\ & 8192u_6u_2^{14}u_1^{13}x_{10}^2 + 512u_5u_2^{17}u_1^9x_{10}x_5x_1 + \\ & (-256u_5u_2^{19}u_1^8 - 1024u_5u_2^{17}u_1^{10})x_{10}x_5 + 2048u_6u_2^{15}u_1^{11}x_{10}x_4x_1 + \\ & (256u_6u_5u_2^{18}u_1^8 + 1024u_6u_5u_2^{16}u_1^{10})x_{10}x_1 \end{aligned}$$

Reduced to zero.

3904. Creating S-polynomial from the pair  $(p_{56}, p_{60})$ .

Skipping pair  $p_{56}$  and  $p_{60}$  because gcd of their leading monoms is zero.

3905. Creating S-polynomial from the pair  $(p_{56}, p_{61})$ .

Forming S-pol of  $p_{56}$  and  $p_{61}$ :

$$\begin{aligned} p_{901} = & -512u_2^{11}u_1^9x_{12}x_{10}x_4 - 1024u_5u_2^{10}u_1^{10}x_{12}x_{10} + \\ & 256u_5u_2^{11}u_1^8x_{12}x_4x_1 - 128u_5u_2^{13}u_1^7x_{12}x_4 + \\ & 128u_5^2u_2^{12}u_1^7x_{12}x_1 + 512u_2^{11}u_1^9x_{10}^2x_5 + 1024u_6u_2^{10}u_1^{10}x_{10}^2 + \\ & 128u_5u_2^{13}u_1^7x_{10}x_5 - 256u_6u_2^{11}u_1^8x_{10}x_4x_1 - \\ & 128u_6u_5u_2^{12}u_1^7x_{10}x_1 \end{aligned}$$

Reduced to zero.

3906. Creating S-polynomial from the pair  $(p_{56}, p_{62})$ .  
 Skipping pair  $p_{56}$  and  $p_{62}$  because gcd of their leading monoms is zero.
3907. Creating S-polynomial from the pair  $(p_{56}, p_{63})$ .  
 Skipping pair  $p_{56}$  and  $p_{63}$  because gcd of their leading monoms is zero.
3908. Creating S-polynomial from the pair  $(p_{56}, p_{64})$ .  
 Skipping pair  $p_{56}$  and  $p_{64}$  because gcd of their leading monoms is zero.
3909. Creating S-polynomial from the pair  $(p_{56}, p_{65})$ .  
 Skipping pair  $p_{56}$  and  $p_{65}$  because gcd of their leading monoms is zero.
3910. Creating S-polynomial from the pair  $(p_{56}, p_{66})$ .  
 Skipping pair  $p_{56}$  and  $p_{66}$  because gcd of their leading monoms is zero.
3911. Creating S-polynomial from the pair  $(p_{56}, p_{67})$ .  
 Skipping pair  $p_{56}$  and  $p_{67}$  because gcd of their leading monoms is zero.
3912. Creating S-polynomial from the pair  $(p_{56}, p_{68})$ .  
 Skipping pair  $p_{56}$  and  $p_{68}$  because gcd of their leading monoms is zero.
3913. Creating S-polynomial from the pair  $(p_{56}, p_{69})$ .  
 Skipping pair  $p_{56}$  and  $p_{69}$  because gcd of their leading monoms is zero.
3914. Creating S-polynomial from the pair  $(p_{56}, p_{70})$ .  
 Skipping pair  $p_{56}$  and  $p_{70}$  because gcd of their leading monoms is zero.
3915. Creating S-polynomial from the pair  $(p_{56}, p_{71})$ .  
 Skipping pair  $p_{56}$  and  $p_{71}$  because gcd of their leading monoms is zero.
3916. Creating S-polynomial from the pair  $(p_{56}, p_{72})$ .  
 Skipping pair  $p_{56}$  and  $p_{72}$  because gcd of their leading monoms is zero.
3917. Creating S-polynomial from the pair  $(p_{56}, p_{73})$ .  
 Skipping pair  $p_{56}$  and  $p_{73}$  because gcd of their leading monoms is zero.
3918. Creating S-polynomial from the pair  $(p_{56}, p_{74})$ .  
 Skipping pair  $p_{56}$  and  $p_{74}$  because gcd of their leading monoms is zero.
3919. Creating S-polynomial from the pair  $(p_{56}, p_{75})$ .  
 Forming S-pol of  $p_{56}$  and  $p_{75}$ :

$$p_{902} = -32u_5u_2^{10}u_1^5x_{10}x_1 + 16u_5u_2^{12}u_1^4x_{10} + 16u_5u_2^{11}u_1^4x_4x_1 - \\ 8u_5u_2^{13}u_1^3x_4 + 8u_5^2u_2^{12}u_1^3x_1$$

Reduced to zero.

3920. Creating S-polynomial from the pair  $(p_{56}, p_{76})$ .

Forming S-pol of  $p_{56}$  and  $p_{76}$ :

$$\begin{aligned} p_{903} = & -4194304u_5u_2^{23}u_1^{21}x_{12}x_{10}x_4 - 4194304u_5^2u_2^{22}u_1^{22}x_{12}x_{10} + \\ & 1048576u_5^2u_2^{23}u_1^{20}x_{12}x_4x_1 - 524288u_5^2u_2^{25}u_1^{19}x_{12}x_4 + \\ & 524288u_5^3u_2^{24}u_1^{19}x_{12}x_1 + 4194304u_6u_2^{22}u_1^{22}x_{10}^3 + \\ & 2097152u_5u_2^{23}u_1^{21}x_{10}^2x_5 + 1048576u_6u_5u_2^{24}u_1^{20}x_{10}^2 + \\ & 1048576u_5u_2^{24}u_1^{20}x_{10}x_5x_4 + 524288u_5^2u_2^{25}u_1^{19}x_{10}x_5 + \\ & (-524288u_6u_5u_2^{25}u_1^{19} - 2097152u_6u_2^{24}u_1^{21})x_{10}x_4 + \\ & 1048576u_6u_5^2u_2^{24}u_1^{20}x_{10} \end{aligned}$$

Reduced to zero.

3921. Creating S-polynomial from the pair  $(p_{56}, p_{77})$ .

Forming S-pol of  $p_{56}$  and  $p_{77}$ :

$$\begin{aligned} p_{904} = & -1024u_2^{11}u_1^{10}x_{12}x_{10}x_4 - 2048u_5u_2^{10}u_1^{11}x_{12}x_{10} + \\ & 512u_5u_2^{11}u_1^9x_{12}x_4x_1 - 256u_5u_2^{13}u_1^8x_{12}x_4 + \\ & 256u_5^2u_2^{12}u_1^8x_{12}x_1 + 1024u_2^{11}u_1^{10}x_{10}^2x_5 + \\ & 2048u_6u_2^{10}u_1^{11}x_{10}^2 + 256u_5u_2^{13}u_1^8x_{10}x_5 - \\ & 512u_6u_2^{11}u_1^9x_{10}x_4x_1 - 256u_6u_5u_2^{12}u_1^8x_{10}x_1 \end{aligned}$$

Reduced to zero.

3922. Creating S-polynomial from the pair  $(p_{56}, p_{78})$ .

Forming S-pol of  $p_{56}$  and  $p_{78}$ :

$$\begin{aligned} p_{905} = & 512u_5u_2^{12}u_1^9x_{12}x_{10} + 512u_5u_2^{11}u_1^9x_{12}x_4x_1 - \\ & 256u_5u_2^{13}u_1^8x_{12}x_4 + 256u_5^2u_2^{12}u_1^8x_{12}x_1 - 512u_6u_2^{12}u_1^9x_{10}^2 - \\ & 512u_5u_2^{11}u_1^9x_{10}x_5x_1 + 256u_6u_2^{13}u_1^8x_{10}x_4 - \\ & 256u_6u_5u_2^{12}u_1^8x_{10}x_1 \end{aligned}$$

Reduced to zero.

3923. Creating S-polynomial from the pair  $(p_{56}, p_{79})$ .

Skipping pair  $p_{56}$  and  $p_{79}$  because gcd of their leading monoms is zero.

3924. Creating S-polynomial from the pair  $(p_{56}, p_{80})$ .

Skipping pair  $p_{56}$  and  $p_{80}$  because gcd of their leading monoms is zero.

3925. Creating S-polynomial from the pair  $(p_{56}, p_{81})$ .

Skipping pair  $p_{56}$  and  $p_{81}$  because gcd of their leading monoms is zero.

3926. Creating S-polynomial from the pair  $(p_{56}, p_{82})$ .

Skipping pair  $p_{56}$  and  $p_{82}$  because gcd of their leading monoms is zero.

3927. Creating S-polynomial from the pair  $(p_{56}, p_{83})$ .  
 Skipping pair  $p_{56}$  and  $p_{83}$  because gcd of their leading monoms is zero.
3928. Creating S-polynomial from the pair  $(p_{56}, p_{84})$ .  
 Skipping pair  $p_{56}$  and  $p_{84}$  because gcd of their leading monoms is zero.
3929. Creating S-polynomial from the pair  $(p_{56}, p_{85})$ .  
 Skipping pair  $p_{56}$  and  $p_{85}$  because gcd of their leading monoms is zero.
3930. Creating S-polynomial from the pair  $(p_{56}, p_{86})$ .  
 Skipping pair  $p_{56}$  and  $p_{86}$  because gcd of their leading monoms is zero.
3931. Creating S-polynomial from the pair  $(p_{56}, p_{87})$ .  
 Skipping pair  $p_{56}$  and  $p_{87}$  because gcd of their leading monoms is zero.
3932. Creating S-polynomial from the pair  $(p_{56}, p_{88})$ .  
 Skipping pair  $p_{56}$  and  $p_{88}$  because gcd of their leading monoms is zero.
3933. Creating S-polynomial from the pair  $(p_{56}, p_{89})$ .  
 Skipping pair  $p_{56}$  and  $p_{89}$  because gcd of their leading monoms is zero.
3934. Creating S-polynomial from the pair  $(p_{56}, p_{90})$ .  
 Skipping pair  $p_{56}$  and  $p_{90}$  because gcd of their leading monoms is zero.
3935. Creating S-polynomial from the pair  $(p_{56}, p_{91})$ .  
 Skipping pair  $p_{56}$  and  $p_{91}$  because gcd of their leading monoms is zero.
3936. Creating S-polynomial from the pair  $(p_{56}, p_{92})$ .  
 Skipping pair  $p_{56}$  and  $p_{92}$  because gcd of their leading monoms is zero.
3937. Creating S-polynomial from the pair  $(p_{56}, p_{93})$ .  
 Skipping pair  $p_{56}$  and  $p_{93}$  because gcd of their leading monoms is zero.
3938. Creating S-polynomial from the pair  $(p_{56}, p_{94})$ .  
 Skipping pair  $p_{56}$  and  $p_{94}$  because gcd of their leading monoms is zero.
3939. Creating S-polynomial from the pair  $(p_{56}, p_{95})$ .  
 Skipping pair  $p_{56}$  and  $p_{95}$  because gcd of their leading monoms is zero.
3940. Creating S-polynomial from the pair  $(p_{56}, p_{96})$ .  
 Skipping pair  $p_{56}$  and  $p_{96}$  because gcd of their leading monoms is zero.
3941. Creating S-polynomial from the pair  $(p_{56}, p_{97})$ .  
 Skipping pair  $p_{56}$  and  $p_{97}$  because gcd of their leading monoms is zero.
3942. Creating S-polynomial from the pair  $(p_{56}, p_{98})$ .  
 Skipping pair  $p_{56}$  and  $p_{98}$  because gcd of their leading monoms is zero.
3943. Creating S-polynomial from the pair  $(p_{56}, p_{99})$ .  
 Skipping pair  $p_{56}$  and  $p_{99}$  because gcd of their leading monoms is zero.



3944. Creating S-polynomial from the pair  $(p_{56}, p_{100})$ .

Forming S-pol of  $p_{56}$  and  $p_{100}$ :

$$\begin{aligned}
p_{906} = & 2097152u_5u_2^{21}u_1^{21}x_{12}x_{10}^2 - 2097152u_2^{21}u_1^{21}x_{12}x_{10}x_4^2 + \\
& (1048576u_5u_2^{22}u_1^{20} + 4194304u_2^{21}u_1^{22})x_{12}x_{10}x_4 + \\
& (524288u_5^2u_2^{23}u_1^{19} - 2097152u_5^2u_2^{21}u_1^{21})x_{12}x_{10} + \\
& 1048576u_5u_2^{21}u_1^{20}x_{12}x_4^2x_1 - 524288u_5u_2^{23}u_1^{19}x_{12}x_4^2 + \\
& 524288u_5^2u_2^{22}u_1^{19}x_{12}x_4x_1 - 2097152u_6u_2^{21}u_1^{21}x_{10}^3 - \\
& 1048576u_5u_2^{22}u_1^{20}x_{10}^2x_5 - 524288u_6u_5u_2^{23}u_1^{19}x_{10}^2 - \\
& 1048576u_5u_2^{21}u_1^{20}x_{10}x_5x_4x_1 - 262144u_5^2u_2^{24}u_1^{18}x_{10}x_5 - \\
& 524288u_6u_5u_2^{22}u_1^{19}x_{10}x_4x_1 + \\
& (262144u_6u_5u_2^{24}u_1^{18} + 1048576u_6u_2^{23}u_1^{20})x_{10}x_4 - \\
& 524288u_6u_5^2u_2^{23}u_1^{19}x_{10}
\end{aligned}$$

Reduced to zero.

3945. Creating S-polynomial from the pair  $(p_{56}, p_{101})$ .

Skipping pair  $p_{56}$  and  $p_{101}$  because gcd of their leading monoms is zero.

3946. Creating S-polynomial from the pair  $(p_{56}, p_{102})$ .

Skipping pair  $p_{56}$  and  $p_{102}$  because gcd of their leading monoms is zero.

3947. Creating S-polynomial from the pair  $(p_{56}, p_{103})$ .

Skipping pair  $p_{56}$  and  $p_{103}$  because gcd of their leading monoms is zero.

3948. Creating S-polynomial from the pair  $(p_{56}, p_{104})$ .

Skipping pair  $p_{56}$  and  $p_{104}$  because gcd of their leading monoms is zero.

3949. Creating S-polynomial from the pair  $(p_{56}, p_{105})$ .

Skipping pair  $p_{56}$  and  $p_{105}$  because gcd of their leading monoms is zero.

3950. Creating S-polynomial from the pair  $(p_{56}, p_{106})$ .

Skipping pair  $p_{56}$  and  $p_{106}$  because gcd of their leading monoms is zero.

3951. Creating S-polynomial from the pair  $(p_{57}, p_{58})$ .

Forming S-pol of  $p_{57}$  and  $p_{58}$ : Polynomial too big for output (text size is 1036 characters, number of terms is 15)

Reduced to zero.

3952. Creating S-polynomial from the pair  $(p_{57}, p_{59})$ .

Forming S-pol of  $p_{57}$  and  $p_{59}$ : Polynomial too big for output (text size is 1728 characters, number of terms is 17)

Reduced to zero.

3953. Creating S-polynomial from the pair  $(p_{57}, p_{60})$ .  
 Forming S-pol of  $p_{57}$  and  $p_{60}$ : Polynomial too big for output (text size is 2016 characters, number of terms is 17)  
 Reduced to zero.
3954. Creating S-polynomial from the pair  $(p_{57}, p_{61})$ .  
 Forming S-pol of  $p_{57}$  and  $p_{61}$ : Polynomial too big for output (text size is 1164 characters, number of terms is 16)  
 Reduced to zero.
3955. Creating S-polynomial from the pair  $(p_{57}, p_{62})$ .  
 Forming S-pol of  $p_{57}$  and  $p_{62}$ : Polynomial too big for output (text size is 2370 characters, number of terms is 19)  
 Reduced to zero.
3956. Creating S-polynomial from the pair  $(p_{57}, p_{63})$ .  
 Forming S-pol of  $p_{57}$  and  $p_{63}$ : Polynomial too big for output (text size is 1316 characters, number of terms is 17)  
 Reduced to zero.
3957. Creating S-polynomial from the pair  $(p_{57}, p_{64})$ .  
 Skipping pair  $p_{57}$  and  $p_{64}$  because gcd of their leading monoms is zero.
3958. Creating S-polynomial from the pair  $(p_{57}, p_{65})$ .  
 Skipping pair  $p_{57}$  and  $p_{65}$  because gcd of their leading monoms is zero.
3959. Creating S-polynomial from the pair  $(p_{57}, p_{66})$ .  
 Skipping pair  $p_{57}$  and  $p_{66}$  because gcd of their leading monoms is zero.
3960. Creating S-polynomial from the pair  $(p_{57}, p_{67})$ .  
 Forming S-pol of  $p_{57}$  and  $p_{67}$ : Polynomial too big for output (text size is 4564 characters, number of terms is 24)  
 Reduced to zero.
3961. Creating S-polynomial from the pair  $(p_{57}, p_{68})$ .  
 Skipping pair  $p_{57}$  and  $p_{68}$  because gcd of their leading monoms is zero.
3962. Creating S-polynomial from the pair  $(p_{57}, p_{69})$ .  
 Skipping pair  $p_{57}$  and  $p_{69}$  because gcd of their leading monoms is zero.
3963. Creating S-polynomial from the pair  $(p_{57}, p_{70})$ .  
 Skipping pair  $p_{57}$  and  $p_{70}$  because gcd of their leading monoms is zero.
3964. Creating S-polynomial from the pair  $(p_{57}, p_{71})$ .  
 Skipping pair  $p_{57}$  and  $p_{71}$  because gcd of their leading monoms is zero.

3965. Creating S-polynomial from the pair  $(p_{57}, p_{72})$ .  
Forming S-pol of  $p_{57}$  and  $p_{72}$ : Polynomial too big for output (text size is 4025 characters, number of terms is 23)  
Reduced to zero.
3966. Creating S-polynomial from the pair  $(p_{57}, p_{73})$ .  
Skipping pair  $p_{57}$  and  $p_{73}$  because gcd of their leading monoms is zero.
3967. Creating S-polynomial from the pair  $(p_{57}, p_{74})$ .  
Forming S-pol of  $p_{57}$  and  $p_{74}$ : Polynomial too big for output (text size is 1177 characters, number of terms is 15)  
Reduced to zero.
3968. Creating S-polynomial from the pair  $(p_{57}, p_{75})$ .  
Forming S-pol of  $p_{57}$  and  $p_{75}$ :  

$$p_{907} = (-2097152u_2^{30}u_1^{21} - 8388608u_2^{28}u_1^{23})x_{12}x_4^2 +$$

$$(2097152u_5u_2^{29}u_1^{21} + 8388608u_5u_2^{27}u_1^{23})x_{12}x_4x_1 +$$

$$(-1048576u_5u_2^{31}u_1^{20} - 4194304u_5u_2^{29}u_1^{22} + 16777216u_2^{28}u_1^{24})x_{12}x_4 +$$

$$(2097152u_5^2u_2^{30}u_1^{21} - 8388608u_5^2u_2^{28}u_1^{23})x_{12} +$$

$$4194304u_2^{29}u_1^{22}x_{10}^2x_5 +$$

$$(1048576u_5u_2^{31}u_1^{20} - 4194304u_5u_2^{29}u_1^{22})x_{10}x_5 -$$

$$2097152u_6u_5u_2^{30}u_1^{21}x_{10} +$$

$$(1048576u_5u_2^{30}u_1^{20} - 4194304u_5u_2^{28}u_1^{22})x_5x_4x_1 +$$

$$524288u_5^2u_2^{31}u_1^{19}x_5x_1 - 1048576u_5^2u_2^{31}u_1^{20}x_5 +$$

$$(-524288u_6u_5u_2^{31}u_1^{19} - 2097152u_6u_5u_2^{29}u_1^{21} - 2097152u_6u_2^{30}u_1^{21})x_4x_1 +$$

$$(1048576u_6u_5u_2^{31}u_1^{20} + 4194304u_6u_2^{30}u_1^{22})x_4 +$$

$$1048576u_6u_5^2u_2^{30}u_1^{20}x_1 - 2097152u_6u_5^2u_2^{30}u_1^{21}$$
Reduced to zero.
3969. Creating S-polynomial from the pair  $(p_{57}, p_{76})$ .  
Forming S-pol of  $p_{57}$  and  $p_{76}$ : Polynomial too big for output (text size is 1809 characters, number of terms is 19)  
Reduced to zero.
3970. Creating S-polynomial from the pair  $(p_{57}, p_{77})$ .  
Forming S-pol of  $p_{57}$  and  $p_{77}$ : Polynomial too big for output (text size is 1173 characters, number of terms is 16)  
Reduced to zero.

3971. Creating S-polynomial from the pair  $(p_{57}, p_{78})$ .  
 Forming S-pol of  $p_{57}$  and  $p_{78}$ : Polynomial too big for output (text size is 1043 characters, number of terms is 15)  
 Reduced to zero.
3972. Creating S-polynomial from the pair  $(p_{57}, p_{79})$ .  
 Forming S-pol of  $p_{57}$  and  $p_{79}$ : Polynomial too big for output (text size is 2457 characters, number of terms is 17)  
 S-pol added.
3973. Creating S-polynomial from the pair  $(p_{57}, p_{80})$ .  
 Forming S-pol of  $p_{57}$  and  $p_{80}$ : Polynomial too big for output (text size is 1057 characters, number of terms is 15)  
 Reduced to zero.
3974. Creating S-polynomial from the pair  $(p_{57}, p_{81})$ .  
 Skipping pair  $p_{57}$  and  $p_{81}$  because gcd of their leading monoms is zero.
3975. Creating S-polynomial from the pair  $(p_{57}, p_{82})$ .  
 Skipping pair  $p_{57}$  and  $p_{82}$  because gcd of their leading monoms is zero.
3976. Creating S-polynomial from the pair  $(p_{57}, p_{83})$ .  
 Skipping pair  $p_{57}$  and  $p_{83}$  because gcd of their leading monoms is zero.
3977. Creating S-polynomial from the pair  $(p_{57}, p_{84})$ .  
 Skipping pair  $p_{57}$  and  $p_{84}$  because gcd of their leading monoms is zero.
3978. Creating S-polynomial from the pair  $(p_{57}, p_{85})$ .  
 Skipping pair  $p_{57}$  and  $p_{85}$  because gcd of their leading monoms is zero.
3979. Creating S-polynomial from the pair  $(p_{57}, p_{86})$ .  
 Forming S-pol of  $p_{57}$  and  $p_{86}$ : Polynomial too big for output (text size is 3189 characters, number of terms is 19)  
 S-pol added.
3980. Creating S-polynomial from the pair  $(p_{57}, p_{87})$ .  
 Skipping pair  $p_{57}$  and  $p_{87}$  because gcd of their leading monoms is zero.
3981. Creating S-polynomial from the pair  $(p_{57}, p_{88})$ .  
 Skipping pair  $p_{57}$  and  $p_{88}$  because gcd of their leading monoms is zero.
3982. Creating S-polynomial from the pair  $(p_{57}, p_{89})$ .  
 Skipping pair  $p_{57}$  and  $p_{89}$  because gcd of their leading monoms is zero.
3983. Creating S-polynomial from the pair  $(p_{57}, p_{90})$ .  
 Skipping pair  $p_{57}$  and  $p_{90}$  because gcd of their leading monoms is zero.
3984. Creating S-polynomial from the pair  $(p_{57}, p_{91})$ .  
 Skipping pair  $p_{57}$  and  $p_{91}$  because gcd of their leading monoms is zero.

3985. Creating S-polynomial from the pair  $(p_{57}, p_{92})$ .  
 Skipping pair  $p_{57}$  and  $p_{92}$  because gcd of their leading monoms is zero.
3986. Creating S-polynomial from the pair  $(p_{57}, p_{93})$ .  
 Forming S-pol of  $p_{57}$  and  $p_{93}$ : Polynomial too big for output (text size is 3202 characters, number of terms is 19)  
 S-pol added.
3987. Creating S-polynomial from the pair  $(p_{57}, p_{94})$ .  
 Skipping pair  $p_{57}$  and  $p_{94}$  because gcd of their leading monoms is zero.
3988. Creating S-polynomial from the pair  $(p_{57}, p_{95})$ .  
 Forming S-pol of  $p_{57}$  and  $p_{95}$ : Polynomial too big for output (text size is 2870 characters, number of terms is 23)  
 Reduced to zero.
3989. Creating S-polynomial from the pair  $(p_{57}, p_{96})$ .  
 Forming S-pol of  $p_{57}$  and  $p_{96}$ : Polynomial too big for output (text size is 1591 characters, number of terms is 17)  
 Reduced to zero.
3990. Creating S-polynomial from the pair  $(p_{57}, p_{97})$ .  
 Forming S-pol of  $p_{57}$  and  $p_{97}$ : Polynomial too big for output (text size is 2135 characters, number of terms is 19)  
 S-pol added.
3991. Creating S-polynomial from the pair  $(p_{57}, p_{98})$ .  
 Forming S-pol of  $p_{57}$  and  $p_{98}$ : Polynomial too big for output (text size is 7171 characters, number of terms is 39)  
 Reduced to zero.
3992. Creating S-polynomial from the pair  $(p_{57}, p_{99})$ .  
 Skipping pair  $p_{57}$  and  $p_{99}$  because gcd of their leading monoms is zero.
3993. Creating S-polynomial from the pair  $(p_{57}, p_{100})$ .  
 Forming S-pol of  $p_{57}$  and  $p_{100}$ :

$$\begin{aligned}
 p_{908} = & (-137438953472u_5u_2^{40}u_1^{37} - 549755813888u_5u_2^{38}u_1^{39})x_{12}x_{10}^2 + \\
 & (-68719476736u_5u_2^{41}u_1^{36} - 274877906944u_5u_2^{39}u_1^{38} - \\
 & 274877906944u_2^{40}u_1^{38})x_{12}x_{10}x_4 + \\
 & (-34359738368u_5^2u_2^{42}u_1^{35} + 137438953472u_5^2u_2^{40}u_1^{37})x_{12}x_{10} + \\
 & 274877906944u_2^{39}u_1^{38}x_{10}^3x_5 + \\
 & (137438953472u_6u_2^{40}u_1^{37} + 549755813888u_6u_2^{38}u_1^{39})x_{10}^3 + \\
 & 137438953472u_5u_2^{41}u_1^{36}x_{10}^2x_5 + 34359738368u_6u_5u_2^{42}u_1^{35}x_{10}^2 + \\
 & 137438953472u_5u_2^{40}u_1^{36}x_{10}x_5x_4x_1 + 34359738368u_5^2u_2^{41}u_1^{35}x_{10}x_5x_1 +
 \end{aligned}$$

$$\begin{aligned}
& 17179869184u_5^2u_2^{43}u_1^{34}x_{10}x_5 - 137438953472u_6u_2^{40}u_1^{37}x_{10}x_4x_1 + \\
& (-17179869184u_6u_5u_2^{43}u_1^{34} - 68719476736u_6u_2^{42}u_1^{36})x_{10}x_4 + \\
& 68719476736u_6u_5^2u_2^{40}u_1^{36}x_{10}x_1 + 34359738368u_6u_5^2u_2^{42}u_1^{35}x_{10}
\end{aligned}$$

Reduced to zero.

3994. Creating S-polynomial from the pair  $(p_{57}, p_{101})$ .

Forming S-pol of  $p_{57}$  and  $p_{101}$ : Polynomial too big for output (text size is 1286 characters, number of terms is 17)

S-pol added.

3995. Creating S-polynomial from the pair  $(p_{57}, p_{102})$ .

Forming S-pol of  $p_{57}$  and  $p_{102}$ : Polynomial too big for output (text size is 1624 characters, number of terms is 17)

S-pol added.

3996. Creating S-polynomial from the pair  $(p_{57}, p_{103})$ .

Forming S-pol of  $p_{57}$  and  $p_{103}$ : Polynomial too big for output (text size is 7191 characters, number of terms is 39)

Reduced to zero.

3997. Creating S-polynomial from the pair  $(p_{57}, p_{104})$ .

Forming S-pol of  $p_{57}$  and  $p_{104}$ : Polynomial too big for output (text size is 2901 characters, number of terms is 23)

Reduced to zero.

3998. Creating S-polynomial from the pair  $(p_{57}, p_{105})$ .

Forming S-pol of  $p_{57}$  and  $p_{105}$ : Polynomial too big for output (text size is 1606 characters, number of terms is 17)

Reduced to zero.

3999. Creating S-polynomial from the pair  $(p_{57}, p_{106})$ .

Forming S-pol of  $p_{57}$  and  $p_{106}$ : Polynomial too big for output (text size is 2148 characters, number of terms is 19)

S-pol added.

4000. Creating S-polynomial from the pair  $(p_{58}, p_{59})$ .

Forming S-pol of  $p_{58}$  and  $p_{59}$ :

$$\begin{aligned}
p_{909} = & 65536u_2^{17}u_1^{16}x_{12}x_{10}x_4 + \\
& (8192u_5u_2^{20}u_1^{13} + 32768u_5u_2^{18}u_1^{15} + 131072u_5u_2^{16}u_1^{17})x_{12}x_{10} - \\
& 65536u_2^{17}u_1^{16}x_{10}^2x_5 + \\
& (-8192u_6u_2^{20}u_1^{13} - 32768u_6u_2^{18}u_1^{15} - 131072u_6u_2^{16}u_1^{17})x_{10}^2 - \\
& 32768u_5u_2^{17}u_1^{15}x_{10}x_5x_1 + \\
& (-4096u_5u_2^{21}u_1^{12} - 16384u_5u_2^{19}u_1^{14})x_{10}x_5 + 32768u_6u_2^{17}u_1^{15}x_{10}x_4x_1 + \\
& (4096u_6u_2^{21}u_1^{12} + 16384u_6u_2^{19}u_1^{14})x_{10}x_4
\end{aligned}$$

Reduced to zero.

4001. Creating S-polynomial from the pair  $(p_{58}, p_{60})$ .

Forming S-pol of  $p_{58}$  and  $p_{60}$ :

$$\begin{aligned}
p_{910} = & (1024u_2^{17}u_1^{10} + 4096u_2^{15}u_1^{12})x_{12}^2x_4 + \\
& (2048u_5u_2^{16}u_1^{11} + 8192u_5u_2^{14}u_1^{13})x_{12}^2 + \\
& (-1024u_2^{17}u_1^{10} - 4096u_2^{15}u_1^{12})x_{12}x_{10}x_5 + \\
& (-2048u_6u_2^{16}u_1^{11} - 8192u_6u_2^{14}u_1^{13})x_{12}x_{10} + \\
& (-512u_5u_2^{17}u_1^9 - 2048u_5u_2^{15}u_1^{11})x_{12}x_5x_1 + \\
& (256u_6u_2^{19}u_1^8 + 1024u_6u_2^{17}u_1^{10})x_{12}x_4 + \\
& (-256u_6u_5u_2^{18}u_1^8 - 1024u_6u_5u_2^{16}u_1^{10})x_{12}x_1 + \\
& (512u_6u_2^{17}u_1^9 + 2048u_6u_2^{15}u_1^{11})x_{10}x_5x_1 + \\
& (-256u_6u_2^{19}u_1^8 - 1024u_6u_2^{17}u_1^{10})x_{10}x_5 + \\
& (256u_6^2u_2^{18}u_1^8 + 1024u_6^2u_2^{16}u_1^{10})x_{10}x_1
\end{aligned}$$

Reduced to zero.

4002. Creating S-polynomial from the pair  $(p_{58}, p_{61})$ .

Forming S-pol of  $p_{58}$  and  $p_{61}$ :

$$\begin{aligned}
p_{911} = & -8192u_2^{13}u_1^{13}x_{12}x_{10}x_4 + \\
& (-4096u_5u_2^{14}u_1^{12} - 16384u_5u_2^{12}u_1^{14})x_{12}x_{10} + 8192u_2^{13}u_1^{13}x_{10}^2x_5 + \\
& (4096u_6u_2^{14}u_1^{12} + 16384u_6u_2^{12}u_1^{14})x_{10}^2 + 4096u_5u_2^{13}u_1^{12}x_{10}x_5x_1 + \\
& 2048u_5u_2^{15}u_1^{11}x_{10}x_5 - 4096u_6u_2^{13}u_1^{12}x_{10}x_4x_1 - \\
& 2048u_6u_2^{15}u_1^{11}x_{10}x_4
\end{aligned}$$

Reduced to zero.

4003. Creating S-polynomial from the pair  $(p_{58}, p_{62})$ .

Forming S-pol of  $p_{58}$  and  $p_{62}$ : Polynomial too big for output (text size is 1164 characters, number of terms is 16)

Reduced to zero.

4004. Creating S-polynomial from the pair  $(p_{58}, p_{63})$ .

Forming S-pol of  $p_{58}$  and  $p_{63}$ :

$$\begin{aligned}
p_{912} = & -512u_2^{11}u_1^9x_{12}^2x_4 - 1024u_5u_2^{10}u_1^{10}x_{12}^2 + 512u_2^{11}u_1^9x_{12}x_{10}x_5 + \\
& 1024u_6u_2^{10}u_1^{10}x_{12}x_{10} + 256u_5u_2^{11}u_1^8x_{12}x_5x_1 - \\
& 128u_6u_2^{13}u_1^7x_{12}x_4 + 128u_6u_5u_2^{12}u_1^7x_{12}x_1 - \\
& 256u_6u_2^{11}u_1^8x_{10}x_5x_1 + 128u_6u_2^{13}u_1^7x_{10}x_5 - \\
& 128u_6^2u_2^{12}u_1^7x_{10}x_1
\end{aligned}$$

Reduced to zero.

4005. Creating S-polynomial from the pair  $(p_{58}, p_{64})$ .  
 Skipping pair  $p_{58}$  and  $p_{64}$  because gcd of their leading monoms is zero.
4006. Creating S-polynomial from the pair  $(p_{58}, p_{65})$ .  
 Skipping pair  $p_{58}$  and  $p_{65}$  because gcd of their leading monoms is zero.
4007. Creating S-polynomial from the pair  $(p_{58}, p_{66})$ .  
 Skipping pair  $p_{58}$  and  $p_{66}$  because gcd of their leading monoms is zero.
4008. Creating S-polynomial from the pair  $(p_{58}, p_{67})$ .  
 Skipping pair  $p_{58}$  and  $p_{67}$  because gcd of their leading monoms is zero.
4009. Creating S-polynomial from the pair  $(p_{58}, p_{68})$ .  
 Skipping pair  $p_{58}$  and  $p_{68}$  because gcd of their leading monoms is zero.
4010. Creating S-polynomial from the pair  $(p_{58}, p_{69})$ .  
 Skipping pair  $p_{58}$  and  $p_{69}$  because gcd of their leading monoms is zero.
4011. Creating S-polynomial from the pair  $(p_{58}, p_{70})$ .  
 Skipping pair  $p_{58}$  and  $p_{70}$  because gcd of their leading monoms is zero.
4012. Creating S-polynomial from the pair  $(p_{58}, p_{71})$ .  
 Skipping pair  $p_{58}$  and  $p_{71}$  because gcd of their leading monoms is zero.
4013. Creating S-polynomial from the pair  $(p_{58}, p_{72})$ .  
 Skipping pair  $p_{58}$  and  $p_{72}$  because gcd of their leading monoms is zero.
4014. Creating S-polynomial from the pair  $(p_{58}, p_{73})$ .  
 Skipping pair  $p_{58}$  and  $p_{73}$  because gcd of their leading monoms is zero.
4015. Creating S-polynomial from the pair  $(p_{58}, p_{74})$ .  
 Forming S-pol of  $p_{58}$  and  $p_{74}$ :

$$\begin{aligned}
 p_{913} = & 32768u_5u_2^{17}u_1^{15}x_{12}x_4 + 65536u_5^2u_2^{16}u_1^{16}x_{12} - \\
 & 65536u_6u_2^{16}u_1^{16}x_{10}^2 - 32768u_5u_2^{17}u_1^{15}x_{10}x_5 + \\
 & 32768u_6u_2^{17}u_1^{15}x_{10}x_4 - 16384u_6u_5u_2^{18}u_1^{14}x_{10} - \\
 & 16384u_5^2u_2^{17}u_1^{14}x_5x_1 + 8192u_6u_5u_2^{19}u_1^{13}x_4 - \\
 & 8192u_6u_5^2u_2^{18}u_1^{13}x_1
 \end{aligned}$$

Reduced to zero.

4016. Creating S-polynomial from the pair  $(p_{58}, p_{75})$ .  
 Forming S-pol of  $p_{58}$  and  $p_{75}$ :

$$\begin{aligned}
 p_{914} = & -512u_5u_2^{12}u_1^9x_{12}x_1 + 256u_6u_2^{14}u_1^8x_{10} + 256u_5u_2^{13}u_1^8x_5x_1 - \\
 & 128u_6u_2^{15}u_1^7x_4 + 128u_6u_5u_2^{14}u_1^7x_1
 \end{aligned}$$

Reduced to zero.



4017. Creating S-polynomial from the pair  $(p_{58}, p_{76})$ .

Forming S-pol of  $p_{58}$  and  $p_{76}$ :

$$\begin{aligned} p_{915} = & -67108864u_5u_2^{25}u_1^{25}x_{12}x_{10}x_4 + \\ & (-16777216u_5^2u_2^{26}u_1^{24} - 67108864u_5^2u_2^{24}u_1^{26})x_{12}x_{10} + \\ & 67108864u_6u_2^{24}u_1^{26}x_{10}^3 + 33554432u_5u_2^{25}u_1^{25}x_{10}^2x_5 + \\ & 33554432u_6u_5u_2^{26}u_1^{24}x_{10}^2 + 16777216u_5u_2^{26}u_1^{24}x_{10}x_5x_4 + \\ & 16777216u_5^2u_2^{25}u_1^{24}x_{10}x_5x_1 + 8388608u_5^2u_2^{27}u_1^{23}x_{10}x_5 + \\ & (-16777216u_6u_5u_2^{27}u_1^{23} - 33554432u_6u_2^{26}u_1^{25})x_{10}x_4 + \\ & 8388608u_6u_5^2u_2^{26}u_1^{23}x_{10}x_1 + 16777216u_6u_5^2u_2^{26}u_1^{24}x_{10} \end{aligned}$$

Reduced to zero.

4018. Creating S-polynomial from the pair  $(p_{58}, p_{77})$ .

Forming S-pol of  $p_{58}$  and  $p_{77}$ :

$$\begin{aligned} p_{916} = & -16384u_2^{13}u_1^{14}x_{12}x_{10}x_4 + \\ & (-8192u_5u_2^{14}u_1^{13} - 32768u_5u_2^{12}u_1^{15})x_{12}x_{10} + 16384u_2^{13}u_1^{14}x_{10}^2x_5 + \\ & (8192u_6u_2^{14}u_1^{13} + 32768u_6u_2^{12}u_1^{15})x_{10}^2 + 8192u_5u_2^{13}u_1^{13}x_{10}x_5x_1 + \\ & 4096u_5u_2^{15}u_1^{12}x_{10}x_5 - 8192u_6u_2^{13}u_1^{13}x_{10}x_4x_1 - \\ & 4096u_6u_2^{15}u_1^{12}x_{10}x_4 \end{aligned}$$

Reduced to zero.

4019. Creating S-polynomial from the pair  $(p_{58}, p_{78})$ .

Forming S-pol of  $p_{58}$  and  $p_{78}$ :

$$p_{917} = 0$$

Reduced to zero.

4020. Creating S-polynomial from the pair  $(p_{58}, p_{79})$ .

Forming S-pol of  $p_{58}$  and  $p_{79}$ :

$$\begin{aligned} p_{918} = & (32768u_2^{21}u_1^{15} - 65536u_2^{19}u_1^{16})x_{12}x_4^2 + \\ & (65536u_5u_2^{20}u_1^{16} - 131072u_5u_2^{18}u_1^{17})x_{12}x_4 - 65536u_2^{20}u_1^{16}x_{10}^2x_5 + \\ & (262144u_2^{17}u_1^{18} - 131072u_2^{17}u_1^{17})x_{10}x_5x_4x_1 + \\ & (-131072u_2^{19}u_1^{17} + 65536u_2^{19}u_1^{16})x_{10}x_5x_4 - 32768u_5u_2^{20}u_1^{15}x_{10}x_5x_1 + \\ & 65536u_5u_2^{20}u_1^{16}x_{10}x_5 + \\ & (32768u_6u_2^{20}u_1^{15} + 131072u_6u_2^{18}u_1^{17} - 65536u_6u_2^{18}u_1^{16})x_{10}x_4x_1 + \\ & (-16384u_6u_2^{22}u_1^{14} - 65536u_6u_2^{20}u_1^{16} + 32768u_6u_2^{20}u_1^{15})x_{10}x_4 + \\ & (-16384u_5u_2^{21}u_1^{14} + 32768u_5u_2^{19}u_1^{15})x_5x_4x_1 + \\ & (8192u_6u_2^{23}u_1^{13} - 16384u_6u_2^{21}u_1^{14})x_4^2 + \\ & (-8192u_6u_5u_2^{22}u_1^{13} + 16384u_6u_5u_2^{20}u_1^{14})x_4x_1 \end{aligned}$$

S-pol added.

4021. Creating S-polynomial from the pair  $(p_{58}, p_{80})$ .

Forming S-pol of  $p_{58}$  and  $p_{80}$ :

$$\begin{aligned} p_{919} = & -512u_2^{13}u_1^9x_{12}x_4 - 1024u_5u_2^{12}u_1^{10}x_{12} + 512u_2^{13}u_1^9x_{10}x_5 - \\ & 512u_6u_2^{12}u_1^9x_{10}x_1 + \\ & (256u_6u_2^{14}u_1^8 + 1024u_6u_2^{12}u_1^{10})x_{10} + 256u_5u_2^{13}u_1^8x_5x_1 - \\ & 128u_6u_2^{15}u_1^7x_4 + 128u_6u_5u_2^{14}u_1^7x_1 \end{aligned}$$

Reduced to zero.

4022. Creating S-polynomial from the pair  $(p_{58}, p_{81})$ .

Skipping pair  $p_{58}$  and  $p_{81}$  because gcd of their leading monoms is zero.

4023. Creating S-polynomial from the pair  $(p_{58}, p_{82})$ .

Skipping pair  $p_{58}$  and  $p_{82}$  because gcd of their leading monoms is zero.

4024. Creating S-polynomial from the pair  $(p_{58}, p_{83})$ .

Skipping pair  $p_{58}$  and  $p_{83}$  because gcd of their leading monoms is zero.

4025. Creating S-polynomial from the pair  $(p_{58}, p_{84})$ .

Skipping pair  $p_{58}$  and  $p_{84}$  because gcd of their leading monoms is zero.

4026. Creating S-polynomial from the pair  $(p_{58}, p_{85})$ .

Skipping pair  $p_{58}$  and  $p_{85}$  because gcd of their leading monoms is zero.

4027. Creating S-polynomial from the pair  $(p_{58}, p_{86})$ .

Skipping pair  $p_{58}$  and  $p_{86}$  because gcd of their leading monoms is zero.

4028. Creating S-polynomial from the pair  $(p_{58}, p_{87})$ .

Skipping pair  $p_{58}$  and  $p_{87}$  because gcd of their leading monoms is zero.

4029. Creating S-polynomial from the pair  $(p_{58}, p_{88})$ .

Skipping pair  $p_{58}$  and  $p_{88}$  because gcd of their leading monoms is zero.

4030. Creating S-polynomial from the pair  $(p_{58}, p_{89})$ .

Skipping pair  $p_{58}$  and  $p_{89}$  because gcd of their leading monoms is zero.

4031. Creating S-polynomial from the pair  $(p_{58}, p_{90})$ .

Skipping pair  $p_{58}$  and  $p_{90}$  because gcd of their leading monoms is zero.

4032. Creating S-polynomial from the pair  $(p_{58}, p_{91})$ .

Skipping pair  $p_{58}$  and  $p_{91}$  because gcd of their leading monoms is zero.

4033. Creating S-polynomial from the pair  $(p_{58}, p_{92})$ .

Skipping pair  $p_{58}$  and  $p_{92}$  because gcd of their leading monoms is zero.

4034. Creating S-polynomial from the pair  $(p_{58}, p_{93})$ .

Skipping pair  $p_{58}$  and  $p_{93}$  because gcd of their leading monoms is zero.

4035. Creating S-polynomial from the pair  $(p_{58}, p_{94})$ .  
 Skipping pair  $p_{58}$  and  $p_{94}$  because gcd of their leading monoms is zero.
4036. Creating S-polynomial from the pair  $(p_{58}, p_{95})$ .  
 Skipping pair  $p_{58}$  and  $p_{95}$  because gcd of their leading monoms is zero.
4037. Creating S-polynomial from the pair  $(p_{58}, p_{96})$ .  
 Skipping pair  $p_{58}$  and  $p_{96}$  because gcd of their leading monoms is zero.
4038. Creating S-polynomial from the pair  $(p_{58}, p_{97})$ .  
 Skipping pair  $p_{58}$  and  $p_{97}$  because gcd of their leading monoms is zero.
4039. Creating S-polynomial from the pair  $(p_{58}, p_{98})$ .  
 Forming S-pol of  $p_{58}$  and  $p_{98}$ : Polynomial too big for output (text size is 3056 characters, number of terms is 33)  
 Reduced to zero.
4040. Creating S-polynomial from the pair  $(p_{58}, p_{99})$ .  
 Skipping pair  $p_{58}$  and  $p_{99}$  because gcd of their leading monoms is zero.
4041. Creating S-polynomial from the pair  $(p_{58}, p_{100})$ .  
 Forming S-pol of  $p_{58}$  and  $p_{100}$ :

$$\begin{aligned}
 p_{920} = & 33554432u_5u_2^{23}u_1^{25}x_{12}x_{10}^2 - 33554432u_2^{23}u_1^{25}x_{12}x_{10}x_4^2 + \\
 & 67108864u_2^{23}u_1^{26}x_{12}x_{10}x_4 + \\
 & (8388608u_5^2u_2^{25}u_1^{23} - 33554432u_5^2u_2^{23}u_1^{25})x_{12}x_{10} - \\
 & 33554432u_6u_2^{23}u_1^{25}x_{10}^3 - 16777216u_5u_2^{24}u_1^{24}x_{10}^2x_5 + \\
 & 16777216u_6u_2^{24}u_1^{24}x_{10}^2x_4 - 8388608u_6u_5u_2^{25}u_1^{23}x_{10}^2 - \\
 & 4194304u_5^2u_2^{26}u_1^{22}x_{10}x_5 - 8388608u_6u_2^{25}u_1^{23}x_{10}x_4^2 + \\
 & (4194304u_6u_5u_2^{26}u_1^{22} + 16777216u_6u_2^{25}u_1^{24})x_{10}x_4 - \\
 & 8388608u_6u_5^2u_2^{25}u_1^{23}x_{10}
 \end{aligned}$$

Reduced to zero.

4042. Creating S-polynomial from the pair  $(p_{58}, p_{101})$ .  
 Forming S-pol of  $p_{58}$  and  $p_{101}$ :

$$\begin{aligned}
 p_{921} = & 4096u_5u_2^{10}u_1^{12}x_{12}x_{10} + 1024u_2^{12}u_1^{10}x_{12}x_4^2 + \\
 & 2048u_5u_2^{11}u_1^{11}x_{12}x_4 - 2048u_2^{11}u_1^{11}x_{10}^2x_5 - 4096u_6u_2^{10}u_1^{12}x_{10}^2 - \\
 & 1024u_5u_2^{11}u_1^{10}x_{10}x_5x_1 + 1024u_6u_2^{11}u_1^{10}x_{10}x_4x_1 - \\
 & 512u_6u_2^{13}u_1^9x_{10}x_4 - 512u_5u_2^{12}u_1^9x_5x_4x_1 + 256u_6u_2^{14}u_1^8x_4^2 - \\
 & 256u_6u_5u_2^{13}u_1^8x_4x_1
 \end{aligned}$$

Reduced to zero.

4043. Creating S-polynomial from the pair  $(p_{58}, p_{102})$ .

Forming S-pol of  $p_{58}$  and  $p_{102}$ :

$$\begin{aligned}
p_{922} = & 16384u_2^{20}u_1^{14}x_{12}x_4^2 + 32768u_5u_2^{19}u_1^{15}x_{12}x_4 - \\
& 32768u_2^{19}u_1^{15}x_{10}^2x_5 + \\
& (131072u_2^{16}u_1^{17} - 65536u_2^{16}u_1^{16})x_{10}x_5x_4x_1 - 65536u_2^{18}u_1^{16}x_{10}x_5x_4 - \\
& 16384u_5u_2^{19}u_1^{14}x_{10}x_5x_1 + 32768u_5u_2^{19}u_1^{15}x_{10}x_5 + \\
& (16384u_6u_2^{19}u_1^{14} + 65536u_6u_2^{17}u_1^{16})x_{10}x_4x_1 + \\
& (-8192u_6u_2^{21}u_1^{13} - 32768u_6u_2^{19}u_1^{15} - 65536u_6u_2^{17}u_1^{16})x_{10}x_4 - \\
& 8192u_5u_2^{20}u_1^{13}x_5x_4x_1 + 4096u_6u_2^{22}u_1^{12}x_4^2 - \\
& 4096u_6u_5u_2^{21}u_1^{12}x_4x_1
\end{aligned}$$

S-pol added.

4044. Creating S-polynomial from the pair  $(p_{58}, p_{103})$ .

Forming S-pol of  $p_{58}$  and  $p_{103}$ : Polynomial too big for output (text size is 3074 characters, number of terms is 33)

Reduced to zero.

4045. Creating S-polynomial from the pair  $(p_{58}, p_{104})$ .

Skipping pair  $p_{58}$  and  $p_{104}$  because gcd of their leading monoms is zero.

4046. Creating S-polynomial from the pair  $(p_{58}, p_{105})$ .

Skipping pair  $p_{58}$  and  $p_{105}$  because gcd of their leading monoms is zero.

4047. Creating S-polynomial from the pair  $(p_{58}, p_{106})$ .

Skipping pair  $p_{58}$  and  $p_{106}$  because gcd of their leading monoms is zero.

4048. Creating S-polynomial from the pair  $(p_{59}, p_{60})$ .

Forming S-pol of  $p_{59}$  and  $p_{60}$ :

$$\begin{aligned}
p_{923} = & (-2048u_2^{23}u_1^{11} - 8192u_2^{21}u_1^{13})x_{12}^2x_4 + \\
& (1024u_5u_2^{24}u_1^{10} + 4096u_5u_2^{22}u_1^{12})x_{12}^2 + \\
& (2048u_2^{23}u_1^{11} + 8192u_2^{21}u_1^{13})x_{12}x_{10}x_5 + \\
& (-1024u_6u_2^{24}u_1^{10} - 4096u_6u_2^{22}u_1^{12})x_{12}x_{10} + \\
& (1024u_5u_2^{23}u_1^{10} + 4096u_5u_2^{21}u_1^{12})x_{12}x_5x_1 + \\
& (-512u_5u_2^{25}u_1^9 - 4096u_5u_2^{23}u_1^{11} - 8192u_5u_2^{21}u_1^{13})x_{12}x_5 + \\
& (4096u_6u_2^{21}u_1^{12} + 16384u_6u_2^{19}u_1^{14})x_{12}x_4x_1 + \\
& (512u_6u_5u_2^{24}u_1^9 + 4096u_6u_5u_2^{22}u_1^{11} + 8192u_6u_5u_2^{20}u_1^{13})x_{12}x_1 + \\
& (-1024u_6u_2^{23}u_1^{10} - 8192u_6u_2^{21}u_1^{12} - 16384u_6u_2^{19}u_1^{14})x_{10}x_5x_1 + \\
& (512u_6u_2^{25}u_1^9 + 4096u_6u_2^{23}u_1^{11} + 8192u_6u_2^{21}u_1^{13})x_{10}x_5 + \\
& (-512u_6^2u_2^{24}u_1^9 - 4096u_6^2u_2^{22}u_1^{11} - 8192u_6^2u_2^{20}u_1^{13})x_{10}x_1
\end{aligned}$$

Reduced to zero.

4049. Creating S-polynomial from the pair  $(p_{59}, p_{61})$ .

Forming S-pol of  $p_{59}$  and  $p_{61}$ :

$$\begin{aligned} p_{924} = & 16384u_2^{19}u_1^{14}x_{12}x_{10}x_4 + 32768u_5u_2^{18}u_1^{15}x_{12}x_{10} - \\ & 16384u_2^{19}u_1^{14}x_{10}^2x_5 - 32768u_6u_2^{18}u_1^{15}x_{10}^2 - \\ & 8192u_5u_2^{19}u_1^{13}x_{10}x_5x_1 + 8192u_6u_2^{19}u_1^{13}x_{10}x_4x_1 \end{aligned}$$

Reduced to zero.

4050. Creating S-polynomial from the pair  $(p_{59}, p_{62})$ .

Forming S-pol of  $p_{59}$  and  $p_{62}$ : Polynomial too big for output (text size is 1604 characters, number of terms is 16)

Reduced to zero.

4051. Creating S-polynomial from the pair  $(p_{59}, p_{63})$ .

Forming S-pol of  $p_{59}$  and  $p_{63}$ :

$$\begin{aligned} p_{925} = & 1024u_2^{17}u_1^{10}x_{12}^2x_4 - 512u_5u_2^{18}u_1^9x_{12}^2 - 1024u_2^{17}u_1^{10}x_{12}x_{10}x_5 + \\ & 512u_6u_2^{18}u_1^9x_{12}x_{10} - 512u_5u_2^{17}u_1^9x_{12}x_5x_1 + \\ & (256u_5u_2^{19}u_1^8 + 1024u_5u_2^{17}u_1^{10})x_{12}x_5 - 2048u_6u_2^{15}u_1^{11}x_{12}x_4x_1 + \\ & (-256u_6u_5u_2^{18}u_1^8 - 1024u_6u_5u_2^{16}u_1^{10})x_{12}x_1 + \\ & (512u_6u_2^{17}u_1^9 + 2048u_6u_2^{15}u_1^{11})x_{10}x_5x_1 + \\ & (-256u_6u_2^{19}u_1^8 - 1024u_6u_2^{17}u_1^{10})x_{10}x_5 + \\ & (256u_6^2u_2^{18}u_1^8 + 1024u_6^2u_2^{16}u_1^{10})x_{10}x_1 \end{aligned}$$

Reduced to zero.

4052. Creating S-polynomial from the pair  $(p_{59}, p_{64})$ .

Skipping pair  $p_{59}$  and  $p_{64}$  because gcd of their leading monoms is zero.

4053. Creating S-polynomial from the pair  $(p_{59}, p_{65})$ .

Skipping pair  $p_{59}$  and  $p_{65}$  because gcd of their leading monoms is zero.

4054. Creating S-polynomial from the pair  $(p_{59}, p_{66})$ .

Skipping pair  $p_{59}$  and  $p_{66}$  because gcd of their leading monoms is zero.

4055. Creating S-polynomial from the pair  $(p_{59}, p_{67})$ .

Skipping pair  $p_{59}$  and  $p_{67}$  because gcd of their leading monoms is zero.

4056. Creating S-polynomial from the pair  $(p_{59}, p_{68})$ .

Skipping pair  $p_{59}$  and  $p_{68}$  because gcd of their leading monoms is zero.

4057. Creating S-polynomial from the pair  $(p_{59}, p_{69})$ .

Skipping pair  $p_{59}$  and  $p_{69}$  because gcd of their leading monoms is zero.

4058. Creating S-polynomial from the pair  $(p_{59}, p_{70})$ .

Skipping pair  $p_{59}$  and  $p_{70}$  because gcd of their leading monoms is zero.

4059. Creating S-polynomial from the pair  $(p_{59}, p_{71})$ .

Skipping pair  $p_{59}$  and  $p_{71}$  because gcd of their leading monoms is zero.

4060. Creating S-polynomial from the pair  $(p_{59}, p_{72})$ .

Skipping pair  $p_{59}$  and  $p_{72}$  because gcd of their leading monoms is zero.

4061. Creating S-polynomial from the pair  $(p_{59}, p_{73})$ .

Skipping pair  $p_{59}$  and  $p_{73}$  because gcd of their leading monoms is zero.

4062. Creating S-polynomial from the pair  $(p_{59}, p_{74})$ .

Forming S-pol of  $p_{59}$  and  $p_{74}$ :

$$\begin{aligned} p_{926} = & -65536u_5u_2^{23}u_1^{16}x_{12}x_4 + 32768u_5^2u_2^{24}u_1^{15}x_{12} + \\ & (131072u_6u_2^{22}u_1^{17} + 524288u_6u_2^{20}u_1^{19})x_{10}^2 + 65536u_5u_2^{23}u_1^{16}x_{10}x_5 + \\ & (-65536u_6u_2^{23}u_1^{16} - 262144u_6u_2^{21}u_1^{18})x_{10}x_4 - 524288u_6u_5u_2^{20}u_1^{19}x_{10} + \\ & 32768u_5^2u_2^{23}u_1^{15}x_5x_1 + \\ & (-16384u_5^2u_2^{25}u_1^{14} - 65536u_5^2u_2^{23}u_1^{16})x_5 + \\ & 131072u_6u_5u_2^{21}u_1^{17}x_4x_1 + \\ & (16384u_6u_5^2u_2^{24}u_1^{14} + 65536u_6u_5^2u_2^{22}u_1^{16})x_1 \end{aligned}$$

Reduced to zero.

4063. Creating S-polynomial from the pair  $(p_{59}, p_{75})$ .

Forming S-pol of  $p_{59}$  and  $p_{75}$ :

$$\begin{aligned} p_{927} = & -4096u_2^{17}u_1^{12}x_{12}x_4 + (1024u_5u_2^{18}u_1^{10} + 4096u_5u_2^{16}u_1^{12})x_{12}x_1 + \\ & (-512u_5u_2^{20}u_1^9 - 2048u_5u_2^{18}u_1^{11} - 8192u_5u_2^{16}u_1^{13})x_{12} + \\ & 4096u_2^{17}u_1^{12}x_{10}x_5 + 8192u_6u_2^{16}u_1^{13}x_{10} - 512u_5u_2^{19}u_1^9x_5x_1 + \\ & (256u_5u_2^{21}u_1^8 + 1024u_5u_2^{19}u_1^{10})x_5 - 2048u_6u_2^{17}u_1^{11}x_4x_1 + \\ & (-256u_6u_5u_2^{20}u_1^8 - 1024u_6u_5u_2^{18}u_1^{10})x_1 \end{aligned}$$

Reduced to zero.

4064. Creating S-polynomial from the pair  $(p_{59}, p_{76})$ .

Forming S-pol of  $p_{59}$  and  $p_{76}$ :

$$\begin{aligned} p_{928} = & (134217728u_5u_2^{31}u_1^{26} + 268435456u_5u_2^{29}u_1^{28})x_{12}x_{10}x_4 + \\ & 134217728u_5^2u_2^{30}u_1^{27}x_{12}x_{10} + \\ & (-134217728u_6u_2^{30}u_1^{27} - 536870912u_6u_2^{28}u_1^{29})x_{10}^3 - \\ & 67108864u_5u_2^{31}u_1^{26}x_{10}^2x_5 + \\ & (-33554432u_6u_5u_2^{32}u_1^{25} - 134217728u_6u_5u_2^{30}u_1^{27} + \\ & 536870912u_6u_5u_2^{28}u_1^{29})x_{10}^2 + \\ & (-33554432u_5u_2^{32}u_1^{25} - 134217728u_5u_2^{30}u_1^{27})x_{10}x_5x_4 - \end{aligned}$$

$$\begin{aligned}
& 33554432u_5^2u_2^{31}u_1^{25}x_{10}x_5x_1 - 134217728u_6u_5u_2^{29}u_1^{27}x_{10}x_4x_1 + \\
& (16777216u_6u_5u_2^{33}u_1^{24} + 67108864u_6u_5u_2^{31}u_1^{26} + 67108864u_6u_2^{32}u_1^{26} + \\
& 268435456u_6u_2^{30}u_1^{28})x_{10}x_4 + \\
& (-16777216u_6u_5^2u_2^{32}u_1^{24} - 67108864u_6u_5^2u_2^{30}u_1^{26})x_{10}x_1 + \\
& (-33554432u_6u_5^2u_2^{32}u_1^{25} - 134217728u_6u_5^2u_2^{30}u_1^{27})x_{10}
\end{aligned}$$

Reduced to zero.

4065. Creating S-polynomial from the pair  $(p_{59}, p_{77})$ .

Forming S-pol of  $p_{59}$  and  $p_{77}$ :

$$\begin{aligned}
p_{929} = & 32768u_2^{19}u_1^{15}x_{12}x_{10}x_4 + 65536u_5u_2^{18}u_1^{16}x_{12}x_{10} - \\
& 32768u_2^{19}u_1^{15}x_{10}^2x_5 - 65536u_6u_2^{18}u_1^{16}x_{10}^2 - \\
& 16384u_5u_2^{19}u_1^{14}x_{10}x_5x_1 + 16384u_6u_2^{19}u_1^{14}x_{10}x_4x_1
\end{aligned}$$

Reduced to zero.

4066. Creating S-polynomial from the pair  $(p_{59}, p_{78})$ .

Forming S-pol of  $p_{59}$  and  $p_{78}$ :

$$\begin{aligned}
p_{930} = & -131072u_2^{17}u_1^{17}x_{12}x_{10}x_4 + \\
& (-16384u_5u_2^{20}u_1^{14} - 65536u_5u_2^{18}u_1^{16} - 262144u_5u_2^{16}u_1^{18})x_{12}x_{10} + \\
& 131072u_2^{17}u_1^{17}x_{10}^2x_5 + \\
& (16384u_6u_2^{20}u_1^{14} + 65536u_6u_2^{18}u_1^{16} + 262144u_6u_2^{16}u_1^{18})x_{10}^2 + \\
& 65536u_5u_2^{17}u_1^{16}x_{10}x_5x_1 + \\
& (8192u_5u_2^{21}u_1^{13} + 32768u_5u_2^{19}u_1^{15})x_{10}x_5 - 65536u_6u_2^{17}u_1^{16}x_{10}x_4x_1 + \\
& (-8192u_6u_2^{21}u_1^{13} - 32768u_6u_2^{19}u_1^{15})x_{10}x_4
\end{aligned}$$

Reduced to zero.

4067. Creating S-polynomial from the pair  $(p_{59}, p_{79})$ .

Forming S-pol of  $p_{59}$  and  $p_{79}$ : Polynomial too big for output (text size is 1295 characters, number of terms is 13)

S-pol added.

4068. Creating S-polynomial from the pair  $(p_{59}, p_{80})$ .

Forming S-pol of  $p_{59}$  and  $p_{80}$ :

$$\begin{aligned}
p_{931} = & 1024u_2^{19}u_1^{10}x_{12}x_4 - 512u_5u_2^{20}u_1^9x_{12} - 1024u_2^{19}u_1^{10}x_{10}x_5 + \\
& (1024u_6u_2^{18}u_1^{10} + 4096u_6u_2^{16}u_1^{12})x_{10}x_1 - 2048u_6u_2^{18}u_1^{11}x_{10} - \\
& 512u_5u_2^{19}u_1^9x_5x_1 + \\
& (256u_5u_2^{21}u_1^8 + 1024u_5u_2^{19}u_1^{10})x_5 - 2048u_6u_2^{17}u_1^{11}x_4x_1 + \\
& (-256u_6u_5u_2^{20}u_1^8 - 1024u_6u_5u_2^{18}u_1^{10})x_1
\end{aligned}$$

Reduced to zero.

4069. Creating S-polynomial from the pair  $(p_{59}, p_{81})$ .  
 Skipping pair  $p_{59}$  and  $p_{81}$  because gcd of their leading monoms is zero.
4070. Creating S-polynomial from the pair  $(p_{59}, p_{82})$ .  
 Skipping pair  $p_{59}$  and  $p_{82}$  because gcd of their leading monoms is zero.
4071. Creating S-polynomial from the pair  $(p_{59}, p_{83})$ .  
 Skipping pair  $p_{59}$  and  $p_{83}$  because gcd of their leading monoms is zero.
4072. Creating S-polynomial from the pair  $(p_{59}, p_{84})$ .  
 Skipping pair  $p_{59}$  and  $p_{84}$  because gcd of their leading monoms is zero.
4073. Creating S-polynomial from the pair  $(p_{59}, p_{85})$ .  
 Skipping pair  $p_{59}$  and  $p_{85}$  because gcd of their leading monoms is zero.
4074. Creating S-polynomial from the pair  $(p_{59}, p_{86})$ .  
 Skipping pair  $p_{59}$  and  $p_{86}$  because gcd of their leading monoms is zero.
4075. Creating S-polynomial from the pair  $(p_{59}, p_{87})$ .  
 Skipping pair  $p_{59}$  and  $p_{87}$  because gcd of their leading monoms is zero.
4076. Creating S-polynomial from the pair  $(p_{59}, p_{88})$ .  
 Skipping pair  $p_{59}$  and  $p_{88}$  because gcd of their leading monoms is zero.
4077. Creating S-polynomial from the pair  $(p_{59}, p_{89})$ .  
 Skipping pair  $p_{59}$  and  $p_{89}$  because gcd of their leading monoms is zero.
4078. Creating S-polynomial from the pair  $(p_{59}, p_{90})$ .  
 Skipping pair  $p_{59}$  and  $p_{90}$  because gcd of their leading monoms is zero.
4079. Creating S-polynomial from the pair  $(p_{59}, p_{91})$ .  
 Skipping pair  $p_{59}$  and  $p_{91}$  because gcd of their leading monoms is zero.
4080. Creating S-polynomial from the pair  $(p_{59}, p_{92})$ .  
 Skipping pair  $p_{59}$  and  $p_{92}$  because gcd of their leading monoms is zero.
4081. Creating S-polynomial from the pair  $(p_{59}, p_{93})$ .  
 Skipping pair  $p_{59}$  and  $p_{93}$  because gcd of their leading monoms is zero.
4082. Creating S-polynomial from the pair  $(p_{59}, p_{94})$ .  
 Skipping pair  $p_{59}$  and  $p_{94}$  because gcd of their leading monoms is zero.
4083. Creating S-polynomial from the pair  $(p_{59}, p_{95})$ .  
 Skipping pair  $p_{59}$  and  $p_{95}$  because gcd of their leading monoms is zero.
4084. Creating S-polynomial from the pair  $(p_{59}, p_{96})$ .  
 Skipping pair  $p_{59}$  and  $p_{96}$  because gcd of their leading monoms is zero.
4085. Creating S-polynomial from the pair  $(p_{59}, p_{97})$ .  
 Skipping pair  $p_{59}$  and  $p_{97}$  because gcd of their leading monoms is zero.



4086. Creating S-polynomial from the pair  $(p_{59}, p_{98})$ .

Forming S-pol of  $p_{59}$  and  $p_{98}$ : Polynomial too big for output (text size is 5239 characters, number of terms is 34)

Reduced to zero.

4087. Creating S-polynomial from the pair  $(p_{59}, p_{99})$ .

Skipping pair  $p_{59}$  and  $p_{99}$  because gcd of their leading monoms is zero.

4088. Creating S-polynomial from the pair  $(p_{59}, p_{100})$ .

Forming S-pol of  $p_{59}$  and  $p_{100}$ : Polynomial too big for output (text size is 1310 characters, number of terms is 15)

Reduced to zero.

4089. Creating S-polynomial from the pair  $(p_{59}, p_{101})$ .

Forming S-pol of  $p_{59}$  and  $p_{101}$ :

$$\begin{aligned} p_{932} = & (-8192u_5u_2^{16}u_1^{13} - 32768u_5u_2^{14}u_1^{15})x_{12}x_{10} - 2048u_2^{18}u_1^{11}x_{12}x_4^2 + \\ & 1024u_5u_2^{19}u_1^{10}x_{12}x_4 + (4096u_2^{17}u_1^{12} + 16384u_2^{15}u_1^{14})x_{10}^2x_5 + \\ & (8192u_6u_2^{16}u_1^{13} + 32768u_6u_2^{14}u_1^{15})x_{10}^2 - 8192u_2^{16}u_1^{13}x_{10}x_5x_4 + \\ & (2048u_5u_2^{17}u_1^{11} + 8192u_5u_2^{15}u_1^{13})x_{10}x_5x_1 + \\ & (-2048u_6u_2^{17}u_1^{11} - 8192u_6u_2^{15}u_1^{13})x_{10}x_4x_1 - 16384u_6u_2^{15}u_1^{14}x_{10}x_4 + \\ & 1024u_5u_2^{18}u_1^{10}x_5x_4x_1 + \\ & (-512u_5u_2^{20}u_1^9 - 2048u_5u_2^{18}u_1^{11})x_5x_4 + 4096u_6u_2^{16}u_1^{12}x_4^2x_1 + \\ & (512u_6u_5u_2^{19}u_1^9 + 2048u_6u_5u_2^{17}u_1^{11})x_4x_1 \end{aligned}$$

Reduced to zero.

4090. Creating S-polynomial from the pair  $(p_{59}, p_{102})$ .

Forming S-pol of  $p_{59}$  and  $p_{102}$ :

$$\begin{aligned} p_{933} = & -32768u_2^{26}u_1^{15}x_{12}x_4^2 + 16384u_5u_2^{27}u_1^{14}x_{12}x_4 + \\ & (65536u_2^{25}u_1^{16} + 262144u_2^{23}u_1^{18})x_{10}^2x_5 + \\ & (-262144u_2^{22}u_1^{18} + 131072u_2^{22}u_1^{17} - 1048576u_2^{20}u_1^{20} + \\ & 524288u_2^{20}u_1^{19})x_{10}x_5x_4x_1 + 524288u_2^{22}u_1^{19}x_{10}x_5x_4 + \\ & (32768u_5u_2^{25}u_1^{15} + 131072u_5u_2^{23}u_1^{17})x_{10}x_5x_1 + \\ & (-65536u_5u_2^{25}u_1^{16} - 262144u_5u_2^{23}u_1^{18})x_{10}x_5 + \\ & (-32768u_6u_2^{25}u_1^{15} - 262144u_6u_2^{23}u_1^{17} - 524288u_6u_2^{21}u_1^{19})x_{10}x_4x_1 + \\ & (65536u_6u_2^{25}u_1^{16} + 131072u_6u_2^{23}u_1^{17} + 524288u_6u_2^{21}u_1^{19})x_{10}x_4 + \\ & 16384u_5u_2^{26}u_1^{14}x_5x_4x_1 + \\ & (-8192u_5u_2^{28}u_1^{13} - 32768u_5u_2^{26}u_1^{15})x_5x_4 + 65536u_6u_2^{24}u_1^{16}x_4^2x_1 + \\ & (8192u_6u_5u_2^{27}u_1^{13} + 32768u_6u_5u_2^{25}u_1^{15})x_4x_1 \end{aligned}$$

S-pol added.

4091. Creating S-polynomial from the pair  $(p_{59}, p_{103})$ .

Forming S-pol of  $p_{59}$  and  $p_{103}$ : Polynomial too big for output (text size is 5251 characters, number of terms is 34)

Reduced to zero.

4092. Creating S-polynomial from the pair  $(p_{59}, p_{104})$ .

Skipping pair  $p_{59}$  and  $p_{104}$  because gcd of their leading monoms is zero.

4093. Creating S-polynomial from the pair  $(p_{59}, p_{105})$ .

Skipping pair  $p_{59}$  and  $p_{105}$  because gcd of their leading monoms is zero.

4094. Creating S-polynomial from the pair  $(p_{59}, p_{106})$ .

Skipping pair  $p_{59}$  and  $p_{106}$  because gcd of their leading monoms is zero.

4095. Creating S-polynomial from the pair  $(p_{60}, p_{61})$ .

Forming S-pol of  $p_{60}$  and  $p_{61}$ :

$$\begin{aligned} p_{934} = & (512u_5u_2^{18}u_1^9 + 2048u_5u_2^{16}u_1^{11})x_{12}^2 + \\ & (-512u_6u_2^{18}u_1^9 - 2048u_6u_2^{16}u_1^{11})x_{12}x_{10} + \\ & (-256u_5u_2^{19}u_1^8 - 1024u_5u_2^{17}u_1^{10})x_{12}x_5 + \\ & (512u_6u_2^{17}u_1^9 + 2048u_6u_2^{15}u_1^{11})x_{12}x_4x_1 + \\ & (256u_6u_5u_2^{18}u_1^8 + 1024u_6u_5u_2^{16}u_1^{10})x_{12}x_1 + \\ & (-512u_6u_2^{17}u_1^9 - 2048u_6u_2^{15}u_1^{11})x_{10}x_5x_1 + \\ & (256u_6u_2^{19}u_1^8 + 1024u_6u_2^{17}u_1^{10})x_{10}x_5 + \\ & (-256u_6^2u_2^{18}u_1^8 - 1024u_6^2u_2^{16}u_1^{10})x_{10}x_1 \end{aligned}$$

Reduced to zero.

4096. Creating S-polynomial from the pair  $(p_{60}, p_{62})$ .

Forming S-pol of  $p_{60}$  and  $p_{62}$ :

$$\begin{aligned} p_{935} = & (32768u_2^{29}u_1^{15} + 131072u_2^{27}u_1^{17})x_{12}x_{10}x_5 + \\ & (-16384u_2^{30}u_1^{14} - 65536u_2^{28}u_1^{16})x_{12}x_5x_4 + \\ & (8192u_5u_2^{31}u_1^{13} - 131072u_5u_2^{27}u_1^{17})x_{12}x_5 + \\ & (4096u_6u_5u_2^{31}u_1^{12} + 16384u_6u_5u_2^{29}u_1^{14} + 16384u_5u_2^{30}u_1^{14} + \\ & 65536u_5u_2^{28}u_1^{16})x_5x_1 + (-8192u_5u_2^{32}u_1^{13} - 32768u_5u_2^{30}u_1^{15})x_5 + \\ & (-8192u_6^2u_5u_2^{30}u_1^{13} - 32768u_6^2u_5u_2^{28}u_1^{15})x_1 + \\ & (4096u_6^2u_5u_2^{32}u_1^{12} + 16384u_6^2u_5u_2^{30}u_1^{14}) \end{aligned}$$

Reduced to zero.

4097. Creating S-polynomial from the pair  $(p_{60}, p_{63})$ .

Forming S-pol of  $p_{60}$  and  $p_{63}$ :

$$p_{936} = 0$$

Reduced to zero.

4098. Creating S-polynomial from the pair  $(p_{60}, p_{64})$ .

Skipping pair  $p_{60}$  and  $p_{64}$  because gcd of their leading monoms is zero.

4099. Creating S-polynomial from the pair  $(p_{60}, p_{65})$ .

Skipping pair  $p_{60}$  and  $p_{65}$  because gcd of their leading monoms is zero.

4100. Creating S-polynomial from the pair  $(p_{60}, p_{66})$ .

Skipping pair  $p_{60}$  and  $p_{66}$  because gcd of their leading monoms is zero.

4101. Creating S-polynomial from the pair  $(p_{60}, p_{67})$ .

Skipping pair  $p_{60}$  and  $p_{67}$  because gcd of their leading monoms is zero.

4102. Creating S-polynomial from the pair  $(p_{60}, p_{68})$ .

Skipping pair  $p_{60}$  and  $p_{68}$  because gcd of their leading monoms is zero.

4103. Creating S-polynomial from the pair  $(p_{60}, p_{69})$ .

Skipping pair  $p_{60}$  and  $p_{69}$  because gcd of their leading monoms is zero.

4104. Creating S-polynomial from the pair  $(p_{60}, p_{70})$ .

Skipping pair  $p_{60}$  and  $p_{70}$  because gcd of their leading monoms is zero.

4105. Creating S-polynomial from the pair  $(p_{60}, p_{71})$ .

Skipping pair  $p_{60}$  and  $p_{71}$  because gcd of their leading monoms is zero.

4106. Creating S-polynomial from the pair  $(p_{60}, p_{72})$ .

Skipping pair  $p_{60}$  and  $p_{72}$  because gcd of their leading monoms is zero.

4107. Creating S-polynomial from the pair  $(p_{60}, p_{73})$ .

Skipping pair  $p_{60}$  and  $p_{73}$  because gcd of their leading monoms is zero.

4108. Creating S-polynomial from the pair  $(p_{60}, p_{74})$ .

Forming S-pol of  $p_{60}$  and  $p_{74}$ :

$$\begin{aligned} p_{937} = & (8192u_6u_2^{20}u_1^{13} + 32768u_6u_2^{18}u_1^{15})x_{12}x_{10} + \\ & (-4096u_6u_2^{21}u_1^{12} - 16384u_6u_2^{19}u_1^{14})x_{12}x_4 + \\ & (2048u_6u_5u_2^{22}u_1^{11} - 32768u_6u_5u_2^{18}u_1^{15})x_{12} + \\ & (2048u_6u_5u_2^{21}u_1^{11} + 8192u_6u_5u_2^{19}u_1^{13})x_5x_1 + \\ & (-1024u_6u_5u_2^{23}u_1^{10} - 4096u_6u_5u_2^{21}u_1^{12})x_5 + \\ & (1024u_6^2u_5u_2^{22}u_1^{10} + 4096u_6^2u_5u_2^{20}u_1^{12})x_1 \end{aligned}$$

Reduced to zero.

4109. Creating S-polynomial from the pair  $(p_{60}, p_{75})$ .

Skipping pair  $p_{60}$  and  $p_{75}$  because gcd of their leading monoms is zero.

4110. Creating S-polynomial from the pair  $(p_{60}, p_{76})$ .

Forming S-pol of  $p_{60}$  and  $p_{76}$ : Polynomial too big for output (text size is 1090 characters, number of terms is 11)

Reduced to zero.

4111. Creating S-polynomial from the pair  $(p_{60}, p_{77})$ .

Forming S-pol of  $p_{60}$  and  $p_{77}$ :

$$\begin{aligned} p_{938} = & (1024u_5u_2^{18}u_1^{10} + 4096u_5u_2^{16}u_1^{12})x_{12}^2 + \\ & (-1024u_6u_2^{18}u_1^{10} - 4096u_6u_2^{16}u_1^{12})x_{12}x_{10} + \\ & (-512u_5u_2^{19}u_1^9 - 2048u_5u_2^{17}u_1^{11})x_{12}x_5 + \\ & (1024u_6u_2^{17}u_1^{10} + 4096u_6u_2^{15}u_1^{12})x_{12}x_4x_1 + \\ & (512u_6u_5u_2^{18}u_1^9 + 2048u_6u_5u_2^{16}u_1^{11})x_{12}x_1 + \\ & (-1024u_6u_2^{17}u_1^{10} - 4096u_6u_2^{15}u_1^{12})x_{10}x_5x_1 + \\ & (512u_6u_2^{19}u_1^9 + 2048u_6u_2^{17}u_1^{11})x_{10}x_5 + \\ & (-512u_6^2u_2^{18}u_1^9 - 2048u_6^2u_2^{16}u_1^{11})x_{10}x_1 \end{aligned}$$

Reduced to zero.

4112. Creating S-polynomial from the pair  $(p_{60}, p_{78})$ .

Forming S-pol of  $p_{60}$  and  $p_{78}$ :

$$\begin{aligned} p_{939} = & (-2048u_2^{17}u_1^{11} - 8192u_2^{15}u_1^{13})x_{12}^2x_4 + \\ & (-4096u_5u_2^{16}u_1^{12} - 16384u_5u_2^{14}u_1^{14})x_{12}^2 + \\ & (2048u_2^{17}u_1^{11} + 8192u_2^{15}u_1^{13})x_{12}x_{10}x_5 + \\ & (4096u_6u_2^{16}u_1^{12} + 16384u_6u_2^{14}u_1^{14})x_{12}x_{10} + \\ & (1024u_5u_2^{17}u_1^{10} + 4096u_5u_2^{15}u_1^{12})x_{12}x_5x_1 + \\ & (-512u_6u_2^{19}u_1^9 - 2048u_6u_2^{17}u_1^{11})x_{12}x_4 + \\ & (512u_6u_5u_2^{18}u_1^9 + 2048u_6u_5u_2^{16}u_1^{11})x_{12}x_1 + \\ & (-1024u_6u_2^{17}u_1^{10} - 4096u_6u_2^{15}u_1^{12})x_{10}x_5x_1 + \\ & (512u_6u_2^{19}u_1^9 + 2048u_6u_2^{17}u_1^{11})x_{10}x_5 + \\ & (-512u_6^2u_2^{18}u_1^9 - 2048u_6^2u_2^{16}u_1^{11})x_{10}x_1 \end{aligned}$$

Reduced to zero.

4113. Creating S-polynomial from the pair  $(p_{60}, p_{79})$ .

Forming S-pol of  $p_{60}$  and  $p_{79}$ : Polynomial too big for output (text size is 1148 characters, number of terms is 10)

S-pol added.

4114. Creating S-polynomial from the pair  $(p_{60}, p_{80})$ .

Forming S-pol of  $p_{60}$  and  $p_{80}$ :

$$\begin{aligned} p_{940} = & (64u_6u_2^{16}u_1^6 + 256u_6u_2^{14}u_1^8)x_{12}x_1 + \\ & (-32u_6u_2^{18}u_1^5 - 128u_6u_2^{16}u_1^7)x_{12} + \\ & (-32u_6u_2^{17}u_1^5 - 128u_6u_2^{15}u_1^7)x_5x_1 + \\ & (16u_6u_2^{19}u_1^4 + 64u_6u_2^{17}u_1^6)x_5 + \\ & (-16u_6^2u_2^{18}u_1^4 - 64u_6^2u_2^{16}u_1^6)x_1 \end{aligned}$$

Reduced to zero.

4115. Creating S-polynomial from the pair  $(p_{60}, p_{81})$ .

Skipping pair  $p_{60}$  and  $p_{81}$  because gcd of their leading monoms is zero.

4116. Creating S-polynomial from the pair  $(p_{60}, p_{82})$ .

Skipping pair  $p_{60}$  and  $p_{82}$  because gcd of their leading monoms is zero.

4117. Creating S-polynomial from the pair  $(p_{60}, p_{83})$ .

Skipping pair  $p_{60}$  and  $p_{83}$  because gcd of their leading monoms is zero.

4118. Creating S-polynomial from the pair  $(p_{60}, p_{84})$ .

Skipping pair  $p_{60}$  and  $p_{84}$  because gcd of their leading monoms is zero.

4119. Creating S-polynomial from the pair  $(p_{60}, p_{85})$ .

Skipping pair  $p_{60}$  and  $p_{85}$  because gcd of their leading monoms is zero.

4120. Creating S-polynomial from the pair  $(p_{60}, p_{86})$ .

Skipping pair  $p_{60}$  and  $p_{86}$  because gcd of their leading monoms is zero.

4121. Creating S-polynomial from the pair  $(p_{60}, p_{87})$ .

Skipping pair  $p_{60}$  and  $p_{87}$  because gcd of their leading monoms is zero.

4122. Creating S-polynomial from the pair  $(p_{60}, p_{88})$ .

Skipping pair  $p_{60}$  and  $p_{88}$  because gcd of their leading monoms is zero.

4123. Creating S-polynomial from the pair  $(p_{60}, p_{89})$ .

Skipping pair  $p_{60}$  and  $p_{89}$  because gcd of their leading monoms is zero.

4124. Creating S-polynomial from the pair  $(p_{60}, p_{90})$ .

Skipping pair  $p_{60}$  and  $p_{90}$  because gcd of their leading monoms is zero.

4125. Creating S-polynomial from the pair  $(p_{60}, p_{91})$ .

Skipping pair  $p_{60}$  and  $p_{91}$  because gcd of their leading monoms is zero.

4126. Creating S-polynomial from the pair  $(p_{60}, p_{92})$ .

Skipping pair  $p_{60}$  and  $p_{92}$  because gcd of their leading monoms is zero.

4127. Creating S-polynomial from the pair  $(p_{60}, p_{93})$ .

Skipping pair  $p_{60}$  and  $p_{93}$  because gcd of their leading monoms is zero.

4128. Creating S-polynomial from the pair  $(p_{60}, p_{94})$ .  
 Skipping pair  $p_{60}$  and  $p_{94}$  because gcd of their leading monoms is zero.
4129. Creating S-polynomial from the pair  $(p_{60}, p_{95})$ .  
 Skipping pair  $p_{60}$  and  $p_{95}$  because gcd of their leading monoms is zero.
4130. Creating S-polynomial from the pair  $(p_{60}, p_{96})$ .  
 Skipping pair  $p_{60}$  and  $p_{96}$  because gcd of their leading monoms is zero.
4131. Creating S-polynomial from the pair  $(p_{60}, p_{97})$ .  
 Skipping pair  $p_{60}$  and  $p_{97}$  because gcd of their leading monoms is zero.
4132. Creating S-polynomial from the pair  $(p_{60}, p_{98})$ .  
 Forming S-pol of  $p_{60}$  and  $p_{98}$ : Polynomial too big for output (text size is 4885 characters, number of terms is 30)  
 Reduced to zero.
4133. Creating S-polynomial from the pair  $(p_{60}, p_{99})$ .  
 Skipping pair  $p_{60}$  and  $p_{99}$  because gcd of their leading monoms is zero.
4134. Creating S-polynomial from the pair  $(p_{60}, p_{100})$ .  
 Forming S-pol of  $p_{60}$  and  $p_{100}$ : Polynomial too big for output (text size is 1527 characters, number of terms is 16)  
 Reduced to zero.
4135. Creating S-polynomial from the pair  $(p_{60}, p_{101})$ .  
 Forming S-pol of  $p_{60}$  and  $p_{101}$ :

$$\begin{aligned}
 p_{941} = & (-512u_5u_2^{14}u_1^9 - 2048u_5u_2^{12}u_1^{11})x_{12}^2 + \\
 & (256u_2^{15}u_1^8 + 1024u_2^{13}u_1^{10})x_{12}x_{10}x_5 + \\
 & (512u_6u_2^{14}u_1^9 + 2048u_6u_2^{12}u_1^{11})x_{12}x_{10} + \\
 & (-128u_2^{16}u_1^7 - 512u_2^{14}u_1^9)x_{12}x_5x_4 + \\
 & (128u_5u_2^{15}u_1^7 + 512u_5u_2^{13}u_1^9)x_{12}x_5x_1 + \\
 & (-128u_6u_2^{15}u_1^7 - 512u_6u_2^{13}u_1^9)x_{12}x_4x_1 + \\
 & (64u_6u_2^{17}u_1^6 - 1024u_6u_2^{13}u_1^{10})x_{12}x_4 + \\
 & (64u_6u_2^{16}u_1^6 + 256u_6u_2^{14}u_1^8)x_5x_4x_1 + \\
 & (-32u_6u_2^{18}u_1^5 - 128u_6u_2^{16}u_1^7)x_5x_4 + \\
 & (32u_6^2u_2^{17}u_1^5 + 128u_6^2u_2^{15}u_1^7)x_4x_1
 \end{aligned}$$

Reduced to zero.

4136. Creating S-polynomial from the pair  $(p_{60}, p_{102})$ .

Forming S-pol of  $p_{60}$  and  $p_{102}$ :

$$\begin{aligned}
p_{942} = & (4096u_2^{23}u_1^{12} + 16384u_2^{21}u_1^{14})x_{12}x_{10}x_5 + \\
& (-16384u_2^{20}u_1^{14} + 8192u_2^{20}u_1^{13} - 65536u_2^{18}u_1^{16} + \\
& 32768u_2^{18}u_1^{15})x_{12}x_5x_4x_1 + (-2048u_2^{24}u_1^{11} + 32768u_2^{20}u_1^{15})x_{12}x_5x_4 + \\
& (2048u_5u_2^{23}u_1^{11} + 8192u_5u_2^{21}u_1^{13})x_{12}x_5x_1 + \\
& (-4096u_5u_2^{23}u_1^{12} - 16384u_5u_2^{21}u_1^{14})x_{12}x_5 + \\
& (-2048u_6u_2^{23}u_1^{11} - 16384u_6u_2^{21}u_1^{13} - 32768u_6u_2^{19}u_1^{15})x_{12}x_4x_1 + \\
& (1024u_6u_2^{25}u_1^{10} + 4096u_6u_2^{23}u_1^{12} + 8192u_6u_2^{21}u_1^{13} + \\
& 32768u_6u_2^{19}u_1^{15})x_{12}x_4 + (1024u_6u_2^{24}u_1^{10} + 4096u_6u_2^{22}u_1^{12})x_5x_4x_1 + \\
& (-512u_6u_2^{26}u_1^9 - 2048u_6u_2^{24}u_1^{11})x_5x_4 + \\
& (512u_6^2u_2^{25}u_1^9 + 2048u_6^2u_2^{23}u_1^{11})x_4x_1
\end{aligned}$$

S-pol added.

4137. Creating S-polynomial from the pair  $(p_{60}, p_{103})$ .

Forming S-pol of  $p_{60}$  and  $p_{103}$ : Polynomial too big for output (text size is 4893 characters, number of terms is 30)

Reduced to zero.

4138. Creating S-polynomial from the pair  $(p_{60}, p_{104})$ .

Skipping pair  $p_{60}$  and  $p_{104}$  because gcd of their leading monoms is zero.

4139. Creating S-polynomial from the pair  $(p_{60}, p_{105})$ .

Skipping pair  $p_{60}$  and  $p_{105}$  because gcd of their leading monoms is zero.

4140. Creating S-polynomial from the pair  $(p_{60}, p_{106})$ .

Skipping pair  $p_{60}$  and  $p_{106}$  because gcd of their leading monoms is zero.

4141. Creating S-polynomial from the pair  $(p_{61}, p_{62})$ .

Forming S-pol of  $p_{61}$  and  $p_{62}$ : Polynomial too big for output (text size is 1085 characters, number of terms is 15)

Reduced to zero.

4142. Creating S-polynomial from the pair  $(p_{61}, p_{63})$ .

Forming S-pol of  $p_{61}$  and  $p_{63}$ :

$$\begin{aligned}
p_{943} = & 256u_5u_2^{12}u_1^8x_{12}^2 - 256u_6u_2^{12}u_1^8x_{12}x_{10} - 128u_5u_2^{13}u_1^7x_{12}x_5 + \\
& 256u_6u_2^{11}u_1^8x_{12}x_4x_1 + 128u_6u_5u_2^{12}u_1^7x_{12}x_1 - \\
& 256u_6u_2^{11}u_1^8x_{10}x_5x_1 + 128u_6u_2^{13}u_1^7x_{10}x_5 - \\
& 128u_6^2u_2^{12}u_1^7x_{10}x_1
\end{aligned}$$

Reduced to zero.

4143. Creating S-polynomial from the pair  $(p_{61}, p_{64})$ .  
 Skipping pair  $p_{61}$  and  $p_{64}$  because gcd of their leading monoms is zero.
4144. Creating S-polynomial from the pair  $(p_{61}, p_{65})$ .  
 Skipping pair  $p_{61}$  and  $p_{65}$  because gcd of their leading monoms is zero.
4145. Creating S-polynomial from the pair  $(p_{61}, p_{66})$ .  
 Skipping pair  $p_{61}$  and  $p_{66}$  because gcd of their leading monoms is zero.
4146. Creating S-polynomial from the pair  $(p_{61}, p_{67})$ .  
 Skipping pair  $p_{61}$  and  $p_{67}$  because gcd of their leading monoms is zero.
4147. Creating S-polynomial from the pair  $(p_{61}, p_{68})$ .  
 Skipping pair  $p_{61}$  and  $p_{68}$  because gcd of their leading monoms is zero.
4148. Creating S-polynomial from the pair  $(p_{61}, p_{69})$ .  
 Skipping pair  $p_{61}$  and  $p_{69}$  because gcd of their leading monoms is zero.
4149. Creating S-polynomial from the pair  $(p_{61}, p_{70})$ .  
 Skipping pair  $p_{61}$  and  $p_{70}$  because gcd of their leading monoms is zero.
4150. Creating S-polynomial from the pair  $(p_{61}, p_{71})$ .  
 Skipping pair  $p_{61}$  and  $p_{71}$  because gcd of their leading monoms is zero.
4151. Creating S-polynomial from the pair  $(p_{61}, p_{72})$ .  
 Skipping pair  $p_{61}$  and  $p_{72}$  because gcd of their leading monoms is zero.
4152. Creating S-polynomial from the pair  $(p_{61}, p_{73})$ .  
 Skipping pair  $p_{61}$  and  $p_{73}$  because gcd of their leading monoms is zero.
4153. Creating S-polynomial from the pair  $(p_{61}, p_{74})$ .

Forming S-pol of  $p_{61}$  and  $p_{74}$ :

$$\begin{aligned} p_{944} = & -16384u_5^2u_2^{18}u_1^{14}x_{12} - 65536u_6u_2^{16}u_1^{16}x_{10}^2 + \\ & 32768u_6u_2^{17}u_1^{15}x_{10}x_4 + 65536u_6u_5u_2^{16}u_1^{16}x_{10} + \\ & 8192u_5^2u_2^{19}u_1^{13}x_5 - 16384u_6u_5u_2^{17}u_1^{14}x_4x_1 - \\ & 8192u_6u_5^2u_2^{18}u_1^{13}x_1 \end{aligned}$$

Reduced to zero.

4154. Creating S-polynomial from the pair  $(p_{61}, p_{75})$ .

Forming S-pol of  $p_{61}$  and  $p_{75}$ :

$$\begin{aligned} p_{945} = & 512u_2^{13}u_1^9x_{12}x_4 - 512u_5u_2^{12}u_1^9x_{12}x_1 + \\ & (256u_5u_2^{14}u_1^8 + 1024u_5u_2^{12}u_1^{10})x_{12} - 512u_2^{13}u_1^9x_{10}x_5 - \\ & 1024u_6u_2^{12}u_1^{10}x_{10} - 128u_5u_2^{15}u_1^7x_5 + 256u_6u_2^{13}u_1^8x_4x_1 + \\ & 128u_6u_5u_2^{14}u_1^7x_1 \end{aligned}$$

Reduced to zero.



4155. Creating S-polynomial from the pair  $(p_{61}, p_{76})$ .

Forming S-pol of  $p_{61}$  and  $p_{76}$ :

$$\begin{aligned} p_{946} = & -33554432u_5u_2^{25}u_1^{25}x_{12}x_{10}x_4 + 67108864u_6u_2^{24}u_1^{26}x_{10}^3 + \\ & (16777216u_6u_5u_2^{26}u_1^{24} - 67108864u_6u_5u_2^{24}u_1^{26})x_{10}^2 + \\ & 16777216u_5u_2^{26}u_1^{24}x_{10}x_5x_4 + 16777216u_6u_5u_2^{25}u_1^{24}x_{10}x_4x_1 + \\ & (-8388608u_6u_5u_2^{27}u_1^{23} - 33554432u_6u_2^{26}u_1^{25})x_{10}x_4 + \\ & 8388608u_6u_5^2u_2^{26}u_1^{23}x_{10}x_1 + 16777216u_6u_5^2u_2^{26}u_1^{24}x_{10} \end{aligned}$$

Reduced to zero.

4156. Creating S-polynomial from the pair  $(p_{61}, p_{77})$ .

Forming S-pol of  $p_{61}$  and  $p_{77}$ :

$$p_{947} = 0$$

Reduced to zero.

4157. Creating S-polynomial from the pair  $(p_{61}, p_{78})$ .

Forming S-pol of  $p_{61}$  and  $p_{78}$ :

$$\begin{aligned} p_{948} = & 16384u_2^{13}u_1^{14}x_{12}x_{10}x_4 + \\ & (8192u_5u_2^{14}u_1^{13} + 32768u_5u_2^{12}u_1^{15})x_{12}x_{10} - 16384u_2^{13}u_1^{14}x_{10}^2x_5 + \\ & (-8192u_6u_2^{14}u_1^{13} - 32768u_6u_2^{12}u_1^{15})x_{10}^2 - 8192u_5u_2^{13}u_1^{13}x_{10}x_5x_1 - \\ & 4096u_5u_2^{15}u_1^{12}x_{10}x_5 + 8192u_6u_2^{13}u_1^{13}x_{10}x_4x_1 + \\ & 4096u_6u_2^{15}u_1^{12}x_{10}x_4 \end{aligned}$$

Reduced to zero.

4158. Creating S-polynomial from the pair  $(p_{61}, p_{79})$ .

Forming S-pol of  $p_{61}$  and  $p_{79}$ :

$$\begin{aligned} p_{949} = & (-16384u_5u_2^{22}u_1^{14} + 32768u_5u_2^{20}u_1^{15})x_{12}x_4 - 65536u_2^{20}u_1^{16}x_{10}^2x_5 + \\ & (262144u_2^{17}u_1^{18} - 131072u_2^{17}u_1^{17})x_{10}x_5x_4x_1 + \\ & (32768u_2^{21}u_1^{15} - 131072u_2^{19}u_1^{17})x_{10}x_5x_4 - 32768u_5u_2^{20}u_1^{15}x_{10}x_5x_1 + \\ & 65536u_5u_2^{20}u_1^{16}x_{10}x_5 + \\ & (32768u_6u_2^{20}u_1^{15} + 131072u_6u_2^{18}u_1^{17} - 65536u_6u_2^{18}u_1^{16})x_{10}x_4x_1 - \\ & 131072u_6u_2^{18}u_1^{17}x_{10}x_4 + (8192u_5u_2^{23}u_1^{13} - 16384u_5u_2^{21}u_1^{14})x_5x_4 + \\ & (-16384u_6u_2^{21}u_1^{14} + 32768u_6u_2^{19}u_1^{15})x_4^2x_1 + \\ & (-8192u_6u_5u_2^{22}u_1^{13} + 16384u_6u_5u_2^{20}u_1^{14})x_4x_1 \end{aligned}$$

S-pol added.

4159. Creating S-polynomial from the pair  $(p_{61}, p_{80})$ .

Forming S-pol of  $p_{61}$  and  $p_{80}$ :

$$p_{950} = 256u_5u_2^{14}u_1^8x_{12} - 512u_6u_2^{12}u_1^9x_{10}x_1 - 128u_5u_2^{15}u_1^7x_5 + \\ 256u_6u_2^{13}u_1^8x_4x_1 + 128u_6u_5u_2^{14}u_1^7x_1$$

Reduced to zero.

4160. Creating S-polynomial from the pair  $(p_{61}, p_{81})$ .

Skipping pair  $p_{61}$  and  $p_{81}$  because gcd of their leading monoms is zero.

4161. Creating S-polynomial from the pair  $(p_{61}, p_{82})$ .

Skipping pair  $p_{61}$  and  $p_{82}$  because gcd of their leading monoms is zero.

4162. Creating S-polynomial from the pair  $(p_{61}, p_{83})$ .

Skipping pair  $p_{61}$  and  $p_{83}$  because gcd of their leading monoms is zero.

4163. Creating S-polynomial from the pair  $(p_{61}, p_{84})$ .

Skipping pair  $p_{61}$  and  $p_{84}$  because gcd of their leading monoms is zero.

4164. Creating S-polynomial from the pair  $(p_{61}, p_{85})$ .

Skipping pair  $p_{61}$  and  $p_{85}$  because gcd of their leading monoms is zero.

4165. Creating S-polynomial from the pair  $(p_{61}, p_{86})$ .

Skipping pair  $p_{61}$  and  $p_{86}$  because gcd of their leading monoms is zero.

4166. Creating S-polynomial from the pair  $(p_{61}, p_{87})$ .

Skipping pair  $p_{61}$  and  $p_{87}$  because gcd of their leading monoms is zero.

4167. Creating S-polynomial from the pair  $(p_{61}, p_{88})$ .

Skipping pair  $p_{61}$  and  $p_{88}$  because gcd of their leading monoms is zero.

4168. Creating S-polynomial from the pair  $(p_{61}, p_{89})$ .

Skipping pair  $p_{61}$  and  $p_{89}$  because gcd of their leading monoms is zero.

4169. Creating S-polynomial from the pair  $(p_{61}, p_{90})$ .

Skipping pair  $p_{61}$  and  $p_{90}$  because gcd of their leading monoms is zero.

4170. Creating S-polynomial from the pair  $(p_{61}, p_{91})$ .

Skipping pair  $p_{61}$  and  $p_{91}$  because gcd of their leading monoms is zero.

4171. Creating S-polynomial from the pair  $(p_{61}, p_{92})$ .

Skipping pair  $p_{61}$  and  $p_{92}$  because gcd of their leading monoms is zero.

4172. Creating S-polynomial from the pair  $(p_{61}, p_{93})$ .

Skipping pair  $p_{61}$  and  $p_{93}$  because gcd of their leading monoms is zero.

4173. Creating S-polynomial from the pair  $(p_{61}, p_{94})$ .

Skipping pair  $p_{61}$  and  $p_{94}$  because gcd of their leading monoms is zero.

4174. Creating S-polynomial from the pair  $(p_{61}, p_{95})$ .  
 Skipping pair  $p_{61}$  and  $p_{95}$  because gcd of their leading monoms is zero.
4175. Creating S-polynomial from the pair  $(p_{61}, p_{96})$ .  
 Skipping pair  $p_{61}$  and  $p_{96}$  because gcd of their leading monoms is zero.
4176. Creating S-polynomial from the pair  $(p_{61}, p_{97})$ .  
 Skipping pair  $p_{61}$  and  $p_{97}$  because gcd of their leading monoms is zero.
4177. Creating S-polynomial from the pair  $(p_{61}, p_{98})$ .  
 Forming S-pol of  $p_{61}$  and  $p_{98}$ : Polynomial too big for output (text size is 2811 characters, number of terms is 31)  
 Reduced to zero.
4178. Creating S-polynomial from the pair  $(p_{61}, p_{99})$ .  
 Skipping pair  $p_{61}$  and  $p_{99}$  because gcd of their leading monoms is zero.
4179. Creating S-polynomial from the pair  $(p_{61}, p_{100})$ .  
 Forming S-pol of  $p_{61}$  and  $p_{100}$ :

$$\begin{aligned}
 p_{951} = & 33554432u_5u_2^{23}u_1^{25}x_{12}x_{10}^2 + \\
 & (16777216u_5u_2^{24}u_1^{24} + 67108864u_5u_2^{22}u_1^{26} + 67108864u_2^{23}u_1^{26})x_{12}x_{10}x_4 + \\
 & (8388608u_5^2u_2^{25}u_1^{23} - 33554432u_5^2u_2^{23}u_1^{25})x_{12}x_{10} - \\
 & 33554432u_6u_2^{23}u_1^{25}x_{10}^3 - 33554432u_2^{23}u_1^{25}x_{10}^2x_5x_4 - \\
 & 16777216u_5u_2^{24}u_1^{24}x_{10}^2x_5 - 67108864u_6u_2^{22}u_1^{26}x_{10}^2x_4 - \\
 & 8388608u_6u_5u_2^{25}u_1^{23}x_{10}^2 - 16777216u_5u_2^{23}u_1^{24}x_{10}x_5x_4x_1 - \\
 & 8388608u_5u_2^{25}u_1^{23}x_{10}x_5x_4 - 4194304u_5^2u_2^{26}u_1^{22}x_{10}x_5 + \\
 & 16777216u_6u_2^{23}u_1^{24}x_{10}x_4x_1 + \\
 & (4194304u_6u_5u_2^{26}u_1^{22} + 16777216u_6u_2^{25}u_1^{24})x_{10}x_4 - \\
 & 8388608u_6u_5^2u_2^{25}u_1^{23}x_{10}
 \end{aligned}$$

Reduced to zero.

4180. Creating S-polynomial from the pair  $(p_{61}, p_{101})$ .  
 Forming S-pol of  $p_{61}$  and  $p_{101}$ :

$$\begin{aligned}
 p_{952} = & 4096u_5u_2^{10}u_1^{12}x_{12}x_{10} - 512u_5u_2^{13}u_1^9x_{12}x_4 - 2048u_2^{11}u_1^{11}x_{10}^2x_5 - \\
 & 4096u_6u_2^{10}u_1^{12}x_{10}^2 + 1024u_2^{12}u_1^{10}x_{10}x_5x_4 - \\
 & 1024u_5u_2^{11}u_1^{10}x_{10}x_5x_1 + 1024u_6u_2^{11}u_1^{10}x_{10}x_4x_1 + \\
 & 2048u_6u_2^{11}u_1^{11}x_{10}x_4 + 256u_5u_2^{14}u_1^8x_5x_4 - 512u_6u_2^{12}u_1^9x_4^2x_1 - \\
 & 256u_6u_5u_2^{13}u_1^8x_4x_1
 \end{aligned}$$

Reduced to zero.

4181. Creating S-polynomial from the pair  $(p_{61}, p_{102})$ .

Forming S-pol of  $p_{61}$  and  $p_{102}$ :

$$\begin{aligned} p_{953} = & -8192u_5u_2^{21}u_1^{13}x_{12}x_4 - 32768u_2^{19}u_1^{15}x_{10}^2x_5 + \\ & (131072u_2^{16}u_1^{17} - 65536u_2^{16}u_1^{16})x_{10}x_5x_4x_1 + \\ & (16384u_2^{20}u_1^{14} - 65536u_2^{18}u_1^{16})x_{10}x_5x_4 - 16384u_5u_2^{19}u_1^{14}x_{10}x_5x_1 + \\ & 32768u_5u_2^{19}u_1^{15}x_{10}x_5 + \\ & (16384u_6u_2^{19}u_1^{14} + 65536u_6u_2^{17}u_1^{16})x_{10}x_4x_1 - 65536u_6u_2^{17}u_1^{16}x_{10}x_4 + \\ & 4096u_5u_2^{22}u_1^{12}x_5x_4 - 8192u_6u_2^{20}u_1^{13}x_4^2x_1 - \\ & 4096u_6u_5u_2^{21}u_1^{12}x_4x_1 \end{aligned}$$

S-pol added.

4182. Creating S-polynomial from the pair  $(p_{61}, p_{103})$ .

Forming S-pol of  $p_{61}$  and  $p_{103}$ : Polynomial too big for output (text size is 2827 characters, number of terms is 31)

Reduced to zero.

4183. Creating S-polynomial from the pair  $(p_{61}, p_{104})$ .

Skipping pair  $p_{61}$  and  $p_{104}$  because gcd of their leading monoms is zero.

4184. Creating S-polynomial from the pair  $(p_{61}, p_{105})$ .

Skipping pair  $p_{61}$  and  $p_{105}$  because gcd of their leading monoms is zero.

4185. Creating S-polynomial from the pair  $(p_{61}, p_{106})$ .

Skipping pair  $p_{61}$  and  $p_{106}$  because gcd of their leading monoms is zero.

4186. Creating S-polynomial from the pair  $(p_{62}, p_{63})$ .

Forming S-pol of  $p_{62}$  and  $p_{63}$ :

$$\begin{aligned} p_{954} = & 16384u_2^{23}u_1^{14}x_{12}x_{10}x_5 - 8192u_2^{24}u_1^{13}x_{12}x_5x_4 + \\ & (4096u_5u_2^{25}u_1^{12} - 16384u_5u_2^{23}u_1^{14})x_{12}x_5 + \\ & (2048u_6u_5u_2^{25}u_1^{11} + 8192u_5u_2^{24}u_1^{13})x_5x_1 - 4096u_5u_2^{26}u_1^{12}x_5 - \\ & 4096u_6^2u_5u_2^{24}u_1^{12}x_1 + 2048u_6^2u_5u_2^{26}u_1^{11} \end{aligned}$$

Reduced to zero.

4187. Creating S-polynomial from the pair  $(p_{62}, p_{64})$ .

Skipping pair  $p_{62}$  and  $p_{64}$  because gcd of their leading monoms is zero.

4188. Creating S-polynomial from the pair  $(p_{62}, p_{65})$ .

Skipping pair  $p_{62}$  and  $p_{65}$  because gcd of their leading monoms is zero.

4189. Creating S-polynomial from the pair  $(p_{62}, p_{66})$ .

Skipping pair  $p_{62}$  and  $p_{66}$  because gcd of their leading monoms is zero.

4190. Creating S-polynomial from the pair  $(p_{62}, p_{67})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{67}$ : Polynomial too big for output (text size is 4024 characters, number of terms is 23)  
 Reduced to zero.
4191. Creating S-polynomial from the pair  $(p_{62}, p_{68})$ .  
 Skipping pair  $p_{62}$  and  $p_{68}$  because gcd of their leading monoms is zero.
4192. Creating S-polynomial from the pair  $(p_{62}, p_{69})$ .  
 Skipping pair  $p_{62}$  and  $p_{69}$  because gcd of their leading monoms is zero.
4193. Creating S-polynomial from the pair  $(p_{62}, p_{70})$ .  
 Skipping pair  $p_{62}$  and  $p_{70}$  because gcd of their leading monoms is zero.
4194. Creating S-polynomial from the pair  $(p_{62}, p_{71})$ .  
 Skipping pair  $p_{62}$  and  $p_{71}$  because gcd of their leading monoms is zero.
4195. Creating S-polynomial from the pair  $(p_{62}, p_{72})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{72}$ : Polynomial too big for output (text size is 3507 characters, number of terms is 22)  
 Reduced to zero.
4196. Creating S-polynomial from the pair  $(p_{62}, p_{73})$ .  
 Skipping pair  $p_{62}$  and  $p_{73}$  because gcd of their leading monoms is zero.
4197. Creating S-polynomial from the pair  $(p_{62}, p_{74})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{74}$ :

$$\begin{aligned}
 p_{955} = & -1048576u_5u_2^{29}u_1^{20}x_{12}x_{10}x_5 + \\
 & (1048576u_6u_2^{29}u_1^{20} + 4194304u_6u_2^{27}u_1^{22})x_{12}x_{10}x_4 + \\
 & 524288u_5u_2^{30}u_1^{19}x_{12}x_5x_4 + \\
 & (-262144u_5^2u_2^{31}u_1^{18} + 1048576u_5^2u_2^{29}u_1^{20})x_{12}x_5 + \\
 & (-524288u_6u_2^{30}u_1^{19} - 2097152u_6u_2^{28}u_1^{21})x_{12}x_4^2 + \\
 & (262144u_6u_5u_2^{31}u_1^{18} - 4194304u_6u_5u_2^{27}u_1^{22})x_{12}x_4 + \\
 & (262144u_6u_5u_2^{30}u_1^{18} + 1048576u_6u_5u_2^{28}u_1^{20})x_5x_4x_1 + \\
 & (-131072u_6u_5u_2^{32}u_1^{17} - 524288u_6u_5u_2^{30}u_1^{19})x_5x_4 + \\
 & (-131072u_6u_5^2u_2^{31}u_1^{17} - 524288u_5^2u_2^{30}u_1^{19})x_5x_1 + \\
 & 262144u_5^2u_2^{32}u_1^{18}x_5 + \\
 & (131072u_6^2u_5u_2^{31}u_1^{17} + 524288u_6^2u_5u_2^{29}u_1^{19})x_4x_1 + \\
 & 262144u_6^2u_5^2u_2^{30}u_1^{18}x_1 - 131072u_6^2u_5^2u_2^{32}u_1^{17}
 \end{aligned}$$

Reduced to zero.

4198. Creating S-polynomial from the pair  $(p_{62}, p_{75})$ .  
 Skipping pair  $p_{62}$  and  $p_{75}$  because gcd of their leading monoms is zero.

4199. Creating S-polynomial from the pair  $(p_{62}, p_{76})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{76}$ : Polynomial too big for output (text size is 1674 characters, number of terms is 18)  
 Reduced to zero.
4200. Creating S-polynomial from the pair  $(p_{62}, p_{77})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{77}$ : Polynomial too big for output (text size is 1090 characters, number of terms is 15)  
 Reduced to zero.
4201. Creating S-polynomial from the pair  $(p_{62}, p_{78})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{78}$ : Polynomial too big for output (text size is 1170 characters, number of terms is 16)  
 Reduced to zero.
4202. Creating S-polynomial from the pair  $(p_{62}, p_{79})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{79}$ : Polynomial too big for output (text size is 2080 characters, number of terms is 17)  
 S-pol added.
4203. Creating S-polynomial from the pair  $(p_{62}, p_{80})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{80}$ :
- $$\begin{aligned}
 p_{956} = & 16384u_2^{25}u_1^{14}x_{12}x_{10}x_5 - 8192u_2^{26}u_1^{13}x_{12}x_5x_4 + \\
 & (4096u_5u_2^{27}u_1^{12} - 16384u_5u_2^{25}u_1^{14})x_{12}x_5 + \\
 & (8192u_6u_2^{25}u_1^{13} + 32768u_6u_2^{23}u_1^{15})x_{12}x_4x_1 + \\
 & (-4096u_6u_2^{27}u_1^{12} - 16384u_6u_2^{25}u_1^{14})x_{12}x_4 + \\
 & (-4096u_6u_2^{26}u_1^{12} - 16384u_6u_2^{24}u_1^{14})x_5x_4x_1 + \\
 & (2048u_6u_2^{28}u_1^{11} + 8192u_6u_2^{26}u_1^{13})x_5x_4 + \\
 & (2048u_6u_5u_2^{27}u_1^{11} + 8192u_5u_2^{26}u_1^{13})x_5x_1 - 4096u_5u_2^{28}u_1^{12}x_5 + \\
 & (-2048u_6^2u_2^{27}u_1^{11} - 8192u_6^2u_2^{25}u_1^{13})x_4x_1 - \\
 & 4096u_6^2u_5u_2^{26}u_1^{12}x_1 + 2048u_6^2u_5u_2^{28}u_1^{11}
 \end{aligned}$$
- Reduced to zero.
4204. Creating S-polynomial from the pair  $(p_{62}, p_{81})$ .  
 Skipping pair  $p_{62}$  and  $p_{81}$  because gcd of their leading monoms is zero.
4205. Creating S-polynomial from the pair  $(p_{62}, p_{82})$ .  
 Skipping pair  $p_{62}$  and  $p_{82}$  because gcd of their leading monoms is zero.
4206. Creating S-polynomial from the pair  $(p_{62}, p_{83})$ .  
 Skipping pair  $p_{62}$  and  $p_{83}$  because gcd of their leading monoms is zero.

4207. Creating S-polynomial from the pair  $(p_{62}, p_{84})$ .  
 Skipping pair  $p_{62}$  and  $p_{84}$  because gcd of their leading monoms is zero.
4208. Creating S-polynomial from the pair  $(p_{62}, p_{85})$ .  
 Skipping pair  $p_{62}$  and  $p_{85}$  because gcd of their leading monoms is zero.
4209. Creating S-polynomial from the pair  $(p_{62}, p_{86})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{86}$ : Polynomial too big for output (text size is 2723 characters, number of terms is 18)  
 S-pol added.
4210. Creating S-polynomial from the pair  $(p_{62}, p_{87})$ .  
 Skipping pair  $p_{62}$  and  $p_{87}$  because gcd of their leading monoms is zero.
4211. Creating S-polynomial from the pair  $(p_{62}, p_{88})$ .  
 Skipping pair  $p_{62}$  and  $p_{88}$  because gcd of their leading monoms is zero.
4212. Creating S-polynomial from the pair  $(p_{62}, p_{89})$ .  
 Skipping pair  $p_{62}$  and  $p_{89}$  because gcd of their leading monoms is zero.
4213. Creating S-polynomial from the pair  $(p_{62}, p_{90})$ .  
 Skipping pair  $p_{62}$  and  $p_{90}$  because gcd of their leading monoms is zero.
4214. Creating S-polynomial from the pair  $(p_{62}, p_{91})$ .  
 Skipping pair  $p_{62}$  and  $p_{91}$  because gcd of their leading monoms is zero.
4215. Creating S-polynomial from the pair  $(p_{62}, p_{92})$ .  
 Skipping pair  $p_{62}$  and  $p_{92}$  because gcd of their leading monoms is zero.
4216. Creating S-polynomial from the pair  $(p_{62}, p_{93})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{93}$ : Polynomial too big for output (text size is 2735 characters, number of terms is 18)  
 S-pol added.
4217. Creating S-polynomial from the pair  $(p_{62}, p_{94})$ .  
 Skipping pair  $p_{62}$  and  $p_{94}$  because gcd of their leading monoms is zero.
4218. Creating S-polynomial from the pair  $(p_{62}, p_{95})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{95}$ : Polynomial too big for output (text size is 2576 characters, number of terms is 22)  
 Reduced to zero.
4219. Creating S-polynomial from the pair  $(p_{62}, p_{96})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{96}$ : Polynomial too big for output (text size is 1368 characters, number of terms is 16)  
 Reduced to zero.

4220. Creating S-polynomial from the pair  $(p_{62}, p_{97})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{97}$ : Polynomial too big for output (text size is 1880 characters, number of terms is 18)  
 S-pol added.
4221. Creating S-polynomial from the pair  $(p_{62}, p_{98})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{98}$ : Polynomial too big for output (text size is 6356 characters, number of terms is 37)  
 Reduced to zero.
4222. Creating S-polynomial from the pair  $(p_{62}, p_{99})$ .  
 Skipping pair  $p_{62}$  and  $p_{99}$  because gcd of their leading monoms is zero.
4223. Creating S-polynomial from the pair  $(p_{62}, p_{100})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{100}$ : Polynomial too big for output (text size is 1831 characters, number of terms is 21)  
 Reduced to zero.
4224. Creating S-polynomial from the pair  $(p_{62}, p_{101})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{101}$ : Polynomial too big for output (text size is 1101 characters, number of terms is 16)  
 S-pol added.
4225. Creating S-polynomial from the pair  $(p_{62}, p_{102})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{102}$ : Polynomial too big for output (text size is 1428 characters, number of terms is 17)  
 S-pol added.
4226. Creating S-polynomial from the pair  $(p_{62}, p_{103})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{103}$ : Polynomial too big for output (text size is 6372 characters, number of terms is 37)  
 Reduced to zero.
4227. Creating S-polynomial from the pair  $(p_{62}, p_{104})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{104}$ : Polynomial too big for output (text size is 2605 characters, number of terms is 22)  
 Reduced to zero.
4228. Creating S-polynomial from the pair  $(p_{62}, p_{105})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{105}$ : Polynomial too big for output (text size is 1382 characters, number of terms is 16)  
 Reduced to zero.
4229. Creating S-polynomial from the pair  $(p_{62}, p_{106})$ .  
 Forming S-pol of  $p_{62}$  and  $p_{106}$ : Polynomial too big for output (text size is 1893 characters, number of terms is 18)  
 S-pol added.



4230. Creating S-polynomial from the pair  $(p_{63}, p_{64})$ .  
 Skipping pair  $p_{63}$  and  $p_{64}$  because gcd of their leading monoms is zero.
4231. Creating S-polynomial from the pair  $(p_{63}, p_{65})$ .  
 Skipping pair  $p_{63}$  and  $p_{65}$  because gcd of their leading monoms is zero.
4232. Creating S-polynomial from the pair  $(p_{63}, p_{66})$ .  
 Skipping pair  $p_{63}$  and  $p_{66}$  because gcd of their leading monoms is zero.
4233. Creating S-polynomial from the pair  $(p_{63}, p_{67})$ .  
 Skipping pair  $p_{63}$  and  $p_{67}$  because gcd of their leading monoms is zero.
4234. Creating S-polynomial from the pair  $(p_{63}, p_{68})$ .  
 Skipping pair  $p_{63}$  and  $p_{68}$  because gcd of their leading monoms is zero.
4235. Creating S-polynomial from the pair  $(p_{63}, p_{69})$ .  
 Skipping pair  $p_{63}$  and  $p_{69}$  because gcd of their leading monoms is zero.
4236. Creating S-polynomial from the pair  $(p_{63}, p_{70})$ .  
 Skipping pair  $p_{63}$  and  $p_{70}$  because gcd of their leading monoms is zero.
4237. Creating S-polynomial from the pair  $(p_{63}, p_{71})$ .  
 Skipping pair  $p_{63}$  and  $p_{71}$  because gcd of their leading monoms is zero.
4238. Creating S-polynomial from the pair  $(p_{63}, p_{72})$ .  
 Skipping pair  $p_{63}$  and  $p_{72}$  because gcd of their leading monoms is zero.
4239. Creating S-polynomial from the pair  $(p_{63}, p_{73})$ .  
 Skipping pair  $p_{63}$  and  $p_{73}$  because gcd of their leading monoms is zero.
4240. Creating S-polynomial from the pair  $(p_{63}, p_{74})$ .  
 Forming S-pol of  $p_{63}$  and  $p_{74}$ :

$$\begin{aligned}
 p_{957} = & -4096u_6u_2^{14}u_1^{12}x_{12}x_{10} + 2048u_6u_2^{15}u_1^{11}x_{12}x_4 + \\
 & (-1024u_6u_5u_2^{16}u_1^{10} + 4096u_6u_5u_2^{14}u_1^{12})x_{12} - \\
 & 1024u_6u_5u_2^{15}u_1^{10}x_5x_1 + 512u_6u_5u_2^{17}u_1^9x_5 - \\
 & 512u_6^2u_5u_2^{16}u_1^9x_1
 \end{aligned}$$

Reduced to zero.

4241. Creating S-polynomial from the pair  $(p_{63}, p_{75})$ .  
 Skipping pair  $p_{63}$  and  $p_{75}$  because gcd of their leading monoms is zero.
4242. Creating S-polynomial from the pair  $(p_{63}, p_{76})$ .  
 Forming S-pol of  $p_{63}$  and  $p_{76}$ :

$$\begin{aligned}
 p_{958} = & -2097152u_5u_2^{23}u_1^{21}x_{12}^2x_4 - 1048576u_5^2u_2^{24}u_1^{20}x_{12}^2 + \\
 & 4194304u_6u_2^{22}u_1^{22}x_{12}x_{10}^2 +
 \end{aligned}$$

$$\begin{aligned}
& (2097152u_6u_5u_2^{24}u_1^{20} - 4194304u_6u_5u_2^{22}u_1^{22})x_{12}x_{10} + \\
& 1048576u_5u_2^{24}u_1^{20}x_{12}x_5x_4 + 524288u_5^2u_2^{25}u_1^{19}x_{12}x_5 + \\
& (-524288u_6u_5u_2^{25}u_1^{19} - 2097152u_6u_2^{24}u_1^{21})x_{12}x_4 + \\
& 1048576u_6u_5^2u_2^{24}u_1^{20}x_{12} + 1048576u_6u_5u_2^{23}u_1^{20}x_{10}x_5x_1 - \\
& 524288u_6u_5u_2^{25}u_1^{19}x_{10}x_5 + 524288u_6^2u_5u_2^{24}u_1^{19}x_{10}x_1
\end{aligned}$$

Reduced to zero.

4243. Creating S-polynomial from the pair  $(p_{63}, p_{77})$ .

Forming S-pol of  $p_{63}$  and  $p_{77}$ :

$$\begin{aligned}
p_{959} = & -512u_5u_2^{12}u_1^9x_{12}^2 + 512u_6u_2^{12}u_1^9x_{12}x_{10} + 256u_5u_2^{13}u_1^8x_{12}x_5 - \\
& 512u_6u_2^{11}u_1^9x_{12}x_4x_1 - 256u_6u_5u_2^{12}u_1^8x_{12}x_1 + \\
& 512u_6u_2^{11}u_1^9x_{10}x_5x_1 - 256u_6u_2^{13}u_1^8x_{10}x_5 + \\
& 256u_6^2u_2^{12}u_1^8x_{10}x_1
\end{aligned}$$

Reduced to zero.

4244. Creating S-polynomial from the pair  $(p_{63}, p_{78})$ .

Forming S-pol of  $p_{63}$  and  $p_{78}$ :

$$\begin{aligned}
p_{960} = & 1024u_2^{11}u_1^{10}x_{12}^2x_4 + 2048u_5u_2^{10}u_1^{11}x_{12}^2 - \\
& 1024u_2^{11}u_1^{10}x_{12}x_{10}x_5 - 2048u_6u_2^{10}u_1^{11}x_{12}x_{10} - \\
& 512u_5u_2^{11}u_1^9x_{12}x_5x_1 + 256u_6u_2^{13}u_1^8x_{12}x_4 - \\
& 256u_6u_5u_2^{12}u_1^8x_{12}x_1 + 512u_6u_2^{11}u_1^9x_{10}x_5x_1 - \\
& 256u_6u_2^{13}u_1^8x_{10}x_5 + 256u_6^2u_2^{12}u_1^8x_{10}x_1
\end{aligned}$$

Reduced to zero.

4245. Creating S-polynomial from the pair  $(p_{63}, p_{79})$ .

Forming S-pol of  $p_{63}$  and  $p_{79}$ :

$$\begin{aligned}
p_{961} = & -4096u_2^{18}u_1^{12}x_{12}x_{10}x_5 + (16384u_2^{15}u_1^{14} - 8192u_2^{15}u_1^{13})x_{12}x_5x_4x_1 + \\
& (2048u_2^{19}u_1^{11} - 8192u_2^{17}u_1^{13})x_{12}x_5x_4 - 2048u_5u_2^{18}u_1^{11}x_{12}x_5x_1 + \\
& 4096u_5u_2^{18}u_1^{12}x_{12}x_5 + \\
& (2048u_6u_2^{18}u_1^{11} + 8192u_6u_2^{16}u_1^{13} - 4096u_6u_2^{16}u_1^{12})x_{12}x_4x_1 + \\
& (-1024u_6u_2^{20}u_1^{10} + 2048u_6u_2^{18}u_1^{11} - 8192u_6u_2^{16}u_1^{13})x_{12}x_4 + \\
& (-1024u_6u_2^{19}u_1^{10} + 2048u_6u_2^{17}u_1^{11})x_5x_4x_1 + \\
& (512u_6u_2^{21}u_1^9 - 1024u_6u_2^{19}u_1^{10})x_5x_4 + \\
& (-512u_6^2u_2^{20}u_1^9 + 1024u_6^2u_2^{18}u_1^{10})x_4x_1
\end{aligned}$$

S-pol added.

4246. Creating S-polynomial from the pair  $(p_{63}, p_{80})$ .

Forming S-pol of  $p_{63}$  and  $p_{80}$ :

$$p_{962} = -32u_6u_2^{10}u_1^5x_{12}x_1 + 16u_6u_2^{12}u_1^4x_{12} + 16u_6u_2^{11}u_1^4x_5x_1 - \\ 8u_6u_2^{13}u_1^3x_5 + 8u_6^2u_2^{12}u_1^3x_1$$

Reduced to zero.

4247. Creating S-polynomial from the pair  $(p_{63}, p_{81})$ .

Skipping pair  $p_{63}$  and  $p_{81}$  because gcd of their leading monoms is zero.

4248. Creating S-polynomial from the pair  $(p_{63}, p_{82})$ .

Skipping pair  $p_{63}$  and  $p_{82}$  because gcd of their leading monoms is zero.

4249. Creating S-polynomial from the pair  $(p_{63}, p_{83})$ .

Skipping pair  $p_{63}$  and  $p_{83}$  because gcd of their leading monoms is zero.

4250. Creating S-polynomial from the pair  $(p_{63}, p_{84})$ .

Skipping pair  $p_{63}$  and  $p_{84}$  because gcd of their leading monoms is zero.

4251. Creating S-polynomial from the pair  $(p_{63}, p_{85})$ .

Skipping pair  $p_{63}$  and  $p_{85}$  because gcd of their leading monoms is zero.

4252. Creating S-polynomial from the pair  $(p_{63}, p_{86})$ .

Skipping pair  $p_{63}$  and  $p_{86}$  because gcd of their leading monoms is zero.

4253. Creating S-polynomial from the pair  $(p_{63}, p_{87})$ .

Skipping pair  $p_{63}$  and  $p_{87}$  because gcd of their leading monoms is zero.

4254. Creating S-polynomial from the pair  $(p_{63}, p_{88})$ .

Skipping pair  $p_{63}$  and  $p_{88}$  because gcd of their leading monoms is zero.

4255. Creating S-polynomial from the pair  $(p_{63}, p_{89})$ .

Skipping pair  $p_{63}$  and  $p_{89}$  because gcd of their leading monoms is zero.

4256. Creating S-polynomial from the pair  $(p_{63}, p_{90})$ .

Skipping pair  $p_{63}$  and  $p_{90}$  because gcd of their leading monoms is zero.

4257. Creating S-polynomial from the pair  $(p_{63}, p_{91})$ .

Skipping pair  $p_{63}$  and  $p_{91}$  because gcd of their leading monoms is zero.

4258. Creating S-polynomial from the pair  $(p_{63}, p_{92})$ .

Skipping pair  $p_{63}$  and  $p_{92}$  because gcd of their leading monoms is zero.

4259. Creating S-polynomial from the pair  $(p_{63}, p_{93})$ .

Skipping pair  $p_{63}$  and  $p_{93}$  because gcd of their leading monoms is zero.

4260. Creating S-polynomial from the pair  $(p_{63}, p_{94})$ .

Skipping pair  $p_{63}$  and  $p_{94}$  because gcd of their leading monoms is zero.

4261. Creating S-polynomial from the pair  $(p_{63}, p_{95})$ .  
 Skipping pair  $p_{63}$  and  $p_{95}$  because gcd of their leading monoms is zero.
4262. Creating S-polynomial from the pair  $(p_{63}, p_{96})$ .  
 Skipping pair  $p_{63}$  and  $p_{96}$  because gcd of their leading monoms is zero.
4263. Creating S-polynomial from the pair  $(p_{63}, p_{97})$ .  
 Skipping pair  $p_{63}$  and  $p_{97}$  because gcd of their leading monoms is zero.
4264. Creating S-polynomial from the pair  $(p_{63}, p_{98})$ .  
 Forming S-pol of  $p_{63}$  and  $p_{98}$ : Polynomial too big for output (text size is 2745 characters, number of terms is 30)  
 Reduced to zero.
4265. Creating S-polynomial from the pair  $(p_{63}, p_{99})$ .  
 Skipping pair  $p_{63}$  and  $p_{99}$  because gcd of their leading monoms is zero.
4266. Creating S-polynomial from the pair  $(p_{63}, p_{100})$ .  
 Forming S-pol of  $p_{63}$  and  $p_{100}$ :

$$\begin{aligned}
 p_{963} = & 2097152u_5u_2^{21}u_1^{21}x_{12}^2x_{10} + \\
 & (4194304u_5u_2^{20}u_1^{22} + 4194304u_2^{21}u_1^{22})x_{12}^2x_4 + \\
 & (524288u_5^2u_2^{23}u_1^{19} - 2097152u_5^2u_2^{21}u_1^{21})x_{12}^2 - \\
 & 2097152u_6u_2^{21}u_1^{21}x_{12}x_{10}^2 - 2097152u_2^{21}u_1^{21}x_{12}x_{10}x_5x_4 - \\
 & 1048576u_5u_2^{22}u_1^{20}x_{12}x_{10}x_5 + \\
 & (1048576u_6u_2^{22}u_1^{20} - 4194304u_6u_2^{20}u_1^{22})x_{12}x_{10}x_4 - \\
 & 524288u_6u_5u_2^{23}u_1^{19}x_{12}x_{10} - 1048576u_5u_2^{21}u_1^{20}x_{12}x_5x_4x_1 - \\
 & 262144u_5^2u_2^{24}u_1^{18}x_{12}x_5 - 524288u_6u_5u_2^{22}u_1^{19}x_{12}x_4x_1 + \\
 & (262144u_6u_5u_2^{24}u_1^{18} + 1048576u_6u_2^{23}u_1^{20})x_{12}x_4 - \\
 & 524288u_6u_5^2u_2^{23}u_1^{19}x_{12} + 1048576u_6u_2^{21}u_1^{20}x_{10}x_5x_4x_1 - \\
 & 524288u_6u_2^{23}u_1^{19}x_{10}x_5x_4 + 524288u_6^2u_2^{22}u_1^{19}x_{10}x_4x_1
 \end{aligned}$$

Reduced to zero.

4267. Creating S-polynomial from the pair  $(p_{63}, p_{101})$ .  
 Forming S-pol of  $p_{63}$  and  $p_{101}$ :

$$\begin{aligned}
 p_{964} = & 256u_5u_2^8u_1^8x_{12}^2 - 128u_2^9u_1^7x_{12}x_{10}x_5 - 256u_6u_2^8u_1^8x_{12}x_{10} + \\
 & 64u_2^{10}u_1^6x_{12}x_5x_4 - 64u_5u_2^9u_1^6x_{12}x_5x_1 + \\
 & 64u_6u_2^9u_1^6x_{12}x_4x_1 + \\
 & (-32u_6u_2^{11}u_1^5 + 128u_6u_2^9u_1^7)x_{12}x_4 - 32u_6u_2^{10}u_1^5x_5x_4x_1 + \\
 & 16u_6u_2^{12}u_1^4x_5x_4 - 16u_6^2u_2^{11}u_1^4x_4x_1
 \end{aligned}$$

Reduced to zero.

4268. Creating S-polynomial from the pair  $(p_{63}, p_{102})$ .

Forming S-pol of  $p_{63}$  and  $p_{102}$ :

$$\begin{aligned} p_{965} = & -2048u_2^{17}u_1^{11}x_{12}x_{10}x_5 + (8192u_2^{14}u_1^{13} - 4096u_2^{14}u_1^{12})x_{12}x_5x_4x_1 + \\ & (1024u_2^{18}u_1^{10} - 4096u_2^{16}u_1^{12})x_{12}x_5x_4 - 1024u_5u_2^{17}u_1^{10}x_{12}x_5x_1 + \\ & 2048u_5u_2^{17}u_1^{11}x_{12}x_5 + (1024u_6u_2^{17}u_1^{10} + 4096u_6u_2^{15}u_1^{12})x_{12}x_4x_1 + \\ & (-512u_6u_2^{19}u_1^9 - 4096u_6u_2^{15}u_1^{12})x_{12}x_4 - 512u_6u_2^{18}u_1^9x_5x_4x_1 + \\ & 256u_6u_2^{20}u_1^8x_5x_4 - 256u_6u_2^{19}u_1^8x_4x_1 \end{aligned}$$

S-pol added.

4269. Creating S-polynomial from the pair  $(p_{63}, p_{103})$ .

Forming S-pol of  $p_{63}$  and  $p_{103}$ : Polynomial too big for output (text size is 2761 characters, number of terms is 30)

Reduced to zero.

4270. Creating S-polynomial from the pair  $(p_{63}, p_{104})$ .

Skipping pair  $p_{63}$  and  $p_{104}$  because gcd of their leading monoms is zero.

4271. Creating S-polynomial from the pair  $(p_{63}, p_{105})$ .

Skipping pair  $p_{63}$  and  $p_{105}$  because gcd of their leading monoms is zero.

4272. Creating S-polynomial from the pair  $(p_{63}, p_{106})$ .

Skipping pair  $p_{63}$  and  $p_{106}$  because gcd of their leading monoms is zero.

4273. Creating S-polynomial from the pair  $(p_{64}, p_{65})$ .

Forming S-pol of  $p_{64}$  and  $p_{65}$ :

$$\begin{aligned} p_{966} = & (-8192u_4^{24}u_1^{13} - 32768u_4^{22}u_1^{15})x_{16}x_{14}x_4 + \\ & (4096u_5u_4^{24}u_1^{12} + 32768u_5u_4^{22}u_1^{14} + 65536u_5u_4^{20}u_1^{16})x_{16}x_4x_3 + \\ & (-2048u_5u_4^{26}u_1^{11} - 16384u_5u_4^{24}u_1^{13} - 32768u_5u_4^{22}u_1^{15})x_{16}x_4 + \\ & (2048u_5^2u_4^{25}u_1^{11} + 16384u_5^2u_4^{23}u_1^{13} + 32768u_5^2u_4^{21}u_1^{15})x_{16}x_3 + \\ & (8192u_4^{24}u_1^{13} + 32768u_4^{22}u_1^{15})x_{14}^2x_5 + \\ & (-16384u_5u_4^{22}u_1^{14} - 65536u_5u_4^{20}u_1^{16})x_{14}x_5x_3 + \\ & (2048u_5u_4^{26}u_1^{11} + 8192u_5u_4^{24}u_1^{13})x_{14}x_5 + \\ & (-4096u_6u_4^{24}u_1^{12} - 16384u_6u_4^{22}u_1^{14})x_{14}x_4x_3 + \\ & (8192u_6u_4^{24}u_1^{13} + 32768u_6u_4^{22}u_1^{15})x_{14}x_4 + \\ & (-2048u_6u_5u_4^{25}u_1^{11} - 16384u_6u_5u_4^{23}u_1^{13} - 32768u_6u_5u_4^{21}u_1^{15})x_{14}x_3 \end{aligned}$$

Reduced to zero.

4274. Creating S-polynomial from the pair  $(p_{64}, p_{66})$ .

Forming S-pol of  $p_{64}$  and  $p_{66}$ :

$$p_{967} = 0$$

Reduced to zero.

4275. Creating S-polynomial from the pair  $(p_{64}, p_{67})$ .

Forming S-pol of  $p_{64}$  and  $p_{67}$ : Polynomial too big for output (text size is 1714 characters, number of terms is 16)

Reduced to zero.

4276. Creating S-polynomial from the pair  $(p_{64}, p_{68})$ .

Forming S-pol of  $p_{64}$  and  $p_{68}$ :

$$\begin{aligned} p_{968} = & (-512u_5u_4^{18}u_1^9 - 2048u_5u_4^{16}u_1^{11})x_{16}x_{14} + \\ & (-512u_5u_4^{17}u_1^9 - 2048u_5u_4^{15}u_1^{11})x_{16}x_4x_3 + \\ & (256u_5u_4^{19}u_1^8 + 1024u_5u_4^{17}u_1^{10})x_{16}x_4 + \\ & (-256u_5^2u_4^{18}u_1^8 - 1024u_5^2u_4^{16}u_1^{10})x_{16}x_3 + \\ & (512u_6u_4^{18}u_1^9 + 2048u_6u_4^{16}u_1^{11})x_{14}^2 + \\ & (512u_5u_4^{17}u_1^9 + 2048u_5u_4^{15}u_1^{11})x_{14}x_5x_3 + \\ & (-256u_6u_4^{19}u_1^8 - 1024u_6u_4^{17}u_1^{10})x_{14}x_4 + \\ & (256u_6u_5u_4^{18}u_1^8 + 1024u_6u_5u_4^{16}u_1^{10})x_{14}x_3 \end{aligned}$$

Reduced to zero.

4277. Creating S-polynomial from the pair  $(p_{64}, p_{69})$ .

Forming S-pol of  $p_{64}$  and  $p_{69}$ :

$$\begin{aligned} p_{969} = & (-8192u_4^{21}u_1^{13} - 32768u_4^{19}u_1^{15})x_{16}x_{14}x_4 + \\ & (-16384u_5u_4^{20}u_1^{14} - 65536u_5u_4^{18}u_1^{16})x_{16}x_{14} + \\ & (1024u_5u_4^{23}u_1^{10} + 8192u_5u_4^{21}u_1^{12} + 16384u_5u_4^{19}u_1^{14})x_{16}x_4x_3 + \\ & (-512u_5u_4^{25}u_1^9 - 4096u_5u_4^{23}u_1^{11} - 8192u_5u_4^{21}u_1^{13})x_{16}x_4 + \\ & (512u_5^2u_4^{24}u_1^9 + 4096u_5^2u_4^{22}u_1^{11} + 8192u_5^2u_4^{20}u_1^{13})x_{16}x_3 + \\ & (8192u_4^{21}u_1^{13} + 32768u_4^{19}u_1^{15})x_{14}^2x_5 + \\ & (16384u_6u_4^{20}u_1^{14} + 65536u_6u_4^{18}u_1^{16})x_{14}^2 + \\ & (-1024u_5u_4^{23}u_1^{10} - 4096u_5u_4^{21}u_1^{12})x_{14}x_5x_3 + \\ & (512u_5u_4^{25}u_1^9 + 4096u_5u_4^{23}u_1^{11} + 8192u_5u_4^{21}u_1^{13})x_{14}x_5 + \\ & (-4096u_6u_4^{21}u_1^{12} - 16384u_6u_4^{19}u_1^{14})x_{14}x_4x_3 + \\ & (-512u_6u_5u_4^{24}u_1^9 - 4096u_6u_5u_4^{22}u_1^{11} - 8192u_6u_5u_4^{20}u_1^{13})x_{14}x_3 \end{aligned}$$

Reduced to zero.

4278. Creating S-polynomial from the pair  $(p_{64}, p_{70})$ .

Skipping pair  $p_{64}$  and  $p_{70}$  because gcd of their leading monoms is zero.

4279. Creating S-polynomial from the pair  $(p_{64}, p_{71})$ .

Forming S-pol of  $p_{64}$  and  $p_{71}$ :

$$\begin{aligned}
p_{970} = & (1024u_4^{17}u_1^{10} + 4096u_4^{15}u_1^{12})x_{16}x_{14}x_4 + \\
& (2048u_5u_4^{16}u_1^{11} + 8192u_5u_4^{14}u_1^{13})x_{16}x_{14} + \\
& (-512u_5u_4^{17}u_1^9 - 2048u_5u_4^{15}u_1^{11})x_{16}x_4x_3 + \\
& (256u_5u_4^{19}u_1^8 + 1024u_5u_4^{17}u_1^{10})x_{16}x_4 + \\
& (-256u_5^2u_4^{18}u_1^8 - 1024u_5^2u_4^{16}u_1^{10})x_{16}x_3 + \\
& (-1024u_4^{17}u_1^{10} - 4096u_4^{15}u_1^{12})x_{14}^2x_5 + \\
& (-2048u_6u_4^{16}u_1^{11} - 8192u_6u_4^{14}u_1^{13})x_{14}^2 + \\
& (-256u_5u_4^{19}u_1^8 - 1024u_5u_4^{17}u_1^{10})x_{14}x_5 + \\
& (512u_6u_4^{17}u_1^9 + 2048u_6u_4^{15}u_1^{11})x_{14}x_4x_3 + \\
& (256u_6u_5u_4^{18}u_1^8 + 1024u_6u_5u_4^{16}u_1^{10})x_{14}x_3
\end{aligned}$$

Reduced to zero.

4280. Creating S-polynomial from the pair  $(p_{64}, p_{72})$ .

Skipping pair  $p_{64}$  and  $p_{72}$  because gcd of their leading monoms is zero.

4281. Creating S-polynomial from the pair  $(p_{64}, p_{73})$ .

Skipping pair  $p_{64}$  and  $p_{73}$  because gcd of their leading monoms is zero.

4282. Creating S-polynomial from the pair  $(p_{64}, p_{74})$ .

Skipping pair  $p_{64}$  and  $p_{74}$  because gcd of their leading monoms is zero.

4283. Creating S-polynomial from the pair  $(p_{64}, p_{75})$ .

Skipping pair  $p_{64}$  and  $p_{75}$  because gcd of their leading monoms is zero.

4284. Creating S-polynomial from the pair  $(p_{64}, p_{76})$ .

Skipping pair  $p_{64}$  and  $p_{76}$  because gcd of their leading monoms is zero.

4285. Creating S-polynomial from the pair  $(p_{64}, p_{77})$ .

Skipping pair  $p_{64}$  and  $p_{77}$  because gcd of their leading monoms is zero.

4286. Creating S-polynomial from the pair  $(p_{64}, p_{78})$ .

Skipping pair  $p_{64}$  and  $p_{78}$  because gcd of their leading monoms is zero.

4287. Creating S-polynomial from the pair  $(p_{64}, p_{79})$ .

Skipping pair  $p_{64}$  and  $p_{79}$  because gcd of their leading monoms is zero.

4288. Creating S-polynomial from the pair  $(p_{64}, p_{80})$ .

Skipping pair  $p_{64}$  and  $p_{80}$  because gcd of their leading monoms is zero.

4289. Creating S-polynomial from the pair  $(p_{64}, p_{81})$ .  
 Skipping pair  $p_{64}$  and  $p_{81}$  because gcd of their leading monoms is zero.
4290. Creating S-polynomial from the pair  $(p_{64}, p_{82})$ .  
 Skipping pair  $p_{64}$  and  $p_{82}$  because gcd of their leading monoms is zero.
4291. Creating S-polynomial from the pair  $(p_{64}, p_{83})$ .  
 Skipping pair  $p_{64}$  and  $p_{83}$  because gcd of their leading monoms is zero.
4292. Creating S-polynomial from the pair  $(p_{64}, p_{84})$ .  
 Skipping pair  $p_{64}$  and  $p_{84}$  because gcd of their leading monoms is zero.
4293. Creating S-polynomial from the pair  $(p_{64}, p_{85})$ .  
 Skipping pair  $p_{64}$  and  $p_{85}$  because gcd of their leading monoms is zero.
4294. Creating S-polynomial from the pair  $(p_{64}, p_{86})$ .  
 Skipping pair  $p_{64}$  and  $p_{86}$  because gcd of their leading monoms is zero.
4295. Creating S-polynomial from the pair  $(p_{64}, p_{87})$ .  
 Skipping pair  $p_{64}$  and  $p_{87}$  because gcd of their leading monoms is zero.
4296. Creating S-polynomial from the pair  $(p_{64}, p_{88})$ .  
 Skipping pair  $p_{64}$  and  $p_{88}$  because gcd of their leading monoms is zero.
4297. Creating S-polynomial from the pair  $(p_{64}, p_{89})$ .  
 Forming S-pol of  $p_{64}$  and  $p_{89}$ :

$$\begin{aligned}
 p_{971} = & (64u_5u_4^{16}u_1^6 + 256u_5u_4^{14}u_1^8)x_{14}x_3 + \\
 & (-32u_5u_4^{18}u_1^5 - 128u_5u_4^{16}u_1^7)x_{14} + \\
 & (-32u_5u_4^{17}u_1^5 - 128u_5u_4^{15}u_1^7)x_4x_3 + \\
 & (16u_5u_4^{19}u_1^4 + 64u_5u_4^{17}u_1^6)x_4 + \\
 & (-16u_5^2u_4^{18}u_1^4 - 64u_5^2u_4^{16}u_1^6)x_3
 \end{aligned}$$

Reduced to zero.

4298. Creating S-polynomial from the pair  $(p_{64}, p_{90})$ .  
 Forming S-pol of  $p_{64}$  and  $p_{90}$ : Polynomial too big for output (text size is 1119 characters, number of terms is 12)  
 Reduced to zero.
4299. Creating S-polynomial from the pair  $(p_{64}, p_{91})$ .  
 Forming S-pol of  $p_{64}$  and  $p_{91}$ :

$$\begin{aligned}
 p_{972} = & (2048u_4^{17}u_1^{11} + 8192u_4^{15}u_1^{13})x_{16}x_{14}x_4 + \\
 & (4096u_5u_4^{16}u_1^{12} + 16384u_5u_4^{14}u_1^{14})x_{16}x_{14} + \\
 & (-1024u_5u_4^{17}u_1^{10} - 4096u_5u_4^{15}u_1^{12})x_{16}x_4x_3 + \\
 & (512u_5u_4^{19}u_1^9 + 2048u_5u_4^{17}u_1^{11})x_{16}x_4 +
 \end{aligned}$$



$$\begin{aligned}
& (-512u_5^2u_4^{18}u_1^9 - 2048u_5^2u_4^{16}u_1^{11})x_{16}x_3 + \\
& (-2048u_4^{17}u_1^{11} - 8192u_4^{15}u_1^{13})x_{14}^2x_5 + \\
& (-4096u_6u_4^{16}u_1^{12} - 16384u_6u_4^{14}u_1^{14})x_{14}^2 + \\
& (-512u_5u_4^{19}u_1^9 - 2048u_5u_4^{17}u_1^{11})x_{14}x_5 + \\
& (1024u_6u_4^{17}u_1^{10} + 4096u_6u_4^{15}u_1^{12})x_{14}x_4x_3 + \\
& (512u_6u_5u_4^{18}u_1^9 + 2048u_6u_5u_4^{16}u_1^{11})x_{14}x_3
\end{aligned}$$

Reduced to zero.

4300. Creating S-polynomial from the pair  $(p_{64}, p_{92})$ .

Forming S-pol of  $p_{64}$  and  $p_{92}$ :

$$\begin{aligned}
p_{973} = & (-1024u_5u_4^{18}u_1^{10} - 4096u_5u_4^{16}u_1^{12})x_{16}x_{14} + \\
& (-1024u_5u_4^{17}u_1^{10} - 4096u_5u_4^{15}u_1^{12})x_{16}x_4x_3 + \\
& (512u_5u_4^{19}u_1^9 + 2048u_5u_4^{17}u_1^{11})x_{16}x_4 + \\
& (-512u_5^2u_4^{18}u_1^9 - 2048u_5^2u_4^{16}u_1^{11})x_{16}x_3 + \\
& (1024u_6u_4^{18}u_1^{10} + 4096u_6u_4^{16}u_1^{12})x_{14}^2 + \\
& (1024u_5u_4^{17}u_1^{10} + 4096u_5u_4^{15}u_1^{12})x_{14}x_5x_3 + \\
& (-512u_6u_4^{19}u_1^9 - 2048u_6u_4^{17}u_1^{11})x_{14}x_4 + \\
& (512u_6u_5u_4^{18}u_1^9 + 2048u_6u_5u_4^{16}u_1^{11})x_{14}x_3
\end{aligned}$$

Reduced to zero.

4301. Creating S-polynomial from the pair  $(p_{64}, p_{93})$ .

Skipping pair  $p_{64}$  and  $p_{93}$  because gcd of their leading monoms is zero.

4302. Creating S-polynomial from the pair  $(p_{64}, p_{94})$ .

Skipping pair  $p_{64}$  and  $p_{94}$  because gcd of their leading monoms is zero.

4303. Creating S-polynomial from the pair  $(p_{64}, p_{95})$ .

Skipping pair  $p_{64}$  and  $p_{95}$  because gcd of their leading monoms is zero.

4304. Creating S-polynomial from the pair  $(p_{64}, p_{96})$ .

Skipping pair  $p_{64}$  and  $p_{96}$  because gcd of their leading monoms is zero.

4305. Creating S-polynomial from the pair  $(p_{64}, p_{97})$ .

Skipping pair  $p_{64}$  and  $p_{97}$  because gcd of their leading monoms is zero.

4306. Creating S-polynomial from the pair  $(p_{64}, p_{98})$ .

Skipping pair  $p_{64}$  and  $p_{98}$  because gcd of their leading monoms is zero.

4307. Creating S-polynomial from the pair  $(p_{64}, p_{99})$ .

Skipping pair  $p_{64}$  and  $p_{99}$  because gcd of their leading monoms is zero.

4308. Creating S-polynomial from the pair  $(p_{64}, p_{100})$ .

Skipping pair  $p_{64}$  and  $p_{100}$  because gcd of their leading monoms is zero.

4309. Creating S-polynomial from the pair  $(p_{64}, p_{101})$ .  
 Skipping pair  $p_{64}$  and  $p_{101}$  because gcd of their leading monoms is zero.
4310. Creating S-polynomial from the pair  $(p_{64}, p_{102})$ .  
 Skipping pair  $p_{64}$  and  $p_{102}$  because gcd of their leading monoms is zero.
4311. Creating S-polynomial from the pair  $(p_{64}, p_{103})$ .  
 Skipping pair  $p_{64}$  and  $p_{103}$  because gcd of their leading monoms is zero.
4312. Creating S-polynomial from the pair  $(p_{64}, p_{104})$ .  
 Forming S-pol of  $p_{64}$  and  $p_{104}$ : Polynomial too big for output (text size is 1430 characters, number of terms is 15)  
 Reduced to zero.
4313. Creating S-polynomial from the pair  $(p_{64}, p_{105})$ .  
 Skipping pair  $p_{64}$  and  $p_{105}$  because gcd of their leading monoms is zero.
4314. Creating S-polynomial from the pair  $(p_{64}, p_{106})$ .  
 Skipping pair  $p_{64}$  and  $p_{106}$  because gcd of their leading monoms is zero.
4315. Creating S-polynomial from the pair  $(p_{65}, p_{66})$ .  
 Forming S-pol of  $p_{65}$  and  $p_{66}$ :  

$$p_{974} = -4096u_4^{18}u_1^{12}x_{16}x_{14}x_4 + (2048u_5u_4^{18}u_1^{11} + 8192u_5u_4^{16}u_1^{13})x_{16}x_4x_3 +$$

$$(-1024u_5u_4^{20}u_1^{10} - 4096u_5u_4^{18}u_1^{12})x_{16}x_4 +$$

$$(1024u_5^2u_4^{19}u_1^{10} + 4096u_5^2u_4^{17}u_1^{12})x_{16}x_3 + 4096u_4^{18}u_1^{12}x_{14}^2x_5 -$$

$$8192u_5u_4^{16}u_1^{13}x_{14}x_5x_3 + 1024u_5u_4^{20}u_1^{10}x_{14}x_5 -$$

$$2048u_6u_4^{18}u_1^{11}x_{14}x_4x_3 + 4096u_6u_4^{18}u_1^{12}x_{14}x_4 +$$

$$(-1024u_6u_5u_4^{19}u_1^{10} - 4096u_6u_5u_4^{17}u_1^{12})x_{14}x_3$$
 Reduced to zero.
4316. Creating S-polynomial from the pair  $(p_{65}, p_{67})$ .  
 Forming S-pol of  $p_{65}$  and  $p_{67}$ : Polynomial too big for output (text size is 1606 characters, number of terms is 17)  
 Reduced to zero.
4317. Creating S-polynomial from the pair  $(p_{65}, p_{68})$ .  
 Forming S-pol of  $p_{65}$  and  $p_{68}$ :  

$$p_{975} = -65536u_4^{20}u_1^{16}x_{16}x_{14}x_4 +$$

$$(-32768u_5u_4^{21}u_1^{15} - 131072u_5u_4^{19}u_1^{17})x_{16}x_{14} + 65536u_4^{20}u_1^{16}x_{14}^2x_5 +$$

$$(32768u_6u_4^{21}u_1^{15} + 131072u_6u_4^{19}u_1^{17})x_{14}^2 + 32768u_5u_4^{20}u_1^{15}x_{14}x_5x_3 +$$

$$16384u_5u_4^{22}u_1^{14}x_{14}x_5 - 32768u_6u_4^{20}u_1^{15}x_{14}x_4x_3 -$$

$$16384u_6u_4^{22}u_1^{14}x_{14}x_4$$
 Reduced to zero.

4318. Creating S-polynomial from the pair  $(p_{65}, p_{69})$ .

Forming S-pol of  $p_{65}$  and  $p_{69}$ :

$$\begin{aligned} p_{976} = & (131072u_4^{26}u_1^{17} - 2097152u_4^{22}u_1^{21})x_{16}x_{14}x_4 + \\ & (-1048576u_5u_4^{23}u_1^{20} - 4194304u_5u_4^{21}u_1^{22})x_{16}x_{14} + \\ & (-131072u_4^{26}u_1^{17} + 2097152u_4^{22}u_1^{21})x_{14}^2x_5 + \\ & (1048576u_6u_4^{23}u_1^{20} + 4194304u_6u_4^{21}u_1^{22})x_{14}^2 + \\ & (-65536u_5u_4^{26}u_1^{16} + 1048576u_5u_4^{22}u_1^{20})x_{14}x_5x_3 + \\ & (131072u_5u_4^{26}u_1^{17} + 524288u_5u_4^{24}u_1^{19})x_{14}x_5 + \\ & (65536u_6u_4^{26}u_1^{16} - 1048576u_6u_4^{22}u_1^{20})x_{14}x_4x_3 + \\ & (-131072u_6u_4^{26}u_1^{17} - 524288u_6u_4^{24}u_1^{19})x_{14}x_4 \end{aligned}$$

Reduced to zero.

4319. Creating S-polynomial from the pair  $(p_{65}, p_{70})$ .

Forming S-pol of  $p_{65}$  and  $p_{70}$ : Polynomial too big for output (text size is 1180 characters, number of terms is 12)

Reduced to zero.

4320. Creating S-polynomial from the pair  $(p_{65}, p_{71})$ .

Forming S-pol of  $p_{65}$  and  $p_{71}$ :

$$\begin{aligned} p_{977} = & 262144u_4^{18}u_1^{18}x_{16}x_{14}x_4 + \\ & (131072u_5u_4^{19}u_1^{17} + 524288u_5u_4^{17}u_1^{19})x_{16}x_{14} - 262144u_4^{18}u_1^{18}x_{14}^2x_5 + \\ & (-131072u_6u_4^{19}u_1^{17} - 524288u_6u_4^{17}u_1^{19})x_{14}^2 - \\ & 131072u_5u_4^{18}u_1^{17}x_{14}x_5x_3 - 65536u_5u_4^{20}u_1^{16}x_{14}x_5 + \\ & 131072u_6u_4^{18}u_1^{17}x_{14}x_4x_3 + 65536u_6u_4^{20}u_1^{16}x_{14}x_4 \end{aligned}$$

Reduced to zero.

4321. Creating S-polynomial from the pair  $(p_{65}, p_{72})$ .

Forming S-pol of  $p_{65}$  and  $p_{72}$ : Polynomial too big for output (text size is 1893 characters, number of terms is 18)

Reduced to zero.

4322. Creating S-polynomial from the pair  $(p_{65}, p_{73})$ .

Forming S-pol of  $p_{65}$  and  $p_{73}$ :

$$\begin{aligned} p_{978} = & 16384u_4^{16}u_1^{14}x_{16}^2x_4 + \\ & (-2048u_5u_4^{19}u_1^{11} + 32768u_5u_4^{15}u_1^{15})x_{16}^2 - 16384u_4^{16}u_1^{14}x_{16}x_{14}x_5 + \\ & (2048u_6u_4^{19}u_1^{11} - 32768u_6u_4^{15}u_1^{15})x_{16}x_{14} - 8192u_5u_4^{16}u_1^{13}x_{16}x_5x_3 + \\ & 1024u_5u_4^{20}u_1^{10}x_{16}x_5 - 2048u_6u_4^{18}u_1^{11}x_{16}x_4x_3 + \\ & 4096u_6u_4^{18}u_1^{12}x_{16}x_4 + \end{aligned}$$

$$\begin{aligned}
& (-1024u_6u_5u_4^{19}u_1^{10} - 4096u_6u_5u_4^{17}u_1^{12})x_{16}x_3 + \\
& (2048u_6u_4^{18}u_1^{11} + 8192u_6u_4^{16}u_1^{13})x_{14}x_5x_3 + \\
& (-1024u_6u_4^{20}u_1^{10} - 4096u_6u_4^{18}u_1^{12})x_{14}x_5 + \\
& (1024u_6^2u_4^{19}u_1^{10} + 4096u_6^2u_4^{17}u_1^{12})x_{14}x_3
\end{aligned}$$

Reduced to zero.

- 4323. Creating S-polynomial from the pair  $(p_{65}, p_{74})$ .  
 Skipping pair  $p_{65}$  and  $p_{74}$  because gcd of their leading monoms is zero.
- 4324. Creating S-polynomial from the pair  $(p_{65}, p_{75})$ .  
 Skipping pair  $p_{65}$  and  $p_{75}$  because gcd of their leading monoms is zero.
- 4325. Creating S-polynomial from the pair  $(p_{65}, p_{76})$ .  
 Skipping pair  $p_{65}$  and  $p_{76}$  because gcd of their leading monoms is zero.
- 4326. Creating S-polynomial from the pair  $(p_{65}, p_{77})$ .  
 Skipping pair  $p_{65}$  and  $p_{77}$  because gcd of their leading monoms is zero.
- 4327. Creating S-polynomial from the pair  $(p_{65}, p_{78})$ .  
 Skipping pair  $p_{65}$  and  $p_{78}$  because gcd of their leading monoms is zero.
- 4328. Creating S-polynomial from the pair  $(p_{65}, p_{79})$ .  
 Skipping pair  $p_{65}$  and  $p_{79}$  because gcd of their leading monoms is zero.
- 4329. Creating S-polynomial from the pair  $(p_{65}, p_{80})$ .  
 Skipping pair  $p_{65}$  and  $p_{80}$  because gcd of their leading monoms is zero.
- 4330. Creating S-polynomial from the pair  $(p_{65}, p_{81})$ .  
 Skipping pair  $p_{65}$  and  $p_{81}$  because gcd of their leading monoms is zero.
- 4331. Creating S-polynomial from the pair  $(p_{65}, p_{82})$ .  
 Skipping pair  $p_{65}$  and  $p_{82}$  because gcd of their leading monoms is zero.
- 4332. Creating S-polynomial from the pair  $(p_{65}, p_{83})$ .  
 Skipping pair  $p_{65}$  and  $p_{83}$  because gcd of their leading monoms is zero.
- 4333. Creating S-polynomial from the pair  $(p_{65}, p_{84})$ .  
 Skipping pair  $p_{65}$  and  $p_{84}$  because gcd of their leading monoms is zero.
- 4334. Creating S-polynomial from the pair  $(p_{65}, p_{85})$ .  
 Skipping pair  $p_{65}$  and  $p_{85}$  because gcd of their leading monoms is zero.
- 4335. Creating S-polynomial from the pair  $(p_{65}, p_{86})$ .  
 Skipping pair  $p_{65}$  and  $p_{86}$  because gcd of their leading monoms is zero.
- 4336. Creating S-polynomial from the pair  $(p_{65}, p_{87})$ .  
 Skipping pair  $p_{65}$  and  $p_{87}$  because gcd of their leading monoms is zero.

4337. Creating S-polynomial from the pair  $(p_{65}, p_{88})$ .

Forming S-pol of  $p_{65}$  and  $p_{88}$ :

$$\begin{aligned} p_{979} = & -1048576u_5u_4^{22}u_1^{20}x_{16}x_4 + \\ & (131072u_5^2u_4^{25}u_1^{17} - 2097152u_5^2u_4^{21}u_1^{21})x_{16} + \\ & (524288u_6u_4^{23}u_1^{19} + 2097152u_6u_4^{21}u_1^{21})x_{14}^2 + 1048576u_5u_4^{22}u_1^{20}x_{14}x_5 + \\ & (-262144u_6u_4^{24}u_1^{18} - 1048576u_6u_4^{22}u_1^{20})x_{14}x_4 + \\ & 524288u_5^2u_4^{22}u_1^{19}x_5x_3 - 65536u_5^2u_4^{26}u_1^{16}x_5 + \\ & 131072u_6u_5u_4^{24}u_1^{17}x_4x_3 - 262144u_6u_5u_4^{24}u_1^{18}x_4 + \\ & (65536u_6u_5^2u_4^{25}u_1^{16} + 262144u_6u_5^2u_4^{23}u_1^{18})x_3 \end{aligned}$$

Reduced to zero.

4338. Creating S-polynomial from the pair  $(p_{65}, p_{89})$ .

Forming S-pol of  $p_{65}$  and  $p_{89}$ :

$$\begin{aligned} p_{980} = & -4096u_4^{20}u_1^{12}x_{16}x_4 + (4096u_5u_4^{19}u_1^{12} + 16384u_5u_4^{17}u_1^{14})x_{16}x_3 + \\ & (-2048u_5u_4^{21}u_1^{11} - 8192u_5u_4^{19}u_1^{13})x_{16} + 4096u_4^{20}u_1^{12}x_{14}x_5 - \\ & 8192u_5u_4^{18}u_1^{13}x_5x_3 + 1024u_5u_4^{22}u_1^{10}x_5 - 2048u_6u_4^{20}u_1^{11}x_4x_3 + \\ & 4096u_6u_4^{20}u_1^{12}x_4 + (-1024u_6u_5u_4^{21}u_1^{10} - 4096u_6u_5u_4^{19}u_1^{12})x_3 \end{aligned}$$

Reduced to zero.

4339. Creating S-polynomial from the pair  $(p_{65}, p_{90})$ .

Forming S-pol of  $p_{65}$  and  $p_{90}$ : Polynomial too big for output (text size is 1022 characters, number of terms is 12)

Reduced to zero.

4340. Creating S-polynomial from the pair  $(p_{65}, p_{91})$ .

Forming S-pol of  $p_{65}$  and  $p_{91}$ :

$$\begin{aligned} p_{981} = & 524288u_4^{18}u_1^{19}x_{16}x_{14}x_4 + \\ & (262144u_5u_4^{19}u_1^{18} + 1048576u_5u_4^{17}u_1^{20})x_{16}x_{14} - 524288u_4^{18}u_1^{19}x_{14}^2x_5 + \\ & (-262144u_6u_4^{19}u_1^{18} - 1048576u_6u_4^{17}u_1^{20})x_{14}^2 - \\ & 262144u_5u_4^{18}u_1^{18}x_{14}x_5x_3 - 131072u_5u_4^{20}u_1^{17}x_{14}x_5 + \\ & 262144u_6u_4^{18}u_1^{18}x_{14}x_4x_3 + 131072u_6u_4^{20}u_1^{17}x_{14}x_4 \end{aligned}$$

Reduced to zero.

4341. Creating S-polynomial from the pair  $(p_{65}, p_{92})$ .

Forming S-pol of  $p_{65}$  and  $p_{92}$ :

$$\begin{aligned} p_{982} = & -131072u_4^{20}u_1^{17}x_{16}x_{14}x_4 + \\ & (-65536u_5u_4^{21}u_1^{16} - 262144u_5u_4^{19}u_1^{18})x_{16}x_{14} + 131072u_4^{20}u_1^{17}x_{14}^2x_5 + \\ & (65536u_6u_4^{21}u_1^{16} + 262144u_6u_4^{19}u_1^{18})x_{14}^2 + 65536u_5u_4^{20}u_1^{16}x_{14}x_5x_3 + \\ & 32768u_5u_4^{22}u_1^{15}x_{14}x_5 - 65536u_6u_4^{20}u_1^{16}x_{14}x_4x_3 - \\ & 32768u_6u_4^{22}u_1^{15}x_{14}x_4 \end{aligned}$$

Reduced to zero.

4342. Creating S-polynomial from the pair  $(p_{65}, p_{93})$ .

Forming S-pol of  $p_{65}$  and  $p_{93}$ : Polynomial too big for output (text size is 1450 characters, number of terms is 14)

S-pol added.

4343. Creating S-polynomial from the pair  $(p_{65}, p_{94})$ .

Forming S-pol of  $p_{65}$  and  $p_{94}$ :

$$\begin{aligned} p_{983} = & 16384u_4^{18}u_1^{14}x_{16}x_4 + \\ & (-2048u_5u_4^{21}u_1^{11} + 32768u_5u_4^{17}u_1^{15})x_{16} - 16384u_4^{18}u_1^{14}x_{14}x_5 + \\ & (4096u_6u_4^{19}u_1^{12} + 16384u_6u_4^{17}u_1^{14})x_{14}x_3 + \\ & (-8192u_6u_4^{19}u_1^{13} - 32768u_6u_4^{17}u_1^{15})x_{14} - 8192u_5u_4^{18}u_1^{13}x_5x_3 + \\ & 1024u_5u_4^{22}u_1^{10}x_5 - 2048u_6u_4^{20}u_1^{11}x_4x_3 + 4096u_6u_4^{20}u_1^{12}x_4 + \\ & (-1024u_6u_5u_4^{21}u_1^{10} - 4096u_6u_5u_4^{19}u_1^{12})x_3 \end{aligned}$$

Reduced to zero.

4344. Creating S-polynomial from the pair  $(p_{65}, p_{95})$ .

Skipping pair  $p_{65}$  and  $p_{95}$  because gcd of their leading monoms is zero.

4345. Creating S-polynomial from the pair  $(p_{65}, p_{96})$ .

Skipping pair  $p_{65}$  and  $p_{96}$  because gcd of their leading monoms is zero.

4346. Creating S-polynomial from the pair  $(p_{65}, p_{97})$ .

Skipping pair  $p_{65}$  and  $p_{97}$  because gcd of their leading monoms is zero.

4347. Creating S-polynomial from the pair  $(p_{65}, p_{98})$ .

Skipping pair  $p_{65}$  and  $p_{98}$  because gcd of their leading monoms is zero.

4348. Creating S-polynomial from the pair  $(p_{65}, p_{99})$ .

Forming S-pol of  $p_{65}$  and  $p_{99}$ : Polynomial too big for output (text size is 5286 characters, number of terms is 34)

Reduced to zero.

4349. Creating S-polynomial from the pair  $(p_{65}, p_{100})$ .  
 Skipping pair  $p_{65}$  and  $p_{100}$  because gcd of their leading monoms is zero.
4350. Creating S-polynomial from the pair  $(p_{65}, p_{101})$ .  
 Skipping pair  $p_{65}$  and  $p_{101}$  because gcd of their leading monoms is zero.
4351. Creating S-polynomial from the pair  $(p_{65}, p_{102})$ .  
 Skipping pair  $p_{65}$  and  $p_{102}$  because gcd of their leading monoms is zero.
4352. Creating S-polynomial from the pair  $(p_{65}, p_{103})$ .  
 Forming S-pol of  $p_{65}$  and  $p_{103}$ : Polynomial too big for output (text size is 5302 characters, number of terms is 34)  
 Reduced to zero.
4353. Creating S-polynomial from the pair  $(p_{65}, p_{104})$ .  
 Forming S-pol of  $p_{65}$  and  $p_{104}$ : Polynomial too big for output (text size is 1256 characters, number of terms is 15)  
 Reduced to zero.
4354. Creating S-polynomial from the pair  $(p_{65}, p_{105})$ .  
 Forming S-pol of  $p_{65}$  and  $p_{105}$ :  

$$p_{984} = (-32768u_5u_4^{17}u_1^{15} - 131072u_5u_4^{15}u_1^{17})x_{16}x_{14} - 32768u_4^{17}u_1^{15}x_{16}x_4^2 +$$

$$(4096u_5u_4^{20}u_1^{12} - 65536u_5u_4^{16}u_1^{16})x_{16}x_4 +$$

$$(16384u_4^{18}u_1^{14} + 65536u_4^{16}u_1^{16})x_{14}^2x_5 +$$

$$(32768u_6u_4^{17}u_1^{15} + 131072u_6u_4^{15}u_1^{17})x_{14}^2 - 8192u_4^{19}u_1^{13}x_{14}x_5x_4 +$$

$$(8192u_5u_4^{18}u_1^{13} + 32768u_5u_4^{16}u_1^{15})x_{14}x_5x_3 +$$

$$(-8192u_6u_4^{18}u_1^{13} - 32768u_6u_4^{16}u_1^{15})x_{14}x_4x_3 +$$

$$16384u_5u_4^{17}u_1^{14}x_5x_4x_3 - 2048u_5u_4^{21}u_1^{11}x_5x_4 +$$

$$4096u_6u_4^{19}u_1^{12}x_4^2x_3 - 8192u_6u_4^{19}u_1^{13}x_4^2 +$$

$$(2048u_6u_5u_4^{20}u_1^{11} + 8192u_6u_5u_4^{18}u_1^{13})x_4x_3$$
 Reduced to zero.
4355. Creating S-polynomial from the pair  $(p_{65}, p_{106})$ .  
 Forming S-pol of  $p_{65}$  and  $p_{106}$ : Polynomial too big for output (text size is 1108 characters, number of terms is 14)  
 S-pol added.
4356. Creating S-polynomial from the pair  $(p_{66}, p_{67})$ .  
 Forming S-pol of  $p_{66}$  and  $p_{67}$ : Polynomial too big for output (text size is 1154 characters, number of terms is 16)  
 Reduced to zero.

4357. Creating S-polynomial from the pair  $(p_{66}, p_{68})$ .

Forming S-pol of  $p_{66}$  and  $p_{68}$ :

$$\begin{aligned} p_{985} = & 256u_5u_4^{12}u_1^8x_{16}x_{14} + 256u_5u_4^{11}u_1^8x_{16}x_4x_3 - \\ & 128u_5u_4^{13}u_1^7x_{16}x_4 + 128u_5^2u_4^{12}u_1^7x_{16}x_3 - 256u_6u_4^{12}u_1^8x_{14}^2 - \\ & 256u_5u_4^{11}u_1^8x_{14}x_5x_3 + 128u_6u_4^{13}u_1^7x_{14}x_4 - \\ & 128u_6u_5u_4^{12}u_1^7x_{14}x_3 \end{aligned}$$

Reduced to zero.

4358. Creating S-polynomial from the pair  $(p_{66}, p_{69})$ .

Forming S-pol of  $p_{66}$  and  $p_{69}$ :

$$\begin{aligned} p_{986} = & 4096u_4^{15}u_1^{12}x_{16}x_{14}x_4 + 8192u_5u_4^{14}u_1^{13}x_{16}x_{14} + \\ & (-512u_5u_4^{17}u_1^9 - 2048u_5u_4^{15}u_1^{11})x_{16}x_4x_3 + \\ & (256u_5u_4^{19}u_1^8 + 1024u_5u_4^{17}u_1^{10})x_{16}x_4 + \\ & (-256u_5^2u_4^{18}u_1^8 - 1024u_5^2u_4^{16}u_1^{10})x_{16}x_3 - 4096u_4^{15}u_1^{12}x_{14}^2x_5 - \\ & 8192u_6u_4^{14}u_1^{13}x_{14}^2 + 512u_5u_4^{17}u_1^9x_{14}x_5x_3 + \\ & (-256u_5u_4^{19}u_1^8 - 1024u_5u_4^{17}u_1^{10})x_{14}x_5 + 2048u_6u_4^{15}u_1^{11}x_{14}x_4x_3 + \\ & (256u_6u_5u_4^{18}u_1^8 + 1024u_6u_5u_4^{16}u_1^{10})x_{14}x_3 \end{aligned}$$

Reduced to zero.

4359. Creating S-polynomial from the pair  $(p_{66}, p_{70})$ .

Skipping pair  $p_{66}$  and  $p_{70}$  because gcd of their leading monoms is zero.

4360. Creating S-polynomial from the pair  $(p_{66}, p_{71})$ .

Forming S-pol of  $p_{66}$  and  $p_{71}$ :

$$\begin{aligned} p_{987} = & -512u_4^{11}u_1^9x_{16}x_{14}x_4 - 1024u_5u_4^{10}u_1^{10}x_{16}x_{14} + \\ & 256u_5u_4^{11}u_1^8x_{16}x_4x_3 - 128u_5u_4^{13}u_1^7x_{16}x_4 + \\ & 128u_5^2u_4^{12}u_1^7x_{16}x_3 + 512u_4^{11}u_1^9x_{14}^2x_5 + 1024u_6u_4^{10}u_1^{10}x_{14}^2 + \\ & 128u_5u_4^{13}u_1^7x_{14}x_5 - 256u_6u_4^{11}u_1^8x_{14}x_4x_3 - \\ & 128u_6u_5u_4^{12}u_1^7x_{14}x_3 \end{aligned}$$

Reduced to zero.

4361. Creating S-polynomial from the pair  $(p_{66}, p_{72})$ .

Skipping pair  $p_{66}$  and  $p_{72}$  because gcd of their leading monoms is zero.

4362. Creating S-polynomial from the pair  $(p_{66}, p_{73})$ .

Skipping pair  $p_{66}$  and  $p_{73}$  because gcd of their leading monoms is zero.

4363. Creating S-polynomial from the pair  $(p_{66}, p_{74})$ .

Skipping pair  $p_{66}$  and  $p_{74}$  because gcd of their leading monoms is zero.



4364. Creating S-polynomial from the pair  $(p_{66}, p_{75})$ .  
 Skipping pair  $p_{66}$  and  $p_{75}$  because gcd of their leading monoms is zero.
4365. Creating S-polynomial from the pair  $(p_{66}, p_{76})$ .  
 Skipping pair  $p_{66}$  and  $p_{76}$  because gcd of their leading monoms is zero.
4366. Creating S-polynomial from the pair  $(p_{66}, p_{77})$ .  
 Skipping pair  $p_{66}$  and  $p_{77}$  because gcd of their leading monoms is zero.
4367. Creating S-polynomial from the pair  $(p_{66}, p_{78})$ .  
 Skipping pair  $p_{66}$  and  $p_{78}$  because gcd of their leading monoms is zero.
4368. Creating S-polynomial from the pair  $(p_{66}, p_{79})$ .  
 Skipping pair  $p_{66}$  and  $p_{79}$  because gcd of their leading monoms is zero.
4369. Creating S-polynomial from the pair  $(p_{66}, p_{80})$ .  
 Skipping pair  $p_{66}$  and  $p_{80}$  because gcd of their leading monoms is zero.
4370. Creating S-polynomial from the pair  $(p_{66}, p_{81})$ .  
 Skipping pair  $p_{66}$  and  $p_{81}$  because gcd of their leading monoms is zero.
4371. Creating S-polynomial from the pair  $(p_{66}, p_{82})$ .  
 Skipping pair  $p_{66}$  and  $p_{82}$  because gcd of their leading monoms is zero.
4372. Creating S-polynomial from the pair  $(p_{66}, p_{83})$ .  
 Skipping pair  $p_{66}$  and  $p_{83}$  because gcd of their leading monoms is zero.
4373. Creating S-polynomial from the pair  $(p_{66}, p_{84})$ .  
 Skipping pair  $p_{66}$  and  $p_{84}$  because gcd of their leading monoms is zero.
4374. Creating S-polynomial from the pair  $(p_{66}, p_{85})$ .  
 Skipping pair  $p_{66}$  and  $p_{85}$  because gcd of their leading monoms is zero.
4375. Creating S-polynomial from the pair  $(p_{66}, p_{86})$ .  
 Skipping pair  $p_{66}$  and  $p_{86}$  because gcd of their leading monoms is zero.
4376. Creating S-polynomial from the pair  $(p_{66}, p_{87})$ .  
 Skipping pair  $p_{66}$  and  $p_{87}$  because gcd of their leading monoms is zero.
4377. Creating S-polynomial from the pair  $(p_{66}, p_{88})$ .  
 Skipping pair  $p_{66}$  and  $p_{88}$  because gcd of their leading monoms is zero.
4378. Creating S-polynomial from the pair  $(p_{66}, p_{89})$ .  
 Forming S-pol of  $p_{66}$  and  $p_{89}$ :

$$p_{988} = -32u_5u_4^{10}u_1^5x_{14}x_3 + 16u_5u_4^{12}u_1^4x_{14} + 16u_5u_4^{11}u_1^4x_4x_3 - \\ 8u_5u_4^{13}u_1^3x_4 + 8u_5^2u_4^{12}u_1^3x_3$$

Reduced to zero.

4379. Creating S-polynomial from the pair  $(p_{66}, p_{90})$ .

Forming S-pol of  $p_{66}$  and  $p_{90}$ :

$$\begin{aligned} p_{989} = & -4194304u_5u_4^{23}u_1^{21}x_{16}x_{14}x_4 - 4194304u_5^2u_4^{22}u_1^{22}x_{16}x_{14} + \\ & 1048576u_5^2u_4^{23}u_1^{20}x_{16}x_4x_3 - 524288u_5^2u_4^{25}u_1^{19}x_{16}x_4 + \\ & 524288u_5^3u_4^{24}u_1^{19}x_{16}x_3 + 4194304u_6u_4^{22}u_1^{22}x_{14}^3 + \\ & 2097152u_5u_4^{23}u_1^{21}x_{14}^2x_5 + 1048576u_6u_5u_4^{24}u_1^{20}x_{14}^2 + \\ & 1048576u_5u_4^{24}u_1^{20}x_{14}x_5x_4 + 524288u_5^2u_4^{25}u_1^{19}x_{14}x_5 + \\ & (-524288u_6u_5u_4^{25}u_1^{19} - 2097152u_6u_4^{24}u_1^{21})x_{14}x_4 + \\ & 1048576u_6u_5^2u_4^{24}u_1^{20}x_{14} \end{aligned}$$

Reduced to zero.

4380. Creating S-polynomial from the pair  $(p_{66}, p_{91})$ .

Forming S-pol of  $p_{66}$  and  $p_{91}$ :

$$\begin{aligned} p_{990} = & -1024u_4^{11}u_1^{10}x_{16}x_{14}x_4 - 2048u_5u_4^{10}u_1^{11}x_{16}x_{14} + \\ & 512u_5u_4^{11}u_1^9x_{16}x_4x_3 - 256u_5u_4^{13}u_1^8x_{16}x_4 + \\ & 256u_5^2u_4^{12}u_1^8x_{16}x_3 + 1024u_4^{11}u_1^{10}x_{14}^2x_5 + \\ & 2048u_6u_4^{10}u_1^{11}x_{14}^2 + 256u_5u_4^{13}u_1^8x_{14}x_5 - \\ & 512u_6u_4^{11}u_1^9x_{14}x_4x_3 - 256u_6u_5u_4^{12}u_1^8x_{14}x_3 \end{aligned}$$

Reduced to zero.

4381. Creating S-polynomial from the pair  $(p_{66}, p_{92})$ .

Forming S-pol of  $p_{66}$  and  $p_{92}$ :

$$\begin{aligned} p_{991} = & 512u_5u_4^{12}u_1^9x_{16}x_{14} + 512u_5u_4^{11}u_1^9x_{16}x_4x_3 - \\ & 256u_5u_4^{13}u_1^8x_{16}x_4 + 256u_5^2u_4^{12}u_1^8x_{16}x_3 - 512u_6u_4^{12}u_1^9x_{14}^2 - \\ & 512u_5u_4^{11}u_1^9x_{14}x_5x_3 + 256u_6u_4^{13}u_1^8x_{14}x_4 - \\ & 256u_6u_5u_4^{12}u_1^8x_{14}x_3 \end{aligned}$$

Reduced to zero.

4382. Creating S-polynomial from the pair  $(p_{66}, p_{93})$ .

Skipping pair  $p_{66}$  and  $p_{93}$  because gcd of their leading monoms is zero.

4383. Creating S-polynomial from the pair  $(p_{66}, p_{94})$ .

Skipping pair  $p_{66}$  and  $p_{94}$  because gcd of their leading monoms is zero.

4384. Creating S-polynomial from the pair  $(p_{66}, p_{95})$ .

Skipping pair  $p_{66}$  and  $p_{95}$  because gcd of their leading monoms is zero.

4385. Creating S-polynomial from the pair  $(p_{66}, p_{96})$ .

Skipping pair  $p_{66}$  and  $p_{96}$  because gcd of their leading monoms is zero.

4386. Creating S-polynomial from the pair  $(p_{66}, p_{97})$ .  
 Skipping pair  $p_{66}$  and  $p_{97}$  because gcd of their leading monoms is zero.
4387. Creating S-polynomial from the pair  $(p_{66}, p_{98})$ .  
 Skipping pair  $p_{66}$  and  $p_{98}$  because gcd of their leading monoms is zero.
4388. Creating S-polynomial from the pair  $(p_{66}, p_{99})$ .  
 Skipping pair  $p_{66}$  and  $p_{99}$  because gcd of their leading monoms is zero.
4389. Creating S-polynomial from the pair  $(p_{66}, p_{100})$ .  
 Skipping pair  $p_{66}$  and  $p_{100}$  because gcd of their leading monoms is zero.
4390. Creating S-polynomial from the pair  $(p_{66}, p_{101})$ .  
 Skipping pair  $p_{66}$  and  $p_{101}$  because gcd of their leading monoms is zero.
4391. Creating S-polynomial from the pair  $(p_{66}, p_{102})$ .  
 Skipping pair  $p_{66}$  and  $p_{102}$  because gcd of their leading monoms is zero.
4392. Creating S-polynomial from the pair  $(p_{66}, p_{103})$ .  
 Skipping pair  $p_{66}$  and  $p_{103}$  because gcd of their leading monoms is zero.
4393. Creating S-polynomial from the pair  $(p_{66}, p_{104})$ .  
 Forming S-pol of  $p_{66}$  and  $p_{104}$ :

$$\begin{aligned}
 p_{992} = & 2097152u_5u_4^{21}u_1^{21}x_{16}x_{14}^2 - 2097152u_4^{21}u_1^{21}x_{16}x_{14}x_4^2 + \\
 & (1048576u_5u_4^{22}u_1^{20} + 4194304u_4^{21}u_1^{22})x_{16}x_{14}x_4 + \\
 & (524288u_5^2u_4^{23}u_1^{19} - 2097152u_5^2u_4^{21}u_1^{21})x_{16}x_{14} + \\
 & 1048576u_5u_4^{21}u_1^{20}x_{16}x_4^2x_3 - 524288u_5u_4^{23}u_1^{19}x_{16}x_4^2 + \\
 & 524288u_5^2u_4^{22}u_1^{19}x_{16}x_4x_3 - 2097152u_6u_4^{21}u_1^{21}x_{14}^3 - \\
 & 1048576u_5u_4^{22}u_1^{20}x_{14}^2x_5 - 524288u_6u_5u_4^{23}u_1^{19}x_{14}^2 - \\
 & 1048576u_5u_4^{21}u_1^{20}x_{14}x_5x_4x_3 - 262144u_5^2u_4^{24}u_1^{18}x_{14}x_5 - \\
 & 524288u_6u_5u_4^{22}u_1^{19}x_{14}x_4x_3 + \\
 & (262144u_6u_5u_4^{24}u_1^{18} + 1048576u_6u_4^{23}u_1^{20})x_{14}x_4 - \\
 & 524288u_6u_5^2u_4^{23}u_1^{19}x_{14}
 \end{aligned}$$

Reduced to zero.

4394. Creating S-polynomial from the pair  $(p_{66}, p_{105})$ .  
 Skipping pair  $p_{66}$  and  $p_{105}$  because gcd of their leading monoms is zero.
4395. Creating S-polynomial from the pair  $(p_{66}, p_{106})$ .  
 Skipping pair  $p_{66}$  and  $p_{106}$  because gcd of their leading monoms is zero.
4396. Creating S-polynomial from the pair  $(p_{67}, p_{68})$ .  
 Forming S-pol of  $p_{67}$  and  $p_{68}$ : Polynomial too big for output (text size is 1036 characters, number of terms is 15)  
 Reduced to zero.

4397. Creating S-polynomial from the pair  $(p_{67}, p_{69})$ .  
 Forming S-pol of  $p_{67}$  and  $p_{69}$ : Polynomial too big for output (text size is 1728 characters, number of terms is 17)  
 Reduced to zero.
4398. Creating S-polynomial from the pair  $(p_{67}, p_{70})$ .  
 Forming S-pol of  $p_{67}$  and  $p_{70}$ : Polynomial too big for output (text size is 2016 characters, number of terms is 17)  
 Reduced to zero.
4399. Creating S-polynomial from the pair  $(p_{67}, p_{71})$ .  
 Forming S-pol of  $p_{67}$  and  $p_{71}$ : Polynomial too big for output (text size is 1164 characters, number of terms is 16)  
 Reduced to zero.
4400. Creating S-polynomial from the pair  $(p_{67}, p_{72})$ .  
 Forming S-pol of  $p_{67}$  and  $p_{72}$ : Polynomial too big for output (text size is 2370 characters, number of terms is 19)  
 Reduced to zero.
4401. Creating S-polynomial from the pair  $(p_{67}, p_{73})$ .  
 Forming S-pol of  $p_{67}$  and  $p_{73}$ : Polynomial too big for output (text size is 1316 characters, number of terms is 17)  
 Reduced to zero.
4402. Creating S-polynomial from the pair  $(p_{67}, p_{74})$ .  
 Skipping pair  $p_{67}$  and  $p_{74}$  because gcd of their leading monoms is zero.
4403. Creating S-polynomial from the pair  $(p_{67}, p_{75})$ .  
 Skipping pair  $p_{67}$  and  $p_{75}$  because gcd of their leading monoms is zero.
4404. Creating S-polynomial from the pair  $(p_{67}, p_{76})$ .  
 Skipping pair  $p_{67}$  and  $p_{76}$  because gcd of their leading monoms is zero.
4405. Creating S-polynomial from the pair  $(p_{67}, p_{77})$ .  
 Skipping pair  $p_{67}$  and  $p_{77}$  because gcd of their leading monoms is zero.
4406. Creating S-polynomial from the pair  $(p_{67}, p_{78})$ .  
 Skipping pair  $p_{67}$  and  $p_{78}$  because gcd of their leading monoms is zero.
4407. Creating S-polynomial from the pair  $(p_{67}, p_{79})$ .  
 Forming S-pol of  $p_{67}$  and  $p_{79}$ : Polynomial too big for output (text size is 3202 characters, number of terms is 19)  
 S-pol added.
4408. Creating S-polynomial from the pair  $(p_{67}, p_{80})$ .  
 Skipping pair  $p_{67}$  and  $p_{80}$  because gcd of their leading monoms is zero.

4409. Creating S-polynomial from the pair  $(p_{67}, p_{81})$ .  
 Skipping pair  $p_{67}$  and  $p_{81}$  because gcd of their leading monoms is zero.
4410. Creating S-polynomial from the pair  $(p_{67}, p_{82})$ .  
 Skipping pair  $p_{67}$  and  $p_{82}$  because gcd of their leading monoms is zero.
4411. Creating S-polynomial from the pair  $(p_{67}, p_{83})$ .  
 Skipping pair  $p_{67}$  and  $p_{83}$  because gcd of their leading monoms is zero.
4412. Creating S-polynomial from the pair  $(p_{67}, p_{84})$ .  
 Skipping pair  $p_{67}$  and  $p_{84}$  because gcd of their leading monoms is zero.
4413. Creating S-polynomial from the pair  $(p_{67}, p_{85})$ .  
 Skipping pair  $p_{67}$  and  $p_{85}$  because gcd of their leading monoms is zero.
4414. Creating S-polynomial from the pair  $(p_{67}, p_{86})$ .  
 Forming S-pol of  $p_{67}$  and  $p_{86}$ : Polynomial too big for output (text size is 3189 characters, number of terms is 19)  
 S-pol added.
4415. Creating S-polynomial from the pair  $(p_{67}, p_{87})$ .  
 Skipping pair  $p_{67}$  and  $p_{87}$  because gcd of their leading monoms is zero.
4416. Creating S-polynomial from the pair  $(p_{67}, p_{88})$ .  
 Forming S-pol of  $p_{67}$  and  $p_{88}$ : Polynomial too big for output (text size is 1177 characters, number of terms is 15)  
 Reduced to zero.
4417. Creating S-polynomial from the pair  $(p_{67}, p_{89})$ .  
 Forming S-pol of  $p_{67}$  and  $p_{89}$ :

$$\begin{aligned}
 p_{993} = & (-2097152u_4^{30}u_1^{21} - 8388608u_4^{28}u_1^{23})x_{16}x_4^2 + \\
 & (2097152u_5u_4^{29}u_1^{21} + 8388608u_5u_4^{27}u_1^{23})x_{16}x_4x_3 + \\
 & (-1048576u_5u_4^{31}u_1^{20} - 4194304u_5u_4^{29}u_1^{22} + 16777216u_4^{28}u_1^{24})x_{16}x_4 + \\
 & (2097152u_5^2u_4^{30}u_1^{21} - 8388608u_5^2u_4^{28}u_1^{23})x_{16} + \\
 & 4194304u_4^{29}u_1^{22}x_{14}^2x_5 + \\
 & (1048576u_5u_4^{31}u_1^{20} - 4194304u_5u_4^{29}u_1^{22})x_{14}x_5 - \\
 & 2097152u_6u_5u_4^{30}u_1^{21}x_{14} + \\
 & (1048576u_5u_4^{30}u_1^{20} - 4194304u_5u_4^{28}u_1^{22})x_5x_4x_3 + \\
 & 524288u_5^2u_4^{31}u_1^{19}x_5x_3 - 1048576u_5^2u_4^{31}u_1^{20}x_5 + \\
 & (-524288u_6u_5u_4^{31}u_1^{19} - 2097152u_6u_5u_4^{29}u_1^{21} - 2097152u_6u_4^{30}u_1^{21})x_4x_3 + \\
 & (1048576u_6u_5u_4^{31}u_1^{20} + 4194304u_6u_4^{30}u_1^{22})x_4 + \\
 & 1048576u_6u_5^2u_4^{30}u_1^{20}x_3 - 2097152u_6u_5^2u_4^{30}u_1^{21}
 \end{aligned}$$

Reduced to zero.

4418. Creating S-polynomial from the pair  $(p_{67}, p_{90})$ .  
 Forming S-pol of  $p_{67}$  and  $p_{90}$ : Polynomial too big for output (text size is 1809 characters, number of terms is 19)  
 Reduced to zero.
4419. Creating S-polynomial from the pair  $(p_{67}, p_{91})$ .  
 Forming S-pol of  $p_{67}$  and  $p_{91}$ : Polynomial too big for output (text size is 1173 characters, number of terms is 16)  
 Reduced to zero.
4420. Creating S-polynomial from the pair  $(p_{67}, p_{92})$ .  
 Forming S-pol of  $p_{67}$  and  $p_{92}$ : Polynomial too big for output (text size is 1043 characters, number of terms is 15)  
 Reduced to zero.
4421. Creating S-polynomial from the pair  $(p_{67}, p_{93})$ .  
 Forming S-pol of  $p_{67}$  and  $p_{93}$ : Polynomial too big for output (text size is 2457 characters, number of terms is 17)  
 S-pol added.
4422. Creating S-polynomial from the pair  $(p_{67}, p_{94})$ .  
 Forming S-pol of  $p_{67}$  and  $p_{94}$ : Polynomial too big for output (text size is 1057 characters, number of terms is 15)  
 Reduced to zero.
4423. Creating S-polynomial from the pair  $(p_{67}, p_{95})$ .  
 Forming S-pol of  $p_{67}$  and  $p_{95}$ : Polynomial too big for output (text size is 2870 characters, number of terms is 23)  
 Reduced to zero.
4424. Creating S-polynomial from the pair  $(p_{67}, p_{96})$ .  
 Forming S-pol of  $p_{67}$  and  $p_{96}$ : Polynomial too big for output (text size is 1591 characters, number of terms is 17)  
 Reduced to zero.
4425. Creating S-polynomial from the pair  $(p_{67}, p_{97})$ .  
 Forming S-pol of  $p_{67}$  and  $p_{97}$ : Polynomial too big for output (text size is 2135 characters, number of terms is 19)  
 S-pol added.
4426. Creating S-polynomial from the pair  $(p_{67}, p_{98})$ .  
 Skipping pair  $p_{67}$  and  $p_{98}$  because gcd of their leading monoms is zero.
4427. Creating S-polynomial from the pair  $(p_{67}, p_{99})$ .  
 Forming S-pol of  $p_{67}$  and  $p_{99}$ : Polynomial too big for output (text size is 7170 characters, number of terms is 39)  
 Reduced to zero.

4428. Creating S-polynomial from the pair  $(p_{67}, p_{100})$ .  
Forming S-pol of  $p_{67}$  and  $p_{100}$ : Polynomial too big for output (text size is 2901 characters, number of terms is 23)  
Reduced to zero.
4429. Creating S-polynomial from the pair  $(p_{67}, p_{101})$ .  
Forming S-pol of  $p_{67}$  and  $p_{101}$ : Polynomial too big for output (text size is 1606 characters, number of terms is 17)  
Reduced to zero.
4430. Creating S-polynomial from the pair  $(p_{67}, p_{102})$ .  
Forming S-pol of  $p_{67}$  and  $p_{102}$ : Polynomial too big for output (text size is 2148 characters, number of terms is 19)  
S-pol added.
4431. Creating S-polynomial from the pair  $(p_{67}, p_{103})$ .  
Forming S-pol of  $p_{67}$  and  $p_{103}$ : Polynomial too big for output (text size is 7191 characters, number of terms is 39)  
Reduced to zero.
4432. Creating S-polynomial from the pair  $(p_{67}, p_{104})$ .  
Forming S-pol of  $p_{67}$  and  $p_{104}$ :  

$$p_{994} = (-137438953472u_5u_4^{40}u_1^{37} - 549755813888u_5u_4^{38}u_1^{39})x_{16}x_{14}^2 +$$

$$(-68719476736u_5u_4^{41}u_1^{36} - 274877906944u_5u_4^{39}u_1^{38} -$$

$$274877906944u_4^{40}u_1^{38})x_{16}x_{14}x_4 +$$

$$(-34359738368u_5^2u_4^{42}u_1^{35} + 137438953472u_5^2u_4^{40}u_1^{37})x_{16}x_{14} +$$

$$274877906944u_4^{39}u_1^{38}x_{14}^3x_5 +$$

$$(137438953472u_6u_4^{40}u_1^{37} + 549755813888u_6u_4^{38}u_1^{39})x_{14}^3 +$$

$$137438953472u_5u_4^{41}u_1^{36}x_{14}^2x_5 + 34359738368u_6u_5u_4^{42}u_1^{35}x_{14}^2 +$$

$$137438953472u_5u_4^{40}u_1^{36}x_{14}x_5x_4x_3 + 34359738368u_5^2u_4^{41}u_1^{35}x_{14}x_5x_3 +$$

$$17179869184u_5^2u_4^{43}u_1^{34}x_{14}x_5 - 137438953472u_6u_4^{40}u_1^{37}x_{14}x_4x_3 +$$

$$(-17179869184u_6u_5u_4^{43}u_1^{34} - 68719476736u_6u_4^{42}u_1^{36})x_{14}x_4 +$$

$$68719476736u_6u_5^2u_4^{40}u_1^{36}x_{14}x_3 + 34359738368u_6u_5^2u_4^{42}u_1^{35}x_{14}$$
  
Reduced to zero.
4433. Creating S-polynomial from the pair  $(p_{67}, p_{105})$ .  
Forming S-pol of  $p_{67}$  and  $p_{105}$ : Polynomial too big for output (text size is 1286 characters, number of terms is 17)  
S-pol added.

4434. Creating S-polynomial from the pair  $(p_{67}, p_{106})$ .

Forming S-pol of  $p_{67}$  and  $p_{106}$ : Polynomial too big for output (text size is 1624 characters, number of terms is 17)

S-pol added.

4435. Creating S-polynomial from the pair  $(p_{68}, p_{69})$ .

Forming S-pol of  $p_{68}$  and  $p_{69}$ :

$$\begin{aligned} p_{995} = & 65536u_4^{17}u_1^{16}x_{16}x_{14}x_4 + \\ & (8192u_5u_4^{20}u_1^{13} + 32768u_5u_4^{18}u_1^{15} + 131072u_5u_4^{16}u_1^{17})x_{16}x_{14} - \\ & 65536u_4^{17}u_1^{16}x_{14}^2x_5 + \\ & (-8192u_6u_4^{20}u_1^{13} - 32768u_6u_4^{18}u_1^{15} - 131072u_6u_4^{16}u_1^{17})x_{14}^2 - \\ & 32768u_5u_4^{17}u_1^{15}x_{14}x_5x_3 + \\ & (-4096u_5u_4^{21}u_1^{12} - 16384u_5u_4^{19}u_1^{14})x_{14}x_5 + 32768u_6u_4^{17}u_1^{15}x_{14}x_4x_3 + \\ & (4096u_6u_4^{21}u_1^{12} + 16384u_6u_4^{19}u_1^{14})x_{14}x_4 \end{aligned}$$

Reduced to zero.

4436. Creating S-polynomial from the pair  $(p_{68}, p_{70})$ .

Forming S-pol of  $p_{68}$  and  $p_{70}$ :

$$\begin{aligned} p_{996} = & (1024u_4^{17}u_1^{10} + 4096u_4^{15}u_1^{12})x_{16}^2x_4 + \\ & (2048u_5u_4^{16}u_1^{11} + 8192u_5u_4^{14}u_1^{13})x_{16}^2 + \\ & (-1024u_4^{17}u_1^{10} - 4096u_4^{15}u_1^{12})x_{16}x_{14}x_5 + \\ & (-2048u_6u_4^{16}u_1^{11} - 8192u_6u_4^{14}u_1^{13})x_{16}x_{14} + \\ & (-512u_5u_4^{17}u_1^9 - 2048u_5u_4^{15}u_1^{11})x_{16}x_5x_3 + \\ & (256u_6u_4^{19}u_1^8 + 1024u_6u_4^{17}u_1^{10})x_{16}x_4 + \\ & (-256u_6u_5u_4^{18}u_1^8 - 1024u_6u_5u_4^{16}u_1^{10})x_{16}x_3 + \\ & (512u_6u_4^{17}u_1^9 + 2048u_6u_4^{15}u_1^{11})x_{14}x_5x_3 + \\ & (-256u_6u_4^{19}u_1^8 - 1024u_6u_4^{17}u_1^{10})x_{14}x_5 + \\ & (256u_6^2u_4^{18}u_1^8 + 1024u_6^2u_4^{16}u_1^{10})x_{14}x_3 \end{aligned}$$

Reduced to zero.

4437. Creating S-polynomial from the pair  $(p_{68}, p_{71})$ .

Forming S-pol of  $p_{68}$  and  $p_{71}$ :

$$\begin{aligned} p_{997} = & -8192u_4^{13}u_1^{13}x_{16}x_{14}x_4 + \\ & (-4096u_5u_4^{14}u_1^{12} - 16384u_5u_4^{12}u_1^{14})x_{16}x_{14} + 8192u_4^{13}u_1^{13}x_{14}^2x_5 + \\ & (4096u_6u_4^{14}u_1^{12} + 16384u_6u_4^{12}u_1^{14})x_{14}^2 + 4096u_5u_4^{13}u_1^{12}x_{14}x_5x_3 + \\ & 2048u_5u_4^{15}u_1^{11}x_{14}x_5 - 4096u_6u_4^{13}u_1^{12}x_{14}x_4x_3 - \\ & 2048u_6u_4^{15}u_1^{11}x_{14}x_4 \end{aligned}$$

Reduced to zero.



4438. Creating S-polynomial from the pair  $(p_{68}, p_{72})$ .  
 Forming S-pol of  $p_{68}$  and  $p_{72}$ : Polynomial too big for output (text size is 1164 characters, number of terms is 16)  
 Reduced to zero.
4439. Creating S-polynomial from the pair  $(p_{68}, p_{73})$ .  
 Forming S-pol of  $p_{68}$  and  $p_{73}$ :
- $$\begin{aligned}
 p_{998} = & -512u_4^{11}u_1^9x_{16}^2x_4 - 1024u_5u_4^{10}u_1^{10}x_{16}^2 + 512u_4^{11}u_1^9x_{16}x_{14}x_5 + \\
 & 1024u_6u_4^{10}u_1^{10}x_{16}x_{14} + 256u_5u_4^{11}u_1^8x_{16}x_5x_3 - \\
 & 128u_6u_4^{13}u_1^7x_{16}x_4 + 128u_6u_5u_4^{12}u_1^7x_{16}x_3 - \\
 & 256u_6u_4^{11}u_1^8x_{14}x_5x_3 + 128u_6u_4^{13}u_1^7x_{14}x_5 - \\
 & 128u_6^2u_4^{12}u_1^7x_{14}x_3
 \end{aligned}$$
- Reduced to zero.
4440. Creating S-polynomial from the pair  $(p_{68}, p_{74})$ .  
 Skipping pair  $p_{68}$  and  $p_{74}$  because gcd of their leading monoms is zero.
4441. Creating S-polynomial from the pair  $(p_{68}, p_{75})$ .  
 Skipping pair  $p_{68}$  and  $p_{75}$  because gcd of their leading monoms is zero.
4442. Creating S-polynomial from the pair  $(p_{68}, p_{76})$ .  
 Skipping pair  $p_{68}$  and  $p_{76}$  because gcd of their leading monoms is zero.
4443. Creating S-polynomial from the pair  $(p_{68}, p_{77})$ .  
 Skipping pair  $p_{68}$  and  $p_{77}$  because gcd of their leading monoms is zero.
4444. Creating S-polynomial from the pair  $(p_{68}, p_{78})$ .  
 Skipping pair  $p_{68}$  and  $p_{78}$  because gcd of their leading monoms is zero.
4445. Creating S-polynomial from the pair  $(p_{68}, p_{79})$ .  
 Skipping pair  $p_{68}$  and  $p_{79}$  because gcd of their leading monoms is zero.
4446. Creating S-polynomial from the pair  $(p_{68}, p_{80})$ .  
 Skipping pair  $p_{68}$  and  $p_{80}$  because gcd of their leading monoms is zero.
4447. Creating S-polynomial from the pair  $(p_{68}, p_{81})$ .  
 Skipping pair  $p_{68}$  and  $p_{81}$  because gcd of their leading monoms is zero.
4448. Creating S-polynomial from the pair  $(p_{68}, p_{82})$ .  
 Skipping pair  $p_{68}$  and  $p_{82}$  because gcd of their leading monoms is zero.
4449. Creating S-polynomial from the pair  $(p_{68}, p_{83})$ .  
 Skipping pair  $p_{68}$  and  $p_{83}$  because gcd of their leading monoms is zero.
4450. Creating S-polynomial from the pair  $(p_{68}, p_{84})$ .  
 Skipping pair  $p_{68}$  and  $p_{84}$  because gcd of their leading monoms is zero.

4451. Creating S-polynomial from the pair  $(p_{68}, p_{85})$ .

Skipping pair  $p_{68}$  and  $p_{85}$  because gcd of their leading monoms is zero.

4452. Creating S-polynomial from the pair  $(p_{68}, p_{86})$ .

Skipping pair  $p_{68}$  and  $p_{86}$  because gcd of their leading monoms is zero.

4453. Creating S-polynomial from the pair  $(p_{68}, p_{87})$ .

Skipping pair  $p_{68}$  and  $p_{87}$  because gcd of their leading monoms is zero.

4454. Creating S-polynomial from the pair  $(p_{68}, p_{88})$ .

Forming S-pol of  $p_{68}$  and  $p_{88}$ :

$$\begin{aligned} p_{999} = & 32768u_5u_4^{17}u_1^{15}x_{16}x_4 + 65536u_5^2u_4^{16}u_1^{16}x_{16} - \\ & 65536u_6u_4^{16}u_1^{16}x_{14}^2 - 32768u_5u_4^{17}u_1^{15}x_{14}x_5 + \\ & 32768u_6u_4^{17}u_1^{15}x_{14}x_4 - 16384u_6u_5u_4^{18}u_1^{14}x_{14} - \\ & 16384u_5^2u_4^{17}u_1^{14}x_5x_3 + 8192u_6u_5u_4^{19}u_1^{13}x_4 - \\ & 8192u_6u_5^2u_4^{18}u_1^{13}x_3 \end{aligned}$$

Reduced to zero.

4455. Creating S-polynomial from the pair  $(p_{68}, p_{89})$ .

Forming S-pol of  $p_{68}$  and  $p_{89}$ :

$$\begin{aligned} p_{1000} = & -512u_5u_4^{12}u_1^9x_{16}x_3 + 256u_6u_4^{14}u_1^8x_{14} + 256u_5u_4^{13}u_1^8x_5x_3 - \\ & 128u_6u_4^{15}u_1^7x_4 + 128u_6u_5u_4^{14}u_1^7x_3 \end{aligned}$$

Reduced to zero.

4456. Creating S-polynomial from the pair  $(p_{68}, p_{90})$ .

Forming S-pol of  $p_{68}$  and  $p_{90}$ :

$$\begin{aligned} p_{1001} = & -67108864u_5u_4^{25}u_1^{25}x_{16}x_{14}x_4 + \\ & (-16777216u_5^2u_4^{26}u_1^{24} - 67108864u_5^2u_4^{24}u_1^{26})x_{16}x_{14} + \\ & 67108864u_6u_4^{24}u_1^{26}x_{14}^3 + 33554432u_5u_4^{25}u_1^{25}x_{14}^2x_5 + \\ & 33554432u_6u_5u_4^{26}u_1^{24}x_{14}^2 + 16777216u_5u_4^{26}u_1^{24}x_{14}x_5x_4 + \\ & 16777216u_5^2u_4^{25}u_1^{24}x_{14}x_5x_3 + 8388608u_5^2u_4^{27}u_1^{23}x_{14}x_5 + \\ & (-16777216u_6u_5u_4^{27}u_1^{23} - 33554432u_6u_4^{26}u_1^{25})x_{14}x_4 + \\ & 8388608u_6^2u_4^{26}u_1^{23}x_{14}x_3 + 16777216u_6u_5^2u_4^{26}u_1^{24}x_{14} \end{aligned}$$

Reduced to zero.

4457. Creating S-polynomial from the pair  $(p_{68}, p_{91})$ .

Forming S-pol of  $p_{68}$  and  $p_{91}$ :

$$\begin{aligned} p_{1002} = & -16384u_4^{13}u_1^{14}x_{16}x_{14}x_4 + \\ & (-8192u_5u_4^{14}u_1^{13} - 32768u_5u_4^{12}u_1^{15})x_{16}x_{14} + 16384u_4^{13}u_1^{14}x_{14}^2x_5 + \\ & (8192u_6u_4^{14}u_1^{13} + 32768u_6u_4^{12}u_1^{15})x_{14}^2 + 8192u_5u_4^{13}u_1^{13}x_{14}x_5x_3 + \\ & 4096u_5u_4^{15}u_1^{12}x_{14}x_5 - 8192u_6u_4^{13}u_1^{13}x_{14}x_4x_3 - \\ & 4096u_6u_4^{15}u_1^{12}x_{14}x_4 \end{aligned}$$

Reduced to zero.

4458. Creating S-polynomial from the pair  $(p_{68}, p_{92})$ .

Forming S-pol of  $p_{68}$  and  $p_{92}$ :

$$p_{1003} = 0$$

Reduced to zero.

4459. Creating S-polynomial from the pair  $(p_{68}, p_{93})$ .

Forming S-pol of  $p_{68}$  and  $p_{93}$ :

$$\begin{aligned} p_{1004} = & (32768u_4^{21}u_1^{15} - 65536u_4^{19}u_1^{16})x_{16}x_4^2 + \\ & (65536u_5u_4^{20}u_1^{16} - 131072u_5u_4^{18}u_1^{17})x_{16}x_4 - 65536u_4^{20}u_1^{16}x_{14}^2x_5 + \\ & (262144u_4^{17}u_1^{18} - 131072u_4^{17}u_1^{17})x_{14}x_5x_4x_3 + \\ & (-131072u_4^{19}u_1^{17} + 65536u_4^{19}u_1^{16})x_{14}x_5x_4 - 32768u_5u_4^{20}u_1^{15}x_{14}x_5x_3 + \\ & 65536u_5u_4^{20}u_1^{16}x_{14}x_5 + \\ & (32768u_6u_4^{20}u_1^{15} + 131072u_6u_4^{18}u_1^{17} - 65536u_6u_4^{18}u_1^{16})x_{14}x_4x_3 + \\ & (-16384u_6u_4^{22}u_1^{14} - 65536u_6u_4^{20}u_1^{16} + 32768u_6u_4^{20}u_1^{15})x_{14}x_4 + \\ & (-16384u_5u_4^{21}u_1^{14} + 32768u_5u_4^{19}u_1^{15})x_5x_4x_3 + \\ & (8192u_6u_4^{23}u_1^{13} - 16384u_6u_4^{21}u_1^{14})x_4^2 + \\ & (-8192u_6u_5u_4^{22}u_1^{13} + 16384u_6u_5u_4^{20}u_1^{14})x_4x_3 \end{aligned}$$

S-pol added.

4460. Creating S-polynomial from the pair  $(p_{68}, p_{94})$ .

Forming S-pol of  $p_{68}$  and  $p_{94}$ :

$$\begin{aligned} p_{1005} = & -512u_4^{13}u_1^9x_{16}x_4 - 1024u_5u_4^{12}u_1^{10}x_{16} + 512u_4^{13}u_1^9x_{14}x_5 - \\ & 512u_6u_4^{12}u_1^9x_{14}x_3 + \\ & (256u_6u_4^{14}u_1^8 + 1024u_6u_4^{12}u_1^{10})x_{14} + 256u_5u_4^{13}u_1^8x_5x_3 - \\ & 128u_6u_4^{15}u_1^7x_4 + 128u_6u_5u_4^{14}u_1^7x_3 \end{aligned}$$

Reduced to zero.

4461. Creating S-polynomial from the pair  $(p_{68}, p_{95})$ .  
 Skipping pair  $p_{68}$  and  $p_{95}$  because gcd of their leading monoms is zero.
4462. Creating S-polynomial from the pair  $(p_{68}, p_{96})$ .  
 Skipping pair  $p_{68}$  and  $p_{96}$  because gcd of their leading monoms is zero.
4463. Creating S-polynomial from the pair  $(p_{68}, p_{97})$ .  
 Skipping pair  $p_{68}$  and  $p_{97}$  because gcd of their leading monoms is zero.
4464. Creating S-polynomial from the pair  $(p_{68}, p_{98})$ .  
 Skipping pair  $p_{68}$  and  $p_{98}$  because gcd of their leading monoms is zero.
4465. Creating S-polynomial from the pair  $(p_{68}, p_{99})$ .  
 Forming S-pol of  $p_{68}$  and  $p_{99}$ : Polynomial too big for output (text size is 3059 characters, number of terms is 33)  
 Reduced to zero.
4466. Creating S-polynomial from the pair  $(p_{68}, p_{100})$ .  
 Skipping pair  $p_{68}$  and  $p_{100}$  because gcd of their leading monoms is zero.
4467. Creating S-polynomial from the pair  $(p_{68}, p_{101})$ .  
 Skipping pair  $p_{68}$  and  $p_{101}$  because gcd of their leading monoms is zero.
4468. Creating S-polynomial from the pair  $(p_{68}, p_{102})$ .  
 Skipping pair  $p_{68}$  and  $p_{102}$  because gcd of their leading monoms is zero.
4469. Creating S-polynomial from the pair  $(p_{68}, p_{103})$ .  
 Forming S-pol of  $p_{68}$  and  $p_{103}$ : Polynomial too big for output (text size is 3074 characters, number of terms is 33)  
 Reduced to zero.
4470. Creating S-polynomial from the pair  $(p_{68}, p_{104})$ .  
 Forming S-pol of  $p_{68}$  and  $p_{104}$ :

$$\begin{aligned}
 p_{1006} = & 33554432u_5u_4^{23}u_1^{25}x_{16}x_{14}^2 - 33554432u_4^{23}u_1^{25}x_{16}x_{14}x_4^2 + \\
 & 67108864u_4^{23}u_1^{26}x_{16}x_{14}x_4 + \\
 & (8388608u_5^2u_4^{25}u_1^{23} - 33554432u_5^2u_4^{23}u_1^{25})x_{16}x_{14} - \\
 & 33554432u_6u_4^{23}u_1^{25}x_{14}^3 - 16777216u_5u_4^{24}u_1^{24}x_{14}^2x_5 + \\
 & 16777216u_6u_4^{24}u_1^{24}x_{14}^2x_4 - 8388608u_6u_5u_4^{25}u_1^{23}x_{14}^2 - \\
 & 4194304u_5^2u_4^{26}u_1^{22}x_{14}x_5 - 8388608u_6u_4^{25}u_1^{23}x_{14}x_4^2 + \\
 & (4194304u_6u_5u_4^{26}u_1^{22} + 16777216u_6u_4^{25}u_1^{24})x_{14}x_4 - \\
 & 8388608u_6u_5^2u_4^{25}u_1^{23}x_{14}
 \end{aligned}$$

Reduced to zero.

4471. Creating S-polynomial from the pair  $(p_{68}, p_{105})$ .

Forming S-pol of  $p_{68}$  and  $p_{105}$ :

$$\begin{aligned} p_{1007} = & 4096u_5u_4^{10}u_1^{12}x_{16}x_{14} + 1024u_4^{12}u_1^{10}x_{16}x_4^2 + \\ & 2048u_5u_4^{11}u_1^{11}x_{16}x_4 - 2048u_4^{11}u_1^{11}x_{14}^2x_5 - 4096u_6u_4^{10}u_1^{12}x_{14}^2 - \\ & 1024u_5u_4^{11}u_1^{10}x_{14}x_5x_3 + 1024u_6u_4^{11}u_1^{10}x_{14}x_4x_3 - \\ & 512u_6u_4^{13}u_1^9x_{14}x_4 - 512u_5u_4^{12}u_1^9x_5x_4x_3 + 256u_6u_4^{14}u_1^8x_4^2 - \\ & 256u_6u_5u_4^{13}u_1^8x_4x_3 \end{aligned}$$

Reduced to zero.

4472. Creating S-polynomial from the pair  $(p_{68}, p_{106})$ .

Forming S-pol of  $p_{68}$  and  $p_{106}$ :

$$\begin{aligned} p_{1008} = & 16384u_4^{20}u_1^{14}x_{16}x_4^2 + 32768u_5u_4^{19}u_1^{15}x_{16}x_4 - \\ & 32768u_4^{19}u_1^{15}x_{14}^2x_5 + \\ & (131072u_4^{16}u_1^{17} - 65536u_4^{16}u_1^{16})x_{14}x_5x_4x_3 - 65536u_4^{18}u_1^{16}x_{14}x_5x_4 - \\ & 16384u_5u_4^{19}u_1^{14}x_{14}x_5x_3 + 32768u_5u_4^{19}u_1^{15}x_{14}x_5 + \\ & (16384u_6u_4^{19}u_1^{14} + 65536u_6u_4^{17}u_1^{16})x_{14}x_4x_3 + \\ & (-8192u_6u_4^{21}u_1^{13} - 32768u_6u_4^{19}u_1^{15} - 65536u_6u_4^{17}u_1^{16})x_{14}x_4 - \\ & 8192u_5u_4^{20}u_1^{13}x_5x_4x_3 + 4096u_6u_4^{22}u_1^{12}x_4^2 - \\ & 4096u_6u_5u_4^{21}u_1^{12}x_4x_3 \end{aligned}$$

S-pol added.

4473. Creating S-polynomial from the pair  $(p_{69}, p_{70})$ .

Forming S-pol of  $p_{69}$  and  $p_{70}$ :

$$\begin{aligned} p_{1009} = & (-2048u_4^{23}u_1^{11} - 8192u_4^{21}u_1^{13})x_{16}^2x_4 + \\ & (1024u_5u_4^{24}u_1^{10} + 4096u_5u_4^{22}u_1^{12})x_{16}^2 + \\ & (2048u_4^{23}u_1^{11} + 8192u_4^{21}u_1^{13})x_{16}x_{14}x_5 + \\ & (-1024u_6u_4^{24}u_1^{10} - 4096u_6u_4^{22}u_1^{12})x_{16}x_{14} + \\ & (1024u_5u_4^{23}u_1^{10} + 4096u_5u_4^{21}u_1^{12})x_{16}x_5x_3 + \\ & (-512u_5u_4^{25}u_1^9 - 4096u_5u_4^{23}u_1^{11} - 8192u_5u_4^{21}u_1^{13})x_{16}x_5 + \\ & (4096u_6u_4^{21}u_1^{12} + 16384u_6u_4^{19}u_1^{14})x_{16}x_4x_3 + \\ & (512u_6u_5u_4^{24}u_1^9 + 4096u_6u_5u_4^{22}u_1^{11} + 8192u_6u_5u_4^{20}u_1^{13})x_{16}x_3 + \\ & (-1024u_6u_4^{23}u_1^{10} - 8192u_6u_4^{21}u_1^{12} - 16384u_6u_4^{19}u_1^{14})x_{14}x_5x_3 + \\ & (512u_6u_4^{25}u_1^9 + 4096u_6u_4^{23}u_1^{11} + 8192u_6u_4^{21}u_1^{13})x_{14}x_5 + \\ & (-512u_6^2u_4^{24}u_1^9 - 4096u_6^2u_4^{22}u_1^{11} - 8192u_6^2u_4^{20}u_1^{13})x_{14}x_3 \end{aligned}$$

Reduced to zero.

4474. Creating S-polynomial from the pair  $(p_{69}, p_{71})$ .

Forming S-pol of  $p_{69}$  and  $p_{71}$ :

$$\begin{aligned} p_{1010} = & 16384u_4^{19}u_1^{14}x_{16}x_{14}x_4 + 32768u_5u_4^{18}u_1^{15}x_{16}x_{14} - \\ & 16384u_4^{19}u_1^{14}x_{14}^2x_5 - 32768u_6u_4^{18}u_1^{15}x_{14}^2 - \\ & 8192u_5u_4^{19}u_1^{13}x_{14}x_5x_3 + 8192u_6u_4^{19}u_1^{13}x_{14}x_4x_3 \end{aligned}$$

Reduced to zero.

4475. Creating S-polynomial from the pair  $(p_{69}, p_{72})$ .

Forming S-pol of  $p_{69}$  and  $p_{72}$ : Polynomial too big for output (text size is 1604 characters, number of terms is 16)

Reduced to zero.

4476. Creating S-polynomial from the pair  $(p_{69}, p_{73})$ .

Forming S-pol of  $p_{69}$  and  $p_{73}$ :

$$\begin{aligned} p_{1011} = & 1024u_4^{17}u_1^{10}x_{16}^2x_4 - 512u_5u_4^{18}u_1^9x_{16}^2 - 1024u_4^{17}u_1^{10}x_{16}x_{14}x_5 + \\ & 512u_6u_4^{18}u_1^9x_{16}x_{14} - 512u_5u_4^{17}u_1^9x_{16}x_5x_3 + \\ & (256u_5u_4^{19}u_1^8 + 1024u_5u_4^{17}u_1^{10})x_{16}x_5 - 2048u_6u_4^{15}u_1^{11}x_{16}x_4x_3 + \\ & (-256u_6u_5u_4^{18}u_1^8 - 1024u_6u_5u_4^{16}u_1^{10})x_{16}x_3 + \\ & (512u_6u_4^{17}u_1^9 + 2048u_6u_4^{15}u_1^{11})x_{14}x_5x_3 + \\ & (-256u_6u_4^{19}u_1^8 - 1024u_6u_4^{17}u_1^{10})x_{14}x_5 + \\ & (256u_6^2u_4^{18}u_1^8 + 1024u_6^2u_4^{16}u_1^{10})x_{14}x_3 \end{aligned}$$

Reduced to zero.

4477. Creating S-polynomial from the pair  $(p_{69}, p_{74})$ .

Skipping pair  $p_{69}$  and  $p_{74}$  because gcd of their leading monoms is zero.

4478. Creating S-polynomial from the pair  $(p_{69}, p_{75})$ .

Skipping pair  $p_{69}$  and  $p_{75}$  because gcd of their leading monoms is zero.

4479. Creating S-polynomial from the pair  $(p_{69}, p_{76})$ .

Skipping pair  $p_{69}$  and  $p_{76}$  because gcd of their leading monoms is zero.

4480. Creating S-polynomial from the pair  $(p_{69}, p_{77})$ .

Skipping pair  $p_{69}$  and  $p_{77}$  because gcd of their leading monoms is zero.

4481. Creating S-polynomial from the pair  $(p_{69}, p_{78})$ .

Skipping pair  $p_{69}$  and  $p_{78}$  because gcd of their leading monoms is zero.

4482. Creating S-polynomial from the pair  $(p_{69}, p_{79})$ .

Skipping pair  $p_{69}$  and  $p_{79}$  because gcd of their leading monoms is zero.

4483. Creating S-polynomial from the pair  $(p_{69}, p_{80})$ .

Skipping pair  $p_{69}$  and  $p_{80}$  because gcd of their leading monoms is zero.

4484. Creating S-polynomial from the pair  $(p_{69}, p_{81})$ .  
 Skipping pair  $p_{69}$  and  $p_{81}$  because gcd of their leading monoms is zero.
4485. Creating S-polynomial from the pair  $(p_{69}, p_{82})$ .  
 Skipping pair  $p_{69}$  and  $p_{82}$  because gcd of their leading monoms is zero.
4486. Creating S-polynomial from the pair  $(p_{69}, p_{83})$ .  
 Skipping pair  $p_{69}$  and  $p_{83}$  because gcd of their leading monoms is zero.
4487. Creating S-polynomial from the pair  $(p_{69}, p_{84})$ .  
 Skipping pair  $p_{69}$  and  $p_{84}$  because gcd of their leading monoms is zero.
4488. Creating S-polynomial from the pair  $(p_{69}, p_{85})$ .  
 Skipping pair  $p_{69}$  and  $p_{85}$  because gcd of their leading monoms is zero.
4489. Creating S-polynomial from the pair  $(p_{69}, p_{86})$ .  
 Skipping pair  $p_{69}$  and  $p_{86}$  because gcd of their leading monoms is zero.
4490. Creating S-polynomial from the pair  $(p_{69}, p_{87})$ .  
 Skipping pair  $p_{69}$  and  $p_{87}$  because gcd of their leading monoms is zero.
4491. Creating S-polynomial from the pair  $(p_{69}, p_{88})$ .  
 Forming S-pol of  $p_{69}$  and  $p_{88}$ :

$$\begin{aligned}
 p_{1012} = & -65536u_5u_4^{23}u_1^{16}x_{16}x_4 + 32768u_5^2u_4^{24}u_1^{15}x_{16} + \\
 & (131072u_6u_4^{22}u_1^{17} + 524288u_6u_4^{20}u_1^{19})x_{14}^2 + 65536u_5u_4^{23}u_1^{16}x_{14}x_5 + \\
 & (-65536u_6u_4^{23}u_1^{16} - 262144u_6u_4^{21}u_1^{18})x_{14}x_4 - 524288u_6u_5u_4^{20}u_1^{19}x_{14} + \\
 & 32768u_5^2u_4^{23}u_1^{15}x_5x_3 + \\
 & (-16384u_5^2u_4^{25}u_1^{14} - 65536u_5^2u_4^{23}u_1^{16})x_5 + \\
 & 131072u_6u_5u_4^{21}u_1^{17}x_4x_3 + \\
 & (16384u_6u_5^2u_4^{24}u_1^{14} + 65536u_6u_5^2u_4^{22}u_1^{16})x_3
 \end{aligned}$$

Reduced to zero.

4492. Creating S-polynomial from the pair  $(p_{69}, p_{89})$ .  
 Forming S-pol of  $p_{69}$  and  $p_{89}$ :

$$\begin{aligned}
 p_{1013} = & -4096u_4^{17}u_1^{12}x_{16}x_4 + (1024u_5u_4^{18}u_1^{10} + 4096u_5u_4^{16}u_1^{12})x_{16}x_3 + \\
 & (-512u_5u_4^{20}u_1^9 - 2048u_5u_4^{18}u_1^{11} - 8192u_5u_4^{16}u_1^{13})x_{16} + \\
 & 4096u_4^{17}u_1^{12}x_{14}x_5 + 8192u_6u_4^{16}u_1^{13}x_{14} - 512u_5u_4^{19}u_1^9x_5x_3 + \\
 & (256u_5u_4^{21}u_1^8 + 1024u_5u_4^{19}u_1^{10})x_5 - 2048u_6u_4^{17}u_1^{11}x_4x_3 + \\
 & (-256u_6u_5u_4^{20}u_1^8 - 1024u_6u_5u_4^{18}u_1^{10})x_3
 \end{aligned}$$

Reduced to zero.

4493. Creating S-polynomial from the pair  $(p_{69}, p_{90})$ .

Forming S-pol of  $p_{69}$  and  $p_{90}$ :

$$\begin{aligned}
p_{1014} = & (134217728u_5u_4^{31}u_1^{26} + 268435456u_5u_4^{29}u_1^{28})x_{16}x_{14}x_4 + \\
& 134217728u_5^2u_4^{30}u_1^{27}x_{16}x_{14} + \\
& (-134217728u_6u_4^{30}u_1^{27} - 536870912u_6u_4^{28}u_1^{29})x_{14}^3 - \\
& 67108864u_5u_4^{31}u_1^{26}x_{14}^2x_5 + \\
& (-33554432u_6u_5u_4^{32}u_1^{25} - 134217728u_6u_5u_4^{30}u_1^{27} + \\
& 536870912u_6u_5u_4^{28}u_1^{29})x_{14}^2 + \\
& (-33554432u_5u_4^{32}u_1^{25} - 134217728u_5u_4^{30}u_1^{27})x_{14}x_5x_4 - \\
& 33554432u_5^2u_4^{31}u_1^{25}x_{14}x_5x_3 - 134217728u_6u_5u_4^{29}u_1^{27}x_{14}x_4x_3 + \\
& (16777216u_6u_5u_4^{33}u_1^{24} + 67108864u_6u_5u_4^{31}u_1^{26} + 67108864u_6u_4^{32}u_1^{26} + \\
& 268435456u_6u_4^{30}u_1^{28})x_{14}x_4 + \\
& (-16777216u_6u_5^2u_4^{32}u_1^{24} - 67108864u_6u_5^2u_4^{30}u_1^{26})x_{14}x_3 + \\
& (-33554432u_6u_5^2u_4^{32}u_1^{25} - 134217728u_6u_5^2u_4^{30}u_1^{27})x_{14}
\end{aligned}$$

Reduced to zero.

4494. Creating S-polynomial from the pair  $(p_{69}, p_{91})$ .

Forming S-pol of  $p_{69}$  and  $p_{91}$ :

$$\begin{aligned}
p_{1015} = & 32768u_4^{19}u_1^{15}x_{16}x_{14}x_4 + 65536u_5u_4^{18}u_1^{16}x_{16}x_{14} - \\
& 32768u_4^{19}u_1^{15}x_{14}^2x_5 - 65536u_6u_4^{18}u_1^{16}x_{14}^2 - \\
& 16384u_5u_4^{19}u_1^{14}x_{14}x_5x_3 + 16384u_6u_4^{19}u_1^{14}x_{14}x_4x_3
\end{aligned}$$

Reduced to zero.

4495. Creating S-polynomial from the pair  $(p_{69}, p_{92})$ .

Forming S-pol of  $p_{69}$  and  $p_{92}$ :

$$\begin{aligned}
p_{1016} = & -131072u_4^{17}u_1^{17}x_{16}x_{14}x_4 + \\
& (-16384u_5u_4^{20}u_1^{14} - 65536u_5u_4^{18}u_1^{16} - 262144u_5u_4^{16}u_1^{18})x_{16}x_{14} + \\
& 131072u_4^{17}u_1^{17}x_{14}^2x_5 + \\
& (16384u_6u_4^{20}u_1^{14} + 65536u_6u_4^{18}u_1^{16} + 262144u_6u_4^{16}u_1^{18})x_{14}^2 + \\
& 65536u_5u_4^{17}u_1^{16}x_{14}x_5x_3 + \\
& (8192u_5u_4^{21}u_1^{13} + 32768u_5u_4^{19}u_1^{15})x_{14}x_5 - 65536u_6u_4^{17}u_1^{16}x_{14}x_4x_3 + \\
& (-8192u_6u_4^{21}u_1^{13} - 32768u_6u_4^{19}u_1^{15})x_{14}x_4
\end{aligned}$$

Reduced to zero.



4496. Creating S-polynomial from the pair  $(p_{69}, p_{93})$ .  
 Forming S-pol of  $p_{69}$  and  $p_{93}$ : Polynomial too big for output (text size is 1295 characters, number of terms is 13)  
 S-pol added.
4497. Creating S-polynomial from the pair  $(p_{69}, p_{94})$ .  
 Forming S-pol of  $p_{69}$  and  $p_{94}$ :  

$$p_{1017} = 1024u_4^{19}u_1^{10}x_{16}x_4 - 512u_5u_4^{20}u_1^9x_{16} - 1024u_4^{19}u_1^{10}x_{14}x_5 +$$

$$(1024u_6u_4^{18}u_1^{10} + 4096u_6u_4^{16}u_1^{12})x_{14}x_3 - 2048u_6u_4^{18}u_1^{11}x_{14} -$$

$$512u_5u_4^{19}u_1^9x_5x_3 +$$

$$(256u_5u_4^{21}u_1^8 + 1024u_5u_4^{19}u_1^{10})x_5 - 2048u_6u_4^{17}u_1^{11}x_4x_3 +$$

$$(-256u_6u_5u_4^{20}u_1^8 - 1024u_6u_5u_4^{18}u_1^{10})x_3$$
  
 Reduced to zero.
4498. Creating S-polynomial from the pair  $(p_{69}, p_{95})$ .  
 Skipping pair  $p_{69}$  and  $p_{95}$  because gcd of their leading monoms is zero.
4499. Creating S-polynomial from the pair  $(p_{69}, p_{96})$ .  
 Skipping pair  $p_{69}$  and  $p_{96}$  because gcd of their leading monoms is zero.
4500. Creating S-polynomial from the pair  $(p_{69}, p_{97})$ .  
 Skipping pair  $p_{69}$  and  $p_{97}$  because gcd of their leading monoms is zero.
4501. Creating S-polynomial from the pair  $(p_{69}, p_{98})$ .  
 Skipping pair  $p_{69}$  and  $p_{98}$  because gcd of their leading monoms is zero.
4502. Creating S-polynomial from the pair  $(p_{69}, p_{99})$ .  
 Forming S-pol of  $p_{69}$  and  $p_{99}$ : Polynomial too big for output (text size is 5235 characters, number of terms is 34)  
 Reduced to zero.
4503. Creating S-polynomial from the pair  $(p_{69}, p_{100})$ .  
 Skipping pair  $p_{69}$  and  $p_{100}$  because gcd of their leading monoms is zero.
4504. Creating S-polynomial from the pair  $(p_{69}, p_{101})$ .  
 Skipping pair  $p_{69}$  and  $p_{101}$  because gcd of their leading monoms is zero.
4505. Creating S-polynomial from the pair  $(p_{69}, p_{102})$ .  
 Skipping pair  $p_{69}$  and  $p_{102}$  because gcd of their leading monoms is zero.
4506. Creating S-polynomial from the pair  $(p_{69}, p_{103})$ .  
 Forming S-pol of  $p_{69}$  and  $p_{103}$ : Polynomial too big for output (text size is 5251 characters, number of terms is 34)  
 Reduced to zero.

4507. Creating S-polynomial from the pair  $(p_{69}, p_{104})$ .

Forming S-pol of  $p_{69}$  and  $p_{104}$ : Polynomial too big for output (text size is 1310 characters, number of terms is 15)

Reduced to zero.

4508. Creating S-polynomial from the pair  $(p_{69}, p_{105})$ .

Forming S-pol of  $p_{69}$  and  $p_{105}$ :

$$\begin{aligned} p_{1018} = & (-8192u_5u_4^{16}u_1^{13} - 32768u_5u_4^{14}u_1^{15})x_{16}x_{14} - 2048u_4^{18}u_1^{11}x_{16}x_4^2 + \\ & 1024u_5u_4^{19}u_1^{10}x_{16}x_4 + (4096u_4^{17}u_1^{12} + 16384u_4^{15}u_1^{14})x_{14}^2x_5 + \\ & (8192u_6u_4^{16}u_1^{13} + 32768u_6u_4^{14}u_1^{15})x_{14}^2 - 8192u_4^{16}u_1^{13}x_{14}x_5x_4 + \\ & (2048u_5u_4^{17}u_1^{11} + 8192u_5u_4^{15}u_1^{13})x_{14}x_5x_3 + \\ & (-2048u_6u_4^{17}u_1^{11} - 8192u_6u_4^{15}u_1^{13})x_{14}x_4x_3 - 16384u_6u_4^{15}u_1^{14}x_{14}x_4 + \\ & 1024u_5u_4^{18}u_1^{10}x_5x_4x_3 + \\ & (-512u_5u_4^{20}u_1^9 - 2048u_5u_4^{18}u_1^{11})x_5x_4 + 4096u_6u_4^{16}u_1^{12}x_4^2x_3 + \\ & (512u_6u_5u_4^{19}u_1^9 + 2048u_6u_5u_4^{17}u_1^{11})x_4x_3 \end{aligned}$$

Reduced to zero.

4509. Creating S-polynomial from the pair  $(p_{69}, p_{106})$ .

Forming S-pol of  $p_{69}$  and  $p_{106}$ :

$$\begin{aligned} p_{1019} = & -32768u_4^{26}u_1^{15}x_{16}x_4^2 + 16384u_5u_4^{27}u_1^{14}x_{16}x_4 + \\ & (65536u_4^{25}u_1^{16} + 262144u_4^{23}u_1^{18})x_{14}^2x_5 + \\ & (-262144u_4^{22}u_1^{18} + 131072u_4^{22}u_1^{17} - 1048576u_4^{20}u_1^{20} + \\ & 524288u_4^{20}u_1^{19})x_{14}x_5x_4x_3 + 524288u_4^{22}u_1^{19}x_{14}x_5x_4 + \\ & (32768u_5u_4^{25}u_1^{15} + 131072u_5u_4^{23}u_1^{17})x_{14}x_5x_3 + \\ & (-65536u_5u_4^{25}u_1^{16} - 262144u_5u_4^{23}u_1^{18})x_{14}x_5 + \\ & (-32768u_6u_4^{25}u_1^{15} - 262144u_6u_4^{23}u_1^{17} - 524288u_6u_4^{21}u_1^{19})x_{14}x_4x_3 + \\ & (65536u_6u_4^{25}u_1^{16} + 131072u_6u_4^{23}u_1^{17} + 524288u_6u_4^{21}u_1^{19})x_{14}x_4 + \\ & 16384u_5u_4^{26}u_1^{14}x_5x_4x_3 + \\ & (-8192u_5u_4^{28}u_1^{13} - 32768u_5u_4^{26}u_1^{15})x_5x_4 + 65536u_6u_4^{24}u_1^{16}x_4^2x_3 + \\ & (8192u_6u_5u_4^{27}u_1^{13} + 32768u_6u_5u_4^{25}u_1^{15})x_4x_3 \end{aligned}$$

S-pol added.

4510. Creating S-polynomial from the pair  $(p_{70}, p_{71})$ .

Forming S-pol of  $p_{70}$  and  $p_{71}$ :

$$\begin{aligned} p_{1020} = & (512u_5u_4^{18}u_1^9 + 2048u_5u_4^{16}u_1^{11})x_{16}^2 + \\ & (-512u_6u_4^{18}u_1^9 - 2048u_6u_4^{16}u_1^{11})x_{16}x_{14} + \\ & (-256u_5u_4^{19}u_1^8 - 1024u_5u_4^{17}u_1^{10})x_{16}x_5 + \\ & (512u_6u_4^{17}u_1^9 + 2048u_6u_4^{15}u_1^{11})x_{16}x_4x_3 + \\ & (256u_6u_5u_4^{18}u_1^8 + 1024u_6u_5u_4^{16}u_1^{10})x_{16}x_3 + \\ & (-512u_6u_4^{17}u_1^9 - 2048u_6u_4^{15}u_1^{11})x_{14}x_5x_3 + \\ & (256u_6u_4^{19}u_1^8 + 1024u_6u_4^{17}u_1^{10})x_{14}x_5 + \\ & (-256u_6^2u_4^{18}u_1^8 - 1024u_6^2u_4^{16}u_1^{10})x_{14}x_3 \end{aligned}$$

Reduced to zero.

4511. Creating S-polynomial from the pair  $(p_{70}, p_{72})$ .

Forming S-pol of  $p_{70}$  and  $p_{72}$ :

$$\begin{aligned} p_{1021} = & (32768u_4^{29}u_1^{15} + 131072u_4^{27}u_1^{17})x_{16}x_{14}x_5 + \\ & (-16384u_4^{30}u_1^{14} - 65536u_4^{28}u_1^{16})x_{16}x_5x_4 + \\ & (8192u_5u_4^{31}u_1^{13} - 131072u_5u_4^{27}u_1^{17})x_{16}x_5 + \\ & (4096u_6u_5u_4^{31}u_1^{12} + 16384u_6u_5u_4^{29}u_1^{14} + 16384u_5u_4^{30}u_1^{14} + \\ & 65536u_5u_4^{28}u_1^{16})x_5x_3 + (-8192u_5u_4^{32}u_1^{13} - 32768u_5u_4^{30}u_1^{15})x_5 + \\ & (-8192u_6^2u_5u_4^{30}u_1^{13} - 32768u_6^2u_5u_4^{28}u_1^{15})x_3 + \\ & (4096u_6^2u_5u_4^{32}u_1^{12} + 16384u_6^2u_5u_4^{30}u_1^{14}) \end{aligned}$$

Reduced to zero.

4512. Creating S-polynomial from the pair  $(p_{70}, p_{73})$ .

Forming S-pol of  $p_{70}$  and  $p_{73}$ :

$$p_{1022} = 0$$

Reduced to zero.

4513. Creating S-polynomial from the pair  $(p_{70}, p_{74})$ .

Skipping pair  $p_{70}$  and  $p_{74}$  because gcd of their leading monoms is zero.

4514. Creating S-polynomial from the pair  $(p_{70}, p_{75})$ .

Skipping pair  $p_{70}$  and  $p_{75}$  because gcd of their leading monoms is zero.

4515. Creating S-polynomial from the pair  $(p_{70}, p_{76})$ .

Skipping pair  $p_{70}$  and  $p_{76}$  because gcd of their leading monoms is zero.

4516. Creating S-polynomial from the pair  $(p_{70}, p_{77})$ .

Skipping pair  $p_{70}$  and  $p_{77}$  because gcd of their leading monoms is zero.

4517. Creating S-polynomial from the pair  $(p_{70}, p_{78})$ .  
 Skipping pair  $p_{70}$  and  $p_{78}$  because gcd of their leading monoms is zero.
4518. Creating S-polynomial from the pair  $(p_{70}, p_{79})$ .  
 Skipping pair  $p_{70}$  and  $p_{79}$  because gcd of their leading monoms is zero.
4519. Creating S-polynomial from the pair  $(p_{70}, p_{80})$ .  
 Skipping pair  $p_{70}$  and  $p_{80}$  because gcd of their leading monoms is zero.
4520. Creating S-polynomial from the pair  $(p_{70}, p_{81})$ .  
 Skipping pair  $p_{70}$  and  $p_{81}$  because gcd of their leading monoms is zero.
4521. Creating S-polynomial from the pair  $(p_{70}, p_{82})$ .  
 Skipping pair  $p_{70}$  and  $p_{82}$  because gcd of their leading monoms is zero.
4522. Creating S-polynomial from the pair  $(p_{70}, p_{83})$ .  
 Skipping pair  $p_{70}$  and  $p_{83}$  because gcd of their leading monoms is zero.
4523. Creating S-polynomial from the pair  $(p_{70}, p_{84})$ .  
 Skipping pair  $p_{70}$  and  $p_{84}$  because gcd of their leading monoms is zero.
4524. Creating S-polynomial from the pair  $(p_{70}, p_{85})$ .  
 Skipping pair  $p_{70}$  and  $p_{85}$  because gcd of their leading monoms is zero.
4525. Creating S-polynomial from the pair  $(p_{70}, p_{86})$ .  
 Skipping pair  $p_{70}$  and  $p_{86}$  because gcd of their leading monoms is zero.
4526. Creating S-polynomial from the pair  $(p_{70}, p_{87})$ .  
 Skipping pair  $p_{70}$  and  $p_{87}$  because gcd of their leading monoms is zero.
4527. Creating S-polynomial from the pair  $(p_{70}, p_{88})$ .  
 Forming S-pol of  $p_{70}$  and  $p_{88}$ :

$$\begin{aligned}
 p_{1023} = & (8192u_6u_4^{20}u_1^{13} + 32768u_6u_4^{18}u_1^{15})x_{16}x_{14} + \\
 & (-4096u_6u_4^{21}u_1^{12} - 16384u_6u_4^{19}u_1^{14})x_{16}x_4 + \\
 & (2048u_6u_5u_4^{22}u_1^{11} - 32768u_6u_5u_4^{18}u_1^{15})x_{16} + \\
 & (2048u_6u_5u_4^{21}u_1^{11} + 8192u_6u_5u_4^{19}u_1^{13})x_5x_3 + \\
 & (-1024u_6u_5u_4^{23}u_1^{10} - 4096u_6u_5u_4^{21}u_1^{12})x_5 + \\
 & (1024u_6^2u_5u_4^{22}u_1^{10} + 4096u_6^2u_5u_4^{20}u_1^{12})x_3
 \end{aligned}$$

Reduced to zero.

4528. Creating S-polynomial from the pair  $(p_{70}, p_{89})$ .  
 Skipping pair  $p_{70}$  and  $p_{89}$  because gcd of their leading monoms is zero.
4529. Creating S-polynomial from the pair  $(p_{70}, p_{90})$ .  
 Forming S-pol of  $p_{70}$  and  $p_{90}$ : Polynomial too big for output (text size is 1090 characters, number of terms is 11)  
 Reduced to zero.

4530. Creating S-polynomial from the pair  $(p_{70}, p_{91})$ .

Forming S-pol of  $p_{70}$  and  $p_{91}$ :

$$\begin{aligned} p_{1024} = & (1024u_5u_4^{18}u_1^{10} + 4096u_5u_4^{16}u_1^{12})x_{16}^2 + \\ & (-1024u_6u_4^{18}u_1^{10} - 4096u_6u_4^{16}u_1^{12})x_{16}x_{14} + \\ & (-512u_5u_4^{19}u_1^9 - 2048u_5u_4^{17}u_1^{11})x_{16}x_5 + \\ & (1024u_6u_4^{17}u_1^{10} + 4096u_6u_4^{15}u_1^{12})x_{16}x_4x_3 + \\ & (512u_6u_5u_4^{18}u_1^9 + 2048u_6u_5u_4^{16}u_1^{11})x_{16}x_3 + \\ & (-1024u_6u_4^{17}u_1^{10} - 4096u_6u_4^{15}u_1^{12})x_{14}x_5x_3 + \\ & (512u_6u_4^{19}u_1^9 + 2048u_6u_4^{17}u_1^{11})x_{14}x_5 + \\ & (-512u_6^2u_4^{18}u_1^9 - 2048u_6^2u_4^{16}u_1^{11})x_{14}x_3 \end{aligned}$$

Reduced to zero.

4531. Creating S-polynomial from the pair  $(p_{70}, p_{92})$ .

Forming S-pol of  $p_{70}$  and  $p_{92}$ :

$$\begin{aligned} p_{1025} = & (-2048u_4^{17}u_1^{11} - 8192u_4^{15}u_1^{13})x_{16}^2x_4 + \\ & (-4096u_5u_4^{16}u_1^{12} - 16384u_5u_4^{14}u_1^{14})x_{16}^2 + \\ & (2048u_4^{17}u_1^{11} + 8192u_4^{15}u_1^{13})x_{16}x_{14}x_5 + \\ & (4096u_6u_4^{16}u_1^{12} + 16384u_6u_4^{14}u_1^{14})x_{16}x_{14} + \\ & (1024u_5u_4^{17}u_1^{10} + 4096u_5u_4^{15}u_1^{12})x_{16}x_5x_3 + \\ & (-512u_6u_4^{19}u_1^9 - 2048u_6u_4^{17}u_1^{11})x_{16}x_4 + \\ & (512u_6u_5u_4^{18}u_1^9 + 2048u_6u_5u_4^{16}u_1^{11})x_{16}x_3 + \\ & (-1024u_6u_4^{17}u_1^{10} - 4096u_6u_4^{15}u_1^{12})x_{14}x_5x_3 + \\ & (512u_6u_4^{19}u_1^9 + 2048u_6u_4^{17}u_1^{11})x_{14}x_5 + \\ & (-512u_6^2u_4^{18}u_1^9 - 2048u_6^2u_4^{16}u_1^{11})x_{14}x_3 \end{aligned}$$

Reduced to zero.

4532. Creating S-polynomial from the pair  $(p_{70}, p_{93})$ .

Forming S-pol of  $p_{70}$  and  $p_{93}$ : Polynomial too big for output (text size is 1148 characters, number of terms is 10)

S-pol added.

4533. Creating S-polynomial from the pair  $(p_{70}, p_{94})$ .

Forming S-pol of  $p_{70}$  and  $p_{94}$ :

$$\begin{aligned} p_{1026} = & (64u_6u_4^{16}u_1^6 + 256u_6u_4^{14}u_1^8)x_{16}x_3 + \\ & (-32u_6u_4^{18}u_1^5 - 128u_6u_4^{16}u_1^7)x_{16} + \\ & (-32u_6u_4^{17}u_1^5 - 128u_6u_4^{15}u_1^7)x_5x_3 + \\ & (16u_6u_4^{19}u_1^4 + 64u_6u_4^{17}u_1^6)x_5 + \\ & (-16u_6^2u_4^{18}u_1^4 - 64u_6^2u_4^{16}u_1^6)x_3 \end{aligned}$$

Reduced to zero.

4534. Creating S-polynomial from the pair  $(p_{70}, p_{95})$ .  
 Skipping pair  $p_{70}$  and  $p_{95}$  because gcd of their leading monoms is zero.
4535. Creating S-polynomial from the pair  $(p_{70}, p_{96})$ .  
 Skipping pair  $p_{70}$  and  $p_{96}$  because gcd of their leading monoms is zero.
4536. Creating S-polynomial from the pair  $(p_{70}, p_{97})$ .  
 Skipping pair  $p_{70}$  and  $p_{97}$  because gcd of their leading monoms is zero.
4537. Creating S-polynomial from the pair  $(p_{70}, p_{98})$ .  
 Skipping pair  $p_{70}$  and  $p_{98}$  because gcd of their leading monoms is zero.
4538. Creating S-polynomial from the pair  $(p_{70}, p_{99})$ .  
 Forming S-pol of  $p_{70}$  and  $p_{99}$ : Polynomial too big for output (text size is 4881 characters, number of terms is 30)  
 Reduced to zero.
4539. Creating S-polynomial from the pair  $(p_{70}, p_{100})$ .  
 Skipping pair  $p_{70}$  and  $p_{100}$  because gcd of their leading monoms is zero.
4540. Creating S-polynomial from the pair  $(p_{70}, p_{101})$ .  
 Skipping pair  $p_{70}$  and  $p_{101}$  because gcd of their leading monoms is zero.
4541. Creating S-polynomial from the pair  $(p_{70}, p_{102})$ .  
 Skipping pair  $p_{70}$  and  $p_{102}$  because gcd of their leading monoms is zero.
4542. Creating S-polynomial from the pair  $(p_{70}, p_{103})$ .  
 Forming S-pol of  $p_{70}$  and  $p_{103}$ : Polynomial too big for output (text size is 4893 characters, number of terms is 30)  
 Reduced to zero.
4543. Creating S-polynomial from the pair  $(p_{70}, p_{104})$ .  
 Forming S-pol of  $p_{70}$  and  $p_{104}$ : Polynomial too big for output (text size is 1527 characters, number of terms is 16)  
 Reduced to zero.
4544. Creating S-polynomial from the pair  $(p_{70}, p_{105})$ .  
 Forming S-pol of  $p_{70}$  and  $p_{105}$ :

$$\begin{aligned}
 p_{1027} = & (-512u_5u_4^{14}u_1^9 - 2048u_5u_4^{12}u_1^{11})x_{16}^2 + \\
 & (256u_4^{15}u_1^8 + 1024u_4^{13}u_1^{10})x_{16}x_{14}x_5 + \\
 & (512u_6u_4^{14}u_1^9 + 2048u_6u_4^{12}u_1^{11})x_{16}x_{14} + \\
 & (-128u_4^{16}u_1^7 - 512u_4^{14}u_1^9)x_{16}x_5x_4 + \\
 & (128u_5u_4^{15}u_1^7 + 512u_5u_4^{13}u_1^9)x_{16}x_5x_3 + \\
 & (-128u_6u_4^{15}u_1^7 - 512u_6u_4^{13}u_1^9)x_{16}x_4x_3 + \\
 & (64u_6u_4^{17}u_1^6 - 1024u_6u_4^{13}u_1^{10})x_{16}x_4 +
 \end{aligned}$$

$$\begin{aligned}
& (64u_6u_4^{16}u_1^6 + 256u_6u_4^{14}u_1^8)x_5x_4x_3 + \\
& (-32u_6u_4^{18}u_1^5 - 128u_6u_4^{16}u_1^7)x_5x_4 + \\
& (32u_6^2u_4^{17}u_1^5 + 128u_6^2u_4^{15}u_1^7)x_4x_3
\end{aligned}$$

Reduced to zero.

4545. Creating S-polynomial from the pair  $(p_{70}, p_{106})$ .

Forming S-pol of  $p_{70}$  and  $p_{106}$ :

$$\begin{aligned}
p_{1028} = & (4096u_4^{23}u_1^{12} + 16384u_4^{21}u_1^{14})x_{16}x_{14}x_5 + \\
& (-16384u_4^{20}u_1^{14} + 8192u_4^{20}u_1^{13} - 65536u_4^{18}u_1^{16} + \\
& 32768u_4^{18}u_1^{15})x_{16}x_5x_4x_3 + (-2048u_4^{24}u_1^{11} + 32768u_4^{20}u_1^{15})x_{16}x_5x_4 + \\
& (2048u_5u_4^{23}u_1^{11} + 8192u_5u_4^{21}u_1^{13})x_{16}x_5x_3 + \\
& (-4096u_5u_4^{23}u_1^{12} - 16384u_5u_4^{21}u_1^{14})x_{16}x_5 + \\
& (-2048u_6u_4^{23}u_1^{11} - 16384u_6u_4^{21}u_1^{13} - 32768u_6u_4^{19}u_1^{15})x_{16}x_4x_3 + \\
& (1024u_6u_4^{25}u_1^{10} + 4096u_6u_4^{23}u_1^{12} + 8192u_6u_4^{21}u_1^{13} + \\
& 32768u_6u_4^{19}u_1^{15})x_{16}x_4 + (1024u_6u_4^{24}u_1^{10} + 4096u_6u_4^{22}u_1^{12})x_5x_4x_3 + \\
& (-512u_6u_4^{26}u_1^9 - 2048u_6u_4^{24}u_1^{11})x_5x_4 + \\
& (512u_6^2u_4^{25}u_1^9 + 2048u_6^2u_4^{23}u_1^{11})x_4x_3
\end{aligned}$$

S-pol added.

4546. Creating S-polynomial from the pair  $(p_{71}, p_{72})$ .

Forming S-pol of  $p_{71}$  and  $p_{72}$ : Polynomial too big for output (text size is 1085 characters, number of terms is 15)

Reduced to zero.

4547. Creating S-polynomial from the pair  $(p_{71}, p_{73})$ .

Forming S-pol of  $p_{71}$  and  $p_{73}$ :

$$\begin{aligned}
p_{1029} = & 256u_5u_4^{12}u_1^8x_{16}^2 - 256u_6u_4^{12}u_1^8x_{16}x_{14} - 128u_5u_4^{13}u_1^7x_{16}x_5 + \\
& 256u_6u_4^{11}u_1^8x_{16}x_4x_3 + 128u_6u_5u_4^{12}u_1^7x_{16}x_3 - \\
& 256u_6u_4^{11}u_1^8x_{14}x_5x_3 + 128u_6u_4^{13}u_1^7x_{14}x_5 - \\
& 128u_6^2u_4^{12}u_1^7x_{14}x_3
\end{aligned}$$

Reduced to zero.

4548. Creating S-polynomial from the pair  $(p_{71}, p_{74})$ .

Skipping pair  $p_{71}$  and  $p_{74}$  because gcd of their leading monoms is zero.

4549. Creating S-polynomial from the pair  $(p_{71}, p_{75})$ .

Skipping pair  $p_{71}$  and  $p_{75}$  because gcd of their leading monoms is zero.

4550. Creating S-polynomial from the pair  $(p_{71}, p_{76})$ .

Skipping pair  $p_{71}$  and  $p_{76}$  because gcd of their leading monoms is zero.

4551. Creating S-polynomial from the pair  $(p_{71}, p_{77})$ .  
 Skipping pair  $p_{71}$  and  $p_{77}$  because gcd of their leading monoms is zero.
4552. Creating S-polynomial from the pair  $(p_{71}, p_{78})$ .  
 Skipping pair  $p_{71}$  and  $p_{78}$  because gcd of their leading monoms is zero.
4553. Creating S-polynomial from the pair  $(p_{71}, p_{79})$ .  
 Skipping pair  $p_{71}$  and  $p_{79}$  because gcd of their leading monoms is zero.
4554. Creating S-polynomial from the pair  $(p_{71}, p_{80})$ .  
 Skipping pair  $p_{71}$  and  $p_{80}$  because gcd of their leading monoms is zero.
4555. Creating S-polynomial from the pair  $(p_{71}, p_{81})$ .  
 Skipping pair  $p_{71}$  and  $p_{81}$  because gcd of their leading monoms is zero.
4556. Creating S-polynomial from the pair  $(p_{71}, p_{82})$ .  
 Skipping pair  $p_{71}$  and  $p_{82}$  because gcd of their leading monoms is zero.
4557. Creating S-polynomial from the pair  $(p_{71}, p_{83})$ .  
 Skipping pair  $p_{71}$  and  $p_{83}$  because gcd of their leading monoms is zero.
4558. Creating S-polynomial from the pair  $(p_{71}, p_{84})$ .  
 Skipping pair  $p_{71}$  and  $p_{84}$  because gcd of their leading monoms is zero.
4559. Creating S-polynomial from the pair  $(p_{71}, p_{85})$ .  
 Skipping pair  $p_{71}$  and  $p_{85}$  because gcd of their leading monoms is zero.
4560. Creating S-polynomial from the pair  $(p_{71}, p_{86})$ .  
 Skipping pair  $p_{71}$  and  $p_{86}$  because gcd of their leading monoms is zero.
4561. Creating S-polynomial from the pair  $(p_{71}, p_{87})$ .  
 Skipping pair  $p_{71}$  and  $p_{87}$  because gcd of their leading monoms is zero.
4562. Creating S-polynomial from the pair  $(p_{71}, p_{88})$ .  
 Forming S-pol of  $p_{71}$  and  $p_{88}$ :

$$\begin{aligned}
 p_{1030} = & -16384u_5^2u_4^{18}u_1^{14}x_{16} - 65536u_6u_4^{16}u_1^{16}x_{14}^2 + \\
 & 32768u_6u_4^{17}u_1^{15}x_{14}x_4 + 65536u_6u_5u_4^{16}u_1^{16}x_{14} + \\
 & 8192u_5^2u_4^{19}u_1^{13}x_5 - 16384u_6u_5u_4^{17}u_1^{14}x_4x_3 - \\
 & 8192u_6u_5^2u_4^{18}u_1^{13}x_3
 \end{aligned}$$

Reduced to zero.

4563. Creating S-polynomial from the pair  $(p_{71}, p_{89})$ .  
 Forming S-pol of  $p_{71}$  and  $p_{89}$ :

$$\begin{aligned}
 p_{1031} = & 512u_4^{13}u_1^9x_{16}x_4 - 512u_5u_4^{12}u_1^9x_{16}x_3 + \\
 & (256u_5u_4^{14}u_1^8 + 1024u_5u_4^{12}u_1^{10})x_{16} - 512u_4^{13}u_1^9x_{14}x_5 - \\
 & 1024u_6u_4^{12}u_1^{10}x_{14} - 128u_5u_4^{15}u_1^7x_5 + 256u_6u_4^{13}u_1^8x_4x_3 + \\
 & 128u_6u_5u_4^{14}u_1^7x_3
 \end{aligned}$$

Reduced to zero.



4564. Creating S-polynomial from the pair  $(p_{71}, p_{90})$ .

Forming S-pol of  $p_{71}$  and  $p_{90}$ :

$$\begin{aligned} p_{1032} = & -33554432u_5u_4^{25}u_1^{25}x_{16}x_{14}x_4 + 67108864u_6u_4^{24}u_1^{26}x_{14}^3 + \\ & (16777216u_6u_5u_4^{26}u_1^{24} - 67108864u_6u_5u_4^{24}u_1^{26})x_{14}^2 + \\ & 16777216u_5u_4^{26}u_1^{24}x_{14}x_5x_4 + 16777216u_6u_5u_4^{25}u_1^{24}x_{14}x_4x_3 + \\ & (-8388608u_6u_5u_4^{27}u_1^{23} - 33554432u_6u_4^{26}u_1^{25})x_{14}x_4 + \\ & 8388608u_6u_5^2u_4^{26}u_1^{23}x_{14}x_3 + 16777216u_6u_5^2u_4^{26}u_1^{24}x_{14} \end{aligned}$$

Reduced to zero.

4565. Creating S-polynomial from the pair  $(p_{71}, p_{91})$ .

Forming S-pol of  $p_{71}$  and  $p_{91}$ :

$$p_{1033} = 0$$

Reduced to zero.

4566. Creating S-polynomial from the pair  $(p_{71}, p_{92})$ .

Forming S-pol of  $p_{71}$  and  $p_{92}$ :

$$\begin{aligned} p_{1034} = & 16384u_4^{13}u_1^{14}x_{16}x_{14}x_4 + \\ & (8192u_5u_4^{14}u_1^{13} + 32768u_5u_4^{12}u_1^{15})x_{16}x_{14} - 16384u_4^{13}u_1^{14}x_{14}^2x_5 + \\ & (-8192u_6u_4^{14}u_1^{13} - 32768u_6u_4^{12}u_1^{15})x_{14}^2 - 8192u_5u_4^{13}u_1^{13}x_{14}x_5x_3 - \\ & 4096u_5u_4^{15}u_1^{12}x_{14}x_5 + 8192u_6u_4^{13}u_1^{13}x_{14}x_4x_3 + \\ & 4096u_6u_4^{15}u_1^{12}x_{14}x_4 \end{aligned}$$

Reduced to zero.

4567. Creating S-polynomial from the pair  $(p_{71}, p_{93})$ .

Forming S-pol of  $p_{71}$  and  $p_{93}$ :

$$\begin{aligned} p_{1035} = & (-16384u_5u_4^{22}u_1^{14} + 32768u_5u_4^{20}u_1^{15})x_{16}x_4 - 65536u_4^{20}u_1^{16}x_{14}^2x_5 + \\ & (262144u_4^{17}u_1^{18} - 131072u_4^{17}u_1^{17})x_{14}x_5x_4x_3 + \\ & (32768u_4^{21}u_1^{15} - 131072u_4^{19}u_1^{17})x_{14}x_5x_4 - 32768u_5u_4^{20}u_1^{15}x_{14}x_5x_3 + \\ & 65536u_5u_4^{20}u_1^{16}x_{14}x_5 + \\ & (32768u_6u_4^{20}u_1^{15} + 131072u_6u_4^{18}u_1^{17} - 65536u_6u_4^{18}u_1^{16})x_{14}x_4x_3 - \\ & 131072u_6u_4^{18}u_1^{17}x_{14}x_4 + (8192u_5u_4^{23}u_1^{13} - 16384u_5u_4^{21}u_1^{14})x_5x_4 + \\ & (-16384u_6u_4^{21}u_1^{14} + 32768u_6u_4^{19}u_1^{15})x_4^2x_3 + \\ & (-8192u_6u_5u_4^{22}u_1^{13} + 16384u_6u_5u_4^{20}u_1^{14})x_4x_3 \end{aligned}$$

S-pol added.

4568. Creating S-polynomial from the pair  $(p_{71}, p_{94})$ .

Forming S-pol of  $p_{71}$  and  $p_{94}$ :

$$p_{1036} = 256u_5u_4^{14}u_1^8x_{16} - 512u_6u_4^{12}u_1^9x_{14}x_3 - 128u_5u_4^{15}u_1^7x_5 + \\ 256u_6u_4^{13}u_1^8x_4x_3 + 128u_6u_5u_4^{14}u_1^7x_3$$

Reduced to zero.

4569. Creating S-polynomial from the pair  $(p_{71}, p_{95})$ .

Skipping pair  $p_{71}$  and  $p_{95}$  because gcd of their leading monoms is zero.

4570. Creating S-polynomial from the pair  $(p_{71}, p_{96})$ .

Skipping pair  $p_{71}$  and  $p_{96}$  because gcd of their leading monoms is zero.

4571. Creating S-polynomial from the pair  $(p_{71}, p_{97})$ .

Skipping pair  $p_{71}$  and  $p_{97}$  because gcd of their leading monoms is zero.

4572. Creating S-polynomial from the pair  $(p_{71}, p_{98})$ .

Skipping pair  $p_{71}$  and  $p_{98}$  because gcd of their leading monoms is zero.

4573. Creating S-polynomial from the pair  $(p_{71}, p_{99})$ .

Forming S-pol of  $p_{71}$  and  $p_{99}$ : Polynomial too big for output (text size is 2814 characters, number of terms is 31)

Reduced to zero.

4574. Creating S-polynomial from the pair  $(p_{71}, p_{100})$ .

Skipping pair  $p_{71}$  and  $p_{100}$  because gcd of their leading monoms is zero.

4575. Creating S-polynomial from the pair  $(p_{71}, p_{101})$ .

Skipping pair  $p_{71}$  and  $p_{101}$  because gcd of their leading monoms is zero.

4576. Creating S-polynomial from the pair  $(p_{71}, p_{102})$ .

Skipping pair  $p_{71}$  and  $p_{102}$  because gcd of their leading monoms is zero.

4577. Creating S-polynomial from the pair  $(p_{71}, p_{103})$ .

Forming S-pol of  $p_{71}$  and  $p_{103}$ : Polynomial too big for output (text size is 2827 characters, number of terms is 31)

Reduced to zero.

4578. Creating S-polynomial from the pair  $(p_{71}, p_{104})$ .

Forming S-pol of  $p_{71}$  and  $p_{104}$ :

$$p_{1037} = 33554432u_5u_4^{23}u_1^{25}x_{16}x_{14}^2 + \\ (16777216u_5u_4^{24}u_1^{24} + 67108864u_5u_4^{22}u_1^{26} + 67108864u_4^{23}u_1^{26})x_{16}x_{14}x_4 + \\ (8388608u_5^2u_4^{25}u_1^{23} - 33554432u_5^2u_4^{23}u_1^{25})x_{16}x_{14} - \\ 33554432u_6u_4^{23}u_1^{25}x_{14}^3 - 33554432u_4^{23}u_1^{25}x_{14}^2x_5x_4 - \\ 16777216u_5u_4^{24}u_1^{24}x_{14}^2x_5 - 67108864u_6u_4^{22}u_1^{26}x_{14}^2x_4 -$$

$$\begin{aligned}
& 8388608u_6u_5u_4^{25}u_1^{23}x_{14}^2 - 16777216u_5u_4^{23}u_1^{24}x_{14}x_5x_4x_3 - \\
& 8388608u_5u_4^{25}u_1^{23}x_{14}x_5x_4 - 4194304u_5^2u_4^{26}u_1^{22}x_{14}x_5 + \\
& 16777216u_6u_4^{23}u_1^{24}x_{14}x_4^2x_3 + \\
& (4194304u_6u_5u_4^{26}u_1^{22} + 16777216u_6u_4^{25}u_1^{24})x_{14}x_4 - \\
& 8388608u_6u_5^2u_4^{25}u_1^{23}x_{14}
\end{aligned}$$

Reduced to zero.

4579. Creating S-polynomial from the pair  $(p_{71}, p_{105})$ .

Forming S-pol of  $p_{71}$  and  $p_{105}$ :

$$\begin{aligned}
p_{1038} = & 4096u_5u_4^{10}u_1^{12}x_{16}x_{14} - 512u_5u_4^{13}u_1^9x_{16}x_4 - 2048u_4^{11}u_1^{11}x_{14}^2x_5 - \\
& 4096u_6u_4^{10}u_1^{12}x_{14}^2 + 1024u_4^{12}u_1^{10}x_{14}x_5x_4 - \\
& 1024u_5u_4^{11}u_1^{10}x_{14}x_5x_3 + 1024u_6u_4^{11}u_1^{10}x_{14}x_4x_3 + \\
& 2048u_6u_4^{11}u_1^{11}x_{14}x_4 + 256u_5u_4^{14}u_1^8x_5x_4 - 512u_6u_4^{12}u_1^9x_4^2x_3 - \\
& 256u_6u_5u_4^{13}u_1^8x_4x_3
\end{aligned}$$

Reduced to zero.

4580. Creating S-polynomial from the pair  $(p_{71}, p_{106})$ .

Forming S-pol of  $p_{71}$  and  $p_{106}$ :

$$\begin{aligned}
p_{1039} = & -8192u_5u_4^{21}u_1^{13}x_{16}x_4 - 32768u_4^{19}u_1^{15}x_{14}^2x_5 + \\
& (131072u_4^{16}u_1^{17} - 65536u_4^{16}u_1^{16})x_{14}x_5x_4x_3 + \\
& (16384u_4^{20}u_1^{14} - 65536u_4^{18}u_1^{16})x_{14}x_5x_4 - 16384u_5u_4^{19}u_1^{14}x_{14}x_5x_3 + \\
& 32768u_5u_4^{19}u_1^{15}x_{14}x_5 + \\
& (16384u_6u_4^{19}u_1^{14} + 65536u_6u_4^{17}u_1^{16})x_{14}x_4x_3 - 65536u_6u_4^{17}u_1^{16}x_{14}x_4 + \\
& 4096u_5u_4^{22}u_1^{12}x_5x_4 - 8192u_6u_4^{20}u_1^{13}x_4^2x_3 - \\
& 4096u_6u_5u_4^{21}u_1^{12}x_4x_3
\end{aligned}$$

S-pol added.

4581. Creating S-polynomial from the pair  $(p_{72}, p_{73})$ .

Forming S-pol of  $p_{72}$  and  $p_{73}$ :

$$\begin{aligned}
p_{1040} = & 16384u_4^{23}u_1^{14}x_{16}x_{14}x_5 - 8192u_4^{24}u_1^{13}x_{16}x_5x_4 + \\
& (4096u_5u_4^{25}u_1^{12} - 16384u_5u_4^{23}u_1^{14})x_{16}x_5 + \\
& (2048u_6u_5u_4^{25}u_1^{11} + 8192u_5u_4^{24}u_1^{13})x_5x_3 - 4096u_5u_4^{26}u_1^{12}x_5 - \\
& 4096u_6^2u_5u_4^{24}u_1^{12}x_3 + 2048u_6^2u_5u_4^{26}u_1^{11}
\end{aligned}$$

Reduced to zero.

4582. Creating S-polynomial from the pair  $(p_{72}, p_{74})$ .

Skipping pair  $p_{72}$  and  $p_{74}$  because gcd of their leading monoms is zero.

4583. Creating S-polynomial from the pair  $(p_{72}, p_{75})$ .  
 Skipping pair  $p_{72}$  and  $p_{75}$  because gcd of their leading monoms is zero.
4584. Creating S-polynomial from the pair  $(p_{72}, p_{76})$ .  
 Skipping pair  $p_{72}$  and  $p_{76}$  because gcd of their leading monoms is zero.
4585. Creating S-polynomial from the pair  $(p_{72}, p_{77})$ .  
 Skipping pair  $p_{72}$  and  $p_{77}$  because gcd of their leading monoms is zero.
4586. Creating S-polynomial from the pair  $(p_{72}, p_{78})$ .  
 Skipping pair  $p_{72}$  and  $p_{78}$  because gcd of their leading monoms is zero.
4587. Creating S-polynomial from the pair  $(p_{72}, p_{79})$ .  
 Forming S-pol of  $p_{72}$  and  $p_{79}$ : Polynomial too big for output (text size is 2735 characters, number of terms is 18)  
 S-pol added.
4588. Creating S-polynomial from the pair  $(p_{72}, p_{80})$ .  
 Skipping pair  $p_{72}$  and  $p_{80}$  because gcd of their leading monoms is zero.
4589. Creating S-polynomial from the pair  $(p_{72}, p_{81})$ .  
 Skipping pair  $p_{72}$  and  $p_{81}$  because gcd of their leading monoms is zero.
4590. Creating S-polynomial from the pair  $(p_{72}, p_{82})$ .  
 Skipping pair  $p_{72}$  and  $p_{82}$  because gcd of their leading monoms is zero.
4591. Creating S-polynomial from the pair  $(p_{72}, p_{83})$ .  
 Skipping pair  $p_{72}$  and  $p_{83}$  because gcd of their leading monoms is zero.
4592. Creating S-polynomial from the pair  $(p_{72}, p_{84})$ .  
 Skipping pair  $p_{72}$  and  $p_{84}$  because gcd of their leading monoms is zero.
4593. Creating S-polynomial from the pair  $(p_{72}, p_{85})$ .  
 Skipping pair  $p_{72}$  and  $p_{85}$  because gcd of their leading monoms is zero.
4594. Creating S-polynomial from the pair  $(p_{72}, p_{86})$ .  
 Forming S-pol of  $p_{72}$  and  $p_{86}$ : Polynomial too big for output (text size is 2723 characters, number of terms is 18)  
 S-pol added.
4595. Creating S-polynomial from the pair  $(p_{72}, p_{87})$ .  
 Skipping pair  $p_{72}$  and  $p_{87}$  because gcd of their leading monoms is zero.
4596. Creating S-polynomial from the pair  $(p_{72}, p_{88})$ .  
 Forming S-pol of  $p_{72}$  and  $p_{88}$ :

$$p_{1041} = -1048576u_5u_4^{29}u_1^{20}x_{16}x_{14}x_5 + \\
(1048576u_6u_4^{29}u_1^{20} + 4194304u_6u_4^{27}u_1^{22})x_{16}x_{14}x_4 +$$

$$\begin{aligned}
& 524288u_5u_4^{30}u_1^{19}x_{16}x_5x_4+ \\
& (-262144u_5^2u_4^{31}u_1^{18} + 1048576u_5^2u_4^{29}u_1^{20})x_{16}x_5+ \\
& (-524288u_6u_4^{30}u_1^{19} - 2097152u_6u_4^{28}u_1^{21})x_{16}x_4^2+ \\
& (262144u_6u_5u_4^{31}u_1^{18} - 4194304u_6u_5u_4^{27}u_1^{22})x_{16}x_4+ \\
& (262144u_6u_5u_4^{30}u_1^{18} + 1048576u_6u_5u_4^{28}u_1^{20})x_5x_4x_3+ \\
& (-131072u_6u_5u_4^{32}u_1^{17} - 524288u_6u_5u_4^{30}u_1^{19})x_5x_4+ \\
& (-131072u_6u_5^2u_4^{31}u_1^{17} - 524288u_5^2u_4^{30}u_1^{19})x_5x_3+ \\
& 262144u_5^2u_4^{32}u_1^{18}x_5+ \\
& (131072u_6^2u_5u_4^{31}u_1^{17} + 524288u_6^2u_5u_4^{29}u_1^{19})x_4x_3+ \\
& 262144u_6^2u_5^2u_4^{30}u_1^{18}x_3 - 131072u_6^2u_5^2u_4^{32}u_1^{17}
\end{aligned}$$

Reduced to zero.

4597. Creating S-polynomial from the pair  $(p_{72}, p_{89})$ .

Skipping pair  $p_{72}$  and  $p_{89}$  because gcd of their leading monoms is zero.

4598. Creating S-polynomial from the pair  $(p_{72}, p_{90})$ .

Forming S-pol of  $p_{72}$  and  $p_{90}$ : Polynomial too big for output (text size is 1674 characters, number of terms is 18)

Reduced to zero.

4599. Creating S-polynomial from the pair  $(p_{72}, p_{91})$ .

Forming S-pol of  $p_{72}$  and  $p_{91}$ : Polynomial too big for output (text size is 1090 characters, number of terms is 15)

Reduced to zero.

4600. Creating S-polynomial from the pair  $(p_{72}, p_{92})$ .

Forming S-pol of  $p_{72}$  and  $p_{92}$ : Polynomial too big for output (text size is 1170 characters, number of terms is 16)

Reduced to zero.

4601. Creating S-polynomial from the pair  $(p_{72}, p_{93})$ .

Forming S-pol of  $p_{72}$  and  $p_{93}$ : Polynomial too big for output (text size is 2080 characters, number of terms is 17)

S-pol added.

4602. Creating S-polynomial from the pair  $(p_{72}, p_{94})$ .

Forming S-pol of  $p_{72}$  and  $p_{94}$ :

$$\begin{aligned}
p_{1042} = & 16384u_4^{25}u_1^{14}x_{16}x_{14}x_5 - 8192u_4^{26}u_1^{13}x_{16}x_5x_4+ \\
& (4096u_5u_4^{27}u_1^{12} - 16384u_5u_4^{25}u_1^{14})x_{16}x_5+ \\
& (8192u_6u_4^{25}u_1^{13} + 32768u_6u_4^{23}u_1^{15})x_{16}x_4x_3+ \\
& (-4096u_6u_4^{27}u_1^{12} - 16384u_6u_4^{25}u_1^{14})x_{16}x_4+
\end{aligned}$$

$$\begin{aligned}
& (-4096u_6u_4^{26}u_1^{12} - 16384u_6u_4^{24}u_1^{14})x_5x_4x_3 + \\
& (2048u_6u_4^{28}u_1^{11} + 8192u_6u_4^{26}u_1^{13})x_5x_4 + \\
& (2048u_6u_5u_4^{27}u_1^{11} + 8192u_5u_4^{26}u_1^{13})x_5x_3 - 4096u_5u_4^{28}u_1^{12}x_5 + \\
& (-2048u_6^2u_4^{27}u_1^{11} - 8192u_6^2u_4^{25}u_1^{13})x_4x_3 - \\
& 4096u_6^2u_5u_4^{26}u_1^{12}x_3 + 2048u_6^2u_5u_4^{28}u_1^{11}
\end{aligned}$$

Reduced to zero.

4603. Creating S-polynomial from the pair  $(p_{72}, p_{95})$ .

Forming S-pol of  $p_{72}$  and  $p_{95}$ : Polynomial too big for output (text size is 2576 characters, number of terms is 22)

Reduced to zero.

4604. Creating S-polynomial from the pair  $(p_{72}, p_{96})$ .

Forming S-pol of  $p_{72}$  and  $p_{96}$ : Polynomial too big for output (text size is 1368 characters, number of terms is 16)

Reduced to zero.

4605. Creating S-polynomial from the pair  $(p_{72}, p_{97})$ .

Forming S-pol of  $p_{72}$  and  $p_{97}$ : Polynomial too big for output (text size is 1880 characters, number of terms is 18)

S-pol added.

4606. Creating S-polynomial from the pair  $(p_{72}, p_{98})$ .

Skipping pair  $p_{72}$  and  $p_{98}$  because gcd of their leading monoms is zero.

4607. Creating S-polynomial from the pair  $(p_{72}, p_{99})$ .

Forming S-pol of  $p_{72}$  and  $p_{99}$ : Polynomial too big for output (text size is 6353 characters, number of terms is 37)

Reduced to zero.

4608. Creating S-polynomial from the pair  $(p_{72}, p_{100})$ .

Forming S-pol of  $p_{72}$  and  $p_{100}$ : Polynomial too big for output (text size is 2605 characters, number of terms is 22)

Reduced to zero.

4609. Creating S-polynomial from the pair  $(p_{72}, p_{101})$ .

Forming S-pol of  $p_{72}$  and  $p_{101}$ : Polynomial too big for output (text size is 1382 characters, number of terms is 16)

Reduced to zero.

4610. Creating S-polynomial from the pair  $(p_{72}, p_{102})$ .

Forming S-pol of  $p_{72}$  and  $p_{102}$ : Polynomial too big for output (text size is 1892 characters, number of terms is 18)

S-pol added.

4611. Creating S-polynomial from the pair  $(p_{72}, p_{103})$ .  
 Forming S-pol of  $p_{72}$  and  $p_{103}$ : Polynomial too big for output (text size is 6372 characters, number of terms is 37)  
 Reduced to zero.
4612. Creating S-polynomial from the pair  $(p_{72}, p_{104})$ .  
 Forming S-pol of  $p_{72}$  and  $p_{104}$ : Polynomial too big for output (text size is 1831 characters, number of terms is 21)  
 Reduced to zero.
4613. Creating S-polynomial from the pair  $(p_{72}, p_{105})$ .  
 Forming S-pol of  $p_{72}$  and  $p_{105}$ : Polynomial too big for output (text size is 1101 characters, number of terms is 16)  
 S-pol added.
4614. Creating S-polynomial from the pair  $(p_{72}, p_{106})$ .  
 Forming S-pol of  $p_{72}$  and  $p_{106}$ : Polynomial too big for output (text size is 1428 characters, number of terms is 17)  
 S-pol added.
4615. Creating S-polynomial from the pair  $(p_{73}, p_{74})$ .  
 Skipping pair  $p_{73}$  and  $p_{74}$  because gcd of their leading monoms is zero.
4616. Creating S-polynomial from the pair  $(p_{73}, p_{75})$ .  
 Skipping pair  $p_{73}$  and  $p_{75}$  because gcd of their leading monoms is zero.
4617. Creating S-polynomial from the pair  $(p_{73}, p_{76})$ .  
 Skipping pair  $p_{73}$  and  $p_{76}$  because gcd of their leading monoms is zero.
4618. Creating S-polynomial from the pair  $(p_{73}, p_{77})$ .  
 Skipping pair  $p_{73}$  and  $p_{77}$  because gcd of their leading monoms is zero.
4619. Creating S-polynomial from the pair  $(p_{73}, p_{78})$ .  
 Skipping pair  $p_{73}$  and  $p_{78}$  because gcd of their leading monoms is zero.
4620. Creating S-polynomial from the pair  $(p_{73}, p_{79})$ .  
 Skipping pair  $p_{73}$  and  $p_{79}$  because gcd of their leading monoms is zero.
4621. Creating S-polynomial from the pair  $(p_{73}, p_{80})$ .  
 Skipping pair  $p_{73}$  and  $p_{80}$  because gcd of their leading monoms is zero.
4622. Creating S-polynomial from the pair  $(p_{73}, p_{81})$ .  
 Skipping pair  $p_{73}$  and  $p_{81}$  because gcd of their leading monoms is zero.
4623. Creating S-polynomial from the pair  $(p_{73}, p_{82})$ .  
 Skipping pair  $p_{73}$  and  $p_{82}$  because gcd of their leading monoms is zero.
4624. Creating S-polynomial from the pair  $(p_{73}, p_{83})$ .  
 Skipping pair  $p_{73}$  and  $p_{83}$  because gcd of their leading monoms is zero.

4625. Creating S-polynomial from the pair  $(p_{73}, p_{84})$ .

Skipping pair  $p_{73}$  and  $p_{84}$  because gcd of their leading monoms is zero.

4626. Creating S-polynomial from the pair  $(p_{73}, p_{85})$ .

Skipping pair  $p_{73}$  and  $p_{85}$  because gcd of their leading monoms is zero.

4627. Creating S-polynomial from the pair  $(p_{73}, p_{86})$ .

Skipping pair  $p_{73}$  and  $p_{86}$  because gcd of their leading monoms is zero.

4628. Creating S-polynomial from the pair  $(p_{73}, p_{87})$ .

Skipping pair  $p_{73}$  and  $p_{87}$  because gcd of their leading monoms is zero.

4629. Creating S-polynomial from the pair  $(p_{73}, p_{88})$ .

Forming S-pol of  $p_{73}$  and  $p_{88}$ :

$$\begin{aligned} p_{1043} = & -4096u_6u_4^{14}u_1^{12}x_{16}x_{14} + 2048u_6u_4^{15}u_1^{11}x_{16}x_4 + \\ & (-1024u_6u_5u_4^{16}u_1^{10} + 4096u_6u_5u_4^{14}u_1^{12})x_{16} - \\ & 1024u_6u_5u_4^{15}u_1^{10}x_5x_3 + 512u_6u_5u_4^{17}u_1^9x_5 - \\ & 512u_6^2u_5u_4^{16}u_1^9x_3 \end{aligned}$$

Reduced to zero.

4630. Creating S-polynomial from the pair  $(p_{73}, p_{89})$ .

Skipping pair  $p_{73}$  and  $p_{89}$  because gcd of their leading monoms is zero.

4631. Creating S-polynomial from the pair  $(p_{73}, p_{90})$ .

Forming S-pol of  $p_{73}$  and  $p_{90}$ :

$$\begin{aligned} p_{1044} = & -2097152u_5u_4^{23}u_1^{21}x_{16}^2x_4 - 1048576u_5^2u_4^{24}u_1^{20}x_{16}^2 + \\ & 4194304u_6u_4^{22}u_1^{22}x_{16}x_{14} + \\ & (2097152u_6u_5u_4^{24}u_1^{20} - 4194304u_6u_5u_4^{22}u_1^{22})x_{16}x_{14} + \\ & 1048576u_5u_4^{24}u_1^{20}x_{16}x_5x_4 + 524288u_5^2u_4^{25}u_1^{19}x_{16}x_5 + \\ & (-524288u_6u_5u_4^{25}u_1^{19} - 2097152u_6u_4^{24}u_1^{21})x_{16}x_4 + \\ & 1048576u_6u_5^2u_4^{24}u_1^{20}x_{16} + 1048576u_6u_5u_4^{23}u_1^{20}x_{14}x_5x_3 - \\ & 524288u_6u_5u_4^{25}u_1^{19}x_{14}x_5 + 524288u_6^2u_5u_4^{24}u_1^{19}x_{14}x_3 \end{aligned}$$

Reduced to zero.

4632. Creating S-polynomial from the pair  $(p_{73}, p_{91})$ .

Forming S-pol of  $p_{73}$  and  $p_{91}$ :

$$\begin{aligned} p_{1045} = & -512u_5u_4^{12}u_1^9x_{16}^2 + 512u_6u_4^{12}u_1^9x_{16}x_{14} + 256u_5u_4^{13}u_1^8x_{16}x_5 - \\ & 512u_6u_4^{11}u_1^9x_{16}x_4x_3 - 256u_6u_5u_4^{12}u_1^8x_{16}x_3 + \\ & 512u_6u_4^{11}u_1^9x_{14}x_5x_3 - 256u_6u_4^{13}u_1^8x_{14}x_5 + \\ & 256u_6^2u_4^{12}u_1^8x_{14}x_3 \end{aligned}$$

Reduced to zero.



4633. Creating S-polynomial from the pair  $(p_{73}, p_{92})$ .

Forming S-pol of  $p_{73}$  and  $p_{92}$ :

$$\begin{aligned} p_{1046} = & 1024u_4^{11}u_1^{10}x_{16}^2x_4 + 2048u_5u_4^{10}u_1^{11}x_{16}^2 - \\ & 1024u_4^{11}u_1^{10}x_{16}x_{14}x_5 - 2048u_6u_4^{10}u_1^{11}x_{16}x_{14} - \\ & 512u_5u_4^{11}u_1^9x_{16}x_5x_3 + 256u_6u_4^{13}u_1^8x_{16}x_4 - \\ & 256u_6u_5u_4^{12}u_1^8x_{16}x_3 + 512u_6u_4^{11}u_1^9x_{14}x_5x_3 - \\ & 256u_6u_4^{13}u_1^8x_{14}x_5 + 256u_6^2u_4^{12}u_1^8x_{14}x_3 \end{aligned}$$

Reduced to zero.

4634. Creating S-polynomial from the pair  $(p_{73}, p_{93})$ .

Forming S-pol of  $p_{73}$  and  $p_{93}$ :

$$\begin{aligned} p_{1047} = & -4096u_4^{18}u_1^{12}x_{16}x_{14}x_5 + (16384u_4^{15}u_1^{14} - 8192u_4^{15}u_1^{13})x_{16}x_5x_4x_3 + \\ & (2048u_4^{19}u_1^{11} - 8192u_4^{17}u_1^{13})x_{16}x_5x_4 - 2048u_5u_4^{18}u_1^{11}x_{16}x_5x_3 + \\ & 4096u_5u_4^{18}u_1^{12}x_{16}x_5 + \\ & (2048u_6u_4^{18}u_1^{11} + 8192u_6u_4^{16}u_1^{13} - 4096u_6u_4^{16}u_1^{12})x_{16}x_4x_3 + \\ & (-1024u_6u_4^{20}u_1^{10} + 2048u_6u_4^{18}u_1^{11} - 8192u_6u_4^{16}u_1^{13})x_{16}x_4 + \\ & (-1024u_6u_4^{19}u_1^{10} + 2048u_6u_4^{17}u_1^{11})x_5x_4x_3 + \\ & (512u_6u_4^{21}u_1^9 - 1024u_6u_4^{19}u_1^{10})x_5x_4 + \\ & (-512u_6^2u_4^{20}u_1^9 + 1024u_6^2u_4^{18}u_1^{10})x_4x_3 \end{aligned}$$

S-pol added.

4635. Creating S-polynomial from the pair  $(p_{73}, p_{94})$ .

Forming S-pol of  $p_{73}$  and  $p_{94}$ :

$$\begin{aligned} p_{1048} = & -32u_6u_4^{10}u_1^5x_{16}x_3 + 16u_6u_4^{12}u_1^4x_{16} + 16u_6u_4^{11}u_1^4x_5x_3 - \\ & 8u_6u_4^{13}u_1^3x_5 + 8u_6^2u_4^{12}u_1^3x_3 \end{aligned}$$

Reduced to zero.

4636. Creating S-polynomial from the pair  $(p_{73}, p_{95})$ .

Skipping pair  $p_{73}$  and  $p_{95}$  because gcd of their leading monoms is zero.

4637. Creating S-polynomial from the pair  $(p_{73}, p_{96})$ .

Skipping pair  $p_{73}$  and  $p_{96}$  because gcd of their leading monoms is zero.

4638. Creating S-polynomial from the pair  $(p_{73}, p_{97})$ .

Skipping pair  $p_{73}$  and  $p_{97}$  because gcd of their leading monoms is zero.

4639. Creating S-polynomial from the pair  $(p_{73}, p_{98})$ .

Skipping pair  $p_{73}$  and  $p_{98}$  because gcd of their leading monoms is zero.

4640. Creating S-polynomial from the pair  $(p_{73}, p_{99})$ .  
 Forming S-pol of  $p_{73}$  and  $p_{99}$ : Polynomial too big for output (text size is 2749 characters, number of terms is 30)  
 Reduced to zero.
4641. Creating S-polynomial from the pair  $(p_{73}, p_{100})$ .  
 Skipping pair  $p_{73}$  and  $p_{100}$  because gcd of their leading monoms is zero.
4642. Creating S-polynomial from the pair  $(p_{73}, p_{101})$ .  
 Skipping pair  $p_{73}$  and  $p_{101}$  because gcd of their leading monoms is zero.
4643. Creating S-polynomial from the pair  $(p_{73}, p_{102})$ .  
 Skipping pair  $p_{73}$  and  $p_{102}$  because gcd of their leading monoms is zero.
4644. Creating S-polynomial from the pair  $(p_{73}, p_{103})$ .  
 Forming S-pol of  $p_{73}$  and  $p_{103}$ : Polynomial too big for output (text size is 2761 characters, number of terms is 30)  
 Reduced to zero.
4645. Creating S-polynomial from the pair  $(p_{73}, p_{104})$ .  
 Forming S-pol of  $p_{73}$  and  $p_{104}$ :

$$\begin{aligned}
 p_{1049} = & 2097152u_5u_4^{21}u_1^{21}x_{16}^2x_{14} + \\
 & (4194304u_5u_4^{20}u_1^{22} + 4194304u_4^{21}u_1^{22})x_{16}^2x_4 + \\
 & (524288u_5^2u_4^{23}u_1^{19} - 2097152u_5^2u_4^{21}u_1^{21})x_{16}^2 - \\
 & 2097152u_6u_4^{21}u_1^{21}x_{16}x_{14}^2 - 2097152u_4^{21}u_1^{21}x_{16}x_{14}x_5x_4 - \\
 & 1048576u_5u_4^{22}u_1^{20}x_{16}x_{14}x_5 + \\
 & (1048576u_6u_4^{22}u_1^{20} - 4194304u_6u_4^{20}u_1^{22})x_{16}x_{14}x_4 - \\
 & 524288u_6u_5u_4^{23}u_1^{19}x_{16}x_{14} - 1048576u_5u_4^{21}u_1^{20}x_{16}x_5x_4x_3 - \\
 & 262144u_5^2u_4^{24}u_1^{18}x_{16}x_5 - 524288u_6u_5u_4^{22}u_1^{19}x_{16}x_4x_3 + \\
 & (262144u_6u_5u_4^{24}u_1^{18} + 1048576u_6u_4^{23}u_1^{20})x_{16}x_4 - \\
 & 524288u_6u_5^2u_4^{23}u_1^{19}x_{16} + 1048576u_6u_4^{21}u_1^{20}x_{14}x_5x_4x_3 - \\
 & 524288u_6u_4^{23}u_1^{19}x_{14}x_5x_4 + 524288u_6^2u_4^{22}u_1^{19}x_{14}x_4x_3
 \end{aligned}$$

Reduced to zero.

4646. Creating S-polynomial from the pair  $(p_{73}, p_{105})$ .  
 Forming S-pol of  $p_{73}$  and  $p_{105}$ :

$$\begin{aligned}
 p_{1050} = & 256u_5u_4^8u_1^8x_{16}^2 - 128u_4^9u_1^7x_{16}x_{14}x_5 - 256u_6u_4^8u_1^8x_{16}x_{14} + \\
 & 64u_4^{10}u_1^6x_{16}x_5x_4 - 64u_5u_4^9u_1^6x_{16}x_5x_3 + \\
 & 64u_6u_4^9u_1^6x_{16}x_4x_3 + \\
 & (-32u_6u_4^{11}u_1^5 + 128u_6u_4^9u_1^7)x_{16}x_4 - 32u_6u_4^{10}u_1^5x_5x_4x_3 + \\
 & 16u_6u_4^{12}u_1^4x_5x_4 - 16u_6^2u_4^{11}u_1^4x_4x_3
 \end{aligned}$$

Reduced to zero.

4647. Creating S-polynomial from the pair  $(p_{73}, p_{106})$ .

Forming S-pol of  $p_{73}$  and  $p_{106}$ :

$$\begin{aligned} p_{1051} = & -2048u_4^{17}u_1^{11}x_{16}x_{14}x_5 + (8192u_4^{14}u_1^{13} - 4096u_4^{14}u_1^{12})x_{16}x_5x_4x_3 + \\ & (1024u_4^{18}u_1^{10} - 4096u_4^{16}u_1^{12})x_{16}x_5x_4 - 1024u_5u_4^{17}u_1^{10}x_{16}x_5x_3 + \\ & 2048u_5u_4^{17}u_1^{11}x_{16}x_5 + (1024u_6u_4^{17}u_1^{10} + 4096u_6u_4^{15}u_1^{12})x_{16}x_4x_3 + \\ & (-512u_6u_4^{19}u_1^9 - 4096u_6u_4^{15}u_1^{12})x_{16}x_4 - 512u_6u_4^{18}u_1^9x_5x_4x_3 + \\ & 256u_6u_4^{20}u_1^8x_5x_4 - 256u_6^2u_4^{19}u_1^8x_4x_3 \end{aligned}$$

S-pol added.

4648. Creating S-polynomial from the pair  $(p_{74}, p_{75})$ .

Skipping pair  $p_{74}$  and  $p_{75}$  because gcd of their leading monoms is zero.

4649. Creating S-polynomial from the pair  $(p_{74}, p_{76})$ .

Forming S-pol of  $p_{74}$  and  $p_{76}$ :

$$\begin{aligned} p_{1052} = & 134217728u_5^2u_2^{29}u_1^{27}x_{12}x_4 + 67108864u_5^3u_2^{30}u_1^{26}x_{12} - \\ & 134217728u_6u_5u_2^{29}u_1^{27}x_{10}x_4 - 67108864u_6u_5^2u_2^{30}u_1^{26}x_{10} - \\ & 67108864u_5^2u_2^{30}u_1^{26}x_5x_4 - 33554432u_5^3u_2^{31}u_1^{25}x_5 + \\ & (33554432u_6u_5^2u_2^{31}u_1^{25} + 134217728u_6u_5u_2^{30}u_1^{27})x_4 - \\ & 67108864u_6u_5^3u_2^{30}u_1^{26} \end{aligned}$$

Reduced to zero.

4650. Creating S-polynomial from the pair  $(p_{74}, p_{77})$ .

Forming S-pol of  $p_{74}$  and  $p_{77}$ :

$$\begin{aligned} p_{1053} = & 32768u_5^2u_2^{18}u_1^{15}x_{12} + 131072u_6u_2^{16}u_1^{17}x_{10}^2 - \\ & 65536u_6u_2^{17}u_1^{16}x_{10}x_4 - 131072u_6u_5u_2^{16}u_1^{17}x_{10} - \\ & 16384u_5^2u_2^{19}u_1^{14}x_5 + 32768u_6u_5u_2^{17}u_1^{15}x_4x_1 + \\ & 16384u_6u_3^2u_2^{18}u_1^{14}x_1 \end{aligned}$$

Reduced to zero.

4651. Creating S-polynomial from the pair  $(p_{74}, p_{78})$ .

Forming S-pol of  $p_{74}$  and  $p_{78}$ :

$$\begin{aligned} p_{1054} = & -65536u_5u_2^{17}u_1^{16}x_{12}x_4 - 131072u_5^2u_2^{16}u_1^{17}x_{12} + \\ & 131072u_6u_2^{16}u_1^{17}x_{10}^2 + 65536u_5u_2^{17}u_1^{16}x_{10}x_5 - \\ & 65536u_6u_2^{17}u_1^{16}x_{10}x_4 + 32768u_6u_5u_2^{18}u_1^{15}x_{10} + \\ & 32768u_5^2u_2^{17}u_1^{15}x_5x_1 - 16384u_6u_5u_2^{19}u_1^{14}x_4 + \\ & 16384u_6u_5^2u_2^{18}u_1^{14}x_1 \end{aligned}$$

Reduced to zero.

4652. Creating S-polynomial from the pair  $(p_{74}, p_{79})$ .

Forming S-pol of  $p_{74}$  and  $p_{79}$ :

$$\begin{aligned} p_{1055} = & 262144u_5u_2^{24}u_1^{18}x_{10}x_5 + (-262144u_6u_2^{24}u_1^{18} + 524288u_6u_2^{22}u_1^{19})x_{10}x_4 + \\ & (-1048576u_5u_2^{21}u_1^{20} + 524288u_5u_2^{21}u_1^{19})x_5x_4x_1 + \\ & (-131072u_5u_2^{25}u_1^{17} + 524288u_5u_2^{23}u_1^{19})x_5x_4 + \\ & 131072u_5^2u_2^{24}u_1^{17}x_5x_1 - 262144u_5^2u_2^{24}u_1^{18}x_5 + \\ & (131072u_6u_2^{25}u_1^{17} - 262144u_6u_2^{23}u_1^{18})x_4^2 + \\ & (-131072u_6u_5u_2^{24}u_1^{17} - 524288u_6u_5u_2^{22}u_1^{19} + \\ & 262144u_6u_5u_2^{22}u_1^{18})x_4x_1 + 262144u_6u_5u_2^{24}u_1^{18}x_4 \end{aligned}$$

S-pol added.

4653. Creating S-polynomial from the pair  $(p_{74}, p_{80})$ .

Forming S-pol of  $p_{74}$  and  $p_{80}$ :

$$\begin{aligned} p_{1056} = & 4096u_6u_2^{16}u_1^{12}x_{10} - 2048u_6u_2^{17}u_1^{11}x_4 + 2048u_6u_5u_2^{16}u_1^{11}x_1 - \\ & 4096u_6u_5u_2^{16}u_1^{12} \end{aligned}$$

Reduced to zero.

4654. Creating S-polynomial from the pair  $(p_{74}, p_{81})$ .

Skipping pair  $p_{74}$  and  $p_{81}$  because gcd of their leading monoms is zero.

4655. Creating S-polynomial from the pair  $(p_{74}, p_{82})$ .

Skipping pair  $p_{74}$  and  $p_{82}$  because gcd of their leading monoms is zero.

4656. Creating S-polynomial from the pair  $(p_{74}, p_{83})$ .

Skipping pair  $p_{74}$  and  $p_{83}$  because gcd of their leading monoms is zero.

4657. Creating S-polynomial from the pair  $(p_{74}, p_{84})$ .

Skipping pair  $p_{74}$  and  $p_{84}$  because gcd of their leading monoms is zero.

4658. Creating S-polynomial from the pair  $(p_{74}, p_{85})$ .

Skipping pair  $p_{74}$  and  $p_{85}$  because gcd of their leading monoms is zero.

4659. Creating S-polynomial from the pair  $(p_{74}, p_{86})$ .

Skipping pair  $p_{74}$  and  $p_{86}$  because gcd of their leading monoms is zero.

4660. Creating S-polynomial from the pair  $(p_{74}, p_{87})$ .

Skipping pair  $p_{74}$  and  $p_{87}$  because gcd of their leading monoms is zero.

4661. Creating S-polynomial from the pair  $(p_{74}, p_{88})$ .

Skipping pair  $p_{74}$  and  $p_{88}$  because gcd of their leading monoms is zero.

4662. Creating S-polynomial from the pair  $(p_{74}, p_{89})$ .

Skipping pair  $p_{74}$  and  $p_{89}$  because gcd of their leading monoms is zero.

4663. Creating S-polynomial from the pair  $(p_{74}, p_{90})$ .  
 Skipping pair  $p_{74}$  and  $p_{90}$  because gcd of their leading monoms is zero.
4664. Creating S-polynomial from the pair  $(p_{74}, p_{91})$ .  
 Skipping pair  $p_{74}$  and  $p_{91}$  because gcd of their leading monoms is zero.
4665. Creating S-polynomial from the pair  $(p_{74}, p_{92})$ .  
 Skipping pair  $p_{74}$  and  $p_{92}$  because gcd of their leading monoms is zero.
4666. Creating S-polynomial from the pair  $(p_{74}, p_{93})$ .  
 Skipping pair  $p_{74}$  and  $p_{93}$  because gcd of their leading monoms is zero.
4667. Creating S-polynomial from the pair  $(p_{74}, p_{94})$ .  
 Skipping pair  $p_{74}$  and  $p_{94}$  because gcd of their leading monoms is zero.
4668. Creating S-polynomial from the pair  $(p_{74}, p_{95})$ .  
 Skipping pair  $p_{74}$  and  $p_{95}$  because gcd of their leading monoms is zero.
4669. Creating S-polynomial from the pair  $(p_{74}, p_{96})$ .  
 Skipping pair  $p_{74}$  and  $p_{96}$  because gcd of their leading monoms is zero.
4670. Creating S-polynomial from the pair  $(p_{74}, p_{97})$ .  
 Skipping pair  $p_{74}$  and  $p_{97}$  because gcd of their leading monoms is zero.
4671. Creating S-polynomial from the pair  $(p_{74}, p_{98})$ .  
 Forming S-pol of  $p_{74}$  and  $p_{98}$ : Polynomial too big for output (text size is 2179 characters, number of terms is 26)  
 Reduced to zero.
4672. Creating S-polynomial from the pair  $(p_{74}, p_{99})$ .  
 Skipping pair  $p_{74}$  and  $p_{99}$  because gcd of their leading monoms is zero.
4673. Creating S-polynomial from the pair  $(p_{74}, p_{100})$ .  
 Forming S-pol of  $p_{74}$  and  $p_{100}$ :

$$\begin{aligned}
 p_{1057} = & -134217728u_5^2u_2^{27}u_1^{27}x_{12}x_{10} + \\
 & (-268435456u_5^2u_2^{26}u_1^{28} - 268435456u_5u_2^{27}u_1^{28})x_{12}x_4 + \\
 & (-33554432u_5^3u_2^{29}u_1^{25} + 134217728u_5^3u_2^{27}u_1^{27})x_{12} + \\
 & 268435456u_6u_2^{26}u_1^{28}x_{10}^2x_4 + 134217728u_6u_5u_2^{27}u_1^{27}x_{10}^2 + \\
 & 134217728u_5u_2^{27}u_1^{27}x_{10}x_5x_4 + 67108864u_5^2u_2^{28}u_1^{26}x_{10}x_5 - \\
 & 134217728u_6u_2^{27}u_1^{27}x_{10}x_4^2 + 33554432u_6u_5^2u_2^{29}u_1^{25}x_{10} + \\
 & 67108864u_5^2u_2^{27}u_1^{26}x_5x_4x_1 + 16777216u_3^3u_2^{30}u_1^{24}x_5 + \\
 & 33554432u_6u_5^2u_2^{28}u_1^{25}x_4x_1 + \\
 & (-16777216u_6u_5^2u_2^{30}u_1^{24} - 67108864u_6u_5u_2^{29}u_1^{26})x_4 + \\
 & 33554432u_6u_5^3u_2^{29}u_1^{25}
 \end{aligned}$$

Reduced to zero.

4674. Creating S-polynomial from the pair  $(p_{74}, p_{101})$ .

Forming S-pol of  $p_{74}$  and  $p_{101}$ :

$$\begin{aligned} p_{1058} = & -16384u_5^2u_2^{14}u_1^{14}x_{12} + 8192u_5u_2^{15}u_1^{13}x_{10}x_5 - \\ & 8192u_6u_2^{15}u_1^{13}x_{10}x_4 + 16384u_6u_5u_2^{14}u_1^{14}x_{10} - \\ & 4096u_5u_2^{16}u_1^{12}x_5x_4 + 4096u_5^2u_2^{15}u_1^{12}x_5x_1 + \\ & 4096u_6u_2^{16}u_1^{12}x_4^2 - 4096u_6u_5u_2^{15}u_1^{12}x_4x_1 \end{aligned}$$

Reduced to zero.

4675. Creating S-polynomial from the pair  $(p_{74}, p_{102})$ .

Forming S-pol of  $p_{74}$  and  $p_{102}$ :

$$\begin{aligned} p_{1059} = & 131072u_5u_2^{23}u_1^{17}x_{10}x_5 - 131072u_6u_2^{23}u_1^{17}x_{10}x_4 + \\ & (-524288u_5u_2^{20}u_1^{19} + 262144u_5u_2^{20}u_1^{18})x_5x_4x_1 + \\ & (-65536u_5u_2^{24}u_1^{16} + 262144u_5u_2^{22}u_1^{18})x_5x_4 + 65536u_5^2u_2^{23}u_1^{16}x_5x_1 - \\ & 131072u_5^2u_2^{23}u_1^{17}x_5 + 65536u_6u_2^{24}u_1^{16}x_4^2 + \\ & (-65536u_6u_5u_2^{23}u_1^{16} - 262144u_6u_5u_2^{21}u_1^{18})x_4x_1 + \\ & (131072u_6u_5u_2^{23}u_1^{17} + 262144u_6u_5u_2^{21}u_1^{18})x_4 \end{aligned}$$

S-pol added.

4676. Creating S-polynomial from the pair  $(p_{74}, p_{103})$ .

Forming S-pol of  $p_{74}$  and  $p_{103}$ : Polynomial too big for output (text size is 2185 characters, number of terms is 26)

Reduced to zero.

4677. Creating S-polynomial from the pair  $(p_{74}, p_{104})$ .

Skipping pair  $p_{74}$  and  $p_{104}$  because gcd of their leading monoms is zero.

4678. Creating S-polynomial from the pair  $(p_{74}, p_{105})$ .

Skipping pair  $p_{74}$  and  $p_{105}$  because gcd of their leading monoms is zero.

4679. Creating S-polynomial from the pair  $(p_{74}, p_{106})$ .

Skipping pair  $p_{74}$  and  $p_{106}$  because gcd of their leading monoms is zero.

4680. Creating S-polynomial from the pair  $(p_{75}, p_{76})$ .

Forming S-pol of  $p_{75}$  and  $p_{76}$ :

$$\begin{aligned} p_{1060} = & -4194304u_5u_2^{25}u_1^{21}x_{12}x_4 + 2097152u_5^2u_2^{24}u_1^{21}x_{12}x_1 + \\ & (-1048576u_5^2u_2^{26}u_1^{20} - 4194304u_5^2u_2^{24}u_1^{22})x_{12} + \\ & 4194304u_6u_2^{24}u_1^{22}x_{10}^2 + 2097152u_5u_2^{25}u_1^{21}x_{10}x_5 + \\ & 1048576u_6u_5u_2^{26}u_1^{20}x_{10} + 1048576u_5u_2^{26}u_1^{20}x_5x_4 + \\ & 524288u_5^2u_2^{27}u_1^{19}x_5 + \\ & (-524288u_6u_5u_2^{27}u_1^{19} - 2097152u_6u_2^{26}u_1^{21})x_4 + 1048576u_6u_5^2u_2^{26}u_1^{20} \end{aligned}$$

Reduced to zero.

4681. Creating S-polynomial from the pair  $(p_{75}, p_{77})$ .

Forming S-pol of  $p_{75}$  and  $p_{77}$ :

$$\begin{aligned} p_{1061} = & -1024u_2^{13}u_1^{10}x_{12}x_4 + 1024u_5u_2^{12}u_1^{10}x_{12}x_1 + \\ & (-512u_5u_2^{14}u_1^9 - 2048u_5u_2^{12}u_1^{11})x_{12} + 1024u_2^{13}u_1^{10}x_{10}x_5 + \\ & 2048u_6u_2^{12}u_1^{11}x_{10} + 256u_5u_2^{15}u_1^8x_5 - 512u_6u_2^{13}u_1^9x_4x_1 - \\ & 256u_6u_5u_2^{14}u_1^8x_1 \end{aligned}$$

Reduced to zero.

4682. Creating S-polynomial from the pair  $(p_{75}, p_{78})$ .

Forming S-pol of  $p_{75}$  and  $p_{78}$ :

$$\begin{aligned} p_{1062} = & 1024u_5u_2^{12}u_1^{10}x_{12}x_1 - 512u_6u_2^{14}u_1^9x_{10} - 512u_5u_2^{13}u_1^9x_5x_1 + \\ & 256u_6u_2^{15}u_1^8x_4 - 256u_6u_5u_2^{14}u_1^8x_1 \end{aligned}$$

Reduced to zero.

4683. Creating S-polynomial from the pair  $(p_{75}, p_{79})$ .

Skipping pair  $p_{75}$  and  $p_{79}$  because gcd of their leading monoms is zero.

4684. Creating S-polynomial from the pair  $(p_{75}, p_{80})$ .

Skipping pair  $p_{75}$  and  $p_{80}$  because gcd of their leading monoms is zero.

4685. Creating S-polynomial from the pair  $(p_{75}, p_{81})$ .

Skipping pair  $p_{75}$  and  $p_{81}$  because gcd of their leading monoms is zero.

4686. Creating S-polynomial from the pair  $(p_{75}, p_{82})$ .

Skipping pair  $p_{75}$  and  $p_{82}$  because gcd of their leading monoms is zero.

4687. Creating S-polynomial from the pair  $(p_{75}, p_{83})$ .

Skipping pair  $p_{75}$  and  $p_{83}$  because gcd of their leading monoms is zero.

4688. Creating S-polynomial from the pair  $(p_{75}, p_{84})$ .

Skipping pair  $p_{75}$  and  $p_{84}$  because gcd of their leading monoms is zero.

4689. Creating S-polynomial from the pair  $(p_{75}, p_{85})$ .

Skipping pair  $p_{75}$  and  $p_{85}$  because gcd of their leading monoms is zero.

4690. Creating S-polynomial from the pair  $(p_{75}, p_{86})$ .

Skipping pair  $p_{75}$  and  $p_{86}$  because gcd of their leading monoms is zero.

4691. Creating S-polynomial from the pair  $(p_{75}, p_{87})$ .

Skipping pair  $p_{75}$  and  $p_{87}$  because gcd of their leading monoms is zero.

4692. Creating S-polynomial from the pair  $(p_{75}, p_{88})$ .

Skipping pair  $p_{75}$  and  $p_{88}$  because gcd of their leading monoms is zero.

4693. Creating S-polynomial from the pair  $(p_{75}, p_{89})$ .  
 Skipping pair  $p_{75}$  and  $p_{89}$  because gcd of their leading monoms is zero.
4694. Creating S-polynomial from the pair  $(p_{75}, p_{90})$ .  
 Skipping pair  $p_{75}$  and  $p_{90}$  because gcd of their leading monoms is zero.
4695. Creating S-polynomial from the pair  $(p_{75}, p_{91})$ .  
 Skipping pair  $p_{75}$  and  $p_{91}$  because gcd of their leading monoms is zero.
4696. Creating S-polynomial from the pair  $(p_{75}, p_{92})$ .  
 Skipping pair  $p_{75}$  and  $p_{92}$  because gcd of their leading monoms is zero.
4697. Creating S-polynomial from the pair  $(p_{75}, p_{93})$ .  
 Skipping pair  $p_{75}$  and  $p_{93}$  because gcd of their leading monoms is zero.
4698. Creating S-polynomial from the pair  $(p_{75}, p_{94})$ .  
 Skipping pair  $p_{75}$  and  $p_{94}$  because gcd of their leading monoms is zero.
4699. Creating S-polynomial from the pair  $(p_{75}, p_{95})$ .  
 Skipping pair  $p_{75}$  and  $p_{95}$  because gcd of their leading monoms is zero.
4700. Creating S-polynomial from the pair  $(p_{75}, p_{96})$ .  
 Skipping pair  $p_{75}$  and  $p_{96}$  because gcd of their leading monoms is zero.
4701. Creating S-polynomial from the pair  $(p_{75}, p_{97})$ .  
 Skipping pair  $p_{75}$  and  $p_{97}$  because gcd of their leading monoms is zero.
4702. Creating S-polynomial from the pair  $(p_{75}, p_{98})$ .  
 Skipping pair  $p_{75}$  and  $p_{98}$  because gcd of their leading monoms is zero.
4703. Creating S-polynomial from the pair  $(p_{75}, p_{99})$ .  
 Skipping pair  $p_{75}$  and  $p_{99}$  because gcd of their leading monoms is zero.
4704. Creating S-polynomial from the pair  $(p_{75}, p_{100})$ .  
 Forming S-pol of  $p_{75}$  and  $p_{100}$ :

$$\begin{aligned}
 p_{1063} = & 2097152u_5u_2^{23}u_1^{21}x_{12}x_{10} - 2097152u_2^{23}u_1^{21}x_{12}x_4^2 + \\
 & 2097152u_5u_2^{22}u_1^{21}x_{12}x_4x_1 + 4194304u_2^{23}u_1^{22}x_{12}x_4 + \\
 & (524288u_5^2u_2^{25}u_1^{19} - 2097152u_5^2u_2^{23}u_1^{21})x_{12} - \\
 & 2097152u_6u_2^{23}u_1^{21}x_{10}^2 - 1048576u_5u_2^{24}u_1^{20}x_{10}x_5 - \\
 & 524288u_6u_5u_2^{25}u_1^{19}x_{10} - 1048576u_5u_2^{23}u_1^{20}x_5x_4x_1 - \\
 & 262144u_5^2u_2^{26}u_1^{18}x_5 - 524288u_6u_5u_2^{24}u_1^{19}x_4x_1 + \\
 & (262144u_6u_5u_2^{26}u_1^{18} + 1048576u_6u_2^{25}u_1^{20})x_4 - 524288u_6u_5^2u_2^{25}u_1^{19}
 \end{aligned}$$

Reduced to zero.

4705. Creating S-polynomial from the pair  $(p_{75}, p_{101})$ .  
 Skipping pair  $p_{75}$  and  $p_{101}$  because gcd of their leading monoms is zero.



4706. Creating S-polynomial from the pair  $(p_{75}, p_{102})$ .  
 Skipping pair  $p_{75}$  and  $p_{102}$  because gcd of their leading monoms is zero.
4707. Creating S-polynomial from the pair  $(p_{75}, p_{103})$ .  
 Skipping pair  $p_{75}$  and  $p_{103}$  because gcd of their leading monoms is zero.
4708. Creating S-polynomial from the pair  $(p_{75}, p_{104})$ .  
 Skipping pair  $p_{75}$  and  $p_{104}$  because gcd of their leading monoms is zero.
4709. Creating S-polynomial from the pair  $(p_{75}, p_{105})$ .  
 Skipping pair  $p_{75}$  and  $p_{105}$  because gcd of their leading monoms is zero.
4710. Creating S-polynomial from the pair  $(p_{75}, p_{106})$ .  
 Skipping pair  $p_{75}$  and  $p_{106}$  because gcd of their leading monoms is zero.
4711. Creating S-polynomial from the pair  $(p_{76}, p_{77})$ .  
 Forming S-pol of  $p_{76}$  and  $p_{77}$ :

$$\begin{aligned} p_{1064} = & 67108864u_5u_2^{25}u_1^{26}x_{12}x_{10}x_4 - 134217728u_6u_2^{24}u_1^{27}x_{10}^3 + \\ & (-33554432u_6u_5u_2^{26}u_1^{25} + 134217728u_6u_5u_2^{24}u_1^{27})x_{10}^2 - \\ & 33554432u_5u_2^{26}u_1^{25}x_{10}x_5x_4 - 33554432u_6u_5u_2^{25}u_1^{25}x_{10}x_4x_1 + \\ & (16777216u_6u_5u_2^{27}u_1^{24} + 67108864u_6u_2^{26}u_1^{26})x_{10}x_4 - \\ & 16777216u_6u_5u_2^{26}u_1^{24}x_{10}x_1 - 33554432u_6u_5u_2^{26}u_1^{25}x_{10} \end{aligned}$$

Reduced to zero.

4712. Creating S-polynomial from the pair  $(p_{76}, p_{78})$ .  
 Forming S-pol of  $p_{76}$  and  $p_{78}$ :

$$\begin{aligned} p_{1065} = & 134217728u_5u_2^{25}u_1^{26}x_{12}x_{10}x_4 + \\ & (33554432u_5u_2^{26}u_1^{25} + 134217728u_5u_2^{24}u_1^{27})x_{12}x_{10} - \\ & 134217728u_6u_2^{24}u_1^{27}x_{10}^3 - 67108864u_5u_2^{25}u_1^{26}x_{10}^2x_5 - \\ & 67108864u_6u_5u_2^{26}u_1^{25}x_{10}^2 - 33554432u_5u_2^{26}u_1^{25}x_{10}x_5x_4 - \\ & 33554432u_5u_2^{25}u_1^{25}x_{10}x_5x_1 - 16777216u_5u_2^{27}u_1^{24}x_{10}x_5 + \\ & (33554432u_6u_5u_2^{27}u_1^{24} + 67108864u_6u_2^{26}u_1^{26})x_{10}x_4 - \\ & 16777216u_6u_5u_2^{26}u_1^{24}x_{10}x_1 - 33554432u_6u_5u_2^{26}u_1^{25}x_{10} \end{aligned}$$

Reduced to zero.

4713. Creating S-polynomial from the pair  $(p_{76}, p_{79})$ .  
 Forming S-pol of  $p_{76}$  and  $p_{79}$ : Polynomial too big for output (text size is 1300 characters, number of terms is 14)  
 S-pol added.

4714. Creating S-polynomial from the pair  $(p_{76}, p_{80})$ .

Forming S-pol of  $p_{76}$  and  $p_{80}$ :

$$\begin{aligned} p_{1066} = & 2097152u_5u_2^{25}u_1^{21}x_{12}x_4 + 1048576u_5^2u_2^{26}u_1^{20}x_{12} - \\ & 4194304u_6u_2^{24}u_1^{22}x_{10}^2 - 2097152u_6u_5u_2^{24}u_1^{21}x_{10}x_1 + \\ & (-1048576u_6u_5u_2^{26}u_1^{20} + 4194304u_6u_5u_2^{24}u_1^{22})x_{10} - \\ & 1048576u_5u_2^{26}u_1^{20}x_5x_4 - 524288u_5^2u_2^{27}u_1^{19}x_5 + \\ & (524288u_6u_5u_2^{27}u_1^{19} + 2097152u_6u_2^{26}u_1^{21})x_4 - 1048576u_6u_5^2u_2^{26}u_1^{20} \end{aligned}$$

Reduced to zero.

4715. Creating S-polynomial from the pair  $(p_{76}, p_{81})$ .

Skipping pair  $p_{76}$  and  $p_{81}$  because gcd of their leading monoms is zero.

4716. Creating S-polynomial from the pair  $(p_{76}, p_{82})$ .

Skipping pair  $p_{76}$  and  $p_{82}$  because gcd of their leading monoms is zero.

4717. Creating S-polynomial from the pair  $(p_{76}, p_{83})$ .

Skipping pair  $p_{76}$  and  $p_{83}$  because gcd of their leading monoms is zero.

4718. Creating S-polynomial from the pair  $(p_{76}, p_{84})$ .

Skipping pair  $p_{76}$  and  $p_{84}$  because gcd of their leading monoms is zero.

4719. Creating S-polynomial from the pair  $(p_{76}, p_{85})$ .

Skipping pair  $p_{76}$  and  $p_{85}$  because gcd of their leading monoms is zero.

4720. Creating S-polynomial from the pair  $(p_{76}, p_{86})$ .

Skipping pair  $p_{76}$  and  $p_{86}$  because gcd of their leading monoms is zero.

4721. Creating S-polynomial from the pair  $(p_{76}, p_{87})$ .

Skipping pair  $p_{76}$  and  $p_{87}$  because gcd of their leading monoms is zero.

4722. Creating S-polynomial from the pair  $(p_{76}, p_{88})$ .

Skipping pair  $p_{76}$  and  $p_{88}$  because gcd of their leading monoms is zero.

4723. Creating S-polynomial from the pair  $(p_{76}, p_{89})$ .

Skipping pair  $p_{76}$  and  $p_{89}$  because gcd of their leading monoms is zero.

4724. Creating S-polynomial from the pair  $(p_{76}, p_{90})$ .

Skipping pair  $p_{76}$  and  $p_{90}$  because gcd of their leading monoms is zero.

4725. Creating S-polynomial from the pair  $(p_{76}, p_{91})$ .

Skipping pair  $p_{76}$  and  $p_{91}$  because gcd of their leading monoms is zero.

4726. Creating S-polynomial from the pair  $(p_{76}, p_{92})$ .

Skipping pair  $p_{76}$  and  $p_{92}$  because gcd of their leading monoms is zero.

4727. Creating S-polynomial from the pair  $(p_{76}, p_{93})$ .

Skipping pair  $p_{76}$  and  $p_{93}$  because gcd of their leading monoms is zero.

4728. Creating S-polynomial from the pair  $(p_{76}, p_{94})$ .  
 Skipping pair  $p_{76}$  and  $p_{94}$  because gcd of their leading monoms is zero.
4729. Creating S-polynomial from the pair  $(p_{76}, p_{95})$ .  
 Skipping pair  $p_{76}$  and  $p_{95}$  because gcd of their leading monoms is zero.
4730. Creating S-polynomial from the pair  $(p_{76}, p_{96})$ .  
 Skipping pair  $p_{76}$  and  $p_{96}$  because gcd of their leading monoms is zero.
4731. Creating S-polynomial from the pair  $(p_{76}, p_{97})$ .  
 Skipping pair  $p_{76}$  and  $p_{97}$  because gcd of their leading monoms is zero.
4732. Creating S-polynomial from the pair  $(p_{76}, p_{98})$ .  
 Forming S-pol of  $p_{76}$  and  $p_{98}$ : Polynomial too big for output (text size is 3492 characters, number of terms is 33)  
 Reduced to zero.
4733. Creating S-polynomial from the pair  $(p_{76}, p_{99})$ .  
 Skipping pair  $p_{76}$  and  $p_{99}$  because gcd of their leading monoms is zero.
4734. Creating S-polynomial from the pair  $(p_{76}, p_{100})$ .  
 Forming S-pol of  $p_{76}$  and  $p_{100}$ : Polynomial too big for output (text size is 1273 characters, number of terms is 18)  
 Reduced to zero.
4735. Creating S-polynomial from the pair  $(p_{76}, p_{101})$ .  
 Forming S-pol of  $p_{76}$  and  $p_{101}$ :

$$\begin{aligned}
 p_{1067} = & 16777216u_5^2u_2^{22}u_1^{24}x_{12}x_{10} - 4194304u_5u_2^{24}u_1^{22}x_{12}x_4^2 - \\
 & 2097152u_5^2u_2^{25}u_1^{21}x_{12}x_4 - 8388608u_5u_2^{23}u_1^{23}x_{10}^2x_5 + \\
 & 8388608u_6u_2^{23}u_1^{23}x_{10}^2x_4 - 16777216u_6u_5u_2^{22}u_1^{24}x_{10}^2 + \\
 & 4194304u_5u_2^{24}u_1^{22}x_{10}x_5x_4 - 4194304u_5^2u_2^{23}u_1^{22}x_{10}x_5x_1 + \\
 & 4194304u_6u_5u_2^{23}u_1^{22}x_{10}x_4x_1 + 2097152u_6u_5u_2^{25}u_1^{21}x_{10}x_4 + \\
 & 2097152u_5u_2^{25}u_1^{21}x_5x_4^2 + 1048576u_5^2u_2^{26}u_1^{20}x_5x_4 + \\
 & (-1048576u_6u_5u_2^{26}u_1^{20} - 4194304u_6u_2^{25}u_1^{22})x_4^2 + \\
 & 2097152u_6u_5^2u_2^{25}u_1^{21}x_4
 \end{aligned}$$

Reduced to zero.

4736. Creating S-polynomial from the pair  $(p_{76}, p_{102})$ .  
 Forming S-pol of  $p_{76}$  and  $p_{102}$ :

$$\begin{aligned}
 p_{1068} = & -67108864u_5u_2^{32}u_1^{26}x_{12}x_4^2 - 33554432u_5^2u_2^{33}u_1^{25}x_{12}x_4 - \\
 & 134217728u_5u_2^{31}u_1^{27}x_{10}^2x_5 + 134217728u_6u_2^{31}u_1^{27}x_{10}^2x_4 + \\
 & (536870912u_5u_2^{28}u_1^{29} - 268435456u_5u_2^{28}u_1^{28})x_{10}x_5x_4x_1 +
 \end{aligned}$$

$$\begin{aligned}
& (67108864u_5u_2^{32}u_1^{26} - 268435456u_5u_2^{30}u_1^{28})x_{10}x_5x_4 - \\
& 67108864u_5^2u_2^{31}u_1^{26}x_{10}x_5x_1 + 134217728u_5^2u_2^{31}u_1^{27}x_{10}x_5 + \\
& (67108864u_6u_5u_2^{31}u_1^{26} + 268435456u_6u_5u_2^{29}u_1^{28})x_{10}x_4x_1 + \\
& (33554432u_6u_5u_2^{33}u_1^{25} - 134217728u_6u_5u_2^{31}u_1^{27} - \\
& 268435456u_6u_5u_2^{29}u_1^{28})x_{10}x_4 + 33554432u_5u_2^{33}u_1^{25}x_5x_4^2 + \\
& 16777216u_5^2u_2^{34}u_1^{24}x_5x_4 + \\
& (-16777216u_6u_5u_2^{34}u_1^{24} - 67108864u_6u_2^{33}u_1^{26})x_4^2 + \\
& 33554432u_6u_5^2u_2^{33}u_1^{25}x_4
\end{aligned}$$

S-pol added.

4737. Creating S-polynomial from the pair  $(p_{76}, p_{103})$ .

Forming S-pol of  $p_{76}$  and  $p_{103}$ : Polynomial too big for output (text size is 3508 characters, number of terms is 33)

Reduced to zero.

4738. Creating S-polynomial from the pair  $(p_{76}, p_{104})$ .

Skipping pair  $p_{76}$  and  $p_{104}$  because gcd of their leading monoms is zero.

4739. Creating S-polynomial from the pair  $(p_{76}, p_{105})$ .

Skipping pair  $p_{76}$  and  $p_{105}$  because gcd of their leading monoms is zero.

4740. Creating S-polynomial from the pair  $(p_{76}, p_{106})$ .

Skipping pair  $p_{76}$  and  $p_{106}$  because gcd of their leading monoms is zero.

4741. Creating S-polynomial from the pair  $(p_{77}, p_{78})$ .

Forming S-pol of  $p_{77}$  and  $p_{78}$ :

$$\begin{aligned}
p_{1069} = & 32768u_2^{13}u_1^{15}x_{12}x_{10}x_4 + \\
& (16384u_5u_2^{14}u_1^{14} + 65536u_5u_2^{12}u_1^{16})x_{12}x_{10} - 32768u_2^{13}u_1^{15}x_{10}^2x_5 + \\
& (-16384u_6u_2^{14}u_1^{14} - 65536u_6u_2^{12}u_1^{16})x_{10}^2 - 16384u_5u_2^{13}u_1^{14}x_{10}x_5x_1 - \\
& 8192u_5u_2^{15}u_1^{13}x_{10}x_5 + 16384u_6u_2^{13}u_1^{14}x_{10}x_4x_1 + \\
& 8192u_6u_2^{15}u_1^{13}x_{10}x_4
\end{aligned}$$

Reduced to zero.

4742. Creating S-polynomial from the pair  $(p_{77}, p_{79})$ .

Forming S-pol of  $p_{77}$  and  $p_{79}$ :

$$\begin{aligned}
p_{1070} = & (-32768u_5u_2^{22}u_1^{15} + 65536u_5u_2^{20}u_1^{16})x_{12}x_4 - 131072u_2^{20}u_1^{17}x_{10}^2x_5 + \\
& (524288u_2^{17}u_1^{19} - 262144u_2^{17}u_1^{18})x_{10}x_5x_4x_1 + \\
& (65536u_2^{21}u_1^{16} - 262144u_2^{19}u_1^{18})x_{10}x_5x_4 - 65536u_5u_2^{20}u_1^{16}x_{10}x_5x_1 + \\
& 131072u_5u_2^{20}u_1^{17}x_{10}x_5 + \\
& (65536u_6u_2^{20}u_1^{16} + 262144u_6u_2^{18}u_1^{18} - 131072u_6u_2^{18}u_1^{17})x_{10}x_4x_1 -
\end{aligned}$$

$$\begin{aligned}
& 262144u_6u_2^{18}u_1^{18}x_{10}x_4 + (16384u_5u_2^{23}u_1^{14} - 32768u_5u_2^{21}u_1^{15})x_5x_4 + \\
& (-32768u_6u_2^{21}u_1^{15} + 65536u_6u_2^{19}u_1^{16})x_4^2x_1 + \\
& (-16384u_6u_5u_2^{22}u_1^{14} + 32768u_6u_5u_2^{20}u_1^{15})x_4x_1
\end{aligned}$$

S-pol added.

4743. Creating S-polynomial from the pair  $(p_{77}, p_{80})$ .

Forming S-pol of  $p_{77}$  and  $p_{80}$ :

$$\begin{aligned}
p_{1071} = & 512u_5u_2^{14}u_1^9x_{12} - 1024u_6u_2^{12}u_1^{10}x_{10}x_1 - 256u_5u_2^{15}u_1^8x_5 + \\
& 512u_6u_2^{13}u_1^9x_4x_1 + 256u_6u_5u_2^{14}u_1^8x_1
\end{aligned}$$

Reduced to zero.

4744. Creating S-polynomial from the pair  $(p_{77}, p_{81})$ .

Skipping pair  $p_{77}$  and  $p_{81}$  because gcd of their leading monoms is zero.

4745. Creating S-polynomial from the pair  $(p_{77}, p_{82})$ .

Skipping pair  $p_{77}$  and  $p_{82}$  because gcd of their leading monoms is zero.

4746. Creating S-polynomial from the pair  $(p_{77}, p_{83})$ .

Skipping pair  $p_{77}$  and  $p_{83}$  because gcd of their leading monoms is zero.

4747. Creating S-polynomial from the pair  $(p_{77}, p_{84})$ .

Skipping pair  $p_{77}$  and  $p_{84}$  because gcd of their leading monoms is zero.

4748. Creating S-polynomial from the pair  $(p_{77}, p_{85})$ .

Skipping pair  $p_{77}$  and  $p_{85}$  because gcd of their leading monoms is zero.

4749. Creating S-polynomial from the pair  $(p_{77}, p_{86})$ .

Skipping pair  $p_{77}$  and  $p_{86}$  because gcd of their leading monoms is zero.

4750. Creating S-polynomial from the pair  $(p_{77}, p_{87})$ .

Skipping pair  $p_{77}$  and  $p_{87}$  because gcd of their leading monoms is zero.

4751. Creating S-polynomial from the pair  $(p_{77}, p_{88})$ .

Skipping pair  $p_{77}$  and  $p_{88}$  because gcd of their leading monoms is zero.

4752. Creating S-polynomial from the pair  $(p_{77}, p_{89})$ .

Skipping pair  $p_{77}$  and  $p_{89}$  because gcd of their leading monoms is zero.

4753. Creating S-polynomial from the pair  $(p_{77}, p_{90})$ .

Skipping pair  $p_{77}$  and  $p_{90}$  because gcd of their leading monoms is zero.

4754. Creating S-polynomial from the pair  $(p_{77}, p_{91})$ .

Skipping pair  $p_{77}$  and  $p_{91}$  because gcd of their leading monoms is zero.

4755. Creating S-polynomial from the pair  $(p_{77}, p_{92})$ .

Skipping pair  $p_{77}$  and  $p_{92}$  because gcd of their leading monoms is zero.

4756. Creating S-polynomial from the pair  $(p_{77}, p_{93})$ .  
 Skipping pair  $p_{77}$  and  $p_{93}$  because gcd of their leading monoms is zero.
4757. Creating S-polynomial from the pair  $(p_{77}, p_{94})$ .  
 Skipping pair  $p_{77}$  and  $p_{94}$  because gcd of their leading monoms is zero.
4758. Creating S-polynomial from the pair  $(p_{77}, p_{95})$ .  
 Skipping pair  $p_{77}$  and  $p_{95}$  because gcd of their leading monoms is zero.
4759. Creating S-polynomial from the pair  $(p_{77}, p_{96})$ .  
 Skipping pair  $p_{77}$  and  $p_{96}$  because gcd of their leading monoms is zero.
4760. Creating S-polynomial from the pair  $(p_{77}, p_{97})$ .  
 Skipping pair  $p_{77}$  and  $p_{97}$  because gcd of their leading monoms is zero.
4761. Creating S-polynomial from the pair  $(p_{77}, p_{98})$ .  
 Forming S-pol of  $p_{77}$  and  $p_{98}$ : Polynomial too big for output (text size is 2815 characters, number of terms is 31)  
 Reduced to zero.
4762. Creating S-polynomial from the pair  $(p_{77}, p_{99})$ .  
 Skipping pair  $p_{77}$  and  $p_{99}$  because gcd of their leading monoms is zero.
4763. Creating S-polynomial from the pair  $(p_{77}, p_{100})$ .  
 Forming S-pol of  $p_{77}$  and  $p_{100}$ :

$$\begin{aligned}
 p_{1072} = & 67108864u_5u_2^{23}u_1^{26}x_{12}x_{10}^2 + \\
 & (33554432u_5u_2^{24}u_1^{25} + 134217728u_5u_2^{22}u_1^{27} + 134217728u_2^{23}u_1^{27})x_{12}x_{10}x_4 + \\
 & (16777216u_5^2u_2^{25}u_1^{24} - 67108864u_5^2u_2^{23}u_1^{26})x_{12}x_{10} - \\
 & 67108864u_6u_2^{23}u_1^{26}x_{10}^3 - 67108864u_2^{23}u_1^{26}x_{10}^2x_5x_4 - \\
 & 33554432u_5u_2^{24}u_1^{25}x_{10}^2x_5 - 134217728u_6u_2^{22}u_1^{27}x_{10}^2x_4 - \\
 & 16777216u_6u_5u_2^{25}u_1^{24}x_{10}^2 - 33554432u_5u_2^{23}u_1^{25}x_{10}x_5x_4x_1 - \\
 & 16777216u_5u_2^{25}u_1^{24}x_{10}x_5x_4 - 8388608u_5^2u_2^{26}u_1^{23}x_{10}x_5 + \\
 & 33554432u_6u_2^{23}u_1^{25}x_{10}x_4^2x_1 + \\
 & (8388608u_6u_5u_2^{26}u_1^{23} + 33554432u_6u_2^{25}u_1^{25})x_{10}x_4 - \\
 & 16777216u_6u_5^2u_2^{25}u_1^{24}x_{10}
 \end{aligned}$$

Reduced to zero.

4764. Creating S-polynomial from the pair  $(p_{77}, p_{101})$ .  
 Forming S-pol of  $p_{77}$  and  $p_{101}$ :

$$\begin{aligned}
 p_{1073} = & 8192u_5u_2^{10}u_1^{13}x_{12}x_{10} - 1024u_5u_2^{13}u_1^{10}x_{12}x_4 - \\
 & 4096u_2^{11}u_1^{12}x_{10}^2x_5 - 8192u_6u_2^{10}u_1^{13}x_{10}^2 + 2048u_2^{12}u_1^{11}x_{10}x_5x_4 - \\
 & 2048u_5u_2^{11}u_1^{11}x_{10}x_5x_1 + 2048u_6u_2^{11}u_1^{11}x_{10}x_4x_1 + \\
 & 4096u_6u_2^{11}u_1^{12}x_{10}x_4 + 512u_5u_2^{14}u_1^9x_5x_4 - \\
 & 1024u_6u_2^{12}u_1^{10}x_4^2x_1 - 512u_6u_5u_2^{13}u_1^9x_4x_1
 \end{aligned}$$

Reduced to zero.

4765. Creating S-polynomial from the pair  $(p_{77}, p_{102})$ .

Forming S-pol of  $p_{77}$  and  $p_{102}$ :

$$\begin{aligned} p_{1074} = & -16384u_5u_2^{21}u_1^{14}x_{12}x_4 - 65536u_2^{19}u_1^{16}x_{10}^2x_5 + \\ & (262144u_2^{16}u_1^{18} - 131072u_2^{16}u_1^{17})x_{10}x_5x_4x_1 + \\ & (32768u_2^{20}u_1^{15} - 131072u_2^{18}u_1^{17})x_{10}x_5x_4 - 32768u_5u_2^{19}u_1^{15}x_{10}x_5x_1 + \\ & 65536u_5u_2^{19}u_1^{16}x_{10}x_5 + \\ & (32768u_6u_2^{19}u_1^{15} + 131072u_6u_2^{17}u_1^{17})x_{10}x_4x_1 - \\ & 131072u_6u_2^{17}u_1^{17}x_{10}x_4 + 8192u_5u_2^{22}u_1^{13}x_5x_4 - \\ & 16384u_6u_2^{20}u_1^{14}x_4^2x_1 - 8192u_6u_5u_2^{21}u_1^{13}x_4x_1 \end{aligned}$$

S-pol added.

4766. Creating S-polynomial from the pair  $(p_{77}, p_{103})$ .

Forming S-pol of  $p_{77}$  and  $p_{103}$ : Polynomial too big for output (text size is 2831 characters, number of terms is 31)

Reduced to zero.

4767. Creating S-polynomial from the pair  $(p_{77}, p_{104})$ .

Skipping pair  $p_{77}$  and  $p_{104}$  because gcd of their leading monoms is zero.

4768. Creating S-polynomial from the pair  $(p_{77}, p_{105})$ .

Skipping pair  $p_{77}$  and  $p_{105}$  because gcd of their leading monoms is zero.

4769. Creating S-polynomial from the pair  $(p_{77}, p_{106})$ .

Skipping pair  $p_{77}$  and  $p_{106}$  because gcd of their leading monoms is zero.

4770. Creating S-polynomial from the pair  $(p_{78}, p_{79})$ .

Forming S-pol of  $p_{78}$  and  $p_{79}$ :

$$\begin{aligned} p_{1075} = & (65536u_2^{21}u_1^{16} - 131072u_2^{19}u_1^{17})x_{12}x_4^2 + \\ & (131072u_5u_2^{20}u_1^{17} - 262144u_5u_2^{18}u_1^{18})x_{12}x_4 - 131072u_2^{20}u_1^{17}x_{10}^2x_5 + \\ & (524288u_2^{17}u_1^{19} - 262144u_2^{17}u_1^{18})x_{10}x_5x_4x_1 + \\ & (-262144u_2^{19}u_1^{18} + 131072u_2^{19}u_1^{17})x_{10}x_5x_4 - 65536u_5u_2^{20}u_1^{16}x_{10}x_5x_1 + \\ & 131072u_5u_2^{20}u_1^{17}x_{10}x_5 + \\ & (65536u_6u_2^{20}u_1^{16} + 262144u_6u_2^{18}u_1^{18} - 131072u_6u_2^{18}u_1^{17})x_{10}x_4x_1 + \\ & (-32768u_6u_2^{22}u_1^{15} - 131072u_6u_2^{20}u_1^{17} + 65536u_6u_2^{20}u_1^{16})x_{10}x_4 + \\ & (-32768u_5u_2^{21}u_1^{15} + 65536u_5u_2^{19}u_1^{16})x_5x_4x_1 + \\ & (16384u_6u_2^{23}u_1^{14} - 32768u_6u_2^{21}u_1^{15})x_4^2 + \\ & (-16384u_6u_5u_2^{22}u_1^{14} + 32768u_6u_5u_2^{20}u_1^{15})x_4x_1 \end{aligned}$$

S-pol added.

4771. Creating S-polynomial from the pair  $(p_{78}, p_{80})$ .

Forming S-pol of  $p_{78}$  and  $p_{80}$ :

$$\begin{aligned} p_{1076} = & -1024u_2^{13}u_1^{10}x_{12}x_4 - 2048u_5u_2^{12}u_1^{11}x_{12} + 1024u_2^{13}u_1^{10}x_{10}x_5 - \\ & 1024u_6u_2^{12}u_1^{10}x_{10}x_1 + \\ & (512u_6u_2^{14}u_1^9 + 2048u_6u_2^{12}u_1^{11})x_{10} + 512u_5u_2^{13}u_1^9x_5x_1 - \\ & 256u_6u_2^{15}u_1^8x_4 + 256u_6u_5u_2^{14}u_1^8x_1 \end{aligned}$$

Reduced to zero.

4772. Creating S-polynomial from the pair  $(p_{78}, p_{81})$ .

Skipping pair  $p_{78}$  and  $p_{81}$  because gcd of their leading monoms is zero.

4773. Creating S-polynomial from the pair  $(p_{78}, p_{82})$ .

Skipping pair  $p_{78}$  and  $p_{82}$  because gcd of their leading monoms is zero.

4774. Creating S-polynomial from the pair  $(p_{78}, p_{83})$ .

Skipping pair  $p_{78}$  and  $p_{83}$  because gcd of their leading monoms is zero.

4775. Creating S-polynomial from the pair  $(p_{78}, p_{84})$ .

Skipping pair  $p_{78}$  and  $p_{84}$  because gcd of their leading monoms is zero.

4776. Creating S-polynomial from the pair  $(p_{78}, p_{85})$ .

Skipping pair  $p_{78}$  and  $p_{85}$  because gcd of their leading monoms is zero.

4777. Creating S-polynomial from the pair  $(p_{78}, p_{86})$ .

Skipping pair  $p_{78}$  and  $p_{86}$  because gcd of their leading monoms is zero.

4778. Creating S-polynomial from the pair  $(p_{78}, p_{87})$ .

Skipping pair  $p_{78}$  and  $p_{87}$  because gcd of their leading monoms is zero.

4779. Creating S-polynomial from the pair  $(p_{78}, p_{88})$ .

Skipping pair  $p_{78}$  and  $p_{88}$  because gcd of their leading monoms is zero.

4780. Creating S-polynomial from the pair  $(p_{78}, p_{89})$ .

Skipping pair  $p_{78}$  and  $p_{89}$  because gcd of their leading monoms is zero.

4781. Creating S-polynomial from the pair  $(p_{78}, p_{90})$ .

Skipping pair  $p_{78}$  and  $p_{90}$  because gcd of their leading monoms is zero.

4782. Creating S-polynomial from the pair  $(p_{78}, p_{91})$ .

Skipping pair  $p_{78}$  and  $p_{91}$  because gcd of their leading monoms is zero.

4783. Creating S-polynomial from the pair  $(p_{78}, p_{92})$ .

Skipping pair  $p_{78}$  and  $p_{92}$  because gcd of their leading monoms is zero.

4784. Creating S-polynomial from the pair  $(p_{78}, p_{93})$ .

Skipping pair  $p_{78}$  and  $p_{93}$  because gcd of their leading monoms is zero.



4785. Creating S-polynomial from the pair  $(p_{78}, p_{94})$ .  
 Skipping pair  $p_{78}$  and  $p_{94}$  because gcd of their leading monoms is zero.
4786. Creating S-polynomial from the pair  $(p_{78}, p_{95})$ .  
 Skipping pair  $p_{78}$  and  $p_{95}$  because gcd of their leading monoms is zero.
4787. Creating S-polynomial from the pair  $(p_{78}, p_{96})$ .  
 Skipping pair  $p_{78}$  and  $p_{96}$  because gcd of their leading monoms is zero.
4788. Creating S-polynomial from the pair  $(p_{78}, p_{97})$ .  
 Skipping pair  $p_{78}$  and  $p_{97}$  because gcd of their leading monoms is zero.
4789. Creating S-polynomial from the pair  $(p_{78}, p_{98})$ .  
 Forming S-pol of  $p_{78}$  and  $p_{98}$ : Polynomial too big for output (text size is 3060 characters, number of terms is 33)  
 Reduced to zero.
4790. Creating S-polynomial from the pair  $(p_{78}, p_{99})$ .  
 Skipping pair  $p_{78}$  and  $p_{99}$  because gcd of their leading monoms is zero.
4791. Creating S-polynomial from the pair  $(p_{78}, p_{100})$ .  
 Forming S-pol of  $p_{78}$  and  $p_{100}$ :

$$\begin{aligned}
 p_{1077} = & 67108864u_5u_2^{23}u_1^{26}x_{12}x_{10}^2 - 67108864u_2^{23}u_1^{26}x_{12}x_{10}x_4^2 + \\
 & 134217728u_2^{23}u_1^{27}x_{12}x_{10}x_4 + \\
 & (16777216u_5^2u_2^{25}u_1^{24} - 67108864u_5^2u_2^{23}u_1^{26})x_{12}x_{10} - \\
 & 67108864u_6u_2^{23}u_1^{26}x_{10}^3 - 33554432u_5u_2^{24}u_1^{25}x_{10}^2x_5 + \\
 & 33554432u_6u_2^{24}u_1^{25}x_{10}^2x_4 - 16777216u_6u_5u_2^{25}u_1^{24}x_{10}^2 - \\
 & 8388608u_5^2u_2^{26}u_1^{23}x_{10}x_5 - 16777216u_6u_2^{25}u_1^{24}x_{10}x_4^2 + \\
 & (8388608u_6u_5u_2^{26}u_1^{23} + 33554432u_6u_2^{25}u_1^{25})x_{10}x_4 - \\
 & 16777216u_6u_5^2u_2^{25}u_1^{24}x_{10}
 \end{aligned}$$

Reduced to zero.

4792. Creating S-polynomial from the pair  $(p_{78}, p_{101})$ .  
 Forming S-pol of  $p_{78}$  and  $p_{101}$ :

$$\begin{aligned}
 p_{1078} = & 8192u_5u_2^{10}u_1^{13}x_{12}x_{10} + 2048u_2^{12}u_1^{11}x_{12}x_4^2 + \\
 & 4096u_5u_2^{11}u_1^{12}x_{12}x_4 - 4096u_2^{11}u_1^{12}x_{10}^2x_5 - 8192u_6u_2^{10}u_1^{13}x_{10}^2 - \\
 & 2048u_5u_2^{11}u_1^{11}x_{10}x_5x_1 + 2048u_6u_2^{11}u_1^{11}x_{10}x_4x_1 - \\
 & 1024u_6u_2^{13}u_1^{10}x_{10}x_4 - 1024u_5u_2^{12}u_1^{10}x_5x_4x_1 + \\
 & 512u_6u_2^{14}u_1^9x_4^2 - 512u_6u_5u_2^{13}u_1^9x_4x_1
 \end{aligned}$$

Reduced to zero.

4793. Creating S-polynomial from the pair  $(p_{78}, p_{102})$ .

Forming S-pol of  $p_{78}$  and  $p_{102}$ :

$$\begin{aligned} p_{1079} = & 32768u_2^{20}u_1^{15}x_{12}x_4^2 + 65536u_5u_2^{19}u_1^{16}x_{12}x_4 - \\ & 65536u_2^{19}u_1^{16}x_{10}^2x_5 + \\ & (262144u_2^{16}u_1^{18} - 131072u_2^{16}u_1^{17})x_{10}x_5x_4x_1 - 131072u_2^{18}u_1^{17}x_{10}x_5x_4 - \\ & 32768u_5u_2^{19}u_1^{15}x_{10}x_5x_1 + 65536u_5u_2^{19}u_1^{16}x_{10}x_5 + \\ & (32768u_6u_2^{19}u_1^{15} + 131072u_6u_2^{17}u_1^{17})x_{10}x_4x_1 + \\ & (-16384u_6u_2^{21}u_1^{14} - 65536u_6u_2^{19}u_1^{16} - 131072u_6u_2^{17}u_1^{17})x_{10}x_4 - \\ & 16384u_5u_2^{20}u_1^{14}x_5x_4x_1 + 8192u_6u_2^{22}u_1^{13}x_4^2 - \\ & 8192u_6u_5u_2^{21}u_1^{13}x_4x_1 \end{aligned}$$

S-pol added.

4794. Creating S-polynomial from the pair  $(p_{78}, p_{103})$ .

Forming S-pol of  $p_{78}$  and  $p_{103}$ : Polynomial too big for output (text size is 3078 characters, number of terms is 33)

Reduced to zero.

4795. Creating S-polynomial from the pair  $(p_{78}, p_{104})$ .

Skipping pair  $p_{78}$  and  $p_{104}$  because gcd of their leading monoms is zero.

4796. Creating S-polynomial from the pair  $(p_{78}, p_{105})$ .

Skipping pair  $p_{78}$  and  $p_{105}$  because gcd of their leading monoms is zero.

4797. Creating S-polynomial from the pair  $(p_{78}, p_{106})$ .

Skipping pair  $p_{78}$  and  $p_{106}$  because gcd of their leading monoms is zero.

4798. Creating S-polynomial from the pair  $(p_{79}, p_{80})$ .

Forming S-pol of  $p_{79}$  and  $p_{80}$ :

$$\begin{aligned} p_{1080} = & 4096u_2^{20}u_1^{12}x_{10}x_5 + (-16384u_2^{17}u_1^{14} + 8192u_2^{17}u_1^{13})x_5x_4x_1 + \\ & (-2048u_2^{21}u_1^{11} + 8192u_2^{19}u_1^{13})x_5x_4 + 2048u_5u_2^{20}u_1^{11}x_5x_1 - \\ & 4096u_5u_2^{20}u_1^{12}x_5 - 8192u_6u_2^{18}u_1^{13}x_4x_1 + 8192u_6u_2^{18}u_1^{13}x_4 \end{aligned}$$

S-pol added.

4799. Creating S-polynomial from the pair  $(p_{79}, p_{81})$ .

Skipping pair  $p_{79}$  and  $p_{81}$  because gcd of their leading monoms is zero.

4800. Creating S-polynomial from the pair  $(p_{79}, p_{82})$ .

Skipping pair  $p_{79}$  and  $p_{82}$  because gcd of their leading monoms is zero.

4801. Creating S-polynomial from the pair  $(p_{79}, p_{83})$ .

Skipping pair  $p_{79}$  and  $p_{83}$  because gcd of their leading monoms is zero.

4802. Creating S-polynomial from the pair  $(p_{79}, p_{84})$ .  
 Skipping pair  $p_{79}$  and  $p_{84}$  because gcd of their leading monoms is zero.
4803. Creating S-polynomial from the pair  $(p_{79}, p_{85})$ .  
 Skipping pair  $p_{79}$  and  $p_{85}$  because gcd of their leading monoms is zero.
4804. Creating S-polynomial from the pair  $(p_{79}, p_{86})$ .  
 Forming S-pol of  $p_{79}$  and  $p_{86}$ : Polynomial too big for output (text size is 2001 characters, number of terms is 14)  
 S-pol added.
4805. Creating S-polynomial from the pair  $(p_{79}, p_{87})$ .  
 Skipping pair  $p_{79}$  and  $p_{87}$  because gcd of their leading monoms is zero.
4806. Creating S-polynomial from the pair  $(p_{79}, p_{88})$ .  
 Skipping pair  $p_{79}$  and  $p_{88}$  because gcd of their leading monoms is zero.
4807. Creating S-polynomial from the pair  $(p_{79}, p_{89})$ .  
 Skipping pair  $p_{79}$  and  $p_{89}$  because gcd of their leading monoms is zero.
4808. Creating S-polynomial from the pair  $(p_{79}, p_{90})$ .  
 Skipping pair  $p_{79}$  and  $p_{90}$  because gcd of their leading monoms is zero.
4809. Creating S-polynomial from the pair  $(p_{79}, p_{91})$ .  
 Skipping pair  $p_{79}$  and  $p_{91}$  because gcd of their leading monoms is zero.
4810. Creating S-polynomial from the pair  $(p_{79}, p_{92})$ .  
 Skipping pair  $p_{79}$  and  $p_{92}$  because gcd of their leading monoms is zero.
4811. Creating S-polynomial from the pair  $(p_{79}, p_{93})$ .  
 Forming S-pol of  $p_{79}$  and  $p_{93}$ : Polynomial too big for output (text size is 2009 characters, number of terms is 14)  
 S-pol added.
4812. Creating S-polynomial from the pair  $(p_{79}, p_{94})$ .  
 Skipping pair  $p_{79}$  and  $p_{94}$  because gcd of their leading monoms is zero.
4813. Creating S-polynomial from the pair  $(p_{79}, p_{95})$ .  
 Forming S-pol of  $p_{79}$  and  $p_{95}$ : Polynomial too big for output (text size is 2098 characters, number of terms is 18)  
 S-pol added.
4814. Creating S-polynomial from the pair  $(p_{79}, p_{96})$ .  
 Forming S-pol of  $p_{79}$  and  $p_{96}$ :

$$\begin{aligned}
 p_{1081} = & (-16384u_5u_3^4u_2^{14}u_1^{14} + 32768u_5u_3^4u_2^{12}u_1^{15})x_{12}x_8 + \\
 & (8192u_3^5u_2^{14}u_1^{13} - 16384u_3^5u_2^{12}u_1^{14})x_{12}x_6x_5 + \\
 & (16384u_6u_3^4u_2^{14}u_1^{14} - 32768u_6u_3^4u_2^{12}u_1^{15})x_{12}x_6 +
 \end{aligned}$$

$$\begin{aligned}
& (4096u_5u_3^5u_2^{14}u_1^{12} - 8192u_5u_3^5u_2^{12}u_1^{13})x_{12}x_5x_2 + \\
& (-4096u_6u_3^5u_2^{14}u_1^{12} + 8192u_6u_3^5u_2^{12}u_1^{13})x_{12}x_4x_2 - \\
& 8192u_3^5u_2^{14}u_1^{13}x_{10}x_8x_5 + \\
& (32768u_3^5u_2^{11}u_1^{15} - 16384u_3^5u_2^{11}u_1^{14})x_8x_5x_4x_1 + \\
& (-16384u_3^5u_2^{13}u_1^{14} + 8192u_3^5u_2^{13}u_1^{13})x_8x_5x_4 - \\
& 4096u_5u_3^5u_2^{14}u_1^{12}x_8x_5x_1 + 8192u_5u_3^5u_2^{14}u_1^{13}x_8x_5 + \\
& (4096u_6u_3^5u_2^{14}u_1^{12} + 16384u_6u_3^5u_2^{12}u_1^{14} - \\
& 8192u_6u_3^5u_2^{12}u_1^{13})x_8x_4x_1 - 8192u_6u_3^5u_2^{14}u_1^{13}x_8x_4
\end{aligned}$$

S-pol added.

4815. Creating S-polynomial from the pair  $(p_{79}, p_{97})$ .

Forming S-pol of  $p_{79}$  and  $p_{97}$ : Polynomial too big for output (text size is 1466 characters, number of terms is 14)

S-pol added.

4816. Creating S-polynomial from the pair  $(p_{79}, p_{98})$ .

Forming S-pol of  $p_{79}$  and  $p_{98}$ : Polynomial too big for output (text size is 4926 characters, number of terms is 31)

S-pol added.

4817. Creating S-polynomial from the pair  $(p_{79}, p_{99})$ .

Skipping pair  $p_{79}$  and  $p_{99}$  because gcd of their leading monoms is zero.

4818. Creating S-polynomial from the pair  $(p_{79}, p_{100})$ .

Forming S-pol of  $p_{79}$  and  $p_{100}$ : Polynomial too big for output (text size is 1641 characters, number of terms is 16)

S-pol added.

4819. Creating S-polynomial from the pair  $(p_{79}, p_{101})$ .

Forming S-pol of  $p_{79}$  and  $p_{101}$ :

$$\begin{aligned}
p_{1082} = & (-16384u_5u_2^{18}u_1^{14} + 32768u_5u_2^{16}u_1^{15})x_{12}x_4 - 16384u_2^{17}u_1^{14}x_{10}x_5x_4 + \\
& (16384u_6u_2^{18}u_1^{14} - 32768u_6u_2^{16}u_1^{15})x_{10}x_4 + \\
& (32768u_2^{16}u_1^{15} - 16384u_2^{16}u_1^{14})x_5x_4^2x_1 + \\
& (-16384u_2^{18}u_1^{14} + 8192u_2^{18}u_1^{13})x_5x_4^2 - 8192u_5u_2^{17}u_1^{13}x_5x_4x_1 + \\
& 8192u_5u_2^{19}u_1^{13}x_5x_4 + 16384u_6u_2^{17}u_1^{14}x_4^2x_1 - \\
& 8192u_6u_2^{19}u_1^{13}x_4^2
\end{aligned}$$

S-pol added.

4820. Creating S-polynomial from the pair  $(p_{79}, p_{102})$ .

Forming S-pol of  $p_{79}$  and  $p_{102}$ :

$$\begin{aligned} p_{1083} = & -262144u_2^{25}u_1^{18}x_{10}x_5x_4 + (1048576u_2^{22}u_1^{20} - 524288u_2^{22}u_1^{19})x_5x_4^2x_1 + \\ & (131072u_2^{26}u_1^{17} - 524288u_2^{24}u_1^{19})x_5x_4^2 - 131072u_5u_2^{25}u_1^{17}x_5x_4x_1 + \\ & 262144u_5u_2^{25}u_1^{18}x_5x_4 + 524288u_6u_2^{23}u_1^{19}x_4^2x_1 - \\ & 524288u_6u_2^{23}u_1^{19}x_4^2 \end{aligned}$$

S-pol added.

4821. Creating S-polynomial from the pair  $(p_{79}, p_{103})$ .

Forming S-pol of  $p_{79}$  and  $p_{103}$ : Polynomial too big for output (text size is 4936 characters, number of terms is 31)

S-pol added.

4822. Creating S-polynomial from the pair  $(p_{79}, p_{104})$ .

Forming S-pol of  $p_{79}$  and  $p_{104}$ : Polynomial too big for output (text size is 2119 characters, number of terms is 18)

S-pol added.

4823. Creating S-polynomial from the pair  $(p_{79}, p_{105})$ .

Forming S-pol of  $p_{79}$  and  $p_{105}$ :

$$\begin{aligned} p_{1084} = & (-16384u_5u_4^4u_2^{14}u_1^{14} + 32768u_5u_4^4u_2^{12}u_1^{15})x_{16}x_{12} - \\ & 8192u_4^5u_2^{14}u_1^{13}x_{16}x_{10}x_5 + \\ & (32768u_4^5u_2^{11}u_1^{15} - 16384u_4^5u_2^{11}u_1^{14})x_{16}x_5x_4x_1 + \\ & (-16384u_4^5u_2^{13}u_1^{14} + 8192u_4^5u_2^{13}u_1^{13})x_{16}x_5x_4 - \\ & 4096u_5u_4^5u_2^{14}u_1^{12}x_{16}x_5x_1 + 8192u_5u_4^5u_2^{14}u_1^{13}x_{16}x_5 + \\ & (4096u_6u_4^5u_2^{14}u_1^{12} + 16384u_6u_4^5u_2^{12}u_1^{14} - \\ & 8192u_6u_4^5u_2^{12}u_1^{13})x_{16}x_4x_1 - 8192u_6u_4^5u_2^{14}u_1^{13}x_{16}x_4 + \\ & (8192u_4^5u_2^{14}u_1^{13} - 16384u_4^5u_2^{12}u_1^{14})x_{14}x_{12}x_5 + \\ & (16384u_6u_4^4u_2^{14}u_1^{14} - 32768u_6u_4^4u_2^{12}u_1^{15})x_{14}x_{12} + \\ & (4096u_5u_4^5u_2^{14}u_1^{12} - 8192u_5u_4^5u_2^{12}u_1^{13})x_{12}x_5x_3 + \\ & (-4096u_6u_4^5u_2^{14}u_1^{12} + 8192u_6u_4^5u_2^{12}u_1^{13})x_{12}x_4x_3 \end{aligned}$$

S-pol added.

4824. Creating S-polynomial from the pair  $(p_{79}, p_{106})$ .

Forming S-pol of  $p_{79}$  and  $p_{106}$ : Polynomial too big for output (text size is 1475 characters, number of terms is 14)

S-pol added.

4825. Creating S-polynomial from the pair  $(p_{80}, p_{81})$ .

Skipping pair  $p_{80}$  and  $p_{81}$  because gcd of their leading monoms is zero.

4826. Creating S-polynomial from the pair  $(p_{80}, p_{82})$ .  
 Skipping pair  $p_{80}$  and  $p_{82}$  because gcd of their leading monoms is zero.
4827. Creating S-polynomial from the pair  $(p_{80}, p_{83})$ .  
 Skipping pair  $p_{80}$  and  $p_{83}$  because gcd of their leading monoms is zero.
4828. Creating S-polynomial from the pair  $(p_{80}, p_{84})$ .  
 Skipping pair  $p_{80}$  and  $p_{84}$  because gcd of their leading monoms is zero.
4829. Creating S-polynomial from the pair  $(p_{80}, p_{85})$ .  
 Skipping pair  $p_{80}$  and  $p_{85}$  because gcd of their leading monoms is zero.
4830. Creating S-polynomial from the pair  $(p_{80}, p_{86})$ .  
 Skipping pair  $p_{80}$  and  $p_{86}$  because gcd of their leading monoms is zero.
4831. Creating S-polynomial from the pair  $(p_{80}, p_{87})$ .  
 Skipping pair  $p_{80}$  and  $p_{87}$  because gcd of their leading monoms is zero.
4832. Creating S-polynomial from the pair  $(p_{80}, p_{88})$ .  
 Skipping pair  $p_{80}$  and  $p_{88}$  because gcd of their leading monoms is zero.
4833. Creating S-polynomial from the pair  $(p_{80}, p_{89})$ .  
 Skipping pair  $p_{80}$  and  $p_{89}$  because gcd of their leading monoms is zero.
4834. Creating S-polynomial from the pair  $(p_{80}, p_{90})$ .  
 Skipping pair  $p_{80}$  and  $p_{90}$  because gcd of their leading monoms is zero.
4835. Creating S-polynomial from the pair  $(p_{80}, p_{91})$ .  
 Skipping pair  $p_{80}$  and  $p_{91}$  because gcd of their leading monoms is zero.
4836. Creating S-polynomial from the pair  $(p_{80}, p_{92})$ .  
 Skipping pair  $p_{80}$  and  $p_{92}$  because gcd of their leading monoms is zero.
4837. Creating S-polynomial from the pair  $(p_{80}, p_{93})$ .  
 Skipping pair  $p_{80}$  and  $p_{93}$  because gcd of their leading monoms is zero.
4838. Creating S-polynomial from the pair  $(p_{80}, p_{94})$ .  
 Skipping pair  $p_{80}$  and  $p_{94}$  because gcd of their leading monoms is zero.
4839. Creating S-polynomial from the pair  $(p_{80}, p_{95})$ .  
 Skipping pair  $p_{80}$  and  $p_{95}$  because gcd of their leading monoms is zero.
4840. Creating S-polynomial from the pair  $(p_{80}, p_{96})$ .  
 Skipping pair  $p_{80}$  and  $p_{96}$  because gcd of their leading monoms is zero.
4841. Creating S-polynomial from the pair  $(p_{80}, p_{97})$ .  
 Skipping pair  $p_{80}$  and  $p_{97}$  because gcd of their leading monoms is zero.

4842. Creating S-polynomial from the pair  $(p_{80}, p_{98})$ .

Forming S-pol of  $p_{80}$  and  $p_{98}$ : Polynomial too big for output (text size is 2104 characters, number of terms is 27)

Reduced to zero.

4843. Creating S-polynomial from the pair  $(p_{80}, p_{99})$ .

Skipping pair  $p_{80}$  and  $p_{99}$  because gcd of their leading monoms is zero.

4844. Creating S-polynomial from the pair  $(p_{80}, p_{100})$ .

Forming S-pol of  $p_{80}$  and  $p_{100}$ :

$$\begin{aligned} p_{1085} = & 2097152u_5u_2^{23}u_1^{21}x_{12}x_{10} + (4194304u_5u_2^{22}u_1^{22} + 4194304u_2^{23}u_1^{22})x_{12}x_4 + \\ & (524288u_5^2u_2^{25}u_1^{19} - 2097152u_5^2u_2^{23}u_1^{21})x_{12} - \\ & 2097152u_6u_2^{23}u_1^{21}x_{10}^2 - 2097152u_2^{23}u_1^{21}x_{10}x_5x_4 - \\ & 1048576u_5u_2^{24}u_1^{20}x_{10}x_5 + 2097152u_6u_2^{22}u_1^{21}x_{10}x_4x_1 - \\ & 4194304u_6u_2^{22}u_1^{22}x_{10}x_4 - 524288u_6u_5u_2^{25}u_1^{19}x_{10} - \\ & 1048576u_5u_2^{23}u_1^{20}x_5x_4x_1 - 262144u_5^2u_2^{26}u_1^{18}x_5 - \\ & 524288u_6u_5u_2^{24}u_1^{19}x_4x_1 + \\ & (262144u_6u_5u_2^{26}u_1^{18} + 1048576u_6u_2^{25}u_1^{20})x_4 - 524288u_6u_5^2u_2^{25}u_1^{19} \end{aligned}$$

Reduced to zero.

4845. Creating S-polynomial from the pair  $(p_{80}, p_{101})$ .

Forming S-pol of  $p_{80}$  and  $p_{101}$ :

$$\begin{aligned} p_{1086} = & 256u_5u_2^{10}u_1^8x_{12} - 128u_2^{11}u_1^7x_{10}x_5 - 256u_6u_2^{10}u_1^8x_{10} + \\ & 64u_2^{12}u_1^6x_5x_4 - 64u_5u_2^{11}u_1^6x_5x_1 + 128u_6u_2^{11}u_1^7x_4 \end{aligned}$$

Reduced to zero.

4846. Creating S-polynomial from the pair  $(p_{80}, p_{102})$ .

Forming S-pol of  $p_{80}$  and  $p_{102}$ :

$$\begin{aligned} p_{1087} = & -2048u_2^{19}u_1^{11}x_{10}x_5 + (8192u_2^{16}u_1^{13} - 4096u_2^{16}u_1^{12})x_5x_4x_1 + \\ & (1024u_2^{20}u_1^{10} - 4096u_2^{18}u_1^{12})x_5x_4 - 1024u_5u_2^{19}u_1^{10}x_5x_1 + \\ & 2048u_5u_2^{19}u_1^{11}x_5 + 4096u_6u_2^{17}u_1^{12}x_4x_1 - 4096u_6u_2^{17}u_1^{12}x_4 \end{aligned}$$

S-pol added.

4847. Creating S-polynomial from the pair  $(p_{80}, p_{103})$ .

Forming S-pol of  $p_{80}$  and  $p_{103}$ : Polynomial too big for output (text size is 2114 characters, number of terms is 27)

Reduced to zero.

4848. Creating S-polynomial from the pair  $(p_{80}, p_{104})$ .

Skipping pair  $p_{80}$  and  $p_{104}$  because gcd of their leading monoms is zero.

4849. Creating S-polynomial from the pair  $(p_{80}, p_{105})$ .

Skipping pair  $p_{80}$  and  $p_{105}$  because gcd of their leading monoms is zero.

4850. Creating S-polynomial from the pair  $(p_{80}, p_{106})$ .

Skipping pair  $p_{80}$  and  $p_{106}$  because gcd of their leading monoms is zero.

4851. Creating S-polynomial from the pair  $(p_{81}, p_{82})$ .

Skipping pair  $p_{81}$  and  $p_{82}$  because gcd of their leading monoms is zero.

4852. Creating S-polynomial from the pair  $(p_{81}, p_{83})$ .

Forming S-pol of  $p_{81}$  and  $p_{83}$ :

$$\begin{aligned} p_{1088} = & 134217728u_5^2u_3^{29}u_1^{27}x_8x_4 + 67108864u_5^3u_3^{30}u_1^{26}x_8 - \\ & 134217728u_6u_5u_3^{29}u_1^{27}x_6x_4 - 67108864u_6u_5^2u_3^{30}u_1^{26}x_6 - \\ & 67108864u_5^2u_3^{30}u_1^{26}x_5x_4 - 33554432u_5^3u_3^{31}u_1^{25}x_5 + \\ & (33554432u_6u_5^2u_3^{31}u_1^{25} + 134217728u_6u_5u_3^{30}u_1^{27})x_4 - \\ & 67108864u_6u_5^3u_3^{30}u_1^{26} \end{aligned}$$

Reduced to zero.

4853. Creating S-polynomial from the pair  $(p_{81}, p_{84})$ .

Forming S-pol of  $p_{81}$  and  $p_{84}$ :

$$\begin{aligned} p_{1089} = & 32768u_5^2u_3^{18}u_1^{15}x_8 + 131072u_6u_3^{16}u_1^{17}x_6^2 - \\ & 65536u_6u_3^{17}u_1^{16}x_6x_4 - 131072u_6u_5u_3^{16}u_1^{17}x_6 - \\ & 16384u_5^2u_3^{19}u_1^{14}x_5 + 32768u_6u_5u_3^{17}u_1^{15}x_4x_2 + \\ & 16384u_6u_5^2u_3^{18}u_1^{14}x_2 \end{aligned}$$

Reduced to zero.

4854. Creating S-polynomial from the pair  $(p_{81}, p_{85})$ .

Forming S-pol of  $p_{81}$  and  $p_{85}$ :

$$\begin{aligned} p_{1090} = & -65536u_5u_3^{17}u_1^{16}x_8x_4 - 131072u_5^2u_3^{16}u_1^{17}x_8 + \\ & 131072u_6u_3^{16}u_1^{17}x_6^2 + 65536u_5u_3^{17}u_1^{16}x_6x_5 - \\ & 65536u_6u_3^{17}u_1^{16}x_6x_4 + 32768u_6u_5u_3^{18}u_1^{15}x_6 + \\ & 32768u_5^2u_3^{17}u_1^{15}x_5x_2 - 16384u_6u_5u_3^{19}u_1^{14}x_4 + \\ & 16384u_6u_5^2u_3^{18}u_1^{14}x_2 \end{aligned}$$

Reduced to zero.



4855. Creating S-polynomial from the pair  $(p_{81}, p_{86})$ .

Forming S-pol of  $p_{81}$  and  $p_{86}$ :

$$\begin{aligned} p_{1091} = & 262144u_5u_3^{24}u_1^{18}x_6x_5 + (-262144u_6u_3^{24}u_1^{18} + 524288u_6u_3^{22}u_1^{19})x_6x_4 + \\ & (-1048576u_5u_3^{21}u_1^{20} + 524288u_5u_3^{21}u_1^{19})x_5x_4x_2 + \\ & (-131072u_5u_3^{25}u_1^{17} + 524288u_5u_3^{23}u_1^{19})x_5x_4 + \\ & 131072u_5^2u_3^{24}u_1^{17}x_5x_2 - 262144u_5^2u_3^{24}u_1^{18}x_5 + \\ & (131072u_6u_3^{25}u_1^{17} - 262144u_6u_3^{23}u_1^{18})x_4^2 + \\ & (-131072u_6u_5u_3^{24}u_1^{17} - 524288u_6u_5u_3^{22}u_1^{19} + \\ & 262144u_6u_5u_3^{22}u_1^{18})x_4x_2 + 262144u_6u_5u_3^{24}u_1^{18}x_4 \end{aligned}$$

S-pol added.

4856. Creating S-polynomial from the pair  $(p_{81}, p_{87})$ .

Forming S-pol of  $p_{81}$  and  $p_{87}$ :

$$\begin{aligned} p_{1092} = & 4096u_6u_3^{16}u_1^{12}x_6 - 2048u_6u_3^{17}u_1^{11}x_4 + 2048u_6u_5u_3^{16}u_1^{11}x_2 - \\ & 4096u_6u_5u_3^{16}u_1^{12} \end{aligned}$$

Reduced to zero.

4857. Creating S-polynomial from the pair  $(p_{81}, p_{88})$ .

Skipping pair  $p_{81}$  and  $p_{88}$  because gcd of their leading monoms is zero.

4858. Creating S-polynomial from the pair  $(p_{81}, p_{89})$ .

Skipping pair  $p_{81}$  and  $p_{89}$  because gcd of their leading monoms is zero.

4859. Creating S-polynomial from the pair  $(p_{81}, p_{90})$ .

Skipping pair  $p_{81}$  and  $p_{90}$  because gcd of their leading monoms is zero.

4860. Creating S-polynomial from the pair  $(p_{81}, p_{91})$ .

Skipping pair  $p_{81}$  and  $p_{91}$  because gcd of their leading monoms is zero.

4861. Creating S-polynomial from the pair  $(p_{81}, p_{92})$ .

Skipping pair  $p_{81}$  and  $p_{92}$  because gcd of their leading monoms is zero.

4862. Creating S-polynomial from the pair  $(p_{81}, p_{93})$ .

Skipping pair  $p_{81}$  and  $p_{93}$  because gcd of their leading monoms is zero.

4863. Creating S-polynomial from the pair  $(p_{81}, p_{94})$ .

Skipping pair  $p_{81}$  and  $p_{94}$  because gcd of their leading monoms is zero.

4864. Creating S-polynomial from the pair  $(p_{81}, p_{95})$ .

Forming S-pol of  $p_{81}$  and  $p_{95}$ :

$$\begin{aligned}
p_{1093} = & -134217728u_5^2u_3^{27}u_1^{27}x_8x_6 + \\
& (-268435456u_5^2u_3^{26}u_1^{28} - 268435456u_5u_3^{27}u_1^{28})x_8x_4 + \\
& (-33554432u_5^3u_3^{29}u_1^{25} + 134217728u_5^3u_3^{27}u_1^{27})x_8 + \\
& 268435456u_6u_3^{26}u_1^{28}x_6^2x_4 + 134217728u_6u_5u_3^{27}u_1^{27}x_6^2 + \\
& 134217728u_5u_3^{27}u_1^{27}x_6x_5x_4 + 67108864u_5^2u_3^{28}u_1^{26}x_6x_5 - \\
& 134217728u_6u_3^{27}u_1^{27}x_6x_4^2 + 33554432u_6u_5^2u_3^{29}u_1^{25}x_6 + \\
& 67108864u_5^2u_3^{27}u_1^{26}x_5x_4x_2 + 16777216u_5^3u_3^{30}u_1^{24}x_5 + \\
& 33554432u_6u_5^2u_3^{28}u_1^{25}x_4x_2 + \\
& (-16777216u_6u_5^2u_3^{30}u_1^{24} - 67108864u_6u_5u_3^{29}u_1^{26})x_4 + \\
& 33554432u_6u_5^3u_3^{29}u_1^{25}
\end{aligned}$$

Reduced to zero.

4865. Creating S-polynomial from the pair  $(p_{81}, p_{96})$ .

Forming S-pol of  $p_{81}$  and  $p_{96}$ :

$$\begin{aligned}
p_{1094} = & -16384u_5^2u_3^{14}u_1^{14}x_8 + 8192u_5u_3^{15}u_1^{13}x_6x_5 - 8192u_6u_3^{15}u_1^{13}x_6x_4 + \\
& 16384u_6u_5u_3^{14}u_1^{14}x_6 - 4096u_5u_3^{16}u_1^{12}x_5x_4 + \\
& 4096u_5^2u_3^{15}u_1^{12}x_5x_2 + 4096u_6u_3^{16}u_1^{12}x_4^2 - \\
& 4096u_6u_5u_3^{15}u_1^{12}x_4x_2
\end{aligned}$$

Reduced to zero.

4866. Creating S-polynomial from the pair  $(p_{81}, p_{97})$ .

Forming S-pol of  $p_{81}$  and  $p_{97}$ :

$$\begin{aligned}
p_{1095} = & 131072u_5u_3^{23}u_1^{17}x_6x_5 - 131072u_6u_3^{23}u_1^{17}x_6x_4 + \\
& (-524288u_5u_3^{20}u_1^{19} + 262144u_5u_3^{20}u_1^{18})x_5x_4x_2 + \\
& (-65536u_5u_3^{24}u_1^{16} + 262144u_5u_3^{22}u_1^{18})x_5x_4 + 65536u_5^2u_3^{23}u_1^{16}x_5x_2 - \\
& 131072u_5^2u_3^{23}u_1^{17}x_5 + 65536u_6u_3^{24}u_1^{16}x_4^2 + \\
& (-65536u_6u_5u_3^{23}u_1^{16} - 262144u_6u_5u_3^{21}u_1^{18})x_4x_2 + \\
& (131072u_6u_5u_3^{23}u_1^{17} + 262144u_6u_5u_3^{21}u_1^{18})x_4
\end{aligned}$$

S-pol added.

4867. Creating S-polynomial from the pair  $(p_{81}, p_{98})$ .

Forming S-pol of  $p_{81}$  and  $p_{98}$ : Polynomial too big for output (text size is 2178 characters, number of terms is 26)

Reduced to zero.

4868. Creating S-polynomial from the pair  $(p_{81}, p_{99})$ .  
 Forming S-pol of  $p_{81}$  and  $p_{99}$ : Polynomial too big for output (text size is 2176 characters, number of terms is 26)  
 Reduced to zero.
4869. Creating S-polynomial from the pair  $(p_{81}, p_{100})$ .  
 Skipping pair  $p_{81}$  and  $p_{100}$  because gcd of their leading monoms is zero.
4870. Creating S-polynomial from the pair  $(p_{81}, p_{101})$ .  
 Skipping pair  $p_{81}$  and  $p_{101}$  because gcd of their leading monoms is zero.
4871. Creating S-polynomial from the pair  $(p_{81}, p_{102})$ .  
 Skipping pair  $p_{81}$  and  $p_{102}$  because gcd of their leading monoms is zero.
4872. Creating S-polynomial from the pair  $(p_{81}, p_{103})$ .  
 Skipping pair  $p_{81}$  and  $p_{103}$  because gcd of their leading monoms is zero.
4873. Creating S-polynomial from the pair  $(p_{81}, p_{104})$ .  
 Skipping pair  $p_{81}$  and  $p_{104}$  because gcd of their leading monoms is zero.
4874. Creating S-polynomial from the pair  $(p_{81}, p_{105})$ .  
 Skipping pair  $p_{81}$  and  $p_{105}$  because gcd of their leading monoms is zero.
4875. Creating S-polynomial from the pair  $(p_{81}, p_{106})$ .  
 Skipping pair  $p_{81}$  and  $p_{106}$  because gcd of their leading monoms is zero.
4876. Creating S-polynomial from the pair  $(p_{82}, p_{83})$ .  
 Forming S-pol of  $p_{82}$  and  $p_{83}$ :

$$\begin{aligned}
 p_{1096} = & -4194304u_5u_3^{25}u_1^{21}x_8x_4 + 2097152u_5^2u_3^{24}u_1^{21}x_8x_2 + \\
 & (-1048576u_5^2u_3^{26}u_1^{20} - 4194304u_5^2u_3^{24}u_1^{22})x_8 + \\
 & 4194304u_6u_3^{24}u_1^{22}x_6^2 + 2097152u_5u_3^{25}u_1^{21}x_6x_5 + \\
 & 1048576u_6u_5u_3^{26}u_1^{20}x_6 + 1048576u_5u_3^{26}u_1^{20}x_5x_4 + \\
 & 524288u_5^2u_3^{27}u_1^{19}x_5 + \\
 & (-524288u_6u_5u_3^{27}u_1^{19} - 2097152u_6u_3^{26}u_1^{21})x_4 + 1048576u_6u_5^2u_3^{26}u_1^{20}
 \end{aligned}$$

Reduced to zero.

4877. Creating S-polynomial from the pair  $(p_{82}, p_{84})$ .  
 Forming S-pol of  $p_{82}$  and  $p_{84}$ :

$$\begin{aligned}
 p_{1097} = & -1024u_3^{13}u_1^{10}x_8x_4 + 1024u_5u_3^{12}u_1^{10}x_8x_2 + \\
 & (-512u_5u_3^{14}u_1^9 - 2048u_5u_3^{12}u_1^{11})x_8 + 1024u_3^{13}u_1^{10}x_6x_5 + \\
 & 2048u_6u_3^{12}u_1^{11}x_6 + 256u_5u_3^{15}u_1^8x_5 - 512u_6u_3^{13}u_1^9x_4x_2 - \\
 & 256u_6u_5u_3^{14}u_1^8x_2
 \end{aligned}$$

Reduced to zero.

4878. Creating S-polynomial from the pair  $(p_{82}, p_{85})$ .

Forming S-pol of  $p_{82}$  and  $p_{85}$ :

$$p_{1098} = 1024u_5u_3^{12}u_1^{10}x_8x_2 - 512u_6u_3^{14}u_1^9x_6 - 512u_5u_3^{13}u_1^9x_5x_2 + \\ 256u_6u_3^{15}u_1^8x_4 - 256u_6u_5u_3^{14}u_1^8x_2$$

Reduced to zero.

4879. Creating S-polynomial from the pair  $(p_{82}, p_{86})$ .

Skipping pair  $p_{82}$  and  $p_{86}$  because gcd of their leading monoms is zero.

4880. Creating S-polynomial from the pair  $(p_{82}, p_{87})$ .

Skipping pair  $p_{82}$  and  $p_{87}$  because gcd of their leading monoms is zero.

4881. Creating S-polynomial from the pair  $(p_{82}, p_{88})$ .

Skipping pair  $p_{82}$  and  $p_{88}$  because gcd of their leading monoms is zero.

4882. Creating S-polynomial from the pair  $(p_{82}, p_{89})$ .

Skipping pair  $p_{82}$  and  $p_{89}$  because gcd of their leading monoms is zero.

4883. Creating S-polynomial from the pair  $(p_{82}, p_{90})$ .

Skipping pair  $p_{82}$  and  $p_{90}$  because gcd of their leading monoms is zero.

4884. Creating S-polynomial from the pair  $(p_{82}, p_{91})$ .

Skipping pair  $p_{82}$  and  $p_{91}$  because gcd of their leading monoms is zero.

4885. Creating S-polynomial from the pair  $(p_{82}, p_{92})$ .

Skipping pair  $p_{82}$  and  $p_{92}$  because gcd of their leading monoms is zero.

4886. Creating S-polynomial from the pair  $(p_{82}, p_{93})$ .

Skipping pair  $p_{82}$  and  $p_{93}$  because gcd of their leading monoms is zero.

4887. Creating S-polynomial from the pair  $(p_{82}, p_{94})$ .

Skipping pair  $p_{82}$  and  $p_{94}$  because gcd of their leading monoms is zero.

4888. Creating S-polynomial from the pair  $(p_{82}, p_{95})$ .

Forming S-pol of  $p_{82}$  and  $p_{95}$ :

$$p_{1099} = 2097152u_5u_3^{23}u_1^{21}x_8x_6 - 2097152u_3^{23}u_1^{21}x_8x_4^2 + \\ 2097152u_5u_3^{22}u_1^{21}x_8x_4x_2 + 4194304u_3^{23}u_1^{22}x_8x_4 + \\ (524288u_5^2u_3^{25}u_1^{19} - 2097152u_5^2u_3^{23}u_1^{21})x_8 - 2097152u_6u_3^{23}u_1^{21}x_6^2 - \\ 1048576u_5u_3^{24}u_1^{20}x_6x_5 - 524288u_6u_5u_3^{25}u_1^{19}x_6 - \\ 1048576u_5u_3^{23}u_1^{20}x_5x_4x_2 - 262144u_5^2u_3^{26}u_1^{18}x_5 - \\ 524288u_6u_5u_3^{24}u_1^{19}x_4x_2 + \\ (262144u_6u_5u_3^{26}u_1^{18} + 1048576u_6u_3^{25}u_1^{20})x_4 - 524288u_6u_5^2u_3^{25}u_1^{19}$$

Reduced to zero.

4889. Creating S-polynomial from the pair  $(p_{82}, p_{96})$ .  
 Skipping pair  $p_{82}$  and  $p_{96}$  because gcd of their leading monoms is zero.
4890. Creating S-polynomial from the pair  $(p_{82}, p_{97})$ .  
 Skipping pair  $p_{82}$  and  $p_{97}$  because gcd of their leading monoms is zero.
4891. Creating S-polynomial from the pair  $(p_{82}, p_{98})$ .  
 Skipping pair  $p_{82}$  and  $p_{98}$  because gcd of their leading monoms is zero.
4892. Creating S-polynomial from the pair  $(p_{82}, p_{99})$ .  
 Skipping pair  $p_{82}$  and  $p_{99}$  because gcd of their leading monoms is zero.
4893. Creating S-polynomial from the pair  $(p_{82}, p_{100})$ .  
 Skipping pair  $p_{82}$  and  $p_{100}$  because gcd of their leading monoms is zero.
4894. Creating S-polynomial from the pair  $(p_{82}, p_{101})$ .  
 Skipping pair  $p_{82}$  and  $p_{101}$  because gcd of their leading monoms is zero.
4895. Creating S-polynomial from the pair  $(p_{82}, p_{102})$ .  
 Skipping pair  $p_{82}$  and  $p_{102}$  because gcd of their leading monoms is zero.
4896. Creating S-polynomial from the pair  $(p_{82}, p_{103})$ .  
 Skipping pair  $p_{82}$  and  $p_{103}$  because gcd of their leading monoms is zero.
4897. Creating S-polynomial from the pair  $(p_{82}, p_{104})$ .  
 Skipping pair  $p_{82}$  and  $p_{104}$  because gcd of their leading monoms is zero.
4898. Creating S-polynomial from the pair  $(p_{82}, p_{105})$ .  
 Skipping pair  $p_{82}$  and  $p_{105}$  because gcd of their leading monoms is zero.
4899. Creating S-polynomial from the pair  $(p_{82}, p_{106})$ .  
 Skipping pair  $p_{82}$  and  $p_{106}$  because gcd of their leading monoms is zero.
4900. Creating S-polynomial from the pair  $(p_{83}, p_{84})$ .  
 Forming S-pol of  $p_{83}$  and  $p_{84}$ :

$$\begin{aligned}
 p_{1100} = & 67108864u_5u_3^{25}u_1^{26}x_8x_6x_4 - 134217728u_6u_3^{24}u_1^{27}x_6^3 + \\
 & (-33554432u_6u_5u_3^{26}u_1^{25} + 134217728u_6u_5u_3^{24}u_1^{27})x_6^2 - \\
 & 33554432u_5u_3^{26}u_1^{25}x_6x_5x_4 - 33554432u_6u_5u_3^{25}u_1^{25}x_6x_4x_2 + \\
 & (16777216u_6u_5u_3^{27}u_1^{24} + 67108864u_6u_3^{26}u_1^{26})x_6x_4 - \\
 & 16777216u_6u_5^2u_3^{26}u_1^{24}x_6x_2 - 33554432u_6u_5^2u_3^{26}u_1^{25}x_6
 \end{aligned}$$

Reduced to zero.

4901. Creating S-polynomial from the pair  $(p_{83}, p_{85})$ .

Forming S-pol of  $p_{83}$  and  $p_{85}$ :

$$\begin{aligned} p_{1101} = & 134217728u_5u_3^{25}u_1^{26}x_8x_6x_4 + \\ & (33554432u_5^2u_3^{26}u_1^{25} + 134217728u_5^2u_3^{24}u_1^{27})x_8x_6 - \\ & 134217728u_6u_3^{24}u_1^{27}x_6^3 - 67108864u_5u_3^{25}u_1^{26}x_6^2x_5 - \\ & 67108864u_6u_5u_3^{26}u_1^{25}x_6^2x_5 - 33554432u_5u_3^{26}u_1^{25}x_6x_5x_4 - \\ & 33554432u_5^2u_3^{25}u_1^{25}x_6x_5x_2 - 16777216u_5^2u_3^{27}u_1^{24}x_6x_5 + \\ & (33554432u_6u_5u_3^{27}u_1^{24} + 67108864u_6u_3^{26}u_1^{26})x_6x_4 - \\ & 16777216u_6u_5u_3^{26}u_1^{24}x_6x_2 - 33554432u_6u_5u_3^{26}u_1^{25}x_6 \end{aligned}$$

Reduced to zero.

4902. Creating S-polynomial from the pair  $(p_{83}, p_{86})$ .

Forming S-pol of  $p_{83}$  and  $p_{86}$ : Polynomial too big for output (text size is 1290 characters, number of terms is 14)

S-pol added.

4903. Creating S-polynomial from the pair  $(p_{83}, p_{87})$ .

Forming S-pol of  $p_{83}$  and  $p_{87}$ :

$$\begin{aligned} p_{1102} = & 2097152u_5u_3^{25}u_1^{21}x_8x_4 + 1048576u_5^2u_3^{26}u_1^{20}x_8 - \\ & 4194304u_6u_3^{24}u_1^{22}x_6^2 - 2097152u_6u_5u_3^{24}u_1^{21}x_6x_2 + \\ & (-1048576u_6u_5u_3^{26}u_1^{20} + 4194304u_6u_5u_3^{24}u_1^{22})x_6 - \\ & 1048576u_5u_3^{26}u_1^{20}x_5x_4 - 524288u_5^2u_3^{27}u_1^{19}x_5 + \\ & (524288u_6u_5u_3^{27}u_1^{19} + 2097152u_6u_3^{26}u_1^{21})x_4 - 1048576u_6u_5u_3^{26}u_1^{20} \end{aligned}$$

Reduced to zero.

4904. Creating S-polynomial from the pair  $(p_{83}, p_{88})$ .

Skipping pair  $p_{83}$  and  $p_{88}$  because gcd of their leading monoms is zero.

4905. Creating S-polynomial from the pair  $(p_{83}, p_{89})$ .

Skipping pair  $p_{83}$  and  $p_{89}$  because gcd of their leading monoms is zero.

4906. Creating S-polynomial from the pair  $(p_{83}, p_{90})$ .

Skipping pair  $p_{83}$  and  $p_{90}$  because gcd of their leading monoms is zero.

4907. Creating S-polynomial from the pair  $(p_{83}, p_{91})$ .

Skipping pair  $p_{83}$  and  $p_{91}$  because gcd of their leading monoms is zero.

4908. Creating S-polynomial from the pair  $(p_{83}, p_{92})$ .

Skipping pair  $p_{83}$  and  $p_{92}$  because gcd of their leading monoms is zero.

4909. Creating S-polynomial from the pair  $(p_{83}, p_{93})$ .

Skipping pair  $p_{83}$  and  $p_{93}$  because gcd of their leading monoms is zero.

4910. Creating S-polynomial from the pair  $(p_{83}, p_{94})$ .

Skipping pair  $p_{83}$  and  $p_{94}$  because gcd of their leading monoms is zero.

4911. Creating S-polynomial from the pair  $(p_{83}, p_{95})$ .

Forming S-pol of  $p_{83}$  and  $p_{95}$ : Polynomial too big for output (text size is 1251 characters, number of terms is 18)

Reduced to zero.

4912. Creating S-polynomial from the pair  $(p_{83}, p_{96})$ .

Forming S-pol of  $p_{83}$  and  $p_{96}$ :

$$\begin{aligned} p_{1103} = & 16777216u_5^2u_3^{22}u_1^{24}x_8x_6 - 4194304u_5u_3^{24}u_1^{22}x_8x_4^2 - \\ & 2097152u_5^2u_3^{25}u_1^{21}x_8x_4 - 8388608u_5u_3^{23}u_1^{23}x_6^2x_5 + \\ & 8388608u_6u_3^{23}u_1^{23}x_6^2x_4 - 16777216u_6u_5u_3^{22}u_1^{24}x_6^2 + \\ & 4194304u_5u_3^{24}u_1^{22}x_6x_5x_4 - 4194304u_5^2u_3^{23}u_1^{22}x_6x_5x_2 + \\ & 4194304u_6u_5u_3^{23}u_1^{22}x_6x_4x_2 + 2097152u_6u_5u_3^{25}u_1^{21}x_6x_4 + \\ & 2097152u_5u_3^{25}u_1^{21}x_5x_4^2 + 1048576u_5^2u_3^{26}u_1^{20}x_5x_4 + \\ & (-1048576u_6u_5u_3^{26}u_1^{20} - 4194304u_6u_3^{25}u_1^{22})x_4^2 + \\ & 2097152u_6u_5^2u_3^{25}u_1^{21}x_4 \end{aligned}$$

Reduced to zero.

4913. Creating S-polynomial from the pair  $(p_{83}, p_{97})$ .

Forming S-pol of  $p_{83}$  and  $p_{97}$ :

$$\begin{aligned} p_{1104} = & -67108864u_5u_3^{32}u_1^{26}x_8x_4^2 - 33554432u_5^2u_3^{33}u_1^{25}x_8x_4 - \\ & 134217728u_5u_3^{31}u_1^{27}x_6^2x_5 + 134217728u_6u_3^{31}u_1^{27}x_6^2x_4 + \\ & (536870912u_5u_3^{28}u_1^{29} - 268435456u_5u_3^{28}u_1^{28})x_6x_5x_4x_2 + \\ & (67108864u_5u_3^{32}u_1^{26} - 268435456u_5u_3^{30}u_1^{28})x_6x_5x_4 - \\ & 67108864u_5^2u_3^{31}u_1^{26}x_6x_5x_2 + 134217728u_5^2u_3^{31}u_1^{27}x_6x_5 + \\ & (67108864u_6u_5u_3^{31}u_1^{26} + 268435456u_6u_5u_3^{29}u_1^{28})x_6x_4x_2 + \\ & (33554432u_6u_5u_3^{33}u_1^{25} - 134217728u_6u_5u_3^{31}u_1^{27} - \\ & 268435456u_6u_5u_3^{29}u_1^{28})x_6x_4 + 33554432u_5u_3^{33}u_1^{25}x_5x_4^2 + \\ & 16777216u_5^2u_3^{34}u_1^{24}x_5x_4 + \\ & (-16777216u_6u_5u_3^{34}u_1^{24} - 67108864u_6u_3^{33}u_1^{26})x_4^2 + \\ & 33554432u_6u_5^2u_3^{33}u_1^{25}x_4 \end{aligned}$$

S-pol added.

4914. Creating S-polynomial from the pair  $(p_{83}, p_{98})$ .

Forming S-pol of  $p_{83}$  and  $p_{98}$ : Polynomial too big for output (text size is 3473 characters, number of terms is 33)

Reduced to zero.

4915. Creating S-polynomial from the pair  $(p_{83}, p_{99})$ .  
 Forming S-pol of  $p_{83}$  and  $p_{99}$ : Polynomial too big for output (text size is 3474 characters, number of terms is 33)  
 Reduced to zero.
4916. Creating S-polynomial from the pair  $(p_{83}, p_{100})$ .  
 Skipping pair  $p_{83}$  and  $p_{100}$  because gcd of their leading monoms is zero.
4917. Creating S-polynomial from the pair  $(p_{83}, p_{101})$ .  
 Skipping pair  $p_{83}$  and  $p_{101}$  because gcd of their leading monoms is zero.
4918. Creating S-polynomial from the pair  $(p_{83}, p_{102})$ .  
 Skipping pair  $p_{83}$  and  $p_{102}$  because gcd of their leading monoms is zero.
4919. Creating S-polynomial from the pair  $(p_{83}, p_{103})$ .  
 Skipping pair  $p_{83}$  and  $p_{103}$  because gcd of their leading monoms is zero.
4920. Creating S-polynomial from the pair  $(p_{83}, p_{104})$ .  
 Skipping pair  $p_{83}$  and  $p_{104}$  because gcd of their leading monoms is zero.
4921. Creating S-polynomial from the pair  $(p_{83}, p_{105})$ .  
 Skipping pair  $p_{83}$  and  $p_{105}$  because gcd of their leading monoms is zero.
4922. Creating S-polynomial from the pair  $(p_{83}, p_{106})$ .  
 Skipping pair  $p_{83}$  and  $p_{106}$  because gcd of their leading monoms is zero.
4923. Creating S-polynomial from the pair  $(p_{84}, p_{85})$ .  
 Forming S-pol of  $p_{84}$  and  $p_{85}$ :

$$\begin{aligned}
 p_{1105} = & 32768u_3^{13}u_1^{15}x_8x_6x_4 + \\
 & (16384u_5u_3^{14}u_1^{14} + 65536u_5u_3^{12}u_1^{16})x_8x_6 - 32768u_3^{13}u_1^{15}x_6^2x_5 + \\
 & (-16384u_6u_3^{14}u_1^{14} - 65536u_6u_3^{12}u_1^{16})x_6^2 - 16384u_5u_3^{13}u_1^{14}x_6x_5x_2 - \\
 & 8192u_5u_3^{15}u_1^{13}x_6x_5 + 16384u_6u_3^{13}u_1^{14}x_6x_4x_2 + \\
 & 8192u_6u_3^{15}u_1^{13}x_6x_4
 \end{aligned}$$

Reduced to zero.

4924. Creating S-polynomial from the pair  $(p_{84}, p_{86})$ .  
 Forming S-pol of  $p_{84}$  and  $p_{86}$ :
- $$\begin{aligned}
 p_{1106} = & (-32768u_5u_3^{22}u_1^{15} + 65536u_5u_3^{20}u_1^{16})x_8x_4 - 131072u_3^{20}u_1^{17}x_6^2x_5 + \\
 & (524288u_3^{17}u_1^{19} - 262144u_3^{17}u_1^{18})x_6x_5x_4x_2 + \\
 & (65536u_3^{21}u_1^{16} - 262144u_3^{19}u_1^{18})x_6x_5x_4 - 65536u_5u_3^{20}u_1^{16}x_6x_5x_2 + \\
 & 131072u_5u_3^{20}u_1^{17}x_6x_5 + \\
 & (65536u_6u_3^{20}u_1^{16} + 262144u_6u_3^{18}u_1^{18} - 131072u_6u_3^{18}u_1^{17})x_6x_4x_2 - \\
 & 262144u_6u_3^{18}u_1^{18}x_6x_4 + (16384u_5u_3^{23}u_1^{14} - 32768u_5u_3^{21}u_1^{15})x_5x_4 +
 \end{aligned}$$



$$(-32768u_6u_3^{21}u_1^{15} + 65536u_6u_3^{19}u_1^{16})x_4^2x_2 + \\ (-16384u_6u_5u_3^{22}u_1^{14} + 32768u_6u_5u_3^{20}u_1^{15})x_4x_2$$

S-pol added.

4925. Creating S-polynomial from the pair  $(p_{84}, p_{87})$ .

Forming S-pol of  $p_{84}$  and  $p_{87}$ :

$$p_{1107} = 512u_5u_3^{14}u_1^9x_8 - 1024u_6u_3^{12}u_1^{10}x_6x_2 - 256u_5u_3^{15}u_1^8x_5 + \\ 512u_6u_3^{13}u_1^9x_4x_2 + 256u_6u_5u_3^{14}u_1^8x_2$$

Reduced to zero.

4926. Creating S-polynomial from the pair  $(p_{84}, p_{88})$ .

Skipping pair  $p_{84}$  and  $p_{88}$  because gcd of their leading monoms is zero.

4927. Creating S-polynomial from the pair  $(p_{84}, p_{89})$ .

Skipping pair  $p_{84}$  and  $p_{89}$  because gcd of their leading monoms is zero.

4928. Creating S-polynomial from the pair  $(p_{84}, p_{90})$ .

Skipping pair  $p_{84}$  and  $p_{90}$  because gcd of their leading monoms is zero.

4929. Creating S-polynomial from the pair  $(p_{84}, p_{91})$ .

Skipping pair  $p_{84}$  and  $p_{91}$  because gcd of their leading monoms is zero.

4930. Creating S-polynomial from the pair  $(p_{84}, p_{92})$ .

Skipping pair  $p_{84}$  and  $p_{92}$  because gcd of their leading monoms is zero.

4931. Creating S-polynomial from the pair  $(p_{84}, p_{93})$ .

Skipping pair  $p_{84}$  and  $p_{93}$  because gcd of their leading monoms is zero.

4932. Creating S-polynomial from the pair  $(p_{84}, p_{94})$ .

Skipping pair  $p_{84}$  and  $p_{94}$  because gcd of their leading monoms is zero.

4933. Creating S-polynomial from the pair  $(p_{84}, p_{95})$ .

Forming S-pol of  $p_{84}$  and  $p_{95}$ :

$$p_{1108} = 67108864u_5u_3^{23}u_1^{26}x_8x_6^2 + \\ (33554432u_5u_3^{24}u_1^{25} + 134217728u_5u_3^{22}u_1^{27} + 134217728u_3^{23}u_1^{27})x_8x_6x_4 + \\ (16777216u_5^2u_3^{25}u_1^{24} - 67108864u_5^2u_3^{23}u_1^{26})x_8x_6 - \\ 67108864u_6u_3^{23}u_1^{26}x_6^3 - 67108864u_3^{23}u_1^{26}x_6^2x_5x_4 - \\ 33554432u_5u_3^{24}u_1^{25}x_6^2x_5 - 134217728u_6u_3^{22}u_1^{27}x_6^2x_4 - \\ 16777216u_6u_5u_3^{25}u_1^{24}x_6^2 - 33554432u_5u_3^{23}u_1^{25}x_6x_5x_4x_2 - \\ 16777216u_5u_3^{25}u_1^{24}x_6x_5x_4 - 8388608u_5^2u_3^{26}u_1^{23}x_6x_5 + \\ 33554432u_6u_3^{23}u_1^{25}x_6x_4x_2 + \\ (8388608u_6u_5u_3^{26}u_1^{23} + 33554432u_6u_3^{25}u_1^{25})x_6x_4 - \\ 16777216u_6u_5^2u_3^{25}u_1^{24}x_6$$

Reduced to zero.

4934. Creating S-polynomial from the pair  $(p_{84}, p_{96})$ .

Forming S-pol of  $p_{84}$  and  $p_{96}$ :

$$\begin{aligned} p_{1109} = & 8192u_5u_3^{10}u_1^{13}x_8x_6 - 1024u_5u_3^{13}u_1^{10}x_8x_4 - 4096u_3^{11}u_1^{12}x_6^2x_5 - \\ & 8192u_6u_3^{10}u_1^{13}x_6^2 + 2048u_3^{12}u_1^{11}x_6x_5x_4 - \\ & 2048u_5u_3^{11}u_1^{11}x_6x_5x_2 + 2048u_6u_3^{11}u_1^{11}x_6x_4x_2 + \\ & 4096u_6u_3^{11}u_1^{12}x_6x_4 + 512u_5u_3^{14}u_1^9x_5x_4 - \\ & 1024u_6u_3^{12}u_1^{10}x_4^2x_2 - 512u_6u_5u_3^{13}u_1^9x_4x_2 \end{aligned}$$

Reduced to zero.

4935. Creating S-polynomial from the pair  $(p_{84}, p_{97})$ .

Forming S-pol of  $p_{84}$  and  $p_{97}$ :

$$\begin{aligned} p_{1110} = & -16384u_5u_3^{21}u_1^{14}x_8x_4 - 65536u_3^{19}u_1^{16}x_6^2x_5 + \\ & (262144u_3^{16}u_1^{18} - 131072u_3^{16}u_1^{17})x_6x_5x_4x_2 + \\ & (32768u_3^{20}u_1^{15} - 131072u_3^{18}u_1^{17})x_6x_5x_4 - 32768u_5u_3^{19}u_1^{15}x_6x_5x_2 + \\ & 65536u_5u_3^{19}u_1^{16}x_6x_5 + \\ & (32768u_6u_3^{19}u_1^{15} + 131072u_6u_3^{17}u_1^{17})x_6x_4x_2 - 131072u_6u_3^{17}u_1^{17}x_6x_4 + \\ & 8192u_5u_3^{22}u_1^{13}x_5x_4 - 16384u_6u_3^{20}u_1^{14}x_4^2x_2 - \\ & 8192u_6u_5u_3^{21}u_1^{13}x_4x_2 \end{aligned}$$

S-pol added.

4936. Creating S-polynomial from the pair  $(p_{84}, p_{98})$ .

Forming S-pol of  $p_{84}$  and  $p_{98}$ : Polynomial too big for output (text size is 2795 characters, number of terms is 31)

Reduced to zero.

4937. Creating S-polynomial from the pair  $(p_{84}, p_{99})$ .

Forming S-pol of  $p_{84}$  and  $p_{99}$ : Polynomial too big for output (text size is 2798 characters, number of terms is 31)

Reduced to zero.

4938. Creating S-polynomial from the pair  $(p_{84}, p_{100})$ .

Skipping pair  $p_{84}$  and  $p_{100}$  because gcd of their leading monoms is zero.

4939. Creating S-polynomial from the pair  $(p_{84}, p_{101})$ .

Skipping pair  $p_{84}$  and  $p_{101}$  because gcd of their leading monoms is zero.

4940. Creating S-polynomial from the pair  $(p_{84}, p_{102})$ .

Skipping pair  $p_{84}$  and  $p_{102}$  because gcd of their leading monoms is zero.

4941. Creating S-polynomial from the pair  $(p_{84}, p_{103})$ .

Skipping pair  $p_{84}$  and  $p_{103}$  because gcd of their leading monoms is zero.

4942. Creating S-polynomial from the pair  $(p_{84}, p_{104})$ .

Skipping pair  $p_{84}$  and  $p_{104}$  because gcd of their leading monoms is zero.

4943. Creating S-polynomial from the pair  $(p_{84}, p_{105})$ .

Skipping pair  $p_{84}$  and  $p_{105}$  because gcd of their leading monoms is zero.

4944. Creating S-polynomial from the pair  $(p_{84}, p_{106})$ .

Skipping pair  $p_{84}$  and  $p_{106}$  because gcd of their leading monoms is zero.

4945. Creating S-polynomial from the pair  $(p_{85}, p_{86})$ .

Forming S-pol of  $p_{85}$  and  $p_{86}$ :

$$\begin{aligned}
p_{1111} = & (65536u_3^{21}u_1^{16} - 131072u_3^{19}u_1^{17})x_8x_4^2 + \\
& (131072u_5u_3^{20}u_1^{17} - 262144u_5u_3^{18}u_1^{18})x_8x_4 - 131072u_3^{20}u_1^{17}x_6^2x_5 + \\
& (524288u_3^{17}u_1^{19} - 262144u_3^{17}u_1^{18})x_6x_5x_4x_2 + \\
& (-262144u_3^{19}u_1^{18} + 131072u_3^{19}u_1^{17})x_6x_5x_4 - 65536u_5u_3^{20}u_1^{16}x_6x_5x_2 + \\
& 131072u_5u_3^{20}u_1^{17}x_6x_5 + \\
& (65536u_6u_3^{20}u_1^{16} + 262144u_6u_3^{18}u_1^{18} - 131072u_6u_3^{18}u_1^{17})x_6x_4x_2 + \\
& (-32768u_6u_3^{22}u_1^{15} - 131072u_6u_3^{20}u_1^{17} + 65536u_6u_3^{20}u_1^{16})x_6x_4 + \\
& (-32768u_5u_3^{21}u_1^{15} + 65536u_5u_3^{19}u_1^{16})x_5x_4x_2 + \\
& (16384u_6u_3^{23}u_1^{14} - 32768u_6u_3^{21}u_1^{15})x_4^2 + \\
& (-16384u_6u_5u_3^{22}u_1^{14} + 32768u_6u_5u_3^{20}u_1^{15})x_4x_2
\end{aligned}$$

S-pol added.

4946. Creating S-polynomial from the pair  $(p_{85}, p_{87})$ .

Forming S-pol of  $p_{85}$  and  $p_{87}$ :

$$\begin{aligned}
p_{1112} = & -1024u_3^{13}u_1^{10}x_8x_4 - 2048u_5u_3^{12}u_1^{11}x_8 + 1024u_3^{13}u_1^{10}x_6x_5 - \\
& 1024u_6u_3^{12}u_1^{10}x_6x_2 + \\
& (512u_6u_3^{14}u_1^9 + 2048u_6u_3^{12}u_1^{11})x_6 + 512u_5u_3^{13}u_1^9x_5x_2 - \\
& 256u_6u_3^{15}u_1^8x_4 + 256u_6u_5u_3^{14}u_1^8x_2
\end{aligned}$$

Reduced to zero.

4947. Creating S-polynomial from the pair  $(p_{85}, p_{88})$ .

Skipping pair  $p_{85}$  and  $p_{88}$  because gcd of their leading monoms is zero.

4948. Creating S-polynomial from the pair  $(p_{85}, p_{89})$ .

Skipping pair  $p_{85}$  and  $p_{89}$  because gcd of their leading monoms is zero.

4949. Creating S-polynomial from the pair  $(p_{85}, p_{90})$ .

Skipping pair  $p_{85}$  and  $p_{90}$  because gcd of their leading monoms is zero.

4950. Creating S-polynomial from the pair  $(p_{85}, p_{91})$ .

Skipping pair  $p_{85}$  and  $p_{91}$  because gcd of their leading monoms is zero.

4951. Creating S-polynomial from the pair  $(p_{85}, p_{92})$ .

Skipping pair  $p_{85}$  and  $p_{92}$  because gcd of their leading monoms is zero.

4952. Creating S-polynomial from the pair  $(p_{85}, p_{93})$ .

Skipping pair  $p_{85}$  and  $p_{93}$  because gcd of their leading monoms is zero.

4953. Creating S-polynomial from the pair  $(p_{85}, p_{94})$ .

Skipping pair  $p_{85}$  and  $p_{94}$  because gcd of their leading monoms is zero.

4954. Creating S-polynomial from the pair  $(p_{85}, p_{95})$ .

Forming S-pol of  $p_{85}$  and  $p_{95}$ :

$$\begin{aligned} p_{1113} = & 67108864u_5u_3^{23}u_1^{26}x_8x_6^2 - 67108864u_3^{23}u_1^{26}x_8x_6x_4^2 + \\ & 134217728u_3^{23}u_1^{27}x_8x_6x_4 + \\ & (16777216u_5^2u_3^{25}u_1^{24} - 67108864u_5^2u_3^{23}u_1^{26})x_8x_6 - \\ & 67108864u_6u_3^{23}u_1^{26}x_6^3 - 33554432u_5u_3^{24}u_1^{25}x_6^2x_5 + \\ & 33554432u_6u_3^{24}u_1^{25}x_6^2x_4 - 16777216u_6u_5u_3^{25}u_1^{24}x_6^2 - \\ & 8388608u_5^2u_3^{26}u_1^{23}x_6x_5 - 16777216u_6u_3^{25}u_1^{24}x_6x_4^2 + \\ & (8388608u_6u_5u_3^{26}u_1^{23} + 33554432u_6u_3^{25}u_1^{25})x_6x_4 - \\ & 16777216u_6u_5^2u_3^{25}u_1^{24}x_6 \end{aligned}$$

Reduced to zero.

4955. Creating S-polynomial from the pair  $(p_{85}, p_{96})$ .

Forming S-pol of  $p_{85}$  and  $p_{96}$ :

$$\begin{aligned} p_{1114} = & 8192u_5u_3^{10}u_1^{13}x_8x_6 + 2048u_3^{12}u_1^{11}x_8x_4^2 + 4096u_5u_3^{11}u_1^{12}x_8x_4 - \\ & 4096u_3^{11}u_1^{12}x_6^2x_5 - 8192u_6u_3^{10}u_1^{13}x_6^2 - \\ & 2048u_5u_3^{11}u_1^{11}x_6x_5x_2 + 2048u_6u_3^{11}u_1^{11}x_6x_4x_2 - \\ & 1024u_6u_3^{13}u_1^{10}x_6x_4 - 1024u_5u_3^{12}u_1^{10}x_5x_4x_2 + \\ & 512u_6u_3^{14}u_1^9x_4^2 - 512u_6u_5u_3^{13}u_1^9x_4x_2 \end{aligned}$$

Reduced to zero.

4956. Creating S-polynomial from the pair  $(p_{85}, p_{97})$ .

Forming S-pol of  $p_{85}$  and  $p_{97}$ :

$$\begin{aligned} p_{1115} = & 32768u_3^{20}u_1^{15}x_8x_4^2 + 65536u_5u_3^{19}u_1^{16}x_8x_4 - 65536u_3^{19}u_1^{16}x_6^2x_5 + \\ & (262144u_3^{16}u_1^{18} - 131072u_3^{16}u_1^{17})x_6x_5x_4x_2 - 131072u_3^{18}u_1^{17}x_6x_5x_4 - \\ & 32768u_5u_3^{19}u_1^{15}x_6x_5x_2 + 65536u_5u_3^{19}u_1^{16}x_6x_5 + \\ & (32768u_6u_3^{19}u_1^{15} + 131072u_6u_3^{17}u_1^{17})x_6x_4x_2 + \end{aligned}$$

$$\begin{aligned}
& (-16384u_6u_3^{21}u_1^{14} - 65536u_6u_3^{19}u_1^{16} - 131072u_6u_3^{17}u_1^{17})x_6x_4 - \\
& 16384u_5u_3^{20}u_1^{14}x_5x_4x_2 + 8192u_6u_3^{22}u_1^{13}x_4^2 - \\
& 8192u_6u_5u_3^{21}u_1^{13}x_4x_2
\end{aligned}$$

S-pol added.

4957. Creating S-polynomial from the pair  $(p_{85}, p_{98})$ .

Forming S-pol of  $p_{85}$  and  $p_{98}$ : Polynomial too big for output (text size is 3040 characters, number of terms is 33)

Reduced to zero.

4958. Creating S-polynomial from the pair  $(p_{85}, p_{99})$ .

Forming S-pol of  $p_{85}$  and  $p_{99}$ : Polynomial too big for output (text size is 3043 characters, number of terms is 33)

Reduced to zero.

4959. Creating S-polynomial from the pair  $(p_{85}, p_{100})$ .

Skipping pair  $p_{85}$  and  $p_{100}$  because gcd of their leading monoms is zero.

4960. Creating S-polynomial from the pair  $(p_{85}, p_{101})$ .

Skipping pair  $p_{85}$  and  $p_{101}$  because gcd of their leading monoms is zero.

4961. Creating S-polynomial from the pair  $(p_{85}, p_{102})$ .

Skipping pair  $p_{85}$  and  $p_{102}$  because gcd of their leading monoms is zero.

4962. Creating S-polynomial from the pair  $(p_{85}, p_{103})$ .

Skipping pair  $p_{85}$  and  $p_{103}$  because gcd of their leading monoms is zero.

4963. Creating S-polynomial from the pair  $(p_{85}, p_{104})$ .

Skipping pair  $p_{85}$  and  $p_{104}$  because gcd of their leading monoms is zero.

4964. Creating S-polynomial from the pair  $(p_{85}, p_{105})$ .

Skipping pair  $p_{85}$  and  $p_{105}$  because gcd of their leading monoms is zero.

4965. Creating S-polynomial from the pair  $(p_{85}, p_{106})$ .

Skipping pair  $p_{85}$  and  $p_{106}$  because gcd of their leading monoms is zero.

4966. Creating S-polynomial from the pair  $(p_{86}, p_{87})$ .

Forming S-pol of  $p_{86}$  and  $p_{87}$ :

$$\begin{aligned}
p_{1116} = & 4096u_3^{20}u_1^{12}x_6x_5 + (-16384u_3^{17}u_1^{14} + 8192u_3^{17}u_1^{13})x_5x_4x_2 + \\
& (-2048u_3^{21}u_1^{11} + 8192u_3^{19}u_1^{13})x_5x_4 + 2048u_5u_3^{20}u_1^{11}x_5x_2 - \\
& 4096u_5u_3^{20}u_1^{12}x_5 - 8192u_6u_3^{18}u_1^{13}x_4x_2 + 8192u_6u_3^{18}u_1^{13}x_4
\end{aligned}$$

S-pol added.

4967. Creating S-polynomial from the pair  $(p_{86}, p_{88})$ .

Skipping pair  $p_{86}$  and  $p_{88}$  because gcd of their leading monoms is zero.

4968. Creating S-polynomial from the pair  $(p_{86}, p_{89})$ .  
 Skipping pair  $p_{86}$  and  $p_{89}$  because gcd of their leading monoms is zero.
4969. Creating S-polynomial from the pair  $(p_{86}, p_{90})$ .  
 Skipping pair  $p_{86}$  and  $p_{90}$  because gcd of their leading monoms is zero.
4970. Creating S-polynomial from the pair  $(p_{86}, p_{91})$ .  
 Skipping pair  $p_{86}$  and  $p_{91}$  because gcd of their leading monoms is zero.
4971. Creating S-polynomial from the pair  $(p_{86}, p_{92})$ .  
 Skipping pair  $p_{86}$  and  $p_{92}$  because gcd of their leading monoms is zero.
4972. Creating S-polynomial from the pair  $(p_{86}, p_{93})$ .  
 Forming S-pol of  $p_{86}$  and  $p_{93}$ : Polynomial too big for output (text size is 2001 characters, number of terms is 14)  
 S-pol added.
4973. Creating S-polynomial from the pair  $(p_{86}, p_{94})$ .  
 Skipping pair  $p_{86}$  and  $p_{94}$  because gcd of their leading monoms is zero.
4974. Creating S-polynomial from the pair  $(p_{86}, p_{95})$ .  
 Forming S-pol of  $p_{86}$  and  $p_{95}$ : Polynomial too big for output (text size is 1629 characters, number of terms is 16)  
 S-pol added.
4975. Creating S-polynomial from the pair  $(p_{86}, p_{96})$ .  
 Forming S-pol of  $p_{86}$  and  $p_{96}$ :  

$$p_{1117} = (-16384u_5u_3^{18}u_1^{14} + 32768u_5u_3^{16}u_1^{15})x_8x_4 - 16384u_3^{17}u_1^{14}x_6x_5x_4 +$$

$$(16384u_6u_3^{18}u_1^{14} - 32768u_6u_3^{16}u_1^{15})x_6x_4 +$$

$$(32768u_3^{16}u_1^{15} - 16384u_3^{16}u_1^{14})x_5x_4^2x_2 +$$

$$(-16384u_3^{18}u_1^{14} + 8192u_3^{18}u_1^{13})x_5x_4^2 - 8192u_5u_3^{17}u_1^{13}x_5x_4x_2 +$$

$$8192u_5u_3^{19}u_1^{13}x_5x_4 + 16384u_6u_3^{17}u_1^{14}x_4^2x_2 -$$

$$8192u_6u_3^{19}u_1^{13}x_4^2$$
 S-pol added.
4976. Creating S-polynomial from the pair  $(p_{86}, p_{97})$ .  
 Forming S-pol of  $p_{86}$  and  $p_{97}$ :  

$$p_{1118} = -262144u_3^{25}u_1^{18}x_6x_5x_4 + (1048576u_3^{22}u_1^{20} - 524288u_3^{22}u_1^{19})x_5x_4^2x_2 +$$

$$(131072u_3^{26}u_1^{17} - 524288u_3^{24}u_1^{19})x_5x_4^2 - 131072u_5u_3^{25}u_1^{17}x_5x_4x_2 +$$

$$262144u_5u_3^{25}u_1^{18}x_5x_4 + 524288u_6u_3^{23}u_1^{19}x_4^2x_2 -$$

$$524288u_6u_3^{23}u_1^{19}x_4^2$$
 S-pol added.

4977. Creating S-polynomial from the pair  $(p_{86}, p_{98})$ .

Forming S-pol of  $p_{86}$  and  $p_{98}$ : Polynomial too big for output (text size is 4928 characters, number of terms is 31)

S-pol added.

4978. Creating S-polynomial from the pair  $(p_{86}, p_{99})$ .

Forming S-pol of  $p_{86}$  and  $p_{99}$ : Polynomial too big for output (text size is 4926 characters, number of terms is 31)

S-pol added.

4979. Creating S-polynomial from the pair  $(p_{86}, p_{100})$ .

Forming S-pol of  $p_{86}$  and  $p_{100}$ : Polynomial too big for output (text size is 2107 characters, number of terms is 18)

S-pol added.

4980. Creating S-polynomial from the pair  $(p_{86}, p_{101})$ .

Forming S-pol of  $p_{86}$  and  $p_{101}$ :

$$\begin{aligned} p_{1119} = & (-16384u_5u_3^{14}u_2^4u_1^{14} + 32768u_5u_3^{12}u_2^4u_1^{15})x_{12}x_8 - \\ & 8192u_3^{14}u_2^5u_1^{13}x_{12}x_6x_5 + \\ & (32768u_3^{11}u_2^5u_1^{15} - 16384u_3^{11}u_2^5u_1^{14})x_{12}x_5x_4x_2 + \\ & (-16384u_3^{13}u_2^5u_1^{14} + 8192u_3^{13}u_2^5u_1^{13})x_{12}x_5x_4 - \\ & 4096u_5u_3^{14}u_2^5u_1^{12}x_{12}x_5x_2 + 8192u_5u_3^{14}u_2^5u_1^{13}x_{12}x_5 + \\ & (4096u_6u_3^{14}u_2^5u_1^{12} + 16384u_6u_3^{12}u_2^5u_1^{14} - \\ & 8192u_6u_3^{12}u_2^5u_1^{13})x_{12}x_4x_2 - 8192u_6u_3^{14}u_2^5u_1^{13}x_{12}x_4 + \\ & (8192u_3^{14}u_2^5u_1^{13} - 16384u_3^{12}u_2^5u_1^{14})x_{10}x_8x_5 + \\ & (16384u_6u_3^{14}u_2^4u_1^{14} - 32768u_6u_3^{12}u_2^4u_1^{15})x_{10}x_8 + \\ & (4096u_5u_3^{14}u_2^5u_1^{12} - 8192u_5u_3^{12}u_2^5u_1^{13})x_8x_5x_1 + \\ & (-4096u_6u_3^{14}u_2^5u_1^{12} + 8192u_6u_3^{12}u_2^5u_1^{13})x_8x_4x_1 \end{aligned}$$

S-pol added.

4981. Creating S-polynomial from the pair  $(p_{86}, p_{102})$ .

Forming S-pol of  $p_{86}$  and  $p_{102}$ : Polynomial too big for output (text size is 1467 characters, number of terms is 14)

S-pol added.

4982. Creating S-polynomial from the pair  $(p_{86}, p_{103})$ .

Skipping pair  $p_{86}$  and  $p_{103}$  because gcd of their leading monoms is zero.

4983. Creating S-polynomial from the pair  $(p_{86}, p_{104})$ .

Forming S-pol of  $p_{86}$  and  $p_{104}$ : Polynomial too big for output (text size is 2107 characters, number of terms is 18)

S-pol added.

4984. Creating S-polynomial from the pair  $(p_{86}, p_{105})$ .

Forming S-pol of  $p_{86}$  and  $p_{105}$ :

$$\begin{aligned}
p_{1120} = & (-16384u_5u_4^4u_3^{14}u_1^{14} + 32768u_5u_4^4u_3^{12}u_1^{15})x_{16}x_8 - \\
& 8192u_4^5u_3^{14}u_1^{13}x_{16}x_6x_5 + \\
& (32768u_4^5u_3^{11}u_1^{15} - 16384u_4^5u_3^{11}u_1^{14})x_{16}x_5x_4x_2 + \\
& (-16384u_4^5u_3^{13}u_1^{14} + 8192u_4^5u_3^{13}u_1^{13})x_{16}x_5x_4 - \\
& 4096u_5u_4^5u_3^{14}u_1^{12}x_{16}x_5x_2 + 8192u_5u_4^5u_3^{14}u_1^{13}x_{16}x_5 + \\
& (4096u_6u_4^5u_3^{14}u_1^{12} + 16384u_6u_4^5u_3^{12}u_1^{14} - \\
& 8192u_6u_4^5u_3^{12}u_1^{13})x_{16}x_4x_2 - 8192u_6u_4^5u_3^{14}u_1^{13}x_{16}x_4 + \\
& (8192u_4^5u_3^{14}u_1^{13} - 16384u_4^5u_3^{12}u_1^{14})x_{14}x_8x_5 + \\
& (16384u_6u_4^4u_3^{14}u_1^{14} - 32768u_6u_4^4u_3^{12}u_1^{15})x_{14}x_8 + \\
& (4096u_5u_4^5u_3^{14}u_1^{12} - 8192u_5u_4^5u_3^{12}u_1^{13})x_8x_5x_3 + \\
& (-4096u_6u_4^5u_3^{14}u_1^{12} + 8192u_6u_4^5u_3^{12}u_1^{13})x_8x_4x_3
\end{aligned}$$

S-pol added.

4985. Creating S-polynomial from the pair  $(p_{86}, p_{106})$ .

Forming S-pol of  $p_{86}$  and  $p_{106}$ : Polynomial too big for output (text size is 1467 characters, number of terms is 14)

S-pol added.

4986. Creating S-polynomial from the pair  $(p_{87}, p_{88})$ .

Skipping pair  $p_{87}$  and  $p_{88}$  because gcd of their leading monoms is zero.

4987. Creating S-polynomial from the pair  $(p_{87}, p_{89})$ .

Skipping pair  $p_{87}$  and  $p_{89}$  because gcd of their leading monoms is zero.

4988. Creating S-polynomial from the pair  $(p_{87}, p_{90})$ .

Skipping pair  $p_{87}$  and  $p_{90}$  because gcd of their leading monoms is zero.

4989. Creating S-polynomial from the pair  $(p_{87}, p_{91})$ .

Skipping pair  $p_{87}$  and  $p_{91}$  because gcd of their leading monoms is zero.

4990. Creating S-polynomial from the pair  $(p_{87}, p_{92})$ .

Skipping pair  $p_{87}$  and  $p_{92}$  because gcd of their leading monoms is zero.

4991. Creating S-polynomial from the pair  $(p_{87}, p_{93})$ .

Skipping pair  $p_{87}$  and  $p_{93}$  because gcd of their leading monoms is zero.

4992. Creating S-polynomial from the pair  $(p_{87}, p_{94})$ .

Skipping pair  $p_{87}$  and  $p_{94}$  because gcd of their leading monoms is zero.



4993. Creating S-polynomial from the pair  $(p_{87}, p_{95})$ .

Forming S-pol of  $p_{87}$  and  $p_{95}$ :

$$\begin{aligned} p_{1121} = & 2097152u_5u_3^{23}u_1^{21}x_8x_6 + (4194304u_5u_3^{22}u_1^{22} + 4194304u_3^{23}u_1^{22})x_8x_4 + \\ & (524288u_5^2u_3^{25}u_1^{19} - 2097152u_5^2u_3^{23}u_1^{21})x_8 - 2097152u_6u_3^{23}u_1^{21}x_6^2 - \\ & 2097152u_3^{23}u_1^{21}x_6x_5x_4 - 1048576u_5u_3^{24}u_1^{20}x_6x_5 + \\ & 2097152u_6u_3^{22}u_1^{21}x_6x_4x_2 - 4194304u_6u_3^{22}u_1^{22}x_6x_4 - \\ & 524288u_6u_5u_3^{25}u_1^{19}x_6 - 1048576u_5u_3^{23}u_1^{20}x_5x_4x_2 - \\ & 262144u_5^2u_3^{26}u_1^{18}x_5 - 524288u_6u_5u_3^{24}u_1^{19}x_4x_2 + \\ & (262144u_6u_5u_3^{26}u_1^{18} + 1048576u_6u_3^{25}u_1^{20})x_4 - 524288u_6u_5^2u_3^{25}u_1^{19} \end{aligned}$$

Reduced to zero.

4994. Creating S-polynomial from the pair  $(p_{87}, p_{96})$ .

Forming S-pol of  $p_{87}$  and  $p_{96}$ :

$$\begin{aligned} p_{1122} = & 256u_5u_3^{10}u_1^8x_8 - 128u_3^{11}u_1^7x_6x_5 - 256u_6u_3^{10}u_1^8x_6 + \\ & 64u_3^{12}u_1^6x_5x_4 - 64u_5u_3^{11}u_1^6x_5x_2 + 128u_6u_3^{11}u_1^7x_4 \end{aligned}$$

Reduced to zero.

4995. Creating S-polynomial from the pair  $(p_{87}, p_{97})$ .

Forming S-pol of  $p_{87}$  and  $p_{97}$ :

$$\begin{aligned} p_{1123} = & -2048u_3^{19}u_1^{11}x_6x_5 + (8192u_3^{16}u_1^{13} - 4096u_3^{16}u_1^{12})x_5x_4x_2 + \\ & (1024u_3^{20}u_1^{10} - 4096u_3^{18}u_1^{12})x_5x_4 - 1024u_5u_3^{19}u_1^{10}x_5x_2 + \\ & 2048u_5u_3^{19}u_1^{11}x_5 + 4096u_6u_3^{17}u_1^{12}x_4x_2 - 4096u_6u_3^{17}u_1^{12}x_4 \end{aligned}$$

S-pol added.

4996. Creating S-polynomial from the pair  $(p_{87}, p_{98})$ .

Forming S-pol of  $p_{87}$  and  $p_{98}$ : Polynomial too big for output (text size is 2104 characters, number of terms is 27)

Reduced to zero.

4997. Creating S-polynomial from the pair  $(p_{87}, p_{99})$ .

Forming S-pol of  $p_{87}$  and  $p_{99}$ : Polynomial too big for output (text size is 2105 characters, number of terms is 27)

Reduced to zero.

4998. Creating S-polynomial from the pair  $(p_{87}, p_{100})$ .

Skipping pair  $p_{87}$  and  $p_{100}$  because gcd of their leading monoms is zero.

4999. Creating S-polynomial from the pair  $(p_{87}, p_{101})$ .

Skipping pair  $p_{87}$  and  $p_{101}$  because gcd of their leading monoms is zero.

5000. Creating S-polynomial from the pair  $(p_{87}, p_{102})$ .  
 Skipping pair  $p_{87}$  and  $p_{102}$  because gcd of their leading monoms is zero.
5001. Creating S-polynomial from the pair  $(p_{87}, p_{103})$ .  
 Skipping pair  $p_{87}$  and  $p_{103}$  because gcd of their leading monoms is zero.
5002. Creating S-polynomial from the pair  $(p_{87}, p_{104})$ .  
 Skipping pair  $p_{87}$  and  $p_{104}$  because gcd of their leading monoms is zero.
5003. Creating S-polynomial from the pair  $(p_{87}, p_{105})$ .  
 Skipping pair  $p_{87}$  and  $p_{105}$  because gcd of their leading monoms is zero.
5004. Creating S-polynomial from the pair  $(p_{87}, p_{106})$ .  
 Skipping pair  $p_{87}$  and  $p_{106}$  because gcd of their leading monoms is zero.
5005. Creating S-polynomial from the pair  $(p_{88}, p_{89})$ .  
 Skipping pair  $p_{88}$  and  $p_{89}$  because gcd of their leading monoms is zero.
5006. Creating S-polynomial from the pair  $(p_{88}, p_{90})$ .  
 Forming S-pol of  $p_{88}$  and  $p_{90}$ :

$$\begin{aligned}
 p_{1124} = & 134217728u_5^2u_4^{29}u_1^{27}x_{16}x_4 + 67108864u_5^3u_4^{30}u_1^{26}x_{16} - \\
 & 134217728u_6u_5u_4^{29}u_1^{27}x_{14}x_4 - 67108864u_6u_5^2u_4^{30}u_1^{26}x_{14} - \\
 & 67108864u_5^2u_4^{30}u_1^{26}x_5x_4 - 33554432u_5^3u_4^{31}u_1^{25}x_5 + \\
 & (33554432u_6u_5^2u_4^{31}u_1^{25} + 134217728u_6u_5u_4^{30}u_1^{27})x_4 - \\
 & 67108864u_6u_5^3u_4^{30}u_1^{26}
 \end{aligned}$$

Reduced to zero.

5007. Creating S-polynomial from the pair  $(p_{88}, p_{91})$ .  
 Forming S-pol of  $p_{88}$  and  $p_{91}$ :

$$\begin{aligned}
 p_{1125} = & 32768u_5^2u_4^{18}u_1^{15}x_{16} + 131072u_6u_4^{16}u_1^{17}x_{14}^2 - \\
 & 65536u_6u_4^{17}u_1^{16}x_{14}x_4 - 131072u_6u_5u_4^{16}u_1^{17}x_{14} - \\
 & 16384u_5^2u_4^{19}u_1^{14}x_5 + 32768u_6u_5u_4^{17}u_1^{15}x_4x_3 + \\
 & 16384u_6u_5^2u_4^{18}u_1^{14}x_3
 \end{aligned}$$

Reduced to zero.

5008. Creating S-polynomial from the pair  $(p_{88}, p_{92})$ .  
 Forming S-pol of  $p_{88}$  and  $p_{92}$ :

$$\begin{aligned}
 p_{1126} = & -65536u_5u_4^{17}u_1^{16}x_{16}x_4 - 131072u_5^2u_4^{16}u_1^{17}x_{16} + \\
 & 131072u_6u_4^{16}u_1^{17}x_{14}^2 + 65536u_5u_4^{17}u_1^{16}x_{14}x_5 - \\
 & 65536u_6u_4^{17}u_1^{16}x_{14}x_4 + 32768u_6u_5u_4^{18}u_1^{15}x_{14} + \\
 & 32768u_5^2u_4^{17}u_1^{15}x_5x_3 - 16384u_6u_5u_4^{19}u_1^{14}x_4 + \\
 & 16384u_6u_5^2u_4^{18}u_1^{14}x_3
 \end{aligned}$$

Reduced to zero.

5009. Creating S-polynomial from the pair  $(p_{88}, p_{93})$ .

Forming S-pol of  $p_{88}$  and  $p_{93}$ :

$$\begin{aligned} p_{1127} = & 262144u_5u_4^{24}u_1^{18}x_{14}x_5 + (-262144u_6u_4^{24}u_1^{18} + 524288u_6u_4^{22}u_1^{19})x_{14}x_4 + \\ & (-1048576u_5u_4^{21}u_1^{20} + 524288u_5u_4^{21}u_1^{19})x_5x_4x_3 + \\ & (-131072u_5u_4^{25}u_1^{17} + 524288u_5u_4^{23}u_1^{19})x_5x_4 + \\ & 131072u_5^2u_4^{24}u_1^{17}x_5x_3 - 262144u_5^2u_4^{24}u_1^{18}x_5 + \\ & (131072u_6u_4^{25}u_1^{17} - 262144u_6u_4^{23}u_1^{18})x_4^2 + \\ & (-131072u_6u_5u_4^{24}u_1^{17} - 524288u_6u_5u_4^{22}u_1^{19} + \\ & 262144u_6u_5u_4^{22}u_1^{18})x_4x_3 + 262144u_6u_5u_4^{24}u_1^{18}x_4 \end{aligned}$$

S-pol added.

5010. Creating S-polynomial from the pair  $(p_{88}, p_{94})$ .

Forming S-pol of  $p_{88}$  and  $p_{94}$ :

$$\begin{aligned} p_{1128} = & 4096u_6u_4^{16}u_1^{12}x_{14} - 2048u_6u_4^{17}u_1^{11}x_4 + 2048u_6u_5u_4^{16}u_1^{11}x_3 - \\ & 4096u_6u_5u_4^{16}u_1^{12} \end{aligned}$$

Reduced to zero.

5011. Creating S-polynomial from the pair  $(p_{88}, p_{95})$ .

Skipping pair  $p_{88}$  and  $p_{95}$  because gcd of their leading monoms is zero.

5012. Creating S-polynomial from the pair  $(p_{88}, p_{96})$ .

Skipping pair  $p_{88}$  and  $p_{96}$  because gcd of their leading monoms is zero.

5013. Creating S-polynomial from the pair  $(p_{88}, p_{97})$ .

Skipping pair  $p_{88}$  and  $p_{97}$  because gcd of their leading monoms is zero.

5014. Creating S-polynomial from the pair  $(p_{88}, p_{98})$ .

Skipping pair  $p_{88}$  and  $p_{98}$  because gcd of their leading monoms is zero.

5015. Creating S-polynomial from the pair  $(p_{88}, p_{99})$ .

Forming S-pol of  $p_{88}$  and  $p_{99}$ : Polynomial too big for output (text size is 2177 characters, number of terms is 26)

Reduced to zero.

5016. Creating S-polynomial from the pair  $(p_{88}, p_{100})$ .

Skipping pair  $p_{88}$  and  $p_{100}$  because gcd of their leading monoms is zero.

5017. Creating S-polynomial from the pair  $(p_{88}, p_{101})$ .

Skipping pair  $p_{88}$  and  $p_{101}$  because gcd of their leading monoms is zero.

5018. Creating S-polynomial from the pair  $(p_{88}, p_{102})$ .

Skipping pair  $p_{88}$  and  $p_{102}$  because gcd of their leading monoms is zero.

5019. Creating S-polynomial from the pair  $(p_{88}, p_{103})$ .

Forming S-pol of  $p_{88}$  and  $p_{103}$ : Polynomial too big for output (text size is 2185 characters, number of terms is 26)

Reduced to zero.

5020. Creating S-polynomial from the pair  $(p_{88}, p_{104})$ .

Forming S-pol of  $p_{88}$  and  $p_{104}$ :

$$\begin{aligned} p_{1129} = & -134217728u_5^2u_4^{27}u_1^{27}x_{16}x_{14} + \\ & (-268435456u_5^2u_4^{26}u_1^{28} - 268435456u_5u_4^{27}u_1^{28})x_{16}x_4 + \\ & (-33554432u_5^3u_4^{29}u_1^{25} + 134217728u_5^3u_4^{27}u_1^{27})x_{16} + \\ & 268435456u_6u_4^{26}u_1^{28}x_{14}^2x_4 + 134217728u_6u_5u_4^{27}u_1^{27}x_{14}^2 + \\ & 134217728u_5u_4^{27}u_1^{27}x_{14}x_5x_4 + 67108864u_5^2u_4^{28}u_1^{26}x_{14}x_5 - \\ & 134217728u_6u_4^{27}u_1^{27}x_{14}x_4^2 + 33554432u_6u_5^2u_4^{29}u_1^{25}x_{14} + \\ & 67108864u_5^2u_4^{27}u_1^{26}x_5x_4x_3 + 16777216u_5^3u_4^{30}u_1^{24}x_5 + \\ & 33554432u_6u_5^2u_4^{28}u_1^{25}x_4x_3 + \\ & (-16777216u_6u_5^2u_4^{30}u_1^{24} - 67108864u_6u_5u_4^{29}u_1^{26})x_4 + \\ & 33554432u_6u_5^3u_4^{29}u_1^{25} \end{aligned}$$

Reduced to zero.

5021. Creating S-polynomial from the pair  $(p_{88}, p_{105})$ .

Forming S-pol of  $p_{88}$  and  $p_{105}$ :

$$\begin{aligned} p_{1130} = & -16384u_5^2u_4^{14}u_1^{14}x_{16} + 8192u_5u_4^{15}u_1^{13}x_{14}x_5 - \\ & 8192u_6u_4^{15}u_1^{13}x_{14}x_4 + 16384u_6u_5u_4^{14}u_1^{14}x_{14} - \\ & 4096u_5u_4^{16}u_1^{12}x_5x_4 + 4096u_5^2u_4^{15}u_1^{12}x_5x_3 + \\ & 4096u_6u_4^{16}u_1^{12}x_4^2 - 4096u_6u_5u_4^{15}u_1^{12}x_4x_3 \end{aligned}$$

Reduced to zero.

5022. Creating S-polynomial from the pair  $(p_{88}, p_{106})$ .

Forming S-pol of  $p_{88}$  and  $p_{106}$ :

$$\begin{aligned} p_{1131} = & 131072u_5u_4^{23}u_1^{17}x_{14}x_5 - 131072u_6u_4^{23}u_1^{17}x_{14}x_4 + \\ & (-524288u_5u_4^{20}u_1^{19} + 262144u_5u_4^{20}u_1^{18})x_5x_4x_3 + \\ & (-65536u_5u_4^{24}u_1^{16} + 262144u_5u_4^{22}u_1^{18})x_5x_4 + 65536u_5^2u_4^{23}u_1^{16}x_5x_3 - \\ & 131072u_5^2u_4^{23}u_1^{17}x_5 + 65536u_6u_4^{24}u_1^{16}x_4^2 + \\ & (-65536u_6u_5u_4^{23}u_1^{16} - 262144u_6u_5u_4^{21}u_1^{18})x_4x_3 + \\ & (131072u_6u_5u_4^{23}u_1^{17} + 262144u_6u_5u_4^{21}u_1^{18})x_4 \end{aligned}$$

S-pol added.

5023. Creating S-polynomial from the pair  $(p_{89}, p_{90})$ .

Forming S-pol of  $p_{89}$  and  $p_{90}$ :

$$\begin{aligned} p_{1132} = & -4194304u_5u_4^{25}u_1^{21}x_{16}x_4 + 2097152u_5^2u_4^{24}u_1^{21}x_{16}x_3 + \\ & (-1048576u_5^2u_4^{26}u_1^{20} - 4194304u_5^2u_4^{24}u_1^{22})x_{16} + \\ & 4194304u_6u_4^{24}u_1^{22}x_{14}^2 + 2097152u_5u_4^{25}u_1^{21}x_{14}x_5 + \\ & 1048576u_6u_5u_4^{26}u_1^{20}x_{14} + 1048576u_5u_4^{26}u_1^{20}x_5x_4 + \\ & 524288u_5^2u_4^{27}u_1^{19}x_5 + \\ & (-524288u_6u_5u_4^{27}u_1^{19} - 2097152u_6u_4^{26}u_1^{21})x_4 + 1048576u_6u_5^2u_4^{26}u_1^{20} \end{aligned}$$

Reduced to zero.

5024. Creating S-polynomial from the pair  $(p_{89}, p_{91})$ .

Forming S-pol of  $p_{89}$  and  $p_{91}$ :

$$\begin{aligned} p_{1133} = & -1024u_4^{13}u_1^{10}x_{16}x_4 + 1024u_5u_4^{12}u_1^{10}x_{16}x_3 + \\ & (-512u_5u_4^{14}u_1^9 - 2048u_5u_4^{12}u_1^{11})x_{16} + 1024u_4^{13}u_1^{10}x_{14}x_5 + \\ & 2048u_6u_4^{12}u_1^{11}x_{14} + 256u_5u_4^{15}u_1^8x_5 - 512u_6u_4^{13}u_1^9x_4x_3 - \\ & 256u_6u_5u_4^{14}u_1^8x_3 \end{aligned}$$

Reduced to zero.

5025. Creating S-polynomial from the pair  $(p_{89}, p_{92})$ .

Forming S-pol of  $p_{89}$  and  $p_{92}$ :

$$\begin{aligned} p_{1134} = & 1024u_5u_4^{12}u_1^{10}x_{16}x_3 - 512u_6u_4^{14}u_1^9x_{14} - 512u_5u_4^{13}u_1^9x_5x_3 + \\ & 256u_6u_4^{15}u_1^8x_4 - 256u_6u_5u_4^{14}u_1^8x_3 \end{aligned}$$

Reduced to zero.

5026. Creating S-polynomial from the pair  $(p_{89}, p_{93})$ .

Skipping pair  $p_{89}$  and  $p_{93}$  because gcd of their leading monoms is zero.

5027. Creating S-polynomial from the pair  $(p_{89}, p_{94})$ .

Skipping pair  $p_{89}$  and  $p_{94}$  because gcd of their leading monoms is zero.

5028. Creating S-polynomial from the pair  $(p_{89}, p_{95})$ .

Skipping pair  $p_{89}$  and  $p_{95}$  because gcd of their leading monoms is zero.

5029. Creating S-polynomial from the pair  $(p_{89}, p_{96})$ .

Skipping pair  $p_{89}$  and  $p_{96}$  because gcd of their leading monoms is zero.

5030. Creating S-polynomial from the pair  $(p_{89}, p_{97})$ .

Skipping pair  $p_{89}$  and  $p_{97}$  because gcd of their leading monoms is zero.

5031. Creating S-polynomial from the pair  $(p_{89}, p_{98})$ .

Skipping pair  $p_{89}$  and  $p_{98}$  because gcd of their leading monoms is zero.

5032. Creating S-polynomial from the pair  $(p_{89}, p_{99})$ .

Skipping pair  $p_{89}$  and  $p_{99}$  because gcd of their leading monoms is zero.

5033. Creating S-polynomial from the pair  $(p_{89}, p_{100})$ .

Skipping pair  $p_{89}$  and  $p_{100}$  because gcd of their leading monoms is zero.

5034. Creating S-polynomial from the pair  $(p_{89}, p_{101})$ .

Skipping pair  $p_{89}$  and  $p_{101}$  because gcd of their leading monoms is zero.

5035. Creating S-polynomial from the pair  $(p_{89}, p_{102})$ .

Skipping pair  $p_{89}$  and  $p_{102}$  because gcd of their leading monoms is zero.

5036. Creating S-polynomial from the pair  $(p_{89}, p_{103})$ .

Skipping pair  $p_{89}$  and  $p_{103}$  because gcd of their leading monoms is zero.

5037. Creating S-polynomial from the pair  $(p_{89}, p_{104})$ .

Forming S-pol of  $p_{89}$  and  $p_{104}$ :

$$\begin{aligned} p_{1135} = & 2097152u_5u_4^{23}u_1^{21}x_{16}x_{14} - 2097152u_4^{23}u_1^{21}x_{16}x_4^2 + \\ & 2097152u_5u_4^{22}u_1^{21}x_{16}x_4x_3 + 4194304u_4^{23}u_1^{22}x_{16}x_4 + \\ & (524288u_5^2u_4^{25}u_1^{19} - 2097152u_5^2u_4^{23}u_1^{21})x_{16} - \\ & 2097152u_6u_4^{23}u_1^{21}x_{14}^2 - 1048576u_5u_4^{24}u_1^{20}x_{14}x_5 - \\ & 524288u_6u_5u_4^{25}u_1^{19}x_{14} - 1048576u_5u_4^{23}u_1^{20}x_5x_4x_3 - \\ & 262144u_5^2u_4^{26}u_1^{18}x_5 - 524288u_6u_5u_4^{24}u_1^{19}x_4x_3 + \\ & (262144u_6u_5u_4^{26}u_1^{18} + 1048576u_6u_4^{25}u_1^{20})x_4 - 524288u_6u_5^2u_4^{25}u_1^{19} \end{aligned}$$

Reduced to zero.

5038. Creating S-polynomial from the pair  $(p_{89}, p_{105})$ .

Skipping pair  $p_{89}$  and  $p_{105}$  because gcd of their leading monoms is zero.

5039. Creating S-polynomial from the pair  $(p_{89}, p_{106})$ .

Skipping pair  $p_{89}$  and  $p_{106}$  because gcd of their leading monoms is zero.

5040. Creating S-polynomial from the pair  $(p_{90}, p_{91})$ .

Forming S-pol of  $p_{90}$  and  $p_{91}$ :

$$\begin{aligned} p_{1136} = & 67108864u_5u_4^{25}u_1^{26}x_{16}x_{14}x_4 - 134217728u_6u_4^{24}u_1^{27}x_{14}^3 + \\ & (-33554432u_6u_5u_4^{26}u_1^{25} + 134217728u_6u_5u_4^{24}u_1^{27})x_{14}^2 - \\ & 33554432u_5u_4^{26}u_1^{25}x_{14}x_5x_4 - 33554432u_6u_5u_4^{25}u_1^{25}x_{14}x_4x_3 + \\ & (16777216u_6u_5u_4^{27}u_1^{24} + 67108864u_6u_4^{26}u_1^{26})x_{14}x_4 - \\ & 16777216u_6u_5^2u_4^{26}u_1^{24}x_{14}x_3 - 33554432u_6u_5^2u_4^{26}u_1^{25}x_{14} \end{aligned}$$

Reduced to zero.

5041. Creating S-polynomial from the pair  $(p_{90}, p_{92})$ .

Forming S-pol of  $p_{90}$  and  $p_{92}$ :

$$\begin{aligned} p_{1137} = & 134217728u_5u_4^{25}u_1^{26}x_{16}x_{14}x_4 + \\ & (33554432u_5^2u_4^{26}u_1^{25} + 134217728u_5^2u_4^{24}u_1^{27})x_{16}x_{14} - \\ & 134217728u_6u_4^{24}u_1^{27}x_{14}^3 - 67108864u_5u_4^{25}u_1^{26}x_{14}^2x_5 - \\ & 67108864u_6u_5u_4^{26}u_1^{25}x_{14}^2 - 33554432u_5u_4^{26}u_1^{25}x_{14}x_5x_4 - \\ & 33554432u_5^2u_4^{25}u_1^{25}x_{14}x_5x_3 - 16777216u_5^2u_4^{27}u_1^{24}x_{14}x_5 + \\ & (33554432u_6u_5u_4^{27}u_1^{24} + 67108864u_6u_4^{26}u_1^{26})x_{14}x_4 - \\ & 16777216u_6u_5^2u_4^{26}u_1^{24}x_{14}x_3 - 33554432u_6u_5^2u_4^{26}u_1^{25}x_{14} \end{aligned}$$

Reduced to zero.

5042. Creating S-polynomial from the pair  $(p_{90}, p_{93})$ .

Forming S-pol of  $p_{90}$  and  $p_{93}$ : Polynomial too big for output (text size is 1300 characters, number of terms is 14)

S-pol added.

5043. Creating S-polynomial from the pair  $(p_{90}, p_{94})$ .

Forming S-pol of  $p_{90}$  and  $p_{94}$ :

$$\begin{aligned} p_{1138} = & 2097152u_5u_4^{25}u_1^{21}x_{16}x_4 + 1048576u_5^2u_4^{26}u_1^{20}x_{16} - \\ & 4194304u_6u_4^{24}u_1^{22}x_{14}^2 - 2097152u_6u_5u_4^{24}u_1^{21}x_{14}x_3 + \\ & (-1048576u_6u_5u_4^{26}u_1^{20} + 4194304u_6u_5u_4^{24}u_1^{22})x_{14} - \\ & 1048576u_5u_4^{26}u_1^{20}x_5x_4 - 524288u_5^2u_4^{27}u_1^{19}x_5 + \\ & (524288u_6u_5u_4^{27}u_1^{19} + 2097152u_6u_4^{26}u_1^{21})x_4 - 1048576u_6u_5^2u_4^{26}u_1^{20} \end{aligned}$$

Reduced to zero.

5044. Creating S-polynomial from the pair  $(p_{90}, p_{95})$ .

Skipping pair  $p_{90}$  and  $p_{95}$  because gcd of their leading monoms is zero.

5045. Creating S-polynomial from the pair  $(p_{90}, p_{96})$ .

Skipping pair  $p_{90}$  and  $p_{96}$  because gcd of their leading monoms is zero.

5046. Creating S-polynomial from the pair  $(p_{90}, p_{97})$ .

Skipping pair  $p_{90}$  and  $p_{97}$  because gcd of their leading monoms is zero.

5047. Creating S-polynomial from the pair  $(p_{90}, p_{98})$ .

Skipping pair  $p_{90}$  and  $p_{98}$  because gcd of their leading monoms is zero.

5048. Creating S-polynomial from the pair  $(p_{90}, p_{99})$ .

Forming S-pol of  $p_{90}$  and  $p_{99}$ : Polynomial too big for output (text size is 3493 characters, number of terms is 33)

Reduced to zero.

5049. Creating S-polynomial from the pair  $(p_{90}, p_{100})$ .  
 Skipping pair  $p_{90}$  and  $p_{100}$  because gcd of their leading monoms is zero.
5050. Creating S-polynomial from the pair  $(p_{90}, p_{101})$ .  
 Skipping pair  $p_{90}$  and  $p_{101}$  because gcd of their leading monoms is zero.
5051. Creating S-polynomial from the pair  $(p_{90}, p_{102})$ .  
 Skipping pair  $p_{90}$  and  $p_{102}$  because gcd of their leading monoms is zero.
5052. Creating S-polynomial from the pair  $(p_{90}, p_{103})$ .  
 Forming S-pol of  $p_{90}$  and  $p_{103}$ : Polynomial too big for output (text size is 3508 characters, number of terms is 33)  
 Reduced to zero.
5053. Creating S-polynomial from the pair  $(p_{90}, p_{104})$ .  
 Forming S-pol of  $p_{90}$  and  $p_{104}$ : Polynomial too big for output (text size is 1273 characters, number of terms is 18)  
 Reduced to zero.
5054. Creating S-polynomial from the pair  $(p_{90}, p_{105})$ .  
 Forming S-pol of  $p_{90}$  and  $p_{105}$ :

$$\begin{aligned}
 p_{1139} = & 16777216u_5^2u_4^{22}u_1^{24}x_{16}x_{14} - 4194304u_5u_4^{24}u_1^{22}x_{16}x_4^2 - \\
 & 2097152u_5^2u_4^{25}u_1^{21}x_{16}x_4 - 8388608u_5u_4^{23}u_1^{23}x_{14}x_5 + \\
 & 8388608u_6u_4^{23}u_1^{23}x_{14}x_4 - 16777216u_6u_5u_4^{22}u_1^{24}x_{14}^2 + \\
 & 4194304u_5u_4^{24}u_1^{22}x_{14}x_5x_4 - 4194304u_5^2u_4^{23}u_1^{22}x_{14}x_5x_3 + \\
 & 4194304u_6u_5u_4^{23}u_1^{22}x_{14}x_4x_3 + 2097152u_6u_5u_4^{25}u_1^{21}x_{14}x_4 + \\
 & 2097152u_5u_4^{25}u_1^{21}x_5x_4^2 + 1048576u_5^2u_4^{26}u_1^{20}x_5x_4 + \\
 & (-1048576u_6u_5u_4^{26}u_1^{20} - 4194304u_6u_4^{25}u_1^{22})x_4^2 + \\
 & 2097152u_6u_5^2u_4^{25}u_1^{21}x_4
 \end{aligned}$$

Reduced to zero.

5055. Creating S-polynomial from the pair  $(p_{90}, p_{106})$ .  
 Forming S-pol of  $p_{90}$  and  $p_{106}$ :

$$\begin{aligned}
 p_{1140} = & -67108864u_5u_4^{32}u_1^{26}x_{16}x_4^2 - 33554432u_5^2u_4^{33}u_1^{25}x_{16}x_4 - \\
 & 134217728u_5u_4^{31}u_1^{27}x_{14}^2x_5 + 134217728u_6u_4^{31}u_1^{27}x_{14}^2x_4 + \\
 & (536870912u_5u_4^{28}u_1^{29} - 268435456u_5u_4^{28}u_1^{28})x_{14}x_5x_4x_3 + \\
 & (67108864u_5u_4^{32}u_1^{26} - 268435456u_5u_4^{30}u_1^{28})x_{14}x_5x_4 - \\
 & 67108864u_5^2u_4^{31}u_1^{26}x_{14}x_5x_3 + 134217728u_5^2u_4^{31}u_1^{27}x_{14}x_5 + \\
 & (67108864u_6u_5u_4^{31}u_1^{26} + 268435456u_6u_5u_4^{29}u_1^{28})x_{14}x_4x_3 + \\
 & (33554432u_6u_5u_4^{33}u_1^{25} - 134217728u_6u_5u_4^{31}u_1^{27} -
 \end{aligned}$$



$$\begin{aligned}
& 268435456u_6u_5u_4^{29}u_1^{28})x_{14}x_4 + 33554432u_5u_4^{33}u_1^{25}x_5x_4^2 + \\
& 16777216u_5^2u_4^{34}u_1^{24}x_5x_4 + \\
& (-16777216u_6u_5u_4^{34}u_1^{24} - 67108864u_6u_4^{33}u_1^{26})x_4^2 + \\
& 33554432u_6u_5^2u_4^{33}u_1^{25}x_4
\end{aligned}$$

S-pol added.

5056. Creating S-polynomial from the pair  $(p_{91}, p_{92})$ .

Forming S-pol of  $p_{91}$  and  $p_{92}$ :

$$\begin{aligned}
p_{1141} = & 32768u_4^{13}u_1^{15}x_{16}x_{14}x_4 + \\
& (16384u_5u_4^{14}u_1^{14} + 65536u_5u_4^{12}u_1^{16})x_{16}x_{14} - 32768u_4^{13}u_1^{15}x_{14}^2x_5 + \\
& (-16384u_6u_4^{14}u_1^{14} - 65536u_6u_4^{12}u_1^{16})x_{14}^2 - 16384u_5u_4^{13}u_1^{14}x_{14}x_5x_3 - \\
& 8192u_5u_4^{15}u_1^{13}x_{14}x_5 + 16384u_6u_4^{13}u_1^{14}x_{14}x_4x_3 + \\
& 8192u_6u_4^{15}u_1^{13}x_{14}x_4
\end{aligned}$$

Reduced to zero.

5057. Creating S-polynomial from the pair  $(p_{91}, p_{93})$ .

Forming S-pol of  $p_{91}$  and  $p_{93}$ :

$$\begin{aligned}
p_{1142} = & (-32768u_5u_4^{22}u_1^{15} + 65536u_5u_4^{20}u_1^{16})x_{16}x_4 - 131072u_4^{20}u_1^{17}x_{14}^2x_5 + \\
& (524288u_4^{17}u_1^{19} - 262144u_4^{17}u_1^{18})x_{14}x_5x_4x_3 + \\
& (65536u_4^{21}u_1^{16} - 262144u_4^{19}u_1^{18})x_{14}x_5x_4 - 65536u_5u_4^{20}u_1^{16}x_{14}x_5x_3 + \\
& 131072u_5u_4^{20}u_1^{17}x_{14}x_5 + \\
& (65536u_6u_4^{20}u_1^{16} + 262144u_6u_4^{18}u_1^{18} - 131072u_6u_4^{18}u_1^{17})x_{14}x_4x_3 - \\
& 262144u_6u_4^{18}u_1^{18}x_{14}x_4 + (16384u_5u_4^{23}u_1^{14} - 32768u_5u_4^{21}u_1^{15})x_5x_4 + \\
& (-32768u_6u_4^{21}u_1^{15} + 65536u_6u_4^{19}u_1^{16})x_4^2x_3 + \\
& (-16384u_6u_5u_4^{22}u_1^{14} + 32768u_6u_5u_4^{20}u_1^{15})x_4x_3
\end{aligned}$$

S-pol added.

5058. Creating S-polynomial from the pair  $(p_{91}, p_{94})$ .

Forming S-pol of  $p_{91}$  and  $p_{94}$ :

$$\begin{aligned}
p_{1143} = & 512u_5u_4^{14}u_1^9x_{16} - 1024u_6u_4^{12}u_1^{10}x_{14}x_3 - 256u_5u_4^{15}u_1^8x_5 + \\
& 512u_6u_4^{13}u_1^9x_4x_3 + 256u_6u_5u_4^{14}u_1^8x_3
\end{aligned}$$

Reduced to zero.

5059. Creating S-polynomial from the pair  $(p_{91}, p_{95})$ .

Skipping pair  $p_{91}$  and  $p_{95}$  because gcd of their leading monoms is zero.

5060. Creating S-polynomial from the pair  $(p_{91}, p_{96})$ .

Skipping pair  $p_{91}$  and  $p_{96}$  because gcd of their leading monoms is zero.

5061. Creating S-polynomial from the pair  $(p_{91}, p_{97})$ .  
 Skipping pair  $p_{91}$  and  $p_{97}$  because gcd of their leading monoms is zero.
5062. Creating S-polynomial from the pair  $(p_{91}, p_{98})$ .  
 Skipping pair  $p_{91}$  and  $p_{98}$  because gcd of their leading monoms is zero.
5063. Creating S-polynomial from the pair  $(p_{91}, p_{99})$ .  
 Forming S-pol of  $p_{91}$  and  $p_{99}$ : Polynomial too big for output (text size is 2818 characters, number of terms is 31)  
 Reduced to zero.
5064. Creating S-polynomial from the pair  $(p_{91}, p_{100})$ .  
 Skipping pair  $p_{91}$  and  $p_{100}$  because gcd of their leading monoms is zero.
5065. Creating S-polynomial from the pair  $(p_{91}, p_{101})$ .  
 Skipping pair  $p_{91}$  and  $p_{101}$  because gcd of their leading monoms is zero.
5066. Creating S-polynomial from the pair  $(p_{91}, p_{102})$ .  
 Skipping pair  $p_{91}$  and  $p_{102}$  because gcd of their leading monoms is zero.
5067. Creating S-polynomial from the pair  $(p_{91}, p_{103})$ .  
 Forming S-pol of  $p_{91}$  and  $p_{103}$ : Polynomial too big for output (text size is 2831 characters, number of terms is 31)  
 Reduced to zero.
5068. Creating S-polynomial from the pair  $(p_{91}, p_{104})$ .  
 Forming S-pol of  $p_{91}$  and  $p_{104}$ :

$$\begin{aligned}
 p_{1144} = & 67108864u_5u_4^{23}u_1^{26}x_{16}x_{14}^2 + \\
 & (33554432u_5u_4^{24}u_1^{25} + 134217728u_5u_4^{22}u_1^{27} + 134217728u_4^{23}u_1^{27})x_{16}x_{14}x_4 + \\
 & (16777216u_5^2u_4^{25}u_1^{24} - 67108864u_5^2u_4^{23}u_1^{26})x_{16}x_{14} - \\
 & 67108864u_6u_4^{23}u_1^{26}x_{14}^3 - 67108864u_4^{23}u_1^{26}x_{14}^2x_5x_4 - \\
 & 33554432u_5u_4^{24}u_1^{25}x_{14}^2x_5 - 134217728u_6u_4^{22}u_1^{27}x_{14}^2x_4 - \\
 & 16777216u_6u_5u_4^{25}u_1^{24}x_{14}^2 - 33554432u_5u_4^{23}u_1^{25}x_{14}x_5x_4x_3 - \\
 & 16777216u_5u_4^{25}u_1^{24}x_{14}x_5x_4 - 8388608u_5^2u_4^{26}u_1^{23}x_{14}x_5 + \\
 & 33554432u_6u_4^{23}u_1^{25}x_{14}x_4^2x_3 + \\
 & (8388608u_6u_5u_4^{26}u_1^{23} + 33554432u_6u_4^{25}u_1^{25})x_{14}x_4 - \\
 & 16777216u_6u_5^2u_4^{25}u_1^{24}x_{14}
 \end{aligned}$$

Reduced to zero.

5069. Creating S-polynomial from the pair  $(p_{91}, p_{105})$ .

Forming S-pol of  $p_{91}$  and  $p_{105}$ :

$$\begin{aligned} p_{1145} = & 8192u_5u_4^{10}u_1^{13}x_{16}x_{14} - 1024u_5u_4^{13}u_1^{10}x_{16}x_4 - \\ & 4096u_4^{11}u_1^{12}x_{14}^2x_5 - 8192u_6u_4^{10}u_1^{13}x_{14}^2 + 2048u_4^{12}u_1^{11}x_{14}x_5x_4 - \\ & 2048u_5u_4^{11}u_1^{11}x_{14}x_5x_3 + 2048u_6u_4^{11}u_1^{11}x_{14}x_4x_3 + \\ & 4096u_6u_4^{11}u_1^{12}x_{14}x_4 + 512u_5u_4^{14}u_1^9x_5x_4 - \\ & 1024u_6u_4^{12}u_1^{10}x_4^2x_3 - 512u_6u_5u_4^{13}u_1^9x_4x_3 \end{aligned}$$

Reduced to zero.

5070. Creating S-polynomial from the pair  $(p_{91}, p_{106})$ .

Forming S-pol of  $p_{91}$  and  $p_{106}$ :

$$\begin{aligned} p_{1146} = & -16384u_5u_4^{21}u_1^{14}x_{16}x_4 - 65536u_4^{19}u_1^{16}x_{14}^2x_5 + \\ & (262144u_4^{16}u_1^{18} - 131072u_4^{16}u_1^{17})x_{14}x_5x_4x_3 + \\ & (32768u_4^{20}u_1^{15} - 131072u_4^{18}u_1^{17})x_{14}x_5x_4 - 32768u_5u_4^{19}u_1^{15}x_{14}x_5x_3 + \\ & 65536u_5u_4^{19}u_1^{16}x_{14}x_5 + \\ & (32768u_6u_4^{19}u_1^{15} + 131072u_6u_4^{17}u_1^{17})x_{14}x_4x_3 - \\ & 131072u_6u_4^{17}u_1^{17}x_{14}x_4 + 8192u_5u_4^{22}u_1^{13}x_5x_4 - \\ & 16384u_6u_4^{20}u_1^{14}x_4^2x_3 - 8192u_6u_5u_4^{21}u_1^{13}x_4x_3 \end{aligned}$$

S-pol added.

5071. Creating S-polynomial from the pair  $(p_{92}, p_{93})$ .

Forming S-pol of  $p_{92}$  and  $p_{93}$ :

$$\begin{aligned} p_{1147} = & (65536u_4^{21}u_1^{16} - 131072u_4^{19}u_1^{17})x_{16}x_4^2 + \\ & (131072u_5u_4^{20}u_1^{17} - 262144u_5u_4^{18}u_1^{18})x_{16}x_4 - 131072u_4^{20}u_1^{17}x_{14}^2x_5 + \\ & (524288u_4^{17}u_1^{19} - 262144u_4^{17}u_1^{18})x_{14}x_5x_4x_3 + \\ & (-262144u_4^{19}u_1^{18} + 131072u_4^{19}u_1^{17})x_{14}x_5x_4 - 65536u_5u_4^{20}u_1^{16}x_{14}x_5x_3 + \\ & 131072u_5u_4^{20}u_1^{17}x_{14}x_5 + \\ & (65536u_6u_4^{20}u_1^{16} + 262144u_6u_4^{18}u_1^{18} - 131072u_6u_4^{18}u_1^{17})x_{14}x_4x_3 + \\ & (-32768u_6u_4^{22}u_1^{15} - 131072u_6u_4^{20}u_1^{17} + 65536u_6u_4^{20}u_1^{16})x_{14}x_4 + \\ & (-32768u_5u_4^{21}u_1^{15} + 65536u_5u_4^{19}u_1^{16})x_5x_4x_3 + \\ & (16384u_6u_4^{23}u_1^{14} - 32768u_6u_4^{21}u_1^{15})x_4^2 + \\ & (-16384u_6u_5u_4^{22}u_1^{14} + 32768u_6u_5u_4^{20}u_1^{15})x_4x_3 \end{aligned}$$

S-pol added.

5072. Creating S-polynomial from the pair  $(p_{92}, p_{94})$ .

Forming S-pol of  $p_{92}$  and  $p_{94}$ :

$$\begin{aligned} p_{1148} = & -1024u_4^{13}u_1^{10}x_{16}x_4 - 2048u_5u_4^{12}u_1^{11}x_{16} + 1024u_4^{13}u_1^{10}x_{14}x_5 - \\ & 1024u_6u_4^{12}u_1^{10}x_{14}x_3 + \\ & (512u_6u_4^{14}u_1^9 + 2048u_6u_4^{12}u_1^{11})x_{14} + 512u_5u_4^{13}u_1^9x_5x_3 - \\ & 256u_6u_4^{15}u_1^8x_4 + 256u_6u_5u_4^{14}u_1^8x_3 \end{aligned}$$

Reduced to zero.

5073. Creating S-polynomial from the pair  $(p_{92}, p_{95})$ .

Skipping pair  $p_{92}$  and  $p_{95}$  because gcd of their leading monoms is zero.

5074. Creating S-polynomial from the pair  $(p_{92}, p_{96})$ .

Skipping pair  $p_{92}$  and  $p_{96}$  because gcd of their leading monoms is zero.

5075. Creating S-polynomial from the pair  $(p_{92}, p_{97})$ .

Skipping pair  $p_{92}$  and  $p_{97}$  because gcd of their leading monoms is zero.

5076. Creating S-polynomial from the pair  $(p_{92}, p_{98})$ .

Skipping pair  $p_{92}$  and  $p_{98}$  because gcd of their leading monoms is zero.

5077. Creating S-polynomial from the pair  $(p_{92}, p_{99})$ .

Forming S-pol of  $p_{92}$  and  $p_{99}$ : Polynomial too big for output (text size is 3063 characters, number of terms is 33)

Reduced to zero.

5078. Creating S-polynomial from the pair  $(p_{92}, p_{100})$ .

Skipping pair  $p_{92}$  and  $p_{100}$  because gcd of their leading monoms is zero.

5079. Creating S-polynomial from the pair  $(p_{92}, p_{101})$ .

Skipping pair  $p_{92}$  and  $p_{101}$  because gcd of their leading monoms is zero.

5080. Creating S-polynomial from the pair  $(p_{92}, p_{102})$ .

Skipping pair  $p_{92}$  and  $p_{102}$  because gcd of their leading monoms is zero.

5081. Creating S-polynomial from the pair  $(p_{92}, p_{103})$ .

Forming S-pol of  $p_{92}$  and  $p_{103}$ : Polynomial too big for output (text size is 3078 characters, number of terms is 33)

Reduced to zero.

5082. Creating S-polynomial from the pair  $(p_{92}, p_{104})$ .

Forming S-pol of  $p_{92}$  and  $p_{104}$ :

$$\begin{aligned} p_{1149} = & 67108864u_5u_4^{23}u_1^{26}x_{16}x_{14}^2 - 67108864u_4^{23}u_1^{26}x_{16}x_{14}x_4^2 + \\ & 134217728u_4^{23}u_1^{27}x_{16}x_{14}x_4 + \\ & (16777216u_5^2u_4^{25}u_1^{24} - 67108864u_5^2u_4^{23}u_1^{26})x_{16}x_{14} - \end{aligned}$$

$$\begin{aligned}
& 67108864u_6u_4^{23}u_1^{26}x_{14}^3 - 33554432u_5u_4^{24}u_1^{25}x_{14}^2x_5 + \\
& 33554432u_6u_4^{24}u_1^{25}x_{14}^2x_4 - 16777216u_6u_5u_4^{25}u_1^{24}x_{14}^2 - \\
& 8388608u_5^2u_4^{26}u_1^{23}x_{14}x_5 - 16777216u_6u_4^{25}u_1^{24}x_{14}x_4 + \\
& (8388608u_6u_5u_4^{26}u_1^{23} + 33554432u_6u_4^{25}u_1^{25})x_{14}x_4 - \\
& 16777216u_6u_5^2u_4^{25}u_1^{24}x_{14}
\end{aligned}$$

Reduced to zero.

5083. Creating S-polynomial from the pair  $(p_{92}, p_{105})$ .

Forming S-pol of  $p_{92}$  and  $p_{105}$ :

$$\begin{aligned}
p_{1150} = & 8192u_5u_4^{10}u_1^{13}x_{16}x_{14} + 2048u_4^{12}u_1^{11}x_{16}x_4^2 + \\
& 4096u_5u_4^{11}u_1^{12}x_{16}x_4 - 4096u_4^{11}u_1^{12}x_{14}^2x_5 - 8192u_6u_4^{10}u_1^{13}x_{14}^2 - \\
& 2048u_5u_4^{11}u_1^{11}x_{14}x_5x_3 + 2048u_6u_4^{11}u_1^{11}x_{14}x_4x_3 - \\
& 1024u_6u_4^{13}u_1^{10}x_{14}x_4 - 1024u_5u_4^{12}u_1^{10}x_5x_4x_3 + \\
& 512u_6u_4^{14}u_1^9x_4^2 - 512u_6u_5u_4^{13}u_1^9x_4x_3
\end{aligned}$$

Reduced to zero.

5084. Creating S-polynomial from the pair  $(p_{92}, p_{106})$ .

Forming S-pol of  $p_{92}$  and  $p_{106}$ :

$$\begin{aligned}
p_{1151} = & 32768u_4^{20}u_1^{15}x_{16}x_4^2 + 65536u_5u_4^{19}u_1^{16}x_{16}x_4 - \\
& 65536u_4^{19}u_1^{16}x_{14}^2x_5 + \\
& (262144u_4^{16}u_1^{18} - 131072u_4^{16}u_1^{17})x_{14}x_5x_4x_3 - 131072u_4^{18}u_1^{17}x_{14}x_5x_4 - \\
& 32768u_5u_4^{19}u_1^{15}x_{14}x_5x_3 + 65536u_5u_4^{19}u_1^{16}x_{14}x_5 + \\
& (32768u_6u_4^{19}u_1^{15} + 131072u_6u_4^{17}u_1^{17})x_{14}x_4x_3 + \\
& (-16384u_6u_4^{21}u_1^{14} - 65536u_6u_4^{19}u_1^{16} - 131072u_6u_4^{17}u_1^{17})x_{14}x_4 - \\
& 16384u_5u_4^{20}u_1^{14}x_5x_4x_3 + 8192u_6u_4^{22}u_1^{13}x_4^2 - \\
& 8192u_6u_5u_4^{21}u_1^{13}x_4x_3
\end{aligned}$$

S-pol added.

5085. Creating S-polynomial from the pair  $(p_{93}, p_{94})$ .

Forming S-pol of  $p_{93}$  and  $p_{94}$ :

$$\begin{aligned}
p_{1152} = & 4096u_4^{20}u_1^{12}x_{14}x_5 + (-16384u_4^{17}u_1^{14} + 8192u_4^{17}u_1^{13})x_5x_4x_3 + \\
& (-2048u_4^{21}u_1^{11} + 8192u_4^{19}u_1^{13})x_5x_4 + 2048u_5u_4^{20}u_1^{11}x_5x_3 - \\
& 4096u_5u_4^{20}u_1^{12}x_5 - 8192u_6u_4^{18}u_1^{13}x_4x_3 + 8192u_6u_4^{18}u_1^{13}x_4
\end{aligned}$$

S-pol added.

5086. Creating S-polynomial from the pair  $(p_{93}, p_{95})$ .

Forming S-pol of  $p_{93}$  and  $p_{95}$ : Polynomial too big for output (text size is 2098 characters, number of terms is 18)

S-pol added.

5087. Creating S-polynomial from the pair  $(p_{93}, p_{96})$ .

Forming S-pol of  $p_{93}$  and  $p_{96}$ :

$$\begin{aligned} p_{1153} = & (-16384u_5u_4^{14}u_3^4u_1^{14} + 32768u_5u_4^{12}u_3^4u_1^{15})x_{16}x_8 + \\ & (8192u_4^{14}u_3^5u_1^{13} - 16384u_4^{12}u_3^5u_1^{14})x_{16}x_6x_5 + \\ & (16384u_6u_4^{14}u_3^4u_1^{14} - 32768u_6u_4^{12}u_3^4u_1^{15})x_{16}x_6 + \\ & (4096u_5u_4^{14}u_3^5u_1^{12} - 8192u_5u_4^{12}u_3^5u_1^{13})x_{16}x_5x_2 + \\ & (-4096u_6u_4^{14}u_3^5u_1^{12} + 8192u_6u_4^{12}u_3^5u_1^{13})x_{16}x_4x_2 - \\ & 8192u_4^{14}u_3^5u_1^{13}x_{14}x_8x_5 + \\ & (32768u_4^{11}u_3^5u_1^{15} - 16384u_4^{11}u_3^5u_1^{14})x_8x_5x_4x_3 + \\ & (-16384u_4^{13}u_3^5u_1^{14} + 8192u_4^{13}u_3^5u_1^{13})x_8x_5x_4 - \\ & 4096u_5u_4^{14}u_3^5u_1^{12}x_8x_5x_3 + 8192u_5u_4^{14}u_3^5u_1^{13}x_8x_5 + \\ & (4096u_6u_4^{14}u_3^5u_1^{12} + 16384u_6u_4^{12}u_3^5u_1^{14} - \\ & 8192u_6u_4^{12}u_3^5u_1^{13})x_8x_4x_3 - 8192u_6u_4^{14}u_3^5u_1^{13}x_8x_4 \end{aligned}$$

S-pol added.

5088. Creating S-polynomial from the pair  $(p_{93}, p_{97})$ .

Forming S-pol of  $p_{93}$  and  $p_{97}$ : Polynomial too big for output (text size is 1466 characters, number of terms is 14)

S-pol added.

5089. Creating S-polynomial from the pair  $(p_{93}, p_{98})$ .

Skipping pair  $p_{93}$  and  $p_{98}$  because gcd of their leading monoms is zero.

5090. Creating S-polynomial from the pair  $(p_{93}, p_{99})$ .

Forming S-pol of  $p_{93}$  and  $p_{99}$ : Polynomial too big for output (text size is 4924 characters, number of terms is 31)

S-pol added.

5091. Creating S-polynomial from the pair  $(p_{93}, p_{100})$ .

Forming S-pol of  $p_{93}$  and  $p_{100}$ : Polynomial too big for output (text size is 2119 characters, number of terms is 18)

S-pol added.

5092. Creating S-polynomial from the pair  $(p_{93}, p_{101})$ .

Forming S-pol of  $p_{93}$  and  $p_{101}$ :

$$\begin{aligned}
p_{1154} = & (-16384u_5u_4^{14}u_2^4u_1^{14} + 32768u_5u_4^{12}u_2^4u_1^{15})x_{16}x_{12} + \\
& (8192u_4^{14}u_2^5u_1^{13} - 16384u_4^{12}u_2^5u_1^{14})x_{16}x_{10}x_5 + \\
& (16384u_6u_4^{14}u_2^4u_1^{14} - 32768u_6u_4^{12}u_2^4u_1^{15})x_{16}x_{10} + \\
& (4096u_5u_4^{14}u_2^5u_1^{12} - 8192u_5u_4^{12}u_2^5u_1^{13})x_{16}x_5x_1 + \\
& (-4096u_6u_4^{14}u_2^5u_1^{12} + 8192u_6u_4^{12}u_2^5u_1^{13})x_{16}x_4x_1 - \\
& 8192u_4^{14}u_2^5u_1^{13}x_{14}x_{12}x_5 + \\
& (32768u_4^{11}u_2^5u_1^{15} - 16384u_4^{11}u_2^5u_1^{14})x_{12}x_5x_4x_3 + \\
& (-16384u_4^{13}u_2^5u_1^{14} + 8192u_4^{13}u_2^5u_1^{13})x_{12}x_5x_4 - \\
& 4096u_5u_4^{14}u_2^5u_1^{12}x_{12}x_5x_3 + 8192u_5u_4^{14}u_2^5u_1^{13}x_{12}x_5 + \\
& (4096u_6u_4^{14}u_2^5u_1^{12} + 16384u_6u_4^{12}u_2^5u_1^{14} - \\
& 8192u_6u_4^{12}u_2^5u_1^{13})x_{12}x_4x_3 - 8192u_6u_4^{14}u_2^5u_1^{13}x_{12}x_4
\end{aligned}$$

S-pol added.

5093. Creating S-polynomial from the pair  $(p_{93}, p_{102})$ .

Forming S-pol of  $p_{93}$  and  $p_{102}$ : Polynomial too big for output (text size is 1474 characters, number of terms is 14)

S-pol added.

5094. Creating S-polynomial from the pair  $(p_{93}, p_{103})$ .

Forming S-pol of  $p_{93}$  and  $p_{103}$ : Polynomial too big for output (text size is 4937 characters, number of terms is 31)

S-pol added.

5095. Creating S-polynomial from the pair  $(p_{93}, p_{104})$ .

Forming S-pol of  $p_{93}$  and  $p_{104}$ : Polynomial too big for output (text size is 1641 characters, number of terms is 16)

S-pol added.

5096. Creating S-polynomial from the pair  $(p_{93}, p_{105})$ .

Forming S-pol of  $p_{93}$  and  $p_{105}$ :

$$\begin{aligned}
p_{1155} = & (-16384u_5u_4^{18}u_1^{14} + 32768u_5u_4^{16}u_1^{15})x_{16}x_4 - 16384u_4^{17}u_1^{14}x_{14}x_5x_4 + \\
& (16384u_6u_4^{18}u_1^{14} - 32768u_6u_4^{16}u_1^{15})x_{14}x_4 + \\
& (32768u_4^{16}u_1^{15} - 16384u_4^{16}u_1^{14})x_5x_4^2x_3 + \\
& (-16384u_4^{18}u_1^{14} + 8192u_4^{18}u_1^{13})x_5x_4^2 - 8192u_5u_4^{17}u_1^{13}x_5x_4x_3 + \\
& 8192u_5u_4^{19}u_1^{13}x_5x_4 + 16384u_6u_4^{17}u_1^{14}x_4^2x_3 - \\
& 8192u_6u_4^{19}u_1^{13}x_4^2
\end{aligned}$$

S-pol added.

5097. Creating S-polynomial from the pair  $(p_{93}, p_{106})$ .

Forming S-pol of  $p_{93}$  and  $p_{106}$ :

$$\begin{aligned} p_{1156} = & -262144u_4^{25}u_1^{18}x_{14}x_5x_4 + (1048576u_4^{22}u_1^{20} - 524288u_4^{22}u_1^{19})x_5x_4^2x_3 + \\ & (131072u_4^{26}u_1^{17} - 524288u_4^{24}u_1^{19})x_5x_4^2 - 131072u_5u_4^{25}u_1^{17}x_5x_4x_3 + \\ & 262144u_5u_4^{25}u_1^{18}x_5x_4 + 524288u_6u_4^{23}u_1^{19}x_4^2x_3 - \\ & 524288u_6u_4^{23}u_1^{19}x_4^2 \end{aligned}$$

S-pol added.

5098. Creating S-polynomial from the pair  $(p_{94}, p_{95})$ .

Skipping pair  $p_{94}$  and  $p_{95}$  because gcd of their leading monoms is zero.

5099. Creating S-polynomial from the pair  $(p_{94}, p_{96})$ .

Skipping pair  $p_{94}$  and  $p_{96}$  because gcd of their leading monoms is zero.

5100. Creating S-polynomial from the pair  $(p_{94}, p_{97})$ .

Skipping pair  $p_{94}$  and  $p_{97}$  because gcd of their leading monoms is zero.

5101. Creating S-polynomial from the pair  $(p_{94}, p_{98})$ .

Skipping pair  $p_{94}$  and  $p_{98}$  because gcd of their leading monoms is zero.

5102. Creating S-polynomial from the pair  $(p_{94}, p_{99})$ .

Forming S-pol of  $p_{94}$  and  $p_{99}$ : Polynomial too big for output (text size is 2105 characters, number of terms is 27)

Reduced to zero.

5103. Creating S-polynomial from the pair  $(p_{94}, p_{100})$ .

Skipping pair  $p_{94}$  and  $p_{100}$  because gcd of their leading monoms is zero.

5104. Creating S-polynomial from the pair  $(p_{94}, p_{101})$ .

Skipping pair  $p_{94}$  and  $p_{101}$  because gcd of their leading monoms is zero.

5105. Creating S-polynomial from the pair  $(p_{94}, p_{102})$ .

Skipping pair  $p_{94}$  and  $p_{102}$  because gcd of their leading monoms is zero.

5106. Creating S-polynomial from the pair  $(p_{94}, p_{103})$ .

Forming S-pol of  $p_{94}$  and  $p_{103}$ : Polynomial too big for output (text size is 2114 characters, number of terms is 27)

Reduced to zero.

5107. Creating S-polynomial from the pair  $(p_{94}, p_{104})$ .

Forming S-pol of  $p_{94}$  and  $p_{104}$ :

$$\begin{aligned} p_{1157} = & 2097152u_5u_4^{23}u_1^{21}x_{16}x_{14} + (4194304u_5u_4^{22}u_1^{22} + 4194304u_4^{23}u_1^{22})x_{16}x_4 + \\ & (524288u_5^2u_4^{25}u_1^{19} - 2097152u_5^2u_4^{23}u_1^{21})x_{16} - \\ & 2097152u_6u_4^{23}u_1^{21}x_{14}^2 - 2097152u_4^{23}u_1^{21}x_{14}x_5x_4 - \end{aligned}$$



$$\begin{aligned}
& 1048576u_5u_4^{24}u_1^{20}x_{14}x_5 + 2097152u_6u_4^{22}u_1^{21}x_{14}x_4x_3 - \\
& 4194304u_6u_4^{22}u_1^{22}x_{14}x_4 - 524288u_6u_5u_4^{25}u_1^{19}x_{14} - \\
& 1048576u_5u_4^{23}u_1^{20}x_5x_4x_3 - 262144u_5^2u_4^{26}u_1^{18}x_5 - \\
& 524288u_6u_5u_4^{24}u_1^{19}x_4x_3 + \\
& (262144u_6u_5u_4^{26}u_1^{18} + 1048576u_6u_4^{25}u_1^{20})x_4 - 524288u_6u_5^2u_4^{25}u_1^{19}
\end{aligned}$$

Reduced to zero.

5108. Creating S-polynomial from the pair  $(p_{94}, p_{105})$ .

Forming S-pol of  $p_{94}$  and  $p_{105}$ :

$$\begin{aligned}
p_{1158} = & 256u_5u_4^{10}u_1^8x_{16} - 128u_4^{11}u_1^7x_{14}x_5 - 256u_6u_4^{10}u_1^8x_{14} + \\
& 64u_4^{12}u_1^6x_5x_4 - 64u_5u_4^{11}u_1^6x_5x_3 + 128u_6u_4^{11}u_1^7x_4
\end{aligned}$$

Reduced to zero.

5109. Creating S-polynomial from the pair  $(p_{94}, p_{106})$ .

Forming S-pol of  $p_{94}$  and  $p_{106}$ :

$$\begin{aligned}
p_{1159} = & -2048u_4^{19}u_1^{11}x_{14}x_5 + (8192u_4^{16}u_1^{13} - 4096u_4^{16}u_1^{12})x_5x_4x_3 + \\
& (1024u_4^{20}u_1^{10} - 4096u_4^{18}u_1^{12})x_5x_4 - 1024u_5u_4^{19}u_1^{10}x_5x_3 + \\
& 2048u_5u_4^{19}u_1^{11}x_5 + 4096u_6u_4^{17}u_1^{12}x_4x_3 - 4096u_6u_4^{17}u_1^{12}x_4
\end{aligned}$$

S-pol added.

5110. Creating S-polynomial from the pair  $(p_{95}, p_{96})$ .

Forming S-pol of  $p_{95}$  and  $p_{96}$ :

$$\begin{aligned}
p_{1160} = & 4194304u_5u_3^{22}u_1^{22}x_8x_6x_4 + 16777216u_5u_3^{20}u_1^{24}x_8x_6 + \\
& (8388608u_5u_3^{21}u_1^{23} + 8388608u_3^{22}u_1^{23})x_8x_4^2 + \\
& (1048576u_5^2u_3^{24}u_1^{20} - 4194304u_5^2u_3^{22}u_1^{22})x_8x_4 - \\
& 8388608u_3^{21}u_1^{23}x_6^2x_5 - 4194304u_6u_3^{22}u_1^{22}x_6^2x_4 - \\
& 16777216u_6u_3^{20}u_1^{24}x_6^2 - 2097152u_5u_3^{23}u_1^{21}x_6x_5x_4 - \\
& 4194304u_5u_3^{21}u_1^{22}x_6x_5x_2 + 4194304u_6u_3^{21}u_1^{22}x_6x_4x_2 - \\
& 1048576u_6u_5u_3^{24}u_1^{20}x_6x_4 - 2097152u_5u_3^{22}u_1^{21}x_5x_4^2x_2 - \\
& 524288u_5^2u_3^{25}u_1^{19}x_5x_4 - 1048576u_6u_5u_3^{23}u_1^{20}x_4^2x_2 + \\
& (524288u_6u_5u_3^{25}u_1^{19} + 2097152u_6u_3^{24}u_1^{21})x_4^2 - \\
& 1048576u_6u_5^2u_3^{24}u_1^{20}x_4
\end{aligned}$$

S-pol added.

5111. Creating S-polynomial from the pair  $(p_{95}, p_{97})$ .

Forming S-pol of  $p_{95}$  and  $p_{97}$ : Polynomial too big for output (text size is 1060 characters, number of terms is 16)

S-pol added.

5112. Creating S-polynomial from the pair  $(p_{95}, p_{98})$ .  
 Forming S-pol of  $p_{95}$  and  $p_{98}$ : Polynomial too big for output (text size is 4377 characters, number of terms is 38)  
 Reduced to zero.
5113. Creating S-polynomial from the pair  $(p_{95}, p_{99})$ .  
 Forming S-pol of  $p_{95}$  and  $p_{99}$ : Polynomial too big for output (text size is 4383 characters, number of terms is 38)  
 Reduced to zero.
5114. Creating S-polynomial from the pair  $(p_{95}, p_{100})$ .  
 Forming S-pol of  $p_{95}$  and  $p_{100}$ : Polynomial too big for output (text size is 1801 characters, number of terms is 21)  
 Reduced to zero.
5115. Creating S-polynomial from the pair  $(p_{95}, p_{101})$ .  
 Forming S-pol of  $p_{95}$  and  $p_{101}$ : Polynomial too big for output (text size is 1059 characters, number of terms is 15)  
 Reduced to zero.
5116. Creating S-polynomial from the pair  $(p_{95}, p_{102})$ .  
 Forming S-pol of  $p_{95}$  and  $p_{102}$ : Polynomial too big for output (text size is 1374 characters, number of terms is 18)  
 S-pol added.
5117. Creating S-polynomial from the pair  $(p_{95}, p_{103})$ .  
 Skipping pair  $p_{95}$  and  $p_{103}$  because gcd of their leading monoms is zero.
5118. Creating S-polynomial from the pair  $(p_{95}, p_{104})$ .  
 Forming S-pol of  $p_{95}$  and  $p_{104}$ : Polynomial too big for output (text size is 1800 characters, number of terms is 21)  
 Reduced to zero.
5119. Creating S-polynomial from the pair  $(p_{95}, p_{105})$ .  
 Forming S-pol of  $p_{95}$  and  $p_{105}$ : Polynomial too big for output (text size is 1059 characters, number of terms is 15)  
 Reduced to zero.
5120. Creating S-polynomial from the pair  $(p_{95}, p_{106})$ .  
 Forming S-pol of  $p_{95}$  and  $p_{106}$ : Polynomial too big for output (text size is 1374 characters, number of terms is 18)  
 S-pol added.
5121. Creating S-polynomial from the pair  $(p_{96}, p_{97})$ .  
 Forming S-pol of  $p_{96}$  and  $p_{97}$ :

$$p_{1161} = 8192u_5u_3^{17}u_1^{13}x_8x_4 - 8192u_6u_3^{17}u_1^{13}x_6x_4 +$$

$$\begin{aligned}
&(-16384u_3^{15}u_1^{14} + 8192u_3^{15}u_1^{13})x_5x_4^2x_2 + 8192u_3^{17}u_1^{13}x_5x_4^2 - \\
&4096u_5u_3^{18}u_1^{12}x_5x_4 - 8192u_6u_3^{16}u_1^{13}x_4^2x_2 + \\
&(4096u_6u_3^{18}u_1^{12} + 8192u_6u_3^{16}u_1^{13})x_4^2
\end{aligned}$$

S-pol added.

5122. Creating S-polynomial from the pair  $(p_{96}, p_{98})$ .

Forming S-pol of  $p_{96}$  and  $p_{98}$ : Polynomial too big for output (text size is 2738 characters, number of terms is 31)

Reduced to zero.

5123. Creating S-polynomial from the pair  $(p_{96}, p_{99})$ .

Forming S-pol of  $p_{96}$  and  $p_{99}$ : Polynomial too big for output (text size is 2737 characters, number of terms is 31)

Reduced to zero.

5124. Creating S-polynomial from the pair  $(p_{96}, p_{100})$ .

Forming S-pol of  $p_{96}$  and  $p_{100}$ : Polynomial too big for output (text size is 1065 characters, number of terms is 15)

Reduced to zero.

5125. Creating S-polynomial from the pair  $(p_{96}, p_{101})$ .

Forming S-pol of  $p_{96}$  and  $p_{101}$ :

$$\begin{aligned}
p_{1162} = &(-512u_5u_3^5u_2^4u_1^9 + 512u_5u_3^4u_2^5u_1^9)x_{12}x_8 - \\
&256u_3^5u_2^5u_1^8x_{12}x_6x_5 - 512u_6u_3^4u_2^5u_1^9x_{12}x_6 - \\
&128u_5u_3^5u_2^5u_1^7x_{12}x_5x_2 + 128u_6u_3^5u_2^5u_1^7x_{12}x_4x_2 + \\
&256u_3^5u_2^5u_1^8x_{10}x_8x_5 + 512u_6u_3^5u_2^4u_1^9x_{10}x_8 + \\
&128u_5u_3^5u_2^5u_1^7x_8x_5x_1 - 128u_6u_3^5u_2^5u_1^7x_8x_4x_1
\end{aligned}$$

Reduced to zero.

5126. Creating S-polynomial from the pair  $(p_{96}, p_{102})$ .

Forming S-pol of  $p_{96}$  and  $p_{102}$ :

$$\begin{aligned}
p_{1163} = &8192u_5u_3^4u_2^{13}u_1^{13}x_{12}x_8 - 4096u_3^5u_2^{13}u_1^{12}x_{12}x_6x_5 - \\
&8192u_6u_3^4u_2^{13}u_1^{13}x_{12}x_6 - 2048u_5u_3^5u_2^{13}u_1^{11}x_{12}x_5x_2 + \\
&2048u_6u_3^5u_2^{13}u_1^{11}x_{12}x_4x_2 + 4096u_3^5u_2^{13}u_1^{12}x_{10}x_8x_5 + \\
&(-16384u_3^5u_2^{10}u_1^{14} + 8192u_3^5u_2^{10}u_1^{13})x_8x_5x_4x_1 + \\
&8192u_3^5u_2^{12}u_1^{13}x_8x_5x_4 + 2048u_5u_3^5u_2^{13}u_1^{11}x_8x_5x_1 - \\
&4096u_5u_3^5u_2^{13}u_1^{12}x_8x_5 + \\
&(-2048u_6u_3^5u_2^{13}u_1^{11} - 8192u_6u_3^5u_2^{11}u_1^{13})x_8x_4x_1 + \\
&(4096u_6u_3^5u_2^{13}u_1^{12} + 8192u_6u_3^5u_2^{11}u_1^{13})x_8x_4
\end{aligned}$$

S-pol added.

5127. Creating S-polynomial from the pair  $(p_{96}, p_{103})$ .

Skipping pair  $p_{96}$  and  $p_{103}$  because gcd of their leading monoms is zero.

5128. Creating S-polynomial from the pair  $(p_{96}, p_{104})$ .

Forming S-pol of  $p_{96}$  and  $p_{104}$ : Polynomial too big for output (text size is 1065 characters, number of terms is 15)

Reduced to zero.

5129. Creating S-polynomial from the pair  $(p_{96}, p_{105})$ .

Forming S-pol of  $p_{96}$  and  $p_{105}$ :

$$\begin{aligned} p_{1164} = & (512u_5u_4^5u_3^4u_1^9 - 512u_5u_4^4u_3^5u_1^9)x_{16}x_8 - \\ & 256u_4^5u_3^5u_1^8x_{16}x_6x_5 - 512u_6u_4^5u_3^4u_1^9x_{16}x_6 - \\ & 128u_5u_4^5u_3^5u_1^7x_{16}x_5x_2 + 128u_6u_4^5u_3^5u_1^7x_{16}x_4x_2 + \\ & 256u_4^5u_3^5u_1^8x_{14}x_8x_5 + 512u_6u_4^4u_3^5u_1^9x_{14}x_8 + \\ & 128u_5u_4^5u_3^5u_1^7x_8x_5x_3 - 128u_6u_4^5u_3^5u_1^7x_8x_4x_3 \end{aligned}$$

Reduced to zero.

5130. Creating S-polynomial from the pair  $(p_{96}, p_{106})$ .

Forming S-pol of  $p_{96}$  and  $p_{106}$ :

$$\begin{aligned} p_{1165} = & 8192u_5u_4^{13}u_3^4u_1^{13}x_{16}x_8 - 4096u_4^{13}u_3^5u_1^{12}x_{16}x_6x_5 - \\ & 8192u_6u_4^{13}u_3^4u_1^{13}x_{16}x_6 - 2048u_5u_4^{13}u_3^5u_1^{11}x_{16}x_5x_2 + \\ & 2048u_6u_4^{13}u_3^5u_1^{11}x_{16}x_4x_2 + 4096u_4^{13}u_3^5u_1^{12}x_{14}x_8x_5 + \\ & (-16384u_4^{10}u_3^5u_1^{14} + 8192u_4^{10}u_3^5u_1^{13})x_8x_5x_4x_3 + \\ & 8192u_4^{12}u_3^5u_1^{13}x_8x_5x_4 + 2048u_5u_4^{13}u_3^5u_1^{11}x_8x_5x_3 - \\ & 4096u_5u_4^{13}u_3^5u_1^{12}x_8x_5 + \\ & (-2048u_6u_4^{13}u_3^5u_1^{11} - 8192u_6u_4^{11}u_3^5u_1^{13})x_8x_4x_3 + \\ & (4096u_6u_4^{13}u_3^5u_1^{12} + 8192u_6u_4^{11}u_3^5u_1^{13})x_8x_4 \end{aligned}$$

S-pol added.

5131. Creating S-polynomial from the pair  $(p_{97}, p_{98})$ .

Forming S-pol of  $p_{97}$  and  $p_{98}$ : Polynomial too big for output (text size is 3332 characters, number of terms is 31)

S-pol added.

5132. Creating S-polynomial from the pair  $(p_{97}, p_{99})$ .

Forming S-pol of  $p_{97}$  and  $p_{99}$ : Polynomial too big for output (text size is 3330 characters, number of terms is 31)

S-pol added.

5133. Creating S-polynomial from the pair  $(p_{97}, p_{100})$ .

Forming S-pol of  $p_{97}$  and  $p_{100}$ : Polynomial too big for output (text size is 1388 characters, number of terms is 18)

S-pol added.

5134. Creating S-polynomial from the pair  $(p_{97}, p_{101})$ .

Forming S-pol of  $p_{97}$  and  $p_{101}$ :

$$\begin{aligned} p_{1166} = & -8192u_5u_3^{13}u_2^4u_1^{13}x_{12}x_8 - 4096u_3^{13}u_2^5u_1^{12}x_{12}x_6x_5 + \\ & (16384u_3^{10}u_2^5u_1^{14} - 8192u_3^{10}u_2^5u_1^{13})x_{12}x_5x_4x_2 - \\ & 8192u_3^{12}u_2^5u_1^{13}x_{12}x_5x_4 - 2048u_5u_3^{13}u_2^5u_1^{11}x_{12}x_5x_2 + \\ & 4096u_5u_3^{13}u_2^5u_1^{12}x_{12}x_5 + \\ & (2048u_6u_3^{13}u_2^5u_1^{11} + 8192u_6u_3^{11}u_2^5u_1^{13})x_{12}x_4x_2 + \\ & (-4096u_6u_3^{13}u_2^5u_1^{12} - 8192u_6u_3^{11}u_2^5u_1^{13})x_{12}x_4 + \\ & 4096u_3^{13}u_2^5u_1^{12}x_{10}x_8x_5 + 8192u_6u_3^{13}u_2^4u_1^{13}x_{10}x_8 + \\ & 2048u_5u_3^{13}u_2^5u_1^{11}x_8x_5x_1 - 2048u_6u_3^{13}u_2^5u_1^{11}x_8x_4x_1 \end{aligned}$$

S-pol added.

5135. Creating S-polynomial from the pair  $(p_{97}, p_{102})$ .

Forming S-pol of  $p_{97}$  and  $p_{102}$ : Polynomial too big for output (text size is 1014 characters, number of terms is 14)

S-pol added.

5136. Creating S-polynomial from the pair  $(p_{97}, p_{103})$ .

Skipping pair  $p_{97}$  and  $p_{103}$  because gcd of their leading monoms is zero.

5137. Creating S-polynomial from the pair  $(p_{97}, p_{104})$ .

Forming S-pol of  $p_{97}$  and  $p_{104}$ : Polynomial too big for output (text size is 1388 characters, number of terms is 18)

S-pol added.

5138. Creating S-polynomial from the pair  $(p_{97}, p_{105})$ .

Forming S-pol of  $p_{97}$  and  $p_{105}$ :

$$\begin{aligned} p_{1167} = & -8192u_5u_4^4u_3^{13}u_1^{13}x_{16}x_8 - 4096u_4^5u_3^{13}u_1^{12}x_{16}x_6x_5 + \\ & (16384u_4^5u_3^{10}u_1^{14} - 8192u_4^5u_3^{10}u_1^{13})x_{16}x_5x_4x_2 - \\ & 8192u_4^5u_3^{12}u_1^{13}x_{16}x_5x_4 - 2048u_5u_4^5u_3^{13}u_1^{11}x_{16}x_5x_2 + \\ & 4096u_5u_4^5u_3^{13}u_1^{12}x_{16}x_5 + \\ & (2048u_6u_4^5u_3^{13}u_1^{11} + 8192u_6u_4^5u_3^{11}u_1^{13})x_{16}x_4x_2 + \\ & (-4096u_6u_4^5u_3^{13}u_1^{12} - 8192u_6u_4^5u_3^{11}u_1^{13})x_{16}x_4 + \\ & 4096u_4^5u_3^{13}u_1^{12}x_{14}x_8x_5 + 8192u_6u_4^4u_3^{13}u_1^{13}x_{14}x_8 + \\ & 2048u_5u_4^5u_3^{13}u_1^{11}x_8x_5x_3 - 2048u_6u_4^5u_3^{13}u_1^{11}x_8x_4x_3 \end{aligned}$$

S-pol added.

5139. Creating S-polynomial from the pair  $(p_{97}, p_{106})$ .  
 Forming S-pol of  $p_{97}$  and  $p_{106}$ : Polynomial too big for output (text size is 1014 characters, number of terms is 14)  
 S-pol added.
5140. Creating S-polynomial from the pair  $(p_{98}, p_{99})$ .  
 Forming S-pol of  $p_{98}$  and  $p_{99}$ : Polynomial too big for output (text size is 10512 characters, number of terms is 48)  
 Reduced to zero.
5141. Creating S-polynomial from the pair  $(p_{98}, p_{100})$ .  
 Forming S-pol of  $p_{98}$  and  $p_{100}$ : Polynomial too big for output (text size is 4402 characters, number of terms is 38)  
 Reduced to zero.
5142. Creating S-polynomial from the pair  $(p_{98}, p_{101})$ .  
 Forming S-pol of  $p_{98}$  and  $p_{101}$ : Polynomial too big for output (text size is 2736 characters, number of terms is 31)  
 Reduced to zero.
5143. Creating S-polynomial from the pair  $(p_{98}, p_{102})$ .  
 Forming S-pol of  $p_{98}$  and  $p_{102}$ : Polynomial too big for output (text size is 3327 characters, number of terms is 31)  
 S-pol added.
5144. Creating S-polynomial from the pair  $(p_{98}, p_{103})$ .  
 Forming S-pol of  $p_{98}$  and  $p_{103}$ : Polynomial too big for output (text size is 10499 characters, number of terms is 48)  
 Reduced to zero.
5145. Creating S-polynomial from the pair  $(p_{98}, p_{104})$ .  
 Skipping pair  $p_{98}$  and  $p_{104}$  because gcd of their leading monoms is zero.
5146. Creating S-polynomial from the pair  $(p_{98}, p_{105})$ .  
 Skipping pair  $p_{98}$  and  $p_{105}$  because gcd of their leading monoms is zero.
5147. Creating S-polynomial from the pair  $(p_{98}, p_{106})$ .  
 Skipping pair  $p_{98}$  and  $p_{106}$  because gcd of their leading monoms is zero.
5148. Creating S-polynomial from the pair  $(p_{99}, p_{100})$ .  
 Skipping pair  $p_{99}$  and  $p_{100}$  because gcd of their leading monoms is zero.
5149. Creating S-polynomial from the pair  $(p_{99}, p_{101})$ .  
 Skipping pair  $p_{99}$  and  $p_{101}$  because gcd of their leading monoms is zero.
5150. Creating S-polynomial from the pair  $(p_{99}, p_{102})$ .  
 Skipping pair  $p_{99}$  and  $p_{102}$  because gcd of their leading monoms is zero.

5151. Creating S-polynomial from the pair  $(p_{99}, p_{103})$ .  
 Forming S-pol of  $p_{99}$  and  $p_{103}$ : Polynomial too big for output (text size is 10499 characters, number of terms is 48)  
 Reduced to zero.
5152. Creating S-polynomial from the pair  $(p_{99}, p_{104})$ .  
 Forming S-pol of  $p_{99}$  and  $p_{104}$ : Polynomial too big for output (text size is 4396 characters, number of terms is 38)  
 Reduced to zero.
5153. Creating S-polynomial from the pair  $(p_{99}, p_{105})$ .  
 Forming S-pol of  $p_{99}$  and  $p_{105}$ : Polynomial too big for output (text size is 2737 characters, number of terms is 31)  
 Reduced to zero.
5154. Creating S-polynomial from the pair  $(p_{99}, p_{106})$ .  
 Forming S-pol of  $p_{99}$  and  $p_{106}$ : Polynomial too big for output (text size is 3329 characters, number of terms is 31)  
 S-pol added.
5155. Creating S-polynomial from the pair  $(p_{100}, p_{101})$ .  
 Forming S-pol of  $p_{100}$  and  $p_{101}$ :  

$$p_{1168} = 4194304u_5u_2^{22}u_1^{22}x_{12}x_{10}x_4 + 16777216u_5u_2^{20}u_1^{24}x_{12}x_{10} +$$

$$(8388608u_5u_2^{21}u_1^{23} + 8388608u_2^{22}u_1^{23})x_{12}x_4^2 +$$

$$(1048576u_5^2u_2^{24}u_1^{20} - 4194304u_5^2u_2^{22}u_1^{22})x_{12}x_4 -$$

$$8388608u_2^{21}u_1^{23}x_{10}^2x_5 - 4194304u_6u_2^{22}u_1^{22}x_{10}^2x_4 -$$

$$16777216u_6u_2^{20}u_1^{24}x_{10}^2 - 2097152u_5u_2^{23}u_1^{21}x_{10}x_5x_4 -$$

$$4194304u_5u_2^{21}u_1^{22}x_{10}x_5x_1 + 4194304u_6u_2^{21}u_1^{22}x_{10}x_4x_1 -$$

$$1048576u_6u_5u_2^{24}u_1^{20}x_{10}x_4 - 2097152u_5u_2^{22}u_1^{21}x_5x_4^2x_1 -$$

$$524288u_5^2u_2^{25}u_1^{19}x_5x_4 - 1048576u_6u_5u_2^{23}u_1^{20}x_4^2x_1 +$$

$$(524288u_6u_5u_2^{25}u_1^{19} + 2097152u_6u_2^{24}u_1^{21})x_4^2 -$$

$$1048576u_6u_5^2u_2^{24}u_1^{20}x_4$$
  
 S-pol added.
5156. Creating S-polynomial from the pair  $(p_{100}, p_{102})$ .  
 Forming S-pol of  $p_{100}$  and  $p_{102}$ : Polynomial too big for output (text size is 1072 characters, number of terms is 16)  
 S-pol added.
5157. Creating S-polynomial from the pair  $(p_{100}, p_{103})$ .  
 Forming S-pol of  $p_{100}$  and  $p_{103}$ : Polynomial too big for output (text size is 4422 characters, number of terms is 38)  
 Reduced to zero.

5158. Creating S-polynomial from the pair  $(p_{100}, p_{104})$ .

Forming S-pol of  $p_{100}$  and  $p_{104}$ : Polynomial too big for output (text size is 1827 characters, number of terms is 21)

Reduced to zero.

5159. Creating S-polynomial from the pair  $(p_{100}, p_{105})$ .

Forming S-pol of  $p_{100}$  and  $p_{105}$ : Polynomial too big for output (text size is 1074 characters, number of terms is 15)

Reduced to zero.

5160. Creating S-polynomial from the pair  $(p_{100}, p_{106})$ .

Forming S-pol of  $p_{100}$  and  $p_{106}$ : Polynomial too big for output (text size is 1395 characters, number of terms is 18)

S-pol added.

5161. Creating S-polynomial from the pair  $(p_{101}, p_{102})$ .

Forming S-pol of  $p_{101}$  and  $p_{102}$ :

$$\begin{aligned} p_{1169} = & 8192u_5u_2^{17}u_1^{13}x_{12}x_4 - 8192u_6u_2^{17}u_1^{13}x_{10}x_4 + \\ & (-16384u_2^{15}u_1^{14} + 8192u_2^{15}u_1^{13})x_5x_4^2x_1 + 8192u_2^{17}u_1^{13}x_5x_4^2 - \\ & 4096u_5u_2^{18}u_1^{12}x_5x_4 - 8192u_6u_2^{16}u_1^{13}x_4^2x_1 + \\ & (4096u_6u_2^{18}u_1^{12} + 8192u_6u_2^{16}u_1^{13})x_4^2 \end{aligned}$$

S-pol added.

5162. Creating S-polynomial from the pair  $(p_{101}, p_{103})$ .

Forming S-pol of  $p_{101}$  and  $p_{103}$ : Polynomial too big for output (text size is 2749 characters, number of terms is 31)

Reduced to zero.

5163. Creating S-polynomial from the pair  $(p_{101}, p_{104})$ .

Forming S-pol of  $p_{101}$  and  $p_{104}$ : Polynomial too big for output (text size is 1078 characters, number of terms is 15)

Reduced to zero.

5164. Creating S-polynomial from the pair  $(p_{101}, p_{105})$ .

Forming S-pol of  $p_{101}$  and  $p_{105}$ :

$$\begin{aligned} p_{1170} = & (512u_5u_4^5u_2^4u_1^9 - 512u_5u_4^4u_2^5u_1^9)x_{16}x_{12} - \\ & 256u_4^5u_2^5u_1^8x_{16}x_{10}x_5 - 512u_6u_4^5u_2^4u_1^9x_{16}x_{10} - \\ & 128u_5u_4^5u_2^7u_1^7x_{16}x_5x_1 + 128u_6u_4^5u_2^5u_1^7x_{16}x_4x_1 + \\ & 256u_4^5u_2^5u_1^8x_{14}x_{12}x_5 + 512u_6u_4^4u_2^5u_1^9x_{14}x_{12} + \\ & 128u_5u_4^5u_2^5u_1^7x_{12}x_5x_3 - 128u_6u_4^5u_2^5u_1^7x_{12}x_4x_3 \end{aligned}$$

Reduced to zero.



5165. Creating S-polynomial from the pair  $(p_{101}, p_{106})$ .

Forming S-pol of  $p_{101}$  and  $p_{106}$ :

$$\begin{aligned} p_{1171} = & 8192u_5u_4^{13}u_2^4u_1^{13}x_{16}x_{12} - 4096u_4^{13}u_2^5u_1^{12}x_{16}x_{10}x_5 - \\ & 8192u_6u_4^{13}u_2^4u_1^{13}x_{16}x_{10} - 2048u_5u_4^{13}u_2^5u_1^{11}x_{16}x_5x_1 + \\ & 2048u_6u_4^{13}u_2^5u_1^{11}x_{16}x_4x_1 + 4096u_4^{13}u_2^5u_1^{12}x_{14}x_{12}x_5 + \\ & (-16384u_4^{10}u_2^5u_1^{14} + 8192u_4^{10}u_2^5u_1^{13})x_{12}x_5x_4x_3 + \\ & 8192u_4^{12}u_2^5u_1^{13}x_{12}x_5x_4 + 2048u_5u_4^{13}u_2^5u_1^{11}x_{12}x_5x_3 - \\ & 4096u_5u_4^{13}u_2^5u_1^{12}x_{12}x_5 + \\ & (-2048u_6u_4^{13}u_2^5u_1^{11} - 8192u_6u_4^{11}u_2^5u_1^{13})x_{12}x_4x_3 + \\ & (4096u_6u_4^{13}u_2^5u_1^{12} + 8192u_6u_4^{11}u_2^5u_1^{13})x_{12}x_4 \end{aligned}$$

S-pol added.

5166. Creating S-polynomial from the pair  $(p_{102}, p_{103})$ .

Forming S-pol of  $p_{102}$  and  $p_{103}$ : Polynomial too big for output (text size is 3340 characters, number of terms is 31)

S-pol added.

5167. Creating S-polynomial from the pair  $(p_{102}, p_{104})$ .

Forming S-pol of  $p_{102}$  and  $p_{104}$ : Polynomial too big for output (text size is 1400 characters, number of terms is 18)

S-pol added.

5168. Creating S-polynomial from the pair  $(p_{102}, p_{105})$ .

Forming S-pol of  $p_{102}$  and  $p_{105}$ :

$$\begin{aligned} p_{1172} = & -8192u_5u_4^4u_2^{13}u_1^{13}x_{16}x_{12} - 4096u_4^5u_2^{13}u_1^{12}x_{16}x_{10}x_5 + \\ & (16384u_4^5u_2^{10}u_1^{14} - 8192u_4^5u_2^{10}u_1^{13})x_{16}x_5x_4x_1 - \\ & 8192u_4^5u_2^{12}u_1^{13}x_{16}x_5x_4 - 2048u_5u_4^5u_2^{13}u_1^{11}x_{16}x_5x_1 + \\ & 4096u_5u_4^5u_2^{13}u_1^{12}x_{16}x_5 + \\ & (2048u_6u_4^5u_2^{13}u_1^{11} + 8192u_6u_4^5u_2^{11}u_1^{13})x_{16}x_4x_1 + \\ & (-4096u_6u_4^5u_2^{13}u_1^{12} - 8192u_6u_4^5u_2^{11}u_1^{13})x_{16}x_4 + \\ & 4096u_4^5u_2^{13}u_1^{12}x_{14}x_{12}x_5 + 8192u_6u_4^4u_2^{13}u_1^{13}x_{14}x_{12} + \\ & 2048u_5u_4^5u_2^{13}u_1^{11}x_{12}x_5x_3 - 2048u_6u_4^5u_2^{13}u_1^{11}x_{12}x_4x_3 \end{aligned}$$

S-pol added.

5169. Creating S-polynomial from the pair  $(p_{102}, p_{106})$ .

Forming S-pol of  $p_{102}$  and  $p_{106}$ : Polynomial too big for output (text size is 1022 characters, number of terms is 14)

S-pol added.

5170. Creating S-polynomial from the pair  $(p_{103}, p_{104})$ .

Forming S-pol of  $p_{103}$  and  $p_{104}$ : Polynomial too big for output (text size is 4416 characters, number of terms is 38)

Reduced to zero.

5171. Creating S-polynomial from the pair  $(p_{103}, p_{105})$ .

Forming S-pol of  $p_{103}$  and  $p_{105}$ : Polynomial too big for output (text size is 2750 characters, number of terms is 31)

Reduced to zero.

5172. Creating S-polynomial from the pair  $(p_{103}, p_{106})$ .

Forming S-pol of  $p_{103}$  and  $p_{106}$ : Polynomial too big for output (text size is 3342 characters, number of terms is 31)

S-pol added.

5173. Creating S-polynomial from the pair  $(p_{104}, p_{105})$ .

Forming S-pol of  $p_{104}$  and  $p_{105}$ :

$$\begin{aligned} p_{1173} = & 4194304u_5u_4^{22}u_1^{22}x_{16}x_{14}x_4 + 16777216u_5u_4^{20}u_1^{24}x_{16}x_{14} + \\ & (8388608u_5u_4^{21}u_1^{23} + 8388608u_4^{22}u_1^{23})x_{16}x_4^2 + \\ & (1048576u_5^2u_4^{24}u_1^{20} - 4194304u_5^2u_4^{22}u_1^{22})x_{16}x_4 - \\ & 8388608u_4^{21}u_1^{23}x_{14}^2x_5 - 4194304u_6u_4^{22}u_1^{22}x_{14}^2x_4 - \\ & 16777216u_6u_4^{20}u_1^{24}x_{14}^2x_4 - 2097152u_5u_4^{23}u_1^{21}x_{14}x_5x_4 - \\ & 4194304u_5u_4^{21}u_1^{22}x_{14}x_5x_3 + 4194304u_6u_4^{21}u_1^{22}x_{14}x_4x_3 - \\ & 1048576u_6u_5u_4^{24}u_1^{20}x_{14}x_4 - 2097152u_5u_4^{22}u_1^{21}x_5x_4^2x_3 - \\ & 524288u_5^2u_4^{25}u_1^{19}x_5x_4 - 1048576u_6u_5u_4^{23}u_1^{20}x_4^2x_3 + \\ & (524288u_6u_5u_4^{25}u_1^{19} + 2097152u_6u_4^{24}u_1^{21})x_4^2 - \\ & 1048576u_6u_5^2u_4^{24}u_1^{20}x_4 \end{aligned}$$

S-pol added.

5174. Creating S-polynomial from the pair  $(p_{104}, p_{106})$ .

Forming S-pol of  $p_{104}$  and  $p_{106}$ : Polynomial too big for output (text size is 1072 characters, number of terms is 16)

S-pol added.

5175. Creating S-polynomial from the pair  $(p_{105}, p_{106})$ .

Forming S-pol of  $p_{105}$  and  $p_{106}$ :

$$\begin{aligned} p_{1174} = & 8192u_5u_4^{17}u_1^{13}x_{16}x_4 - 8192u_6u_4^{17}u_1^{13}x_{14}x_4 + \\ & (-16384u_4^{15}u_1^{14} + 8192u_4^{15}u_1^{13})x_5x_4^2x_3 + 8192u_4^{17}u_1^{13}x_5x_4^2 - \\ & 4096u_5u_4^{18}u_1^{12}x_5x_4 - 8192u_6u_4^{16}u_1^{13}x_4^2x_3 + \\ & (4096u_6u_4^{18}u_1^{12} + 8192u_6u_4^{16}u_1^{13})x_4^2 \end{aligned}$$

S-pol added.

## 5.4 Iteration 4

Current set is  $S_4 =$

$$\begin{aligned}
p_0 &= x_1^2 - 2u_1x_1 + u_2^2 \\
p_1 &= x_2^2 - 2u_1x_2 + u_3^2 \\
p_2 &= x_3^2 - 2u_1x_3 + u_4^2 \\
p_3 &= x_4^2 - 2u_1x_4 + u_5^2 \\
p_4 &= x_5^2 - 2u_1x_5 + u_6^2 \\
p_5 &= -u_3x_7 + x_6x_2 \\
p_6 &= -x_7x_2 - u_3x_6 + x_4x_2 + u_5u_3 \\
p_7 &= -u_3x_9 + x_8x_2 \\
p_8 &= -x_9x_2 - u_3x_8 + x_5x_2 + u_6u_3 \\
p_9 &= -u_2x_{11} + x_{10}x_1 \\
p_{10} &= -x_{11}x_1 - u_2x_{10} + x_4x_1 + u_5u_2 \\
p_{11} &= -u_2x_{13} + x_{12}x_1 \\
p_{12} &= -x_{13}x_1 - u_2x_{12} + x_5x_1 + u_6u_2 \\
p_{13} &= -u_4x_{15} + x_{14}x_3 \\
p_{14} &= -x_{15}x_3 - u_4x_{14} + x_4x_3 + u_5u_4 \\
p_{15} &= -u_4x_{17} + x_{16}x_3 \\
p_{16} &= -x_{17}x_3 - u_4x_{16} + x_5x_3 + u_6u_4 \\
p_{17} &= 4u_2u_1^2x_{10}x_1 - 2u_2^3u_1x_{10} - 2u_2^2u_1x_4x_1 + u_2^4x_4 - u_5u_2^3x_1 \\
p_{18} &= 4u_2u_1^2x_{12}x_1 - 2u_2^3u_1x_{12} - 2u_2^2u_1x_5x_1 + u_2^4x_5 - u_6u_2^3x_1 \\
p_{19} &= 4u_3u_1^2x_6x_2 - 2u_3^3u_1x_6 - 2u_3^2u_1x_4x_2 + u_3^4x_4 - u_5u_3^3x_2 \\
p_{20} &= 4u_3u_1^2x_8x_2 - 2u_3^3u_1x_8 - 2u_3^2u_1x_5x_2 + u_3^4x_5 - u_6u_3^3x_2 \\
p_{21} &= 4u_4u_1^2x_{14}x_3 - 2u_4^3u_1x_{14} - 2u_4^2u_1x_4x_3 + u_4^4x_4 - u_5u_4^3x_3 \\
p_{22} &= 4u_4u_1^2x_{16}x_3 - 2u_4^3u_1x_{16} - 2u_4^2u_1x_5x_3 + u_4^4x_5 - u_6u_4^3x_3 \\
p_{23} &= -2u_1x_6x_2 + u_3x_4x_2 + u_5u_3^2 \\
p_{24} &= -2u_3^5u_1x_8x_4x_2 + u_3^7x_8x_4 - u_5u_3^6x_8x_2 + 2u_3^5u_1x_6x_5x_2 - \\
&\quad u_3^7x_6x_5 + u_6u_3^6x_6x_2 \\
p_{25} &= -2u_1x_8x_2 + u_3x_5x_2 + u_6u_3^2 \\
p_{26} &= -2u_1x_{10}x_1 + u_2x_4x_1 + u_5u_2^2 \\
p_{27} &= -2u_2^5u_1x_{12}x_4x_1 + u_2^7x_{12}x_4 - u_5u_2^6x_{12}x_1 + 2u_2^5u_1x_{10}x_5x_1 - \\
&\quad u_2^7x_{10}x_5 + u_6u_2^6x_{10}x_1 \\
p_{28} &= -2u_1x_{12}x_1 + u_2x_5x_1 + u_6u_2^2 \\
p_{29} &= -2u_1x_{14}x_3 + u_4x_4x_3 + u_5u_4^2 \\
p_{30} &= -2u_4^5u_1x_{16}x_4x_3 + u_4^7x_{16}x_4 - u_5u_4^6x_{16}x_3 + 2u_4^5u_1x_{14}x_5x_3 - \\
&\quad u_4^7x_{14}x_5 + u_6u_4^6x_{14}x_3 \\
p_{31} &= -2u_1x_{16}x_3 + u_4x_5x_3 + u_6u_4^2 \\
p_{32} &= 4u_2^6u_1^2x_{10} - 2u_2^7u_1x_4 + 2u_5u_2^6u_1x_1 - 4u_5u_2^6u_1^2 \\
p_{33} &= 4u_2^6u_1^2x_{12} - 2u_2^7u_1x_5 + 2u_6u_2^6u_1x_1 - 4u_6u_2^6u_1^2 \\
p_{34} &= -128u_2^{13}u_1^7x_{12}x_4 + 128u_2^{13}u_1^7x_{10}x_5 + 64u_5u_2^{13}u_1^6x_5x_1 - \\
&\quad 128u_5u_2^{13}u_1^7x_5 - 64u_6u_2^{13}u_1^6x_4x_1 + 128u_6u_2^{13}u_1^7x_4 \\
p_{35} &= 4u_3^6u_1^2x_6 - 2u_3^7u_1x_4 + 2u_5u_3^6u_1^2x_2 - 4u_5u_3^6u_1^2 \\
p_{36} &= 4u_3^6u_1^2x_8 - 2u_3^7u_1x_5 + 2u_6u_3^6u_1x_2 - 4u_6u_3^6u_1^2 \\
p_{37} &= -128u_3^{13}u_1^7x_8x_4 + 128u_3^{13}u_1^7x_6x_5 + 64u_5u_3^{13}u_1^6x_5x_2 - \\
&\quad 128u_5u_3^{13}u_1^7x_5 - 64u_6u_3^{13}u_1^6x_4x_2 + 128u_6u_3^{13}u_1^7x_4 \\
p_{38} &= 4u_4^6u_1^2x_{14} - 2u_4^7u_1x_4 + 2u_5u_4^6u_1x_3 - 4u_5u_4^6u_1^2 \\
p_{39} &= 4u_4^6u_1^2x_{16} - 2u_4^7u_1x_5 + 2u_6u_4^6u_1x_3 - 4u_6u_4^6u_1^2 \\
p_{40} &= -128u_4^{13}u_1^7x_{16}x_4 + 128u_4^{13}u_1^7x_{14}x_5 + 64u_5u_4^{13}u_1^6x_5x_3 -
\end{aligned}$$

1. Creating S-polynomial from the pair  $(p_0, p_{107})$ .

Forming S-pol of  $p_0$  and  $p_{107}$ :

$$\begin{aligned} p_{1399} = & (131072u_2^{31}u_1^{17} - 524288u_2^{29}u_1^{19} + 262144u_2^{29}u_1^{18})x_5x_4x_1 + \\ & (262144u_2^{31}u_1^{18} - 131072u_2^{31}u_1^{17})x_5x_4 + \\ & (131072u_5^2u_2^{29}u_1^{17} - 65536u_5^2u_2^{29}u_1^{16})x_5x_1^2 - \\ & 65536u_5^2u_2^{31}u_1^{16}x_5x_1 - 131072u_6u_2^{30}u_1^{17}x_4x_1^2 + \\ & 131072u_6u_2^{30}u_1^{17}x_4x_1 + 65536u_6u_5^2u_2^{30}u_1^{16}x_1^2 - \\ & 65536u_6u_5^2u_2^{30}u_1^{16}x_1 \end{aligned}$$

S-pol added.

2. Creating S-polynomial from the pair  $(p_0, p_{108})$ .

Skipping pair  $p_0$  and  $p_{108}$  because gcd of their leading monoms is zero.

3. Creating S-polynomial from the pair  $(p_0, p_{109})$ .

Skipping pair  $p_0$  and  $p_{109}$  because gcd of their leading monoms is zero.

4. Creating S-polynomial from the pair  $(p_0, p_{110})$ .

Skipping pair  $p_0$  and  $p_{110}$  because gcd of their leading monoms is zero.

5. Creating S-polynomial from the pair  $(p_0, p_{111})$ .

Forming S-pol of  $p_0$  and  $p_{111}$ :

$$\begin{aligned} p_{1400} = & (65536u_2^{30}u_1^{16} - 262144u_2^{28}u_1^{18} + 131072u_2^{28}u_1^{17})x_5x_4x_1 + \\ & (131072u_2^{30}u_1^{17} - 65536u_2^{30}u_1^{16})x_5x_4 + \\ & (65536u_5^2u_2^{28}u_1^{16} - 32768u_5^2u_2^{28}u_1^{15})x_5x_1^2 - \\ & 32768u_5^2u_2^{30}u_1^{15}x_5x_1 - 65536u_6u_2^{29}u_1^{16}x_4x_1^2 + \\ & 65536u_6u_2^{29}u_1^{16}x_4x_1 + 32768u_6u_5^2u_2^{29}u_1^{15}x_1^2 - \\ & 32768u_6u_5^2u_2^{29}u_1^{15}x_1 \end{aligned}$$

S-pol added.

6. Creating S-polynomial from the pair  $(p_0, p_{112})$ .

Skipping pair  $p_0$  and  $p_{112}$  because gcd of their leading monoms is zero.

7. Creating S-polynomial from the pair  $(p_0, p_{113})$ .

Forming S-pol of  $p_0$  and  $p_{113}$ :

$$\begin{aligned} p_{1401} = & (1048576u_2^{27}u_1^{19} - 262144u_2^{27}u_1^{18} - 2097152u_2^{25}u_1^{21} + \\ & 1048576u_2^{25}u_1^{20})x_5x_4x_1 + \\ & (-262144u_2^{29}u_1^{18} + 1048576u_2^{27}u_1^{20} - 524288u_2^{27}u_1^{19})x_5x_4 + \\ & (-524288u_6u_2^{26}u_1^{19} + 262144u_6u_2^{26}u_1^{18})x_4x_1^2 + \\ & 262144u_6u_2^{28}u_1^{18}x_4x_1 \end{aligned}$$

S-pol added.

8. Creating S-polynomial from the pair  $(p_0, p_{114})$ .

Forming S-pol of  $p_0$  and  $p_{114}$ :

$$\begin{aligned} p_{1402} = & (524288u_2^{26}u_1^{18} - 131072u_2^{26}u_1^{17} - 1048576u_2^{24}u_1^{20} + \\ & 524288u_2^{24}u_1^{19})x_5x_4x_1 + \\ & (-131072u_2^{28}u_1^{17} + 524288u_2^{26}u_1^{19} - 262144u_2^{26}u_1^{18})x_5x_4 + \\ & (-262144u_6u_2^{25}u_1^{18} + 131072u_6u_2^{25}u_1^{17})x_4x_1^2 + \\ & 131072u_6u_2^{27}u_1^{17}x_4x_1 \end{aligned}$$

S-pol added.

9. Creating S-polynomial from the pair  $(p_0, p_{115})$ .

Skipping pair  $p_0$  and  $p_{115}$  because gcd of their leading monoms is zero.

10. Creating S-polynomial from the pair  $(p_0, p_{116})$ .

Skipping pair  $p_0$  and  $p_{116}$  because gcd of their leading monoms is zero.

11. Creating S-polynomial from the pair  $(p_0, p_{117})$ .

Skipping pair  $p_0$  and  $p_{117}$  because gcd of their leading monoms is zero.

12. Creating S-polynomial from the pair  $(p_0, p_{118})$ .

Skipping pair  $p_0$  and  $p_{118}$  because gcd of their leading monoms is zero.

13. Creating S-polynomial from the pair  $(p_0, p_{119})$ .

Skipping pair  $p_0$  and  $p_{119}$  because gcd of their leading monoms is zero.

14. Creating S-polynomial from the pair  $(p_0, p_{120})$ .

Skipping pair  $p_0$  and  $p_{120}$  because gcd of their leading monoms is zero.

15. Creating S-polynomial from the pair  $(p_0, p_{121})$ .

Forming S-pol of  $p_0$  and  $p_{121}$ : Polynomial too big for output (text size is 1084 characters, number of terms is 8)

S-pol added.

16. Creating S-polynomial from the pair  $(p_0, p_{122})$ .

Skipping pair  $p_0$  and  $p_{122}$  because gcd of their leading monoms is zero.

17. Creating S-polynomial from the pair  $(p_0, p_{123})$ .

Skipping pair  $p_0$  and  $p_{123}$  because gcd of their leading monoms is zero.

18. Creating S-polynomial from the pair  $(p_0, p_{124})$ .

Skipping pair  $p_0$  and  $p_{124}$  because gcd of their leading monoms is zero.

19. Creating S-polynomial from the pair  $(p_0, p_{125})$ .

Skipping pair  $p_0$  and  $p_{125}$  because gcd of their leading monoms is zero.

20. Creating S-polynomial from the pair  $(p_0, p_{126})$ .  
 Forming S-pol of  $p_0$  and  $p_{126}$ : Polynomial too big for output (text size is 1079 characters, number of terms is 8)  
 S-pol added.
21. Creating S-polynomial from the pair  $(p_0, p_{127})$ .  
 Skipping pair  $p_0$  and  $p_{127}$  because gcd of their leading monoms is zero.
22. Creating S-polynomial from the pair  $(p_0, p_{128})$ .  
 Skipping pair  $p_0$  and  $p_{128}$  because gcd of their leading monoms is zero.
23. Creating S-polynomial from the pair  $(p_0, p_{129})$ .  
 Skipping pair  $p_0$  and  $p_{129}$  because gcd of their leading monoms is zero.
24. Creating S-polynomial from the pair  $(p_0, p_{130})$ .  
 Forming S-pol of  $p_0$  and  $p_{130}$ : Polynomial too big for output (text size is 2179 characters, number of terms is 8)  
 S-pol added.
25. Creating S-polynomial from the pair  $(p_0, p_{131})$ .  
 Forming S-pol of  $p_0$  and  $p_{131}$ : Polynomial too big for output (text size is 1289 characters, number of terms is 8)  
 S-pol added.
26. Creating S-polynomial from the pair  $(p_0, p_{132})$ .  
 Forming S-pol of  $p_0$  and  $p_{132}$ :
- $$\begin{aligned}
 p_{1403} = & (-268435456u_2^{45}u_1^{27} + 67108864u_2^{45}u_1^{26} + 536870912u_2^{43}u_1^{29} - \\
 & 268435456u_2^{43}u_1^{28})x_5x_4x_1 + \\
 & (67108864u_2^{47}u_1^{26} - 268435456u_2^{45}u_1^{28} + 134217728u_2^{45}u_1^{27})x_5x_4 + \\
 & (33554432u_5^2u_2^{45}u_1^{25} - 134217728u_5^2u_2^{43}u_1^{27} + \\
 & 67108864u_5^2u_2^{43}u_1^{26})x_5x_1^2 + \\
 & (67108864u_5^2u_2^{45}u_1^{26} - 33554432u_5^2u_2^{45}u_1^{25})x_5x_1 + \\
 & (134217728u_6u_2^{44}u_1^{27} - 67108864u_6u_2^{44}u_1^{26})x_4x_1^2 - \\
 & 67108864u_6u_2^{46}u_1^{26}x_4x_1 + \\
 & (-67108864u_6u_5^2u_2^{44}u_1^{26} + 33554432u_6u_5^2u_2^{44}u_1^{25})x_1^2 + \\
 & 33554432u_6u_5^2u_2^{46}u_1^{25}x_1
 \end{aligned}$$
- S-pol added.
27. Creating S-polynomial from the pair  $(p_0, p_{133})$ .  
 Forming S-pol of  $p_0$  and  $p_{133}$ : Polynomial too big for output (text size is 1013 characters, number of terms is 8)  
 S-pol added.

28. Creating S-polynomial from the pair  $(p_0, p_{134})$ .

Forming S-pol of  $p_0$  and  $p_{134}$ : Polynomial too big for output (text size is 1013 characters, number of terms is 8)

S-pol added.

29. Creating S-polynomial from the pair  $(p_0, p_{135})$ .

Forming S-pol of  $p_0$  and  $p_{135}$ : Polynomial too big for output (text size is 1005 characters, number of terms is 8)

S-pol added.

30. Creating S-polynomial from the pair  $(p_0, p_{136})$ .

Forming S-pol of  $p_0$  and  $p_{136}$ : Polynomial too big for output (text size is 1159 characters, number of terms is 8)

S-pol added.

31. Creating S-polynomial from the pair  $(p_0, p_{137})$ .

Forming S-pol of  $p_0$  and  $p_{137}$ :

$$\begin{aligned} p_{1404} = & (-33554432u_2^{43}u_1^{24} + 8388608u_2^{43}u_1^{23} + 67108864u_2^{41}u_1^{26} - \\ & 33554432u_2^{41}u_1^{25})x_5x_4x_1 + \\ & (8388608u_2^{45}u_1^{23} - 33554432u_2^{43}u_1^{25} + 16777216u_2^{43}u_1^{24})x_5x_4 + \\ & (4194304u_5^2u_2^{43}u_1^{22} - 16777216u_5^2u_2^{41}u_1^{24} + \\ & 8388608u_5^2u_2^{41}u_1^{23})x_5x_1^2 + \\ & (8388608u_5^2u_2^{43}u_1^{23} - 4194304u_5^2u_2^{43}u_1^{22})x_5x_1 + \\ & (16777216u_6u_2^{42}u_1^{24} - 8388608u_6u_2^{42}u_1^{23})x_4x_1^2 - \\ & 8388608u_6u_2^{44}u_1^{23}x_4x_1 + \\ & (-8388608u_6u_5^2u_2^{42}u_1^{23} + 4194304u_6u_5^2u_2^{42}u_1^{22})x_1^2 + \\ & 4194304u_6u_5^2u_2^{44}u_1^{22}x_1 \end{aligned}$$

S-pol added.

32. Creating S-polynomial from the pair  $(p_0, p_{138})$ .

Forming S-pol of  $p_0$  and  $p_{138}$ : Polynomial too big for output (text size is 1005 characters, number of terms is 8)

S-pol added.

33. Creating S-polynomial from the pair  $(p_0, p_{139})$ .

Forming S-pol of  $p_0$  and  $p_{139}$ :

$$\begin{aligned} p_{1405} = & (-131072u_2^{20}u_1^{16} + 32768u_2^{20}u_1^{15} + 262144u_2^{18}u_1^{18} - \\ & 131072u_2^{18}u_1^{17})x_5x_4x_1 + \\ & (32768u_2^{22}u_1^{15} - 131072u_2^{20}u_1^{17} + 65536u_2^{20}u_1^{16})x_5x_4 + \\ & (65536u_6u_2^{19}u_1^{16} - 32768u_6u_2^{19}u_1^{15})x_4x_1^2 - 32768u_6u_2^{21}u_1^{15}x_4x_1 \end{aligned}$$

S-pol added.

34. Creating S-polynomial from the pair  $(p_0, p_{140})$ .

Forming S-pol of  $p_0$  and  $p_{140}$ :

$$\begin{aligned} p_{1406} = & (-65536u_2^{19}u_1^{15} + 16384u_2^{19}u_1^{14} + 131072u_2^{17}u_1^{17} - \\ & 65536u_2^{17}u_1^{16})x_5x_4x_1 + \\ & (16384u_2^{21}u_1^{14} - 65536u_2^{19}u_1^{16} + 32768u_2^{19}u_1^{15})x_5x_4 + \\ & (32768u_6u_2^{18}u_1^{15} - 16384u_6u_2^{18}u_1^{14})x_4x_1^2 - 16384u_6u_2^{20}u_1^{14}x_4x_1 \end{aligned}$$

S-pol added.

35. Creating S-polynomial from the pair  $(p_0, p_{141})$ .

Skipping pair  $p_0$  and  $p_{141}$  because gcd of their leading monoms is zero.

36. Creating S-polynomial from the pair  $(p_0, p_{142})$ .

Skipping pair  $p_0$  and  $p_{142}$  because gcd of their leading monoms is zero.

37. Creating S-polynomial from the pair  $(p_0, p_{143})$ .

Forming S-pol of  $p_0$  and  $p_{143}$ : Polynomial too big for output (text size is 1084 characters, number of terms is 8)

S-pol added.

38. Creating S-polynomial from the pair  $(p_0, p_{144})$ .

Skipping pair  $p_0$  and  $p_{144}$  because gcd of their leading monoms is zero.

39. Creating S-polynomial from the pair  $(p_0, p_{145})$ .

Skipping pair  $p_0$  and  $p_{145}$  because gcd of their leading monoms is zero.

40. Creating S-polynomial from the pair  $(p_0, p_{146})$ .

Skipping pair  $p_0$  and  $p_{146}$  because gcd of their leading monoms is zero.

41. Creating S-polynomial from the pair  $(p_0, p_{147})$ .

Forming S-pol of  $p_0$  and  $p_{147}$ : Polynomial too big for output (text size is 1079 characters, number of terms is 8)

S-pol added.

42. Creating S-polynomial from the pair  $(p_0, p_{148})$ .

Skipping pair  $p_0$  and  $p_{148}$  because gcd of their leading monoms is zero.

43. Creating S-polynomial from the pair  $(p_0, p_{149})$ .

Skipping pair  $p_0$  and  $p_{149}$  because gcd of their leading monoms is zero.

44. Creating S-polynomial from the pair  $(p_0, p_{150})$ .

Skipping pair  $p_0$  and  $p_{150}$  because gcd of their leading monoms is zero.

45. Creating S-polynomial from the pair  $(p_0, p_{151})$ .

Skipping pair  $p_0$  and  $p_{151}$  because gcd of their leading monoms is zero.



46. Creating S-polynomial from the pair  $(p_0, p_{152})$ .

Forming S-pol of  $p_0$  and  $p_{152}$ :

$$\begin{aligned} p_{1407} = & (16384u_2^{25}u_1^{14} - 65536u_2^{23}u_1^{16} + 32768u_2^{23}u_1^{15})x_5x_4x_1 + \\ & (32768u_2^{25}u_1^{15} - 16384u_2^{25}u_1^{14})x_5x_4 - 16384u_6u_2^{24}u_1^{14}x_4x_1^2 + \\ & 16384u_6u_2^{24}u_1^{14}x_4x_1 \end{aligned}$$

S-pol added.

47. Creating S-polynomial from the pair  $(p_0, p_{153})$ .

Forming S-pol of  $p_0$  and  $p_{153}$ :

$$\begin{aligned} p_{1408} = & (8192u_2^{24}u_1^{13} - 32768u_2^{22}u_1^{15} + 16384u_2^{22}u_1^{14})x_5x_4x_1 + \\ & (16384u_2^{24}u_1^{14} - 8192u_2^{24}u_1^{13})x_5x_4 - 8192u_6u_2^{23}u_1^{13}x_4x_1^2 + \\ & 8192u_6u_2^{23}u_1^{13}x_4x_1 \end{aligned}$$

S-pol added.

48. Creating S-polynomial from the pair  $(p_0, p_{154})$ .

Forming S-pol of  $p_0$  and  $p_{154}$ : Polynomial too big for output (text size is 2295 characters, number of terms is 8)

S-pol added.

49. Creating S-polynomial from the pair  $(p_0, p_{155})$ .

Forming S-pol of  $p_0$  and  $p_{155}$ : Polynomial too big for output (text size is 1303 characters, number of terms is 8)

S-pol added.

50. Creating S-polynomial from the pair  $(p_0, p_{156})$ .

Forming S-pol of  $p_0$  and  $p_{156}$ :

$$\begin{aligned} p_{1409} = & (-1048576u_2^{32}u_1^{20} + 4194304u_2^{30}u_1^{22} - 2097152u_2^{30}u_1^{21})x_5x_4x_1 + \\ & (-2097152u_2^{32}u_1^{21} + 1048576u_2^{32}u_1^{20})x_5x_4 + \\ & (-1048576u_5^2u_2^{30}u_1^{20} + 524288u_5^2u_2^{30}u_1^{19})x_5x_1^2 + \\ & 524288u_5^2u_2^{32}u_1^{19}x_5x_1 + 1048576u_6u_2^{31}u_1^{20}x_4x_1^2 - \\ & 1048576u_6u_2^{31}u_1^{20}x_4x_1 - 524288u_6u_5^2u_2^{31}u_1^{19}x_1^2 + \\ & 524288u_6u_5^2u_2^{31}u_1^{19}x_1 \end{aligned}$$

S-pol added.

51. Creating S-polynomial from the pair  $(p_0, p_{157})$ .

Forming S-pol of  $p_0$  and  $p_{157}$ :

$$\begin{aligned} p_{1410} = & (17592186044416u_6u_3^{48}u_2^{62}u_1^{44} + 70368744177664u_3^{47}u_2^{62}u_1^{46} - \\ & 35184372088832u_3^{47}u_2^{62}u_1^{45})x_5x_4x_2x_1 + \end{aligned}$$

$$\begin{aligned}
& (35184372088832u_6u_3^{47}u_2^{63}u_1^{45} - 17592186044416u_6u_3^{47}u_2^{63}u_1^{44})x_5x_4x_2 + \\
& 17592186044416u_6u_3^{49}u_2^{61}u_1^{44}x_5x_4x_1 + \\
& (-35184372088832u_6u_3^{49}u_2^{61}u_1^{45} - 17592186044416u_6u_3^{48}u_2^{62}u_1^{44} - \\
& 35184372088832u_3^{49}u_2^{62}u_1^{45})x_5x_4x_1 - \\
& 17592186044416u_6^2u_3^{48}u_2^{61}u_1^{44}x_4x_2x_1 + \\
& (35184372088832u_6^2u_3^{48}u_2^{61}u_1^{45} - 35184372088832u_6^2u_3^{47}u_2^{62}u_1^{45} + \\
& 17592186044416u_6^2u_3^{47}u_2^{62}u_1^{44})x_4x_2x_1 + \\
& 17592186044416u_6^2u_3^{48}u_2^{61}u_1^{44}x_4x_1 + \\
& (17592186044416u_6^2u_3^{49}u_2^{62}u_1^{44} - 35184372088832u_6^2u_3^{48}u_2^{61}u_1^{45})x_4x_1
\end{aligned}$$

S-pol added.

52. Creating S-polynomial from the pair  $(p_0, p_{158})$ .

Forming S-pol of  $p_0$  and  $p_{158}$ :

$$\begin{aligned}
p_{1411} = & (17592186044416u_6u_4^{48}u_2^{62}u_1^{44} + 70368744177664u_4^{47}u_2^{62}u_1^{46} - \\
& 35184372088832u_4^{47}u_2^{62}u_1^{45})x_5x_4x_3x_1 + \\
& (35184372088832u_6u_4^{47}u_2^{63}u_1^{45} - 17592186044416u_6u_4^{47}u_2^{63}u_1^{44})x_5x_4x_3 + \\
& 17592186044416u_6u_4^{49}u_2^{61}u_1^{44}x_5x_4x_1 + \\
& (-35184372088832u_6u_4^{49}u_2^{61}u_1^{45} - 17592186044416u_6u_4^{48}u_2^{62}u_1^{44} - \\
& 35184372088832u_4^{49}u_2^{62}u_1^{45})x_5x_4x_1 - \\
& 17592186044416u_6^2u_4^{48}u_2^{61}u_1^{44}x_4x_3x_1 + \\
& (35184372088832u_6^2u_4^{48}u_2^{61}u_1^{45} - 35184372088832u_6^2u_4^{47}u_2^{62}u_1^{45} + \\
& 17592186044416u_6^2u_4^{47}u_2^{62}u_1^{44})x_4x_3x_1 + \\
& 17592186044416u_6^2u_4^{48}u_2^{61}u_1^{44}x_4x_1 + \\
& (17592186044416u_6^2u_4^{49}u_2^{62}u_1^{44} - 35184372088832u_6^2u_4^{48}u_2^{61}u_1^{45})x_4x_1
\end{aligned}$$

S-pol added.

53. Creating S-polynomial from the pair  $(p_0, p_{159})$ .

Forming S-pol of  $p_0$  and  $p_{159}$ :

$$\begin{aligned}
p_{1412} = & (8796093022208u_6u_3^{47}u_2^{62}u_1^{43} + 35184372088832u_3^{46}u_2^{62}u_1^{45} - \\
& 17592186044416u_3^{46}u_2^{62}u_1^{44})x_5x_4x_2x_1 + \\
& (17592186044416u_6u_3^{46}u_2^{63}u_1^{44} - 8796093022208u_6u_3^{46}u_2^{63}u_1^{43})x_5x_4x_2 + \\
& 8796093022208u_6u_3^{48}u_2^{61}u_1^{43}x_5x_4x_1 + \\
& (-17592186044416u_6u_3^{48}u_2^{61}u_1^{44} - 8796093022208u_6u_3^{47}u_2^{62}u_1^{43} - \\
& 17592186044416u_3^{48}u_2^{62}u_1^{44})x_5x_4x_1 - \\
& 8796093022208u_6^2u_3^{47}u_2^{61}u_1^{43}x_4x_2x_1 +
\end{aligned}$$

$$\begin{aligned}
& (17592186044416u_6^2u_3^{47}u_2^{61}u_1^{44} - 17592186044416u_6^2u_3^{46}u_2^{62}u_1^{44} + \\
& 8796093022208u_6^2u_3^{46}u_2^{62}u_1^{43})x_4x_2x_1 + \\
& 8796093022208u_6^2u_3^{47}u_2^{61}u_1^{43}x_4x_1^2 + \\
& (8796093022208u_6^2u_3^{48}u_2^{62}u_1^{43} - 17592186044416u_6^2u_3^{47}u_2^{61}u_1^{44})x_4x_1
\end{aligned}$$

S-pol added.

54. Creating S-polynomial from the pair  $(p_0, p_{160})$ .

Forming S-pol of  $p_0$  and  $p_{160}$ : Polynomial too big for output (text size is 1347 characters, number of terms is 8)

S-pol added.

55. Creating S-polynomial from the pair  $(p_0, p_{161})$ .

Forming S-pol of  $p_0$  and  $p_{161}$ :

$$\begin{aligned}
p_{1413} = & (-131072u_2^{25}u_1^{17} + 524288u_2^{23}u_1^{19} - 262144u_2^{23}u_1^{18})x_5x_4x_1 + \\
& (-262144u_2^{25}u_1^{18} + 131072u_2^{25}u_1^{17})x_5x_4 + \\
& (-131072u_5^2u_2^{23}u_1^{17} + 65536u_5^2u_2^{23}u_1^{16})x_5x_1^2 + \\
& 65536u_5^2u_2^{25}u_1^{16}x_5x_1 + 131072u_6u_2^{24}u_1^{17}x_4x_1^2 - \\
& 131072u_6u_2^{24}u_1^{17}x_4x_1 - 65536u_6u_5^2u_2^{24}u_1^{16}x_1^2 + \\
& 65536u_6u_5^2u_2^{24}u_1^{16}x_1
\end{aligned}$$

S-pol added.

56. Creating S-polynomial from the pair  $(p_0, p_{162})$ .

Forming S-pol of  $p_0$  and  $p_{162}$ :

$$\begin{aligned}
p_{1414} = & (8796093022208u_6^4u_4^{47}u_2^{62}u_1^{43} + 35184372088832u_4^{46}u_2^{62}u_1^{45} - \\
& 17592186044416u_4^{46}u_2^{62}u_1^{44})x_5x_4x_3x_1 + \\
& (17592186044416u_6^4u_4^{46}u_2^{63}u_1^{44} - 8796093022208u_6^4u_4^{46}u_2^{63}u_1^{43})x_5x_4x_3 + \\
& 8796093022208u_6^4u_4^{48}u_2^{61}u_1^{43}x_5x_4x_1^2 + \\
& (-17592186044416u_6^4u_4^{48}u_2^{61}u_1^{44} - 8796093022208u_6^4u_4^{47}u_2^{62}u_1^{43} - \\
& 17592186044416u_4^{48}u_2^{62}u_1^{44})x_5x_4x_1 - \\
& 8796093022208u_6^2u_4^{47}u_2^{61}u_1^{43}x_4x_3x_1^2 + \\
& (17592186044416u_6^2u_4^{47}u_2^{61}u_1^{44} - 17592186044416u_6^2u_4^{46}u_2^{62}u_1^{44} + \\
& 8796093022208u_6^2u_4^{46}u_2^{62}u_1^{43})x_4x_3x_1 + \\
& 8796093022208u_6^2u_4^{47}u_2^{61}u_1^{43}x_4x_1^2 + \\
& (8796093022208u_6^2u_4^{48}u_2^{62}u_1^{43} - 17592186044416u_6^2u_4^{47}u_2^{61}u_1^{44})x_4x_1
\end{aligned}$$

S-pol added.

57. Creating S-polynomial from the pair  $(p_0, p_{163})$ .

Skipping pair  $p_0$  and  $p_{163}$  because gcd of their leading monoms is zero.

58. Creating S-polynomial from the pair  $(p_0, p_{164})$ .  
 Skipping pair  $p_0$  and  $p_{164}$  because gcd of their leading monoms is zero.
59. Creating S-polynomial from the pair  $(p_0, p_{165})$ .  
 Skipping pair  $p_0$  and  $p_{165}$  because gcd of their leading monoms is zero.
60. Creating S-polynomial from the pair  $(p_0, p_{166})$ .  
 Skipping pair  $p_0$  and  $p_{166}$  because gcd of their leading monoms is zero.
61. Creating S-polynomial from the pair  $(p_0, p_{167})$ .  
 Forming S-pol of  $p_0$  and  $p_{167}$ : Polynomial too big for output (text size is 1137 characters, number of terms is 8)  
 S-pol added.
62. Creating S-polynomial from the pair  $(p_0, p_{168})$ .  
 Skipping pair  $p_0$  and  $p_{168}$  because gcd of their leading monoms is zero.
63. Creating S-polynomial from the pair  $(p_0, p_{169})$ .  
 Skipping pair  $p_0$  and  $p_{169}$  because gcd of their leading monoms is zero.
64. Creating S-polynomial from the pair  $(p_0, p_{170})$ .  
 Skipping pair  $p_0$  and  $p_{170}$  because gcd of their leading monoms is zero.
65. Creating S-polynomial from the pair  $(p_0, p_{171})$ .  
 Skipping pair  $p_0$  and  $p_{171}$  because gcd of their leading monoms is zero.
66. Creating S-polynomial from the pair  $(p_0, p_{172})$ .  
 Forming S-pol of  $p_0$  and  $p_{172}$ : Polynomial too big for output (text size is 1134 characters, number of terms is 8)  
 S-pol added.
67. Creating S-polynomial from the pair  $(p_0, p_{173})$ .  
 Skipping pair  $p_0$  and  $p_{173}$  because gcd of their leading monoms is zero.
68. Creating S-polynomial from the pair  $(p_0, p_{174})$ .  
 Skipping pair  $p_0$  and  $p_{174}$  because gcd of their leading monoms is zero.
69. Creating S-polynomial from the pair  $(p_0, p_{175})$ .  
 Skipping pair  $p_0$  and  $p_{175}$  because gcd of their leading monoms is zero.
70. Creating S-polynomial from the pair  $(p_0, p_{176})$ .  
 Skipping pair  $p_0$  and  $p_{176}$  because gcd of their leading monoms is zero.
71. Creating S-polynomial from the pair  $(p_0, p_{177})$ .  
 Skipping pair  $p_0$  and  $p_{177}$  because gcd of their leading monoms is zero.
72. Creating S-polynomial from the pair  $(p_0, p_{178})$ .  
 Forming S-pol of  $p_0$  and  $p_{178}$ : Polynomial too big for output (text size is 1137 characters, number of terms is 8)  
 S-pol added.

73. Creating S-polynomial from the pair  $(p_0, p_{179})$ .  
 Skipping pair  $p_0$  and  $p_{179}$  because gcd of their leading monoms is zero.
74. Creating S-polynomial from the pair  $(p_0, p_{180})$ .  
 Skipping pair  $p_0$  and  $p_{180}$  because gcd of their leading monoms is zero.
75. Creating S-polynomial from the pair  $(p_0, p_{181})$ .  
 Skipping pair  $p_0$  and  $p_{181}$  because gcd of their leading monoms is zero.
76. Creating S-polynomial from the pair  $(p_0, p_{182})$ .  
 Forming S-pol of  $p_0$  and  $p_{182}$ : Polynomial too big for output (text size is 1134 characters, number of terms is 8)  
 S-pol added.
77. Creating S-polynomial from the pair  $(p_0, p_{183})$ .  
 Skipping pair  $p_0$  and  $p_{183}$  because gcd of their leading monoms is zero.
78. Creating S-polynomial from the pair  $(p_0, p_{184})$ .  
 Skipping pair  $p_0$  and  $p_{184}$  because gcd of their leading monoms is zero.
79. Creating S-polynomial from the pair  $(p_0, p_{185})$ .  
 Skipping pair  $p_0$  and  $p_{185}$  because gcd of their leading monoms is zero.
80. Creating S-polynomial from the pair  $(p_0, p_{186})$ .  
 Skipping pair  $p_0$  and  $p_{186}$  because gcd of their leading monoms is zero.
81. Creating S-polynomial from the pair  $(p_0, p_{187})$ .  
 Forming S-pol of  $p_0$  and  $p_{187}$ : Polynomial too big for output (text size is 1236 characters, number of terms is 8)  
 S-pol added.
82. Creating S-polynomial from the pair  $(p_0, p_{188})$ .  
 Skipping pair  $p_0$  and  $p_{188}$  because gcd of their leading monoms is zero.
83. Creating S-polynomial from the pair  $(p_0, p_{189})$ .  
 Skipping pair  $p_0$  and  $p_{189}$  because gcd of their leading monoms is zero.
84. Creating S-polynomial from the pair  $(p_0, p_{190})$ .  
 Skipping pair  $p_0$  and  $p_{190}$  because gcd of their leading monoms is zero.
85. Creating S-polynomial from the pair  $(p_0, p_{191})$ .  
 Skipping pair  $p_0$  and  $p_{191}$  because gcd of their leading monoms is zero.
86. Creating S-polynomial from the pair  $(p_0, p_{192})$ .  
 Forming S-pol of  $p_0$  and  $p_{192}$ : Polynomial too big for output (text size is 1228 characters, number of terms is 8)  
 S-pol added.

87. Creating S-polynomial from the pair  $(p_0, p_{193})$ .  
 Skipping pair  $p_0$  and  $p_{193}$  because gcd of their leading monoms is zero.
88. Creating S-polynomial from the pair  $(p_0, p_{194})$ .  
 Forming S-pol of  $p_0$  and  $p_{194}$ : Polynomial too big for output (text size is 2401 characters, number of terms is 8)  
 S-pol added.
89. Creating S-polynomial from the pair  $(p_0, p_{195})$ .  
 Forming S-pol of  $p_0$  and  $p_{195}$ : Polynomial too big for output (text size is 1391 characters, number of terms is 8)  
 S-pol added.
90. Creating S-polynomial from the pair  $(p_0, p_{196})$ .  
 Forming S-pol of  $p_0$  and  $p_{196}$ :  

$$p_{1415} = (16777216u_5u_2^{43}u_1^{24} - 67108864u_5u_2^{41}u_1^{26} + 33554432u_5u_2^{41}u_1^{25})x_5x_4x_1 +$$

$$(33554432u_5u_2^{43}u_1^{25} - 16777216u_5u_2^{43}u_1^{24})x_5x_4 +$$

$$(16777216u_5^3u_2^{41}u_1^{24} - 8388608u_5^3u_2^{41}u_1^{23})x_5x_1^2 -$$

$$8388608u_5^3u_2^{43}u_1^{23}x_5x_1 - 16777216u_6u_5u_2^{42}u_1^{24}x_4x_1^2 +$$

$$16777216u_6u_5u_2^{42}u_1^{24}x_4x_1 + 8388608u_6u_5^3u_2^{42}u_1^{23}x_1^2 -$$

$$8388608u_6u_5^3u_2^{42}u_1^{23}x_1$$
  
 S-pol added.
91. Creating S-polynomial from the pair  $(p_0, p_{197})$ .  
 Forming S-pol of  $p_0$  and  $p_{197}$ : Polynomial too big for output (text size is 1034 characters, number of terms is 8)  
 S-pol added.
92. Creating S-polynomial from the pair  $(p_0, p_{198})$ .  
 Forming S-pol of  $p_0$  and  $p_{198}$ : Polynomial too big for output (text size is 1034 characters, number of terms is 8)  
 S-pol added.
93. Creating S-polynomial from the pair  $(p_0, p_{199})$ .  
 Forming S-pol of  $p_0$  and  $p_{199}$ : Polynomial too big for output (text size is 1026 characters, number of terms is 8)  
 S-pol added.
94. Creating S-polynomial from the pair  $(p_0, p_{200})$ .  
 Forming S-pol of  $p_0$  and  $p_{200}$ : Polynomial too big for output (text size is 1389 characters, number of terms is 8)  
 S-pol added.

95. Creating S-polynomial from the pair  $(p_0, p_{201})$ .

Forming S-pol of  $p_0$  and  $p_{201}$ :

$$\begin{aligned} p_{1416} = & (8388608u_5u_2^{42}u_1^{23} - 33554432u_5u_2^{40}u_1^{25} + 16777216u_5u_2^{40}u_1^{24})x_5x_4x_1 + \\ & (16777216u_5u_2^{42}u_1^{24} - 8388608u_5u_2^{42}u_1^{23})x_5x_4 + \\ & (8388608u_5^3u_2^{40}u_1^{23} - 4194304u_5^3u_2^{40}u_1^{22})x_5x_1^2 - \\ & 4194304u_5^3u_2^{42}u_1^{22}x_5x_1 - 8388608u_6u_5u_2^{41}u_1^{23}x_4x_1^2 + \\ & 8388608u_6u_5u_2^{41}u_1^{23}x_4x_1 + 4194304u_6u_5^3u_2^{41}u_1^{22}x_1^2 - \\ & 4194304u_6u_5^3u_2^{41}u_1^{22}x_1 \end{aligned}$$

S-pol added.

96. Creating S-polynomial from the pair  $(p_0, p_{202})$ .

Forming S-pol of  $p_0$  and  $p_{202}$ : Polynomial too big for output (text size is 1026 characters, number of terms is 8)

S-pol added.

97. Creating S-polynomial from the pair  $(p_0, p_{203})$ .

Skipping pair  $p_0$  and  $p_{203}$  because gcd of their leading monoms is zero.

98. Creating S-polynomial from the pair  $(p_0, p_{204})$ .

Skipping pair  $p_0$  and  $p_{204}$  because gcd of their leading monoms is zero.

99. Creating S-polynomial from the pair  $(p_0, p_{205})$ .

Forming S-pol of  $p_0$  and  $p_{205}$ : Polynomial too big for output (text size is 1236 characters, number of terms is 8)

S-pol added.

100. Creating S-polynomial from the pair  $(p_0, p_{206})$ .

Skipping pair  $p_0$  and  $p_{206}$  because gcd of their leading monoms is zero.

101. Creating S-polynomial from the pair  $(p_0, p_{207})$ .

Skipping pair  $p_0$  and  $p_{207}$  because gcd of their leading monoms is zero.

102. Creating S-polynomial from the pair  $(p_0, p_{208})$ .

Skipping pair  $p_0$  and  $p_{208}$  because gcd of their leading monoms is zero.

103. Creating S-polynomial from the pair  $(p_0, p_{209})$ .

Forming S-pol of  $p_0$  and  $p_{209}$ : Polynomial too big for output (text size is 1228 characters, number of terms is 8)

S-pol added.

104. Creating S-polynomial from the pair  $(p_0, p_{210})$ .

Skipping pair  $p_0$  and  $p_{210}$  because gcd of their leading monoms is zero.

105. Creating S-polynomial from the pair  $(p_0, p_{211})$ .

Skipping pair  $p_0$  and  $p_{211}$  because gcd of their leading monoms is zero.

106. Creating S-polynomial from the pair  $(p_0, p_{212})$ .  
 Skipping pair  $p_0$  and  $p_{212}$  because gcd of their leading monoms is zero.
107. Creating S-polynomial from the pair  $(p_0, p_{213})$ .  
 Skipping pair  $p_0$  and  $p_{213}$  because gcd of their leading monoms is zero.
108. Creating S-polynomial from the pair  $(p_0, p_{214})$ .  
 Forming S-pol of  $p_0$  and  $p_{214}$ : Polynomial too big for output (text size is 10898 characters, number of terms is 16)  
 S-pol added.
109. Creating S-polynomial from the pair  $(p_0, p_{215})$ .  
 Skipping pair  $p_0$  and  $p_{215}$  because gcd of their leading monoms is zero.
110. Creating S-polynomial from the pair  $(p_0, p_{216})$ .  
 Skipping pair  $p_0$  and  $p_{216}$  because gcd of their leading monoms is zero.
111. Creating S-polynomial from the pair  $(p_0, p_{217})$ .  
 Skipping pair  $p_0$  and  $p_{217}$  because gcd of their leading monoms is zero.
112. Creating S-polynomial from the pair  $(p_0, p_{218})$ .  
 Skipping pair  $p_0$  and  $p_{218}$  because gcd of their leading monoms is zero.
113. Creating S-polynomial from the pair  $(p_0, p_{219})$ .  
 Forming S-pol of  $p_0$  and  $p_{219}$ : Polynomial too big for output (text size is 10847 characters, number of terms is 16)  
 S-pol added.
114. Creating S-polynomial from the pair  $(p_0, p_{220})$ .  
 Skipping pair  $p_0$  and  $p_{220}$  because gcd of their leading monoms is zero.
115. Creating S-polynomial from the pair  $(p_0, p_{221})$ .  
 Skipping pair  $p_0$  and  $p_{221}$  because gcd of their leading monoms is zero.
116. Creating S-polynomial from the pair  $(p_0, p_{222})$ .  
 Skipping pair  $p_0$  and  $p_{222}$  because gcd of their leading monoms is zero.
117. Creating S-polynomial from the pair  $(p_0, p_{223})$ .  
 Skipping pair  $p_0$  and  $p_{223}$  because gcd of their leading monoms is zero.
118. Creating S-polynomial from the pair  $(p_0, p_{224})$ .  
 Skipping pair  $p_0$  and  $p_{224}$  because gcd of their leading monoms is zero.
119. Creating S-polynomial from the pair  $(p_0, p_{225})$ .  
 Skipping pair  $p_0$  and  $p_{225}$  because gcd of their leading monoms is zero.
120. Creating S-polynomial from the pair  $(p_0, p_{226})$ .  
 Skipping pair  $p_0$  and  $p_{226}$  because gcd of their leading monoms is zero.



121. Creating S-polynomial from the pair  $(p_0, p_{227})$ .  
 Skipping pair  $p_0$  and  $p_{227}$  because gcd of their leading monoms is zero.
122. Creating S-polynomial from the pair  $(p_0, p_{228})$ .  
 Skipping pair  $p_0$  and  $p_{228}$  because gcd of their leading monoms is zero.
123. Creating S-polynomial from the pair  $(p_0, p_{229})$ .  
 Forming S-pol of  $p_0$  and  $p_{229}$ : Polynomial too big for output (text size is 5418 characters, number of terms is 8)  
 S-pol added.
124. Creating S-polynomial from the pair  $(p_0, p_{230})$ .  
 Skipping pair  $p_0$  and  $p_{230}$  because gcd of their leading monoms is zero.
125. Creating S-polynomial from the pair  $(p_0, p_{231})$ .  
 Skipping pair  $p_0$  and  $p_{231}$  because gcd of their leading monoms is zero.
126. Creating S-polynomial from the pair  $(p_0, p_{232})$ .  
 Skipping pair  $p_0$  and  $p_{232}$  because gcd of their leading monoms is zero.
127. Creating S-polynomial from the pair  $(p_0, p_{233})$ .  
 Skipping pair  $p_0$  and  $p_{233}$  because gcd of their leading monoms is zero.
128. Creating S-polynomial from the pair  $(p_0, p_{234})$ .  
 Forming S-pol of  $p_0$  and  $p_{234}$ : Polynomial too big for output (text size is 5394 characters, number of terms is 8)  
 S-pol added.
129. Creating S-polynomial from the pair  $(p_0, p_{235})$ .  
 Skipping pair  $p_0$  and  $p_{235}$  because gcd of their leading monoms is zero.
130. Creating S-polynomial from the pair  $(p_0, p_{236})$ .  
 Skipping pair  $p_0$  and  $p_{236}$  because gcd of their leading monoms is zero.
131. Creating S-polynomial from the pair  $(p_0, p_{237})$ .  
 Skipping pair  $p_0$  and  $p_{237}$  because gcd of their leading monoms is zero.
132. Creating S-polynomial from the pair  $(p_0, p_{238})$ .  
 Forming S-pol of  $p_0$  and  $p_{238}$ : Polynomial too big for output (text size is 1409 characters, number of terms is 8)  
 S-pol added.
133. Creating S-polynomial from the pair  $(p_0, p_{239})$ .  
 Forming S-pol of  $p_0$  and  $p_{239}$ : Polynomial too big for output (text size is 1400 characters, number of terms is 8)  
 S-pol added.

134. Creating S-polynomial from the pair  $(p_0, p_{240})$ .  
Forming S-pol of  $p_0$  and  $p_{240}$ : Polynomial too big for output (text size is 4432 characters, number of terms is 8)  
S-pol added.
135. Creating S-polynomial from the pair  $(p_0, p_{241})$ .  
Forming S-pol of  $p_0$  and  $p_{241}$ : Polynomial too big for output (text size is 9304 characters, number of terms is 16)  
S-pol added.
136. Creating S-polynomial from the pair  $(p_0, p_{242})$ .  
Forming S-pol of  $p_0$  and  $p_{242}$ : Polynomial too big for output (text size is 9304 characters, number of terms is 16)  
S-pol added.
137. Creating S-polynomial from the pair  $(p_0, p_{243})$ .  
Forming S-pol of  $p_0$  and  $p_{243}$ : Polynomial too big for output (text size is 9277 characters, number of terms is 16)  
S-pol added.
138. Creating S-polynomial from the pair  $(p_0, p_{244})$ .  
Forming S-pol of  $p_0$  and  $p_{244}$ : Polynomial too big for output (text size is 2404 characters, number of terms is 8)  
S-pol added.
139. Creating S-polynomial from the pair  $(p_0, p_{245})$ .  
Forming S-pol of  $p_0$  and  $p_{245}$ : Polynomial too big for output (text size is 3443 characters, number of terms is 8)  
S-pol added.
140. Creating S-polynomial from the pair  $(p_0, p_{246})$ .  
Forming S-pol of  $p_0$  and  $p_{246}$ : Polynomial too big for output (text size is 9277 characters, number of terms is 16)  
S-pol added.
141. Creating S-polynomial from the pair  $(p_0, p_{247})$ .  
Forming S-pol of  $p_0$  and  $p_{247}$ :
- $$\begin{aligned}
p_{1417} = & (-536870912u_5u_2^{45}u_1^{29} + 268435456u_5u_2^{45}u_1^{28} + 536870912u_2^{46}u_1^{29} - \\
& 2147483648u_2^{44}u_1^{31} + 1073741824u_2^{44}u_1^{30})x_5x_4x_1 + \\
& (268435456u_5u_2^{47}u_1^{28} + 1073741824u_2^{46}u_1^{30} - 536870912u_2^{46}u_1^{29})x_5x_4 + \\
& (536870912u_5u_2^{44}u_1^{29} - 268435456u_5u_2^{44}u_1^{28})x_5x_1^2 - \\
& 268435456u_5u_2^{46}u_1^{28}x_5x_1 + \\
& (-268435456u_6u_5u_2^{44}u_1^{28} - 536870912u_6u_2^{45}u_1^{29})x_4x_1^2 +
\end{aligned}$$

$$\begin{aligned}
& (-268435456u_6u_5u_2^{46}u_1^{28} + 536870912u_6u_5u_2^{44}u_1^{29} + \\
& 536870912u_6u_2^{45}u_1^{29})x_4x_1 + 268435456u_6u_5^2u_2^{45}u_1^{28}x_1^2 - \\
& 268435456u_6u_5^2u_2^{45}u_1^{28}x_1
\end{aligned}$$

S-pol added.

142. Creating S-polynomial from the pair  $(p_0, p_{248})$ .

Forming S-pol of  $p_0$  and  $p_{248}$ :

$$\begin{aligned}
p_{1418} = & (-1073741824u_5u_2^{50}u_1^{30} + 536870912u_5u_2^{50}u_1^{29} + 1073741824u_2^{51}u_1^{30} - \\
& 4294967296u_2^{49}u_1^{32} + 2147483648u_2^{49}u_1^{31})x_5x_4x_1 + \\
& (536870912u_5u_2^{52}u_1^{29} + 2147483648u_2^{51}u_1^{31} - 1073741824u_2^{51}u_1^{30})x_5x_4 + \\
& (1073741824u_5^2u_2^{49}u_1^{30} - 536870912u_5^2u_2^{49}u_1^{29})x_5x_1^2 - \\
& 536870912u_5^2u_2^{51}u_1^{29}x_5x_1 + \\
& (-536870912u_6u_5u_2^{49}u_1^{29} - 1073741824u_6u_2^{50}u_1^{30})x_4x_1^2 + \\
& (-536870912u_6u_5u_2^{51}u_1^{29} + 1073741824u_6u_5u_2^{49}u_1^{30} + \\
& 1073741824u_6u_2^{50}u_1^{30})x_4x_1 + 536870912u_6u_5^2u_2^{50}u_1^{29}x_1^2 - \\
& 536870912u_6u_5^2u_2^{50}u_1^{29}x_1
\end{aligned}$$

S-pol added.

143. Creating S-polynomial from the pair  $(p_0, p_{249})$ .

Forming S-pol of  $p_0$  and  $p_{249}$ : Polynomial too big for output (text size is 1389 characters, number of terms is 8)

S-pol added.

144. Creating S-polynomial from the pair  $(p_0, p_{250})$ .

Forming S-pol of  $p_0$  and  $p_{250}$ : Polynomial too big for output (text size is 1383 characters, number of terms is 8)

S-pol added.

145. Creating S-polynomial from the pair  $(p_0, p_{251})$ .

Forming S-pol of  $p_0$  and  $p_{251}$ :

$$\begin{aligned}
p_{1419} = & (33554432u_6u_2^{43}u_1^{24} - 16777216u_6u_2^{43}u_1^{23} + 134217728u_6u_2^{41}u_1^{26} - \\
& 67108864u_6u_2^{41}u_1^{25} - 16777216u_2^{44}u_1^{24} - 33554432u_2^{42}u_1^{25} + \\
& 268435456u_2^{40}u_1^{28} - 134217728u_2^{40}u_1^{27})x_5x_4x_1 + \\
& (-16777216u_6u_2^{45}u_1^{23} - 67108864u_6u_2^{43}u_1^{25} - 33554432u_2^{44}u_1^{25} + \\
& 16777216u_2^{44}u_1^{24} - 134217728u_2^{42}u_1^{27} + 67108864u_2^{42}u_1^{26})x_5x_4 + \\
& (-16777216u_6^2u_2^{42}u_1^{24} + 16777216u_6^2u_2^{42}u_1^{23} - 67108864u_6^2u_2^{40}u_1^{26} + \\
& 67108864u_6^2u_2^{40}u_1^{25})x_4x_1^2 + \\
& (16777216u_6^2u_2^{44}u_1^{23} + 67108864u_6^2u_2^{42}u_1^{25} - 16777216u_6^2u_2^{42}u_1^{24} - \\
& 67108864u_6^2u_2^{40}u_1^{26})x_4x_1
\end{aligned}$$

S-pol added.

146. Creating S-polynomial from the pair  $(p_0, p_{252})$ .

Forming S-pol of  $p_0$  and  $p_{252}$ :

$$\begin{aligned} p_{1420} = & (16777216u_6u_2^{42}u_1^{23} - 8388608u_6u_2^{42}u_1^{22} + 67108864u_6u_2^{40}u_1^{25} - \\ & 33554432u_6u_2^{40}u_1^{24} - 8388608u_2^{43}u_1^{23} - 16777216u_2^{41}u_1^{24} + 134217728u_2^{39}u_1^{27} - \\ & 67108864u_2^{39}u_1^{26})x_5x_4x_1 + \\ & (-8388608u_6u_2^{44}u_1^{22} - 33554432u_6u_2^{42}u_1^{24} - 16777216u_2^{43}u_1^{24} + \\ & 8388608u_2^{43}u_1^{23} - 67108864u_2^{41}u_1^{26} + 33554432u_2^{41}u_1^{25})x_5x_4 + \\ & (-8388608u_6^2u_2^{41}u_1^{23} + 8388608u_6^2u_2^{41}u_1^{22} - 33554432u_6^2u_2^{39}u_1^{25} + \\ & 33554432u_6^2u_2^{39}u_1^{24})x_4x_1^2 + \\ & (8388608u_6^2u_2^{43}u_1^{22} + 33554432u_6^2u_2^{41}u_1^{24} - 8388608u_6^2u_2^{41}u_1^{23} - \\ & 33554432u_6^2u_2^{39}u_1^{25})x_4x_1 \end{aligned}$$

S-pol added.

147. Creating S-polynomial from the pair  $(p_0, p_{253})$ .

Forming S-pol of  $p_0$  and  $p_{253}$ :

$$\begin{aligned} p_{1421} = & (-536870912u_5u_2^{45}u_1^{29} + 268435456u_5u_2^{45}u_1^{28} + 536870912u_2^{46}u_1^{29} - \\ & 2147483648u_2^{44}u_1^{31} + 1073741824u_2^{44}u_1^{30})x_5x_4x_1 + \\ & (268435456u_5u_2^{47}u_1^{28} + 1073741824u_2^{46}u_1^{30} - 536870912u_2^{46}u_1^{29})x_5x_4 + \\ & (536870912u_5^2u_2^{44}u_1^{29} - 268435456u_5^2u_2^{44}u_1^{28})x_5x_1^2 - \\ & 268435456u_5^2u_2^{46}u_1^{28}x_5x_1 + \\ & (-268435456u_6u_5u_2^{44}u_1^{28} - 536870912u_6u_2^{45}u_1^{29})x_4x_1^2 + \\ & (-268435456u_6u_5u_2^{46}u_1^{28} + 536870912u_6u_5u_2^{44}u_1^{29} + \\ & 536870912u_6u_2^{45}u_1^{29})x_4x_1 + 268435456u_6u_5^2u_2^{45}u_1^{28}x_1^2 - \\ & 268435456u_6u_5^2u_2^{45}u_1^{28}x_1 \end{aligned}$$

S-pol added.

148. Creating S-polynomial from the pair  $(p_0, p_{254})$ .

Forming S-pol of  $p_0$  and  $p_{254}$ :

$$\begin{aligned} p_{1422} = & (-268435456u_5u_2^{44}u_1^{28} + 134217728u_5u_2^{44}u_1^{27} + 268435456u_2^{45}u_1^{28} - \\ & 1073741824u_2^{43}u_1^{30} + 536870912u_2^{43}u_1^{29})x_5x_4x_1 + \\ & (134217728u_5u_2^{46}u_1^{27} + 536870912u_2^{45}u_1^{29} - 268435456u_2^{45}u_1^{28})x_5x_4 + \\ & (268435456u_5^2u_2^{43}u_1^{28} - 134217728u_5^2u_2^{43}u_1^{27})x_5x_1^2 - \\ & 134217728u_5^2u_2^{45}u_1^{27}x_5x_1 + \\ & (-134217728u_6u_5u_2^{43}u_1^{27} - 268435456u_6u_2^{44}u_1^{28})x_4x_1^2 + \\ & (-134217728u_6u_5u_2^{45}u_1^{27} + 268435456u_6u_5u_2^{43}u_1^{28} + \\ & 268435456u_6u_2^{44}u_1^{28})x_4x_1 + 134217728u_6u_5^2u_2^{44}u_1^{27}x_1^2 - \\ & 134217728u_6u_5^2u_2^{44}u_1^{27}x_1 \end{aligned}$$

S-pol added.

149. Creating S-polynomial from the pair  $(p_0, p_{255})$ .  
 Forming S-pol of  $p_0$  and  $p_{255}$ : Polynomial too big for output (text size is 2588 characters, number of terms is 8)  
 S-pol added.
150. Creating S-polynomial from the pair  $(p_0, p_{256})$ .  
 Forming S-pol of  $p_0$  and  $p_{256}$ : Polynomial too big for output (text size is 4565 characters, number of terms is 8)  
 S-pol added.
151. Creating S-polynomial from the pair  $(p_0, p_{257})$ .  
 Forming S-pol of  $p_0$  and  $p_{257}$ : Polynomial too big for output (text size is 4565 characters, number of terms is 8)  
 S-pol added.
152. Creating S-polynomial from the pair  $(p_0, p_{258})$ .  
 Forming S-pol of  $p_0$  and  $p_{258}$ : Polynomial too big for output (text size is 4548 characters, number of terms is 8)  
 S-pol added.
153. Creating S-polynomial from the pair  $(p_0, p_{259})$ .  
 Forming S-pol of  $p_0$  and  $p_{259}$ : Polynomial too big for output (text size is 1315 characters, number of terms is 8)  
 S-pol added.
154. Creating S-polynomial from the pair  $(p_0, p_{260})$ .  
 Forming S-pol of  $p_0$  and  $p_{260}$ : Polynomial too big for output (text size is 1905 characters, number of terms is 8)  
 S-pol added.
155. Creating S-polynomial from the pair  $(p_0, p_{261})$ .  
 Forming S-pol of  $p_0$  and  $p_{261}$ : Polynomial too big for output (text size is 4548 characters, number of terms is 8)  
 S-pol added.
156. Creating S-polynomial from the pair  $(p_0, p_{262})$ .  
 Forming S-pol of  $p_0$  and  $p_{262}$ :  

$$p_{1423} = (-16777216u_6u_2^{37}u_1^{23} + 8388608u_6u_2^{37}u_1^{22} + 8388608u_2^{38}u_1^{23} -$$

$$33554432u_2^{36}u_1^{25} + 16777216u_2^{36}u_1^{24})x_5x_4x_1 +$$

$$(8388608u_6u_2^{39}u_1^{22} + 16777216u_2^{38}u_1^{24} - 8388608u_2^{38}u_1^{23})x_5x_4 +$$

$$(8388608u_6u_2^{36}u_1^{23} - 8388608u_6u_2^{36}u_1^{22})x_4x_1^2 +$$

$$(-8388608u_6u_2^{38}u_1^{22} + 8388608u_6u_2^{36}u_1^{23})x_4x_1$$
 S-pol added.

157. Creating S-polynomial from the pair  $(p_0, p_{263})$ .

Forming S-pol of  $p_0$  and  $p_{263}$ :

$$\begin{aligned} p_{1424} = & (-8388608u_6u_2^{36}u_1^{22} + 4194304u_6u_2^{36}u_1^{21} + 4194304u_2^{37}u_1^{22} - \\ & 16777216u_2^{35}u_1^{24} + 8388608u_2^{35}u_1^{23})x_5x_4x_1 + \\ & (4194304u_6u_2^{38}u_1^{21} + 8388608u_2^{37}u_1^{23} - 4194304u_2^{37}u_1^{22})x_5x_4 + \\ & (4194304u_6^2u_2^{35}u_1^{22} - 4194304u_6^2u_2^{35}u_1^{21})x_4x_1^2 + \\ & (-4194304u_6^2u_2^{37}u_1^{21} + 4194304u_6^2u_2^{35}u_1^{22})x_4x_1 \end{aligned}$$

S-pol added.

158. Creating S-polynomial from the pair  $(p_0, p_{264})$ .

Skipping pair  $p_0$  and  $p_{264}$  because gcd of their leading monoms is zero.

159. Creating S-polynomial from the pair  $(p_0, p_{265})$ .

Skipping pair  $p_0$  and  $p_{265}$  because gcd of their leading monoms is zero.

160. Creating S-polynomial from the pair  $(p_0, p_{266})$ .

Forming S-pol of  $p_0$  and  $p_{266}$ : Polynomial too big for output (text size is 10898 characters, number of terms is 16)

S-pol added.

161. Creating S-polynomial from the pair  $(p_0, p_{267})$ .

Skipping pair  $p_0$  and  $p_{267}$  because gcd of their leading monoms is zero.

162. Creating S-polynomial from the pair  $(p_0, p_{268})$ .

Skipping pair  $p_0$  and  $p_{268}$  because gcd of their leading monoms is zero.

163. Creating S-polynomial from the pair  $(p_0, p_{269})$ .

Skipping pair  $p_0$  and  $p_{269}$  because gcd of their leading monoms is zero.

164. Creating S-polynomial from the pair  $(p_0, p_{270})$ .

Forming S-pol of  $p_0$  and  $p_{270}$ : Polynomial too big for output (text size is 10847 characters, number of terms is 16)

S-pol added.

165. Creating S-polynomial from the pair  $(p_0, p_{271})$ .

Skipping pair  $p_0$  and  $p_{271}$  because gcd of their leading monoms is zero.

166. Creating S-polynomial from the pair  $(p_0, p_{272})$ .

Skipping pair  $p_0$  and  $p_{272}$  because gcd of their leading monoms is zero.

167. Creating S-polynomial from the pair  $(p_0, p_{273})$ .

Skipping pair  $p_0$  and  $p_{273}$  because gcd of their leading monoms is zero.

168. Creating S-polynomial from the pair  $(p_0, p_{274})$ .

Skipping pair  $p_0$  and  $p_{274}$  because gcd of their leading monoms is zero.

169. Creating S-polynomial from the pair  $(p_0, p_{275})$ .  
 Skipping pair  $p_0$  and  $p_{275}$  because gcd of their leading monoms is zero.
170. Creating S-polynomial from the pair  $(p_0, p_{276})$ .  
 Skipping pair  $p_0$  and  $p_{276}$  because gcd of their leading monoms is zero.
171. Creating S-polynomial from the pair  $(p_0, p_{277})$ .  
 Skipping pair  $p_0$  and  $p_{277}$  because gcd of their leading monoms is zero.
172. Creating S-polynomial from the pair  $(p_0, p_{278})$ .  
 Skipping pair  $p_0$  and  $p_{278}$  because gcd of their leading monoms is zero.
173. Creating S-polynomial from the pair  $(p_0, p_{279})$ .  
 Skipping pair  $p_0$  and  $p_{279}$  because gcd of their leading monoms is zero.
174. Creating S-polynomial from the pair  $(p_0, p_{280})$ .  
 Skipping pair  $p_0$  and  $p_{280}$  because gcd of their leading monoms is zero.
175. Creating S-polynomial from the pair  $(p_0, p_{281})$ .  
 Forming S-pol of  $p_0$  and  $p_{281}$ : Polynomial too big for output (text size is 5418 characters, number of terms is 8)  
 S-pol added.
176. Creating S-polynomial from the pair  $(p_0, p_{282})$ .  
 Skipping pair  $p_0$  and  $p_{282}$  because gcd of their leading monoms is zero.
177. Creating S-polynomial from the pair  $(p_0, p_{283})$ .  
 Skipping pair  $p_0$  and  $p_{283}$  because gcd of their leading monoms is zero.
178. Creating S-polynomial from the pair  $(p_0, p_{284})$ .  
 Skipping pair  $p_0$  and  $p_{284}$  because gcd of their leading monoms is zero.
179. Creating S-polynomial from the pair  $(p_0, p_{285})$ .  
 Forming S-pol of  $p_0$  and  $p_{285}$ : Polynomial too big for output (text size is 5394 characters, number of terms is 8)  
 S-pol added.
180. Creating S-polynomial from the pair  $(p_0, p_{286})$ .  
 Skipping pair  $p_0$  and  $p_{286}$  because gcd of their leading monoms is zero.
181. Creating S-polynomial from the pair  $(p_0, p_{287})$ .  
 Skipping pair  $p_0$  and  $p_{287}$  because gcd of their leading monoms is zero.
182. Creating S-polynomial from the pair  $(p_0, p_{288})$ .  
 Skipping pair  $p_0$  and  $p_{288}$  because gcd of their leading monoms is zero.
183. Creating S-polynomial from the pair  $(p_0, p_{289})$ .  
 Skipping pair  $p_0$  and  $p_{289}$  because gcd of their leading monoms is zero.

184. Creating S-polynomial from the pair  $(p_0, p_{290})$ .

Forming S-pol of  $p_0$  and  $p_{290}$ :

$$\begin{aligned} p_{1425} = & (-8388608u_5u_2^{35}u_1^{23} + 33554432u_5u_2^{33}u_1^{25} - 16777216u_5u_2^{33}u_1^{24})x_5x_4x_1 + \\ & (-16777216u_5u_2^{35}u_1^{24} + 8388608u_5u_2^{35}u_1^{23})x_5x_4 + \\ & 8388608u_6u_5u_2^{34}u_1^{23}x_4x_1^2 - 8388608u_6u_5u_2^{34}u_1^{23}x_4x_1 \end{aligned}$$

S-pol added.

185. Creating S-polynomial from the pair  $(p_0, p_{291})$ .

Forming S-pol of  $p_0$  and  $p_{291}$ :

$$\begin{aligned} p_{1426} = & (-4194304u_5u_2^{34}u_1^{22} + 16777216u_5u_2^{32}u_1^{24} - 8388608u_5u_2^{32}u_1^{23})x_5x_4x_1 + \\ & (-8388608u_5u_2^{34}u_1^{23} + 4194304u_5u_2^{34}u_1^{22})x_5x_4 + \\ & 4194304u_6u_5u_2^{33}u_1^{22}x_4x_1^2 - 4194304u_6u_5u_2^{33}u_1^{22}x_4x_1 \end{aligned}$$

S-pol added.

186. Creating S-polynomial from the pair  $(p_0, p_{292})$ .

Forming S-pol of  $p_0$  and  $p_{292}$ :

$$\begin{aligned} p_{1427} = & (-140737488355328u_5^2u_2^{75}u_1^{47} + 70368744177664u_5^2u_2^{75}u_1^{46} + \\ & 140737488355328u_5u_2^{76}u_1^{47} - 562949953421312u_5u_2^{74}u_1^{49} + \\ & 281474976710656u_5u_2^{74}u_1^{48})x_5x_4x_1 + \\ & (70368744177664u_5^2u_2^{77}u_1^{46} + 281474976710656u_5u_2^{76}u_1^{48} - \\ & 140737488355328u_5u_2^{76}u_1^{47})x_5x_4 + \\ & (140737488355328u_5^3u_2^{74}u_1^{47} - 70368744177664u_5^3u_2^{74}u_1^{46})x_5x_1^2 - \\ & 70368744177664u_5^3u_2^{76}u_1^{46}x_5x_1 + \\ & (-70368744177664u_6u_5^2u_2^{74}u_1^{46} - 140737488355328u_6u_5u_2^{75}u_1^{47})x_4x_1^2 + \\ & (-70368744177664u_6u_5^2u_2^{76}u_1^{46} + 140737488355328u_6u_5^2u_2^{74}u_1^{47} + \\ & 140737488355328u_6u_5u_2^{75}u_1^{47})x_4x_1 + 70368744177664u_6u_5^3u_2^{75}u_1^{46}x_1^2 - \\ & 70368744177664u_6u_5^3u_2^{75}u_1^{46}x_1 \end{aligned}$$

S-pol added.

187. Creating S-polynomial from the pair  $(p_0, p_{293})$ .

Forming S-pol of  $p_0$  and  $p_{293}$ :

$$\begin{aligned} p_{1428} = & (-70368744177664u_5^2u_2^{74}u_1^{46} + 35184372088832u_5^2u_2^{74}u_1^{45} + \\ & 70368744177664u_5u_2^{75}u_1^{46} - 281474976710656u_5u_2^{73}u_1^{48} + \\ & 140737488355328u_5u_2^{73}u_1^{47})x_5x_4x_1 + \\ & (35184372088832u_5^2u_2^{76}u_1^{45} + 140737488355328u_5u_2^{75}u_1^{47} - \end{aligned}$$



$$\begin{aligned}
& 70368744177664u_5u_2^{75}u_1^{46})x_5x_4+ \\
& (70368744177664u_5^3u_2^{73}u_1^{46} - 35184372088832u_5^3u_2^{73}u_1^{45})x_5x_1^2- \\
& 35184372088832u_5^3u_2^{75}u_1^{45}x_5x_1+ \\
& (-35184372088832u_6u_5^2u_2^{73}u_1^{45} - 70368744177664u_6u_5u_2^{74}u_1^{46})x_4x_1^2+ \\
& (-35184372088832u_6u_5^2u_2^{75}u_1^{45} + 70368744177664u_6u_5^2u_2^{73}u_1^{46} + \\
& 70368744177664u_6u_5u_2^{74}u_1^{46})x_4x_1 + 35184372088832u_6u_5^3u_2^{74}u_1^{45}x_1^2- \\
& 35184372088832u_6u_5^3u_2^{74}u_1^{45}x_1
\end{aligned}$$

S-pol added.

188. Creating S-polynomial from the pair  $(p_0, p_{294})$ .

Forming S-pol of  $p_0$  and  $p_{294}$ :

$$\begin{aligned}
p_{1429} = & (-1073741824u_5u_2^{45}u_1^{30} + 536870912u_5u_2^{45}u_1^{29} + 1073741824u_2^{46}u_1^{30} - \\
& 4294967296u_2^{44}u_1^{32} + 2147483648u_2^{44}u_1^{31})x_5x_4x_1+ \\
& (536870912u_5u_2^{47}u_1^{29} + 2147483648u_2^{46}u_1^{31} - 1073741824u_2^{46}u_1^{30})x_5x_4+ \\
& (1073741824u_5^2u_2^{44}u_1^{30} - 536870912u_5^2u_2^{44}u_1^{29})x_5x_1^2- \\
& 536870912u_5^2u_2^{46}u_1^{29}x_5x_1+ \\
& (-536870912u_6u_5u_2^{44}u_1^{29} - 1073741824u_6u_2^{45}u_1^{30})x_4x_1^2+ \\
& (-536870912u_6u_5u_2^{46}u_1^{29} + 1073741824u_6u_5u_2^{44}u_1^{30} + \\
& 1073741824u_6u_2^{45}u_1^{30})x_4x_1 + 536870912u_6u_5^2u_2^{45}u_1^{29}x_1^2- \\
& 536870912u_6u_5^2u_2^{45}u_1^{29}x_1
\end{aligned}$$

S-pol added.

189. Creating S-polynomial from the pair  $(p_0, p_{295})$ .

Forming S-pol of  $p_0$  and  $p_{295}$ :

$$\begin{aligned}
p_{1430} = & (-536870912u_5u_2^{44}u_1^{29} + 268435456u_5u_2^{44}u_1^{28} + 536870912u_2^{45}u_1^{29} - \\
& 2147483648u_2^{43}u_1^{31} + 1073741824u_2^{43}u_1^{30})x_5x_4x_1+ \\
& (268435456u_5u_2^{46}u_1^{28} + 1073741824u_2^{45}u_1^{30} - 536870912u_2^{45}u_1^{29})x_5x_4+ \\
& (536870912u_5^2u_2^{43}u_1^{29} - 268435456u_5^2u_2^{43}u_1^{28})x_5x_1^2- \\
& 268435456u_5^2u_2^{45}u_1^{28}x_5x_1+ \\
& (-268435456u_6u_5u_2^{43}u_1^{28} - 536870912u_6u_2^{44}u_1^{29})x_4x_1^2+ \\
& (-268435456u_6u_5u_2^{45}u_1^{28} + 536870912u_6u_5u_2^{43}u_1^{29} + \\
& 536870912u_6u_2^{44}u_1^{29})x_4x_1 + 268435456u_6u_5^2u_2^{44}u_1^{28}x_1^2- \\
& 268435456u_6u_5^2u_2^{44}u_1^{28}x_1
\end{aligned}$$

S-pol added.

190. Creating S-polynomial from the pair  $(p_0, p_{296})$ .

Forming S-pol of  $p_0$  and  $p_{296}$ :

$$\begin{aligned} p_{1431} = & (-1073741824u_5u_2^{45}u_1^{30} + 536870912u_5u_2^{45}u_1^{29} + 1073741824u_2^{46}u_1^{30} - \\ & 4294967296u_2^{44}u_1^{32} + 2147483648u_2^{44}u_1^{31})x_5x_4x_1 + \\ & (536870912u_5u_2^{47}u_1^{29} + 2147483648u_2^{46}u_1^{31} - 1073741824u_2^{46}u_1^{30})x_5x_4 + \\ & (1073741824u_5^2u_2^{44}u_1^{30} - 536870912u_5^2u_2^{44}u_1^{29})x_5x_1^2 - \\ & 536870912u_5^2u_2^{46}u_1^{29}x_5x_1 + \\ & (-536870912u_6u_5u_2^{44}u_1^{29} - 1073741824u_6u_2^{45}u_1^{30})x_4x_1^2 + \\ & (-536870912u_6u_5u_2^{46}u_1^{29} + 1073741824u_6u_5u_2^{44}u_1^{30} + \\ & 1073741824u_6u_2^{45}u_1^{30})x_4x_1 + 536870912u_6u_5^2u_2^{45}u_1^{29}x_1^2 - \\ & 536870912u_6u_5^2u_2^{45}u_1^{29}x_1 \end{aligned}$$

S-pol added.

191. Creating S-polynomial from the pair  $(p_0, p_{297})$ .

Forming S-pol of  $p_0$  and  $p_{297}$ :

$$\begin{aligned} p_{1432} = & (-2147483648u_5u_2^{50}u_1^{31} + 1073741824u_5u_2^{50}u_1^{30} + 2147483648u_2^{51}u_1^{31} - \\ & 8589934592u_2^{49}u_1^{33} + 4294967296u_2^{49}u_1^{32})x_5x_4x_1 + \\ & (1073741824u_5u_2^{52}u_1^{30} + 4294967296u_2^{51}u_1^{32} - 2147483648u_2^{51}u_1^{31})x_5x_4 + \\ & (2147483648u_5^2u_2^{49}u_1^{31} - 1073741824u_5^2u_2^{49}u_1^{30})x_5x_1^2 - \\ & 1073741824u_5^2u_2^{51}u_1^{30}x_5x_1 + \\ & (-1073741824u_6u_5u_2^{49}u_1^{30} - 2147483648u_6u_2^{50}u_1^{31})x_4x_1^2 + \\ & (-1073741824u_6u_5u_2^{51}u_1^{30} + 2147483648u_6u_5u_2^{49}u_1^{31} + \\ & 2147483648u_6u_2^{50}u_1^{31})x_4x_1 + 1073741824u_6u_5^2u_2^{50}u_1^{30}x_1^2 - \\ & 1073741824u_6u_5^2u_2^{50}u_1^{30}x_1 \end{aligned}$$

S-pol added.

192. Creating S-polynomial from the pair  $(p_0, p_{298})$ .

Forming S-pol of  $p_0$  and  $p_{298}$ :

$$\begin{aligned} p_{1433} = & (-32768u_2^{25}u_1^{15} + 131072u_2^{23}u_1^{17} - 65536u_2^{23}u_1^{16})x_5x_4x_1 + \\ & (-65536u_2^{25}u_1^{16} + 32768u_2^{25}u_1^{15})x_5x_4 + 32768u_6u_2^{24}u_1^{15}x_4x_1^2 - \\ & 32768u_6u_2^{24}u_1^{15}x_4x_1 \end{aligned}$$

S-pol added.

193. Creating S-polynomial from the pair  $(p_0, p_{299})$ .

Forming S-pol of  $p_0$  and  $p_{299}$ : Polynomial too big for output (text size is 3266 characters, number of terms is 8)

S-pol added.

194. Creating S-polynomial from the pair  $(p_0, p_{300})$ .  
 Forming S-pol of  $p_0$  and  $p_{300}$ : Polynomial too big for output (text size is 3266 characters, number of terms is 8)  
 S-pol added.
195. Creating S-polynomial from the pair  $(p_0, p_{301})$ .  
 Forming S-pol of  $p_0$  and  $p_{301}$ : Polynomial too big for output (text size is 6210 characters, number of terms is 16)  
 S-pol added.
196. Creating S-polynomial from the pair  $(p_0, p_{302})$ .  
 Forming S-pol of  $p_0$  and  $p_{302}$ : Polynomial too big for output (text size is 1176 characters, number of terms is 8)  
 S-pol added.
197. Creating S-polynomial from the pair  $(p_0, p_{303})$ .  
 Forming S-pol of  $p_0$  and  $p_{303}$ : Polynomial too big for output (text size is 2840 characters, number of terms is 8)  
 S-pol added.
198. Creating S-polynomial from the pair  $(p_0, p_{304})$ .  
 Forming S-pol of  $p_0$  and  $p_{304}$ : Polynomial too big for output (text size is 2827 characters, number of terms is 8)  
 S-pol added.
199. Creating S-polynomial from the pair  $(p_0, p_{305})$ .  
 Forming S-pol of  $p_0$  and  $p_{305}$ : Polynomial too big for output (text size is 2763 characters, number of terms is 8)  
 S-pol added.
200. Creating S-polynomial from the pair  $(p_0, p_{306})$ .  
 Forming S-pol of  $p_0$  and  $p_{306}$ :

$$\begin{aligned}
 p_{1434} = & (2097152u_2^{36}u_1^{21} - 8388608u_2^{34}u_1^{23} + 4194304u_2^{34}u_1^{22})x_5x_4x_1 + \\
 & (4194304u_2^{36}u_1^{22} - 2097152u_2^{36}u_1^{21})x_5x_4 + \\
 & (2097152u_5^2u_2^{34}u_1^{21} - 1048576u_5^2u_2^{34}u_1^{20})x_5x_1 - \\
 & 1048576u_5^2u_2^{36}u_1^{20}x_5x_1 - 2097152u_6u_2^{35}u_1^{21}x_4x_1^2 + \\
 & 2097152u_6u_2^{35}u_1^{21}x_4x_1 + 1048576u_6u_5^2u_2^{35}u_1^{20}x_1^2 - \\
 & 1048576u_6u_5^2u_2^{35}u_1^{20}x_1
 \end{aligned}$$

S-pol added.

201. Creating S-polynomial from the pair  $(p_0, p_{307})$ .

Forming S-pol of  $p_0$  and  $p_{307}$ :

$$\begin{aligned} p_{1435} = & (4194304u_2^{30}u_1^{22} - 16777216u_2^{28}u_1^{24} + 8388608u_2^{28}u_1^{23})x_5x_4x_1 + \\ & (8388608u_2^{30}u_1^{23} - 4194304u_2^{30}u_1^{22})x_5x_4 + \\ & (4194304u_5^2u_2^{28}u_1^{22} - 2097152u_5^2u_2^{28}u_1^{21})x_5x_1 - \\ & 2097152u_5^2u_2^{30}u_1^{21}x_5x_1 - 4194304u_6u_2^{29}u_1^{22}x_4x_1^2 + \\ & 4194304u_6u_2^{29}u_1^{22}x_4x_1 + 2097152u_6u_5^2u_2^{29}u_1^{21}x_1^2 - \\ & 2097152u_6u_5^2u_2^{29}u_1^{21}x_1 \end{aligned}$$

S-pol added.

202. Creating S-polynomial from the pair  $(p_0, p_{308})$ .

Forming S-pol of  $p_0$  and  $p_{308}$ : Polynomial too big for output (text size is 2829 characters, number of terms is 8)

S-pol added.

203. Creating S-polynomial from the pair  $(p_0, p_{309})$ .

Forming S-pol of  $p_0$  and  $p_{309}$ : Polynomial too big for output (text size is 6210 characters, number of terms is 16)

S-pol added.

204. Creating S-polynomial from the pair  $(p_0, p_{310})$ .

Forming S-pol of  $p_0$  and  $p_{310}$ : Polynomial too big for output (text size is 1176 characters, number of terms is 8)

S-pol added.

205. Creating S-polynomial from the pair  $(p_0, p_{311})$ .

Forming S-pol of  $p_0$  and  $p_{311}$ : Polynomial too big for output (text size is 2840 characters, number of terms is 8)

S-pol added.

206. Creating S-polynomial from the pair  $(p_0, p_{312})$ .

Forming S-pol of  $p_0$  and  $p_{312}$ :

$$\begin{aligned} p_{1436} = & (16384u_2^{24}u_1^{14} - 65536u_2^{22}u_1^{16} + 32768u_2^{22}u_1^{15})x_5x_4x_1 + \\ & (32768u_2^{24}u_1^{15} - 16384u_2^{24}u_1^{14})x_5x_4 - 16384u_6u_2^{23}u_1^{14}x_4x_1^2 + \\ & 16384u_6u_2^{23}u_1^{14}x_4x_1 \end{aligned}$$

S-pol added.

207. Creating S-polynomial from the pair  $(p_0, p_{313})$ .

Skipping pair  $p_0$  and  $p_{313}$  because gcd of their leading monoms is zero.

208. Creating S-polynomial from the pair  $(p_0, p_{314})$ .

Skipping pair  $p_0$  and  $p_{314}$  because gcd of their leading monoms is zero.

209. Creating S-polynomial from the pair  $(p_0, p_{315})$ .  
 Skipping pair  $p_0$  and  $p_{315}$  because gcd of their leading monoms is zero.
210. Creating S-polynomial from the pair  $(p_0, p_{316})$ .  
 Skipping pair  $p_0$  and  $p_{316}$  because gcd of their leading monoms is zero.
211. Creating S-polynomial from the pair  $(p_0, p_{317})$ .  
 Skipping pair  $p_0$  and  $p_{317}$  because gcd of their leading monoms is zero.
212. Creating S-polynomial from the pair  $(p_0, p_{318})$ .  
 Skipping pair  $p_0$  and  $p_{318}$  because gcd of their leading monoms is zero.
213. Creating S-polynomial from the pair  $(p_0, p_{319})$ .  
 Skipping pair  $p_0$  and  $p_{319}$  because gcd of their leading monoms is zero.
214. Creating S-polynomial from the pair  $(p_0, p_{320})$ .  
 Skipping pair  $p_0$  and  $p_{320}$  because gcd of their leading monoms is zero.
215. Creating S-polynomial from the pair  $(p_0, p_{321})$ .  
 Skipping pair  $p_0$  and  $p_{321}$  because gcd of their leading monoms is zero.
216. Creating S-polynomial from the pair  $(p_0, p_{322})$ .  
 Skipping pair  $p_0$  and  $p_{322}$  because gcd of their leading monoms is zero.
217. Creating S-polynomial from the pair  $(p_0, p_{323})$ .  
 Skipping pair  $p_0$  and  $p_{323}$  because gcd of their leading monoms is zero.
218. Creating S-polynomial from the pair  $(p_0, p_{324})$ .  
 Skipping pair  $p_0$  and  $p_{324}$  because gcd of their leading monoms is zero.
219. Creating S-polynomial from the pair  $(p_0, p_{325})$ .  
 Skipping pair  $p_0$  and  $p_{325}$  because gcd of their leading monoms is zero.
220. Creating S-polynomial from the pair  $(p_0, p_{326})$ .  
 Forming S-pol of  $p_0$  and  $p_{326}$ : Polynomial too big for output (text size is 2373 characters, number of terms is 8)  
 S-pol added.
221. Creating S-polynomial from the pair  $(p_0, p_{327})$ .  
 Skipping pair  $p_0$  and  $p_{327}$  because gcd of their leading monoms is zero.
222. Creating S-polynomial from the pair  $(p_0, p_{328})$ .  
 Forming S-pol of  $p_0$  and  $p_{328}$ : Polynomial too big for output (text size is 5086 characters, number of terms is 16)  
 S-pol added.

223. Creating S-polynomial from the pair  $(p_0, p_{329})$ .

Forming S-pol of  $p_0$  and  $p_{329}$ :

$$\begin{aligned}
p_{1437} = & (-35184372088832u_6u_3^{48}u_2^{66}u_1^{45} - 140737488355328u_3^{47}u_2^{66}u_1^{47} + \\
& 70368744177664u_3^{47}u_2^{66}u_1^{46})x_5x_4x_2x_1 + \\
& (-70368744177664u_6u_3^{47}u_2^{67}u_1^{46} + 35184372088832u_6u_3^{47}u_2^{67}u_1^{45})x_5x_4x_2 - \\
& 35184372088832u_6u_3^{49}u_2^{65}u_1^{45}x_5x_4x_1^2 + \\
& (70368744177664u_6u_3^{49}u_2^{65}u_1^{46} + 35184372088832u_6u_3^{48}u_2^{66}u_1^{45} + \\
& 70368744177664u_3^{49}u_2^{66}u_1^{46})x_5x_4x_1 + \\
& 35184372088832u_6^2u_3^{48}u_2^{65}u_1^{45}x_4x_2x_1^2 + \\
& (-70368744177664u_6^2u_3^{48}u_2^{65}u_1^{46} + 70368744177664u_6^2u_3^{47}u_2^{66}u_1^{46} - \\
& 35184372088832u_6^2u_3^{47}u_2^{66}u_1^{45})x_4x_2x_1 - \\
& 35184372088832u_6^2u_3^{48}u_2^{65}u_1^{45}x_4x_1^2 + \\
& (-35184372088832u_6^2u_3^{49}u_2^{66}u_1^{45} + 70368744177664u_6^2u_3^{48}u_2^{65}u_1^{46})x_4x_1
\end{aligned}$$

S-pol added.

224. Creating S-polynomial from the pair  $(p_0, p_{330})$ .

Forming S-pol of  $p_0$  and  $p_{330}$ : Polynomial too big for output (text size is 3044 characters, number of terms is 8)

S-pol added.

225. Creating S-polynomial from the pair  $(p_0, p_{331})$ .

Skipping pair  $p_0$  and  $p_{331}$  because gcd of their leading monoms is zero.

226. Creating S-polynomial from the pair  $(p_0, p_{332})$ .

Skipping pair  $p_0$  and  $p_{332}$  because gcd of their leading monoms is zero.

227. Creating S-polynomial from the pair  $(p_0, p_{333})$ .

Skipping pair  $p_0$  and  $p_{333}$  because gcd of their leading monoms is zero.

228. Creating S-polynomial from the pair  $(p_0, p_{334})$ .

Skipping pair  $p_0$  and  $p_{334}$  because gcd of their leading monoms is zero.

229. Creating S-polynomial from the pair  $(p_0, p_{335})$ .

Skipping pair  $p_0$  and  $p_{335}$  because gcd of their leading monoms is zero.

230. Creating S-polynomial from the pair  $(p_0, p_{336})$ .

Skipping pair  $p_0$  and  $p_{336}$  because gcd of their leading monoms is zero.

231. Creating S-polynomial from the pair  $(p_0, p_{337})$ .

Skipping pair  $p_0$  and  $p_{337}$  because gcd of their leading monoms is zero.

232. Creating S-polynomial from the pair  $(p_0, p_{338})$ .

Skipping pair  $p_0$  and  $p_{338}$  because gcd of their leading monoms is zero.

233. Creating S-polynomial from the pair  $(p_0, p_{339})$ .  
 Skipping pair  $p_0$  and  $p_{339}$  because gcd of their leading monoms is zero.
234. Creating S-polynomial from the pair  $(p_0, p_{340})$ .  
 Skipping pair  $p_0$  and  $p_{340}$  because gcd of their leading monoms is zero.
235. Creating S-polynomial from the pair  $(p_0, p_{341})$ .  
 Skipping pair  $p_0$  and  $p_{341}$  because gcd of their leading monoms is zero.
236. Creating S-polynomial from the pair  $(p_0, p_{342})$ .  
 Skipping pair  $p_0$  and  $p_{342}$  because gcd of their leading monoms is zero.
237. Creating S-polynomial from the pair  $(p_0, p_{343})$ .  
 Skipping pair  $p_0$  and  $p_{343}$  because gcd of their leading monoms is zero.
238. Creating S-polynomial from the pair  $(p_0, p_{344})$ .  
 Skipping pair  $p_0$  and  $p_{344}$  because gcd of their leading monoms is zero.
239. Creating S-polynomial from the pair  $(p_0, p_{345})$ .  
 Skipping pair  $p_0$  and  $p_{345}$  because gcd of their leading monoms is zero.
240. Creating S-polynomial from the pair  $(p_0, p_{346})$ .  
 Skipping pair  $p_0$  and  $p_{346}$  because gcd of their leading monoms is zero.
241. Creating S-polynomial from the pair  $(p_0, p_{347})$ .  
 Skipping pair  $p_0$  and  $p_{347}$  because gcd of their leading monoms is zero.
242. Creating S-polynomial from the pair  $(p_0, p_{348})$ .  
 Forming S-pol of  $p_0$  and  $p_{348}$ : Polynomial too big for output (text size is 5086 characters, number of terms is 16)  
 S-pol added.
243. Creating S-polynomial from the pair  $(p_0, p_{349})$ .  
 Forming S-pol of  $p_0$  and  $p_{349}$ :  

$$p_{1438} = (-35184372088832u_6u_4^{48}u_2^{66}u_1^{45} - 140737488355328u_4^{47}u_2^{66}u_1^{47} +$$

$$70368744177664u_4^{47}u_2^{66}u_1^{46})x_5x_4x_3x_1 +$$

$$(-70368744177664u_6u_4^{47}u_2^{67}u_1^{46} + 35184372088832u_6u_4^{47}u_2^{67}u_1^{45})x_5x_4x_3 -$$

$$35184372088832u_6u_4^{49}u_2^{65}u_1^{45}x_5x_4x_1^2 +$$

$$(70368744177664u_6u_4^{49}u_2^{65}u_1^{46} + 35184372088832u_6u_4^{48}u_2^{66}u_1^{45} +$$

$$70368744177664u_4^{49}u_2^{66}u_1^{46})x_5x_4x_1 +$$

$$35184372088832u_6^2u_4^{48}u_2^{65}u_1^{45}x_4x_3x_1^2 +$$

$$(-70368744177664u_6^2u_4^{48}u_2^{65}u_1^{46} + 70368744177664u_6^2u_4^{47}u_2^{66}u_1^{46} -$$

$$35184372088832u_6^2u_4^{47}u_2^{66}u_1^{45})x_4x_3x_1 -$$

$$35184372088832u_6^2u_4^{48}u_2^{65}u_1^{45}x_4x_1^2 +$$

$$(-35184372088832u_6^2u_4^{49}u_2^{66}u_1^{45} + 70368744177664u_6^2u_4^{48}u_2^{65}u_1^{46})x_4x_1$$
 S-pol added.

244. Creating S-polynomial from the pair  $(p_0, p_{350})$ .  
 Forming S-pol of  $p_0$  and  $p_{350}$ : Polynomial too big for output (text size is 3044 characters, number of terms is 8)  
 S-pol added.
245. Creating S-polynomial from the pair  $(p_0, p_{351})$ .  
 Forming S-pol of  $p_0$  and  $p_{351}$ : Polynomial too big for output (text size is 2377 characters, number of terms is 8)  
 S-pol added.
246. Creating S-polynomial from the pair  $(p_0, p_{352})$ .  
 Skipping pair  $p_0$  and  $p_{352}$  because gcd of their leading monoms is zero.
247. Creating S-polynomial from the pair  $(p_0, p_{353})$ .  
 Skipping pair  $p_0$  and  $p_{353}$  because gcd of their leading monoms is zero.
248. Creating S-polynomial from the pair  $(p_0, p_{354})$ .  
 Skipping pair  $p_0$  and  $p_{354}$  because gcd of their leading monoms is zero.
249. Creating S-polynomial from the pair  $(p_0, p_{355})$ .  
 Skipping pair  $p_0$  and  $p_{355}$  because gcd of their leading monoms is zero.
250. Creating S-polynomial from the pair  $(p_0, p_{356})$ .  
 Skipping pair  $p_0$  and  $p_{356}$  because gcd of their leading monoms is zero.
251. Creating S-polynomial from the pair  $(p_0, p_{357})$ .  
 Skipping pair  $p_0$  and  $p_{357}$  because gcd of their leading monoms is zero.
252. Creating S-polynomial from the pair  $(p_0, p_{358})$ .  
 Forming S-pol of  $p_0$  and  $p_{358}$ : Polynomial too big for output (text size is 6189 characters, number of terms is 16)  
 S-pol added.
253. Creating S-polynomial from the pair  $(p_0, p_{359})$ .  
 Skipping pair  $p_0$  and  $p_{359}$  because gcd of their leading monoms is zero.
254. Creating S-polynomial from the pair  $(p_0, p_{360})$ .  
 Skipping pair  $p_0$  and  $p_{360}$  because gcd of their leading monoms is zero.
255. Creating S-polynomial from the pair  $(p_0, p_{361})$ .  
 Forming S-pol of  $p_0$  and  $p_{361}$ : Polynomial too big for output (text size is 1166 characters, number of terms is 8)  
 S-pol added.
256. Creating S-polynomial from the pair  $(p_0, p_{362})$ .  
 Skipping pair  $p_0$  and  $p_{362}$  because gcd of their leading monoms is zero.



257. Creating S-polynomial from the pair  $(p_0, p_{363})$ .  
Forming S-pol of  $p_0$  and  $p_{363}$ : Polynomial too big for output (text size is 2368 characters, number of terms is 8)  
S-pol added.
258. Creating S-polynomial from the pair  $(p_0, p_{364})$ .  
Skipping pair  $p_0$  and  $p_{364}$  because gcd of their leading monoms is zero.
259. Creating S-polynomial from the pair  $(p_0, p_{365})$ .  
Forming S-pol of  $p_0$  and  $p_{365}$ : Polynomial too big for output (text size is 5059 characters, number of terms is 16)  
S-pol added.
260. Creating S-polynomial from the pair  $(p_0, p_{366})$ .  
Forming S-pol of  $p_0$  and  $p_{366}$ :  

$$p_{1439} = (-17592186044416u_6u_3^{47}u_2^{66}u_1^{44} - 70368744177664u_3^{46}u_2^{66}u_1^{46} +$$

$$35184372088832u_3^{46}u_2^{66}u_1^{45})x_5x_4x_2x_1 +$$

$$(-35184372088832u_6u_3^{46}u_2^{67}u_1^{45} + 17592186044416u_6u_3^{46}u_2^{67}u_1^{44})x_5x_4x_2 -$$

$$17592186044416u_6u_3^{48}u_2^{65}u_1^{44}x_5x_4x_1^2 +$$

$$(35184372088832u_6u_3^{48}u_2^{65}u_1^{45} + 17592186044416u_6u_3^{47}u_2^{66}u_1^{44} +$$

$$35184372088832u_3^{48}u_2^{66}u_1^{45})x_5x_4x_1 +$$

$$17592186044416u_6^2u_3^{47}u_2^{65}u_1^{44}x_4x_2x_1^2 +$$

$$(-35184372088832u_6^2u_3^{47}u_2^{65}u_1^{45} + 35184372088832u_6^2u_3^{46}u_2^{66}u_1^{45} -$$

$$17592186044416u_6^2u_3^{46}u_2^{66}u_1^{44})x_4x_2x_1 -$$

$$17592186044416u_6^2u_3^{47}u_2^{65}u_1^{44}x_4x_1^2 +$$

$$(-17592186044416u_6^2u_3^{48}u_2^{66}u_1^{44} + 35184372088832u_6^2u_3^{47}u_2^{65}u_1^{45})x_4x_1$$
S-pol added.
261. Creating S-polynomial from the pair  $(p_0, p_{367})$ .  
Forming S-pol of  $p_0$  and  $p_{367}$ : Polynomial too big for output (text size is 1992 characters, number of terms is 8)  
S-pol added.
262. Creating S-polynomial from the pair  $(p_0, p_{368})$ .  
Skipping pair  $p_0$  and  $p_{368}$  because gcd of their leading monoms is zero.
263. Creating S-polynomial from the pair  $(p_0, p_{369})$ .  
Skipping pair  $p_0$  and  $p_{369}$  because gcd of their leading monoms is zero.
264. Creating S-polynomial from the pair  $(p_0, p_{370})$ .  
Skipping pair  $p_0$  and  $p_{370}$  because gcd of their leading monoms is zero.

265. Creating S-polynomial from the pair  $(p_0, p_{371})$ .  
Forming S-pol of  $p_0$  and  $p_{371}$ : Polynomial too big for output (text size is 2822 characters, number of terms is 8)  
S-pol added.
266. Creating S-polynomial from the pair  $(p_0, p_{372})$ .  
Skipping pair  $p_0$  and  $p_{372}$  because gcd of their leading monoms is zero.
267. Creating S-polynomial from the pair  $(p_0, p_{373})$ .  
Forming S-pol of  $p_0$  and  $p_{373}$ : Polynomial too big for output (text size is 1404 characters, number of terms is 8)  
S-pol added.
268. Creating S-polynomial from the pair  $(p_0, p_{374})$ .  
Forming S-pol of  $p_0$  and  $p_{374}$ : Polynomial too big for output (text size is 2055 characters, number of terms is 8)  
S-pol added.
269. Creating S-polynomial from the pair  $(p_0, p_{375})$ .  
Forming S-pol of  $p_0$  and  $p_{375}$ : Polynomial too big for output (text size is 5058 characters, number of terms is 16)  
S-pol added.
270. Creating S-polynomial from the pair  $(p_0, p_{376})$ .  
Forming S-pol of  $p_0$  and  $p_{376}$ :

$$\begin{aligned}
p_{1440} = & (-262144u_2^{29}u_1^{18} + 1048576u_2^{27}u_1^{20} - 524288u_2^{27}u_1^{19})x_5x_4x_1 + \\
& (-524288u_2^{29}u_1^{19} + 262144u_2^{29}u_1^{18})x_5x_4 + \\
& (-262144u_5^2u_2^{27}u_1^{18} + 131072u_5^2u_2^{27}u_1^{17})x_5x_1^2 + \\
& 131072u_5^2u_2^{29}u_1^{17}x_5x_1 + 262144u_6u_2^{28}u_1^{18}x_4x_1^2 - \\
& 262144u_6u_2^{28}u_1^{18}x_4x_1 - 131072u_6u_5^2u_2^{28}u_1^{17}x_1^2 + \\
& 131072u_6u_5^2u_2^{28}u_1^{17}x_1
\end{aligned}$$

S-pol added.

271. Creating S-polynomial from the pair  $(p_0, p_{377})$ .  
Forming S-pol of  $p_0$  and  $p_{377}$ :

$$\begin{aligned}
p_{1441} = & (17592186044416u_6u_4^{47}u_2^{66}u_1^{44} + 70368744177664u_4^{46}u_2^{66}u_1^{46} - \\
& 35184372088832u_4^{46}u_2^{66}u_1^{45})x_5x_4x_3x_1 + \\
& (35184372088832u_6u_4^{46}u_2^{67}u_1^{45} - 17592186044416u_6u_4^{46}u_2^{67}u_1^{44})x_5x_4x_3 + \\
& 17592186044416u_6u_4^{48}u_2^{65}u_1^{44}x_5x_4x_1^2 + \\
& (-35184372088832u_6u_4^{48}u_2^{65}u_1^{45} - 17592186044416u_6u_4^{47}u_2^{66}u_1^{44} - \\
& 35184372088832u_4^{48}u_2^{66}u_1^{45})x_5x_4x_1 -
\end{aligned}$$

$$\begin{aligned}
& 17592186044416u_6^2u_4^{47}u_2^{65}u_1^{44}x_4x_3x_1^2+ \\
& (35184372088832u_6^2u_4^{47}u_2^{65}u_1^{45} - 35184372088832u_6^2u_4^{46}u_2^{66}u_1^{45} + \\
& 17592186044416u_6^2u_4^{46}u_2^{66}u_1^{44})x_4x_3x_1+ \\
& 17592186044416u_6^2u_4^{47}u_2^{65}u_1^{44}x_4x_1^2+ \\
& (17592186044416u_6^2u_4^{48}u_2^{66}u_1^{44} - 35184372088832u_6^2u_4^{47}u_2^{65}u_1^{45})x_4x_1
\end{aligned}$$

S-pol added.

272. Creating S-polynomial from the pair  $(p_0, p_{378})$ .  
 Forming S-pol of  $p_0$  and  $p_{378}$ : Polynomial too big for output (text size is 2822 characters, number of terms is 8)  
 S-pol added.
273. Creating S-polynomial from the pair  $(p_0, p_{379})$ .  
 Forming S-pol of  $p_0$  and  $p_{379}$ : Polynomial too big for output (text size is 6188 characters, number of terms is 16)  
 S-pol added.
274. Creating S-polynomial from the pair  $(p_0, p_{380})$ .  
 Forming S-pol of  $p_0$  and  $p_{380}$ : Polynomial too big for output (text size is 1168 characters, number of terms is 8)  
 S-pol added.
275. Creating S-polynomial from the pair  $(p_0, p_{381})$ .  
 Forming S-pol of  $p_0$  and  $p_{381}$ : Polynomial too big for output (text size is 1994 characters, number of terms is 8)  
 S-pol added.
276. Creating S-polynomial from the pair  $(p_0, p_{382})$ .  
 Forming S-pol of  $p_0$  and  $p_{382}$ : Polynomial too big for output (text size is 2368 characters, number of terms is 8)  
 S-pol added.
277. Creating S-polynomial from the pair  $(p_0, p_{383})$ .  
 Skipping pair  $p_0$  and  $p_{383}$  because gcd of their leading monoms is zero.
278. Creating S-polynomial from the pair  $(p_0, p_{384})$ .  
 Skipping pair  $p_0$  and  $p_{384}$  because gcd of their leading monoms is zero.
279. Creating S-polynomial from the pair  $(p_0, p_{385})$ .  
 Skipping pair  $p_0$  and  $p_{385}$  because gcd of their leading monoms is zero.
280. Creating S-polynomial from the pair  $(p_1, p_{107})$ .  
 Skipping pair  $p_1$  and  $p_{107}$  because gcd of their leading monoms is zero.

281. Creating S-polynomial from the pair  $(p_1, p_{108})$ .

Forming S-pol of  $p_1$  and  $p_{108}$ :

$$\begin{aligned} p_{1442} = & (131072u_3^{31}u_1^{17} - 524288u_3^{29}u_1^{19} + 262144u_3^{29}u_1^{18})x_5x_4x_2 + \\ & (262144u_3^{31}u_1^{18} - 131072u_3^{31}u_1^{17})x_5x_4 + \\ & (131072u_5^2u_3^{29}u_1^{17} - 65536u_5^2u_3^{29}u_1^{16})x_5x_2 - \\ & 65536u_5^2u_3^{31}u_1^{16}x_5x_2 - 131072u_6u_3^{30}u_1^{17}x_4x_2 + \\ & 131072u_6u_3^{30}u_1^{17}x_4x_2 + 65536u_6u_5^2u_3^{30}u_1^{16}x_2^2 - \\ & 65536u_6u_5^2u_3^{30}u_1^{16}x_2 \end{aligned}$$

S-pol added.

282. Creating S-polynomial from the pair  $(p_1, p_{109})$ .

Skipping pair  $p_1$  and  $p_{109}$  because gcd of their leading monoms is zero.

283. Creating S-polynomial from the pair  $(p_1, p_{110})$ .

Forming S-pol of  $p_1$  and  $p_{110}$ :

$$\begin{aligned} p_{1443} = & (65536u_3^{30}u_1^{16} - 262144u_3^{28}u_1^{18} + 131072u_3^{28}u_1^{17})x_5x_4x_2 + \\ & (131072u_3^{30}u_1^{17} - 65536u_3^{30}u_1^{16})x_5x_4 + \\ & (65536u_5^2u_3^{28}u_1^{16} - 32768u_5^2u_3^{28}u_1^{15})x_5x_2 - \\ & 32768u_5^2u_3^{30}u_1^{15}x_5x_2 - 65536u_6u_3^{29}u_1^{16}x_4x_2 + \\ & 65536u_6u_3^{29}u_1^{16}x_4x_2 + 32768u_6u_5^2u_3^{29}u_1^{15}x_2^2 - \\ & 32768u_6u_5^2u_3^{29}u_1^{15}x_2 \end{aligned}$$

S-pol added.

284. Creating S-polynomial from the pair  $(p_1, p_{111})$ .

Skipping pair  $p_1$  and  $p_{111}$  because gcd of their leading monoms is zero.

285. Creating S-polynomial from the pair  $(p_1, p_{112})$ .

Skipping pair  $p_1$  and  $p_{112}$  because gcd of their leading monoms is zero.

286. Creating S-polynomial from the pair  $(p_1, p_{113})$ .

Skipping pair  $p_1$  and  $p_{113}$  because gcd of their leading monoms is zero.

287. Creating S-polynomial from the pair  $(p_1, p_{114})$ .

Skipping pair  $p_1$  and  $p_{114}$  because gcd of their leading monoms is zero.

288. Creating S-polynomial from the pair  $(p_1, p_{115})$ .

Forming S-pol of  $p_1$  and  $p_{115}$ :

$$\begin{aligned} p_{1444} = & (1048576u_3^{27}u_1^{19} - 262144u_3^{27}u_1^{18} - 2097152u_3^{25}u_1^{21} + \\ & 1048576u_3^{25}u_1^{20})x_5x_4x_2 + \\ & (-262144u_3^{29}u_1^{18} + 1048576u_3^{27}u_1^{20} - 524288u_3^{27}u_1^{19})x_5x_4 + \\ & (-524288u_6u_3^{26}u_1^{19} + 262144u_6u_3^{26}u_1^{18})x_4x_2 + \\ & 262144u_6u_3^{28}u_1^{18}x_4x_2 \end{aligned}$$

S-pol added.

289. Creating S-polynomial from the pair  $(p_1, p_{116})$ .

Forming S-pol of  $p_1$  and  $p_{116}$ :

$$\begin{aligned} p_{1445} = & (524288u_3^{26}u_1^{18} - 131072u_3^{26}u_1^{17} - 1048576u_3^{24}u_1^{20} + \\ & 524288u_3^{24}u_1^{19})x_5x_4x_2 + \\ & (-131072u_3^{28}u_1^{17} + 524288u_3^{26}u_1^{19} - 262144u_3^{26}u_1^{18})x_5x_4 + \\ & (-262144u_6u_3^{25}u_1^{18} + 131072u_6u_3^{25}u_1^{17})x_4x_2^2 + \\ & 131072u_6u_3^{27}u_1^{17}x_4x_2 \end{aligned}$$

S-pol added.

290. Creating S-polynomial from the pair  $(p_1, p_{117})$ .

Skipping pair  $p_1$  and  $p_{117}$  because gcd of their leading monoms is zero.

291. Creating S-polynomial from the pair  $(p_1, p_{118})$ .

Skipping pair  $p_1$  and  $p_{118}$  because gcd of their leading monoms is zero.

292. Creating S-polynomial from the pair  $(p_1, p_{119})$ .

Forming S-pol of  $p_1$  and  $p_{119}$ : Polynomial too big for output (text size is 2179 characters, number of terms is 8)

S-pol added.

293. Creating S-polynomial from the pair  $(p_1, p_{120})$ .

Forming S-pol of  $p_1$  and  $p_{120}$ : Polynomial too big for output (text size is 1289 characters, number of terms is 8)

S-pol added.

294. Creating S-polynomial from the pair  $(p_1, p_{121})$ .

Forming S-pol of  $p_1$  and  $p_{121}$ : Polynomial too big for output (text size is 1085 characters, number of terms is 8)

S-pol added.

295. Creating S-polynomial from the pair  $(p_1, p_{122})$ .

Forming S-pol of  $p_1$  and  $p_{122}$ :

$$\begin{aligned} p_{1446} = & (-268435456u_3^{45}u_1^{27} + 67108864u_3^{45}u_1^{26} + 536870912u_3^{43}u_1^{29} - \\ & 268435456u_3^{43}u_1^{28})x_5x_4x_2 + \\ & (67108864u_3^{47}u_1^{26} - 268435456u_3^{45}u_1^{28} + 134217728u_3^{45}u_1^{27})x_5x_4 + \\ & (33554432u_5^2u_3^{45}u_1^{25} - 134217728u_5^2u_3^{43}u_1^{27} + \\ & 67108864u_5^2u_3^{43}u_1^{26})x_5x_2^2 + \\ & (67108864u_5^2u_3^{45}u_1^{26} - 33554432u_5^2u_3^{45}u_1^{25})x_5x_2 + \\ & (134217728u_6u_3^{44}u_1^{27} - 67108864u_6u_3^{44}u_1^{26})x_4x_2^2 - \\ & 67108864u_6u_3^{46}u_1^{26}x_4x_2 + \\ & (-67108864u_6u_5^2u_3^{44}u_1^{26} + 33554432u_6u_5^2u_3^{44}u_1^{25})x_2^2 + \\ & 33554432u_6u_5^2u_3^{46}u_1^{25}x_2 \end{aligned}$$

S-pol added.

296. Creating S-polynomial from the pair  $(p_1, p_{123})$ .

Forming S-pol of  $p_1$  and  $p_{123}$ : Polynomial too big for output (text size is 1013 characters, number of terms is 8)

S-pol added.

297. Creating S-polynomial from the pair  $(p_1, p_{124})$ .

Forming S-pol of  $p_1$  and  $p_{124}$ : Polynomial too big for output (text size is 1159 characters, number of terms is 8)

S-pol added.

298. Creating S-polynomial from the pair  $(p_1, p_{125})$ .

Forming S-pol of  $p_1$  and  $p_{125}$ :

$$\begin{aligned} p_{1447} = & (-33554432u_3^{43}u_1^{24} + 8388608u_3^{43}u_1^{23} + 67108864u_3^{41}u_1^{26} - \\ & 33554432u_3^{41}u_1^{25})x_5x_4x_2 + \\ & (8388608u_3^{45}u_1^{23} - 33554432u_3^{43}u_1^{25} + 16777216u_3^{43}u_1^{24})x_5x_4 + \\ & (4194304u_5^2u_3^{43}u_1^{22} - 16777216u_5^2u_3^{41}u_1^{24} + \\ & 8388608u_5^2u_3^{41}u_1^{23})x_5x_2 + \\ & (8388608u_5^2u_3^{43}u_1^{23} - 4194304u_5^2u_3^{43}u_1^{22})x_5x_2 + \\ & (16777216u_6u_3^{42}u_1^{24} - 8388608u_6u_3^{42}u_1^{23})x_4x_2 - \\ & 8388608u_6u_3^{44}u_1^{23}x_4x_2 + \\ & (-8388608u_6u_5^2u_3^{42}u_1^{23} + 4194304u_6u_5^2u_3^{42}u_1^{22})x_2 + \\ & 4194304u_6u_5^2u_3^{44}u_1^{22}x_2 \end{aligned}$$

S-pol added.

299. Creating S-polynomial from the pair  $(p_1, p_{126})$ .

Forming S-pol of  $p_1$  and  $p_{126}$ : Polynomial too big for output (text size is 1080 characters, number of terms is 8)

S-pol added.

300. Creating S-polynomial from the pair  $(p_1, p_{127})$ .

Forming S-pol of  $p_1$  and  $p_{127}$ : Polynomial too big for output (text size is 1005 characters, number of terms is 8)

S-pol added.

301. Creating S-polynomial from the pair  $(p_1, p_{128})$ .

Forming S-pol of  $p_1$  and  $p_{128}$ :

$$\begin{aligned} p_{1448} = & (-131072u_3^{20}u_1^{16} + 32768u_3^{20}u_1^{15} + 262144u_3^{18}u_1^{18} - \\ & 131072u_3^{18}u_1^{17})x_5x_4x_2 + \\ & (32768u_3^{22}u_1^{15} - 131072u_3^{20}u_1^{17} + 65536u_3^{20}u_1^{16})x_5x_4 + \\ & (65536u_6u_3^{19}u_1^{16} - 32768u_6u_3^{19}u_1^{15})x_4x_2^2 - 32768u_6u_3^{21}u_1^{15}x_4x_2 \end{aligned}$$

S-pol added.

302. Creating S-polynomial from the pair  $(p_1, p_{129})$ .

Forming S-pol of  $p_1$  and  $p_{129}$ :

$$\begin{aligned} p_{1449} = & (-65536u_3^{19}u_1^{15} + 16384u_3^{19}u_1^{14} + 131072u_3^{17}u_1^{17} - \\ & 65536u_3^{17}u_1^{16})x_5x_4x_2 + \\ & (16384u_3^{21}u_1^{14} - 65536u_3^{19}u_1^{16} + 32768u_3^{19}u_1^{15})x_5x_4 + \\ & (32768u_6u_3^{18}u_1^{15} - 16384u_6u_3^{18}u_1^{14})x_4x_2^2 - 16384u_6u_3^{20}u_1^{14}x_4x_2 \end{aligned}$$

S-pol added.

303. Creating S-polynomial from the pair  $(p_1, p_{130})$ .

Skipping pair  $p_1$  and  $p_{130}$  because gcd of their leading monoms is zero.

304. Creating S-polynomial from the pair  $(p_1, p_{131})$ .

Skipping pair  $p_1$  and  $p_{131}$  because gcd of their leading monoms is zero.

305. Creating S-polynomial from the pair  $(p_1, p_{132})$ .

Skipping pair  $p_1$  and  $p_{132}$  because gcd of their leading monoms is zero.

306. Creating S-polynomial from the pair  $(p_1, p_{133})$ .

Forming S-pol of  $p_1$  and  $p_{133}$ : Polynomial too big for output (text size is 1012 characters, number of terms is 8)

S-pol added.

307. Creating S-polynomial from the pair  $(p_1, p_{134})$ .

Skipping pair  $p_1$  and  $p_{134}$  because gcd of their leading monoms is zero.

308. Creating S-polynomial from the pair  $(p_1, p_{135})$ .

Forming S-pol of  $p_1$  and  $p_{135}$ : Polynomial too big for output (text size is 1004 characters, number of terms is 8)

S-pol added.

309. Creating S-polynomial from the pair  $(p_1, p_{136})$ .

Skipping pair  $p_1$  and  $p_{136}$  because gcd of their leading monoms is zero.

310. Creating S-polynomial from the pair  $(p_1, p_{137})$ .

Skipping pair  $p_1$  and  $p_{137}$  because gcd of their leading monoms is zero.

311. Creating S-polynomial from the pair  $(p_1, p_{138})$ .

Skipping pair  $p_1$  and  $p_{138}$  because gcd of their leading monoms is zero.

312. Creating S-polynomial from the pair  $(p_1, p_{139})$ .

Skipping pair  $p_1$  and  $p_{139}$  because gcd of their leading monoms is zero.

313. Creating S-polynomial from the pair  $(p_1, p_{140})$ .

Skipping pair  $p_1$  and  $p_{140}$  because gcd of their leading monoms is zero.

314. Creating S-polynomial from the pair  $(p_1, p_{141})$ .

Skipping pair  $p_1$  and  $p_{141}$  because gcd of their leading monoms is zero.

315. Creating S-polynomial from the pair  $(p_1, p_{142})$ .  
 Skipping pair  $p_1$  and  $p_{142}$  because gcd of their leading monoms is zero.
316. Creating S-polynomial from the pair  $(p_1, p_{143})$ .  
 Skipping pair  $p_1$  and  $p_{143}$  because gcd of their leading monoms is zero.
317. Creating S-polynomial from the pair  $(p_1, p_{144})$ .  
 Forming S-pol of  $p_1$  and  $p_{144}$ : Polynomial too big for output (text size is 1084 characters, number of terms is 8)  
 S-pol added.
318. Creating S-polynomial from the pair  $(p_1, p_{145})$ .  
 Skipping pair  $p_1$  and  $p_{145}$  because gcd of their leading monoms is zero.
319. Creating S-polynomial from the pair  $(p_1, p_{146})$ .  
 Forming S-pol of  $p_1$  and  $p_{146}$ : Polynomial too big for output (text size is 1079 characters, number of terms is 8)  
 S-pol added.
320. Creating S-polynomial from the pair  $(p_1, p_{147})$ .  
 Skipping pair  $p_1$  and  $p_{147}$  because gcd of their leading monoms is zero.
321. Creating S-polynomial from the pair  $(p_1, p_{148})$ .  
 Skipping pair  $p_1$  and  $p_{148}$  because gcd of their leading monoms is zero.
322. Creating S-polynomial from the pair  $(p_1, p_{149})$ .  
 Skipping pair  $p_1$  and  $p_{149}$  because gcd of their leading monoms is zero.
323. Creating S-polynomial from the pair  $(p_1, p_{150})$ .  
 Skipping pair  $p_1$  and  $p_{150}$  because gcd of their leading monoms is zero.
324. Creating S-polynomial from the pair  $(p_1, p_{151})$ .  
 Skipping pair  $p_1$  and  $p_{151}$  because gcd of their leading monoms is zero.
325. Creating S-polynomial from the pair  $(p_1, p_{152})$ .  
 Skipping pair  $p_1$  and  $p_{152}$  because gcd of their leading monoms is zero.
326. Creating S-polynomial from the pair  $(p_1, p_{153})$ .  
 Skipping pair  $p_1$  and  $p_{153}$  because gcd of their leading monoms is zero.
327. Creating S-polynomial from the pair  $(p_1, p_{154})$ .  
 Skipping pair  $p_1$  and  $p_{154}$  because gcd of their leading monoms is zero.
328. Creating S-polynomial from the pair  $(p_1, p_{155})$ .  
 Skipping pair  $p_1$  and  $p_{155}$  because gcd of their leading monoms is zero.
329. Creating S-polynomial from the pair  $(p_1, p_{156})$ .  
 Skipping pair  $p_1$  and  $p_{156}$  because gcd of their leading monoms is zero.



330. Creating S-polynomial from the pair  $(p_1, p_{157})$ .  
Forming S-pol of  $p_1$  and  $p_{157}$ : Polynomial too big for output (text size is 1153 characters, number of terms is 8)  
S-pol added.
331. Creating S-polynomial from the pair  $(p_1, p_{158})$ .  
Skipping pair  $p_1$  and  $p_{158}$  because gcd of their leading monoms is zero.
332. Creating S-polynomial from the pair  $(p_1, p_{159})$ .  
Forming S-pol of  $p_1$  and  $p_{159}$ : Polynomial too big for output (text size is 1145 characters, number of terms is 8)  
S-pol added.
333. Creating S-polynomial from the pair  $(p_1, p_{160})$ .  
Skipping pair  $p_1$  and  $p_{160}$  because gcd of their leading monoms is zero.
334. Creating S-polynomial from the pair  $(p_1, p_{161})$ .  
Skipping pair  $p_1$  and  $p_{161}$  because gcd of their leading monoms is zero.
335. Creating S-polynomial from the pair  $(p_1, p_{162})$ .  
Skipping pair  $p_1$  and  $p_{162}$  because gcd of their leading monoms is zero.
336. Creating S-polynomial from the pair  $(p_1, p_{163})$ .  
Forming S-pol of  $p_1$  and  $p_{163}$ :  

$$p_{1450} = (16384u_3^{25}u_1^{14} - 65536u_3^{23}u_1^{16} + 32768u_3^{23}u_1^{15})x_5x_4x_2 +$$

$$(32768u_3^{25}u_1^{15} - 16384u_3^{25}u_1^{14})x_5x_4 - 16384u_6u_3^{24}u_1^{14}x_4x_2^2 +$$

$$16384u_6u_3^{24}u_1^{14}x_4x_2$$
S-pol added.
337. Creating S-polynomial from the pair  $(p_1, p_{164})$ .  
Forming S-pol of  $p_1$  and  $p_{164}$ :  

$$p_{1451} = (8192u_3^{24}u_1^{13} - 32768u_3^{22}u_1^{15} + 16384u_3^{22}u_1^{14})x_5x_4x_2 +$$

$$(16384u_3^{24}u_1^{14} - 8192u_3^{24}u_1^{13})x_5x_4 - 8192u_6u_3^{23}u_1^{13}x_4x_2^2 +$$

$$8192u_6u_3^{23}u_1^{13}x_4x_2$$
S-pol added.
338. Creating S-polynomial from the pair  $(p_1, p_{165})$ .  
Forming S-pol of  $p_1$  and  $p_{165}$ : Polynomial too big for output (text size is 2295 characters, number of terms is 8)  
S-pol added.
339. Creating S-polynomial from the pair  $(p_1, p_{166})$ .  
Forming S-pol of  $p_1$  and  $p_{166}$ : Polynomial too big for output (text size is 1303 characters, number of terms is 8)  
S-pol added.

340. Creating S-polynomial from the pair  $(p_1, p_{167})$ .

Forming S-pol of  $p_1$  and  $p_{167}$ :

$$\begin{aligned}
p_{1452} = & 4398046511104u_6u_3^{55}u_2^{49}u_1^{42}x_5x_4x_2^2 + \\
& (4398046511104u_6u_3^{56}u_2^{48}u_1^{42} + 17592186044416u_3^{56}u_2^{47}u_1^{44} - \\
& 8796093022208u_3^{56}u_2^{47}u_1^{43})x_5x_4x_2x_1 + \\
& (-4398046511104u_6u_3^{56}u_2^{48}u_1^{42} - 8796093022208u_6u_3^{55}u_2^{49}u_1^{43} - \\
& 8796093022208u_3^{56}u_2^{49}u_1^{43})x_5x_4x_2 + \\
& (8796093022208u_6u_3^{57}u_2^{47}u_1^{43} - 4398046511104u_6u_3^{57}u_2^{47}u_1^{42})x_5x_4x_1 - \\
& 4398046511104u_6^2u_3^{55}u_2^{48}u_1^{42}x_4x_2^2x_1 + \\
& 4398046511104u_6^2u_3^{55}u_2^{48}u_1^{42}x_4x_2^2 + \\
& (-8796093022208u_6^2u_3^{56}u_2^{47}u_1^{43} + 4398046511104u_6^2u_3^{56}u_2^{47}u_1^{42} + \\
& 8796093022208u_6^2u_3^{55}u_2^{48}u_1^{43})x_4x_2x_1 + \\
& (4398046511104u_6^2u_3^{56}u_2^{49}u_1^{42} - 8796093022208u_6^2u_3^{55}u_2^{48}u_1^{43})x_4x_2
\end{aligned}$$

S-pol added.

341. Creating S-polynomial from the pair  $(p_1, p_{168})$ .

Forming S-pol of  $p_1$  and  $p_{168}$ :

$$\begin{aligned}
p_{1453} = & (-1048576u_3^{32}u_1^{20} + 4194304u_3^{30}u_1^{22} - 2097152u_3^{30}u_1^{21})x_5x_4x_2 + \\
& (-2097152u_3^{32}u_1^{21} + 1048576u_3^{32}u_1^{20})x_5x_4 + \\
& (-1048576u_5^2u_3^{30}u_1^{20} + 524288u_5^2u_3^{30}u_1^{19})x_5x_2^2 + \\
& 524288u_5^2u_3^{32}u_1^{19}x_5x_2 + 1048576u_6u_3^{31}u_1^{20}x_4x_2^2 - \\
& 1048576u_6u_3^{31}u_1^{20}x_4x_2 - 524288u_6u_5^2u_3^{31}u_1^{19}x_2^2 + \\
& 524288u_6u_5^2u_3^{31}u_1^{19}x_2
\end{aligned}$$

S-pol added.

342. Creating S-polynomial from the pair  $(p_1, p_{169})$ .

Forming S-pol of  $p_1$  and  $p_{169}$ :

$$\begin{aligned}
p_{1454} = & (17592186044416u_6u_4^{48}u_3^{62}u_1^{44} + 70368744177664u_4^{47}u_3^{62}u_1^{46} - \\
& 35184372088832u_4^{47}u_3^{62}u_1^{45})x_5x_4x_3x_2 + \\
& (35184372088832u_6u_4^{47}u_3^{63}u_1^{45} - 17592186044416u_6u_4^{47}u_3^{63}u_1^{44})x_5x_4x_3 + \\
& 17592186044416u_6u_4^{49}u_3^{61}u_1^{44}x_5x_4x_2^2 + \\
& (-35184372088832u_6u_4^{49}u_3^{61}u_1^{45} - 17592186044416u_6u_4^{48}u_3^{62}u_1^{44} - \\
& 35184372088832u_4^{49}u_3^{62}u_1^{45})x_5x_4x_2 - \\
& 17592186044416u_6^2u_4^{48}u_3^{61}u_1^{44}x_4x_3x_2^2 + \\
& (35184372088832u_6^2u_4^{48}u_3^{61}u_1^{45} - 35184372088832u_6^2u_4^{47}u_3^{62}u_1^{45} + \\
& 17592186044416u_6^2u_4^{47}u_3^{62}u_1^{44})x_4x_3x_2 + \\
& 17592186044416u_6^2u_4^{48}u_3^{61}u_1^{44}x_4x_2^2 + \\
& (17592186044416u_6^2u_4^{49}u_3^{62}u_1^{44} - 35184372088832u_6^2u_4^{48}u_3^{61}u_1^{45})x_4x_2
\end{aligned}$$

S-pol added.

343. Creating S-polynomial from the pair  $(p_1, p_{170})$ .

Forming S-pol of  $p_1$  and  $p_{170}$ : Polynomial too big for output (text size is 1347 characters, number of terms is 8)

S-pol added.

344. Creating S-polynomial from the pair  $(p_1, p_{171})$ .

Forming S-pol of  $p_1$  and  $p_{171}$ :

$$\begin{aligned} p_{1455} = & (-131072u_3^{25}u_1^{17} + 524288u_3^{23}u_1^{19} - 262144u_3^{23}u_1^{18})x_5x_4x_2 + \\ & (-262144u_3^{25}u_1^{18} + 131072u_3^{25}u_1^{17})x_5x_4 + \\ & (-131072u_5^2u_3^{23}u_1^{17} + 65536u_5^2u_3^{23}u_1^{16})x_5x_2^2 + \\ & 65536u_5^2u_3^{25}u_1^{16}x_5x_2 + 131072u_6u_3^{24}u_1^{17}x_4x_2^2 - \\ & 131072u_6u_3^{24}u_1^{17}x_4x_2 - 65536u_6u_5^2u_3^{24}u_1^{16}x_2^2 + \\ & 65536u_6u_5^2u_3^{24}u_1^{16}x_2 \end{aligned}$$

S-pol added.

345. Creating S-polynomial from the pair  $(p_1, p_{172})$ .

Forming S-pol of  $p_1$  and  $p_{172}$ :

$$\begin{aligned} p_{1456} = & 2199023255552u_6u_3^{55}u_2^{48}u_1^{41}x_5x_4x_2^2 + \\ & (2199023255552u_6u_3^{56}u_2^{47}u_1^{41} + 8796093022208u_3^{56}u_2^{46}u_1^{43} - \\ & 4398046511104u_3^{56}u_2^{46}u_1^{42})x_5x_4x_2x_1 + \\ & (-2199023255552u_6u_3^{56}u_2^{47}u_1^{41} - 4398046511104u_6u_3^{55}u_2^{48}u_1^{42} - \\ & 4398046511104u_3^{56}u_2^{48}u_1^{42})x_5x_4x_2 + \\ & (4398046511104u_6u_3^{57}u_2^{46}u_1^{42} - 2199023255552u_6u_3^{57}u_2^{46}u_1^{41})x_5x_4x_1 - \\ & 2199023255552u_6^2u_3^{55}u_2^{47}u_1^{41}x_4x_2^2x_1 + \\ & 2199023255552u_6^2u_3^{55}u_2^{47}u_1^{41}x_4x_2^2 + \\ & (-4398046511104u_6^2u_3^{56}u_2^{46}u_1^{42} + 2199023255552u_6^2u_3^{56}u_2^{46}u_1^{41} + \\ & 4398046511104u_6^2u_3^{55}u_2^{47}u_1^{42})x_4x_2x_1 + \\ & (2199023255552u_6^2u_3^{56}u_2^{48}u_1^{41} - 4398046511104u_6^2u_3^{55}u_2^{47}u_1^{42})x_4x_2 \end{aligned}$$

S-pol added.

346. Creating S-polynomial from the pair  $(p_1, p_{173})$ .

Forming S-pol of  $p_1$  and  $p_{173}$ :

$$\begin{aligned} p_{1457} = & (8796093022208u_6u_4^{47}u_3^{62}u_1^{43} + 35184372088832u_4^{46}u_3^{62}u_1^{45} - \\ & 17592186044416u_4^{46}u_3^{62}u_1^{44})x_5x_4x_3x_2 + \\ & (17592186044416u_6u_4^{46}u_3^{63}u_1^{44} - 8796093022208u_6u_4^{46}u_3^{63}u_1^{43})x_5x_4x_3 + \\ & 8796093022208u_6u_4^{48}u_3^{61}u_1^{43}x_5x_4x_2^2 + \end{aligned}$$

$$\begin{aligned}
& (-17592186044416u_6u_4^{48}u_3^{61}u_1^{44} - 8796093022208u_6u_4^{47}u_3^{62}u_1^{43} - \\
& 17592186044416u_4^{48}u_3^{62}u_1^{44})x_5x_4x_2 - \\
& 8796093022208u_6^2u_4^{47}u_3^{61}u_1^{43}x_4x_3x_2^2 + \\
& (17592186044416u_6^2u_4^{47}u_3^{61}u_1^{44} - 17592186044416u_6^2u_4^{46}u_3^{62}u_1^{44} + \\
& 8796093022208u_6^2u_4^{46}u_3^{62}u_1^{43})x_4x_3x_2 + \\
& 8796093022208u_6^2u_4^{47}u_3^{61}u_1^{43}x_4x_2^2 + \\
& (8796093022208u_6^2u_4^{48}u_3^{62}u_1^{43} - 17592186044416u_6^2u_4^{47}u_3^{61}u_1^{44})x_4x_2
\end{aligned}$$

S-pol added.

347. Creating S-polynomial from the pair  $(p_1, p_{174})$ .  
 Skipping pair  $p_1$  and  $p_{174}$  because gcd of their leading monoms is zero.
348. Creating S-polynomial from the pair  $(p_1, p_{175})$ .  
 Skipping pair  $p_1$  and  $p_{175}$  because gcd of their leading monoms is zero.
349. Creating S-polynomial from the pair  $(p_1, p_{176})$ .  
 Skipping pair  $p_1$  and  $p_{176}$  because gcd of their leading monoms is zero.
350. Creating S-polynomial from the pair  $(p_1, p_{177})$ .  
 Skipping pair  $p_1$  and  $p_{177}$  because gcd of their leading monoms is zero.
351. Creating S-polynomial from the pair  $(p_1, p_{178})$ .  
 Skipping pair  $p_1$  and  $p_{178}$  because gcd of their leading monoms is zero.
352. Creating S-polynomial from the pair  $(p_1, p_{179})$ .  
 Forming S-pol of  $p_1$  and  $p_{179}$ : Polynomial too big for output (text size is 1137 characters, number of terms is 8)  
 S-pol added.
353. Creating S-polynomial from the pair  $(p_1, p_{180})$ .  
 Skipping pair  $p_1$  and  $p_{180}$  because gcd of their leading monoms is zero.
354. Creating S-polynomial from the pair  $(p_1, p_{181})$ .  
 Forming S-pol of  $p_1$  and  $p_{181}$ : Polynomial too big for output (text size is 1134 characters, number of terms is 8)  
 S-pol added.
355. Creating S-polynomial from the pair  $(p_1, p_{182})$ .  
 Skipping pair  $p_1$  and  $p_{182}$  because gcd of their leading monoms is zero.
356. Creating S-polynomial from the pair  $(p_1, p_{183})$ .  
 Skipping pair  $p_1$  and  $p_{183}$  because gcd of their leading monoms is zero.
357. Creating S-polynomial from the pair  $(p_1, p_{184})$ .  
 Skipping pair  $p_1$  and  $p_{184}$  because gcd of their leading monoms is zero.

358. Creating S-polynomial from the pair  $(p_1, p_{185})$ .  
Forming S-pol of  $p_1$  and  $p_{185}$ : Polynomial too big for output (text size is 2401 characters, number of terms is 8)  
S-pol added.
359. Creating S-polynomial from the pair  $(p_1, p_{186})$ .  
Forming S-pol of  $p_1$  and  $p_{186}$ : Polynomial too big for output (text size is 1391 characters, number of terms is 8)  
S-pol added.
360. Creating S-polynomial from the pair  $(p_1, p_{187})$ .  
Forming S-pol of  $p_1$  and  $p_{187}$ : Polynomial too big for output (text size is 1018 characters, number of terms is 8)  
S-pol added.
361. Creating S-polynomial from the pair  $(p_1, p_{188})$ .  
Forming S-pol of  $p_1$  and  $p_{188}$ :  

$$p_{1458} = (16777216u_5u_3^{43}u_1^{24} - 67108864u_5u_3^{41}u_1^{26} + 33554432u_5u_3^{41}u_1^{25})x_5x_4x_2 +$$

$$(33554432u_5u_3^{43}u_1^{25} - 16777216u_5u_3^{43}u_1^{24})x_5x_4 +$$

$$(16777216u_5^3u_3^{41}u_1^{24} - 8388608u_5^3u_3^{41}u_1^{23})x_5x_2 -$$

$$8388608u_5^3u_3^{43}u_1^{23}x_5x_2 - 16777216u_6u_5u_3^{42}u_1^{24}x_4x_2^2 +$$

$$16777216u_6u_5u_3^{42}u_1^{24}x_4x_2 + 8388608u_6u_5^3u_3^{42}u_1^{23}x_2^2 -$$

$$8388608u_6u_5^3u_3^{42}u_1^{23}x_2$$
  
S-pol added.
362. Creating S-polynomial from the pair  $(p_1, p_{189})$ .  
Forming S-pol of  $p_1$  and  $p_{189}$ : Polynomial too big for output (text size is 1034 characters, number of terms is 8)  
S-pol added.
363. Creating S-polynomial from the pair  $(p_1, p_{190})$ .  
Forming S-pol of  $p_1$  and  $p_{190}$ : Polynomial too big for output (text size is 1389 characters, number of terms is 8)  
S-pol added.
364. Creating S-polynomial from the pair  $(p_1, p_{191})$ .  
Forming S-pol of  $p_1$  and  $p_{191}$ :  

$$p_{1459} = (8388608u_5u_3^{42}u_1^{23} - 33554432u_5u_3^{40}u_1^{25} + 16777216u_5u_3^{40}u_1^{24})x_5x_4x_2 +$$

$$(16777216u_5u_3^{42}u_1^{24} - 8388608u_5u_3^{42}u_1^{23})x_5x_4 +$$

$$(8388608u_5^3u_3^{40}u_1^{23} - 4194304u_5^3u_3^{40}u_1^{22})x_5x_2 -$$

$$4194304u_5^3u_3^{42}u_1^{22}x_5x_2 - 8388608u_6u_5u_3^{41}u_1^{23}x_4x_2^2 +$$

$$8388608u_6u_5u_3^{41}u_1^{23}x_4x_2 + 4194304u_6u_3^3u_3^{41}u_1^{22}x_2^2 -$$

$$4194304u_6u_5^3u_3^{41}u_1^{22}x_2$$
  
S-pol added.

365. Creating S-polynomial from the pair  $(p_1, p_{192})$ .  
Forming S-pol of  $p_1$  and  $p_{192}$ : Polynomial too big for output (text size is 1010 characters, number of terms is 8)  
S-pol added.
366. Creating S-polynomial from the pair  $(p_1, p_{193})$ .  
Forming S-pol of  $p_1$  and  $p_{193}$ : Polynomial too big for output (text size is 1026 characters, number of terms is 8)  
S-pol added.
367. Creating S-polynomial from the pair  $(p_1, p_{194})$ .  
Skipping pair  $p_1$  and  $p_{194}$  because gcd of their leading monoms is zero.
368. Creating S-polynomial from the pair  $(p_1, p_{195})$ .  
Skipping pair  $p_1$  and  $p_{195}$  because gcd of their leading monoms is zero.
369. Creating S-polynomial from the pair  $(p_1, p_{196})$ .  
Skipping pair  $p_1$  and  $p_{196}$  because gcd of their leading monoms is zero.
370. Creating S-polynomial from the pair  $(p_1, p_{197})$ .  
Forming S-pol of  $p_1$  and  $p_{197}$ : Polynomial too big for output (text size is 1257 characters, number of terms is 8)  
S-pol added.
371. Creating S-polynomial from the pair  $(p_1, p_{198})$ .  
Skipping pair  $p_1$  and  $p_{198}$  because gcd of their leading monoms is zero.
372. Creating S-polynomial from the pair  $(p_1, p_{199})$ .  
Forming S-pol of  $p_1$  and  $p_{199}$ : Polynomial too big for output (text size is 1249 characters, number of terms is 8)  
S-pol added.
373. Creating S-polynomial from the pair  $(p_1, p_{200})$ .  
Skipping pair  $p_1$  and  $p_{200}$  because gcd of their leading monoms is zero.
374. Creating S-polynomial from the pair  $(p_1, p_{201})$ .  
Skipping pair  $p_1$  and  $p_{201}$  because gcd of their leading monoms is zero.
375. Creating S-polynomial from the pair  $(p_1, p_{202})$ .  
Skipping pair  $p_1$  and  $p_{202}$  because gcd of their leading monoms is zero.
376. Creating S-polynomial from the pair  $(p_1, p_{203})$ .  
Skipping pair  $p_1$  and  $p_{203}$  because gcd of their leading monoms is zero.
377. Creating S-polynomial from the pair  $(p_1, p_{204})$ .  
Skipping pair  $p_1$  and  $p_{204}$  because gcd of their leading monoms is zero.
378. Creating S-polynomial from the pair  $(p_1, p_{205})$ .  
Skipping pair  $p_1$  and  $p_{205}$  because gcd of their leading monoms is zero.

379. Creating S-polynomial from the pair  $(p_1, p_{206})$ .  
 Forming S-pol of  $p_1$  and  $p_{206}$ : Polynomial too big for output (text size is 1236 characters, number of terms is 8)  
 S-pol added.
380. Creating S-polynomial from the pair  $(p_1, p_{207})$ .  
 Skipping pair  $p_1$  and  $p_{207}$  because gcd of their leading monoms is zero.
381. Creating S-polynomial from the pair  $(p_1, p_{208})$ .  
 Forming S-pol of  $p_1$  and  $p_{208}$ : Polynomial too big for output (text size is 1228 characters, number of terms is 8)  
 S-pol added.
382. Creating S-polynomial from the pair  $(p_1, p_{209})$ .  
 Skipping pair  $p_1$  and  $p_{209}$  because gcd of their leading monoms is zero.
383. Creating S-polynomial from the pair  $(p_1, p_{210})$ .  
 Skipping pair  $p_1$  and  $p_{210}$  because gcd of their leading monoms is zero.
384. Creating S-polynomial from the pair  $(p_1, p_{211})$ .  
 Skipping pair  $p_1$  and  $p_{211}$  because gcd of their leading monoms is zero.
385. Creating S-polynomial from the pair  $(p_1, p_{212})$ .  
 Forming S-pol of  $p_1$  and  $p_{212}$ : Polynomial too big for output (text size is 1409 characters, number of terms is 8)  
 S-pol added.
386. Creating S-polynomial from the pair  $(p_1, p_{213})$ .  
 Forming S-pol of  $p_1$  and  $p_{213}$ : Polynomial too big for output (text size is 1400 characters, number of terms is 8)  
 S-pol added.
387. Creating S-polynomial from the pair  $(p_1, p_{214})$ .  
 Forming S-pol of  $p_1$  and  $p_{214}$ : Polynomial too big for output (text size is 9117 characters, number of terms is 16)  
 S-pol added.
388. Creating S-polynomial from the pair  $(p_1, p_{215})$ .  
 Forming S-pol of  $p_1$  and  $p_{215}$ : Polynomial too big for output (text size is 4432 characters, number of terms is 8)  
 S-pol added.
389. Creating S-polynomial from the pair  $(p_1, p_{216})$ .  
 Forming S-pol of  $p_1$  and  $p_{216}$ : Polynomial too big for output (text size is 9304 characters, number of terms is 16)  
 S-pol added.

390. Creating S-polynomial from the pair  $(p_1, p_{217})$ .  
 Forming S-pol of  $p_1$  and  $p_{217}$ : Polynomial too big for output (text size is 2404 characters, number of terms is 8)  
 S-pol added.

391. Creating S-polynomial from the pair  $(p_1, p_{218})$ .  
 Forming S-pol of  $p_1$  and  $p_{218}$ : Polynomial too big for output (text size is 3443 characters, number of terms is 8)  
 S-pol added.

392. Creating S-polynomial from the pair  $(p_1, p_{219})$ .  
 Forming S-pol of  $p_1$  and  $p_{219}$ : Polynomial too big for output (text size is 9074 characters, number of terms is 16)  
 S-pol added.

393. Creating S-polynomial from the pair  $(p_1, p_{220})$ .  
 Forming S-pol of  $p_1$  and  $p_{220}$ : Polynomial too big for output (text size is 9277 characters, number of terms is 16)  
 S-pol added.

394. Creating S-polynomial from the pair  $(p_1, p_{221})$ .  
 Forming S-pol of  $p_1$  and  $p_{221}$ :  

$$p_{1460} = (-536870912u_5u_3^{45}u_1^{29} + 268435456u_5u_3^{45}u_1^{28} + 536870912u_3^{46}u_1^{29} -$$

$$2147483648u_3^{44}u_1^{31} + 1073741824u_3^{44}u_1^{30})x_5x_4x_2 +$$

$$(268435456u_5u_3^{47}u_1^{28} + 1073741824u_3^{46}u_1^{30} - 536870912u_3^{46}u_1^{29})x_5x_4 +$$

$$(536870912u_5^2u_3^{44}u_1^{29} - 268435456u_5^2u_3^{44}u_1^{28})x_5x_2 -$$

$$268435456u_5^2u_3^{46}u_1^{28}x_5x_2 +$$

$$(-268435456u_6u_5u_3^{44}u_1^{28} - 536870912u_6u_3^{45}u_1^{29})x_4x_2 +$$

$$(-268435456u_6u_5u_3^{46}u_1^{28} + 536870912u_6u_5u_3^{44}u_1^{29} +$$

$$536870912u_6u_3^{45}u_1^{29})x_4x_2 + 268435456u_6u_5^2u_3^{45}u_1^{28}x_2 -$$

$$268435456u_6u_5^2u_3^{45}u_1^{28}x_2$$

S-pol added.

395. Creating S-polynomial from the pair  $(p_1, p_{222})$ .  
 Forming S-pol of  $p_1$  and  $p_{222}$ :  

$$p_{1461} = (-1073741824u_5u_3^{50}u_1^{30} + 536870912u_5u_3^{50}u_1^{29} + 1073741824u_3^{51}u_1^{30} -$$

$$4294967296u_3^{49}u_1^{32} + 2147483648u_3^{49}u_1^{31})x_5x_4x_2 +$$

$$(536870912u_5u_3^{52}u_1^{29} + 2147483648u_3^{51}u_1^{31} - 1073741824u_3^{51}u_1^{30})x_5x_4 +$$

$$(1073741824u_5^2u_3^{49}u_1^{30} - 536870912u_5^2u_3^{49}u_1^{29})x_5x_2 -$$

$$536870912u_5^2u_3^{51}u_1^{29}x_5x_2 +$$



$$\begin{aligned}
& (-536870912u_6u_5u_3^{49}u_1^{29} - 1073741824u_6u_3^{50}u_1^{30})x_4x_2^2 + \\
& (-536870912u_6u_5u_3^{51}u_1^{29} + 1073741824u_6u_5u_3^{49}u_1^{30} + \\
& 1073741824u_6u_3^{50}u_1^{30})x_4x_2 + 536870912u_6u_5^2u_3^{50}u_1^{29}x_2^2 - \\
& 536870912u_6u_5^2u_3^{50}u_1^{29}x_2
\end{aligned}$$

S-pol added.

396. Creating S-polynomial from the pair  $(p_1, p_{223})$ .

Forming S-pol of  $p_1$  and  $p_{223}$ : Polynomial too big for output (text size is 1389 characters, number of terms is 8)

S-pol added.

397. Creating S-polynomial from the pair  $(p_1, p_{224})$ .

Forming S-pol of  $p_1$  and  $p_{224}$ : Polynomial too big for output (text size is 1383 characters, number of terms is 8)

S-pol added.

398. Creating S-polynomial from the pair  $(p_1, p_{225})$ .

Forming S-pol of  $p_1$  and  $p_{225}$ :

$$\begin{aligned}
p_{1462} = & (33554432u_6u_3^{43}u_1^{24} - 16777216u_6u_3^{43}u_1^{23} + 134217728u_6u_3^{41}u_1^{26} - \\
& 67108864u_6u_3^{41}u_1^{25} - 16777216u_3^{44}u_1^{24} - 33554432u_3^{42}u_1^{25} + \\
& 268435456u_3^{40}u_1^{28} - 134217728u_3^{40}u_1^{27})x_5x_4x_2 + \\
& (-16777216u_6u_3^{45}u_1^{23} - 67108864u_6u_3^{43}u_1^{25} - 33554432u_3^{44}u_1^{25} + \\
& 16777216u_3^{44}u_1^{24} - 134217728u_3^{42}u_1^{27} + 67108864u_3^{42}u_1^{26})x_5x_4 + \\
& (-16777216u_6^2u_3^{42}u_1^{24} + 16777216u_6^2u_3^{42}u_1^{23} - 67108864u_6^2u_3^{40}u_1^{26} + \\
& 67108864u_6^2u_3^{40}u_1^{25})x_4x_2^2 + \\
& (16777216u_6^2u_3^{44}u_1^{23} + 67108864u_6^2u_3^{42}u_1^{25} - 16777216u_6^2u_3^{42}u_1^{24} - \\
& 67108864u_6^2u_3^{40}u_1^{26})x_4x_2
\end{aligned}$$

S-pol added.

399. Creating S-polynomial from the pair  $(p_1, p_{226})$ .

Forming S-pol of  $p_1$  and  $p_{226}$ :

$$\begin{aligned}
p_{1463} = & (16777216u_6u_3^{42}u_1^{23} - 8388608u_6u_3^{42}u_1^{22} + 67108864u_6u_3^{40}u_1^{25} - \\
& 33554432u_6u_3^{40}u_1^{24} - 8388608u_3^{43}u_1^{23} - 16777216u_3^{41}u_1^{24} + 134217728u_3^{39}u_1^{27} - \\
& 67108864u_3^{39}u_1^{26})x_5x_4x_2 + \\
& (-8388608u_6u_3^{44}u_1^{22} - 33554432u_6u_3^{42}u_1^{24} - 16777216u_3^{43}u_1^{24} + \\
& 8388608u_3^{43}u_1^{23} - 67108864u_3^{41}u_1^{26} + 33554432u_3^{41}u_1^{25})x_5x_4 + \\
& (-8388608u_6^2u_3^{41}u_1^{23} + 8388608u_6^2u_3^{41}u_1^{22} - 33554432u_6^2u_3^{39}u_1^{25} + \\
& 33554432u_6^2u_3^{39}u_1^{24})x_4x_2^2 + \\
& (8388608u_6^2u_3^{43}u_1^{22} + 33554432u_6^2u_3^{41}u_1^{24} - 8388608u_6^2u_3^{41}u_1^{23} - \\
& 33554432u_6^2u_3^{39}u_1^{25})x_4x_2
\end{aligned}$$

S-pol added.

400. Creating S-polynomial from the pair  $(p_1, p_{227})$ .

Forming S-pol of  $p_1$  and  $p_{227}$ :

$$\begin{aligned}
p_{1464} = & (-536870912u_5u_3^{45}u_1^{29} + 268435456u_5u_3^{45}u_1^{28} + 536870912u_3^{46}u_1^{29} - \\
& 2147483648u_3^{44}u_1^{31} + 1073741824u_3^{44}u_1^{30})x_5x_4x_2 + \\
& (268435456u_5u_3^{47}u_1^{28} + 1073741824u_3^{46}u_1^{30} - 536870912u_3^{46}u_1^{29})x_5x_4 + \\
& (536870912u_5^2u_3^{44}u_1^{29} - 268435456u_5^2u_3^{44}u_1^{28})x_5x_2^2 - \\
& 268435456u_5^2u_3^{46}u_1^{28}x_5x_2 + \\
& (-268435456u_6u_5u_3^{44}u_1^{28} - 536870912u_6u_3^{45}u_1^{29})x_4x_2^2 + \\
& (-268435456u_6u_5u_3^{46}u_1^{28} + 536870912u_6u_5u_3^{44}u_1^{29} + \\
& 536870912u_6u_3^{45}u_1^{29})x_4x_2 + 268435456u_6u_5^2u_3^{45}u_1^{28}x_2^2 - \\
& 268435456u_6u_5^2u_3^{45}u_1^{28}x_2
\end{aligned}$$

S-pol added.

401. Creating S-polynomial from the pair  $(p_1, p_{228})$ .

Forming S-pol of  $p_1$  and  $p_{228}$ :

$$\begin{aligned}
p_{1465} = & (-268435456u_5u_3^{44}u_1^{28} + 134217728u_5u_3^{44}u_1^{27} + 268435456u_3^{45}u_1^{28} - \\
& 1073741824u_3^{43}u_1^{30} + 536870912u_3^{43}u_1^{29})x_5x_4x_2 + \\
& (134217728u_5u_3^{46}u_1^{27} + 536870912u_3^{45}u_1^{29} - 268435456u_3^{45}u_1^{28})x_5x_4 + \\
& (268435456u_5^2u_3^{43}u_1^{28} - 134217728u_5^2u_3^{43}u_1^{27})x_5x_2^2 - \\
& 134217728u_5^2u_3^{45}u_1^{27}x_5x_2 + \\
& (-134217728u_6u_5u_3^{43}u_1^{27} - 268435456u_6u_3^{44}u_1^{28})x_4x_2^2 + \\
& (-134217728u_6u_5u_3^{45}u_1^{27} + 268435456u_6u_5u_3^{43}u_1^{28} + \\
& 268435456u_6u_3^{44}u_1^{28})x_4x_2 + 134217728u_6u_5^2u_3^{44}u_1^{27}x_2^2 - \\
& 134217728u_6u_5^2u_3^{44}u_1^{27}x_2
\end{aligned}$$

S-pol added.

402. Creating S-polynomial from the pair  $(p_1, p_{229})$ .

Forming S-pol of  $p_1$  and  $p_{229}$ : Polynomial too big for output (text size is 4273 characters, number of terms is 8)

S-pol added.

403. Creating S-polynomial from the pair  $(p_1, p_{230})$ .

Forming S-pol of  $p_1$  and  $p_{230}$ : Polynomial too big for output (text size is 2588 characters, number of terms is 8)

S-pol added.

404. Creating S-polynomial from the pair  $(p_1, p_{231})$ .  
 Forming S-pol of  $p_1$  and  $p_{231}$ : Polynomial too big for output (text size is 4565 characters, number of terms is 8)  
 S-pol added.
405. Creating S-polynomial from the pair  $(p_1, p_{232})$ .  
 Forming S-pol of  $p_1$  and  $p_{232}$ : Polynomial too big for output (text size is 1315 characters, number of terms is 8)  
 S-pol added.
406. Creating S-polynomial from the pair  $(p_1, p_{233})$ .  
 Forming S-pol of  $p_1$  and  $p_{233}$ : Polynomial too big for output (text size is 1905 characters, number of terms is 8)  
 S-pol added.
407. Creating S-polynomial from the pair  $(p_1, p_{234})$ .  
 Forming S-pol of  $p_1$  and  $p_{234}$ : Polynomial too big for output (text size is 4253 characters, number of terms is 8)  
 S-pol added.
408. Creating S-polynomial from the pair  $(p_1, p_{235})$ .  
 Forming S-pol of  $p_1$  and  $p_{235}$ : Polynomial too big for output (text size is 4548 characters, number of terms is 8)  
 S-pol added.
409. Creating S-polynomial from the pair  $(p_1, p_{236})$ .  
 Forming S-pol of  $p_1$  and  $p_{236}$ :  

$$p_{1466} = (-16777216u_6u_3^{37}u_1^{23} + 8388608u_6u_3^{37}u_1^{22} + 8388608u_3^{38}u_1^{23} -$$

$$33554432u_3^{36}u_1^{25} + 16777216u_3^{36}u_1^{24})x_5x_4x_2 +$$

$$(8388608u_6u_3^{39}u_1^{22} + 16777216u_3^{38}u_1^{24} - 8388608u_3^{38}u_1^{23})x_5x_4 +$$

$$(8388608u_6^2u_3^{36}u_1^{23} - 8388608u_6^2u_3^{36}u_1^{22})x_4x_2^2 +$$

$$(-8388608u_6^2u_3^{38}u_1^{22} + 8388608u_6^2u_3^{36}u_1^{23})x_4x_2$$
 S-pol added.
410. Creating S-polynomial from the pair  $(p_1, p_{237})$ .  
 Forming S-pol of  $p_1$  and  $p_{237}$ :  

$$p_{1467} = (-8388608u_6u_3^{36}u_1^{22} + 4194304u_6u_3^{36}u_1^{21} + 4194304u_3^{37}u_1^{22} -$$

$$16777216u_3^{35}u_1^{24} + 8388608u_3^{35}u_1^{23})x_5x_4x_2 +$$

$$(4194304u_6u_3^{38}u_1^{21} + 8388608u_3^{37}u_1^{23} - 4194304u_3^{37}u_1^{22})x_5x_4 +$$

$$(4194304u_6^2u_3^{35}u_1^{22} - 4194304u_6^2u_3^{35}u_1^{21})x_4x_2^2 +$$

$$(-4194304u_6^2u_3^{37}u_1^{21} + 4194304u_6^2u_3^{35}u_1^{22})x_4x_2$$
 S-pol added.

411. Creating S-polynomial from the pair  $(p_1, p_{238})$ .  
 Skipping pair  $p_1$  and  $p_{238}$  because gcd of their leading monoms is zero.
412. Creating S-polynomial from the pair  $(p_1, p_{239})$ .  
 Skipping pair  $p_1$  and  $p_{239}$  because gcd of their leading monoms is zero.
413. Creating S-polynomial from the pair  $(p_1, p_{240})$ .  
 Skipping pair  $p_1$  and  $p_{240}$  because gcd of their leading monoms is zero.
414. Creating S-polynomial from the pair  $(p_1, p_{241})$ .  
 Forming S-pol of  $p_1$  and  $p_{241}$ : Polynomial too big for output (text size is 11123 characters, number of terms is 16)  
 S-pol added.
415. Creating S-polynomial from the pair  $(p_1, p_{242})$ .  
 Skipping pair  $p_1$  and  $p_{242}$  because gcd of their leading monoms is zero.
416. Creating S-polynomial from the pair  $(p_1, p_{243})$ .  
 Forming S-pol of  $p_1$  and  $p_{243}$ : Polynomial too big for output (text size is 11086 characters, number of terms is 16)  
 S-pol added.
417. Creating S-polynomial from the pair  $(p_1, p_{244})$ .  
 Skipping pair  $p_1$  and  $p_{244}$  because gcd of their leading monoms is zero.
418. Creating S-polynomial from the pair  $(p_1, p_{245})$ .  
 Skipping pair  $p_1$  and  $p_{245}$  because gcd of their leading monoms is zero.
419. Creating S-polynomial from the pair  $(p_1, p_{246})$ .  
 Skipping pair  $p_1$  and  $p_{246}$  because gcd of their leading monoms is zero.
420. Creating S-polynomial from the pair  $(p_1, p_{247})$ .  
 Skipping pair  $p_1$  and  $p_{247}$  because gcd of their leading monoms is zero.
421. Creating S-polynomial from the pair  $(p_1, p_{248})$ .  
 Skipping pair  $p_1$  and  $p_{248}$  because gcd of their leading monoms is zero.
422. Creating S-polynomial from the pair  $(p_1, p_{249})$ .  
 Skipping pair  $p_1$  and  $p_{249}$  because gcd of their leading monoms is zero.
423. Creating S-polynomial from the pair  $(p_1, p_{250})$ .  
 Skipping pair  $p_1$  and  $p_{250}$  because gcd of their leading monoms is zero.
424. Creating S-polynomial from the pair  $(p_1, p_{251})$ .  
 Skipping pair  $p_1$  and  $p_{251}$  because gcd of their leading monoms is zero.
425. Creating S-polynomial from the pair  $(p_1, p_{252})$ .  
 Skipping pair  $p_1$  and  $p_{252}$  because gcd of their leading monoms is zero.

426. Creating S-polynomial from the pair  $(p_1, p_{253})$ .  
 Skipping pair  $p_1$  and  $p_{253}$  because gcd of their leading monoms is zero.
427. Creating S-polynomial from the pair  $(p_1, p_{254})$ .  
 Skipping pair  $p_1$  and  $p_{254}$  because gcd of their leading monoms is zero.
428. Creating S-polynomial from the pair  $(p_1, p_{255})$ .  
 Skipping pair  $p_1$  and  $p_{255}$  because gcd of their leading monoms is zero.
429. Creating S-polynomial from the pair  $(p_1, p_{256})$ .  
 Forming S-pol of  $p_1$  and  $p_{256}$ : Polynomial too big for output (text size is 5790 characters, number of terms is 8)  
 S-pol added.
430. Creating S-polynomial from the pair  $(p_1, p_{257})$ .  
 Skipping pair  $p_1$  and  $p_{257}$  because gcd of their leading monoms is zero.
431. Creating S-polynomial from the pair  $(p_1, p_{258})$ .  
 Forming S-pol of  $p_1$  and  $p_{258}$ : Polynomial too big for output (text size is 5768 characters, number of terms is 8)  
 S-pol added.
432. Creating S-polynomial from the pair  $(p_1, p_{259})$ .  
 Skipping pair  $p_1$  and  $p_{259}$  because gcd of their leading monoms is zero.
433. Creating S-polynomial from the pair  $(p_1, p_{260})$ .  
 Skipping pair  $p_1$  and  $p_{260}$  because gcd of their leading monoms is zero.
434. Creating S-polynomial from the pair  $(p_1, p_{261})$ .  
 Skipping pair  $p_1$  and  $p_{261}$  because gcd of their leading monoms is zero.
435. Creating S-polynomial from the pair  $(p_1, p_{262})$ .  
 Skipping pair  $p_1$  and  $p_{262}$  because gcd of their leading monoms is zero.
436. Creating S-polynomial from the pair  $(p_1, p_{263})$ .  
 Skipping pair  $p_1$  and  $p_{263}$  because gcd of their leading monoms is zero.
437. Creating S-polynomial from the pair  $(p_1, p_{264})$ .  
 Skipping pair  $p_1$  and  $p_{264}$  because gcd of their leading monoms is zero.
438. Creating S-polynomial from the pair  $(p_1, p_{265})$ .  
 Skipping pair  $p_1$  and  $p_{265}$  because gcd of their leading monoms is zero.
439. Creating S-polynomial from the pair  $(p_1, p_{266})$ .  
 Skipping pair  $p_1$  and  $p_{266}$  because gcd of their leading monoms is zero.
440. Creating S-polynomial from the pair  $(p_1, p_{267})$ .  
 Forming S-pol of  $p_1$  and  $p_{267}$ : Polynomial too big for output (text size is 10898 characters, number of terms is 16)  
 S-pol added.

441. Creating S-polynomial from the pair  $(p_1, p_{268})$ .  
 Skipping pair  $p_1$  and  $p_{268}$  because gcd of their leading monoms is zero.
442. Creating S-polynomial from the pair  $(p_1, p_{269})$ .  
 Forming S-pol of  $p_1$  and  $p_{269}$ : Polynomial too big for output (text size is 10847 characters, number of terms is 16)  
 S-pol added.
443. Creating S-polynomial from the pair  $(p_1, p_{270})$ .  
 Skipping pair  $p_1$  and  $p_{270}$  because gcd of their leading monoms is zero.
444. Creating S-polynomial from the pair  $(p_1, p_{271})$ .  
 Skipping pair  $p_1$  and  $p_{271}$  because gcd of their leading monoms is zero.
445. Creating S-polynomial from the pair  $(p_1, p_{272})$ .  
 Skipping pair  $p_1$  and  $p_{272}$  because gcd of their leading monoms is zero.
446. Creating S-polynomial from the pair  $(p_1, p_{273})$ .  
 Skipping pair  $p_1$  and  $p_{273}$  because gcd of their leading monoms is zero.
447. Creating S-polynomial from the pair  $(p_1, p_{274})$ .  
 Skipping pair  $p_1$  and  $p_{274}$  because gcd of their leading monoms is zero.
448. Creating S-polynomial from the pair  $(p_1, p_{275})$ .  
 Skipping pair  $p_1$  and  $p_{275}$  because gcd of their leading monoms is zero.
449. Creating S-polynomial from the pair  $(p_1, p_{276})$ .  
 Skipping pair  $p_1$  and  $p_{276}$  because gcd of their leading monoms is zero.
450. Creating S-polynomial from the pair  $(p_1, p_{277})$ .  
 Skipping pair  $p_1$  and  $p_{277}$  because gcd of their leading monoms is zero.
451. Creating S-polynomial from the pair  $(p_1, p_{278})$ .  
 Skipping pair  $p_1$  and  $p_{278}$  because gcd of their leading monoms is zero.
452. Creating S-polynomial from the pair  $(p_1, p_{279})$ .  
 Skipping pair  $p_1$  and  $p_{279}$  because gcd of their leading monoms is zero.
453. Creating S-polynomial from the pair  $(p_1, p_{280})$ .  
 Skipping pair  $p_1$  and  $p_{280}$  because gcd of their leading monoms is zero.
454. Creating S-polynomial from the pair  $(p_1, p_{281})$ .  
 Skipping pair  $p_1$  and  $p_{281}$  because gcd of their leading monoms is zero.
455. Creating S-polynomial from the pair  $(p_1, p_{282})$ .  
 Forming S-pol of  $p_1$  and  $p_{282}$ : Polynomial too big for output (text size is 5418 characters, number of terms is 8)  
 S-pol added.

456. Creating S-polynomial from the pair  $(p_1, p_{283})$ .  
 Skipping pair  $p_1$  and  $p_{283}$  because gcd of their leading monoms is zero.
457. Creating S-polynomial from the pair  $(p_1, p_{284})$ .  
 Forming S-pol of  $p_1$  and  $p_{284}$ : Polynomial too big for output (text size is 5394 characters, number of terms is 8)  
 S-pol added.
458. Creating S-polynomial from the pair  $(p_1, p_{285})$ .  
 Skipping pair  $p_1$  and  $p_{285}$  because gcd of their leading monoms is zero.
459. Creating S-polynomial from the pair  $(p_1, p_{286})$ .  
 Skipping pair  $p_1$  and  $p_{286}$  because gcd of their leading monoms is zero.
460. Creating S-polynomial from the pair  $(p_1, p_{287})$ .  
 Skipping pair  $p_1$  and  $p_{287}$  because gcd of their leading monoms is zero.
461. Creating S-polynomial from the pair  $(p_1, p_{288})$ .  
 Skipping pair  $p_1$  and  $p_{288}$  because gcd of their leading monoms is zero.
462. Creating S-polynomial from the pair  $(p_1, p_{289})$ .  
 Skipping pair  $p_1$  and  $p_{289}$  because gcd of their leading monoms is zero.
463. Creating S-polynomial from the pair  $(p_1, p_{290})$ .  
 Skipping pair  $p_1$  and  $p_{290}$  because gcd of their leading monoms is zero.
464. Creating S-polynomial from the pair  $(p_1, p_{291})$ .  
 Skipping pair  $p_1$  and  $p_{291}$  because gcd of their leading monoms is zero.
465. Creating S-polynomial from the pair  $(p_1, p_{292})$ .  
 Skipping pair  $p_1$  and  $p_{292}$  because gcd of their leading monoms is zero.
466. Creating S-polynomial from the pair  $(p_1, p_{293})$ .  
 Skipping pair  $p_1$  and  $p_{293}$  because gcd of their leading monoms is zero.
467. Creating S-polynomial from the pair  $(p_1, p_{294})$ .  
 Skipping pair  $p_1$  and  $p_{294}$  because gcd of their leading monoms is zero.
468. Creating S-polynomial from the pair  $(p_1, p_{295})$ .  
 Skipping pair  $p_1$  and  $p_{295}$  because gcd of their leading monoms is zero.
469. Creating S-polynomial from the pair  $(p_1, p_{296})$ .  
 Skipping pair  $p_1$  and  $p_{296}$  because gcd of their leading monoms is zero.
470. Creating S-polynomial from the pair  $(p_1, p_{297})$ .  
 Skipping pair  $p_1$  and  $p_{297}$  because gcd of their leading monoms is zero.
471. Creating S-polynomial from the pair  $(p_1, p_{298})$ .  
 Skipping pair  $p_1$  and  $p_{298}$  because gcd of their leading monoms is zero.

472. Creating S-polynomial from the pair  $(p_1, p_{299})$ .  
 Forming S-pol of  $p_1$  and  $p_{299}$ : Polynomial too big for output (text size is 3266 characters, number of terms is 8)  
 S-pol added.

473. Creating S-polynomial from the pair  $(p_1, p_{300})$ .  
 Skipping pair  $p_1$  and  $p_{300}$  because gcd of their leading monoms is zero.

474. Creating S-polynomial from the pair  $(p_1, p_{301})$ .  
 Forming S-pol of  $p_1$  and  $p_{301}$ : Polynomial too big for output (text size is 5117 characters, number of terms is 16)  
 S-pol added.

475. Creating S-polynomial from the pair  $(p_1, p_{302})$ .  
 Forming S-pol of  $p_1$  and  $p_{302}$ :

$$\begin{aligned}
 p_{1468} = & -140737488355328u_6u_3^{71}u_2^{49}u_1^{47}x_5x_4x_2^2 + \\
 & (-140737488355328u_6u_3^{72}u_2^{48}u_1^{47} - 562949953421312u_3^{72}u_2^{47}u_1^{49} + \\
 & 281474976710656u_3^{72}u_2^{47}u_1^{48})x_5x_4x_2x_1 + \\
 & (140737488355328u_6u_3^{72}u_2^{48}u_1^{47} + 281474976710656u_6u_3^{71}u_2^{49}u_1^{48} + \\
 & 281474976710656u_3^{72}u_2^{49}u_1^{48})x_5x_4x_2 + \\
 & (-281474976710656u_6u_3^{73}u_2^{47}u_1^{48} + 140737488355328u_6u_3^{73}u_2^{47}u_1^{47})x_5x_4x_1 + \\
 & 140737488355328u_6^2u_3^{71}u_2^{48}u_1^{47}x_4x_2^2x_1 - \\
 & 140737488355328u_6^2u_3^{71}u_2^{48}u_1^{47}x_4x_2^2 + \\
 & (281474976710656u_6^2u_3^{72}u_2^{47}u_1^{48} - 140737488355328u_6^2u_3^{72}u_2^{47}u_1^{47} - \\
 & 281474976710656u_6^2u_3^{71}u_2^{48}u_1^{48})x_4x_2x_1 + \\
 & (-140737488355328u_6^2u_3^{72}u_2^{49}u_1^{47} + \\
 & 281474976710656u_6^2u_3^{71}u_2^{48}u_1^{48})x_4x_2
 \end{aligned}$$

S-pol added.

476. Creating S-polynomial from the pair  $(p_1, p_{303})$ .  
 Forming S-pol of  $p_1$  and  $p_{303}$ : Polynomial too big for output (text size is 3046 characters, number of terms is 8)  
 S-pol added.

477. Creating S-polynomial from the pair  $(p_1, p_{304})$ .  
 Forming S-pol of  $p_1$  and  $p_{304}$ : Polynomial too big for output (text size is 2279 characters, number of terms is 8)  
 S-pol added.

478. Creating S-polynomial from the pair  $(p_1, p_{305})$ .  
 Skipping pair  $p_1$  and  $p_{305}$  because gcd of their leading monoms is zero.



479. Creating S-polynomial from the pair  $(p_1, p_{306})$ .  
 Skipping pair  $p_1$  and  $p_{306}$  because gcd of their leading monoms is zero.
480. Creating S-polynomial from the pair  $(p_1, p_{307})$ .  
 Skipping pair  $p_1$  and  $p_{307}$  because gcd of their leading monoms is zero.
481. Creating S-polynomial from the pair  $(p_1, p_{308})$ .  
 Skipping pair  $p_1$  and  $p_{308}$  because gcd of their leading monoms is zero.
482. Creating S-polynomial from the pair  $(p_1, p_{309})$ .  
 Skipping pair  $p_1$  and  $p_{309}$  because gcd of their leading monoms is zero.
483. Creating S-polynomial from the pair  $(p_1, p_{310})$ .  
 Skipping pair  $p_1$  and  $p_{310}$  because gcd of their leading monoms is zero.
484. Creating S-polynomial from the pair  $(p_1, p_{311})$ .  
 Skipping pair  $p_1$  and  $p_{311}$  because gcd of their leading monoms is zero.
485. Creating S-polynomial from the pair  $(p_1, p_{312})$ .  
 Skipping pair  $p_1$  and  $p_{312}$  because gcd of their leading monoms is zero.
486. Creating S-polynomial from the pair  $(p_1, p_{313})$ .  
 Forming S-pol of  $p_1$  and  $p_{313}$ :
- $$p_{1469} = (-8388608u_5u_3^{35}u_1^{23} + 33554432u_5u_3^{33}u_1^{25} - 16777216u_5u_3^{33}u_1^{24})x_5x_4x_2 +$$
- $$(-16777216u_5u_3^{35}u_1^{24} + 8388608u_5u_3^{35}u_1^{23})x_5x_4 +$$
- $$8388608u_6u_5u_3^{34}u_1^{23}x_4x_2^2 - 8388608u_6u_5u_3^{34}u_1^{23}x_4x_2$$
- S-pol added.
487. Creating S-polynomial from the pair  $(p_1, p_{314})$ .  
 Forming S-pol of  $p_1$  and  $p_{314}$ :
- $$p_{1470} = (-4194304u_5u_3^{34}u_1^{22} + 16777216u_5u_3^{32}u_1^{24} - 8388608u_5u_3^{32}u_1^{23})x_5x_4x_2 +$$
- $$(-8388608u_5u_3^{34}u_1^{23} + 4194304u_5u_3^{34}u_1^{22})x_5x_4 +$$
- $$4194304u_6u_5u_3^{33}u_1^{22}x_4x_2^2 - 4194304u_6u_5u_3^{33}u_1^{22}x_4x_2$$
- S-pol added.
488. Creating S-polynomial from the pair  $(p_1, p_{315})$ .  
 Forming S-pol of  $p_1$  and  $p_{315}$ :
- $$p_{1471} = (-140737488355328u_5^2u_3^{75}u_1^{47} + 70368744177664u_5^2u_3^{75}u_1^{46} +$$
- $$140737488355328u_5u_3^{76}u_1^{47} - 562949953421312u_5u_3^{74}u_1^{49} +$$
- $$281474976710656u_5u_3^{74}u_1^{48})x_5x_4x_2 +$$
- $$(70368744177664u_5^2u_3^{77}u_1^{46} + 281474976710656u_5u_3^{76}u_1^{48} -$$
- $$140737488355328u_5u_3^{76}u_1^{47})x_5x_4 +$$

$$\begin{aligned}
& (140737488355328u_5^3u_3^{74}u_1^{47} - 70368744177664u_5^3u_3^{74}u_1^{46})x_5x_2^2 - \\
& 70368744177664u_5^3u_3^{76}u_1^{46}x_5x_2 + \\
& (-70368744177664u_6u_5^2u_3^{74}u_1^{46} - 140737488355328u_6u_5u_3^{75}u_1^{47})x_4x_2^2 + \\
& (-70368744177664u_6u_5^2u_3^{76}u_1^{46} + 140737488355328u_6u_5^2u_3^{74}u_1^{47} + \\
& 140737488355328u_6u_5u_3^{75}u_1^{47})x_4x_2 + 70368744177664u_6u_5^3u_3^{75}u_1^{46}x_2^2 - \\
& 70368744177664u_6u_5^3u_3^{75}u_1^{46}x_2
\end{aligned}$$

S-pol added.

489. Creating S-polynomial from the pair  $(p_1, p_{316})$ .

Forming S-pol of  $p_1$  and  $p_{316}$ :

$$\begin{aligned}
p_{1472} = & (-70368744177664u_5^2u_3^{74}u_1^{46} + 35184372088832u_5^2u_3^{74}u_1^{45} + \\
& 70368744177664u_5u_3^{75}u_1^{46} - 281474976710656u_5u_3^{73}u_1^{48} + \\
& 140737488355328u_5u_3^{73}u_1^{47})x_5x_4x_2 + \\
& (35184372088832u_5^2u_3^{76}u_1^{45} + 140737488355328u_5u_3^{75}u_1^{47} - \\
& 70368744177664u_5u_3^{75}u_1^{46})x_5x_4 + \\
& (70368744177664u_5^3u_3^{73}u_1^{46} - 35184372088832u_5^3u_3^{73}u_1^{45})x_5x_2^2 - \\
& 35184372088832u_5^3u_3^{75}u_1^{45}x_5x_2 + \\
& (-35184372088832u_6u_5^2u_3^{73}u_1^{45} - 70368744177664u_6u_5u_3^{74}u_1^{46})x_4x_2^2 + \\
& (-35184372088832u_6u_5^2u_3^{75}u_1^{45} + 70368744177664u_6u_5^2u_3^{73}u_1^{46} + \\
& 70368744177664u_6u_5u_3^{74}u_1^{46})x_4x_2 + 35184372088832u_6u_5^3u_3^{74}u_1^{45}x_2^2 - \\
& 35184372088832u_6u_5^3u_3^{74}u_1^{45}x_2
\end{aligned}$$

S-pol added.

490. Creating S-polynomial from the pair  $(p_1, p_{317})$ .

Forming S-pol of  $p_1$  and  $p_{317}$ :

$$\begin{aligned}
p_{1473} = & (-1073741824u_5u_3^{45}u_1^{30} + 536870912u_5u_3^{45}u_1^{29} + 1073741824u_3^{46}u_1^{30} - \\
& 4294967296u_3^{44}u_1^{32} + 2147483648u_3^{44}u_1^{31})x_5x_4x_2 + \\
& (536870912u_5u_3^{47}u_1^{29} + 2147483648u_3^{46}u_1^{31} - 1073741824u_3^{46}u_1^{30})x_5x_4 + \\
& (1073741824u_5^2u_3^{44}u_1^{30} - 536870912u_5^2u_3^{44}u_1^{29})x_5x_2^2 - \\
& 536870912u_5^2u_3^{46}u_1^{29}x_5x_2 + \\
& (-536870912u_6u_5u_3^{44}u_1^{29} - 1073741824u_6u_3^{45}u_1^{30})x_4x_2^2 + \\
& (-536870912u_6u_5u_3^{46}u_1^{29} + 1073741824u_6u_5u_3^{44}u_1^{30} + \\
& 1073741824u_6u_3^{45}u_1^{30})x_4x_2 + 536870912u_6u_5^2u_3^{45}u_1^{29}x_2^2 - \\
& 536870912u_6u_5^2u_3^{45}u_1^{29}x_2
\end{aligned}$$

S-pol added.

491. Creating S-polynomial from the pair  $(p_1, p_{318})$ .

Forming S-pol of  $p_1$  and  $p_{318}$ :

$$\begin{aligned}
p_{1474} = & (-536870912u_5u_3^{44}u_1^{29} + 268435456u_5u_3^{44}u_1^{28} + 536870912u_3^{45}u_1^{29} - \\
& 2147483648u_3^{43}u_1^{31} + 1073741824u_3^{43}u_1^{30})x_5x_4x_2 + \\
& (268435456u_5u_3^{46}u_1^{28} + 1073741824u_3^{45}u_1^{30} - 536870912u_3^{45}u_1^{29})x_5x_4 + \\
& (536870912u_5^2u_3^{43}u_1^{29} - 268435456u_5^2u_3^{43}u_1^{28})x_5x_2 - \\
& 268435456u_5^2u_3^{45}u_1^{28}x_5x_2 + \\
& (-268435456u_6u_5u_3^{43}u_1^{28} - 536870912u_6u_3^{44}u_1^{29})x_4x_2 + \\
& (-268435456u_6u_5u_3^{45}u_1^{28} + 536870912u_6u_5u_3^{43}u_1^{29} + \\
& 536870912u_6u_3^{44}u_1^{29})x_4x_2 + 268435456u_6u_5^2u_3^{44}u_1^{28}x_2 - \\
& 268435456u_6u_5^2u_3^{44}u_1^{28}x_2
\end{aligned}$$

S-pol added.

492. Creating S-polynomial from the pair  $(p_1, p_{319})$ .

Forming S-pol of  $p_1$  and  $p_{319}$ :

$$\begin{aligned}
p_{1475} = & (-1073741824u_5u_3^{45}u_1^{30} + 536870912u_5u_3^{45}u_1^{29} + 1073741824u_3^{46}u_1^{30} - \\
& 4294967296u_3^{44}u_1^{32} + 2147483648u_3^{44}u_1^{31})x_5x_4x_2 + \\
& (536870912u_5u_3^{47}u_1^{29} + 2147483648u_3^{46}u_1^{31} - 1073741824u_3^{46}u_1^{30})x_5x_4 + \\
& (1073741824u_5^2u_3^{44}u_1^{30} - 536870912u_5^2u_3^{44}u_1^{29})x_5x_2 - \\
& 536870912u_5^2u_3^{46}u_1^{29}x_5x_2 + \\
& (-536870912u_6u_5u_3^{44}u_1^{29} - 1073741824u_6u_3^{45}u_1^{30})x_4x_2 + \\
& (-536870912u_6u_5u_3^{46}u_1^{29} + 1073741824u_6u_5u_3^{44}u_1^{30} + \\
& 1073741824u_6u_3^{45}u_1^{30})x_4x_2 + 536870912u_6u_5^2u_3^{45}u_1^{29}x_2 - \\
& 536870912u_6u_5^2u_3^{45}u_1^{29}x_2
\end{aligned}$$

S-pol added.

493. Creating S-polynomial from the pair  $(p_1, p_{320})$ .

Forming S-pol of  $p_1$  and  $p_{320}$ :

$$\begin{aligned}
p_{1476} = & (-2147483648u_5u_3^{50}u_1^{31} + 1073741824u_5u_3^{50}u_1^{30} + 2147483648u_3^{51}u_1^{31} - \\
& 8589934592u_3^{49}u_1^{33} + 4294967296u_3^{49}u_1^{32})x_5x_4x_2 + \\
& (1073741824u_5u_3^{52}u_1^{30} + 4294967296u_3^{51}u_1^{32} - 2147483648u_3^{51}u_1^{31})x_5x_4 + \\
& (2147483648u_5^2u_3^{49}u_1^{31} - 1073741824u_5^2u_3^{49}u_1^{30})x_5x_2 - \\
& 1073741824u_5^2u_3^{51}u_1^{30}x_5x_2 + \\
& (-1073741824u_6u_5u_3^{49}u_1^{30} - 2147483648u_6u_3^{50}u_1^{31})x_4x_2 + \\
& (-1073741824u_6u_5u_3^{51}u_1^{30} + 2147483648u_6u_5u_3^{49}u_1^{31} + \\
& 2147483648u_6u_3^{50}u_1^{31})x_4x_2 + 1073741824u_6u_5^2u_3^{50}u_1^{30}x_2 - \\
& 1073741824u_6u_5^2u_3^{50}u_1^{30}x_2
\end{aligned}$$

S-pol added.

494. Creating S-polynomial from the pair  $(p_1, p_{321})$ .

Forming S-pol of  $p_1$  and  $p_{321}$ :

$$\begin{aligned} p_{1477} = & (-32768u_3^{25}u_1^{15} + 131072u_3^{23}u_1^{17} - 65536u_3^{23}u_1^{16})x_5x_4x_2 + \\ & (-65536u_3^{25}u_1^{16} + 32768u_3^{25}u_1^{15})x_5x_4 + 32768u_6u_3^{24}u_1^{15}x_4x_2^2 - \\ & 32768u_6u_3^{24}u_1^{15}x_4x_2 \end{aligned}$$

S-pol added.

495. Creating S-polynomial from the pair  $(p_1, p_{322})$ .

Forming S-pol of  $p_1$  and  $p_{322}$ : Polynomial too big for output (text size is 3266 characters, number of terms is 8)

S-pol added.

496. Creating S-polynomial from the pair  $(p_1, p_{323})$ .

Forming S-pol of  $p_1$  and  $p_{323}$ : Polynomial too big for output (text size is 2763 characters, number of terms is 8)

S-pol added.

497. Creating S-polynomial from the pair  $(p_1, p_{324})$ .

Forming S-pol of  $p_1$  and  $p_{324}$ :

$$\begin{aligned} p_{1478} = & (2097152u_3^{36}u_1^{21} - 8388608u_3^{34}u_1^{23} + 4194304u_3^{34}u_1^{22})x_5x_4x_2 + \\ & (4194304u_3^{36}u_1^{22} - 2097152u_3^{36}u_1^{21})x_5x_4 + \\ & (2097152u_5^2u_3^{34}u_1^{21} - 1048576u_5^2u_3^{34}u_1^{20})x_5x_2^2 - \\ & 1048576u_5^2u_3^{36}u_1^{20}x_5x_2 - 2097152u_6u_3^{35}u_1^{21}x_4x_2^2 + \\ & 2097152u_6u_3^{35}u_1^{21}x_4x_2 + 1048576u_6u_5^2u_3^{35}u_1^{20}x_2^2 - \\ & 1048576u_6u_5^2u_3^{35}u_1^{20}x_2 \end{aligned}$$

S-pol added.

498. Creating S-polynomial from the pair  $(p_1, p_{325})$ .

Forming S-pol of  $p_1$  and  $p_{325}$ :

$$\begin{aligned} p_{1479} = & (4194304u_3^{30}u_1^{22} - 16777216u_3^{28}u_1^{24} + 8388608u_3^{28}u_1^{23})x_5x_4x_2 + \\ & (8388608u_3^{30}u_1^{23} - 4194304u_3^{30}u_1^{22})x_5x_4 + \\ & (4194304u_5^2u_3^{28}u_1^{22} - 2097152u_5^2u_3^{28}u_1^{21})x_5x_2^2 - \\ & 2097152u_5^2u_3^{30}u_1^{21}x_5x_2 - 4194304u_6u_3^{29}u_1^{22}x_4x_2^2 + \\ & 4194304u_6u_3^{29}u_1^{22}x_4x_2 + 2097152u_6u_5^2u_3^{29}u_1^{21}x_2^2 - \\ & 2097152u_6u_5^2u_3^{29}u_1^{21}x_2 \end{aligned}$$

S-pol added.

499. Creating S-polynomial from the pair  $(p_1, p_{326})$ .  
Forming S-pol of  $p_1$  and  $p_{326}$ : Polynomial too big for output (text size is 2949 characters, number of terms is 8)  
S-pol added.
500. Creating S-polynomial from the pair  $(p_1, p_{327})$ .  
Forming S-pol of  $p_1$  and  $p_{327}$ : Polynomial too big for output (text size is 2829 characters, number of terms is 8)  
S-pol added.
501. Creating S-polynomial from the pair  $(p_1, p_{328})$ .  
Forming S-pol of  $p_1$  and  $p_{328}$ : Polynomial too big for output (text size is 6165 characters, number of terms is 16)  
S-pol added.
502. Creating S-polynomial from the pair  $(p_1, p_{329})$ .  
Forming S-pol of  $p_1$  and  $p_{329}$ : Polynomial too big for output (text size is 1160 characters, number of terms is 8)  
S-pol added.
503. Creating S-polynomial from the pair  $(p_1, p_{330})$ .  
Forming S-pol of  $p_1$  and  $p_{330}$ : Polynomial too big for output (text size is 2838 characters, number of terms is 8)  
S-pol added.
504. Creating S-polynomial from the pair  $(p_1, p_{331})$ .  
Forming S-pol of  $p_1$  and  $p_{331}$ : Polynomial too big for output (text size is 6210 characters, number of terms is 16)  
S-pol added.
505. Creating S-polynomial from the pair  $(p_1, p_{332})$ .  
Forming S-pol of  $p_1$  and  $p_{332}$ : Polynomial too big for output (text size is 1176 characters, number of terms is 8)  
S-pol added.
506. Creating S-polynomial from the pair  $(p_1, p_{333})$ .  
Forming S-pol of  $p_1$  and  $p_{333}$ : Polynomial too big for output (text size is 2840 characters, number of terms is 8)  
S-pol added.
507. Creating S-polynomial from the pair  $(p_1, p_{334})$ .  
Forming S-pol of  $p_1$  and  $p_{334}$ :  

$$p_{1480} = (16384u_3^{24}u_1^{14} - 65536u_3^{22}u_1^{16} + 32768u_3^{22}u_1^{15})x_5x_4x_2 +$$

$$(32768u_3^{24}u_1^{15} - 16384u_3^{24}u_1^{14})x_5x_4 - 16384u_6u_3^{23}u_1^{14}x_4x_2^2 +$$

$$16384u_6u_3^{23}u_1^{14}x_4x_2$$
S-pol added.

508. Creating S-polynomial from the pair  $(p_1, p_{335})$ .  
 Skipping pair  $p_1$  and  $p_{335}$  because gcd of their leading monoms is zero.
509. Creating S-polynomial from the pair  $(p_1, p_{336})$ .  
 Skipping pair  $p_1$  and  $p_{336}$  because gcd of their leading monoms is zero.
510. Creating S-polynomial from the pair  $(p_1, p_{337})$ .  
 Skipping pair  $p_1$  and  $p_{337}$  because gcd of their leading monoms is zero.
511. Creating S-polynomial from the pair  $(p_1, p_{338})$ .  
 Skipping pair  $p_1$  and  $p_{338}$  because gcd of their leading monoms is zero.
512. Creating S-polynomial from the pair  $(p_1, p_{339})$ .  
 Skipping pair  $p_1$  and  $p_{339}$  because gcd of their leading monoms is zero.
513. Creating S-polynomial from the pair  $(p_1, p_{340})$ .  
 Skipping pair  $p_1$  and  $p_{340}$  because gcd of their leading monoms is zero.
514. Creating S-polynomial from the pair  $(p_1, p_{341})$ .  
 Skipping pair  $p_1$  and  $p_{341}$  because gcd of their leading monoms is zero.
515. Creating S-polynomial from the pair  $(p_1, p_{342})$ .  
 Skipping pair  $p_1$  and  $p_{342}$  because gcd of their leading monoms is zero.
516. Creating S-polynomial from the pair  $(p_1, p_{343})$ .  
 Skipping pair  $p_1$  and  $p_{343}$  because gcd of their leading monoms is zero.
517. Creating S-polynomial from the pair  $(p_1, p_{344})$ .  
 Forming S-pol of  $p_1$  and  $p_{344}$ : Polynomial too big for output (text size is 5086 characters, number of terms is 16)  
 S-pol added.
518. Creating S-polynomial from the pair  $(p_1, p_{345})$ .  
 Forming S-pol of  $p_1$  and  $p_{345}$ :  

$$p_{1481} = (-35184372088832u_6u_4^{48}u_3^{66}u_1^{45} - 140737488355328u_4^{47}u_3^{66}u_1^{47} +$$

$$70368744177664u_4^{47}u_3^{66}u_1^{46})x_5x_4x_3x_2 +$$

$$(-70368744177664u_6u_4^{47}u_3^{67}u_1^{46} + 35184372088832u_6u_4^{47}u_3^{67}u_1^{45})x_5x_4x_3 -$$

$$35184372088832u_6u_4^{49}u_3^{65}u_1^{45}x_5x_4x_2^2 +$$

$$(70368744177664u_6u_4^{49}u_3^{65}u_1^{46} + 35184372088832u_6u_4^{48}u_3^{66}u_1^{45} +$$

$$70368744177664u_4^{49}u_3^{66}u_1^{46})x_5x_4x_2 +$$

$$35184372088832u_6^2u_4^{48}u_3^{65}u_1^{45}x_4x_3x_2^2 +$$

$$(-70368744177664u_6^2u_4^{48}u_3^{65}u_1^{46} + 70368744177664u_6^2u_4^{47}u_3^{66}u_1^{46} -$$

$$35184372088832u_6^2u_4^{47}u_3^{66}u_1^{45})x_4x_3x_2 -$$

$$35184372088832u_6^2u_4^{48}u_3^{65}u_1^{45}x_4x_2^2 +$$

$$(-35184372088832u_6^2u_4^{49}u_3^{66}u_1^{45} + 70368744177664u_6^2u_4^{48}u_3^{65}u_1^{46})x_4x_2$$
 S-pol added.

519. Creating S-polynomial from the pair  $(p_1, p_{346})$ .  
 Forming S-pol of  $p_1$  and  $p_{346}$ : Polynomial too big for output (text size is 3044 characters, number of terms is 8)  
 S-pol added.
520. Creating S-polynomial from the pair  $(p_1, p_{347})$ .  
 Forming S-pol of  $p_1$  and  $p_{347}$ : Polynomial too big for output (text size is 2377 characters, number of terms is 8)  
 S-pol added.
521. Creating S-polynomial from the pair  $(p_1, p_{348})$ .  
 Skipping pair  $p_1$  and  $p_{348}$  because gcd of their leading monoms is zero.
522. Creating S-polynomial from the pair  $(p_1, p_{349})$ .  
 Skipping pair  $p_1$  and  $p_{349}$  because gcd of their leading monoms is zero.
523. Creating S-polynomial from the pair  $(p_1, p_{350})$ .  
 Skipping pair  $p_1$  and  $p_{350}$  because gcd of their leading monoms is zero.
524. Creating S-polynomial from the pair  $(p_1, p_{351})$ .  
 Skipping pair  $p_1$  and  $p_{351}$  because gcd of their leading monoms is zero.
525. Creating S-polynomial from the pair  $(p_1, p_{352})$ .  
 Skipping pair  $p_1$  and  $p_{352}$  because gcd of their leading monoms is zero.
526. Creating S-polynomial from the pair  $(p_1, p_{353})$ .  
 Skipping pair  $p_1$  and  $p_{353}$  because gcd of their leading monoms is zero.
527. Creating S-polynomial from the pair  $(p_1, p_{354})$ .  
 Skipping pair  $p_1$  and  $p_{354}$  because gcd of their leading monoms is zero.
528. Creating S-polynomial from the pair  $(p_1, p_{355})$ .  
 Skipping pair  $p_1$  and  $p_{355}$  because gcd of their leading monoms is zero.
529. Creating S-polynomial from the pair  $(p_1, p_{356})$ .  
 Forming S-pol of  $p_1$  and  $p_{356}$ : Polynomial too big for output (text size is 1404 characters, number of terms is 8)  
 S-pol added.
530. Creating S-polynomial from the pair  $(p_1, p_{357})$ .  
 Forming S-pol of  $p_1$  and  $p_{357}$ : Polynomial too big for output (text size is 2055 characters, number of terms is 8)  
 S-pol added.
531. Creating S-polynomial from the pair  $(p_1, p_{358})$ .  
 Forming S-pol of  $p_1$  and  $p_{358}$ : Polynomial too big for output (text size is 5104 characters, number of terms is 16)  
 S-pol added.

532. Creating S-polynomial from the pair  $(p_1, p_{359})$ .

Forming S-pol of  $p_1$  and  $p_{359}$ : Polynomial too big for output (text size is 5058 characters, number of terms is 16)

S-pol added.

533. Creating S-polynomial from the pair  $(p_1, p_{360})$ .

Forming S-pol of  $p_1$  and  $p_{360}$ :

$$\begin{aligned} p_{1482} = & (-262144u_3^{29}u_1^{18} + 1048576u_3^{27}u_1^{20} - 524288u_3^{27}u_1^{19})x_5x_4x_2 + \\ & (-524288u_3^{29}u_1^{19} + 262144u_3^{29}u_1^{18})x_5x_4 + \\ & (-262144u_5^2u_3^{27}u_1^{18} + 131072u_5^2u_3^{27}u_1^{17})x_5x_2^2 + \\ & 131072u_5^2u_3^{29}u_1^{17}x_5x_2 + 262144u_6u_3^{28}u_1^{18}x_4x_2^2 - \\ & 262144u_6u_3^{28}u_1^{18}x_4x_2 - 131072u_6u_5^2u_3^{28}u_1^{17}x_2^2 + \\ & 131072u_6u_5^2u_3^{28}u_1^{17}x_2 \end{aligned}$$

S-pol added.

534. Creating S-polynomial from the pair  $(p_1, p_{361})$ .

Forming S-pol of  $p_1$  and  $p_{361}$ :

$$\begin{aligned} p_{1483} = & 70368744177664u_6u_3^{71}u_2^{48}u_1^{46}x_5x_4x_2^2 + \\ & (70368744177664u_6u_3^{72}u_2^{47}u_1^{46} + 281474976710656u_3^{72}u_2^{46}u_1^{48} - \\ & 140737488355328u_3^{72}u_2^{46}u_1^{47})x_5x_4x_2x_1 + \\ & (-70368744177664u_6u_3^{72}u_2^{47}u_1^{46} - 140737488355328u_6u_3^{71}u_2^{48}u_1^{47} - \\ & 140737488355328u_3^{72}u_2^{48}u_1^{47})x_5x_4x_2 + \\ & (140737488355328u_6u_3^{73}u_2^{46}u_1^{47} - 70368744177664u_6u_3^{73}u_2^{46}u_1^{46})x_5x_4x_1 - \\ & 70368744177664u_6^2u_3^{71}u_2^{47}u_1^{46}x_4x_2^2x_1 + \\ & 70368744177664u_6^2u_3^{71}u_2^{47}u_1^{46}x_4x_2^2 + \\ & (-140737488355328u_6^2u_3^{72}u_2^{46}u_1^{47} + 70368744177664u_6^2u_3^{72}u_2^{46}u_1^{46} + \\ & 140737488355328u_6^2u_3^{71}u_2^{47}u_1^{47})x_4x_2x_1 + \\ & (70368744177664u_6^2u_3^{72}u_2^{48}u_1^{46} - 140737488355328u_6^2u_3^{71}u_2^{47}u_1^{47})x_4x_2 \end{aligned}$$

S-pol added.

535. Creating S-polynomial from the pair  $(p_1, p_{362})$ .

Forming S-pol of  $p_1$  and  $p_{362}$ :

$$\begin{aligned} p_{1484} = & (17592186044416u_6u_4^{47}u_3^{66}u_1^{44} + 70368744177664u_4^{46}u_3^{66}u_1^{46} - \\ & 35184372088832u_4^{46}u_3^{66}u_1^{45})x_5x_4x_3x_2 + \\ & (35184372088832u_6u_4^{46}u_3^{67}u_1^{45} - 17592186044416u_6u_4^{46}u_3^{67}u_1^{44})x_5x_4x_3 + \\ & 17592186044416u_6u_4^{48}u_3^{65}u_1^{44}x_5x_4x_2^2 + \end{aligned}$$



$$\begin{aligned}
& (-35184372088832u_6u_4^{48}u_3^{65}u_1^{45} - 17592186044416u_6u_4^{47}u_3^{66}u_1^{44} - \\
& 35184372088832u_4^{48}u_3^{66}u_1^{45})x_5x_4x_2 - \\
& 17592186044416u_6^2u_4^{47}u_3^{65}u_1^{44}x_4x_3x_2 + \\
& (35184372088832u_6^2u_4^{47}u_3^{65}u_1^{45} - 35184372088832u_6^2u_4^{46}u_3^{66}u_1^{45} + \\
& 17592186044416u_6^2u_4^{46}u_3^{66}u_1^{44})x_4x_3x_2 + \\
& 17592186044416u_6^2u_4^{47}u_3^{65}u_1^{44}x_4x_2 + \\
& (17592186044416u_6^2u_4^{48}u_3^{66}u_1^{44} - 35184372088832u_6^2u_4^{47}u_3^{65}u_1^{45})x_4x_2
\end{aligned}$$

S-pol added.

536. Creating S-polynomial from the pair  $(p_1, p_{363})$ .

Forming S-pol of  $p_1$  and  $p_{363}$ : Polynomial too big for output (text size is 2936 characters, number of terms is 8)

S-pol added.

537. Creating S-polynomial from the pair  $(p_1, p_{364})$ .

Forming S-pol of  $p_1$  and  $p_{364}$ : Polynomial too big for output (text size is 2822 characters, number of terms is 8)

S-pol added.

538. Creating S-polynomial from the pair  $(p_1, p_{365})$ .

Forming S-pol of  $p_1$  and  $p_{365}$ : Polynomial too big for output (text size is 6136 characters, number of terms is 16)

S-pol added.

539. Creating S-polynomial from the pair  $(p_1, p_{366})$ .

Forming S-pol of  $p_1$  and  $p_{366}$ : Polynomial too big for output (text size is 1157 characters, number of terms is 8)

S-pol added.

540. Creating S-polynomial from the pair  $(p_1, p_{367})$ .

Forming S-pol of  $p_1$  and  $p_{367}$ : Polynomial too big for output (text size is 1992 characters, number of terms is 8)

S-pol added.

541. Creating S-polynomial from the pair  $(p_1, p_{368})$ .

Forming S-pol of  $p_1$  and  $p_{368}$ : Polynomial too big for output (text size is 6188 characters, number of terms is 16)

S-pol added.

542. Creating S-polynomial from the pair  $(p_1, p_{369})$ .

Forming S-pol of  $p_1$  and  $p_{369}$ : Polynomial too big for output (text size is 1168 characters, number of terms is 8)

S-pol added.

543. Creating S-polynomial from the pair  $(p_1, p_{370})$ .  
 Forming S-pol of  $p_1$  and  $p_{370}$ : Polynomial too big for output (text size is 1994 characters, number of terms is 8)  
 S-pol added.
544. Creating S-polynomial from the pair  $(p_1, p_{371})$ .  
 Forming S-pol of  $p_1$  and  $p_{371}$ : Polynomial too big for output (text size is 2278 characters, number of terms is 8)  
 S-pol added.
545. Creating S-polynomial from the pair  $(p_1, p_{372})$ .  
 Forming S-pol of  $p_1$  and  $p_{372}$ : Polynomial too big for output (text size is 2368 characters, number of terms is 8)  
 S-pol added.
546. Creating S-polynomial from the pair  $(p_1, p_{373})$ .  
 Skipping pair  $p_1$  and  $p_{373}$  because gcd of their leading monoms is zero.
547. Creating S-polynomial from the pair  $(p_1, p_{374})$ .  
 Skipping pair  $p_1$  and  $p_{374}$  because gcd of their leading monoms is zero.
548. Creating S-polynomial from the pair  $(p_1, p_{375})$ .  
 Skipping pair  $p_1$  and  $p_{375}$  because gcd of their leading monoms is zero.
549. Creating S-polynomial from the pair  $(p_1, p_{376})$ .  
 Skipping pair  $p_1$  and  $p_{376}$  because gcd of their leading monoms is zero.
550. Creating S-polynomial from the pair  $(p_1, p_{377})$ .  
 Skipping pair  $p_1$  and  $p_{377}$  because gcd of their leading monoms is zero.
551. Creating S-polynomial from the pair  $(p_1, p_{378})$ .  
 Skipping pair  $p_1$  and  $p_{378}$  because gcd of their leading monoms is zero.
552. Creating S-polynomial from the pair  $(p_1, p_{379})$ .  
 Skipping pair  $p_1$  and  $p_{379}$  because gcd of their leading monoms is zero.
553. Creating S-polynomial from the pair  $(p_1, p_{380})$ .  
 Skipping pair  $p_1$  and  $p_{380}$  because gcd of their leading monoms is zero.
554. Creating S-polynomial from the pair  $(p_1, p_{381})$ .  
 Skipping pair  $p_1$  and  $p_{381}$  because gcd of their leading monoms is zero.
555. Creating S-polynomial from the pair  $(p_1, p_{382})$ .  
 Skipping pair  $p_1$  and  $p_{382}$  because gcd of their leading monoms is zero.
556. Creating S-polynomial from the pair  $(p_1, p_{383})$ .  
 Skipping pair  $p_1$  and  $p_{383}$  because gcd of their leading monoms is zero.

557. Creating S-polynomial from the pair  $(p_1, p_{384})$ .  
 Skipping pair  $p_1$  and  $p_{384}$  because gcd of their leading monoms is zero.
558. Creating S-polynomial from the pair  $(p_1, p_{385})$ .  
 Skipping pair  $p_1$  and  $p_{385}$  because gcd of their leading monoms is zero.
559. Creating S-polynomial from the pair  $(p_2, p_{107})$ .  
 Skipping pair  $p_2$  and  $p_{107}$  because gcd of their leading monoms is zero.
560. Creating S-polynomial from the pair  $(p_2, p_{108})$ .  
 Skipping pair  $p_2$  and  $p_{108}$  because gcd of their leading monoms is zero.
561. Creating S-polynomial from the pair  $(p_2, p_{109})$ .  
 Forming S-pol of  $p_2$  and  $p_{109}$ :

$$\begin{aligned}
 p_{1485} = & (131072u_4^{31}u_1^{17} - 524288u_4^{29}u_1^{19} + 262144u_4^{29}u_1^{18})x_5x_4x_3 + \\
 & (262144u_4^{31}u_1^{18} - 131072u_4^{31}u_1^{17})x_5x_4 + \\
 & (131072u_5^2u_4^{29}u_1^{17} - 65536u_5^2u_4^{29}u_1^{16})x_5x_3^2 - \\
 & 65536u_5^2u_4^{31}u_1^{16}x_5x_3 - 131072u_6u_4^{30}u_1^{17}x_4x_3^2 + \\
 & 131072u_6u_4^{30}u_1^{17}x_4x_3 + 65536u_6u_5^2u_4^{30}u_1^{16}x_3^2 - \\
 & 65536u_6u_5^2u_4^{30}u_1^{16}x_3
 \end{aligned}$$

S-pol added.

562. Creating S-polynomial from the pair  $(p_2, p_{110})$ .  
 Skipping pair  $p_2$  and  $p_{110}$  because gcd of their leading monoms is zero.
563. Creating S-polynomial from the pair  $(p_2, p_{111})$ .  
 Skipping pair  $p_2$  and  $p_{111}$  because gcd of their leading monoms is zero.
564. Creating S-polynomial from the pair  $(p_2, p_{112})$ .  
 Forming S-pol of  $p_2$  and  $p_{112}$ :

$$\begin{aligned}
 p_{1486} = & (65536u_4^{30}u_1^{16} - 262144u_4^{28}u_1^{18} + 131072u_4^{28}u_1^{17})x_5x_4x_3 + \\
 & (131072u_4^{30}u_1^{17} - 65536u_4^{30}u_1^{16})x_5x_4 + \\
 & (65536u_5^2u_4^{28}u_1^{16} - 32768u_5^2u_4^{28}u_1^{15})x_5x_3^2 - \\
 & 32768u_5^2u_4^{30}u_1^{15}x_5x_3 - 65536u_6u_4^{29}u_1^{16}x_4x_3^2 + \\
 & 65536u_6u_4^{29}u_1^{16}x_4x_3 + 32768u_6u_5^2u_4^{29}u_1^{15}x_3^2 - \\
 & 32768u_6u_5^2u_4^{29}u_1^{15}x_3
 \end{aligned}$$

S-pol added.

565. Creating S-polynomial from the pair  $(p_2, p_{113})$ .  
 Skipping pair  $p_2$  and  $p_{113}$  because gcd of their leading monoms is zero.

566. Creating S-polynomial from the pair  $(p_2, p_{114})$ .

Skipping pair  $p_2$  and  $p_{114}$  because gcd of their leading monoms is zero.

567. Creating S-polynomial from the pair  $(p_2, p_{115})$ .

Skipping pair  $p_2$  and  $p_{115}$  because gcd of their leading monoms is zero.

568. Creating S-polynomial from the pair  $(p_2, p_{116})$ .

Skipping pair  $p_2$  and  $p_{116}$  because gcd of their leading monoms is zero.

569. Creating S-polynomial from the pair  $(p_2, p_{117})$ .

Forming S-pol of  $p_2$  and  $p_{117}$ :

$$\begin{aligned} p_{1487} = & (1048576u_4^{27}u_1^{19} - 262144u_4^{27}u_1^{18} - 2097152u_4^{25}u_1^{21} + \\ & 1048576u_4^{25}u_1^{20})x_5x_4x_3 + \\ & (-262144u_4^{29}u_1^{18} + 1048576u_4^{27}u_1^{20} - 524288u_4^{27}u_1^{19})x_5x_4 + \\ & (-524288u_6u_4^{26}u_1^{19} + 262144u_6u_4^{26}u_1^{18})x_4x_3^2 + \\ & 262144u_6u_4^{28}u_1^{18}x_4x_3 \end{aligned}$$

S-pol added.

570. Creating S-polynomial from the pair  $(p_2, p_{118})$ .

Forming S-pol of  $p_2$  and  $p_{118}$ :

$$\begin{aligned} p_{1488} = & (524288u_4^{26}u_1^{18} - 131072u_4^{26}u_1^{17} - 1048576u_4^{24}u_1^{20} + \\ & 524288u_4^{24}u_1^{19})x_5x_4x_3 + \\ & (-131072u_4^{28}u_1^{17} + 524288u_4^{26}u_1^{19} - 262144u_4^{26}u_1^{18})x_5x_4 + \\ & (-262144u_6u_4^{25}u_1^{18} + 131072u_6u_4^{25}u_1^{17})x_4x_3^2 + \\ & 131072u_6u_4^{27}u_1^{17}x_4x_3 \end{aligned}$$

S-pol added.

571. Creating S-polynomial from the pair  $(p_2, p_{119})$ .

Skipping pair  $p_2$  and  $p_{119}$  because gcd of their leading monoms is zero.

572. Creating S-polynomial from the pair  $(p_2, p_{120})$ .

Skipping pair  $p_2$  and  $p_{120}$  because gcd of their leading monoms is zero.

573. Creating S-polynomial from the pair  $(p_2, p_{121})$ .

Skipping pair  $p_2$  and  $p_{121}$  because gcd of their leading monoms is zero.

574. Creating S-polynomial from the pair  $(p_2, p_{122})$ .

Skipping pair  $p_2$  and  $p_{122}$  because gcd of their leading monoms is zero.

575. Creating S-polynomial from the pair  $(p_2, p_{123})$ .

Forming S-pol of  $p_2$  and  $p_{123}$ : Polynomial too big for output (text size is 1012 characters, number of terms is 8)

S-pol added.

576. Creating S-polynomial from the pair  $(p_2, p_{124})$ .  
 Skipping pair  $p_2$  and  $p_{124}$  because gcd of their leading monoms is zero.
577. Creating S-polynomial from the pair  $(p_2, p_{125})$ .  
 Skipping pair  $p_2$  and  $p_{125}$  because gcd of their leading monoms is zero.
578. Creating S-polynomial from the pair  $(p_2, p_{126})$ .  
 Skipping pair  $p_2$  and  $p_{126}$  because gcd of their leading monoms is zero.
579. Creating S-polynomial from the pair  $(p_2, p_{127})$ .  
 Forming S-pol of  $p_2$  and  $p_{127}$ : Polynomial too big for output (text size is 1004 characters, number of terms is 8)  
 S-pol added.
580. Creating S-polynomial from the pair  $(p_2, p_{128})$ .  
 Skipping pair  $p_2$  and  $p_{128}$  because gcd of their leading monoms is zero.
581. Creating S-polynomial from the pair  $(p_2, p_{129})$ .  
 Skipping pair  $p_2$  and  $p_{129}$  because gcd of their leading monoms is zero.
582. Creating S-polynomial from the pair  $(p_2, p_{130})$ .  
 Skipping pair  $p_2$  and  $p_{130}$  because gcd of their leading monoms is zero.
583. Creating S-polynomial from the pair  $(p_2, p_{131})$ .  
 Skipping pair  $p_2$  and  $p_{131}$  because gcd of their leading monoms is zero.
584. Creating S-polynomial from the pair  $(p_2, p_{132})$ .  
 Skipping pair  $p_2$  and  $p_{132}$  because gcd of their leading monoms is zero.
585. Creating S-polynomial from the pair  $(p_2, p_{133})$ .  
 Skipping pair  $p_2$  and  $p_{133}$  because gcd of their leading monoms is zero.
586. Creating S-polynomial from the pair  $(p_2, p_{134})$ .  
 Forming S-pol of  $p_2$  and  $p_{134}$ : Polynomial too big for output (text size is 1012 characters, number of terms is 8)  
 S-pol added.
587. Creating S-polynomial from the pair  $(p_2, p_{135})$ .  
 Skipping pair  $p_2$  and  $p_{135}$  because gcd of their leading monoms is zero.
588. Creating S-polynomial from the pair  $(p_2, p_{136})$ .  
 Skipping pair  $p_2$  and  $p_{136}$  because gcd of their leading monoms is zero.
589. Creating S-polynomial from the pair  $(p_2, p_{137})$ .  
 Skipping pair  $p_2$  and  $p_{137}$  because gcd of their leading monoms is zero.
590. Creating S-polynomial from the pair  $(p_2, p_{138})$ .  
 Forming S-pol of  $p_2$  and  $p_{138}$ : Polynomial too big for output (text size is 1004 characters, number of terms is 8)  
 S-pol added.

591. Creating S-polynomial from the pair  $(p_2, p_{139})$ .  
 Skipping pair  $p_2$  and  $p_{139}$  because gcd of their leading monoms is zero.
592. Creating S-polynomial from the pair  $(p_2, p_{140})$ .  
 Skipping pair  $p_2$  and  $p_{140}$  because gcd of their leading monoms is zero.
593. Creating S-polynomial from the pair  $(p_2, p_{141})$ .  
 Forming S-pol of  $p_2$  and  $p_{141}$ : Polynomial too big for output (text size is 2179 characters, number of terms is 8)  
 S-pol added.
594. Creating S-polynomial from the pair  $(p_2, p_{142})$ .  
 Forming S-pol of  $p_2$  and  $p_{142}$ : Polynomial too big for output (text size is 1289 characters, number of terms is 8)  
 S-pol added.
595. Creating S-polynomial from the pair  $(p_2, p_{143})$ .  
 Forming S-pol of  $p_2$  and  $p_{143}$ : Polynomial too big for output (text size is 1085 characters, number of terms is 8)  
 S-pol added.
596. Creating S-polynomial from the pair  $(p_2, p_{144})$ .  
 Forming S-pol of  $p_2$  and  $p_{144}$ : Polynomial too big for output (text size is 1085 characters, number of terms is 8)  
 S-pol added.
597. Creating S-polynomial from the pair  $(p_2, p_{145})$ .  
 Forming S-pol of  $p_2$  and  $p_{145}$ :

$$\begin{aligned}
 p_{1489} = & (-268435456u_4^{45}u_1^{27} + 67108864u_4^{45}u_1^{26} + 536870912u_4^{43}u_1^{29} - \\
 & 268435456u_4^{43}u_1^{28})x_5x_4x_3 + \\
 & (67108864u_4^{47}u_1^{26} - 268435456u_4^{45}u_1^{28} + 134217728u_4^{45}u_1^{27})x_5x_4 + \\
 & (33554432u_5^2u_4^{45}u_1^{25} - 134217728u_5^2u_4^{43}u_1^{27} + \\
 & 67108864u_5^2u_4^{43}u_1^{26})x_5x_3^2 + \\
 & (67108864u_5^2u_4^{45}u_1^{26} - 33554432u_5^2u_4^{45}u_1^{25})x_5x_3 + \\
 & (134217728u_6u_4^{44}u_1^{27} - 67108864u_6u_4^{44}u_1^{26})x_4x_3^2 - \\
 & 67108864u_6u_4^{46}u_1^{26}x_4x_3 + \\
 & (-67108864u_6u_5^2u_4^{44}u_1^{26} + 33554432u_6u_5^2u_4^{44}u_1^{25})x_3^2 + \\
 & 33554432u_6u_5^2u_4^{46}u_1^{25}x_3
 \end{aligned}$$

S-pol added.

598. Creating S-polynomial from the pair  $(p_2, p_{146})$ .

Forming S-pol of  $p_2$  and  $p_{146}$ : Polynomial too big for output (text size is 1080 characters, number of terms is 8)

S-pol added.

599. Creating S-polynomial from the pair  $(p_2, p_{147})$ .

Forming S-pol of  $p_2$  and  $p_{147}$ : Polynomial too big for output (text size is 1080 characters, number of terms is 8)

S-pol added.

600. Creating S-polynomial from the pair  $(p_2, p_{148})$ .

Forming S-pol of  $p_2$  and  $p_{148}$ : Polynomial too big for output (text size is 1159 characters, number of terms is 8)

S-pol added.

601. Creating S-polynomial from the pair  $(p_2, p_{149})$ .

Forming S-pol of  $p_2$  and  $p_{149}$ :

$$\begin{aligned} p_{1490} = & (-33554432u_4^{43}u_1^{24} + 8388608u_4^{43}u_1^{23} + 67108864u_4^{41}u_1^{26} - \\ & 33554432u_4^{41}u_1^{25})x_5x_4x_3 + \\ & (8388608u_4^{45}u_1^{23} - 33554432u_4^{43}u_1^{25} + 16777216u_4^{43}u_1^{24})x_5x_4 + \\ & (4194304u_5^2u_4^{43}u_1^{22} - 16777216u_5^2u_4^{41}u_1^{24} + \\ & 8388608u_5^2u_4^{41}u_1^{23})x_5x_3^2 + \\ & (8388608u_5^2u_4^{43}u_1^{23} - 4194304u_5^2u_4^{43}u_1^{22})x_5x_3 + \\ & (16777216u_6u_4^{42}u_1^{24} - 8388608u_6u_4^{42}u_1^{23})x_4x_3^2 - \\ & 8388608u_6u_4^{44}u_1^{23}x_4x_3 + \\ & (-8388608u_6u_5^2u_4^{42}u_1^{23} + 4194304u_6u_5^2u_4^{42}u_1^{22})x_3^2 + \\ & 4194304u_6u_5^2u_4^{44}u_1^{22}x_3 \end{aligned}$$

S-pol added.

602. Creating S-polynomial from the pair  $(p_2, p_{150})$ .

Forming S-pol of  $p_2$  and  $p_{150}$ :

$$\begin{aligned} p_{1491} = & (-131072u_4^{20}u_1^{16} + 32768u_4^{20}u_1^{15} + 262144u_4^{18}u_1^{18} - \\ & 131072u_4^{18}u_1^{17})x_5x_4x_3 + \\ & (32768u_4^{22}u_1^{15} - 131072u_4^{20}u_1^{17} + 65536u_4^{20}u_1^{16})x_5x_4 + \\ & (65536u_6u_4^{19}u_1^{16} - 32768u_6u_4^{19}u_1^{15})x_4x_3^2 - 32768u_6u_4^{21}u_1^{15}x_4x_3 \end{aligned}$$

S-pol added.

603. Creating S-polynomial from the pair  $(p_2, p_{151})$ .

Forming S-pol of  $p_2$  and  $p_{151}$ :

$$\begin{aligned} p_{1492} = & (-65536u_4^{19}u_1^{15} + 16384u_4^{19}u_1^{14} + 131072u_4^{17}u_1^{17} - \\ & 65536u_4^{17}u_1^{16})x_5x_4x_3 + \\ & (16384u_4^{21}u_1^{14} - 65536u_4^{19}u_1^{16} + 32768u_4^{19}u_1^{15})x_5x_4 + \\ & (32768u_6u_4^{18}u_1^{15} - 16384u_6u_4^{18}u_1^{14})x_4x_3^2 - 16384u_6u_4^{20}u_1^{14}x_4x_3 \end{aligned}$$

S-pol added.

604. Creating S-polynomial from the pair  $(p_2, p_{152})$ .

Skipping pair  $p_2$  and  $p_{152}$  because gcd of their leading monoms is zero.

605. Creating S-polynomial from the pair  $(p_2, p_{153})$ .

Skipping pair  $p_2$  and  $p_{153}$  because gcd of their leading monoms is zero.

606. Creating S-polynomial from the pair  $(p_2, p_{154})$ .

Skipping pair  $p_2$  and  $p_{154}$  because gcd of their leading monoms is zero.

607. Creating S-polynomial from the pair  $(p_2, p_{155})$ .

Skipping pair  $p_2$  and  $p_{155}$  because gcd of their leading monoms is zero.

608. Creating S-polynomial from the pair  $(p_2, p_{156})$ .

Skipping pair  $p_2$  and  $p_{156}$  because gcd of their leading monoms is zero.

609. Creating S-polynomial from the pair  $(p_2, p_{157})$ .

Skipping pair  $p_2$  and  $p_{157}$  because gcd of their leading monoms is zero.

610. Creating S-polynomial from the pair  $(p_2, p_{158})$ .

Forming S-pol of  $p_2$  and  $p_{158}$ : Polynomial too big for output (text size is 1153 characters, number of terms is 8)

S-pol added.

611. Creating S-polynomial from the pair  $(p_2, p_{159})$ .

Skipping pair  $p_2$  and  $p_{159}$  because gcd of their leading monoms is zero.

612. Creating S-polynomial from the pair  $(p_2, p_{160})$ .

Skipping pair  $p_2$  and  $p_{160}$  because gcd of their leading monoms is zero.

613. Creating S-polynomial from the pair  $(p_2, p_{161})$ .

Skipping pair  $p_2$  and  $p_{161}$  because gcd of their leading monoms is zero.

614. Creating S-polynomial from the pair  $(p_2, p_{162})$ .

Forming S-pol of  $p_2$  and  $p_{162}$ : Polynomial too big for output (text size is 1145 characters, number of terms is 8)

S-pol added.

615. Creating S-polynomial from the pair  $(p_2, p_{163})$ .

Skipping pair  $p_2$  and  $p_{163}$  because gcd of their leading monoms is zero.



616. Creating S-polynomial from the pair  $(p_2, p_{164})$ .  
 Skipping pair  $p_2$  and  $p_{164}$  because gcd of their leading monoms is zero.
617. Creating S-polynomial from the pair  $(p_2, p_{165})$ .  
 Skipping pair  $p_2$  and  $p_{165}$  because gcd of their leading monoms is zero.
618. Creating S-polynomial from the pair  $(p_2, p_{166})$ .  
 Skipping pair  $p_2$  and  $p_{166}$  because gcd of their leading monoms is zero.
619. Creating S-polynomial from the pair  $(p_2, p_{167})$ .  
 Skipping pair  $p_2$  and  $p_{167}$  because gcd of their leading monoms is zero.
620. Creating S-polynomial from the pair  $(p_2, p_{168})$ .  
 Skipping pair  $p_2$  and  $p_{168}$  because gcd of their leading monoms is zero.
621. Creating S-polynomial from the pair  $(p_2, p_{169})$ .  
 Forming S-pol of  $p_2$  and  $p_{169}$ : Polynomial too big for output (text size is 1153 characters, number of terms is 8)  
 S-pol added.
622. Creating S-polynomial from the pair  $(p_2, p_{170})$ .  
 Skipping pair  $p_2$  and  $p_{170}$  because gcd of their leading monoms is zero.
623. Creating S-polynomial from the pair  $(p_2, p_{171})$ .  
 Skipping pair  $p_2$  and  $p_{171}$  because gcd of their leading monoms is zero.
624. Creating S-polynomial from the pair  $(p_2, p_{172})$ .  
 Skipping pair  $p_2$  and  $p_{172}$  because gcd of their leading monoms is zero.
625. Creating S-polynomial from the pair  $(p_2, p_{173})$ .  
 Forming S-pol of  $p_2$  and  $p_{173}$ : Polynomial too big for output (text size is 1145 characters, number of terms is 8)  
 S-pol added.
626. Creating S-polynomial from the pair  $(p_2, p_{174})$ .  
 Forming S-pol of  $p_2$  and  $p_{174}$ :  

$$p_{1493} = (16384u_4^{25}u_1^{14} - 65536u_4^{23}u_1^{16} + 32768u_4^{23}u_1^{15})x_5x_4x_3 +$$

$$(32768u_4^{25}u_1^{15} - 16384u_4^{25}u_1^{14})x_5x_4 - 16384u_6u_4^{24}u_1^{14}x_4x_3^2 +$$

$$16384u_6u_4^{24}u_1^{14}x_4x_3$$
  
 S-pol added.
627. Creating S-polynomial from the pair  $(p_2, p_{175})$ .  
 Forming S-pol of  $p_2$  and  $p_{175}$ :  

$$p_{1494} = (8192u_4^{24}u_1^{13} - 32768u_4^{22}u_1^{15} + 16384u_4^{22}u_1^{14})x_5x_4x_3 +$$

$$(16384u_4^{24}u_1^{14} - 8192u_4^{24}u_1^{13})x_5x_4 - 8192u_6u_4^{23}u_1^{13}x_4x_3^2 +$$

$$8192u_6u_4^{23}u_1^{13}x_4x_3$$
  
 S-pol added.

628. Creating S-polynomial from the pair  $(p_2, p_{176})$ .

Forming S-pol of  $p_2$  and  $p_{176}$ : Polynomial too big for output (text size is 2295 characters, number of terms is 8)

S-pol added.

629. Creating S-polynomial from the pair  $(p_2, p_{177})$ .

Forming S-pol of  $p_2$  and  $p_{177}$ : Polynomial too big for output (text size is 1303 characters, number of terms is 8)

S-pol added.

630. Creating S-polynomial from the pair  $(p_2, p_{178})$ .

Forming S-pol of  $p_2$  and  $p_{178}$ :

$$\begin{aligned} p_{1495} = & 4398046511104u_6u_4^{55}u_2^{49}u_1^{42}x_5x_4x_3^2 + \\ & (4398046511104u_6u_4^{56}u_2^{48}u_1^{42} + 17592186044416u_4^{56}u_2^{47}u_1^{44} - \\ & 8796093022208u_4^{56}u_2^{47}u_1^{43})x_5x_4x_3x_1 + \\ & (-4398046511104u_6u_4^{56}u_2^{48}u_1^{42} - 8796093022208u_6u_4^{55}u_2^{49}u_1^{43} - \\ & 8796093022208u_4^{56}u_2^{49}u_1^{43})x_5x_4x_3 + \\ & (8796093022208u_6u_4^{57}u_2^{47}u_1^{43} - 4398046511104u_6u_4^{57}u_2^{47}u_1^{42})x_5x_4x_1 - \\ & 4398046511104u_6^2u_4^{55}u_2^{48}u_1^{42}x_4x_3^2x_1 + \\ & 4398046511104u_6^2u_4^{55}u_2^{48}u_1^{42}x_4x_3^2 + \\ & (-8796093022208u_6^2u_4^{56}u_2^{47}u_1^{43} + 4398046511104u_6^2u_4^{56}u_2^{47}u_1^{42} + \\ & 8796093022208u_6^2u_4^{55}u_2^{48}u_1^{43})x_4x_3x_1 + \\ & (4398046511104u_6^2u_4^{56}u_2^{49}u_1^{42} - 8796093022208u_6^2u_4^{55}u_2^{48}u_1^{43})x_4x_3 \end{aligned}$$

S-pol added.

631. Creating S-polynomial from the pair  $(p_2, p_{179})$ .

Forming S-pol of  $p_2$  and  $p_{179}$ :

$$\begin{aligned} p_{1496} = & 4398046511104u_6u_4^{55}u_3^{49}u_1^{42}x_5x_4x_3^2 + \\ & (4398046511104u_6u_4^{56}u_3^{48}u_1^{42} + 17592186044416u_4^{56}u_3^{47}u_1^{44} - \\ & 8796093022208u_4^{56}u_3^{47}u_1^{43})x_5x_4x_3x_2 + \\ & (-4398046511104u_6u_4^{56}u_3^{48}u_1^{42} - 8796093022208u_6u_4^{55}u_3^{49}u_1^{43} - \\ & 8796093022208u_4^{56}u_3^{49}u_1^{43})x_5x_4x_3 + \\ & (8796093022208u_6u_4^{57}u_3^{47}u_1^{43} - 4398046511104u_6u_4^{57}u_3^{47}u_1^{42})x_5x_4x_2 - \\ & 4398046511104u_6^2u_4^{55}u_3^{48}u_1^{42}x_4x_3^2x_2 + \\ & 4398046511104u_6^2u_4^{55}u_3^{48}u_1^{42}x_4x_3^2 + \\ & (-8796093022208u_6^2u_4^{56}u_3^{47}u_1^{43} + 4398046511104u_6^2u_4^{56}u_3^{47}u_1^{42} + \\ & 8796093022208u_6^2u_4^{55}u_3^{48}u_1^{43})x_4x_3x_2 + \\ & (4398046511104u_6^2u_4^{56}u_3^{49}u_1^{42} - 8796093022208u_6^2u_4^{55}u_3^{48}u_1^{43})x_4x_3 \end{aligned}$$

S-pol added.

632. Creating S-polynomial from the pair  $(p_2, p_{180})$ .

Forming S-pol of  $p_2$  and  $p_{180}$ :

$$\begin{aligned} p_{1497} = & (-1048576u_4^{32}u_1^{20} + 4194304u_4^{30}u_1^{22} - 2097152u_4^{30}u_1^{21})x_5x_4x_3 + \\ & (-2097152u_4^{32}u_1^{21} + 1048576u_4^{32}u_1^{20})x_5x_4 + \\ & (-1048576u_5^2u_4^{30}u_1^{20} + 524288u_5^2u_4^{30}u_1^{19})x_5x_3^2 + \\ & 524288u_5^2u_4^{32}u_1^{19}x_5x_3 + 1048576u_6u_4^{31}u_1^{20}x_4x_3^2 - \\ & 1048576u_6u_4^{31}u_1^{20}x_4x_3 - 524288u_6u_5^2u_4^{31}u_1^{19}x_3^2 + \\ & 524288u_6u_5^2u_4^{31}u_1^{19}x_3 \end{aligned}$$

S-pol added.

633. Creating S-polynomial from the pair  $(p_2, p_{181})$ .

Forming S-pol of  $p_2$  and  $p_{181}$ :

$$\begin{aligned} p_{1498} = & 2199023255552u_6u_4^{55}u_3^{48}u_1^{41}x_5x_4x_3^2 + \\ & (2199023255552u_6u_4^{56}u_3^{47}u_1^{41} + 8796093022208u_4^{56}u_3^{46}u_1^{43} - \\ & 4398046511104u_4^{56}u_3^{46}u_1^{42})x_5x_4x_3x_2 + \\ & (-2199023255552u_6u_4^{56}u_3^{47}u_1^{41} - 4398046511104u_6u_4^{55}u_3^{48}u_1^{42} - \\ & 4398046511104u_4^{56}u_3^{48}u_1^{42})x_5x_4x_3 + \\ & (4398046511104u_6u_4^{57}u_3^{46}u_1^{42} - 2199023255552u_6u_4^{57}u_3^{46}u_1^{41})x_5x_4x_2 - \\ & 2199023255552u_6^2u_4^{55}u_3^{47}u_1^{41}x_4x_3^2x_2 + \\ & 2199023255552u_6^2u_4^{55}u_3^{47}u_1^{41}x_4x_3^2 + \\ & (-4398046511104u_6^2u_4^{56}u_3^{46}u_1^{42} + 2199023255552u_6^2u_4^{56}u_3^{46}u_1^{41} + \\ & 4398046511104u_6^2u_4^{55}u_3^{47}u_1^{42})x_4x_3x_2 + \\ & (2199023255552u_6^2u_4^{56}u_3^{48}u_1^{41} - 4398046511104u_6^2u_4^{55}u_3^{47}u_1^{42})x_4x_3 \end{aligned}$$

S-pol added.

634. Creating S-polynomial from the pair  $(p_2, p_{182})$ .

Forming S-pol of  $p_2$  and  $p_{182}$ :

$$\begin{aligned} p_{1499} = & 2199023255552u_6u_4^{55}u_2^{48}u_1^{41}x_5x_4x_3^2 + \\ & (2199023255552u_6u_4^{56}u_2^{47}u_1^{41} + 8796093022208u_4^{56}u_2^{46}u_1^{43} - \\ & 4398046511104u_4^{56}u_2^{46}u_1^{42})x_5x_4x_3x_1 + \\ & (-2199023255552u_6u_4^{56}u_2^{47}u_1^{41} - 4398046511104u_6u_4^{55}u_2^{48}u_1^{42} - \\ & 4398046511104u_4^{56}u_2^{48}u_1^{42})x_5x_4x_3 + \\ & (4398046511104u_6u_4^{57}u_2^{46}u_1^{42} - 2199023255552u_6u_4^{57}u_2^{46}u_1^{41})x_5x_4x_1 - \\ & 2199023255552u_6^2u_4^{55}u_2^{47}u_1^{41}x_4x_3^2x_1 + \\ & 2199023255552u_6^2u_4^{55}u_2^{47}u_1^{41}x_4x_3^2 + \\ & (-4398046511104u_6^2u_4^{56}u_2^{46}u_1^{42} + 2199023255552u_6^2u_4^{56}u_2^{46}u_1^{41} + \\ & 4398046511104u_6^2u_4^{55}u_2^{47}u_1^{42})x_4x_3x_1 + \\ & (2199023255552u_6^2u_4^{56}u_2^{48}u_1^{41} - 4398046511104u_6^2u_4^{55}u_2^{47}u_1^{42})x_4x_3 \end{aligned}$$

S-pol added.

635. Creating S-polynomial from the pair  $(p_2, p_{183})$ .  
 Forming S-pol of  $p_2$  and  $p_{183}$ : Polynomial too big for output (text size is 1347 characters, number of terms is 8)  
 S-pol added.
636. Creating S-polynomial from the pair  $(p_2, p_{184})$ .  
 Forming S-pol of  $p_2$  and  $p_{184}$ :  

$$p_{1500} = (-131072u_4^{25}u_1^{17} + 524288u_4^{23}u_1^{19} - 262144u_4^{23}u_1^{18})x_5x_4x_3 +$$

$$(-262144u_4^{25}u_1^{18} + 131072u_4^{25}u_1^{17})x_5x_4 +$$

$$(-131072u_5^2u_4^{23}u_1^{17} + 65536u_5^2u_4^{23}u_1^{16})x_5x_3^2 +$$

$$65536u_5^2u_4^{25}u_1^{16}x_5x_3 + 131072u_6u_4^{24}u_1^{17}x_4x_3^2 -$$

$$131072u_6u_4^{24}u_1^{17}x_4x_3 - 65536u_6u_5^2u_4^{24}u_1^{16}x_3^2 +$$

$$65536u_6u_5^2u_4^{24}u_1^{16}x_3$$
  
 S-pol added.
637. Creating S-polynomial from the pair  $(p_2, p_{185})$ .  
 Skipping pair  $p_2$  and  $p_{185}$  because gcd of their leading monoms is zero.
638. Creating S-polynomial from the pair  $(p_2, p_{186})$ .  
 Skipping pair  $p_2$  and  $p_{186}$  because gcd of their leading monoms is zero.
639. Creating S-polynomial from the pair  $(p_2, p_{187})$ .  
 Skipping pair  $p_2$  and  $p_{187}$  because gcd of their leading monoms is zero.
640. Creating S-polynomial from the pair  $(p_2, p_{188})$ .  
 Skipping pair  $p_2$  and  $p_{188}$  because gcd of their leading monoms is zero.
641. Creating S-polynomial from the pair  $(p_2, p_{189})$ .  
 Forming S-pol of  $p_2$  and  $p_{189}$ : Polynomial too big for output (text size is 1257 characters, number of terms is 8)  
 S-pol added.
642. Creating S-polynomial from the pair  $(p_2, p_{190})$ .  
 Skipping pair  $p_2$  and  $p_{190}$  because gcd of their leading monoms is zero.
643. Creating S-polynomial from the pair  $(p_2, p_{191})$ .  
 Skipping pair  $p_2$  and  $p_{191}$  because gcd of their leading monoms is zero.
644. Creating S-polynomial from the pair  $(p_2, p_{192})$ .  
 Skipping pair  $p_2$  and  $p_{192}$  because gcd of their leading monoms is zero.
645. Creating S-polynomial from the pair  $(p_2, p_{193})$ .  
 Forming S-pol of  $p_2$  and  $p_{193}$ : Polynomial too big for output (text size is 1249 characters, number of terms is 8)  
 S-pol added.

646. Creating S-polynomial from the pair  $(p_2, p_{194})$ .  
 Skipping pair  $p_2$  and  $p_{194}$  because gcd of their leading monoms is zero.
647. Creating S-polynomial from the pair  $(p_2, p_{195})$ .  
 Skipping pair  $p_2$  and  $p_{195}$  because gcd of their leading monoms is zero.
648. Creating S-polynomial from the pair  $(p_2, p_{196})$ .  
 Skipping pair  $p_2$  and  $p_{196}$  because gcd of their leading monoms is zero.
649. Creating S-polynomial from the pair  $(p_2, p_{197})$ .  
 Skipping pair  $p_2$  and  $p_{197}$  because gcd of their leading monoms is zero.
650. Creating S-polynomial from the pair  $(p_2, p_{198})$ .  
 Forming S-pol of  $p_2$  and  $p_{198}$ : Polynomial too big for output (text size is 1257 characters, number of terms is 8)  
 S-pol added.
651. Creating S-polynomial from the pair  $(p_2, p_{199})$ .  
 Skipping pair  $p_2$  and  $p_{199}$  because gcd of their leading monoms is zero.
652. Creating S-polynomial from the pair  $(p_2, p_{200})$ .  
 Skipping pair  $p_2$  and  $p_{200}$  because gcd of their leading monoms is zero.
653. Creating S-polynomial from the pair  $(p_2, p_{201})$ .  
 Skipping pair  $p_2$  and  $p_{201}$  because gcd of their leading monoms is zero.
654. Creating S-polynomial from the pair  $(p_2, p_{202})$ .  
 Forming S-pol of  $p_2$  and  $p_{202}$ : Polynomial too big for output (text size is 1249 characters, number of terms is 8)  
 S-pol added.
655. Creating S-polynomial from the pair  $(p_2, p_{203})$ .  
 Forming S-pol of  $p_2$  and  $p_{203}$ : Polynomial too big for output (text size is 2401 characters, number of terms is 8)  
 S-pol added.
656. Creating S-polynomial from the pair  $(p_2, p_{204})$ .  
 Forming S-pol of  $p_2$  and  $p_{204}$ : Polynomial too big for output (text size is 1391 characters, number of terms is 8)  
 S-pol added.
657. Creating S-polynomial from the pair  $(p_2, p_{205})$ .  
 Forming S-pol of  $p_2$  and  $p_{205}$ : Polynomial too big for output (text size is 1018 characters, number of terms is 8)  
 S-pol added.

658. Creating S-polynomial from the pair  $(p_2, p_{206})$ .

Forming S-pol of  $p_2$  and  $p_{206}$ : Polynomial too big for output (text size is 1018 characters, number of terms is 8)

S-pol added.

659. Creating S-polynomial from the pair  $(p_2, p_{207})$ .

Forming S-pol of  $p_2$  and  $p_{207}$ :

$$\begin{aligned} p_{1501} = & (16777216u_5u_4^{43}u_1^{24} - 67108864u_5u_4^{41}u_1^{26} + 33554432u_5u_4^{41}u_1^{25})x_5x_4x_3 + \\ & (33554432u_5u_4^{43}u_1^{25} - 16777216u_5u_4^{43}u_1^{24})x_5x_4 + \\ & (16777216u_5^3u_4^{41}u_1^{24} - 8388608u_5^3u_4^{41}u_1^{23})x_5x_3^2 - \\ & 8388608u_5^3u_4^{43}u_1^{23}x_5x_3 - 16777216u_6u_5u_4^{42}u_1^{24}x_4x_3^2 + \\ & 16777216u_6u_5u_4^{42}u_1^{24}x_4x_3 + 8388608u_6u_5^3u_4^{42}u_1^{23}x_3^2 - \\ & 8388608u_6u_5^3u_4^{42}u_1^{23}x_3 \end{aligned}$$

S-pol added.

660. Creating S-polynomial from the pair  $(p_2, p_{208})$ .

Forming S-pol of  $p_2$  and  $p_{208}$ : Polynomial too big for output (text size is 1010 characters, number of terms is 8)

S-pol added.

661. Creating S-polynomial from the pair  $(p_2, p_{209})$ .

Forming S-pol of  $p_2$  and  $p_{209}$ : Polynomial too big for output (text size is 1010 characters, number of terms is 8)

S-pol added.

662. Creating S-polynomial from the pair  $(p_2, p_{210})$ .

Forming S-pol of  $p_2$  and  $p_{210}$ : Polynomial too big for output (text size is 1389 characters, number of terms is 8)

S-pol added.

663. Creating S-polynomial from the pair  $(p_2, p_{211})$ .

Forming S-pol of  $p_2$  and  $p_{211}$ :

$$\begin{aligned} p_{1502} = & (8388608u_5u_4^{42}u_1^{23} - 33554432u_5u_4^{40}u_1^{25} + 16777216u_5u_4^{40}u_1^{24})x_5x_4x_3 + \\ & (16777216u_5u_4^{42}u_1^{24} - 8388608u_5u_4^{42}u_1^{23})x_5x_4 + \\ & (8388608u_5^3u_4^{40}u_1^{23} - 4194304u_5^3u_4^{40}u_1^{22})x_5x_3^2 - \\ & 4194304u_5^3u_4^{42}u_1^{22}x_5x_3 - 8388608u_6u_5u_4^{41}u_1^{23}x_4x_3^2 + \\ & 8388608u_6u_5u_4^{41}u_1^{23}x_4x_3 + 4194304u_6u_5^3u_4^{41}u_1^{22}x_3^2 - \\ & 4194304u_6u_5^3u_4^{41}u_1^{22}x_3 \end{aligned}$$

S-pol added.

664. Creating S-polynomial from the pair  $(p_2, p_{212})$ .  
 Skipping pair  $p_2$  and  $p_{212}$  because gcd of their leading monoms is zero.
665. Creating S-polynomial from the pair  $(p_2, p_{213})$ .  
 Skipping pair  $p_2$  and  $p_{213}$  because gcd of their leading monoms is zero.
666. Creating S-polynomial from the pair  $(p_2, p_{214})$ .  
 Skipping pair  $p_2$  and  $p_{214}$  because gcd of their leading monoms is zero.
667. Creating S-polynomial from the pair  $(p_2, p_{215})$ .  
 Skipping pair  $p_2$  and  $p_{215}$  because gcd of their leading monoms is zero.
668. Creating S-polynomial from the pair  $(p_2, p_{216})$ .  
 Forming S-pol of  $p_2$  and  $p_{216}$ : Polynomial too big for output (text size is 11123 characters, number of terms is 16)  
 S-pol added.
669. Creating S-polynomial from the pair  $(p_2, p_{217})$ .  
 Skipping pair  $p_2$  and  $p_{217}$  because gcd of their leading monoms is zero.
670. Creating S-polynomial from the pair  $(p_2, p_{218})$ .  
 Skipping pair  $p_2$  and  $p_{218}$  because gcd of their leading monoms is zero.
671. Creating S-polynomial from the pair  $(p_2, p_{219})$ .  
 Skipping pair  $p_2$  and  $p_{219}$  because gcd of their leading monoms is zero.
672. Creating S-polynomial from the pair  $(p_2, p_{220})$ .  
 Forming S-pol of  $p_2$  and  $p_{220}$ : Polynomial too big for output (text size is 11086 characters, number of terms is 16)  
 S-pol added.
673. Creating S-polynomial from the pair  $(p_2, p_{221})$ .  
 Skipping pair  $p_2$  and  $p_{221}$  because gcd of their leading monoms is zero.
674. Creating S-polynomial from the pair  $(p_2, p_{222})$ .  
 Skipping pair  $p_2$  and  $p_{222}$  because gcd of their leading monoms is zero.
675. Creating S-polynomial from the pair  $(p_2, p_{223})$ .  
 Skipping pair  $p_2$  and  $p_{223}$  because gcd of their leading monoms is zero.
676. Creating S-polynomial from the pair  $(p_2, p_{224})$ .  
 Skipping pair  $p_2$  and  $p_{224}$  because gcd of their leading monoms is zero.
677. Creating S-polynomial from the pair  $(p_2, p_{225})$ .  
 Skipping pair  $p_2$  and  $p_{225}$  because gcd of their leading monoms is zero.
678. Creating S-polynomial from the pair  $(p_2, p_{226})$ .  
 Skipping pair  $p_2$  and  $p_{226}$  because gcd of their leading monoms is zero.

679. Creating S-polynomial from the pair  $(p_2, p_{227})$ .  
 Skipping pair  $p_2$  and  $p_{227}$  because gcd of their leading monoms is zero.
680. Creating S-polynomial from the pair  $(p_2, p_{228})$ .  
 Skipping pair  $p_2$  and  $p_{228}$  because gcd of their leading monoms is zero.
681. Creating S-polynomial from the pair  $(p_2, p_{229})$ .  
 Skipping pair  $p_2$  and  $p_{229}$  because gcd of their leading monoms is zero.
682. Creating S-polynomial from the pair  $(p_2, p_{230})$ .  
 Skipping pair  $p_2$  and  $p_{230}$  because gcd of their leading monoms is zero.
683. Creating S-polynomial from the pair  $(p_2, p_{231})$ .  
 Forming S-pol of  $p_2$  and  $p_{231}$ : Polynomial too big for output (text size is 5790 characters, number of terms is 8)  
 S-pol added.
684. Creating S-polynomial from the pair  $(p_2, p_{232})$ .  
 Skipping pair  $p_2$  and  $p_{232}$  because gcd of their leading monoms is zero.
685. Creating S-polynomial from the pair  $(p_2, p_{233})$ .  
 Skipping pair  $p_2$  and  $p_{233}$  because gcd of their leading monoms is zero.
686. Creating S-polynomial from the pair  $(p_2, p_{234})$ .  
 Skipping pair  $p_2$  and  $p_{234}$  because gcd of their leading monoms is zero.
687. Creating S-polynomial from the pair  $(p_2, p_{235})$ .  
 Forming S-pol of  $p_2$  and  $p_{235}$ : Polynomial too big for output (text size is 5768 characters, number of terms is 8)  
 S-pol added.
688. Creating S-polynomial from the pair  $(p_2, p_{236})$ .  
 Skipping pair  $p_2$  and  $p_{236}$  because gcd of their leading monoms is zero.
689. Creating S-polynomial from the pair  $(p_2, p_{237})$ .  
 Skipping pair  $p_2$  and  $p_{237}$  because gcd of their leading monoms is zero.
690. Creating S-polynomial from the pair  $(p_2, p_{238})$ .  
 Skipping pair  $p_2$  and  $p_{238}$  because gcd of their leading monoms is zero.
691. Creating S-polynomial from the pair  $(p_2, p_{239})$ .  
 Skipping pair  $p_2$  and  $p_{239}$  because gcd of their leading monoms is zero.
692. Creating S-polynomial from the pair  $(p_2, p_{240})$ .  
 Skipping pair  $p_2$  and  $p_{240}$  because gcd of their leading monoms is zero.
693. Creating S-polynomial from the pair  $(p_2, p_{241})$ .  
 Skipping pair  $p_2$  and  $p_{241}$  because gcd of their leading monoms is zero.



694. Creating S-polynomial from the pair  $(p_2, p_{242})$ .  
 Forming S-pol of  $p_2$  and  $p_{242}$ : Polynomial too big for output (text size is 11123 characters, number of terms is 16)  
 S-pol added.
695. Creating S-polynomial from the pair  $(p_2, p_{243})$ .  
 Skipping pair  $p_2$  and  $p_{243}$  because gcd of their leading monoms is zero.
696. Creating S-polynomial from the pair  $(p_2, p_{244})$ .  
 Skipping pair  $p_2$  and  $p_{244}$  because gcd of their leading monoms is zero.
697. Creating S-polynomial from the pair  $(p_2, p_{245})$ .  
 Skipping pair  $p_2$  and  $p_{245}$  because gcd of their leading monoms is zero.
698. Creating S-polynomial from the pair  $(p_2, p_{246})$ .  
 Forming S-pol of  $p_2$  and  $p_{246}$ : Polynomial too big for output (text size is 11086 characters, number of terms is 16)  
 S-pol added.
699. Creating S-polynomial from the pair  $(p_2, p_{247})$ .  
 Skipping pair  $p_2$  and  $p_{247}$  because gcd of their leading monoms is zero.
700. Creating S-polynomial from the pair  $(p_2, p_{248})$ .  
 Skipping pair  $p_2$  and  $p_{248}$  because gcd of their leading monoms is zero.
701. Creating S-polynomial from the pair  $(p_2, p_{249})$ .  
 Skipping pair  $p_2$  and  $p_{249}$  because gcd of their leading monoms is zero.
702. Creating S-polynomial from the pair  $(p_2, p_{250})$ .  
 Skipping pair  $p_2$  and  $p_{250}$  because gcd of their leading monoms is zero.
703. Creating S-polynomial from the pair  $(p_2, p_{251})$ .  
 Skipping pair  $p_2$  and  $p_{251}$  because gcd of their leading monoms is zero.
704. Creating S-polynomial from the pair  $(p_2, p_{252})$ .  
 Skipping pair  $p_2$  and  $p_{252}$  because gcd of their leading monoms is zero.
705. Creating S-polynomial from the pair  $(p_2, p_{253})$ .  
 Skipping pair  $p_2$  and  $p_{253}$  because gcd of their leading monoms is zero.
706. Creating S-polynomial from the pair  $(p_2, p_{254})$ .  
 Skipping pair  $p_2$  and  $p_{254}$  because gcd of their leading monoms is zero.
707. Creating S-polynomial from the pair  $(p_2, p_{255})$ .  
 Skipping pair  $p_2$  and  $p_{255}$  because gcd of their leading monoms is zero.
708. Creating S-polynomial from the pair  $(p_2, p_{256})$ .  
 Skipping pair  $p_2$  and  $p_{256}$  because gcd of their leading monoms is zero.

709. Creating S-polynomial from the pair  $(p_2, p_{257})$ .  
 Forming S-pol of  $p_2$  and  $p_{257}$ : Polynomial too big for output (text size is 5790 characters, number of terms is 8)  
 S-pol added.
710. Creating S-polynomial from the pair  $(p_2, p_{258})$ .  
 Skipping pair  $p_2$  and  $p_{258}$  because gcd of their leading monoms is zero.
711. Creating S-polynomial from the pair  $(p_2, p_{259})$ .  
 Skipping pair  $p_2$  and  $p_{259}$  because gcd of their leading monoms is zero.
712. Creating S-polynomial from the pair  $(p_2, p_{260})$ .  
 Skipping pair  $p_2$  and  $p_{260}$  because gcd of their leading monoms is zero.
713. Creating S-polynomial from the pair  $(p_2, p_{261})$ .  
 Forming S-pol of  $p_2$  and  $p_{261}$ : Polynomial too big for output (text size is 5768 characters, number of terms is 8)  
 S-pol added.
714. Creating S-polynomial from the pair  $(p_2, p_{262})$ .  
 Skipping pair  $p_2$  and  $p_{262}$  because gcd of their leading monoms is zero.
715. Creating S-polynomial from the pair  $(p_2, p_{263})$ .  
 Skipping pair  $p_2$  and  $p_{263}$  because gcd of their leading monoms is zero.
716. Creating S-polynomial from the pair  $(p_2, p_{264})$ .  
 Forming S-pol of  $p_2$  and  $p_{264}$ : Polynomial too big for output (text size is 1409 characters, number of terms is 8)  
 S-pol added.
717. Creating S-polynomial from the pair  $(p_2, p_{265})$ .  
 Forming S-pol of  $p_2$  and  $p_{265}$ : Polynomial too big for output (text size is 1400 characters, number of terms is 8)  
 S-pol added.
718. Creating S-polynomial from the pair  $(p_2, p_{266})$ .  
 Forming S-pol of  $p_2$  and  $p_{266}$ : Polynomial too big for output (text size is 9117 characters, number of terms is 16)  
 S-pol added.
719. Creating S-polynomial from the pair  $(p_2, p_{267})$ .  
 Forming S-pol of  $p_2$  and  $p_{267}$ : Polynomial too big for output (text size is 9117 characters, number of terms is 16)  
 S-pol added.
720. Creating S-polynomial from the pair  $(p_2, p_{268})$ .  
 Forming S-pol of  $p_2$  and  $p_{268}$ : Polynomial too big for output (text size is 4432 characters, number of terms is 8)  
 S-pol added.

721. Creating S-polynomial from the pair  $(p_2, p_{269})$ .

Forming S-pol of  $p_2$  and  $p_{269}$ : Polynomial too big for output (text size is 9074 characters, number of terms is 16)

S-pol added.

722. Creating S-polynomial from the pair  $(p_2, p_{270})$ .

Forming S-pol of  $p_2$  and  $p_{270}$ : Polynomial too big for output (text size is 9074 characters, number of terms is 16)

S-pol added.

723. Creating S-polynomial from the pair  $(p_2, p_{271})$ .

Forming S-pol of  $p_2$  and  $p_{271}$ : Polynomial too big for output (text size is 2404 characters, number of terms is 8)

S-pol added.

724. Creating S-polynomial from the pair  $(p_2, p_{272})$ .

Forming S-pol of  $p_2$  and  $p_{272}$ : Polynomial too big for output (text size is 3443 characters, number of terms is 8)

S-pol added.

725. Creating S-polynomial from the pair  $(p_2, p_{273})$ .

Forming S-pol of  $p_2$  and  $p_{273}$ :

$$\begin{aligned} p_{1503} = & (-536870912u_5u_4^{45}u_1^{29} + 268435456u_5u_4^{45}u_1^{28} + 536870912u_4^{46}u_1^{29} - \\ & 2147483648u_4^{44}u_1^{31} + 1073741824u_4^{44}u_1^{30})x_5x_4x_3 + \\ & (268435456u_5u_4^{47}u_1^{28} + 1073741824u_4^{46}u_1^{30} - 536870912u_4^{46}u_1^{29})x_5x_4 + \\ & (536870912u_5^2u_4^{44}u_1^{29} - 268435456u_5^2u_4^{44}u_1^{28})x_5x_3^2 - \\ & 268435456u_5^2u_4^{46}u_1^{28}x_5x_3 + \\ & (-268435456u_6u_5u_4^{44}u_1^{28} - 536870912u_6u_4^{45}u_1^{29})x_4x_3^2 + \\ & (-268435456u_6u_5u_4^{46}u_1^{28} + 536870912u_6u_5u_4^{44}u_1^{29} + \\ & 536870912u_6u_4^{45}u_1^{29})x_4x_3 + 268435456u_6u_5^2u_4^{45}u_1^{28}x_3^2 - \\ & 268435456u_6u_5^2u_4^{45}u_1^{28}x_3 \end{aligned}$$

S-pol added.

726. Creating S-polynomial from the pair  $(p_2, p_{274})$ .

Forming S-pol of  $p_2$  and  $p_{274}$ :

$$\begin{aligned} p_{1504} = & (-1073741824u_5u_4^{50}u_1^{30} + 536870912u_5u_4^{50}u_1^{29} + 1073741824u_4^{51}u_1^{30} - \\ & 4294967296u_4^{49}u_1^{32} + 2147483648u_4^{49}u_1^{31})x_5x_4x_3 + \\ & (536870912u_5u_4^{52}u_1^{29} + 2147483648u_4^{51}u_1^{31} - 1073741824u_4^{51}u_1^{30})x_5x_4 + \\ & (1073741824u_5^2u_4^{49}u_1^{30} - 536870912u_5^2u_4^{49}u_1^{29})x_5x_3^2 - \\ & 536870912u_5^2u_4^{51}u_1^{29}x_5x_3 + \end{aligned}$$

$$\begin{aligned}
& (-536870912u_6u_5u_4^{49}u_1^{29} - 1073741824u_6u_4^{50}u_1^{30})x_4x_3^2 + \\
& (-536870912u_6u_5u_4^{51}u_1^{29} + 1073741824u_6u_5u_4^{49}u_1^{30} + \\
& 1073741824u_6u_4^{50}u_1^{30})x_4x_3 + 536870912u_6u_5^2u_4^{50}u_1^{29}x_3^2 - \\
& 536870912u_6u_5^2u_4^{50}u_1^{29}x_3
\end{aligned}$$

S-pol added.

727. Creating S-polynomial from the pair  $(p_2, p_{275})$ .

Forming S-pol of  $p_2$  and  $p_{275}$ : Polynomial too big for output (text size is 1389 characters, number of terms is 8)

S-pol added.

728. Creating S-polynomial from the pair  $(p_2, p_{276})$ .

Forming S-pol of  $p_2$  and  $p_{276}$ : Polynomial too big for output (text size is 1383 characters, number of terms is 8)

S-pol added.

729. Creating S-polynomial from the pair  $(p_2, p_{277})$ .

Forming S-pol of  $p_2$  and  $p_{277}$ :

$$\begin{aligned}
p_{1505} = & (33554432u_6u_4^{43}u_1^{24} - 16777216u_6u_4^{43}u_1^{23} + 134217728u_6u_4^{41}u_1^{26} - \\
& 67108864u_6u_4^{41}u_1^{25} - 16777216u_4^{44}u_1^{24} - 33554432u_4^{42}u_1^{25} + \\
& 268435456u_4^{40}u_1^{28} - 134217728u_4^{40}u_1^{27})x_5x_4x_3 + \\
& (-16777216u_6u_4^{45}u_1^{23} - 67108864u_6u_4^{43}u_1^{25} - 33554432u_4^{44}u_1^{25} + \\
& 16777216u_4^{44}u_1^{24} - 134217728u_4^{42}u_1^{27} + 67108864u_4^{42}u_1^{26})x_5x_4 + \\
& (-16777216u_6^2u_4^{42}u_1^{24} + 16777216u_6^2u_4^{42}u_1^{23} - 67108864u_6^2u_4^{40}u_1^{26} + \\
& 67108864u_6^2u_4^{40}u_1^{25})x_4x_3^2 + \\
& (16777216u_6^2u_4^{44}u_1^{23} + 67108864u_6^2u_4^{42}u_1^{25} - 16777216u_6^2u_4^{42}u_1^{24} - \\
& 67108864u_6^2u_4^{40}u_1^{26})x_4x_3
\end{aligned}$$

S-pol added.

730. Creating S-polynomial from the pair  $(p_2, p_{278})$ .

Forming S-pol of  $p_2$  and  $p_{278}$ :

$$\begin{aligned}
p_{1506} = & (16777216u_6u_4^{42}u_1^{23} - 8388608u_6u_4^{42}u_1^{22} + 67108864u_6u_4^{40}u_1^{25} - \\
& 33554432u_6u_4^{40}u_1^{24} - 8388608u_4^{43}u_1^{23} - 16777216u_4^{41}u_1^{24} + 134217728u_4^{39}u_1^{27} - \\
& 67108864u_4^{39}u_1^{26})x_5x_4x_3 + \\
& (-8388608u_6u_4^{44}u_1^{22} - 33554432u_6u_4^{42}u_1^{24} - 16777216u_4^{43}u_1^{24} + \\
& 8388608u_4^{43}u_1^{23} - 67108864u_4^{41}u_1^{26} + 33554432u_4^{41}u_1^{25})x_5x_4 + \\
& (-8388608u_6^2u_4^{41}u_1^{23} + 8388608u_6^2u_4^{41}u_1^{22} - 33554432u_6^2u_4^{39}u_1^{25} + \\
& 33554432u_6^2u_4^{39}u_1^{24})x_4x_3^2 + \\
& (8388608u_6^2u_4^{43}u_1^{22} + 33554432u_6^2u_4^{41}u_1^{24} - 8388608u_6^2u_4^{41}u_1^{23} - \\
& 33554432u_6^2u_4^{39}u_1^{25})x_4x_3
\end{aligned}$$

S-pol added.

731. Creating S-polynomial from the pair  $(p_2, p_{279})$ .

Forming S-pol of  $p_2$  and  $p_{279}$ :

$$\begin{aligned}
p_{1507} = & (-536870912u_5u_4^{45}u_1^{29} + 268435456u_5u_4^{45}u_1^{28} + 536870912u_4^{46}u_1^{29} - \\
& 2147483648u_4^{44}u_1^{31} + 1073741824u_4^{44}u_1^{30})x_5x_4x_3 + \\
& (268435456u_5u_4^{47}u_1^{28} + 1073741824u_4^{46}u_1^{30} - 536870912u_4^{46}u_1^{29})x_5x_4 + \\
& (536870912u_5^2u_4^{44}u_1^{29} - 268435456u_5^2u_4^{44}u_1^{28})x_5x_3^2 - \\
& 268435456u_5^2u_4^{46}u_1^{28}x_5x_3 + \\
& (-268435456u_6u_5u_4^{44}u_1^{28} - 536870912u_6u_4^{45}u_1^{29})x_4x_3^2 + \\
& (-268435456u_6u_5u_4^{46}u_1^{28} + 536870912u_6u_5u_4^{44}u_1^{29} + \\
& 536870912u_6u_4^{45}u_1^{29})x_4x_3 + 268435456u_6u_5^2u_4^{45}u_1^{28}x_3^2 - \\
& 268435456u_6u_5^2u_4^{45}u_1^{28}x_3
\end{aligned}$$

S-pol added.

732. Creating S-polynomial from the pair  $(p_2, p_{280})$ .

Forming S-pol of  $p_2$  and  $p_{280}$ :

$$\begin{aligned}
p_{1508} = & (-268435456u_5u_4^{44}u_1^{28} + 134217728u_5u_4^{44}u_1^{27} + 268435456u_4^{45}u_1^{28} - \\
& 1073741824u_4^{43}u_1^{30} + 536870912u_4^{43}u_1^{29})x_5x_4x_3 + \\
& (134217728u_5u_4^{46}u_1^{27} + 536870912u_4^{45}u_1^{29} - 268435456u_4^{45}u_1^{28})x_5x_4 + \\
& (268435456u_5^2u_4^{43}u_1^{28} - 134217728u_5^2u_4^{43}u_1^{27})x_5x_3^2 - \\
& 134217728u_5^2u_4^{45}u_1^{27}x_5x_3 + \\
& (-134217728u_6u_5u_4^{43}u_1^{27} - 268435456u_6u_4^{44}u_1^{28})x_4x_3^2 + \\
& (-134217728u_6u_5u_4^{45}u_1^{27} + 268435456u_6u_5u_4^{43}u_1^{28} + \\
& 268435456u_6u_4^{44}u_1^{28})x_4x_3 + 134217728u_6u_5^2u_4^{44}u_1^{27}x_3^2 - \\
& 134217728u_6u_5^2u_4^{44}u_1^{27}x_3
\end{aligned}$$

S-pol added.

733. Creating S-polynomial from the pair  $(p_2, p_{281})$ .

Forming S-pol of  $p_2$  and  $p_{281}$ : Polynomial too big for output (text size is 4273 characters, number of terms is 8)

S-pol added.

734. Creating S-polynomial from the pair  $(p_2, p_{282})$ .

Forming S-pol of  $p_2$  and  $p_{282}$ : Polynomial too big for output (text size is 4273 characters, number of terms is 8)

S-pol added.

735. Creating S-polynomial from the pair  $(p_2, p_{283})$ .  
Forming S-pol of  $p_2$  and  $p_{283}$ : Polynomial too big for output (text size is 2588 characters, number of terms is 8)  
S-pol added.
736. Creating S-polynomial from the pair  $(p_2, p_{284})$ .  
Forming S-pol of  $p_2$  and  $p_{284}$ : Polynomial too big for output (text size is 4253 characters, number of terms is 8)  
S-pol added.
737. Creating S-polynomial from the pair  $(p_2, p_{285})$ .  
Forming S-pol of  $p_2$  and  $p_{285}$ : Polynomial too big for output (text size is 4253 characters, number of terms is 8)  
S-pol added.
738. Creating S-polynomial from the pair  $(p_2, p_{286})$ .  
Forming S-pol of  $p_2$  and  $p_{286}$ : Polynomial too big for output (text size is 1315 characters, number of terms is 8)  
S-pol added.
739. Creating S-polynomial from the pair  $(p_2, p_{287})$ .  
Forming S-pol of  $p_2$  and  $p_{287}$ : Polynomial too big for output (text size is 1905 characters, number of terms is 8)  
S-pol added.
740. Creating S-polynomial from the pair  $(p_2, p_{288})$ .  
Forming S-pol of  $p_2$  and  $p_{288}$ :  

$$p_{1509} = (-16777216u_6u_4^{37}u_1^{23} + 8388608u_6u_4^{37}u_1^{22} + 8388608u_4^{38}u_1^{23} - \\
33554432u_4^{36}u_1^{25} + 16777216u_4^{36}u_1^{24})x_5x_4x_3 + \\
(8388608u_6u_4^{39}u_1^{22} + 16777216u_4^{38}u_1^{24} - 8388608u_4^{38}u_1^{23})x_5x_4 + \\
(8388608u_6^2u_4^{36}u_1^{23} - 8388608u_6^2u_4^{36}u_1^{22})x_4x_3^2 + \\
(-8388608u_6^2u_4^{38}u_1^{22} + 8388608u_6^2u_4^{36}u_1^{23})x_4x_3$$
S-pol added.
741. Creating S-polynomial from the pair  $(p_2, p_{289})$ .  
Forming S-pol of  $p_2$  and  $p_{289}$ :  

$$p_{1510} = (-8388608u_6u_4^{36}u_1^{22} + 4194304u_6u_4^{36}u_1^{21} + 4194304u_4^{37}u_1^{22} - \\
16777216u_4^{35}u_1^{24} + 8388608u_4^{35}u_1^{23})x_5x_4x_3 + \\
(4194304u_6u_4^{38}u_1^{21} + 8388608u_4^{37}u_1^{23} - 4194304u_4^{37}u_1^{22})x_5x_4 + \\
(4194304u_6^2u_4^{35}u_1^{22} - 4194304u_6^2u_4^{35}u_1^{21})x_4x_3^2 + \\
(-4194304u_6^2u_4^{37}u_1^{21} + 4194304u_6^2u_4^{35}u_1^{22})x_4x_3$$
S-pol added.

742. Creating S-polynomial from the pair  $(p_2, p_{290})$ .  
 Skipping pair  $p_2$  and  $p_{290}$  because gcd of their leading monoms is zero.
743. Creating S-polynomial from the pair  $(p_2, p_{291})$ .  
 Skipping pair  $p_2$  and  $p_{291}$  because gcd of their leading monoms is zero.
744. Creating S-polynomial from the pair  $(p_2, p_{292})$ .  
 Skipping pair  $p_2$  and  $p_{292}$  because gcd of their leading monoms is zero.
745. Creating S-polynomial from the pair  $(p_2, p_{293})$ .  
 Skipping pair  $p_2$  and  $p_{293}$  because gcd of their leading monoms is zero.
746. Creating S-polynomial from the pair  $(p_2, p_{294})$ .  
 Skipping pair  $p_2$  and  $p_{294}$  because gcd of their leading monoms is zero.
747. Creating S-polynomial from the pair  $(p_2, p_{295})$ .  
 Skipping pair  $p_2$  and  $p_{295}$  because gcd of their leading monoms is zero.
748. Creating S-polynomial from the pair  $(p_2, p_{296})$ .  
 Skipping pair  $p_2$  and  $p_{296}$  because gcd of their leading monoms is zero.
749. Creating S-polynomial from the pair  $(p_2, p_{297})$ .  
 Skipping pair  $p_2$  and  $p_{297}$  because gcd of their leading monoms is zero.
750. Creating S-polynomial from the pair  $(p_2, p_{298})$ .  
 Skipping pair  $p_2$  and  $p_{298}$  because gcd of their leading monoms is zero.
751. Creating S-polynomial from the pair  $(p_2, p_{299})$ .  
 Skipping pair  $p_2$  and  $p_{299}$  because gcd of their leading monoms is zero.
752. Creating S-polynomial from the pair  $(p_2, p_{300})$ .  
 Forming S-pol of  $p_2$  and  $p_{300}$ : Polynomial too big for output (text size is 3266 characters, number of terms is 8)  
 S-pol added.
753. Creating S-polynomial from the pair  $(p_2, p_{301})$ .  
 Skipping pair  $p_2$  and  $p_{301}$  because gcd of their leading monoms is zero.
754. Creating S-polynomial from the pair  $(p_2, p_{302})$ .  
 Skipping pair  $p_2$  and  $p_{302}$  because gcd of their leading monoms is zero.
755. Creating S-polynomial from the pair  $(p_2, p_{303})$ .  
 Skipping pair  $p_2$  and  $p_{303}$  because gcd of their leading monoms is zero.
756. Creating S-polynomial from the pair  $(p_2, p_{304})$ .  
 Skipping pair  $p_2$  and  $p_{304}$  because gcd of their leading monoms is zero.
757. Creating S-polynomial from the pair  $(p_2, p_{305})$ .  
 Skipping pair  $p_2$  and  $p_{305}$  because gcd of their leading monoms is zero.

758. Creating S-polynomial from the pair  $(p_2, p_{306})$ .  
 Skipping pair  $p_2$  and  $p_{306}$  because gcd of their leading monoms is zero.
759. Creating S-polynomial from the pair  $(p_2, p_{307})$ .  
 Skipping pair  $p_2$  and  $p_{307}$  because gcd of their leading monoms is zero.
760. Creating S-polynomial from the pair  $(p_2, p_{308})$ .  
 Forming S-pol of  $p_2$  and  $p_{308}$ : Polynomial too big for output (text size is 2281 characters, number of terms is 8)  
 S-pol added.
761. Creating S-polynomial from the pair  $(p_2, p_{309})$ .  
 Forming S-pol of  $p_2$  and  $p_{309}$ : Polynomial too big for output (text size is 5117 characters, number of terms is 16)  
 S-pol added.
762. Creating S-polynomial from the pair  $(p_2, p_{310})$ .  
 Forming S-pol of  $p_2$  and  $p_{310}$ :
- $$\begin{aligned}
 p_{1511} = & -140737488355328u_6u_4^{71}u_2^{49}u_1^{47}x_5x_4x_3^2 + \\
 & (-140737488355328u_6u_4^{72}u_2^{48}u_1^{47} - 562949953421312u_4^{72}u_2^{47}u_1^{49} + \\
 & 281474976710656u_4^{72}u_2^{47}u_1^{48})x_5x_4x_3x_1 + \\
 & (140737488355328u_6u_4^{72}u_2^{48}u_1^{47} + 281474976710656u_6u_4^{71}u_2^{49}u_1^{48} + \\
 & 281474976710656u_4^{72}u_2^{49}u_1^{48})x_5x_4x_3 + \\
 & (-281474976710656u_6u_4^{73}u_2^{47}u_1^{48} + 140737488355328u_6u_4^{73}u_2^{47}u_1^{47})x_5x_4x_1 + \\
 & 140737488355328u_6^2u_4^{71}u_2^{48}u_1^{47}x_4x_3^2x_1 - \\
 & 140737488355328u_6^2u_4^{71}u_2^{48}u_1^{47}x_4x_3^2 + \\
 & (281474976710656u_6^2u_4^{72}u_2^{47}u_1^{48} - 140737488355328u_6^2u_4^{72}u_2^{47}u_1^{47} - \\
 & 281474976710656u_6^2u_4^{71}u_2^{48}u_1^{48})x_4x_3x_1 + \\
 & (-140737488355328u_6^2u_4^{72}u_2^{49}u_1^{47} + \\
 & 281474976710656u_6^2u_4^{71}u_2^{48}u_1^{48})x_4x_3
 \end{aligned}$$
- S-pol added.
763. Creating S-polynomial from the pair  $(p_2, p_{311})$ .  
 Forming S-pol of  $p_2$  and  $p_{311}$ : Polynomial too big for output (text size is 3046 characters, number of terms is 8)  
 S-pol added.
764. Creating S-polynomial from the pair  $(p_2, p_{312})$ .  
 Skipping pair  $p_2$  and  $p_{312}$  because gcd of their leading monoms is zero.
765. Creating S-polynomial from the pair  $(p_2, p_{313})$ .  
 Skipping pair  $p_2$  and  $p_{313}$  because gcd of their leading monoms is zero.



766. Creating S-polynomial from the pair  $(p_2, p_{314})$ .  
 Skipping pair  $p_2$  and  $p_{314}$  because gcd of their leading monoms is zero.
767. Creating S-polynomial from the pair  $(p_2, p_{315})$ .  
 Skipping pair  $p_2$  and  $p_{315}$  because gcd of their leading monoms is zero.
768. Creating S-polynomial from the pair  $(p_2, p_{316})$ .  
 Skipping pair  $p_2$  and  $p_{316}$  because gcd of their leading monoms is zero.
769. Creating S-polynomial from the pair  $(p_2, p_{317})$ .  
 Skipping pair  $p_2$  and  $p_{317}$  because gcd of their leading monoms is zero.
770. Creating S-polynomial from the pair  $(p_2, p_{318})$ .  
 Skipping pair  $p_2$  and  $p_{318}$  because gcd of their leading monoms is zero.
771. Creating S-polynomial from the pair  $(p_2, p_{319})$ .  
 Skipping pair  $p_2$  and  $p_{319}$  because gcd of their leading monoms is zero.
772. Creating S-polynomial from the pair  $(p_2, p_{320})$ .  
 Skipping pair  $p_2$  and  $p_{320}$  because gcd of their leading monoms is zero.
773. Creating S-polynomial from the pair  $(p_2, p_{321})$ .  
 Skipping pair  $p_2$  and  $p_{321}$  because gcd of their leading monoms is zero.
774. Creating S-polynomial from the pair  $(p_2, p_{322})$ .  
 Forming S-pol of  $p_2$  and  $p_{322}$ : Polynomial too big for output (text size is 3266 characters, number of terms is 8)  
 S-pol added.
775. Creating S-polynomial from the pair  $(p_2, p_{323})$ .  
 Skipping pair  $p_2$  and  $p_{323}$  because gcd of their leading monoms is zero.
776. Creating S-polynomial from the pair  $(p_2, p_{324})$ .  
 Skipping pair  $p_2$  and  $p_{324}$  because gcd of their leading monoms is zero.
777. Creating S-polynomial from the pair  $(p_2, p_{325})$ .  
 Skipping pair  $p_2$  and  $p_{325}$  because gcd of their leading monoms is zero.
778. Creating S-polynomial from the pair  $(p_2, p_{326})$ .  
 Skipping pair  $p_2$  and  $p_{326}$  because gcd of their leading monoms is zero.
779. Creating S-polynomial from the pair  $(p_2, p_{327})$ .  
 Forming S-pol of  $p_2$  and  $p_{327}$ : Polynomial too big for output (text size is 2281 characters, number of terms is 8)  
 S-pol added.
780. Creating S-polynomial from the pair  $(p_2, p_{328})$ .  
 Skipping pair  $p_2$  and  $p_{328}$  because gcd of their leading monoms is zero.

781. Creating S-polynomial from the pair  $(p_2, p_{329})$ .  
 Skipping pair  $p_2$  and  $p_{329}$  because gcd of their leading monoms is zero.
782. Creating S-polynomial from the pair  $(p_2, p_{330})$ .  
 Skipping pair  $p_2$  and  $p_{330}$  because gcd of their leading monoms is zero.
783. Creating S-polynomial from the pair  $(p_2, p_{331})$ .  
 Forming S-pol of  $p_2$  and  $p_{331}$ : Polynomial too big for output (text size is 5117 characters, number of terms is 16)  
 S-pol added.
784. Creating S-polynomial from the pair  $(p_2, p_{332})$ .  
 Forming S-pol of  $p_2$  and  $p_{332}$ :

$$\begin{aligned}
 p_{1512} = & -140737488355328u_6u_4^{71}u_3^{49}u_1^{47}x_5x_4x_3^2 + \\
 & (-140737488355328u_6u_4^{72}u_3^{48}u_1^{47} - 562949953421312u_4^{72}u_3^{47}u_1^{49} + \\
 & 281474976710656u_4^{72}u_3^{47}u_1^{48})x_5x_4x_3x_2 + \\
 & (140737488355328u_6u_4^{72}u_3^{48}u_1^{47} + 281474976710656u_6u_4^{71}u_3^{49}u_1^{48} + \\
 & 281474976710656u_4^{72}u_3^{49}u_1^{48})x_5x_4x_3 + \\
 & (-281474976710656u_6u_4^{73}u_3^{47}u_1^{48} + 140737488355328u_6u_4^{73}u_3^{47}u_1^{47})x_5x_4x_2 + \\
 & 140737488355328u_6^2u_4^{71}u_3^{48}u_1^{47}x_4x_3^2x_2 - \\
 & 140737488355328u_6^2u_4^{71}u_3^{48}u_1^{47}x_4x_3^2 + \\
 & (281474976710656u_6^2u_4^{72}u_3^{47}u_1^{48} - 140737488355328u_6^2u_4^{72}u_3^{47}u_1^{47} - \\
 & 281474976710656u_6^2u_4^{71}u_3^{48}u_1^{48})x_4x_3x_2 + \\
 & (-140737488355328u_6^2u_4^{72}u_3^{49}u_1^{47} + \\
 & 281474976710656u_6^2u_4^{71}u_3^{48}u_1^{48})x_4x_3
 \end{aligned}$$

S-pol added.

785. Creating S-polynomial from the pair  $(p_2, p_{333})$ .  
 Forming S-pol of  $p_2$  and  $p_{333}$ : Polynomial too big for output (text size is 3046 characters, number of terms is 8)  
 S-pol added.
786. Creating S-polynomial from the pair  $(p_2, p_{334})$ .  
 Skipping pair  $p_2$  and  $p_{334}$  because gcd of their leading monoms is zero.
787. Creating S-polynomial from the pair  $(p_2, p_{335})$ .  
 Forming S-pol of  $p_2$  and  $p_{335}$ :

$$\begin{aligned}
 p_{1513} = & (-8388608u_5u_4^{35}u_1^{23} + 33554432u_5u_4^{33}u_1^{25} - 16777216u_5u_4^{33}u_1^{24})x_5x_4x_3 + \\
 & (-16777216u_5u_4^{35}u_1^{24} + 8388608u_5u_4^{35}u_1^{23})x_5x_4 + \\
 & 8388608u_6u_5u_4^{34}u_1^{23}x_4x_3^2 - 8388608u_6u_5u_4^{34}u_1^{23}x_4x_3
 \end{aligned}$$

S-pol added.

788. Creating S-polynomial from the pair  $(p_2, p_{336})$ .

Forming S-pol of  $p_2$  and  $p_{336}$ :

$$\begin{aligned} p_{1514} = & (-4194304u_5u_4^{34}u_1^{22} + 16777216u_5u_4^{32}u_1^{24} - 8388608u_5u_4^{32}u_1^{23})x_5x_4x_3 + \\ & (-8388608u_5u_4^{34}u_1^{23} + 4194304u_5u_4^{34}u_1^{22})x_5x_4 + \\ & 4194304u_6u_5u_4^{33}u_1^{22}x_4x_3^2 - 4194304u_6u_5u_4^{33}u_1^{22}x_4x_3 \end{aligned}$$

S-pol added.

789. Creating S-polynomial from the pair  $(p_2, p_{337})$ .

Forming S-pol of  $p_2$  and  $p_{337}$ :

$$\begin{aligned} p_{1515} = & (-140737488355328u_5^2u_4^{75}u_1^{47} + 70368744177664u_5^2u_4^{75}u_1^{46} + \\ & 140737488355328u_5u_4^{76}u_1^{47} - 562949953421312u_5u_4^{74}u_1^{49} + \\ & 281474976710656u_5u_4^{74}u_1^{48})x_5x_4x_3 + \\ & (70368744177664u_5^2u_4^{77}u_1^{46} + 281474976710656u_5u_4^{76}u_1^{48} - \\ & 140737488355328u_5u_4^{76}u_1^{47})x_5x_4 + \\ & (140737488355328u_5^3u_4^{74}u_1^{47} - 70368744177664u_5^3u_4^{74}u_1^{46})x_5x_3^2 - \\ & 70368744177664u_5^3u_4^{76}u_1^{46}x_5x_3 + \\ & (-70368744177664u_6u_5^2u_4^{74}u_1^{46} - 140737488355328u_6u_5u_4^{75}u_1^{47})x_4x_3^2 + \\ & (-70368744177664u_6u_5^2u_4^{76}u_1^{46} + 140737488355328u_6u_5^2u_4^{74}u_1^{47} + \\ & 140737488355328u_6u_5u_4^{75}u_1^{47})x_4x_3 + 70368744177664u_6u_5^3u_4^{75}u_1^{46}x_3^2 - \\ & 70368744177664u_6u_5^3u_4^{75}u_1^{46}x_3 \end{aligned}$$

S-pol added.

790. Creating S-polynomial from the pair  $(p_2, p_{338})$ .

Forming S-pol of  $p_2$  and  $p_{338}$ :

$$\begin{aligned} p_{1516} = & (-70368744177664u_5^2u_4^{74}u_1^{46} + 35184372088832u_5^2u_4^{74}u_1^{45} + \\ & 70368744177664u_5u_4^{75}u_1^{46} - 281474976710656u_5u_4^{73}u_1^{48} + \\ & 140737488355328u_5u_4^{73}u_1^{47})x_5x_4x_3 + \\ & (35184372088832u_5^2u_4^{76}u_1^{45} + 140737488355328u_5u_4^{75}u_1^{47} - \\ & 70368744177664u_5u_4^{75}u_1^{46})x_5x_4 + \\ & (70368744177664u_5^3u_4^{73}u_1^{46} - 35184372088832u_5^3u_4^{73}u_1^{45})x_5x_3^2 - \\ & 35184372088832u_5^3u_4^{75}u_1^{45}x_5x_3 + \\ & (-35184372088832u_6u_5^2u_4^{73}u_1^{45} - 70368744177664u_6u_5u_4^{74}u_1^{46})x_4x_3^2 + \\ & (-35184372088832u_6u_5^2u_4^{75}u_1^{45} + 70368744177664u_6u_5^2u_4^{73}u_1^{46} + \\ & 70368744177664u_6u_5u_4^{74}u_1^{46})x_4x_3 + 35184372088832u_6u_5^3u_4^{74}u_1^{45}x_3^2 - \\ & 35184372088832u_6u_5^3u_4^{74}u_1^{45}x_3 \end{aligned}$$

S-pol added.

791. Creating S-polynomial from the pair  $(p_2, p_{339})$ .

Forming S-pol of  $p_2$  and  $p_{339}$ :

$$\begin{aligned}
p_{1517} = & (-1073741824u_5u_4^{45}u_1^{30} + 536870912u_5u_4^{45}u_1^{29} + 1073741824u_4^{46}u_1^{30} - \\
& 4294967296u_4^{44}u_1^{32} + 2147483648u_4^{44}u_1^{31})x_5x_4x_3 + \\
& (536870912u_5u_4^{47}u_1^{29} + 2147483648u_4^{46}u_1^{31} - 1073741824u_4^{46}u_1^{30})x_5x_4 + \\
& (1073741824u_5^2u_4^{44}u_1^{30} - 536870912u_5^2u_4^{44}u_1^{29})x_5x_3 - \\
& 536870912u_5^2u_4^{46}u_1^{29}x_5x_3 + \\
& (-536870912u_6u_5u_4^{44}u_1^{29} - 1073741824u_6u_4^{45}u_1^{30})x_4x_3^2 + \\
& (-536870912u_6u_5u_4^{46}u_1^{29} + 1073741824u_6u_5u_4^{44}u_1^{30} + \\
& 1073741824u_6u_4^{45}u_1^{30})x_4x_3 + 536870912u_6u_5^2u_4^{45}u_1^{29}x_3^2 - \\
& 536870912u_6u_5^2u_4^{45}u_1^{29}x_3
\end{aligned}$$

S-pol added.

792. Creating S-polynomial from the pair  $(p_2, p_{340})$ .

Forming S-pol of  $p_2$  and  $p_{340}$ :

$$\begin{aligned}
p_{1518} = & (-536870912u_5u_4^{44}u_1^{29} + 268435456u_5u_4^{44}u_1^{28} + 536870912u_4^{45}u_1^{29} - \\
& 2147483648u_4^{43}u_1^{31} + 1073741824u_4^{43}u_1^{30})x_5x_4x_3 + \\
& (268435456u_5u_4^{46}u_1^{28} + 1073741824u_4^{45}u_1^{30} - 536870912u_4^{45}u_1^{29})x_5x_4 + \\
& (536870912u_5^2u_4^{43}u_1^{29} - 268435456u_5^2u_4^{43}u_1^{28})x_5x_3 - \\
& 268435456u_5^2u_4^{45}u_1^{28}x_5x_3 + \\
& (-268435456u_6u_5u_4^{43}u_1^{28} - 536870912u_6u_4^{44}u_1^{29})x_4x_3^2 + \\
& (-268435456u_6u_5u_4^{45}u_1^{28} + 536870912u_6u_5u_4^{43}u_1^{29} + \\
& 536870912u_6u_4^{44}u_1^{29})x_4x_3 + 268435456u_6u_5^2u_4^{44}u_1^{28}x_3^2 - \\
& 268435456u_6u_5^2u_4^{44}u_1^{28}x_3
\end{aligned}$$

S-pol added.

793. Creating S-polynomial from the pair  $(p_2, p_{341})$ .

Forming S-pol of  $p_2$  and  $p_{341}$ :

$$\begin{aligned}
p_{1519} = & (-1073741824u_5u_4^{45}u_1^{30} + 536870912u_5u_4^{45}u_1^{29} + 1073741824u_4^{46}u_1^{30} - \\
& 4294967296u_4^{44}u_1^{32} + 2147483648u_4^{44}u_1^{31})x_5x_4x_3 + \\
& (536870912u_5u_4^{47}u_1^{29} + 2147483648u_4^{46}u_1^{31} - 1073741824u_4^{46}u_1^{30})x_5x_4 + \\
& (1073741824u_5^2u_4^{44}u_1^{30} - 536870912u_5^2u_4^{44}u_1^{29})x_5x_3 - \\
& 536870912u_5^2u_4^{46}u_1^{29}x_5x_3 + \\
& (-536870912u_6u_5u_4^{44}u_1^{29} - 1073741824u_6u_4^{45}u_1^{30})x_4x_3^2 + \\
& (-536870912u_6u_5u_4^{46}u_1^{29} + 1073741824u_6u_5u_4^{44}u_1^{30} + \\
& 1073741824u_6u_4^{45}u_1^{30})x_4x_3 + 536870912u_6u_5^2u_4^{45}u_1^{29}x_3^2 - \\
& 536870912u_6u_5^2u_4^{45}u_1^{29}x_3
\end{aligned}$$

S-pol added.

794. Creating S-polynomial from the pair  $(p_2, p_{342})$ .

Forming S-pol of  $p_2$  and  $p_{342}$ :

$$\begin{aligned}
p_{1520} = & (-2147483648u_5u_4^{50}u_1^{31} + 1073741824u_5u_4^{50}u_1^{30} + 2147483648u_4^{51}u_1^{31} - \\
& 8589934592u_4^{49}u_1^{33} + 4294967296u_4^{49}u_1^{32})x_5x_4x_3 + \\
& (1073741824u_5u_4^{52}u_1^{30} + 4294967296u_4^{51}u_1^{32} - 2147483648u_4^{51}u_1^{31})x_5x_4 + \\
& (2147483648u_5^2u_4^{49}u_1^{31} - 1073741824u_5^2u_4^{49}u_1^{30})x_5x_3 - \\
& 1073741824u_5^2u_4^{51}u_1^{30}x_5x_3 + \\
& (-1073741824u_6u_5u_4^{49}u_1^{30} - 2147483648u_6u_4^{50}u_1^{31})x_4x_3^2 + \\
& (-1073741824u_6u_5u_4^{51}u_1^{30} + 2147483648u_6u_5u_4^{49}u_1^{31} + \\
& 2147483648u_6u_4^{50}u_1^{31})x_4x_3 + 1073741824u_6u_5^2u_4^{50}u_1^{30}x_3^2 - \\
& 1073741824u_6u_5^2u_4^{50}u_1^{30}x_3
\end{aligned}$$

S-pol added.

795. Creating S-polynomial from the pair  $(p_2, p_{343})$ .

Forming S-pol of  $p_2$  and  $p_{343}$ :

$$\begin{aligned}
p_{1521} = & (-32768u_4^{25}u_1^{15} + 131072u_4^{23}u_1^{17} - 65536u_4^{23}u_1^{16})x_5x_4x_3 + \\
& (-65536u_4^{25}u_1^{16} + 32768u_4^{25}u_1^{15})x_5x_4 + 32768u_6u_4^{24}u_1^{15}x_4x_3^2 - \\
& 32768u_6u_4^{24}u_1^{15}x_4x_3
\end{aligned}$$

S-pol added.

796. Creating S-polynomial from the pair  $(p_2, p_{344})$ .

Forming S-pol of  $p_2$  and  $p_{344}$ : Polynomial too big for output (text size is 6165 characters, number of terms is 16)

S-pol added.

797. Creating S-polynomial from the pair  $(p_2, p_{345})$ .

Forming S-pol of  $p_2$  and  $p_{345}$ : Polynomial too big for output (text size is 1160 characters, number of terms is 8)

S-pol added.

798. Creating S-polynomial from the pair  $(p_2, p_{346})$ .

Forming S-pol of  $p_2$  and  $p_{346}$ : Polynomial too big for output (text size is 2838 characters, number of terms is 8)

S-pol added.

799. Creating S-polynomial from the pair  $(p_2, p_{347})$ .

Forming S-pol of  $p_2$  and  $p_{347}$ : Polynomial too big for output (text size is 2953 characters, number of terms is 8)

S-pol added.

800. Creating S-polynomial from the pair  $(p_2, p_{348})$ .  
Forming S-pol of  $p_2$  and  $p_{348}$ : Polynomial too big for output (text size is 6165 characters, number of terms is 16)  
S-pol added.
801. Creating S-polynomial from the pair  $(p_2, p_{349})$ .  
Forming S-pol of  $p_2$  and  $p_{349}$ : Polynomial too big for output (text size is 1160 characters, number of terms is 8)  
S-pol added.
802. Creating S-polynomial from the pair  $(p_2, p_{350})$ .  
Forming S-pol of  $p_2$  and  $p_{350}$ : Polynomial too big for output (text size is 2838 characters, number of terms is 8)  
S-pol added.
803. Creating S-polynomial from the pair  $(p_2, p_{351})$ .  
Forming S-pol of  $p_2$  and  $p_{351}$ : Polynomial too big for output (text size is 2953 characters, number of terms is 8)  
S-pol added.
804. Creating S-polynomial from the pair  $(p_2, p_{352})$ .  
Forming S-pol of  $p_2$  and  $p_{352}$ : Polynomial too big for output (text size is 2763 characters, number of terms is 8)  
S-pol added.
805. Creating S-polynomial from the pair  $(p_2, p_{353})$ .  
Forming S-pol of  $p_2$  and  $p_{353}$ :  

$$p_{1522} = (2097152u_4^{36}u_1^{21} - 8388608u_4^{34}u_1^{23} + 4194304u_4^{34}u_1^{22})x_5x_4x_3 +$$

$$(4194304u_4^{36}u_1^{22} - 2097152u_4^{36}u_1^{21})x_5x_4 +$$

$$(2097152u_5^2u_4^{34}u_1^{21} - 1048576u_5^2u_4^{34}u_1^{20})x_5x_3 -$$

$$1048576u_5^2u_4^{36}u_1^{20}x_5x_3 - 2097152u_6u_4^{35}u_1^{21}x_4x_3^2 +$$

$$2097152u_6u_4^{35}u_1^{21}x_4x_3 + 1048576u_6u_5^2u_4^{35}u_1^{20}x_3^2 -$$

$$1048576u_6u_5^2u_4^{35}u_1^{20}x_3$$
  
S-pol added.
806. Creating S-polynomial from the pair  $(p_2, p_{354})$ .  
Forming S-pol of  $p_2$  and  $p_{354}$ :  

$$p_{1523} = (4194304u_4^{30}u_1^{22} - 16777216u_4^{28}u_1^{24} + 8388608u_4^{28}u_1^{23})x_5x_4x_3 +$$

$$(8388608u_4^{30}u_1^{23} - 4194304u_4^{30}u_1^{22})x_5x_4 +$$

$$(4194304u_5^2u_4^{28}u_1^{22} - 2097152u_5^2u_4^{28}u_1^{21})x_5x_3 -$$

$$2097152u_5^2u_4^{30}u_1^{21}x_5x_3 - 4194304u_6u_4^{29}u_1^{22}x_4x_3^2 +$$

$$4194304u_6u_4^{29}u_1^{22}x_4x_3 + 2097152u_6u_5^2u_4^{29}u_1^{21}x_3^2 -$$

$$2097152u_6u_5^2u_4^{29}u_1^{21}x_3$$
  
S-pol added.

807. Creating S-polynomial from the pair  $(p_2, p_{355})$ .

Forming S-pol of  $p_2$  and  $p_{355}$ :

$$\begin{aligned} p_{1524} = & (16384u_4^{24}u_1^{14} - 65536u_4^{22}u_1^{16} + 32768u_4^{22}u_1^{15})x_5x_4x_3 + \\ & (32768u_4^{24}u_1^{15} - 16384u_4^{24}u_1^{14})x_5x_4 - 16384u_6u_4^{23}u_1^{14}x_4x_3^2 + \\ & 16384u_6u_4^{23}u_1^{14}x_4x_3 \end{aligned}$$

S-pol added.

808. Creating S-polynomial from the pair  $(p_2, p_{356})$ .

Skipping pair  $p_2$  and  $p_{356}$  because gcd of their leading monoms is zero.

809. Creating S-polynomial from the pair  $(p_2, p_{357})$ .

Skipping pair  $p_2$  and  $p_{357}$  because gcd of their leading monoms is zero.

810. Creating S-polynomial from the pair  $(p_2, p_{358})$ .

Skipping pair  $p_2$  and  $p_{358}$  because gcd of their leading monoms is zero.

811. Creating S-polynomial from the pair  $(p_2, p_{359})$ .

Forming S-pol of  $p_2$  and  $p_{359}$ : Polynomial too big for output (text size is 6137 characters, number of terms is 16)

S-pol added.

812. Creating S-polynomial from the pair  $(p_2, p_{360})$ .

Skipping pair  $p_2$  and  $p_{360}$  because gcd of their leading monoms is zero.

813. Creating S-polynomial from the pair  $(p_2, p_{361})$ .

Skipping pair  $p_2$  and  $p_{361}$  because gcd of their leading monoms is zero.

814. Creating S-polynomial from the pair  $(p_2, p_{362})$ .

Forming S-pol of  $p_2$  and  $p_{362}$ : Polynomial too big for output (text size is 1153 characters, number of terms is 8)

S-pol added.

815. Creating S-polynomial from the pair  $(p_2, p_{363})$ .

Skipping pair  $p_2$  and  $p_{363}$  because gcd of their leading monoms is zero.

816. Creating S-polynomial from the pair  $(p_2, p_{364})$ .

Forming S-pol of  $p_2$  and  $p_{364}$ : Polynomial too big for output (text size is 2278 characters, number of terms is 8)

S-pol added.

817. Creating S-polynomial from the pair  $(p_2, p_{365})$ .

Skipping pair  $p_2$  and  $p_{365}$  because gcd of their leading monoms is zero.

818. Creating S-polynomial from the pair  $(p_2, p_{366})$ .

Skipping pair  $p_2$  and  $p_{366}$  because gcd of their leading monoms is zero.

819. Creating S-polynomial from the pair  $(p_2, p_{367})$ .

Skipping pair  $p_2$  and  $p_{367}$  because gcd of their leading monoms is zero.

820. Creating S-polynomial from the pair  $(p_2, p_{368})$ .

Forming S-pol of  $p_2$  and  $p_{368}$ : Polynomial too big for output (text size is 5101 characters, number of terms is 16)

S-pol added.

821. Creating S-polynomial from the pair  $(p_2, p_{369})$ .

Forming S-pol of  $p_2$  and  $p_{369}$ :

$$\begin{aligned}
p_{1525} = & -70368744177664u_6u_4^{71}u_3^{48}u_1^{46}x_5x_4x_3^2 + \\
& (-70368744177664u_6u_4^{72}u_3^{47}u_1^{46} - 281474976710656u_4^{72}u_3^{46}u_1^{48} + \\
& 140737488355328u_4^{72}u_3^{46}u_1^{47})x_5x_4x_3x_2 + \\
& (70368744177664u_6u_4^{72}u_3^{47}u_1^{46} + 140737488355328u_6u_4^{71}u_3^{48}u_1^{47} + \\
& 140737488355328u_4^{72}u_3^{48}u_1^{47})x_5x_4x_3 + \\
& (-140737488355328u_6u_4^{73}u_3^{46}u_1^{47} + 70368744177664u_6u_4^{73}u_3^{46}u_1^{46})x_5x_4x_2 + \\
& 70368744177664u_6^2u_4^{71}u_3^{47}u_1^{46}x_4x_3^2 - \\
& 70368744177664u_6^2u_4^{71}u_3^{47}u_1^{46}x_4x_3^2 + \\
& (140737488355328u_6^2u_4^{72}u_3^{46}u_1^{47} - 70368744177664u_6^2u_4^{72}u_3^{46}u_1^{46} - \\
& 140737488355328u_6^2u_4^{71}u_3^{47}u_1^{47})x_4x_3x_2 + \\
& (-70368744177664u_6^2u_4^{72}u_3^{48}u_1^{46} + 140737488355328u_6^2u_4^{71}u_3^{47}u_1^{47})x_4x_3
\end{aligned}$$

S-pol added.

822. Creating S-polynomial from the pair  $(p_2, p_{370})$ .

Forming S-pol of  $p_2$  and  $p_{370}$ : Polynomial too big for output (text size is 1994 characters, number of terms is 8)

S-pol added.

823. Creating S-polynomial from the pair  $(p_2, p_{371})$ .

Skipping pair  $p_2$  and  $p_{371}$  because gcd of their leading monoms is zero.

824. Creating S-polynomial from the pair  $(p_2, p_{372})$ .

Forming S-pol of  $p_2$  and  $p_{372}$ : Polynomial too big for output (text size is 2936 characters, number of terms is 8)

S-pol added.

825. Creating S-polynomial from the pair  $(p_2, p_{373})$ .

Skipping pair  $p_2$  and  $p_{373}$  because gcd of their leading monoms is zero.

826. Creating S-polynomial from the pair  $(p_2, p_{374})$ .

Skipping pair  $p_2$  and  $p_{374}$  because gcd of their leading monoms is zero.



827. Creating S-polynomial from the pair  $(p_2, p_{375})$ .  
Forming S-pol of  $p_2$  and  $p_{375}$ : Polynomial too big for output (text size is 6137 characters, number of terms is 16)  
S-pol added.
828. Creating S-polynomial from the pair  $(p_2, p_{376})$ .  
Skipping pair  $p_2$  and  $p_{376}$  because gcd of their leading monoms is zero.
829. Creating S-polynomial from the pair  $(p_2, p_{377})$ .  
Forming S-pol of  $p_2$  and  $p_{377}$ : Polynomial too big for output (text size is 1153 characters, number of terms is 8)  
S-pol added.
830. Creating S-polynomial from the pair  $(p_2, p_{378})$ .  
Forming S-pol of  $p_2$  and  $p_{378}$ : Polynomial too big for output (text size is 2278 characters, number of terms is 8)  
S-pol added.
831. Creating S-polynomial from the pair  $(p_2, p_{379})$ .  
Forming S-pol of  $p_2$  and  $p_{379}$ : Polynomial too big for output (text size is 5101 characters, number of terms is 16)  
S-pol added.
832. Creating S-polynomial from the pair  $(p_2, p_{380})$ .  
Forming S-pol of  $p_2$  and  $p_{380}$ :

$$\begin{aligned}
p_{1526} = & -70368744177664u_6u_4^{71}u_2^{48}u_1^{46}x_5x_4x_3^2 + \\
& (-70368744177664u_6u_4^{72}u_2^{47}u_1^{46} - 281474976710656u_4^{72}u_2^{46}u_1^{48} + \\
& 140737488355328u_4^{72}u_2^{46}u_1^{47})x_5x_4x_3x_1 + \\
& (70368744177664u_6u_4^{72}u_2^{47}u_1^{46} + 140737488355328u_6u_4^{71}u_2^{48}u_1^{47} + \\
& 140737488355328u_4^{72}u_2^{48}u_1^{47})x_5x_4x_3 + \\
& (-140737488355328u_6u_4^{73}u_2^{46}u_1^{47} + 70368744177664u_6u_4^{73}u_2^{46}u_1^{46})x_5x_4x_1 + \\
& 70368744177664u_6^2u_4^{71}u_2^{47}u_1^{46}x_4x_3^2x_1 - \\
& 70368744177664u_6^2u_4^{71}u_2^{47}u_1^{46}x_4x_3^2 + \\
& (140737488355328u_6^2u_4^{72}u_2^{46}u_1^{47} - 70368744177664u_6^2u_4^{72}u_2^{46}u_1^{46} - \\
& 140737488355328u_6^2u_4^{71}u_2^{47}u_1^{47})x_4x_3x_1 + \\
& (-70368744177664u_6^2u_4^{72}u_2^{48}u_1^{46} + 140737488355328u_6^2u_4^{71}u_2^{47}u_1^{47})x_4x_3
\end{aligned}$$

S-pol added.

833. Creating S-polynomial from the pair  $(p_2, p_{381})$ .  
Forming S-pol of  $p_2$  and  $p_{381}$ : Polynomial too big for output (text size is 1994 characters, number of terms is 8)  
S-pol added.

834. Creating S-polynomial from the pair  $(p_2, p_{382})$ .

Forming S-pol of  $p_2$  and  $p_{382}$ : Polynomial too big for output (text size is 2936 characters, number of terms is 8)

S-pol added.

835. Creating S-polynomial from the pair  $(p_2, p_{383})$ .

Forming S-pol of  $p_2$  and  $p_{383}$ : Polynomial too big for output (text size is 1404 characters, number of terms is 8)

S-pol added.

836. Creating S-polynomial from the pair  $(p_2, p_{384})$ .

Forming S-pol of  $p_2$  and  $p_{384}$ : Polynomial too big for output (text size is 2055 characters, number of terms is 8)

S-pol added.

837. Creating S-polynomial from the pair  $(p_2, p_{385})$ .

Forming S-pol of  $p_2$  and  $p_{385}$ :

$$\begin{aligned} p_{1527} = & (-262144u_4^{29}u_1^{18} + 1048576u_4^{27}u_1^{20} - 524288u_4^{27}u_1^{19})x_5x_4x_3 + \\ & (-524288u_4^{29}u_1^{19} + 262144u_4^{29}u_1^{18})x_5x_4 + \\ & (-262144u_5^2u_4^{27}u_1^{18} + 131072u_5^2u_4^{27}u_1^{17})x_5x_3^2 + \\ & 131072u_5^2u_4^{29}u_1^{17}x_5x_3 + 262144u_6u_4^{28}u_1^{18}x_4x_3^2 - \\ & 262144u_6u_4^{28}u_1^{18}x_4x_3 - 131072u_6u_5^2u_4^{28}u_1^{17}x_3^2 + \\ & 131072u_6u_5^2u_4^{28}u_1^{17}x_3 \end{aligned}$$

S-pol added.

838. Creating S-polynomial from the pair  $(p_3, p_{107})$ .

Forming S-pol of  $p_3$  and  $p_{107}$ :

$$\begin{aligned} p_{1528} = & 131072u_2^{31}u_1^{17}x_5x_4^2 + \\ & (131072u_5^2u_2^{29}u_1^{17} - 65536u_5^2u_2^{29}u_1^{16} - 524288u_2^{29}u_1^{19} + \\ & 262144u_2^{29}u_1^{18})x_5x_4x_1 - 65536u_5^2u_2^{31}u_1^{16}x_5x_4 + \\ & (262144u_5^2u_2^{29}u_1^{18} - 131072u_5^2u_2^{29}u_1^{17})x_5x_1 - \\ & 131072u_6u_2^{30}u_1^{17}x_4^2x_1 + 131072u_6u_2^{30}u_1^{17}x_4^2 + \\ & 65536u_6u_5^2u_2^{30}u_1^{16}x_4x_1 - 65536u_6u_5^2u_2^{30}u_1^{16}x_4 \end{aligned}$$

S-pol added.

839. Creating S-polynomial from the pair  $(p_3, p_{108})$ .

Forming S-pol of  $p_3$  and  $p_{108}$ :

$$\begin{aligned} p_{1529} = & 131072u_3^{31}u_1^{17}x_5x_4^2 + \\ & (131072u_5^2u_3^{29}u_1^{17} - 65536u_5^2u_3^{29}u_1^{16} - 524288u_3^{29}u_1^{19} + \\ & 262144u_3^{29}u_1^{18})x_5x_4x_2 - 65536u_5^2u_3^{31}u_1^{16}x_5x_4 + \\ & (262144u_5^2u_3^{29}u_1^{18} - 131072u_5^2u_3^{29}u_1^{17})x_5x_2 - \\ & 131072u_6u_3^{30}u_1^{17}x_4^2x_2 + 131072u_6u_3^{30}u_1^{17}x_4^2 + \\ & 65536u_6u_5^2u_3^{30}u_1^{16}x_4x_2 - 65536u_6u_5^2u_3^{30}u_1^{16}x_4 \end{aligned}$$

S-pol added.

840. Creating S-polynomial from the pair  $(p_3, p_{109})$ .

Forming S-pol of  $p_3$  and  $p_{109}$ :

$$\begin{aligned} p_{1530} = & 131072u_4^{31}u_1^{17}x_5x_4^2 + \\ & (131072u_5^2u_4^{29}u_1^{17} - 65536u_5^2u_4^{29}u_1^{16} - 524288u_4^{29}u_1^{19} + \\ & 262144u_4^{29}u_1^{18})x_5x_4x_3 - 65536u_5^2u_4^{31}u_1^{16}x_5x_4 + \\ & (262144u_5^2u_4^{29}u_1^{18} - 131072u_5^2u_4^{29}u_1^{17})x_5x_3 - \\ & 131072u_6u_4^{30}u_1^{17}x_4^2x_3 + 131072u_6u_4^{30}u_1^{17}x_4^2 + \\ & 65536u_6u_5^2u_4^{30}u_1^{16}x_4x_3 - 65536u_6u_5^2u_4^{30}u_1^{16}x_4 \end{aligned}$$

S-pol added.

841. Creating S-polynomial from the pair  $(p_3, p_{110})$ .

Forming S-pol of  $p_3$  and  $p_{110}$ :

$$\begin{aligned} p_{1531} = & 65536u_3^{30}u_1^{16}x_5x_4^2 + \\ & (65536u_5^2u_3^{28}u_1^{16} - 32768u_5^2u_3^{28}u_1^{15} - 262144u_3^{28}u_1^{18} + \\ & 131072u_3^{28}u_1^{17})x_5x_4x_2 - 32768u_5^2u_3^{30}u_1^{15}x_5x_4 + \\ & (131072u_5^2u_3^{28}u_1^{17} - 65536u_5^2u_3^{28}u_1^{16})x_5x_2 - \\ & 65536u_6u_3^{29}u_1^{16}x_4^2x_2 + 65536u_6u_3^{29}u_1^{16}x_4^2 + \\ & 32768u_6u_5^2u_3^{29}u_1^{15}x_4x_2 - 32768u_6u_5^2u_3^{29}u_1^{15}x_4 \end{aligned}$$

S-pol added.

842. Creating S-polynomial from the pair  $(p_3, p_{111})$ .

Forming S-pol of  $p_3$  and  $p_{111}$ :

$$\begin{aligned} p_{1532} = & 65536u_2^{30}u_1^{16}x_5x_4^2 + \\ & (65536u_5^2u_2^{28}u_1^{16} - 32768u_5^2u_2^{28}u_1^{15} - 262144u_2^{28}u_1^{18} + \\ & 131072u_2^{28}u_1^{17})x_5x_4x_1 - 32768u_5^2u_2^{30}u_1^{15}x_5x_4 + \\ & (131072u_5^2u_2^{28}u_1^{17} - 65536u_5^2u_2^{28}u_1^{16})x_5x_1 - \\ & 65536u_6u_2^{29}u_1^{16}x_4^2x_1 + 65536u_6u_2^{29}u_1^{16}x_4^2 + \\ & 32768u_6u_5^2u_2^{29}u_1^{15}x_4x_1 - 32768u_6u_5^2u_2^{29}u_1^{15}x_4 \end{aligned}$$

S-pol added.

843. Creating S-polynomial from the pair  $(p_3, p_{112})$ .

Forming S-pol of  $p_3$  and  $p_{112}$ :

$$\begin{aligned} p_{1533} = & 65536u_4^{30}u_1^{16}x_5x_4^2 + \\ & (65536u_5^2u_4^{28}u_1^{16} - 32768u_5^2u_4^{28}u_1^{15} - 262144u_4^{28}u_1^{18} + \\ & 131072u_4^{28}u_1^{17})x_5x_4x_3 - 32768u_5^2u_4^{30}u_1^{15}x_5x_4 + \\ & (131072u_5^2u_4^{28}u_1^{17} - 65536u_5^2u_4^{28}u_1^{16})x_5x_3 - \\ & 65536u_6u_4^{29}u_1^{16}x_4^2x_3 + 65536u_6u_4^{29}u_1^{16}x_4^2 + \\ & 32768u_6u_5^2u_4^{29}u_1^{15}x_4x_3 - 32768u_6u_5^2u_4^{29}u_1^{15}x_4 \end{aligned}$$

S-pol added.

844. Creating S-polynomial from the pair  $(p_3, p_{113})$ .

Forming S-pol of  $p_3$  and  $p_{113}$ :

$$\begin{aligned} p_{1534} = & (524288u_2^{27}u_1^{19} - 262144u_2^{27}u_1^{18})x_5x_4^2 + \\ & (524288u_2^{27}u_1^{19} - 2097152u_2^{25}u_1^{21} + 1048576u_2^{25}u_1^{20})x_5x_4x_1 + \\ & (-262144u_5^2u_2^{27}u_1^{18} + 1048576u_5^2u_2^{25}u_1^{20} - 524288u_5^2u_2^{25}u_1^{19})x_5x_1 + \\ & (-524288u_6u_2^{26}u_1^{19} + 262144u_6u_2^{26}u_1^{18})x_4^2x_1 + 262144u_6u_2^{28}u_1^{18}x_4^2 \end{aligned}$$

S-pol added.

845. Creating S-polynomial from the pair  $(p_3, p_{114})$ .

Forming S-pol of  $p_3$  and  $p_{114}$ :

$$\begin{aligned} p_{1535} = & (262144u_2^{26}u_1^{18} - 131072u_2^{26}u_1^{17})x_5x_4^2 + \\ & (262144u_2^{26}u_1^{18} - 1048576u_2^{24}u_1^{20} + 524288u_2^{24}u_1^{19})x_5x_4x_1 + \\ & (-131072u_5^2u_2^{26}u_1^{17} + 524288u_5^2u_2^{24}u_1^{19} - 262144u_5^2u_2^{24}u_1^{18})x_5x_1 + \\ & (-262144u_6u_2^{25}u_1^{18} + 131072u_6u_2^{25}u_1^{17})x_4^2x_1 + 131072u_6u_2^{27}u_1^{17}x_4^2 \end{aligned}$$

S-pol added.

846. Creating S-polynomial from the pair  $(p_3, p_{115})$ .

Forming S-pol of  $p_3$  and  $p_{115}$ :

$$\begin{aligned} p_{1536} = & (524288u_3^{27}u_1^{19} - 262144u_3^{27}u_1^{18})x_5x_4^2 + \\ & (524288u_3^{27}u_1^{19} - 2097152u_3^{25}u_1^{21} + 1048576u_3^{25}u_1^{20})x_5x_4x_2 + \\ & (-262144u_5^2u_3^{27}u_1^{18} + 1048576u_5^2u_3^{25}u_1^{20} - 524288u_5^2u_3^{25}u_1^{19})x_5x_2 + \\ & (-524288u_6u_3^{26}u_1^{19} + 262144u_6u_3^{26}u_1^{18})x_4^2x_2 + 262144u_6u_3^{28}u_1^{18}x_4^2 \end{aligned}$$

S-pol added.

847. Creating S-polynomial from the pair  $(p_3, p_{116})$ .

Forming S-pol of  $p_3$  and  $p_{116}$ :

$$\begin{aligned} p_{1537} = & (262144u_3^{26}u_1^{18} - 131072u_3^{26}u_1^{17})x_5x_4^2 + \\ & (262144u_3^{26}u_1^{18} - 1048576u_3^{24}u_1^{20} + 524288u_3^{24}u_1^{19})x_5x_4x_2 + \\ & (-131072u_5^2u_3^{26}u_1^{17} + 524288u_5^2u_3^{24}u_1^{19} - 262144u_5^2u_3^{24}u_1^{18})x_5x_2 + \\ & (-262144u_6u_3^{25}u_1^{18} + 131072u_6u_3^{25}u_1^{17})x_4^2x_2 + 131072u_6u_3^{27}u_1^{17}x_4^2 \end{aligned}$$

S-pol added.

848. Creating S-polynomial from the pair  $(p_3, p_{117})$ .

Forming S-pol of  $p_3$  and  $p_{117}$ :

$$\begin{aligned} p_{1538} = & (524288u_4^{27}u_1^{19} - 262144u_4^{27}u_1^{18})x_5x_4^2 + \\ & (524288u_4^{27}u_1^{19} - 2097152u_4^{25}u_1^{21} + 1048576u_4^{25}u_1^{20})x_5x_4x_3 + \\ & (-262144u_5^2u_4^{27}u_1^{18} + 1048576u_5^2u_4^{25}u_1^{20} - 524288u_5^2u_4^{25}u_1^{19})x_5x_3 + \\ & (-524288u_6u_4^{26}u_1^{19} + 262144u_6u_4^{26}u_1^{18})x_4^2x_3 + 262144u_6u_4^{28}u_1^{18}x_4^2 \end{aligned}$$

S-pol added.

849. Creating S-polynomial from the pair  $(p_3, p_{118})$ .

Forming S-pol of  $p_3$  and  $p_{118}$ :

$$\begin{aligned} p_{1539} = & (262144u_4^{26}u_1^{18} - 131072u_4^{26}u_1^{17})x_5x_4^2 + \\ & (262144u_4^{26}u_1^{18} - 1048576u_4^{24}u_1^{20} + 524288u_4^{24}u_1^{19})x_5x_4x_3 + \\ & (-131072u_5^2u_4^{26}u_1^{17} + 524288u_5^2u_4^{24}u_1^{19} - 262144u_5^2u_4^{24}u_1^{18})x_5x_3 + \\ & (-262144u_6u_4^{25}u_1^{18} + 131072u_6u_4^{25}u_1^{17})x_4^2x_3 + 131072u_6u_4^{27}u_1^{17}x_4^2 \end{aligned}$$

S-pol added.

850. Creating S-polynomial from the pair  $(p_3, p_{119})$ .

Forming S-pol of  $p_3$  and  $p_{119}$ : Polynomial too big for output (text size is 2118 characters, number of terms is 8)

S-pol added.

851. Creating S-polynomial from the pair  $(p_3, p_{120})$ .

Forming S-pol of  $p_3$  and  $p_{120}$ : Polynomial too big for output (text size is 1325 characters, number of terms is 8)

S-pol added.

852. Creating S-polynomial from the pair  $(p_3, p_{121})$ .

Forming S-pol of  $p_3$  and  $p_{121}$ : Polynomial too big for output (text size is 1130 characters, number of terms is 9)

S-pol added.

853. Creating S-polynomial from the pair  $(p_3, p_{122})$ .

Forming S-pol of  $p_3$  and  $p_{122}$ :

$$\begin{aligned}
p_{1540} = & (-134217728u_3^{45}u_1^{27} + 67108864u_3^{45}u_1^{26})x_5x_4^2 + \\
& (33554432u_5^2u_3^{45}u_1^{25} - 134217728u_5^2u_3^{43}u_1^{27} + 67108864u_5^2u_3^{43}u_1^{26} - \\
& 134217728u_3^{45}u_1^{27} + 536870912u_3^{43}u_1^{29} - 268435456u_3^{43}u_1^{28})x_5x_4x_2 + \\
& (67108864u_5^2u_3^{45}u_1^{26} - 33554432u_5^2u_3^{45}u_1^{25})x_5x_4 + \\
& (67108864u_5^2u_3^{45}u_1^{26} - 268435456u_5^2u_3^{43}u_1^{28} + \\
& 134217728u_5^2u_3^{43}u_1^{27})x_5x_2 + \\
& (134217728u_6u_3^{44}u_1^{27} - 67108864u_6u_3^{44}u_1^{26})x_4^2x_2 - \\
& 67108864u_6u_3^{46}u_1^{26}x_4^2 + \\
& (-67108864u_6u_5^2u_3^{44}u_1^{26} + 33554432u_6u_5^2u_3^{44}u_1^{25})x_4x_2 + \\
& 33554432u_6u_5^2u_3^{46}u_1^{25}x_4
\end{aligned}$$

S-pol added.

854. Creating S-polynomial from the pair  $(p_3, p_{123})$ .

Forming S-pol of  $p_3$  and  $p_{123}$ : Polynomial too big for output (text size is 1058 characters, number of terms is 9)

S-pol added.

855. Creating S-polynomial from the pair  $(p_3, p_{124})$ .

Forming S-pol of  $p_3$  and  $p_{124}$ : Polynomial too big for output (text size is 1127 characters, number of terms is 8)

S-pol added.

856. Creating S-polynomial from the pair  $(p_3, p_{125})$ .

Forming S-pol of  $p_3$  and  $p_{125}$ :

$$\begin{aligned}
p_{1541} = & (-16777216u_3^{43}u_1^{24} + 8388608u_3^{43}u_1^{23})x_5x_4^2 + \\
& (4194304u_5^2u_3^{43}u_1^{22} - 16777216u_5^2u_3^{41}u_1^{24} + 8388608u_5^2u_3^{41}u_1^{23} - \\
& 16777216u_3^{43}u_1^{24} + 67108864u_3^{41}u_1^{26} - 33554432u_3^{41}u_1^{25})x_5x_4x_2 + \\
& (8388608u_5^2u_3^{43}u_1^{23} - 4194304u_5^2u_3^{43}u_1^{22})x_5x_4 + \\
& (8388608u_5^2u_3^{43}u_1^{23} - 33554432u_5^2u_3^{41}u_1^{25} + \\
& 16777216u_5^2u_3^{41}u_1^{24})x_5x_2 + \\
& (16777216u_6u_3^{42}u_1^{24} - 8388608u_6u_3^{42}u_1^{23})x_4^2x_2 - \\
& 8388608u_6u_3^{44}u_1^{23}x_4^2 + \\
& (-8388608u_6u_5^2u_3^{42}u_1^{23} + 4194304u_6u_5^2u_3^{42}u_1^{22})x_4x_2 + \\
& 4194304u_6u_5^2u_3^{44}u_1^{22}x_4
\end{aligned}$$

S-pol added.

857. Creating S-polynomial from the pair  $(p_3, p_{126})$ .

Forming S-pol of  $p_3$  and  $p_{126}$ : Polynomial too big for output (text size is 1125 characters, number of terms is 9)

S-pol added.

858. Creating S-polynomial from the pair  $(p_3, p_{127})$ .

Forming S-pol of  $p_3$  and  $p_{127}$ : Polynomial too big for output (text size is 1050 characters, number of terms is 9)

S-pol added.

859. Creating S-polynomial from the pair  $(p_3, p_{128})$ .

Forming S-pol of  $p_3$  and  $p_{128}$ :

$$\begin{aligned} p_{1542} = & (-65536u_3^{20}u_1^{16} + 32768u_3^{20}u_1^{15})x_5x_4^2 + \\ & (-65536u_3^{20}u_1^{16} + 262144u_3^{18}u_1^{18} - 131072u_3^{18}u_1^{17})x_5x_4x_2 + \\ & (32768u_5^2u_3^{20}u_1^{15} - 131072u_5^2u_3^{18}u_1^{17} + 65536u_5^2u_3^{18}u_1^{16})x_5x_2 + \\ & (65536u_6u_3^{19}u_1^{16} - 32768u_6u_3^{19}u_1^{15})x_4^2x_2 - 32768u_6u_3^{21}u_1^{15}x_4^2 \end{aligned}$$

S-pol added.

860. Creating S-polynomial from the pair  $(p_3, p_{129})$ .

Forming S-pol of  $p_3$  and  $p_{129}$ :

$$\begin{aligned} p_{1543} = & (-32768u_3^{19}u_1^{15} + 16384u_3^{19}u_1^{14})x_5x_4^2 + \\ & (-32768u_3^{19}u_1^{15} + 131072u_3^{17}u_1^{17} - 65536u_3^{17}u_1^{16})x_5x_4x_2 + \\ & (16384u_5^2u_3^{19}u_1^{14} - 65536u_5^2u_3^{17}u_1^{16} + 32768u_5^2u_3^{17}u_1^{15})x_5x_2 + \\ & (32768u_6u_3^{18}u_1^{15} - 16384u_6u_3^{18}u_1^{14})x_4^2x_2 - 16384u_6u_3^{20}u_1^{14}x_4^2 \end{aligned}$$

S-pol added.

861. Creating S-polynomial from the pair  $(p_3, p_{130})$ .

Forming S-pol of  $p_3$  and  $p_{130}$ : Polynomial too big for output (text size is 2118 characters, number of terms is 8)

S-pol added.

862. Creating S-polynomial from the pair  $(p_3, p_{131})$ .

Forming S-pol of  $p_3$  and  $p_{131}$ : Polynomial too big for output (text size is 1325 characters, number of terms is 8)

S-pol added.

863. Creating S-polynomial from the pair  $(p_3, p_{132})$ .

Forming S-pol of  $p_3$  and  $p_{132}$ :

$$\begin{aligned} p_{1544} = & (-134217728u_2^{45}u_1^{27} + 67108864u_2^{45}u_1^{26})x_5x_4^2 + \\ & (33554432u_5^2u_2^{45}u_1^{25} - 134217728u_5^2u_2^{43}u_1^{27} + 67108864u_5^2u_2^{43}u_1^{26} - \end{aligned}$$

$$\begin{aligned}
& 134217728u_2^{45}u_1^{27} + 536870912u_2^{43}u_1^{29} - 268435456u_2^{43}u_1^{28})x_5x_4x_1 + \\
& (67108864u_5^2u_2^{45}u_1^{26} - 33554432u_5^2u_2^{45}u_1^{25})x_5x_4 + \\
& (67108864u_5^2u_2^{45}u_1^{26} - 268435456u_5^2u_2^{43}u_1^{28} + \\
& 134217728u_5^2u_2^{43}u_1^{27})x_5x_1 + \\
& (134217728u_6u_2^{44}u_1^{27} - 67108864u_6u_2^{44}u_1^{26})x_4^2x_1 - \\
& 67108864u_6u_2^{46}u_1^{26}x_4^2 + \\
& (-67108864u_6u_5^2u_2^{44}u_1^{26} + 33554432u_6u_5^2u_2^{44}u_1^{25})x_4x_1 + \\
& 33554432u_6u_5^2u_2^{46}u_1^{25}x_4
\end{aligned}$$

S-pol added.

864. Creating S-polynomial from the pair  $(p_3, p_{133})$ .

Forming S-pol of  $p_3$  and  $p_{133}$ : Polynomial too big for output (text size is 1058 characters, number of terms is 9)

S-pol added.

865. Creating S-polynomial from the pair  $(p_3, p_{134})$ .

Forming S-pol of  $p_3$  and  $p_{134}$ : Polynomial too big for output (text size is 1058 characters, number of terms is 9)

S-pol added.

866. Creating S-polynomial from the pair  $(p_3, p_{135})$ .

Forming S-pol of  $p_3$  and  $p_{135}$ : Polynomial too big for output (text size is 1050 characters, number of terms is 9)

S-pol added.

867. Creating S-polynomial from the pair  $(p_3, p_{136})$ .

Forming S-pol of  $p_3$  and  $p_{136}$ : Polynomial too big for output (text size is 1127 characters, number of terms is 8)

S-pol added.

868. Creating S-polynomial from the pair  $(p_3, p_{137})$ .

Forming S-pol of  $p_3$  and  $p_{137}$ :

$$\begin{aligned}
p_{1545} = & (-16777216u_2^{43}u_1^{24} + 8388608u_2^{43}u_1^{23})x_5x_4^2 + \\
& (4194304u_5^2u_2^{43}u_1^{22} - 16777216u_5^2u_2^{41}u_1^{24} + 8388608u_5^2u_2^{41}u_1^{23} - \\
& 16777216u_2^{43}u_1^{24} + 67108864u_2^{41}u_1^{26} - 33554432u_2^{41}u_1^{25})x_5x_4x_1 + \\
& (8388608u_5^2u_2^{43}u_1^{23} - 4194304u_5^2u_2^{43}u_1^{22})x_5x_4 + \\
& (8388608u_5^2u_2^{43}u_1^{23} - 33554432u_5^2u_2^{41}u_1^{25} + \\
& 16777216u_5^2u_2^{41}u_1^{24})x_5x_1 + \\
& (16777216u_6u_2^{42}u_1^{24} - 8388608u_6u_2^{42}u_1^{23})x_4^2x_1 - \\
& 8388608u_6u_2^{44}u_1^{23}x_4^2 + \\
& (-8388608u_6u_5^2u_2^{42}u_1^{23} + 4194304u_6u_5^2u_2^{42}u_1^{22})x_4x_1 + \\
& 4194304u_6u_5^2u_2^{44}u_1^{22}x_4
\end{aligned}$$

S-pol added.



869. Creating S-polynomial from the pair  $(p_3, p_{138})$ .

Forming S-pol of  $p_3$  and  $p_{138}$ : Polynomial too big for output (text size is 1050 characters, number of terms is 9)

S-pol added.

870. Creating S-polynomial from the pair  $(p_3, p_{139})$ .

Forming S-pol of  $p_3$  and  $p_{139}$ :

$$\begin{aligned} p_{1546} = & (-65536u_2^{20}u_1^{16} + 32768u_2^{20}u_1^{15})x_5x_4^2 + \\ & (-65536u_2^{20}u_1^{16} + 262144u_2^{18}u_1^{18} - 131072u_2^{18}u_1^{17})x_5x_4x_1 + \\ & (32768u_5^2u_2^{20}u_1^{15} - 131072u_5^2u_2^{18}u_1^{17} + 65536u_5^2u_2^{18}u_1^{16})x_5x_1 + \\ & (65536u_6u_2^{19}u_1^{16} - 32768u_6u_2^{19}u_1^{15})x_4^2x_1 - 32768u_6u_2^{21}u_1^{15}x_4^2 \end{aligned}$$

S-pol added.

871. Creating S-polynomial from the pair  $(p_3, p_{140})$ .

Forming S-pol of  $p_3$  and  $p_{140}$ :

$$\begin{aligned} p_{1547} = & (-32768u_2^{19}u_1^{15} + 16384u_2^{19}u_1^{14})x_5x_4^2 + \\ & (-32768u_2^{19}u_1^{15} + 131072u_2^{17}u_1^{17} - 65536u_2^{17}u_1^{16})x_5x_4x_1 + \\ & (16384u_5^2u_2^{19}u_1^{14} - 65536u_5^2u_2^{17}u_1^{16} + 32768u_5^2u_2^{17}u_1^{15})x_5x_1 + \\ & (32768u_6u_2^{18}u_1^{15} - 16384u_6u_2^{18}u_1^{14})x_4^2x_1 - 16384u_6u_2^{20}u_1^{14}x_4^2 \end{aligned}$$

S-pol added.

872. Creating S-polynomial from the pair  $(p_3, p_{141})$ .

Forming S-pol of  $p_3$  and  $p_{141}$ : Polynomial too big for output (text size is 2118 characters, number of terms is 8)

S-pol added.

873. Creating S-polynomial from the pair  $(p_3, p_{142})$ .

Forming S-pol of  $p_3$  and  $p_{142}$ : Polynomial too big for output (text size is 1325 characters, number of terms is 8)

S-pol added.

874. Creating S-polynomial from the pair  $(p_3, p_{143})$ .

Forming S-pol of  $p_3$  and  $p_{143}$ : Polynomial too big for output (text size is 1130 characters, number of terms is 9)

S-pol added.

875. Creating S-polynomial from the pair  $(p_3, p_{144})$ .

Forming S-pol of  $p_3$  and  $p_{144}$ : Polynomial too big for output (text size is 1130 characters, number of terms is 9)

S-pol added.

876. Creating S-polynomial from the pair  $(p_3, p_{145})$ .

Forming S-pol of  $p_3$  and  $p_{145}$ :

$$\begin{aligned}
p_{1548} = & (-134217728u_4^{45}u_1^{27} + 67108864u_4^{45}u_1^{26})x_5x_4^2 + \\
& (33554432u_5^2u_4^{45}u_1^{25} - 134217728u_5^2u_4^{43}u_1^{27} + 67108864u_5^2u_4^{43}u_1^{26} - \\
& 134217728u_4^{45}u_1^{27} + 536870912u_4^{43}u_1^{29} - 268435456u_4^{43}u_1^{28})x_5x_4x_3 + \\
& (67108864u_5^2u_4^{45}u_1^{26} - 33554432u_5^2u_4^{45}u_1^{25})x_5x_4 + \\
& (67108864u_5^2u_4^{45}u_1^{26} - 268435456u_5^2u_4^{43}u_1^{28} + \\
& 134217728u_5^2u_4^{43}u_1^{27})x_5x_3 + \\
& (134217728u_6u_4^{44}u_1^{27} - 67108864u_6u_4^{44}u_1^{26})x_4^2x_3 - \\
& 67108864u_6u_4^{46}u_1^{26}x_4^2 + \\
& (-67108864u_6u_5^2u_4^{44}u_1^{26} + 33554432u_6u_5^2u_4^{44}u_1^{25})x_4x_3 + \\
& 33554432u_6u_5^2u_4^{46}u_1^{25}x_4
\end{aligned}$$

S-pol added.

877. Creating S-polynomial from the pair  $(p_3, p_{146})$ .

Forming S-pol of  $p_3$  and  $p_{146}$ : Polynomial too big for output (text size is 1125 characters, number of terms is 9)

S-pol added.

878. Creating S-polynomial from the pair  $(p_3, p_{147})$ .

Forming S-pol of  $p_3$  and  $p_{147}$ : Polynomial too big for output (text size is 1125 characters, number of terms is 9)

S-pol added.

879. Creating S-polynomial from the pair  $(p_3, p_{148})$ .

Forming S-pol of  $p_3$  and  $p_{148}$ : Polynomial too big for output (text size is 1127 characters, number of terms is 8)

S-pol added.

880. Creating S-polynomial from the pair  $(p_3, p_{149})$ .

Forming S-pol of  $p_3$  and  $p_{149}$ :

$$\begin{aligned}
p_{1549} = & (-16777216u_4^{43}u_1^{24} + 8388608u_4^{43}u_1^{23})x_5x_4^2 + \\
& (4194304u_5^2u_4^{43}u_1^{22} - 16777216u_5^2u_4^{41}u_1^{24} + 8388608u_5^2u_4^{41}u_1^{23} - \\
& 16777216u_4^{43}u_1^{24} + 67108864u_4^{41}u_1^{26} - 33554432u_4^{41}u_1^{25})x_5x_4x_3 + \\
& (8388608u_5^2u_4^{43}u_1^{23} - 4194304u_5^2u_4^{43}u_1^{22})x_5x_4 + \\
& (8388608u_5^2u_4^{43}u_1^{23} - 33554432u_5^2u_4^{41}u_1^{25} + \\
& 16777216u_5^2u_4^{41}u_1^{24})x_5x_3 + \\
& (16777216u_6u_4^{42}u_1^{24} - 8388608u_6u_4^{42}u_1^{23})x_4^2x_3 - \\
& 8388608u_6u_4^{44}u_1^{23}x_4^2 + \\
& (-8388608u_6u_5^2u_4^{42}u_1^{23} + 4194304u_6u_5^2u_4^{42}u_1^{22})x_4x_3 + \\
& 4194304u_6u_5^2u_4^{44}u_1^{22}x_4
\end{aligned}$$

S-pol added.

881. Creating S-polynomial from the pair  $(p_3, p_{150})$ .

Forming S-pol of  $p_3$  and  $p_{150}$ :

$$\begin{aligned} p_{1550} = & (-65536u_4^{20}u_1^{16} + 32768u_4^{20}u_1^{15})x_5x_4^2 + \\ & (-65536u_4^{20}u_1^{16} + 262144u_4^{18}u_1^{18} - 131072u_4^{18}u_1^{17})x_5x_4x_3 + \\ & (32768u_5^2u_4^{20}u_1^{15} - 131072u_5^2u_4^{18}u_1^{17} + 65536u_5^2u_4^{18}u_1^{16})x_5x_3 + \\ & (65536u_6u_4^{19}u_1^{16} - 32768u_6u_4^{19}u_1^{15})x_4^2x_3 - 32768u_6u_4^{21}u_1^{15}x_4^2 \end{aligned}$$

S-pol added.

882. Creating S-polynomial from the pair  $(p_3, p_{151})$ .

Forming S-pol of  $p_3$  and  $p_{151}$ :

$$\begin{aligned} p_{1551} = & (-32768u_4^{19}u_1^{15} + 16384u_4^{19}u_1^{14})x_5x_4^2 + \\ & (-32768u_4^{19}u_1^{15} + 131072u_4^{17}u_1^{17} - 65536u_4^{17}u_1^{16})x_5x_4x_3 + \\ & (16384u_5^2u_4^{19}u_1^{14} - 65536u_5^2u_4^{17}u_1^{16} + 32768u_5^2u_4^{17}u_1^{15})x_5x_3 + \\ & (32768u_6u_4^{18}u_1^{15} - 16384u_6u_4^{18}u_1^{14})x_4^2x_3 - 16384u_6u_4^{20}u_1^{14}x_4^2 \end{aligned}$$

S-pol added.

883. Creating S-polynomial from the pair  $(p_3, p_{152})$ .

Forming S-pol of  $p_3$  and  $p_{152}$ :

$$\begin{aligned} p_{1552} = & 16384u_2^{25}u_1^{14}x_5x_4^2 + (-65536u_2^{23}u_1^{16} + 32768u_2^{23}u_1^{15})x_5x_4x_1 + \\ & (32768u_5^2u_2^{23}u_1^{15} - 16384u_5^2u_2^{23}u_1^{14})x_5x_1 - \\ & 16384u_6u_2^{24}u_1^{14}x_4^2x_1 + 16384u_6u_2^{24}u_1^{14}x_4^2 \end{aligned}$$

Reduced to zero.

884. Creating S-polynomial from the pair  $(p_3, p_{153})$ .

Forming S-pol of  $p_3$  and  $p_{153}$ :

$$\begin{aligned} p_{1553} = & 8192u_2^{24}u_1^{13}x_5x_4^2 + (-32768u_2^{22}u_1^{15} + 16384u_2^{22}u_1^{14})x_5x_4x_1 + \\ & (16384u_5^2u_2^{22}u_1^{14} - 8192u_5^2u_2^{22}u_1^{13})x_5x_1 - \\ & 8192u_6u_2^{23}u_1^{13}x_4^2x_1 + 8192u_6u_2^{23}u_1^{13}x_4^2 \end{aligned}$$

Reduced to zero.

885. Creating S-polynomial from the pair  $(p_3, p_{154})$ .

Forming S-pol of  $p_3$  and  $p_{154}$ : Polynomial too big for output (text size is 2629 characters, number of terms is 8)

S-pol added.

886. Creating S-polynomial from the pair  $(p_3, p_{155})$ .

Forming S-pol of  $p_3$  and  $p_{155}$ : Polynomial too big for output (text size is 1637 characters, number of terms is 8)

S-pol added.

887. Creating S-polynomial from the pair  $(p_3, p_{156})$ .

Forming S-pol of  $p_3$  and  $p_{156}$ :

$$\begin{aligned} p_{1554} = & -1048576u_2^{32}u_1^{20}x_5x_4^2 + \\ & (-1048576u_5^2u_2^{30}u_1^{20} + 524288u_5^2u_2^{30}u_1^{19} + 4194304u_2^{30}u_1^{22} - \\ & 2097152u_2^{30}u_1^{21})x_5x_4x_1 + 524288u_5^2u_2^{32}u_1^{19}x_5x_4 + \\ & (-2097152u_5^2u_2^{30}u_1^{21} + 1048576u_5^2u_2^{30}u_1^{20})x_5x_1 + \\ & 1048576u_6u_2^{31}u_1^{20}x_4^2x_1 - 1048576u_6u_2^{31}u_1^{20}x_4^2 - \\ & 524288u_6u_5^2u_2^{31}u_1^{19}x_4x_1 + 524288u_6u_5^2u_2^{31}u_1^{19}x_4 \end{aligned}$$

S-pol added.

888. Creating S-polynomial from the pair  $(p_3, p_{157})$ .

Forming S-pol of  $p_3$  and  $p_{157}$ : Polynomial too big for output (text size is 1188 characters, number of terms is 9)

S-pol added.

889. Creating S-polynomial from the pair  $(p_3, p_{158})$ .

Forming S-pol of  $p_3$  and  $p_{158}$ : Polynomial too big for output (text size is 1188 characters, number of terms is 9)

S-pol added.

890. Creating S-polynomial from the pair  $(p_3, p_{159})$ .

Forming S-pol of  $p_3$  and  $p_{159}$ : Polynomial too big for output (text size is 1180 characters, number of terms is 9)

S-pol added.

891. Creating S-polynomial from the pair  $(p_3, p_{160})$ .

Forming S-pol of  $p_3$  and  $p_{160}$ : Polynomial too big for output (text size is 1517 characters, number of terms is 8)

S-pol added.

892. Creating S-polynomial from the pair  $(p_3, p_{161})$ .

Forming S-pol of  $p_3$  and  $p_{161}$ :

$$\begin{aligned} p_{1555} = & -131072u_2^{25}u_1^{17}x_5x_4^2 + \\ & (-131072u_5^2u_2^{23}u_1^{17} + 65536u_5^2u_2^{23}u_1^{16} + 524288u_2^{23}u_1^{19} - \\ & 262144u_2^{23}u_1^{18})x_5x_4x_1 + 65536u_5^2u_2^{25}u_1^{16}x_5x_4 + \\ & (-262144u_5^2u_2^{23}u_1^{18} + 131072u_5^2u_2^{23}u_1^{17})x_5x_1 + \\ & 131072u_6u_2^{24}u_1^{17}x_4^2x_1 - 131072u_6u_2^{24}u_1^{17}x_4^2 - \\ & 65536u_6u_5^2u_2^{24}u_1^{16}x_4x_1 + 65536u_6u_5^2u_2^{24}u_1^{16}x_4 \end{aligned}$$

S-pol added.

893. Creating S-polynomial from the pair  $(p_3, p_{162})$ .

Forming S-pol of  $p_3$  and  $p_{162}$ : Polynomial too big for output (text size is 1180 characters, number of terms is 9)

S-pol added.

894. Creating S-polynomial from the pair  $(p_3, p_{163})$ .

Forming S-pol of  $p_3$  and  $p_{163}$ :

$$\begin{aligned} p_{1556} = & 16384u_3^{25}u_1^{14}x_5x_4^2 + (-65536u_3^{23}u_1^{16} + 32768u_3^{23}u_1^{15})x_5x_4x_2 + \\ & (32768u_5^2u_3^{23}u_1^{15} - 16384u_5^2u_3^{23}u_1^{14})x_5x_2 - \\ & 16384u_6u_3^{24}u_1^{14}x_4^2x_2 + 16384u_6u_3^{24}u_1^{14}x_4^2 \end{aligned}$$

Reduced to zero.

895. Creating S-polynomial from the pair  $(p_3, p_{164})$ .

Forming S-pol of  $p_3$  and  $p_{164}$ :

$$\begin{aligned} p_{1557} = & 8192u_3^{24}u_1^{13}x_5x_4^2 + (-32768u_3^{22}u_1^{15} + 16384u_3^{22}u_1^{14})x_5x_4x_2 + \\ & (16384u_5^2u_3^{22}u_1^{14} - 8192u_5^2u_3^{22}u_1^{13})x_5x_2 - \\ & 8192u_6u_3^{23}u_1^{13}x_4^2x_2 + 8192u_6u_3^{23}u_1^{13}x_4^2 \end{aligned}$$

Reduced to zero.

896. Creating S-polynomial from the pair  $(p_3, p_{165})$ .

Forming S-pol of  $p_3$  and  $p_{165}$ : Polynomial too big for output (text size is 2629 characters, number of terms is 8)

S-pol added.

897. Creating S-polynomial from the pair  $(p_3, p_{166})$ .

Forming S-pol of  $p_3$  and  $p_{166}$ : Polynomial too big for output (text size is 1637 characters, number of terms is 8)

S-pol added.

898. Creating S-polynomial from the pair  $(p_3, p_{167})$ .

Forming S-pol of  $p_3$  and  $p_{167}$ : Polynomial too big for output (text size is 1172 characters, number of terms is 9)

S-pol added.

899. Creating S-polynomial from the pair  $(p_3, p_{168})$ .

Forming S-pol of  $p_3$  and  $p_{168}$ :

$$\begin{aligned} p_{1558} = & -1048576u_3^{32}u_1^{20}x_5x_4^2 + \\ & (-1048576u_5^2u_3^{30}u_1^{20} + 524288u_5^2u_3^{30}u_1^{19} + 4194304u_3^{30}u_1^{22} - \\ & 2097152u_3^{30}u_1^{21})x_5x_4x_2 + 524288u_5^2u_3^{32}u_1^{19}x_5x_4 + \\ & (-2097152u_5^2u_3^{30}u_1^{21} + 1048576u_5^2u_3^{30}u_1^{20})x_5x_2 + \\ & 1048576u_6u_3^{31}u_1^{20}x_4^2x_2 - 1048576u_6u_3^{31}u_1^{20}x_4^2 - \\ & 524288u_6u_5^2u_3^{31}u_1^{19}x_4x_2 + 524288u_6u_5^2u_3^{31}u_1^{19}x_4 \end{aligned}$$

S-pol added.

900. Creating S-polynomial from the pair  $(p_3, p_{169})$ .  
 Forming S-pol of  $p_3$  and  $p_{169}$ : Polynomial too big for output (text size is 1188 characters, number of terms is 9)  
 S-pol added.

901. Creating S-polynomial from the pair  $(p_3, p_{170})$ .  
 Forming S-pol of  $p_3$  and  $p_{170}$ : Polynomial too big for output (text size is 1517 characters, number of terms is 8)  
 S-pol added.

902. Creating S-polynomial from the pair  $(p_3, p_{171})$ .  
 Forming S-pol of  $p_3$  and  $p_{171}$ :

$$\begin{aligned} p_{1559} = & -131072u_3^{25}u_1^{17}x_5x_4^2 + \\ & (-131072u_5^2u_3^{23}u_1^{17} + 65536u_5^2u_3^{23}u_1^{16} + 524288u_3^{23}u_1^{19} - \\ & 262144u_3^{23}u_1^{18})x_5x_4x_2 + 65536u_5^2u_3^{25}u_1^{16}x_5x_4 + \\ & (-262144u_5^2u_3^{23}u_1^{18} + 131072u_5^2u_3^{23}u_1^{17})x_5x_2 + \\ & 131072u_6u_3^{24}u_1^{17}x_4^2x_2 - 131072u_6u_3^{24}u_1^{17}x_4^2 - \\ & 65536u_6u_5^2u_3^{24}u_1^{16}x_4x_2 + 65536u_6u_5^2u_3^{24}u_1^{16}x_4 \end{aligned}$$

S-pol added.

903. Creating S-polynomial from the pair  $(p_3, p_{172})$ .  
 Forming S-pol of  $p_3$  and  $p_{172}$ : Polynomial too big for output (text size is 1169 characters, number of terms is 9)  
 S-pol added.

904. Creating S-polynomial from the pair  $(p_3, p_{173})$ .  
 Forming S-pol of  $p_3$  and  $p_{173}$ : Polynomial too big for output (text size is 1180 characters, number of terms is 9)  
 S-pol added.

905. Creating S-polynomial from the pair  $(p_3, p_{174})$ .  
 Forming S-pol of  $p_3$  and  $p_{174}$ :

$$\begin{aligned} p_{1560} = & 16384u_4^{25}u_1^{14}x_5x_4^2 + (-65536u_4^{23}u_1^{16} + 32768u_4^{23}u_1^{15})x_5x_4x_3 + \\ & (32768u_5^2u_4^{23}u_1^{15} - 16384u_5^2u_4^{23}u_1^{14})x_5x_3 - \\ & 16384u_6u_4^{24}u_1^{14}x_4^2x_3 + 16384u_6u_4^{24}u_1^{14}x_4^2 \end{aligned}$$

Reduced to zero.

906. Creating S-polynomial from the pair  $(p_3, p_{175})$ .  
 Forming S-pol of  $p_3$  and  $p_{175}$ :

$$\begin{aligned} p_{1561} = & 8192u_4^{24}u_1^{13}x_5x_4^2 + (-32768u_4^{22}u_1^{15} + 16384u_4^{22}u_1^{14})x_5x_4x_3 + \\ & (16384u_5^2u_4^{22}u_1^{14} - 8192u_5^2u_4^{22}u_1^{13})x_5x_3 - \\ & 8192u_6u_4^{23}u_1^{13}x_4^2x_3 + 8192u_6u_4^{23}u_1^{13}x_4^2 \end{aligned}$$

Reduced to zero.

907. Creating S-polynomial from the pair  $(p_3, p_{176})$ .  
 Forming S-pol of  $p_3$  and  $p_{176}$ : Polynomial too big for output (text size is 2629 characters, number of terms is 8)  
 S-pol added.
908. Creating S-polynomial from the pair  $(p_3, p_{177})$ .  
 Forming S-pol of  $p_3$  and  $p_{177}$ : Polynomial too big for output (text size is 1637 characters, number of terms is 8)  
 S-pol added.
909. Creating S-polynomial from the pair  $(p_3, p_{178})$ .  
 Forming S-pol of  $p_3$  and  $p_{178}$ : Polynomial too big for output (text size is 1172 characters, number of terms is 9)  
 S-pol added.
910. Creating S-polynomial from the pair  $(p_3, p_{179})$ .  
 Forming S-pol of  $p_3$  and  $p_{179}$ : Polynomial too big for output (text size is 1172 characters, number of terms is 9)  
 S-pol added.
911. Creating S-polynomial from the pair  $(p_3, p_{180})$ .  
 Forming S-pol of  $p_3$  and  $p_{180}$ :
- $$\begin{aligned}
 p_{1562} = & -1048576u_4^{32}u_1^{20}x_5x_4^2 + \\
 & (-1048576u_5^2u_4^{30}u_1^{20} + 524288u_5^2u_4^{30}u_1^{19} + 4194304u_4^{30}u_1^{22} - \\
 & 2097152u_4^{30}u_1^{21})x_5x_4x_3 + 524288u_5^2u_4^{32}u_1^{19}x_5x_4 + \\
 & (-2097152u_5^2u_4^{30}u_1^{21} + 1048576u_5^2u_4^{30}u_1^{20})x_5x_3 + \\
 & 1048576u_6u_4^{31}u_1^{20}x_4^2x_3 - 1048576u_6u_4^{31}u_1^{20}x_4^2 - \\
 & 524288u_6u_5^2u_4^{31}u_1^{19}x_4x_3 + 524288u_6u_5^2u_4^{31}u_1^{19}x_4
 \end{aligned}$$
- S-pol added.
912. Creating S-polynomial from the pair  $(p_3, p_{181})$ .  
 Forming S-pol of  $p_3$  and  $p_{181}$ : Polynomial too big for output (text size is 1169 characters, number of terms is 9)  
 S-pol added.
913. Creating S-polynomial from the pair  $(p_3, p_{182})$ .  
 Forming S-pol of  $p_3$  and  $p_{182}$ : Polynomial too big for output (text size is 1169 characters, number of terms is 9)  
 S-pol added.
914. Creating S-polynomial from the pair  $(p_3, p_{183})$ .  
 Forming S-pol of  $p_3$  and  $p_{183}$ : Polynomial too big for output (text size is 1517 characters, number of terms is 8)  
 S-pol added.

915. Creating S-polynomial from the pair  $(p_3, p_{184})$ .

Forming S-pol of  $p_3$  and  $p_{184}$ :

$$\begin{aligned} p_{1563} = & -131072u_4^{25}u_1^{17}x_5x_4^2 + \\ & (-131072u_5^2u_4^{23}u_1^{17} + 65536u_5^2u_4^{23}u_1^{16} + 524288u_4^{23}u_1^{19} - \\ & 262144u_4^{23}u_1^{18})x_5x_4x_3 + 65536u_5^2u_4^{25}u_1^{16}x_5x_4 + \\ & (-262144u_5^2u_4^{23}u_1^{18} + 131072u_5^2u_4^{23}u_1^{17})x_5x_3 + \\ & 131072u_6u_4^{24}u_1^{17}x_4^2x_3 - 131072u_6u_4^{24}u_1^{17}x_4^2 - \\ & 65536u_6u_5^2u_4^{24}u_1^{16}x_4x_3 + 65536u_6u_5^2u_4^{24}u_1^{16}x_4 \end{aligned}$$

S-pol added.

916. Creating S-polynomial from the pair  $(p_3, p_{185})$ .

Forming S-pol of  $p_3$  and  $p_{185}$ : Polynomial too big for output (text size is 2751 characters, number of terms is 8)

S-pol added.

917. Creating S-polynomial from the pair  $(p_3, p_{186})$ .

Forming S-pol of  $p_3$  and  $p_{186}$ : Polynomial too big for output (text size is 1745 characters, number of terms is 8)

S-pol added.

918. Creating S-polynomial from the pair  $(p_3, p_{187})$ .

Forming S-pol of  $p_3$  and  $p_{187}$ : Polynomial too big for output (text size is 1260 characters, number of terms is 9)

S-pol added.

919. Creating S-polynomial from the pair  $(p_3, p_{188})$ .

Forming S-pol of  $p_3$  and  $p_{188}$ :

$$\begin{aligned} p_{1564} = & 16777216u_5u_3^{43}u_1^{24}x_5x_4^2 + \\ & (16777216u_5^3u_3^{41}u_1^{24} - 8388608u_5^3u_3^{41}u_1^{23} - 67108864u_5u_3^{41}u_1^{26} + \\ & 33554432u_5u_3^{41}u_1^{25})x_5x_4x_2 - 8388608u_5^3u_3^{43}u_1^{23}x_5x_4 + \\ & (33554432u_5^3u_3^{41}u_1^{25} - 16777216u_5^3u_3^{41}u_1^{24})x_5x_2 - \\ & 16777216u_6u_5u_3^{42}u_1^{24}x_4^2x_2 + 16777216u_6u_5u_3^{42}u_1^{24}x_4^2 + \\ & 8388608u_6u_5^3u_3^{42}u_1^{23}x_4x_2 - 8388608u_6u_5^3u_3^{42}u_1^{23}x_4 \end{aligned}$$

S-pol added.

920. Creating S-polynomial from the pair  $(p_3, p_{189})$ .

Forming S-pol of  $p_3$  and  $p_{189}$ : Polynomial too big for output (text size is 1280 characters, number of terms is 9)

S-pol added.



921. Creating S-polynomial from the pair  $(p_3, p_{190})$ .

Forming S-pol of  $p_3$  and  $p_{190}$ : Polynomial too big for output (text size is 1566 characters, number of terms is 8)

S-pol added.

922. Creating S-polynomial from the pair  $(p_3, p_{191})$ .

Forming S-pol of  $p_3$  and  $p_{191}$ :

$$\begin{aligned} p_{1565} = & 8388608u_5u_3^{42}u_1^{23}x_5x_4^2 + \\ & (8388608u_5^3u_3^{40}u_1^{23} - 4194304u_5^3u_3^{40}u_1^{22} - 33554432u_5u_3^{40}u_1^{25} + \\ & 16777216u_5u_3^{40}u_1^{24})x_5x_4x_2 - 4194304u_5^3u_3^{42}u_1^{22}x_5x_4 + \\ & (16777216u_5^3u_3^{40}u_1^{24} - 8388608u_5^3u_3^{40}u_1^{23})x_5x_2 - \\ & 8388608u_6u_5u_3^{41}u_1^{23}x_4^2x_2 + 8388608u_6u_5u_3^{41}u_1^{23}x_4^2 + \\ & 4194304u_6u_5^3u_3^{41}u_1^{22}x_4x_2 - 4194304u_6u_5^3u_3^{41}u_1^{22}x_4 \end{aligned}$$

S-pol added.

923. Creating S-polynomial from the pair  $(p_3, p_{192})$ .

Forming S-pol of  $p_3$  and  $p_{192}$ : Polynomial too big for output (text size is 1252 characters, number of terms is 9)

S-pol added.

924. Creating S-polynomial from the pair  $(p_3, p_{193})$ .

Forming S-pol of  $p_3$  and  $p_{193}$ : Polynomial too big for output (text size is 1272 characters, number of terms is 9)

S-pol added.

925. Creating S-polynomial from the pair  $(p_3, p_{194})$ .

Forming S-pol of  $p_3$  and  $p_{194}$ : Polynomial too big for output (text size is 2751 characters, number of terms is 8)

S-pol added.

926. Creating S-polynomial from the pair  $(p_3, p_{195})$ .

Forming S-pol of  $p_3$  and  $p_{195}$ : Polynomial too big for output (text size is 1745 characters, number of terms is 8)

S-pol added.

927. Creating S-polynomial from the pair  $(p_3, p_{196})$ .

Forming S-pol of  $p_3$  and  $p_{196}$ :

$$\begin{aligned} p_{1566} = & 16777216u_5u_2^{43}u_1^{24}x_5x_4^2 + \\ & (16777216u_5^3u_2^{41}u_1^{24} - 8388608u_5^3u_2^{41}u_1^{23} - 67108864u_5u_2^{41}u_1^{26} + \\ & 33554432u_5u_2^{41}u_1^{25})x_5x_4x_1 - 8388608u_5^3u_2^{43}u_1^{23}x_5x_4 + \\ & (33554432u_5^3u_2^{41}u_1^{25} - 16777216u_5^3u_2^{41}u_1^{24})x_5x_1 - \\ & 16777216u_6u_5u_2^{42}u_1^{24}x_4^2x_1 + 16777216u_6u_5u_2^{42}u_1^{24}x_4^2 + \\ & 8388608u_6u_5^3u_2^{42}u_1^{23}x_4x_1 - 8388608u_6u_5^3u_2^{42}u_1^{23}x_4 \end{aligned}$$

S-pol added.

928. Creating S-polynomial from the pair  $(p_3, p_{197})$ .  
Forming S-pol of  $p_3$  and  $p_{197}$ : Polynomial too big for output (text size is 1280 characters, number of terms is 9)  
S-pol added.
929. Creating S-polynomial from the pair  $(p_3, p_{198})$ .  
Forming S-pol of  $p_3$  and  $p_{198}$ : Polynomial too big for output (text size is 1280 characters, number of terms is 9)  
S-pol added.
930. Creating S-polynomial from the pair  $(p_3, p_{199})$ .  
Forming S-pol of  $p_3$  and  $p_{199}$ : Polynomial too big for output (text size is 1272 characters, number of terms is 9)  
S-pol added.
931. Creating S-polynomial from the pair  $(p_3, p_{200})$ .  
Forming S-pol of  $p_3$  and  $p_{200}$ : Polynomial too big for output (text size is 1566 characters, number of terms is 8)  
S-pol added.
932. Creating S-polynomial from the pair  $(p_3, p_{201})$ .  
Forming S-pol of  $p_3$  and  $p_{201}$ :  

$$p_{1567} = 8388608u_5u_2^{42}u_1^{23}x_5x_4^2 +$$

$$(8388608u_5^3u_2^{40}u_1^{23} - 4194304u_5^3u_2^{40}u_1^{22} - 33554432u_5u_2^{40}u_1^{25} +$$

$$16777216u_5u_2^{40}u_1^{24})x_5x_4x_1 - 4194304u_5^3u_2^{42}u_1^{22}x_5x_4 +$$

$$(16777216u_5^3u_2^{40}u_1^{24} - 8388608u_5^3u_2^{40}u_1^{23})x_5x_1 -$$

$$8388608u_6u_5u_2^{41}u_1^{23}x_4^2x_1 + 8388608u_6u_5u_2^{41}u_1^{23}x_4^2 +$$

$$4194304u_6u_5^3u_2^{41}u_1^{22}x_4x_1 - 4194304u_6u_5^3u_2^{41}u_1^{22}x_4$$
- S-pol added.
933. Creating S-polynomial from the pair  $(p_3, p_{202})$ .  
Forming S-pol of  $p_3$  and  $p_{202}$ : Polynomial too big for output (text size is 1272 characters, number of terms is 9)  
S-pol added.
934. Creating S-polynomial from the pair  $(p_3, p_{203})$ .  
Forming S-pol of  $p_3$  and  $p_{203}$ : Polynomial too big for output (text size is 2751 characters, number of terms is 8)  
S-pol added.
935. Creating S-polynomial from the pair  $(p_3, p_{204})$ .  
Forming S-pol of  $p_3$  and  $p_{204}$ : Polynomial too big for output (text size is 1745 characters, number of terms is 8)  
S-pol added.

936. Creating S-polynomial from the pair  $(p_3, p_{205})$ .

Forming S-pol of  $p_3$  and  $p_{205}$ : Polynomial too big for output (text size is 1260 characters, number of terms is 9)

S-pol added.

937. Creating S-polynomial from the pair  $(p_3, p_{206})$ .

Forming S-pol of  $p_3$  and  $p_{206}$ : Polynomial too big for output (text size is 1260 characters, number of terms is 9)

S-pol added.

938. Creating S-polynomial from the pair  $(p_3, p_{207})$ .

Forming S-pol of  $p_3$  and  $p_{207}$ :

$$\begin{aligned} p_{1568} = & 16777216u_5u_4^{43}u_1^{24}x_5x_4^2 + \\ & (16777216u_5^3u_4^{41}u_1^{24} - 8388608u_5^3u_4^{41}u_1^{23} - 67108864u_5u_4^{41}u_1^{26} + \\ & 33554432u_5u_4^{41}u_1^{25})x_5x_4x_3 - 8388608u_5^3u_4^{43}u_1^{23}x_5x_4 + \\ & (33554432u_5^3u_4^{41}u_1^{25} - 16777216u_5^3u_4^{41}u_1^{24})x_5x_3 - \\ & 16777216u_6u_5u_4^{42}u_1^{24}x_4^2x_3 + 16777216u_6u_5u_4^{42}u_1^{24}x_4^2 + \\ & 8388608u_6u_5^3u_4^{42}u_1^{23}x_4x_3 - 8388608u_6u_5^3u_4^{42}u_1^{23}x_4 \end{aligned}$$

S-pol added.

939. Creating S-polynomial from the pair  $(p_3, p_{208})$ .

Forming S-pol of  $p_3$  and  $p_{208}$ : Polynomial too big for output (text size is 1252 characters, number of terms is 9)

S-pol added.

940. Creating S-polynomial from the pair  $(p_3, p_{209})$ .

Forming S-pol of  $p_3$  and  $p_{209}$ : Polynomial too big for output (text size is 1252 characters, number of terms is 9)

S-pol added.

941. Creating S-polynomial from the pair  $(p_3, p_{210})$ .

Forming S-pol of  $p_3$  and  $p_{210}$ : Polynomial too big for output (text size is 1566 characters, number of terms is 8)

S-pol added.

942. Creating S-polynomial from the pair  $(p_3, p_{211})$ .

Forming S-pol of  $p_3$  and  $p_{211}$ :

$$\begin{aligned} p_{1569} = & 8388608u_5u_4^{42}u_1^{23}x_5x_4^2 + \\ & (8388608u_5^3u_4^{40}u_1^{23} - 4194304u_5^3u_4^{40}u_1^{22} - 33554432u_5u_4^{40}u_1^{25} + \\ & 16777216u_5u_4^{40}u_1^{24})x_5x_4x_3 - 4194304u_5^3u_4^{42}u_1^{22}x_5x_4 + \\ & (16777216u_5^3u_4^{40}u_1^{24} - 8388608u_5^3u_4^{40}u_1^{23})x_5x_3 - \\ & 8388608u_6u_5u_4^{41}u_1^{23}x_4^2x_3 + 8388608u_6u_5u_4^{41}u_1^{23}x_4^2 + \\ & 4194304u_6u_5^3u_4^{41}u_1^{22}x_4x_3 - 4194304u_6u_5^3u_4^{41}u_1^{22}x_4 \end{aligned}$$

S-pol added.

943. Creating S-polynomial from the pair  $(p_3, p_{212})$ .  
 Forming S-pol of  $p_3$  and  $p_{212}$ : Polynomial too big for output (text size is 1518 characters, number of terms is 8)  
 S-pol added.
944. Creating S-polynomial from the pair  $(p_3, p_{213})$ .  
 Forming S-pol of  $p_3$  and  $p_{213}$ : Polynomial too big for output (text size is 1509 characters, number of terms is 8)  
 S-pol added.
945. Creating S-polynomial from the pair  $(p_3, p_{214})$ .  
 Forming S-pol of  $p_3$  and  $p_{214}$ : Polynomial too big for output (text size is 10973 characters, number of terms is 16)  
 S-pol added.
946. Creating S-polynomial from the pair  $(p_3, p_{215})$ .  
 Forming S-pol of  $p_3$  and  $p_{215}$ : Polynomial too big for output (text size is 4930 characters, number of terms is 8)  
 S-pol added.
947. Creating S-polynomial from the pair  $(p_3, p_{216})$ .  
 Forming S-pol of  $p_3$  and  $p_{216}$ : Polynomial too big for output (text size is 11199 characters, number of terms is 16)  
 S-pol added.
948. Creating S-polynomial from the pair  $(p_3, p_{217})$ .  
 Forming S-pol of  $p_3$  and  $p_{217}$ : Polynomial too big for output (text size is 2756 characters, number of terms is 8)  
 S-pol added.
949. Creating S-polynomial from the pair  $(p_3, p_{218})$ .  
 Forming S-pol of  $p_3$  and  $p_{218}$ : Polynomial too big for output (text size is 3854 characters, number of terms is 8)  
 S-pol added.
950. Creating S-polynomial from the pair  $(p_3, p_{219})$ .  
 Forming S-pol of  $p_3$  and  $p_{219}$ : Polynomial too big for output (text size is 10922 characters, number of terms is 16)  
 S-pol added.
951. Creating S-polynomial from the pair  $(p_3, p_{220})$ .  
 Forming S-pol of  $p_3$  and  $p_{220}$ : Polynomial too big for output (text size is 11162 characters, number of terms is 16)  
 S-pol added.

952. Creating S-polynomial from the pair  $(p_3, p_{221})$ .

Forming S-pol of  $p_3$  and  $p_{221}$ :

$$\begin{aligned}
p_{1570} = & (268435456u_5u_3^{45}u_1^{28} + 536870912u_3^{46}u_1^{29})x_5x_4^2 + \\
& (536870912u_5^2u_3^{44}u_1^{29} - 268435456u_5^2u_3^{44}u_1^{28} - 536870912u_5u_3^{45}u_1^{29} - \\
& 2147483648u_3^{44}u_1^{31} + 1073741824u_3^{44}u_1^{30})x_5x_4x_2 - \\
& 268435456u_5^2u_3^{46}u_1^{28}x_5x_4 + \\
& (268435456u_5^3u_3^{45}u_1^{28} + 1073741824u_5^2u_3^{44}u_1^{30} - \\
& 536870912u_5^2u_3^{44}u_1^{29})x_5x_2 + \\
& (-268435456u_6u_5u_3^{44}u_1^{28} - 536870912u_6u_3^{45}u_1^{29})x_4^2x_2 + \\
& (-268435456u_6u_5u_3^{46}u_1^{28} + 536870912u_6u_5u_3^{44}u_1^{29} + \\
& 536870912u_6u_3^{45}u_1^{29})x_4^2 + 268435456u_6u_5^2u_3^{45}u_1^{28}x_4x_2 - \\
& 268435456u_6u_5^2u_3^{45}u_1^{28}x_4
\end{aligned}$$

S-pol added.

953. Creating S-polynomial from the pair  $(p_3, p_{222})$ .

Forming S-pol of  $p_3$  and  $p_{222}$ :

$$\begin{aligned}
p_{1571} = & (536870912u_5u_3^{50}u_1^{29} + 1073741824u_3^{51}u_1^{30})x_5x_4^2 + \\
& (1073741824u_5^2u_3^{49}u_1^{30} - 536870912u_5^2u_3^{49}u_1^{29} - 1073741824u_5u_3^{50}u_1^{30} - \\
& 4294967296u_3^{49}u_1^{32} + 2147483648u_3^{49}u_1^{31})x_5x_4x_2 - \\
& 536870912u_5^2u_3^{51}u_1^{29}x_5x_4 + \\
& (536870912u_5^3u_3^{50}u_1^{29} + 2147483648u_5^2u_3^{49}u_1^{31} - \\
& 1073741824u_5^2u_3^{49}u_1^{30})x_5x_2 + \\
& (-536870912u_6u_5u_3^{49}u_1^{29} - 1073741824u_6u_3^{50}u_1^{30})x_4^2x_2 + \\
& (-536870912u_6u_5u_3^{51}u_1^{29} + 1073741824u_6u_5u_3^{49}u_1^{30} + \\
& 1073741824u_6u_3^{50}u_1^{30})x_4^2 + 536870912u_6u_5^2u_3^{50}u_1^{29}x_4x_2 - \\
& 536870912u_6u_5^2u_3^{50}u_1^{29}x_4
\end{aligned}$$

S-pol added.

954. Creating S-polynomial from the pair  $(p_3, p_{223})$ .

Forming S-pol of  $p_3$  and  $p_{223}$ : Polynomial too big for output (text size is 1498 characters, number of terms is 8)

S-pol added.

955. Creating S-polynomial from the pair  $(p_3, p_{224})$ .

Forming S-pol of  $p_3$  and  $p_{224}$ : Polynomial too big for output (text size is 1490 characters, number of terms is 8)

S-pol added.

956. Creating S-polynomial from the pair  $(p_3, p_{225})$ .

Forming S-pol of  $p_3$  and  $p_{225}$ :

$$\begin{aligned}
p_{1572} = & (-16777216u_6u_3^{43}u_1^{23} - 67108864u_6u_3^{41}u_1^{25} - 16777216u_3^{44}u_1^{24} - \\
& 67108864u_3^{42}u_1^{26})x_5x_4 + \\
& (33554432u_6u_3^{43}u_1^{24} + 134217728u_6u_3^{41}u_1^{26} + 67108864u_3^{42}u_1^{26} - \\
& 33554432u_3^{42}u_1^{25} + 268435456u_3^{40}u_1^{28} - 134217728u_3^{40}u_1^{27})x_5x_4x_2 + \\
& (-16777216u_6u_5^2u_3^{43}u_1^{23} - 67108864u_6u_5^2u_3^{41}u_1^{25} - \\
& 33554432u_5^2u_3^{42}u_1^{25} + 16777216u_5^2u_3^{42}u_1^{24} - 134217728u_5^2u_3^{40}u_1^{27} + \\
& 67108864u_5^2u_3^{40}u_1^{26})x_5x_2 + \\
& (-16777216u_6^2u_3^{42}u_1^{24} + 16777216u_6^2u_3^{42}u_1^{23} - 67108864u_6^2u_3^{40}u_1^{26} + \\
& 67108864u_6^2u_3^{40}u_1^{25})x_4^2x_2 + \\
& (16777216u_6^2u_3^{44}u_1^{23} + 67108864u_6^2u_3^{42}u_1^{25} - 16777216u_6^2u_3^{42}u_1^{24} - \\
& 67108864u_6^2u_3^{40}u_1^{26})x_4^2
\end{aligned}$$

S-pol added.

957. Creating S-polynomial from the pair  $(p_3, p_{226})$ .

Forming S-pol of  $p_3$  and  $p_{226}$ :

$$\begin{aligned}
p_{1573} = & (-8388608u_6u_3^{42}u_1^{22} - 33554432u_6u_3^{40}u_1^{24} - 8388608u_3^{43}u_1^{23} - \\
& 33554432u_3^{41}u_1^{25})x_5x_4 + \\
& (16777216u_6u_3^{42}u_1^{23} + 67108864u_6u_3^{40}u_1^{25} + 33554432u_3^{41}u_1^{25} - \\
& 16777216u_3^{41}u_1^{24} + 134217728u_3^{39}u_1^{27} - 67108864u_3^{39}u_1^{26})x_5x_4x_2 + \\
& (-8388608u_6u_5^2u_3^{42}u_1^{22} - 33554432u_6u_5^2u_3^{40}u_1^{24} - \\
& 16777216u_5^2u_3^{41}u_1^{24} + 8388608u_5^2u_3^{41}u_1^{23} - 67108864u_5^2u_3^{39}u_1^{26} + \\
& 33554432u_5^2u_3^{39}u_1^{25})x_5x_2 + \\
& (-8388608u_6^2u_3^{41}u_1^{23} + 8388608u_6^2u_3^{41}u_1^{22} - 33554432u_6^2u_3^{39}u_1^{25} + \\
& 33554432u_6^2u_3^{39}u_1^{24})x_4^2x_2 + \\
& (8388608u_6^2u_3^{43}u_1^{22} + 33554432u_6^2u_3^{41}u_1^{24} - 8388608u_6^2u_3^{41}u_1^{23} - \\
& 33554432u_6^2u_3^{39}u_1^{25})x_4^2
\end{aligned}$$

S-pol added.

958. Creating S-polynomial from the pair  $(p_3, p_{227})$ .

Forming S-pol of  $p_3$  and  $p_{227}$ :

$$\begin{aligned}
p_{1574} = & (268435456u_5u_3^{45}u_1^{28} + 536870912u_3^{46}u_1^{29})x_5x_4^2 + \\
& (536870912u_5^2u_3^{44}u_1^{29} - 268435456u_5^2u_3^{44}u_1^{28} - 536870912u_5u_3^{45}u_1^{29} - \\
& 2147483648u_3^{44}u_1^{31} + 1073741824u_3^{44}u_1^{30})x_5x_4x_2 - \\
& 268435456u_5^2u_3^{46}u_1^{28}x_5x_4 + \\
& (268435456u_5^3u_3^{45}u_1^{28} + 1073741824u_5^2u_3^{44}u_1^{30} - \\
& 536870912u_5^2u_3^{44}u_1^{29})x_5x_2 + \\
& (-268435456u_6u_5u_3^{44}u_1^{28} - 536870912u_6u_3^{45}u_1^{29})x_4^2x_2 + \\
& (-268435456u_6u_5u_3^{46}u_1^{28} + 536870912u_6u_5u_3^{44}u_1^{29} + \\
& 536870912u_6u_3^{45}u_1^{29})x_4^2 + 268435456u_6u_5^2u_3^{45}u_1^{28}x_4x_2 - \\
& 268435456u_6u_5^2u_3^{45}u_1^{28}x_4
\end{aligned}$$

S-pol added.

959. Creating S-polynomial from the pair  $(p_3, p_{228})$ .

Forming S-pol of  $p_3$  and  $p_{228}$ :

$$\begin{aligned}
p_{1575} = & (134217728u_5u_3^{44}u_1^{27} + 268435456u_3^{45}u_1^{28})x_5x_4^2 + \\
& (268435456u_5^2u_3^{43}u_1^{28} - 134217728u_5^2u_3^{43}u_1^{27} - 268435456u_5u_3^{44}u_1^{28} - \\
& 1073741824u_3^{43}u_1^{30} + 536870912u_3^{43}u_1^{29})x_5x_4x_2 - \\
& 134217728u_5^2u_3^{45}u_1^{27}x_5x_4 + \\
& (134217728u_5^3u_3^{44}u_1^{27} + 536870912u_5^2u_3^{43}u_1^{29} - \\
& 268435456u_5^2u_3^{43}u_1^{28})x_5x_2 + \\
& (-134217728u_6u_5u_3^{43}u_1^{27} - 268435456u_6u_3^{44}u_1^{28})x_4^2x_2 + \\
& (-134217728u_6u_5u_3^{45}u_1^{27} + 268435456u_6u_5u_3^{43}u_1^{28} + \\
& 268435456u_6u_3^{44}u_1^{28})x_4^2 + 134217728u_6u_5^2u_3^{44}u_1^{27}x_4x_2 - \\
& 134217728u_6u_5^2u_3^{44}u_1^{27}x_4
\end{aligned}$$

S-pol added.

960. Creating S-polynomial from the pair  $(p_3, p_{229})$ .

Forming S-pol of  $p_3$  and  $p_{229}$ : Polynomial too big for output (text size is 5526 characters, number of terms is 9)

S-pol added.

961. Creating S-polynomial from the pair  $(p_3, p_{230})$ .

Forming S-pol of  $p_3$  and  $p_{230}$ : Polynomial too big for output (text size is 3090 characters, number of terms is 8)

S-pol added.

962. Creating S-polynomial from the pair  $(p_3, p_{231})$ .  
Forming S-pol of  $p_3$  and  $p_{231}$ : Polynomial too big for output (text size is 5899 characters, number of terms is 9)  
S-pol added.
963. Creating S-polynomial from the pair  $(p_3, p_{232})$ .  
Forming S-pol of  $p_3$  and  $p_{232}$ : Polynomial too big for output (text size is 1651 characters, number of terms is 8)  
S-pol added.
964. Creating S-polynomial from the pair  $(p_3, p_{233})$ .  
Forming S-pol of  $p_3$  and  $p_{233}$ : Polynomial too big for output (text size is 2314 characters, number of terms is 8)  
S-pol added.
965. Creating S-polynomial from the pair  $(p_3, p_{234})$ .  
Forming S-pol of  $p_3$  and  $p_{234}$ : Polynomial too big for output (text size is 5502 characters, number of terms is 9)  
S-pol added.
966. Creating S-polynomial from the pair  $(p_3, p_{235})$ .  
Forming S-pol of  $p_3$  and  $p_{235}$ : Polynomial too big for output (text size is 5877 characters, number of terms is 9)  
S-pol added.
967. Creating S-polynomial from the pair  $(p_3, p_{236})$ .  
Forming S-pol of  $p_3$  and  $p_{236}$ :  

$$p_{1576} = (8388608u_6u_3^{37}u_1^{22} + 8388608u_3^{38}u_1^{23})x_5x_4^2 +$$

$$(-16777216u_6u_3^{37}u_1^{23} - 33554432u_3^{36}u_1^{25} + 16777216u_3^{36}u_1^{24})x_5x_4x_2 +$$

$$(8388608u_6u_5^2u_3^{37}u_1^{22} + 16777216u_5^2u_3^{36}u_1^{24} -$$

$$8388608u_5^2u_3^{36}u_1^{23})x_5x_2 +$$

$$(8388608u_6^2u_3^{36}u_1^{23} - 8388608u_6^2u_3^{36}u_1^{22})x_4^2x_2 +$$

$$(-8388608u_6^2u_3^{38}u_1^{22} + 8388608u_6^2u_3^{36}u_1^{23})x_4^2$$
S-pol added.
968. Creating S-polynomial from the pair  $(p_3, p_{237})$ .  
Forming S-pol of  $p_3$  and  $p_{237}$ :  

$$p_{1577} = (4194304u_6u_3^{36}u_1^{21} + 4194304u_3^{37}u_1^{22})x_5x_4^2 +$$

$$(-8388608u_6u_3^{36}u_1^{22} - 16777216u_3^{35}u_1^{24} + 8388608u_3^{35}u_1^{23})x_5x_4x_2 +$$

$$(4194304u_6u_5^2u_3^{36}u_1^{21} + 8388608u_5^2u_3^{35}u_1^{23} -$$

$$4194304u_5^2u_3^{35}u_1^{22})x_5x_2 +$$

$$(4194304u_6^2u_3^{35}u_1^{22} - 4194304u_6^2u_3^{35}u_1^{21})x_4^2x_2 +$$

$$(-4194304u_6^2u_3^{37}u_1^{21} + 4194304u_6^2u_3^{35}u_1^{22})x_4^2$$
S-pol added.



969. Creating S-polynomial from the pair  $(p_3, p_{238})$ .  
 Forming S-pol of  $p_3$  and  $p_{238}$ : Polynomial too big for output (text size is 1518 characters, number of terms is 8)  
 S-pol added.
970. Creating S-polynomial from the pair  $(p_3, p_{239})$ .  
 Forming S-pol of  $p_3$  and  $p_{239}$ : Polynomial too big for output (text size is 1509 characters, number of terms is 8)  
 S-pol added.
971. Creating S-polynomial from the pair  $(p_3, p_{240})$ .  
 Forming S-pol of  $p_3$  and  $p_{240}$ : Polynomial too big for output (text size is 4930 characters, number of terms is 8)  
 S-pol added.
972. Creating S-polynomial from the pair  $(p_3, p_{241})$ .  
 Forming S-pol of  $p_3$  and  $p_{241}$ : Polynomial too big for output (text size is 11199 characters, number of terms is 16)  
 S-pol added.
973. Creating S-polynomial from the pair  $(p_3, p_{242})$ .  
 Forming S-pol of  $p_3$  and  $p_{242}$ : Polynomial too big for output (text size is 11199 characters, number of terms is 16)  
 S-pol added.
974. Creating S-polynomial from the pair  $(p_3, p_{243})$ .  
 Forming S-pol of  $p_3$  and  $p_{243}$ : Polynomial too big for output (text size is 11162 characters, number of terms is 16)  
 S-pol added.
975. Creating S-polynomial from the pair  $(p_3, p_{244})$ .  
 Forming S-pol of  $p_3$  and  $p_{244}$ : Polynomial too big for output (text size is 2756 characters, number of terms is 8)  
 S-pol added.
976. Creating S-polynomial from the pair  $(p_3, p_{245})$ .  
 Forming S-pol of  $p_3$  and  $p_{245}$ : Polynomial too big for output (text size is 3854 characters, number of terms is 8)  
 S-pol added.
977. Creating S-polynomial from the pair  $(p_3, p_{246})$ .  
 Forming S-pol of  $p_3$  and  $p_{246}$ : Polynomial too big for output (text size is 11162 characters, number of terms is 16)  
 S-pol added.

978. Creating S-polynomial from the pair  $(p_3, p_{247})$ .

Forming S-pol of  $p_3$  and  $p_{247}$ :

$$\begin{aligned}
p_{1578} = & (268435456u_5u_2^{45}u_1^{28} + 536870912u_2^{46}u_1^{29})x_5x_4^2 + \\
& (536870912u_5^2u_2^{44}u_1^{29} - 268435456u_5^2u_2^{44}u_1^{28} - 536870912u_5u_2^{45}u_1^{29} - \\
& 2147483648u_2^{44}u_1^{31} + 1073741824u_2^{44}u_1^{30})x_5x_4x_1 - \\
& 268435456u_5^2u_2^{46}u_1^{28}x_5x_4 + \\
& (268435456u_5^3u_2^{45}u_1^{28} + 1073741824u_5^2u_2^{44}u_1^{30} - \\
& 536870912u_5^2u_2^{44}u_1^{29})x_5x_1 + \\
& (-268435456u_6u_5u_2^{44}u_1^{28} - 536870912u_6u_2^{45}u_1^{29})x_4^2x_1 + \\
& (-268435456u_6u_5u_2^{46}u_1^{28} + 536870912u_6u_5u_2^{44}u_1^{29} + \\
& 536870912u_6u_2^{45}u_1^{29})x_4^2 + 268435456u_6u_5^2u_2^{45}u_1^{28}x_4x_1 - \\
& 268435456u_6u_5^2u_2^{45}u_1^{28}x_4
\end{aligned}$$

S-pol added.

979. Creating S-polynomial from the pair  $(p_3, p_{248})$ .

Forming S-pol of  $p_3$  and  $p_{248}$ :

$$\begin{aligned}
p_{1579} = & (536870912u_5u_2^{50}u_1^{29} + 1073741824u_2^{51}u_1^{30})x_5x_4^2 + \\
& (1073741824u_5^2u_2^{49}u_1^{30} - 536870912u_5^2u_2^{49}u_1^{29} - 1073741824u_5u_2^{50}u_1^{30} - \\
& 4294967296u_2^{49}u_1^{32} + 2147483648u_2^{49}u_1^{31})x_5x_4x_1 - \\
& 536870912u_5^2u_2^{51}u_1^{29}x_5x_4 + \\
& (536870912u_5^3u_2^{50}u_1^{29} + 2147483648u_5^2u_2^{49}u_1^{31} - \\
& 1073741824u_5^2u_2^{49}u_1^{30})x_5x_1 + \\
& (-536870912u_6u_5u_2^{49}u_1^{29} - 1073741824u_6u_2^{50}u_1^{30})x_4^2x_1 + \\
& (-536870912u_6u_5u_2^{51}u_1^{29} + 1073741824u_6u_5u_2^{49}u_1^{30} + \\
& 1073741824u_6u_2^{50}u_1^{30})x_4^2 + 536870912u_6u_5^2u_2^{50}u_1^{29}x_4x_1 - \\
& 536870912u_6u_5^2u_2^{50}u_1^{29}x_4
\end{aligned}$$

S-pol added.

980. Creating S-polynomial from the pair  $(p_3, p_{249})$ .

Forming S-pol of  $p_3$  and  $p_{249}$ : Polynomial too big for output (text size is 1498 characters, number of terms is 8)

S-pol added.

981. Creating S-polynomial from the pair  $(p_3, p_{250})$ .

Forming S-pol of  $p_3$  and  $p_{250}$ : Polynomial too big for output (text size is 1490 characters, number of terms is 8)

S-pol added.

982. Creating S-polynomial from the pair  $(p_3, p_{251})$ .

Forming S-pol of  $p_3$  and  $p_{251}$ :

$$\begin{aligned}
p_{1580} = & (-16777216u_6u_2^{43}u_1^{23} - 67108864u_6u_2^{41}u_1^{25} - 16777216u_2^{44}u_1^{24} - \\
& 67108864u_2^{42}u_1^{26})x_5x_4^2 + \\
& (33554432u_6u_2^{43}u_1^{24} + 134217728u_6u_2^{41}u_1^{26} + 67108864u_2^{42}u_1^{26} - \\
& 33554432u_2^{42}u_1^{25} + 268435456u_2^{40}u_1^{28} - 134217728u_2^{40}u_1^{27})x_5x_4x_1 + \\
& (-16777216u_6u_2^{43}u_1^{23} - 67108864u_6u_2^{41}u_1^{25} - \\
& 33554432u_2^{42}u_1^{25} + 16777216u_2^{42}u_1^{24} - 134217728u_2^{40}u_1^{27} + \\
& 67108864u_2^{40}u_1^{26})x_5x_1 + \\
& (-16777216u_6u_2^{42}u_1^{24} + 16777216u_6u_2^{42}u_1^{23} - 67108864u_2^{40}u_1^{26} + \\
& 67108864u_2^{40}u_1^{25})x_4^2x_1 + \\
& (16777216u_6u_2^{44}u_1^{23} + 67108864u_2^{42}u_1^{25} - 16777216u_2^{42}u_1^{24} - \\
& 67108864u_2^{40}u_1^{26})x_4^2
\end{aligned}$$

S-pol added.

983. Creating S-polynomial from the pair  $(p_3, p_{252})$ .

Forming S-pol of  $p_3$  and  $p_{252}$ :

$$\begin{aligned}
p_{1581} = & (-8388608u_6u_2^{42}u_1^{22} - 33554432u_6u_2^{40}u_1^{24} - 8388608u_2^{43}u_1^{23} - \\
& 33554432u_2^{41}u_1^{25})x_5x_4^2 + \\
& (16777216u_6u_2^{42}u_1^{23} + 67108864u_6u_2^{40}u_1^{25} + 33554432u_2^{41}u_1^{25} - \\
& 16777216u_2^{41}u_1^{24} + 134217728u_2^{39}u_1^{27} - 67108864u_2^{39}u_1^{26})x_5x_4x_1 + \\
& (-8388608u_6u_2^{42}u_1^{22} - 33554432u_6u_2^{40}u_1^{24} - \\
& 16777216u_2^{41}u_1^{24} + 8388608u_2^{41}u_1^{23} - 67108864u_2^{39}u_1^{26} + \\
& 33554432u_2^{39}u_1^{25})x_5x_1 + \\
& (-8388608u_6u_2^{41}u_1^{23} + 8388608u_6u_2^{41}u_1^{22} - 33554432u_2^{39}u_1^{25} + \\
& 33554432u_2^{39}u_1^{24})x_4^2x_1 + \\
& (8388608u_6u_2^{43}u_1^{22} + 33554432u_2^{41}u_1^{24} - 8388608u_2^{41}u_1^{23} - \\
& 33554432u_2^{39}u_1^{25})x_4^2
\end{aligned}$$

S-pol added.

984. Creating S-polynomial from the pair  $(p_3, p_{253})$ .

Forming S-pol of  $p_3$  and  $p_{253}$ :

$$\begin{aligned}
p_{1582} = & (268435456u_5u_2^{45}u_1^{28} + 536870912u_2^{46}u_1^{29})x_5x_4^2 + \\
& (536870912u_5^2u_2^{44}u_1^{29} - 268435456u_5^2u_2^{44}u_1^{28} - 536870912u_5u_2^{45}u_1^{29} - \\
& 2147483648u_2^{44}u_1^{31} + 1073741824u_2^{44}u_1^{30})x_5x_4x_1 - \\
& 268435456u_5^2u_2^{46}u_1^{28}x_5x_4 + \\
& (268435456u_5^3u_2^{45}u_1^{28} + 1073741824u_5^2u_2^{44}u_1^{30} - \\
& 536870912u_5^2u_2^{44}u_1^{29})x_5x_1 + \\
& (-268435456u_6u_5u_2^{44}u_1^{28} - 536870912u_6u_2^{45}u_1^{29})x_4^2x_1 + \\
& (-268435456u_6u_5u_2^{46}u_1^{28} + 536870912u_6u_5u_2^{44}u_1^{29} + \\
& 536870912u_6u_2^{45}u_1^{29})x_4^2 + 268435456u_6u_5^2u_2^{45}u_1^{28}x_4x_1 - \\
& 268435456u_6u_5^2u_2^{45}u_1^{28}x_4
\end{aligned}$$

S-pol added.

985. Creating S-polynomial from the pair  $(p_3, p_{254})$ .

Forming S-pol of  $p_3$  and  $p_{254}$ :

$$\begin{aligned}
p_{1583} = & (134217728u_5u_2^{44}u_1^{27} + 268435456u_2^{45}u_1^{28})x_5x_4^2 + \\
& (268435456u_5^2u_2^{43}u_1^{28} - 134217728u_5^2u_2^{43}u_1^{27} - 268435456u_5u_2^{44}u_1^{28} - \\
& 1073741824u_2^{43}u_1^{30} + 536870912u_2^{43}u_1^{29})x_5x_4x_1 - \\
& 134217728u_5^2u_2^{45}u_1^{27}x_5x_4 + \\
& (134217728u_5^3u_2^{44}u_1^{27} + 536870912u_5^2u_2^{43}u_1^{29} - \\
& 268435456u_5^2u_2^{43}u_1^{28})x_5x_1 + \\
& (-134217728u_6u_5u_2^{43}u_1^{27} - 268435456u_6u_2^{44}u_1^{28})x_4^2x_1 + \\
& (-134217728u_6u_5u_2^{45}u_1^{27} + 268435456u_6u_5u_2^{43}u_1^{28} + \\
& 268435456u_6u_2^{44}u_1^{28})x_4^2 + 134217728u_6u_5^2u_2^{44}u_1^{27}x_4x_1 - \\
& 134217728u_6u_5^2u_2^{44}u_1^{27}x_4
\end{aligned}$$

S-pol added.

986. Creating S-polynomial from the pair  $(p_3, p_{255})$ .

Forming S-pol of  $p_3$  and  $p_{255}$ : Polynomial too big for output (text size is 3090 characters, number of terms is 8)

S-pol added.

987. Creating S-polynomial from the pair  $(p_3, p_{256})$ .

Forming S-pol of  $p_3$  and  $p_{256}$ : Polynomial too big for output (text size is 5899 characters, number of terms is 9)

S-pol added.

988. Creating S-polynomial from the pair  $(p_3, p_{257})$ .  
Forming S-pol of  $p_3$  and  $p_{257}$ : Polynomial too big for output (text size is 5899 characters, number of terms is 9)  
S-pol added.
989. Creating S-polynomial from the pair  $(p_3, p_{258})$ .  
Forming S-pol of  $p_3$  and  $p_{258}$ : Polynomial too big for output (text size is 5877 characters, number of terms is 9)  
S-pol added.
990. Creating S-polynomial from the pair  $(p_3, p_{259})$ .  
Forming S-pol of  $p_3$  and  $p_{259}$ : Polynomial too big for output (text size is 1651 characters, number of terms is 8)  
S-pol added.
991. Creating S-polynomial from the pair  $(p_3, p_{260})$ .  
Forming S-pol of  $p_3$  and  $p_{260}$ : Polynomial too big for output (text size is 2314 characters, number of terms is 8)  
S-pol added.
992. Creating S-polynomial from the pair  $(p_3, p_{261})$ .  
Forming S-pol of  $p_3$  and  $p_{261}$ : Polynomial too big for output (text size is 5877 characters, number of terms is 9)  
S-pol added.
993. Creating S-polynomial from the pair  $(p_3, p_{262})$ .  
Forming S-pol of  $p_3$  and  $p_{262}$ :  

$$p_{1584} = (8388608u_6u_2^{37}u_1^{22} + 8388608u_2^{38}u_1^{23})x_5x_4^2 +$$

$$(-16777216u_6u_2^{37}u_1^{23} - 33554432u_2^{36}u_1^{25} + 16777216u_2^{36}u_1^{24})x_5x_4x_1 +$$

$$(8388608u_6u_5^2u_2^{37}u_1^{22} + 16777216u_5^2u_2^{36}u_1^{24} -$$

$$8388608u_5^2u_2^{36}u_1^{23})x_5x_1 +$$

$$(8388608u_6^2u_2^{36}u_1^{23} - 8388608u_6^2u_2^{36}u_1^{22})x_4^2x_1 +$$

$$(-8388608u_6^2u_2^{38}u_1^{22} + 8388608u_6^2u_2^{36}u_1^{23})x_4^2$$
S-pol added.
994. Creating S-polynomial from the pair  $(p_3, p_{263})$ .  
Forming S-pol of  $p_3$  and  $p_{263}$ :  

$$p_{1585} = (4194304u_6u_2^{36}u_1^{21} + 4194304u_2^{37}u_1^{22})x_5x_4^2 +$$

$$(-8388608u_6u_2^{36}u_1^{22} - 16777216u_2^{35}u_1^{24} + 8388608u_2^{35}u_1^{23})x_5x_4x_1 +$$

$$(4194304u_6u_5^2u_2^{36}u_1^{21} + 8388608u_5^2u_2^{35}u_1^{23} -$$

$$4194304u_5^2u_2^{35}u_1^{22})x_5x_1 +$$

$$(4194304u_6^2u_2^{35}u_1^{22} - 4194304u_6^2u_2^{35}u_1^{21})x_4^2x_1 +$$

$$(-4194304u_6^2u_2^{37}u_1^{21} + 4194304u_6^2u_2^{35}u_1^{22})x_4^2$$
S-pol added.

995. Creating S-polynomial from the pair  $(p_3, p_{264})$ .  
 Forming S-pol of  $p_3$  and  $p_{264}$ : Polynomial too big for output (text size is 1518 characters, number of terms is 8)  
 S-pol added.
996. Creating S-polynomial from the pair  $(p_3, p_{265})$ .  
 Forming S-pol of  $p_3$  and  $p_{265}$ : Polynomial too big for output (text size is 1509 characters, number of terms is 8)  
 S-pol added.
997. Creating S-polynomial from the pair  $(p_3, p_{266})$ .  
 Forming S-pol of  $p_3$  and  $p_{266}$ : Polynomial too big for output (text size is 10973 characters, number of terms is 16)  
 S-pol added.
998. Creating S-polynomial from the pair  $(p_3, p_{267})$ .  
 Forming S-pol of  $p_3$  and  $p_{267}$ : Polynomial too big for output (text size is 10973 characters, number of terms is 16)  
 S-pol added.
999. Creating S-polynomial from the pair  $(p_3, p_{268})$ .  
 Forming S-pol of  $p_3$  and  $p_{268}$ : Polynomial too big for output (text size is 4930 characters, number of terms is 8)  
 S-pol added.
1000. Creating S-polynomial from the pair  $(p_3, p_{269})$ .  
 Forming S-pol of  $p_3$  and  $p_{269}$ : Polynomial too big for output (text size is 10922 characters, number of terms is 16)  
 S-pol added.
1001. Creating S-polynomial from the pair  $(p_3, p_{270})$ .  
 Forming S-pol of  $p_3$  and  $p_{270}$ : Polynomial too big for output (text size is 10922 characters, number of terms is 16)  
 S-pol added.
1002. Creating S-polynomial from the pair  $(p_3, p_{271})$ .  
 Forming S-pol of  $p_3$  and  $p_{271}$ : Polynomial too big for output (text size is 2756 characters, number of terms is 8)  
 S-pol added.
1003. Creating S-polynomial from the pair  $(p_3, p_{272})$ .  
 Forming S-pol of  $p_3$  and  $p_{272}$ : Polynomial too big for output (text size is 3854 characters, number of terms is 8)  
 S-pol added.

1004. Creating S-polynomial from the pair  $(p_3, p_{273})$ .

Forming S-pol of  $p_3$  and  $p_{273}$ :

$$\begin{aligned}
p_{1586} = & (268435456u_5u_4^{45}u_1^{28} + 536870912u_4^{46}u_1^{29})x_5x_4^2 + \\
& (536870912u_5^2u_4^{44}u_1^{29} - 268435456u_5^2u_4^{44}u_1^{28} - 536870912u_5u_4^{45}u_1^{29} - \\
& 2147483648u_4^{44}u_1^{31} + 1073741824u_4^{44}u_1^{30})x_5x_4x_3 - \\
& 268435456u_5^2u_4^{46}u_1^{28}x_5x_4 + \\
& (268435456u_5^3u_4^{45}u_1^{28} + 1073741824u_5^2u_4^{44}u_1^{30} - \\
& 536870912u_5^2u_4^{44}u_1^{29})x_5x_3 + \\
& (-268435456u_6u_5u_4^{44}u_1^{28} - 536870912u_6u_4^{45}u_1^{29})x_4^2x_3 + \\
& (-268435456u_6u_5u_4^{46}u_1^{28} + 536870912u_6u_5u_4^{44}u_1^{29} + \\
& 536870912u_6u_4^{45}u_1^{29})x_4^2 + 268435456u_6u_5^2u_4^{45}u_1^{28}x_4x_3 - \\
& 268435456u_6u_5^2u_4^{45}u_1^{28}x_4
\end{aligned}$$

S-pol added.

1005. Creating S-polynomial from the pair  $(p_3, p_{274})$ .

Forming S-pol of  $p_3$  and  $p_{274}$ :

$$\begin{aligned}
p_{1587} = & (536870912u_5u_4^{50}u_1^{29} + 1073741824u_4^{51}u_1^{30})x_5x_4^2 + \\
& (1073741824u_5^2u_4^{49}u_1^{30} - 536870912u_5^2u_4^{49}u_1^{29} - 1073741824u_5u_4^{50}u_1^{30} - \\
& 4294967296u_4^{49}u_1^{32} + 2147483648u_4^{49}u_1^{31})x_5x_4x_3 - \\
& 536870912u_5^2u_4^{51}u_1^{29}x_5x_4 + \\
& (536870912u_5^3u_4^{50}u_1^{29} + 2147483648u_5^2u_4^{49}u_1^{31} - \\
& 1073741824u_5^2u_4^{49}u_1^{30})x_5x_3 + \\
& (-536870912u_6u_5u_4^{49}u_1^{29} - 1073741824u_6u_4^{50}u_1^{30})x_4^2x_3 + \\
& (-536870912u_6u_5u_4^{51}u_1^{29} + 1073741824u_6u_5u_4^{49}u_1^{30} + \\
& 1073741824u_6u_4^{50}u_1^{30})x_4^2 + 536870912u_6u_5^2u_4^{50}u_1^{29}x_4x_3 - \\
& 536870912u_6u_5^2u_4^{50}u_1^{29}x_4
\end{aligned}$$

S-pol added.

1006. Creating S-polynomial from the pair  $(p_3, p_{275})$ .

Forming S-pol of  $p_3$  and  $p_{275}$ : Polynomial too big for output (text size is 1498 characters, number of terms is 8)

S-pol added.

1007. Creating S-polynomial from the pair  $(p_3, p_{276})$ .

Forming S-pol of  $p_3$  and  $p_{276}$ : Polynomial too big for output (text size is 1490 characters, number of terms is 8)

S-pol added.

1008. Creating S-polynomial from the pair  $(p_3, p_{277})$ .

Forming S-pol of  $p_3$  and  $p_{277}$ :

$$\begin{aligned}
p_{1588} = & (-16777216u_6u_4^{43}u_1^{23} - 67108864u_6u_4^{41}u_1^{25} - 16777216u_4^{44}u_1^{24} - \\
& 67108864u_4^{42}u_1^{26})x_5x_4 + \\
& (33554432u_6u_4^{43}u_1^{24} + 134217728u_6u_4^{41}u_1^{26} + 67108864u_4^{42}u_1^{26} - \\
& 33554432u_4^{42}u_1^{25} + 268435456u_4^{40}u_1^{28} - 134217728u_4^{40}u_1^{27})x_5x_4x_3 + \\
& (-16777216u_6u_5^2u_4^{43}u_1^{23} - 67108864u_6u_5^2u_4^{41}u_1^{25} - \\
& 33554432u_5^2u_4^{42}u_1^{25} + 16777216u_5^2u_4^{42}u_1^{24} - 134217728u_5^2u_4^{40}u_1^{27} + \\
& 67108864u_5^2u_4^{40}u_1^{26})x_5x_3 + \\
& (-16777216u_6^2u_4^{42}u_1^{24} + 16777216u_6^2u_4^{42}u_1^{23} - 67108864u_6^2u_4^{40}u_1^{26} + \\
& 67108864u_6^2u_4^{40}u_1^{25})x_4^2x_3 + \\
& (16777216u_6^2u_4^{44}u_1^{23} + 67108864u_6^2u_4^{42}u_1^{25} - 16777216u_6^2u_4^{42}u_1^{24} - \\
& 67108864u_6^2u_4^{40}u_1^{26})x_4^2
\end{aligned}$$

S-pol added.

1009. Creating S-polynomial from the pair  $(p_3, p_{278})$ .

Forming S-pol of  $p_3$  and  $p_{278}$ :

$$\begin{aligned}
p_{1589} = & (-8388608u_6u_4^{42}u_1^{22} - 33554432u_6u_4^{40}u_1^{24} - 8388608u_4^{43}u_1^{23} - \\
& 33554432u_4^{41}u_1^{25})x_5x_4 + \\
& (16777216u_6u_4^{42}u_1^{23} + 67108864u_6u_4^{40}u_1^{25} + 33554432u_4^{41}u_1^{25} - \\
& 16777216u_4^{41}u_1^{24} + 134217728u_4^{39}u_1^{27} - 67108864u_4^{39}u_1^{26})x_5x_4x_3 + \\
& (-8388608u_6u_5^2u_4^{42}u_1^{22} - 33554432u_6u_5^2u_4^{40}u_1^{24} - \\
& 16777216u_5^2u_4^{41}u_1^{24} + 8388608u_5^2u_4^{41}u_1^{23} - 67108864u_5^2u_4^{39}u_1^{26} + \\
& 33554432u_5^2u_4^{39}u_1^{25})x_5x_3 + \\
& (-8388608u_6^2u_4^{41}u_1^{23} + 8388608u_6^2u_4^{41}u_1^{22} - 33554432u_6^2u_4^{39}u_1^{25} + \\
& 33554432u_6^2u_4^{39}u_1^{24})x_4^2x_3 + \\
& (8388608u_6^2u_4^{43}u_1^{22} + 33554432u_6^2u_4^{41}u_1^{24} - 8388608u_6^2u_4^{41}u_1^{23} - \\
& 33554432u_6^2u_4^{39}u_1^{25})x_4^2
\end{aligned}$$

S-pol added.



1010. Creating S-polynomial from the pair  $(p_3, p_{279})$ .

Forming S-pol of  $p_3$  and  $p_{279}$ :

$$\begin{aligned}
p_{1590} = & (268435456u_5u_4^{45}u_1^{28} + 536870912u_4^{46}u_1^{29})x_5x_4^2 + \\
& (536870912u_5^2u_4^{44}u_1^{29} - 268435456u_5^2u_4^{44}u_1^{28} - 536870912u_5u_4^{45}u_1^{29} - \\
& 2147483648u_4^{44}u_1^{31} + 1073741824u_4^{44}u_1^{30})x_5x_4x_3 - \\
& 268435456u_5^2u_4^{46}u_1^{28}x_5x_4 + \\
& (268435456u_5^3u_4^{45}u_1^{28} + 1073741824u_5^2u_4^{44}u_1^{30} - \\
& 536870912u_5^2u_4^{44}u_1^{29})x_5x_3 + \\
& (-268435456u_6u_5u_4^{44}u_1^{28} - 536870912u_6u_4^{45}u_1^{29})x_4^2x_3 + \\
& (-268435456u_6u_5u_4^{46}u_1^{28} + 536870912u_6u_5u_4^{44}u_1^{29} + \\
& 536870912u_6u_4^{45}u_1^{29})x_4^2 + 268435456u_6u_5^2u_4^{45}u_1^{28}x_4x_3 - \\
& 268435456u_6u_5^2u_4^{45}u_1^{28}x_4
\end{aligned}$$

S-pol added.

1011. Creating S-polynomial from the pair  $(p_3, p_{280})$ .

Forming S-pol of  $p_3$  and  $p_{280}$ :

$$\begin{aligned}
p_{1591} = & (134217728u_5u_4^{44}u_1^{27} + 268435456u_4^{45}u_1^{28})x_5x_4^2 + \\
& (268435456u_5^2u_4^{43}u_1^{28} - 134217728u_5^2u_4^{43}u_1^{27} - 268435456u_5u_4^{44}u_1^{28} - \\
& 1073741824u_4^{43}u_1^{30} + 536870912u_4^{43}u_1^{29})x_5x_4x_3 - \\
& 134217728u_5^2u_4^{45}u_1^{27}x_5x_4 + \\
& (134217728u_5^3u_4^{44}u_1^{27} + 536870912u_5^2u_4^{43}u_1^{29} - \\
& 268435456u_5^2u_4^{43}u_1^{28})x_5x_3 + \\
& (-134217728u_6u_5u_4^{43}u_1^{27} - 268435456u_6u_4^{44}u_1^{28})x_4^2x_3 + \\
& (-134217728u_6u_5u_4^{45}u_1^{27} + 268435456u_6u_5u_4^{43}u_1^{28} + \\
& 268435456u_6u_4^{44}u_1^{28})x_4^2 + 134217728u_6u_5^2u_4^{44}u_1^{27}x_4x_3 - \\
& 134217728u_6u_5^2u_4^{44}u_1^{27}x_4
\end{aligned}$$

S-pol added.

1012. Creating S-polynomial from the pair  $(p_3, p_{281})$ .

Forming S-pol of  $p_3$  and  $p_{281}$ : Polynomial too big for output (text size is 5526 characters, number of terms is 9)

S-pol added.

1013. Creating S-polynomial from the pair  $(p_3, p_{282})$ .

Forming S-pol of  $p_3$  and  $p_{282}$ : Polynomial too big for output (text size is 5526 characters, number of terms is 9)

S-pol added.

1014. Creating S-polynomial from the pair  $(p_3, p_{283})$ .  
 Forming S-pol of  $p_3$  and  $p_{283}$ : Polynomial too big for output (text size is 3090 characters, number of terms is 8)  
 S-pol added.
1015. Creating S-polynomial from the pair  $(p_3, p_{284})$ .  
 Forming S-pol of  $p_3$  and  $p_{284}$ : Polynomial too big for output (text size is 5502 characters, number of terms is 9)  
 S-pol added.
1016. Creating S-polynomial from the pair  $(p_3, p_{285})$ .  
 Forming S-pol of  $p_3$  and  $p_{285}$ : Polynomial too big for output (text size is 5502 characters, number of terms is 9)  
 S-pol added.
1017. Creating S-polynomial from the pair  $(p_3, p_{286})$ .  
 Forming S-pol of  $p_3$  and  $p_{286}$ : Polynomial too big for output (text size is 1651 characters, number of terms is 8)  
 S-pol added.
1018. Creating S-polynomial from the pair  $(p_3, p_{287})$ .  
 Forming S-pol of  $p_3$  and  $p_{287}$ : Polynomial too big for output (text size is 2314 characters, number of terms is 8)  
 S-pol added.
1019. Creating S-polynomial from the pair  $(p_3, p_{288})$ .  
 Forming S-pol of  $p_3$  and  $p_{288}$ :  

$$p_{1592} = (8388608u_6u_4^{37}u_1^{22} + 8388608u_4^{38}u_1^{23})x_5x_4^2 +$$

$$(-16777216u_6u_4^{37}u_1^{23} - 33554432u_4^{36}u_1^{25} + 16777216u_4^{36}u_1^{24})x_5x_4x_3 +$$

$$(8388608u_6u_5^2u_4^{37}u_1^{22} + 16777216u_5^2u_4^{36}u_1^{24} -$$

$$8388608u_5^2u_4^{36}u_1^{23})x_5x_3 +$$

$$(8388608u_6^2u_4^{36}u_1^{23} - 8388608u_6^2u_4^{36}u_1^{22})x_4^2x_3 +$$

$$(-8388608u_6^2u_4^{38}u_1^{22} + 8388608u_6^2u_4^{36}u_1^{23})x_4^2$$
  
 S-pol added.
1020. Creating S-polynomial from the pair  $(p_3, p_{289})$ .  
 Forming S-pol of  $p_3$  and  $p_{289}$ :  

$$p_{1593} = (4194304u_6u_4^{36}u_1^{21} + 4194304u_4^{37}u_1^{22})x_5x_4^2 +$$

$$(-8388608u_6u_4^{36}u_1^{22} - 16777216u_4^{35}u_1^{24} + 8388608u_4^{35}u_1^{23})x_5x_4x_3 +$$

$$(4194304u_6u_5^2u_4^{36}u_1^{21} + 8388608u_5^2u_4^{35}u_1^{23} -$$

$$4194304u_5^2u_4^{35}u_1^{22})x_5x_3 +$$

$$(4194304u_6^2u_4^{35}u_1^{22} - 4194304u_6^2u_4^{35}u_1^{21})x_4^2x_3 +$$

$$(-4194304u_6^2u_4^{37}u_1^{21} + 4194304u_6^2u_4^{35}u_1^{22})x_4^2$$
  
 S-pol added.

1021. Creating S-polynomial from the pair  $(p_3, p_{290})$ .

Forming S-pol of  $p_3$  and  $p_{290}$ :

$$\begin{aligned} p_{1594} = & -8388608u_5u_2^{35}u_1^{23}x_5x_4^2 + \\ & (33554432u_5u_2^{33}u_1^{25} - 16777216u_5u_2^{33}u_1^{24})x_5x_4x_1 + \\ & (-16777216u_5^3u_2^{33}u_1^{24} + 8388608u_5^3u_2^{33}u_1^{23})x_5x_1 + \\ & 8388608u_6u_5u_2^{34}u_1^{23}x_4^2x_1 - 8388608u_6u_5u_2^{34}u_1^{23}x_4^2 \end{aligned}$$

Reduced to zero.

1022. Creating S-polynomial from the pair  $(p_3, p_{291})$ .

Forming S-pol of  $p_3$  and  $p_{291}$ :

$$\begin{aligned} p_{1595} = & -4194304u_5u_2^{34}u_1^{22}x_5x_4^2 + \\ & (16777216u_5u_2^{32}u_1^{24} - 8388608u_5u_2^{32}u_1^{23})x_5x_4x_1 + \\ & (-8388608u_5^3u_2^{32}u_1^{23} + 4194304u_5^3u_2^{32}u_1^{22})x_5x_1 + \\ & 4194304u_6u_5u_2^{33}u_1^{22}x_4^2x_1 - 4194304u_6u_5u_2^{33}u_1^{22}x_4^2 \end{aligned}$$

Reduced to zero.

1023. Creating S-polynomial from the pair  $(p_3, p_{292})$ .

Forming S-pol of  $p_3$  and  $p_{292}$ :

$$\begin{aligned} p_{1596} = & (70368744177664u_5^2u_2^{75}u_1^{46} + 140737488355328u_5u_2^{76}u_1^{47})x_5x_4^2 + \\ & (140737488355328u_5^3u_2^{74}u_1^{47} - 70368744177664u_5^3u_2^{74}u_1^{46} - \\ & 140737488355328u_5^2u_2^{75}u_1^{47} - 562949953421312u_5u_2^{74}u_1^{49} + \\ & 281474976710656u_5u_2^{74}u_1^{48})x_5x_4x_1 - 70368744177664u_5^3u_2^{76}u_1^{46}x_5x_4 + \\ & (70368744177664u_5^4u_2^{75}u_1^{46} + 281474976710656u_5^3u_2^{74}u_1^{48} - \\ & 140737488355328u_5^3u_2^{74}u_1^{47})x_5x_1 + \\ & (-70368744177664u_6u_5^2u_2^{74}u_1^{46} - 140737488355328u_6u_5u_2^{75}u_1^{47})x_4^2x_1 + \\ & (-70368744177664u_6u_5^2u_2^{76}u_1^{46} + 140737488355328u_6u_5^2u_2^{74}u_1^{47} + \\ & 140737488355328u_6u_5u_2^{75}u_1^{47})x_4^2 + 70368744177664u_6u_5^3u_2^{75}u_1^{46}x_4x_1 - \\ & 70368744177664u_6u_5^3u_2^{75}u_1^{46}x_4 \end{aligned}$$

S-pol added.

1024. Creating S-polynomial from the pair  $(p_3, p_{293})$ .

Forming S-pol of  $p_3$  and  $p_{293}$ :

$$\begin{aligned} p_{1597} = & (35184372088832u_5^2u_2^{74}u_1^{45} + 70368744177664u_5u_2^{75}u_1^{46})x_5x_4^2 + \\ & (70368744177664u_5^3u_2^{73}u_1^{46} - 35184372088832u_5^3u_2^{73}u_1^{45} - \\ & 70368744177664u_5^2u_2^{74}u_1^{46} - 281474976710656u_5u_2^{73}u_1^{48} + \end{aligned}$$

$$\begin{aligned}
& 140737488355328u_5u_2^{73}u_1^{47})x_5x_4x_1 - 35184372088832u_5^3u_2^{75}u_1^{45}x_5x_4 + \\
& (35184372088832u_5^4u_2^{74}u_1^{45} + 140737488355328u_5^3u_2^{73}u_1^{47} - \\
& 70368744177664u_5^3u_2^{73}u_1^{46})x_5x_1 + \\
& (-35184372088832u_6u_5^2u_2^{73}u_1^{45} - 70368744177664u_6u_5u_2^{74}u_1^{46})x_4^2x_1 + \\
& (-35184372088832u_6u_5^2u_2^{75}u_1^{45} + 70368744177664u_6u_5^2u_2^{73}u_1^{46} + \\
& 70368744177664u_6u_5u_2^{74}u_1^{46})x_4^2 + 35184372088832u_6u_5^3u_2^{74}u_1^{45}x_4x_1 - \\
& 35184372088832u_6u_5^3u_2^{74}u_1^{45}x_4
\end{aligned}$$

S-pol added.

1025. Creating S-polynomial from the pair  $(p_3, p_{294})$ .

Forming S-pol of  $p_3$  and  $p_{294}$ :

$$\begin{aligned}
p_{1598} = & (536870912u_5u_2^{45}u_1^{29} + 1073741824u_2^{46}u_1^{30})x_5x_4^2 + \\
& (1073741824u_5^2u_2^{44}u_1^{30} - 536870912u_5^2u_2^{44}u_1^{29} - 1073741824u_5u_2^{45}u_1^{30} - \\
& 4294967296u_2^{44}u_1^{32} + 2147483648u_2^{44}u_1^{31})x_5x_4x_1 - \\
& 536870912u_5^2u_2^{46}u_1^{29}x_5x_4 + \\
& (536870912u_5^3u_2^{45}u_1^{29} + 2147483648u_5^2u_2^{44}u_1^{31} - \\
& 1073741824u_5^2u_2^{44}u_1^{30})x_5x_1 + \\
& (-536870912u_6u_5u_2^{44}u_1^{29} - 1073741824u_6u_2^{45}u_1^{30})x_4^2x_1 + \\
& (-536870912u_6u_5u_2^{46}u_1^{29} + 1073741824u_6u_5u_2^{44}u_1^{30} + \\
& 1073741824u_6u_2^{45}u_1^{30})x_4^2 + 536870912u_6u_5^2u_2^{45}u_1^{29}x_4x_1 - \\
& 536870912u_6u_5^2u_2^{45}u_1^{29}x_4
\end{aligned}$$

S-pol added.

1026. Creating S-polynomial from the pair  $(p_3, p_{295})$ .

Forming S-pol of  $p_3$  and  $p_{295}$ :

$$\begin{aligned}
p_{1599} = & (268435456u_5u_2^{44}u_1^{28} + 536870912u_2^{45}u_1^{29})x_5x_4^2 + \\
& (536870912u_5^2u_2^{43}u_1^{29} - 268435456u_5^2u_2^{43}u_1^{28} - 536870912u_5u_2^{44}u_1^{29} - \\
& 2147483648u_2^{43}u_1^{31} + 1073741824u_2^{43}u_1^{30})x_5x_4x_1 - \\
& 268435456u_5^2u_2^{45}u_1^{28}x_5x_4 + \\
& (268435456u_5^3u_2^{44}u_1^{28} + 1073741824u_5^2u_2^{43}u_1^{30} - \\
& 536870912u_5^2u_2^{43}u_1^{29})x_5x_1 + \\
& (-268435456u_6u_5u_2^{43}u_1^{28} - 536870912u_6u_2^{44}u_1^{29})x_4^2x_1 + \\
& (-268435456u_6u_5u_2^{45}u_1^{28} + 536870912u_6u_5u_2^{43}u_1^{29} + \\
& 536870912u_6u_2^{44}u_1^{29})x_4^2 + 268435456u_6u_5^2u_2^{44}u_1^{28}x_4x_1 - \\
& 268435456u_6u_5^2u_2^{44}u_1^{28}x_4
\end{aligned}$$

S-pol added.

1027. Creating S-polynomial from the pair  $(p_3, p_{296})$ .

Forming S-pol of  $p_3$  and  $p_{296}$ :

$$\begin{aligned}
p_{1600} = & (536870912u_5u_2^{45}u_1^{29} + 1073741824u_2^{46}u_1^{30})x_5x_4 + \\
& (1073741824u_5^2u_2^{44}u_1^{30} - 536870912u_5^2u_2^{44}u_1^{29} - 1073741824u_5u_2^{45}u_1^{30} - \\
& 4294967296u_2^{44}u_1^{32} + 2147483648u_2^{44}u_1^{31})x_5x_4x_1 - \\
& 536870912u_5^2u_2^{46}u_1^{29}x_5x_4 + \\
& (536870912u_5^3u_2^{45}u_1^{29} + 2147483648u_5^2u_2^{44}u_1^{31} - \\
& 1073741824u_5^2u_2^{44}u_1^{30})x_5x_1 + \\
& (-536870912u_6u_5u_2^{44}u_1^{29} - 1073741824u_6u_2^{45}u_1^{30})x_4^2x_1 + \\
& (-536870912u_6u_5u_2^{46}u_1^{29} + 1073741824u_6u_5u_2^{44}u_1^{30} + \\
& 1073741824u_6u_2^{45}u_1^{30})x_4^2 + 536870912u_6u_5^2u_2^{45}u_1^{29}x_4x_1 - \\
& 536870912u_6u_5^2u_2^{45}u_1^{29}x_4
\end{aligned}$$

S-pol added.

1028. Creating S-polynomial from the pair  $(p_3, p_{297})$ .

Forming S-pol of  $p_3$  and  $p_{297}$ :

$$\begin{aligned}
p_{1601} = & (1073741824u_5u_2^{50}u_1^{30} + 2147483648u_2^{51}u_1^{31})x_5x_4 + \\
& (2147483648u_5^2u_2^{49}u_1^{31} - 1073741824u_5^2u_2^{49}u_1^{30} - 2147483648u_5u_2^{50}u_1^{31} - \\
& 8589934592u_2^{49}u_1^{33} + 4294967296u_2^{49}u_1^{32})x_5x_4x_1 - \\
& 1073741824u_5^2u_2^{51}u_1^{30}x_5x_4 + \\
& (1073741824u_5^3u_2^{50}u_1^{30} + 4294967296u_5^2u_2^{49}u_1^{32} - \\
& 2147483648u_5^2u_2^{49}u_1^{31})x_5x_1 + \\
& (-1073741824u_6u_5u_2^{49}u_1^{30} - 2147483648u_6u_2^{50}u_1^{31})x_4^2x_1 + \\
& (-1073741824u_6u_5u_2^{51}u_1^{30} + 2147483648u_6u_5u_2^{49}u_1^{31} + \\
& 2147483648u_6u_2^{50}u_1^{31})x_4^2 + 1073741824u_6u_5^2u_2^{50}u_1^{30}x_4x_1 - \\
& 1073741824u_6u_5^2u_2^{50}u_1^{30}x_4
\end{aligned}$$

S-pol added.

1029. Creating S-polynomial from the pair  $(p_3, p_{298})$ .

Forming S-pol of  $p_3$  and  $p_{298}$ :

$$\begin{aligned}
p_{1602} = & -32768u_2^{25}u_1^{15}x_5x_4^2 + (131072u_2^{23}u_1^{17} - 65536u_2^{23}u_1^{16})x_5x_4x_1 + \\
& (-65536u_3^2u_2^{23}u_1^{16} + 32768u_5^2u_2^{23}u_1^{15})x_5x_1 + \\
& 32768u_6u_2^{24}u_1^{15}x_4^2x_1 - 32768u_6u_2^{24}u_1^{15}x_4^2
\end{aligned}$$

Reduced to zero.

1030. Creating S-polynomial from the pair  $(p_3, p_{299})$ .  
 Forming S-pol of  $p_3$  and  $p_{299}$ : Polynomial too big for output (text size is 3770 characters, number of terms is 9)  
 S-pol added.
1031. Creating S-polynomial from the pair  $(p_3, p_{300})$ .  
 Forming S-pol of  $p_3$  and  $p_{300}$ : Polynomial too big for output (text size is 3770 characters, number of terms is 9)  
 S-pol added.
1032. Creating S-polynomial from the pair  $(p_3, p_{301})$ .  
 Forming S-pol of  $p_3$  and  $p_{301}$ : Polynomial too big for output (text size is 6247 characters, number of terms is 16)  
 S-pol added.
1033. Creating S-polynomial from the pair  $(p_3, p_{302})$ .  
 Forming S-pol of  $p_3$  and  $p_{302}$ : Polynomial too big for output (text size is 1210 characters, number of terms is 9)  
 S-pol added.
1034. Creating S-polynomial from the pair  $(p_3, p_{303})$ .  
 Forming S-pol of  $p_3$  and  $p_{303}$ : Polynomial too big for output (text size is 3322 characters, number of terms is 9)  
 S-pol added.
1035. Creating S-polynomial from the pair  $(p_3, p_{304})$ .  
 Forming S-pol of  $p_3$  and  $p_{304}$ : Polynomial too big for output (text size is 2862 characters, number of terms is 9)  
 S-pol added.
1036. Creating S-polynomial from the pair  $(p_3, p_{305})$ .  
 Forming S-pol of  $p_3$  and  $p_{305}$ : Polynomial too big for output (text size is 3005 characters, number of terms is 8)  
 S-pol added.
1037. Creating S-polynomial from the pair  $(p_3, p_{306})$ .  
 Forming S-pol of  $p_3$  and  $p_{306}$ :

$$\begin{aligned}
 p_{1603} = & 2097152u_2^{36}u_1^{21}x_5x_4^2 + \\
 & (2097152u_5^2u_2^{34}u_1^{21} - 1048576u_5^2u_2^{34}u_1^{20} - 8388608u_2^{34}u_1^{23} + \\
 & 4194304u_2^{34}u_1^{22})x_5x_4x_1 - 1048576u_5^2u_2^{36}u_1^{20}x_5x_4 + \\
 & (4194304u_5^2u_2^{34}u_1^{22} - 2097152u_5^2u_2^{34}u_1^{21})x_5x_1 - \\
 & 2097152u_6u_2^{35}u_1^{21}x_4^2x_1 + 2097152u_6u_2^{35}u_1^{21}x_4^2 + \\
 & 1048576u_6u_5^2u_2^{35}u_1^{20}x_4x_1 - 1048576u_6u_5^2u_2^{35}u_1^{20}x_4
 \end{aligned}$$

S-pol added.

1038. Creating S-polynomial from the pair  $(p_3, p_{307})$ .

Forming S-pol of  $p_3$  and  $p_{307}$ :

$$\begin{aligned} p_{1604} = & 4194304u_2^{30}u_1^{22}x_5x_4^2 + \\ & (4194304u_5^2u_2^{28}u_1^{22} - 2097152u_5^2u_2^{28}u_1^{21} - 16777216u_2^{28}u_1^{24} + \\ & 8388608u_2^{28}u_1^{23})x_5x_4x_1 - 2097152u_5^2u_2^{30}u_1^{21}x_5x_4 + \\ & (8388608u_5^2u_2^{28}u_1^{23} - 4194304u_5^2u_2^{28}u_1^{22})x_5x_1 - \\ & 4194304u_6u_2^{29}u_1^{22}x_4^2x_1 + 4194304u_6u_2^{29}u_1^{22}x_4^2 + \\ & 2097152u_6u_5^2u_2^{29}u_1^{21}x_4x_1 - 2097152u_6u_5^2u_2^{29}u_1^{21}x_4 \end{aligned}$$

S-pol added.

1039. Creating S-polynomial from the pair  $(p_3, p_{308})$ .

Forming S-pol of  $p_3$  and  $p_{308}$ : Polynomial too big for output (text size is 2863 characters, number of terms is 9)

S-pol added.

1040. Creating S-polynomial from the pair  $(p_3, p_{309})$ .

Forming S-pol of  $p_3$  and  $p_{309}$ : Polynomial too big for output (text size is 6247 characters, number of terms is 16)

S-pol added.

1041. Creating S-polynomial from the pair  $(p_3, p_{310})$ .

Forming S-pol of  $p_3$  and  $p_{310}$ : Polynomial too big for output (text size is 1210 characters, number of terms is 9)

S-pol added.

1042. Creating S-polynomial from the pair  $(p_3, p_{311})$ .

Forming S-pol of  $p_3$  and  $p_{311}$ : Polynomial too big for output (text size is 3322 characters, number of terms is 9)

S-pol added.

1043. Creating S-polynomial from the pair  $(p_3, p_{312})$ .

Forming S-pol of  $p_3$  and  $p_{312}$ :

$$\begin{aligned} p_{1605} = & 16384u_2^{24}u_1^{14}x_5x_4^2 + (-65536u_2^{22}u_1^{16} + 32768u_2^{22}u_1^{15})x_5x_4x_1 + \\ & (32768u_5^2u_2^{22}u_1^{15} - 16384u_5^2u_2^{22}u_1^{14})x_5x_1 - \\ & 16384u_6u_2^{23}u_1^{14}x_4^2x_1 + 16384u_6u_2^{23}u_1^{14}x_4^2 \end{aligned}$$

Reduced to zero.

1044. Creating S-polynomial from the pair  $(p_3, p_{313})$ .

Forming S-pol of  $p_3$  and  $p_{313}$ :

$$\begin{aligned} p_{1606} = & -8388608u_5u_3^{35}u_1^{23}x_5x_4^2 + \\ & (33554432u_5u_3^{33}u_1^{25} - 16777216u_5u_3^{33}u_1^{24})x_5x_4x_2 + \\ & (-16777216u_5^3u_3^{33}u_1^{24} + 8388608u_5^3u_3^{33}u_1^{23})x_5x_2 + \\ & 8388608u_6u_5u_3^{34}u_1^{23}x_4^2x_2 - 8388608u_6u_5u_3^{34}u_1^{23}x_4^2 \end{aligned}$$

Reduced to zero.

1045. Creating S-polynomial from the pair  $(p_3, p_{314})$ .

Forming S-pol of  $p_3$  and  $p_{314}$ :

$$\begin{aligned} p_{1607} = & -4194304u_5u_3^{34}u_1^{22}x_5x_4^2 + \\ & (16777216u_5u_3^{32}u_1^{24} - 8388608u_5u_3^{32}u_1^{23})x_5x_4x_2 + \\ & (-8388608u_5^3u_3^{32}u_1^{23} + 4194304u_5^3u_3^{32}u_1^{22})x_5x_2 + \\ & 4194304u_6u_5u_3^{33}u_1^{22}x_4^2x_2 - 4194304u_6u_5u_3^{33}u_1^{22}x_4^2 \end{aligned}$$

Reduced to zero.

1046. Creating S-polynomial from the pair  $(p_3, p_{315})$ .

Forming S-pol of  $p_3$  and  $p_{315}$ :

$$\begin{aligned} p_{1608} = & (70368744177664u_5^2u_3^{75}u_1^{46} + 140737488355328u_5u_3^{76}u_1^{47})x_5x_4^2 + \\ & (140737488355328u_5^3u_3^{74}u_1^{47} - 70368744177664u_5^3u_3^{74}u_1^{46} - \\ & 140737488355328u_5^2u_3^{75}u_1^{47} - 562949953421312u_5u_3^{74}u_1^{49} + \\ & 281474976710656u_5u_3^{74}u_1^{48})x_5x_4x_2 - 70368744177664u_5^3u_3^{76}u_1^{46}x_5x_4 + \\ & (70368744177664u_5^4u_3^{75}u_1^{46} + 281474976710656u_5^3u_3^{74}u_1^{48} - \\ & 140737488355328u_5^3u_3^{74}u_1^{47})x_5x_2 + \\ & (-70368744177664u_6u_5^2u_3^{74}u_1^{46} - 140737488355328u_6u_5u_3^{75}u_1^{47})x_4^2x_2 + \\ & (-70368744177664u_6u_5^2u_3^{76}u_1^{46} + 140737488355328u_6u_5^2u_3^{74}u_1^{47} + \\ & 140737488355328u_6u_5u_3^{75}u_1^{47})x_4^2 + 70368744177664u_6u_5^3u_3^{75}u_1^{46}x_4x_2 - \\ & 70368744177664u_6u_5^3u_3^{75}u_1^{46}x_4 \end{aligned}$$

S-pol added.

1047. Creating S-polynomial from the pair  $(p_3, p_{316})$ .

Forming S-pol of  $p_3$  and  $p_{316}$ :

$$\begin{aligned} p_{1609} = & (35184372088832u_5^2u_3^{74}u_1^{45} + 70368744177664u_5u_3^{75}u_1^{46})x_5x_4^2 + \\ & (70368744177664u_5^3u_3^{73}u_1^{46} - 35184372088832u_5^3u_3^{73}u_1^{45} - \\ & 70368744177664u_5^2u_3^{74}u_1^{46} - 281474976710656u_5u_3^{73}u_1^{48} + \end{aligned}$$



$$\begin{aligned}
& 140737488355328u_5u_3^{73}u_1^{47})x_5x_4x_2 - 35184372088832u_5^3u_3^{75}u_1^{45}x_5x_4 + \\
& (35184372088832u_5^4u_3^{74}u_1^{45} + 140737488355328u_5^3u_3^{73}u_1^{47} - \\
& 70368744177664u_5^3u_3^{73}u_1^{46})x_5x_2 + \\
& (-35184372088832u_6u_5^2u_3^{73}u_1^{45} - 70368744177664u_6u_5u_3^{74}u_1^{46})x_4^2x_2 + \\
& (-35184372088832u_6u_5^2u_3^{75}u_1^{45} + 70368744177664u_6u_5^2u_3^{73}u_1^{46} + \\
& 70368744177664u_6u_5u_3^{74}u_1^{46})x_4^2 + 35184372088832u_6u_5^3u_3^{74}u_1^{45}x_4x_2 - \\
& 35184372088832u_6u_5^3u_3^{74}u_1^{45}x_4
\end{aligned}$$

S-pol added.

1048. Creating S-polynomial from the pair  $(p_3, p_{317})$ .

Forming S-pol of  $p_3$  and  $p_{317}$ :

$$\begin{aligned}
p_{1610} = & (536870912u_5u_3^{45}u_1^{29} + 1073741824u_3^{46}u_1^{30})x_5x_4^2 + \\
& (1073741824u_5^2u_3^{44}u_1^{30} - 536870912u_5^2u_3^{44}u_1^{29} - 1073741824u_5u_3^{45}u_1^{30} - \\
& 4294967296u_3^{44}u_1^{32} + 2147483648u_3^{44}u_1^{31})x_5x_4x_2 - \\
& 536870912u_5^2u_3^{46}u_1^{29}x_5x_4 + \\
& (536870912u_5^3u_3^{45}u_1^{29} + 2147483648u_5^2u_3^{44}u_1^{31} - \\
& 1073741824u_5^2u_3^{44}u_1^{30})x_5x_2 + \\
& (-536870912u_6u_5u_3^{44}u_1^{29} - 1073741824u_6u_3^{45}u_1^{30})x_4^2x_2 + \\
& (-536870912u_6u_5u_3^{46}u_1^{29} + 1073741824u_6u_5u_3^{44}u_1^{30} + \\
& 1073741824u_6u_3^{45}u_1^{30})x_4^2 + 536870912u_6u_5^2u_3^{45}u_1^{29}x_4x_2 - \\
& 536870912u_6u_5^2u_3^{45}u_1^{29}x_4
\end{aligned}$$

S-pol added.

1049. Creating S-polynomial from the pair  $(p_3, p_{318})$ .

Forming S-pol of  $p_3$  and  $p_{318}$ :

$$\begin{aligned}
p_{1611} = & (268435456u_5u_3^{44}u_1^{28} + 536870912u_3^{45}u_1^{29})x_5x_4^2 + \\
& (536870912u_5^2u_3^{43}u_1^{29} - 268435456u_5^2u_3^{43}u_1^{28} - 536870912u_5u_3^{44}u_1^{29} - \\
& 2147483648u_3^{43}u_1^{31} + 1073741824u_3^{43}u_1^{30})x_5x_4x_2 - \\
& 268435456u_5^2u_3^{45}u_1^{28}x_5x_4 + \\
& (268435456u_3^3u_3^{44}u_1^{28} + 1073741824u_5^2u_3^{43}u_1^{30} - \\
& 536870912u_5^2u_3^{43}u_1^{29})x_5x_2 + \\
& (-268435456u_6u_5u_3^{43}u_1^{28} - 536870912u_6u_3^{44}u_1^{29})x_4^2x_2 + \\
& (-268435456u_6u_5u_3^{45}u_1^{28} + 536870912u_6u_5u_3^{43}u_1^{29} + \\
& 536870912u_6u_3^{44}u_1^{29})x_4^2 + 268435456u_6u_5^2u_3^{44}u_1^{28}x_4x_2 - \\
& 268435456u_6u_5^2u_3^{44}u_1^{28}x_4
\end{aligned}$$

S-pol added.

1050. Creating S-polynomial from the pair  $(p_3, p_{319})$ .

Forming S-pol of  $p_3$  and  $p_{319}$ :

$$\begin{aligned}
p_{1612} = & (536870912u_5u_3^{45}u_1^{29} + 1073741824u_3^{46}u_1^{30})x_5x_4^2 + \\
& (1073741824u_5^2u_3^{44}u_1^{30} - 536870912u_5^2u_3^{44}u_1^{29} - 1073741824u_5u_3^{45}u_1^{30} - \\
& 4294967296u_3^{44}u_1^{32} + 2147483648u_3^{44}u_1^{31})x_5x_4x_2 - \\
& 536870912u_5^2u_3^{46}u_1^{29}x_5x_4 + \\
& (536870912u_5^3u_3^{45}u_1^{29} + 2147483648u_5^2u_3^{44}u_1^{31} - \\
& 1073741824u_5^2u_3^{44}u_1^{30})x_5x_2 + \\
& (-536870912u_6u_5u_3^{44}u_1^{29} - 1073741824u_6u_3^{45}u_1^{30})x_4^2x_2 + \\
& (-536870912u_6u_5u_3^{46}u_1^{29} + 1073741824u_6u_5u_3^{44}u_1^{30} + \\
& 1073741824u_6u_3^{45}u_1^{30})x_4^2 + 536870912u_6u_5^2u_3^{45}u_1^{29}x_4x_2 - \\
& 536870912u_6u_5^2u_3^{45}u_1^{29}x_4
\end{aligned}$$

S-pol added.

1051. Creating S-polynomial from the pair  $(p_3, p_{320})$ .

Forming S-pol of  $p_3$  and  $p_{320}$ :

$$\begin{aligned}
p_{1613} = & (1073741824u_5u_3^{50}u_1^{30} + 2147483648u_3^{51}u_1^{31})x_5x_4^2 + \\
& (2147483648u_5^2u_3^{49}u_1^{31} - 1073741824u_5^2u_3^{49}u_1^{30} - 2147483648u_5u_3^{50}u_1^{31} - \\
& 8589934592u_3^{49}u_1^{33} + 4294967296u_3^{49}u_1^{32})x_5x_4x_2 - \\
& 1073741824u_5^2u_3^{51}u_1^{30}x_5x_4 + \\
& (1073741824u_5^3u_3^{50}u_1^{30} + 4294967296u_5^2u_3^{49}u_1^{32} - \\
& 2147483648u_5^2u_3^{49}u_1^{31})x_5x_2 + \\
& (-1073741824u_6u_5u_3^{49}u_1^{30} - 2147483648u_6u_3^{50}u_1^{31})x_4^2x_2 + \\
& (-1073741824u_6u_5u_3^{51}u_1^{30} + 2147483648u_6u_5u_3^{49}u_1^{31} + \\
& 2147483648u_6u_3^{50}u_1^{31})x_4^2 + 1073741824u_6u_5^2u_3^{50}u_1^{30}x_4x_2 - \\
& 1073741824u_6u_5^2u_3^{50}u_1^{30}x_4
\end{aligned}$$

S-pol added.

1052. Creating S-polynomial from the pair  $(p_3, p_{321})$ .

Forming S-pol of  $p_3$  and  $p_{321}$ :

$$\begin{aligned}
p_{1614} = & -32768u_3^{25}u_1^{15}x_5x_4^2 + (131072u_3^{23}u_1^{17} - 65536u_3^{23}u_1^{16})x_5x_4x_2 + \\
& (-65536u_3^2u_3^{23}u_1^{16} + 32768u_5^2u_3^{23}u_1^{15})x_5x_2 + \\
& 32768u_6u_3^{24}u_1^{15}x_4^2x_2 - 32768u_6u_3^{24}u_1^{15}x_4^2
\end{aligned}$$

Reduced to zero.

1053. Creating S-polynomial from the pair  $(p_3, p_{322})$ .

Forming S-pol of  $p_3$  and  $p_{322}$ : Polynomial too big for output (text size is 3770 characters, number of terms is 9)

S-pol added.

1054. Creating S-polynomial from the pair  $(p_3, p_{323})$ .

Forming S-pol of  $p_3$  and  $p_{323}$ : Polynomial too big for output (text size is 3005 characters, number of terms is 8)

S-pol added.

1055. Creating S-polynomial from the pair  $(p_3, p_{324})$ .

Forming S-pol of  $p_3$  and  $p_{324}$ :

$$\begin{aligned} p_{1615} = & 2097152u_3^{36}u_1^{21}x_5x_4^2 + \\ & (2097152u_5^2u_3^{34}u_1^{21} - 1048576u_5^2u_3^{34}u_1^{20} - 8388608u_3^{34}u_1^{23} + \\ & 4194304u_3^{34}u_1^{22})x_5x_4x_2 - 1048576u_5^2u_3^{36}u_1^{20}x_5x_4 + \\ & (4194304u_5^2u_3^{34}u_1^{22} - 2097152u_5^2u_3^{34}u_1^{21})x_5x_2 - \\ & 2097152u_6u_3^{35}u_1^{21}x_4^2x_2 + 2097152u_6u_3^{35}u_1^{21}x_4^2 + \\ & 1048576u_6u_3^{35}u_1^{20}x_4x_2 - 1048576u_6u_3^{35}u_1^{20}x_4 \end{aligned}$$

S-pol added.

1056. Creating S-polynomial from the pair  $(p_3, p_{325})$ .

Forming S-pol of  $p_3$  and  $p_{325}$ :

$$\begin{aligned} p_{1616} = & 4194304u_3^{30}u_1^{22}x_5x_4^2 + \\ & (4194304u_5^2u_3^{28}u_1^{22} - 2097152u_5^2u_3^{28}u_1^{21} - 16777216u_3^{28}u_1^{24} + \\ & 8388608u_3^{28}u_1^{23})x_5x_4x_2 - 2097152u_5^2u_3^{30}u_1^{21}x_5x_4 + \\ & (8388608u_5^2u_3^{28}u_1^{23} - 4194304u_5^2u_3^{28}u_1^{22})x_5x_2 - \\ & 4194304u_6u_3^{29}u_1^{22}x_4^2x_2 + 4194304u_6u_3^{29}u_1^{22}x_4^2 + \\ & 2097152u_6u_3^{29}u_1^{21}x_4x_2 - 2097152u_6u_3^{29}u_1^{21}x_4 \end{aligned}$$

S-pol added.

1057. Creating S-polynomial from the pair  $(p_3, p_{326})$ .

Forming S-pol of  $p_3$  and  $p_{326}$ : Polynomial too big for output (text size is 2984 characters, number of terms is 9)

S-pol added.

1058. Creating S-polynomial from the pair  $(p_3, p_{327})$ .

Forming S-pol of  $p_3$  and  $p_{327}$ : Polynomial too big for output (text size is 2863 characters, number of terms is 9)

S-pol added.

1059. Creating S-polynomial from the pair  $(p_3, p_{328})$ .  
 Forming S-pol of  $p_3$  and  $p_{328}$ : Polynomial too big for output (text size is 6203 characters, number of terms is 16)  
 S-pol added.
1060. Creating S-polynomial from the pair  $(p_3, p_{329})$ .  
 Forming S-pol of  $p_3$  and  $p_{329}$ : Polynomial too big for output (text size is 1193 characters, number of terms is 9)  
 S-pol added.
1061. Creating S-polynomial from the pair  $(p_3, p_{330})$ .  
 Forming S-pol of  $p_3$  and  $p_{330}$ : Polynomial too big for output (text size is 3321 characters, number of terms is 9)  
 S-pol added.
1062. Creating S-polynomial from the pair  $(p_3, p_{331})$ .  
 Forming S-pol of  $p_3$  and  $p_{331}$ : Polynomial too big for output (text size is 6247 characters, number of terms is 16)  
 S-pol added.
1063. Creating S-polynomial from the pair  $(p_3, p_{332})$ .  
 Forming S-pol of  $p_3$  and  $p_{332}$ : Polynomial too big for output (text size is 1210 characters, number of terms is 9)  
 S-pol added.
1064. Creating S-polynomial from the pair  $(p_3, p_{333})$ .  
 Forming S-pol of  $p_3$  and  $p_{333}$ : Polynomial too big for output (text size is 3322 characters, number of terms is 9)  
 S-pol added.
1065. Creating S-polynomial from the pair  $(p_3, p_{334})$ .  
 Forming S-pol of  $p_3$  and  $p_{334}$ :  

$$p_{1617} = 16384u_3^{24}u_1^{14}x_5x_4^2 + (-65536u_3^{22}u_1^{16} + 32768u_3^{22}u_1^{15})x_5x_4x_2 +$$

$$(32768u_5^2u_3^{22}u_1^{15} - 16384u_5^2u_3^{22}u_1^{14})x_5x_2 -$$

$$16384u_6u_3^{23}u_1^{14}x_4^2x_2 + 16384u_6u_3^{23}u_1^{14}x_4^2$$
 Reduced to zero.
1066. Creating S-polynomial from the pair  $(p_3, p_{335})$ .  
 Forming S-pol of  $p_3$  and  $p_{335}$ :  

$$p_{1618} = -8388608u_5u_4^{35}u_1^{23}x_5x_4^2 +$$

$$(33554432u_5u_4^{33}u_1^{25} - 16777216u_5u_4^{33}u_1^{24})x_5x_4x_3 +$$

$$(-16777216u_5^3u_4^{33}u_1^{24} + 8388608u_5^3u_4^{33}u_1^{23})x_5x_3 +$$

$$8388608u_6u_5u_4^{34}u_1^{23}x_4^2x_3 - 8388608u_6u_5u_4^{34}u_1^{23}x_4^2$$
 Reduced to zero.

1067. Creating S-polynomial from the pair  $(p_3, p_{336})$ .

Forming S-pol of  $p_3$  and  $p_{336}$ :

$$\begin{aligned} p_{1619} = & -4194304u_5u_4^{34}u_1^{22}x_5x_4^2 + \\ & (16777216u_5u_4^{32}u_1^{24} - 8388608u_5u_4^{32}u_1^{23})x_5x_4x_3 + \\ & (-8388608u_5^3u_4^{32}u_1^{23} + 4194304u_5^3u_4^{32}u_1^{22})x_5x_3 + \\ & 4194304u_6u_5u_4^{33}u_1^{22}x_4^2x_3 - 4194304u_6u_5u_4^{33}u_1^{22}x_4^2 \end{aligned}$$

Reduced to zero.

1068. Creating S-polynomial from the pair  $(p_3, p_{337})$ .

Forming S-pol of  $p_3$  and  $p_{337}$ :

$$\begin{aligned} p_{1620} = & (70368744177664u_5^2u_4^{75}u_1^{46} + 140737488355328u_5u_4^{76}u_1^{47})x_5x_4^2 + \\ & (140737488355328u_5^3u_4^{74}u_1^{47} - 70368744177664u_5^3u_4^{74}u_1^{46} - \\ & 140737488355328u_5^2u_4^{75}u_1^{47} - 562949953421312u_5u_4^{74}u_1^{49} + \\ & 281474976710656u_5u_4^{74}u_1^{48})x_5x_4x_3 - 70368744177664u_5^3u_4^{76}u_1^{46}x_5x_4 + \\ & (70368744177664u_5^4u_4^{75}u_1^{46} + 281474976710656u_5^3u_4^{74}u_1^{48} - \\ & 140737488355328u_5^3u_4^{74}u_1^{47})x_5x_3 + \\ & (-70368744177664u_6u_5^2u_4^{74}u_1^{46} - 140737488355328u_6u_5u_4^{75}u_1^{47})x_4^2x_3 + \\ & (-70368744177664u_6u_5^2u_4^{76}u_1^{46} + 140737488355328u_6u_5^2u_4^{74}u_1^{47} + \\ & 140737488355328u_6u_5u_4^{75}u_1^{47})x_4^2 + 70368744177664u_6u_5^3u_4^{75}u_1^{46}x_4x_3 - \\ & 70368744177664u_6u_5^3u_4^{75}u_1^{46}x_4 \end{aligned}$$

S-pol added.

1069. Creating S-polynomial from the pair  $(p_3, p_{338})$ .

Forming S-pol of  $p_3$  and  $p_{338}$ :

$$\begin{aligned} p_{1621} = & (35184372088832u_5^2u_4^{74}u_1^{45} + 70368744177664u_5u_4^{75}u_1^{46})x_5x_4^2 + \\ & (70368744177664u_5^3u_4^{73}u_1^{46} - 35184372088832u_5^3u_4^{73}u_1^{45} - \\ & 70368744177664u_5^2u_4^{74}u_1^{46} - 281474976710656u_5u_4^{73}u_1^{48} + \\ & 140737488355328u_5u_4^{73}u_1^{47})x_5x_4x_3 - 35184372088832u_5^3u_4^{75}u_1^{45}x_5x_4 + \\ & (35184372088832u_5^4u_4^{74}u_1^{45} + 140737488355328u_5^3u_4^{73}u_1^{47} - \\ & 70368744177664u_5^3u_4^{73}u_1^{46})x_5x_3 + \\ & (-35184372088832u_6u_5^2u_4^{73}u_1^{45} - 70368744177664u_6u_5u_4^{74}u_1^{46})x_4^2x_3 + \\ & (-35184372088832u_6u_5^2u_4^{75}u_1^{45} + 70368744177664u_6u_5^2u_4^{73}u_1^{46} + \\ & 70368744177664u_6u_5u_4^{74}u_1^{46})x_4^2 + 35184372088832u_6u_5^3u_4^{74}u_1^{45}x_4x_3 - \\ & 35184372088832u_6u_5^3u_4^{74}u_1^{45}x_4 \end{aligned}$$

S-pol added.

1070. Creating S-polynomial from the pair  $(p_3, p_{339})$ .

Forming S-pol of  $p_3$  and  $p_{339}$ :

$$\begin{aligned}
p_{1622} = & (536870912u_5u_4^{45}u_1^{29} + 1073741824u_4^{46}u_1^{30})x_5x_4^2 + \\
& (1073741824u_5^2u_4^{44}u_1^{30} - 536870912u_5^2u_4^{44}u_1^{29} - 1073741824u_5u_4^{45}u_1^{30} - \\
& 4294967296u_4^{44}u_1^{32} + 2147483648u_4^{44}u_1^{31})x_5x_4x_3 - \\
& 536870912u_5^2u_4^{46}u_1^{29}x_5x_4 + \\
& (536870912u_5^3u_4^{45}u_1^{29} + 2147483648u_5^2u_4^{44}u_1^{31} - \\
& 1073741824u_5^2u_4^{44}u_1^{30})x_5x_3 + \\
& (-536870912u_6u_5u_4^{44}u_1^{29} - 1073741824u_6u_4^{45}u_1^{30})x_4^2x_3 + \\
& (-536870912u_6u_5u_4^{46}u_1^{29} + 1073741824u_6u_5u_4^{44}u_1^{30} + \\
& 1073741824u_6u_4^{45}u_1^{30})x_4^2 + 536870912u_6u_5^2u_4^{45}u_1^{29}x_4x_3 - \\
& 536870912u_6u_5^2u_4^{45}u_1^{29}x_4
\end{aligned}$$

S-pol added.

1071. Creating S-polynomial from the pair  $(p_3, p_{340})$ .

Forming S-pol of  $p_3$  and  $p_{340}$ :

$$\begin{aligned}
p_{1623} = & (268435456u_5u_4^{44}u_1^{28} + 536870912u_4^{45}u_1^{29})x_5x_4^2 + \\
& (536870912u_5^2u_4^{43}u_1^{29} - 268435456u_5^2u_4^{43}u_1^{28} - 536870912u_5u_4^{44}u_1^{29} - \\
& 2147483648u_4^{43}u_1^{31} + 1073741824u_4^{43}u_1^{30})x_5x_4x_3 - \\
& 268435456u_5^2u_4^{45}u_1^{28}x_5x_4 + \\
& (268435456u_5^3u_4^{44}u_1^{28} + 1073741824u_5^2u_4^{43}u_1^{30} - \\
& 536870912u_5^2u_4^{43}u_1^{29})x_5x_3 + \\
& (-268435456u_6u_5u_4^{43}u_1^{28} - 536870912u_6u_4^{44}u_1^{29})x_4^2x_3 + \\
& (-268435456u_6u_5u_4^{45}u_1^{28} + 536870912u_6u_5u_4^{43}u_1^{29} + \\
& 536870912u_6u_4^{44}u_1^{29})x_4^2 + 268435456u_6u_5^2u_4^{44}u_1^{28}x_4x_3 - \\
& 268435456u_6u_5^2u_4^{44}u_1^{28}x_4
\end{aligned}$$

S-pol added.

1072. Creating S-polynomial from the pair  $(p_3, p_{341})$ .

Forming S-pol of  $p_3$  and  $p_{341}$ :

$$\begin{aligned}
p_{1624} = & (536870912u_5u_4^{45}u_1^{29} + 1073741824u_4^{46}u_1^{30})x_5x_4^2 + \\
& (1073741824u_5^2u_4^{44}u_1^{30} - 536870912u_5^2u_4^{44}u_1^{29} - 1073741824u_5u_4^{45}u_1^{30} - \\
& 4294967296u_4^{44}u_1^{32} + 2147483648u_4^{44}u_1^{31})x_5x_4x_3 - \\
& 536870912u_5^2u_4^{46}u_1^{29}x_5x_4 + \\
& (536870912u_5^3u_4^{45}u_1^{29} + 2147483648u_5^2u_4^{44}u_1^{31} -
\end{aligned}$$

$$\begin{aligned}
& 1073741824u_5^2u_4^{44}u_1^{30})x_5x_3+ \\
& (-536870912u_6u_5u_4^{44}u_1^{29} - 1073741824u_6u_4^{45}u_1^{30})x_4^2x_3+ \\
& (-536870912u_6u_5u_4^{46}u_1^{29} + 1073741824u_6u_5u_4^{44}u_1^{30}+ \\
& 1073741824u_6u_4^{45}u_1^{30})x_4^2 + 536870912u_6u_5^2u_4^{45}u_1^{29}x_4x_3- \\
& 536870912u_6u_5^2u_4^{45}u_1^{29}x_4
\end{aligned}$$

S-pol added.

1073. Creating S-polynomial from the pair  $(p_3, p_{342})$ .

Forming S-pol of  $p_3$  and  $p_{342}$ :

$$\begin{aligned}
p_{1625} = & (1073741824u_5u_4^{50}u_1^{30} + 2147483648u_4^{51}u_1^{31})x_5x_4^2+ \\
& (2147483648u_5^2u_4^{49}u_1^{31} - 1073741824u_5^2u_4^{49}u_1^{30} - 2147483648u_5u_4^{50}u_1^{31}- \\
& 8589934592u_4^{49}u_1^{33} + 4294967296u_4^{49}u_1^{32})x_5x_4x_3- \\
& 1073741824u_5^2u_4^{51}u_1^{30}x_5x_4+ \\
& (1073741824u_5^3u_4^{50}u_1^{30} + 4294967296u_5^2u_4^{49}u_1^{32}- \\
& 2147483648u_5^2u_4^{49}u_1^{31})x_5x_3+ \\
& (-1073741824u_6u_5u_4^{49}u_1^{30} - 2147483648u_6u_4^{50}u_1^{31})x_4^2x_3+ \\
& (-1073741824u_6u_5u_4^{51}u_1^{30} + 2147483648u_6u_5u_4^{49}u_1^{31}+ \\
& 2147483648u_6u_4^{50}u_1^{31})x_4^2 + 1073741824u_6u_5^2u_4^{50}u_1^{30}x_4x_3- \\
& 1073741824u_6u_5^2u_4^{50}u_1^{30}x_4
\end{aligned}$$

S-pol added.

1074. Creating S-polynomial from the pair  $(p_3, p_{343})$ .

Forming S-pol of  $p_3$  and  $p_{343}$ :

$$\begin{aligned}
p_{1626} = & -32768u_4^{25}u_1^{15}x_5x_4^2 + (131072u_4^{23}u_1^{17} - 65536u_4^{23}u_1^{16})x_5x_4x_3+ \\
& (-65536u_5^2u_4^{23}u_1^{16} + 32768u_5^2u_4^{23}u_1^{15})x_5x_3+ \\
& 32768u_6u_4^{24}u_1^{15}x_4^2x_3 - 32768u_6u_4^{24}u_1^{15}x_4^2
\end{aligned}$$

Reduced to zero.

1075. Creating S-polynomial from the pair  $(p_3, p_{344})$ .

Forming S-pol of  $p_3$  and  $p_{344}$ : Polynomial too big for output (text size is 6203 characters, number of terms is 16)

S-pol added.

1076. Creating S-polynomial from the pair  $(p_3, p_{345})$ .

Forming S-pol of  $p_3$  and  $p_{345}$ : Polynomial too big for output (text size is 1193 characters, number of terms is 9)

S-pol added.

1077. Creating S-polynomial from the pair  $(p_3, p_{346})$ .  
 Forming S-pol of  $p_3$  and  $p_{346}$ : Polynomial too big for output (text size is 3321 characters, number of terms is 9)  
 S-pol added.
1078. Creating S-polynomial from the pair  $(p_3, p_{347})$ .  
 Forming S-pol of  $p_3$  and  $p_{347}$ : Polynomial too big for output (text size is 2987 characters, number of terms is 9)  
 S-pol added.
1079. Creating S-polynomial from the pair  $(p_3, p_{348})$ .  
 Forming S-pol of  $p_3$  and  $p_{348}$ : Polynomial too big for output (text size is 6203 characters, number of terms is 16)  
 S-pol added.
1080. Creating S-polynomial from the pair  $(p_3, p_{349})$ .  
 Forming S-pol of  $p_3$  and  $p_{349}$ : Polynomial too big for output (text size is 1193 characters, number of terms is 9)  
 S-pol added.
1081. Creating S-polynomial from the pair  $(p_3, p_{350})$ .  
 Forming S-pol of  $p_3$  and  $p_{350}$ : Polynomial too big for output (text size is 3321 characters, number of terms is 9)  
 S-pol added.
1082. Creating S-polynomial from the pair  $(p_3, p_{351})$ .  
 Forming S-pol of  $p_3$  and  $p_{351}$ : Polynomial too big for output (text size is 2987 characters, number of terms is 9)  
 S-pol added.
1083. Creating S-polynomial from the pair  $(p_3, p_{352})$ .  
 Forming S-pol of  $p_3$  and  $p_{352}$ : Polynomial too big for output (text size is 3005 characters, number of terms is 8)  
 S-pol added.
1084. Creating S-polynomial from the pair  $(p_3, p_{353})$ .  
 Forming S-pol of  $p_3$  and  $p_{353}$ :

$$\begin{aligned}
 p_{1627} = & 2097152u_4^{36}u_1^{21}x_5x_4^2 + \\
 & (2097152u_5^2u_4^{34}u_1^{21} - 1048576u_5^2u_4^{34}u_1^{20} - 8388608u_4^{34}u_1^{23} + \\
 & 4194304u_4^{34}u_1^{22})x_5x_4x_3 - 1048576u_5^2u_4^{36}u_1^{20}x_5x_4 + \\
 & (4194304u_5^2u_4^{34}u_1^{22} - 2097152u_5^2u_4^{34}u_1^{21})x_5x_3 - \\
 & 2097152u_6u_4^{35}u_1^{21}x_4^2x_3 + 2097152u_6u_4^{35}u_1^{21}x_4^2 + \\
 & 1048576u_6u_5^2u_4^{35}u_1^{20}x_4x_3 - 1048576u_6u_5^2u_4^{35}u_1^{20}x_4
 \end{aligned}$$

S-pol added.



1085. Creating S-polynomial from the pair  $(p_3, p_{354})$ .

Forming S-pol of  $p_3$  and  $p_{354}$ :

$$\begin{aligned} p_{1628} = & 4194304u_4^{30}u_1^{22}x_5x_4^2 + \\ & (4194304u_5^2u_4^{28}u_1^{22} - 2097152u_5^2u_4^{28}u_1^{21} - 16777216u_4^{28}u_1^{24} + \\ & 8388608u_4^{28}u_1^{23})x_5x_4x_3 - 2097152u_5^2u_4^{30}u_1^{21}x_5x_4 + \\ & (8388608u_5^2u_4^{28}u_1^{23} - 4194304u_5^2u_4^{28}u_1^{22})x_5x_3 - \\ & 4194304u_6u_4^{29}u_1^{22}x_4^2x_3 + 4194304u_6u_4^{29}u_1^{22}x_4^2 + \\ & 2097152u_6u_5^2u_4^{29}u_1^{21}x_4x_3 - 2097152u_6u_5^2u_4^{29}u_1^{21}x_4 \end{aligned}$$

S-pol added.

1086. Creating S-polynomial from the pair  $(p_3, p_{355})$ .

Forming S-pol of  $p_3$  and  $p_{355}$ :

$$\begin{aligned} p_{1629} = & 16384u_4^{24}u_1^{14}x_5x_4^2 + (-65536u_4^{22}u_1^{16} + 32768u_4^{22}u_1^{15})x_5x_4x_3 + \\ & (32768u_5^2u_4^{22}u_1^{15} - 16384u_5^2u_4^{22}u_1^{14})x_5x_3 - \\ & 16384u_6u_4^{23}u_1^{14}x_4^2x_3 + 16384u_6u_4^{23}u_1^{14}x_4^2 \end{aligned}$$

Reduced to zero.

1087. Creating S-polynomial from the pair  $(p_3, p_{356})$ .

Forming S-pol of  $p_3$  and  $p_{356}$ : Polynomial too big for output (text size is 1583 characters, number of terms is 8)

S-pol added.

1088. Creating S-polynomial from the pair  $(p_3, p_{357})$ .

Forming S-pol of  $p_3$  and  $p_{357}$ : Polynomial too big for output (text size is 2249 characters, number of terms is 8)

S-pol added.

1089. Creating S-polynomial from the pair  $(p_3, p_{358})$ .

Forming S-pol of  $p_3$  and  $p_{358}$ : Polynomial too big for output (text size is 6228 characters, number of terms is 16)

S-pol added.

1090. Creating S-polynomial from the pair  $(p_3, p_{359})$ .

Forming S-pol of  $p_3$  and  $p_{359}$ : Polynomial too big for output (text size is 6175 characters, number of terms is 16)

S-pol added.

1091. Creating S-polynomial from the pair  $(p_3, p_{360})$ .

Forming S-pol of  $p_3$  and  $p_{360}$ :

$$\begin{aligned} p_{1630} = & -262144u_3^{29}u_1^{18}x_5x_4^2 + \\ & (-262144u_5^2u_3^{27}u_1^{18} + 131072u_5^2u_3^{27}u_1^{17} + 1048576u_3^{27}u_1^{20} - \\ & 524288u_3^{27}u_1^{19})x_5x_4x_2 + 131072u_5^2u_3^{29}u_1^{17}x_5x_4 + \\ & (-524288u_5^2u_3^{27}u_1^{19} + 262144u_5^2u_3^{27}u_1^{18})x_5x_2 + \\ & 262144u_6u_3^{28}u_1^{18}x_4^2x_2 - 262144u_6u_3^{28}u_1^{18}x_4^2 - \\ & 131072u_6u_3^{28}u_1^{17}x_4x_2 + 131072u_6u_5^2u_3^{28}u_1^{17}x_4 \end{aligned}$$

S-pol added.

1092. Creating S-polynomial from the pair  $(p_3, p_{361})$ .

Forming S-pol of  $p_3$  and  $p_{361}$ : Polynomial too big for output (text size is 1201 characters, number of terms is 9)

S-pol added.

1093. Creating S-polynomial from the pair  $(p_3, p_{362})$ .

Forming S-pol of  $p_3$  and  $p_{362}$ : Polynomial too big for output (text size is 1188 characters, number of terms is 9)

S-pol added.

1094. Creating S-polynomial from the pair  $(p_3, p_{363})$ .

Forming S-pol of  $p_3$  and  $p_{363}$ : Polynomial too big for output (text size is 2971 characters, number of terms is 9)

S-pol added.

1095. Creating S-polynomial from the pair  $(p_3, p_{364})$ .

Forming S-pol of  $p_3$  and  $p_{364}$ : Polynomial too big for output (text size is 2856 characters, number of terms is 9)

S-pol added.

1096. Creating S-polynomial from the pair  $(p_3, p_{365})$ .

Forming S-pol of  $p_3$  and  $p_{365}$ : Polynomial too big for output (text size is 6174 characters, number of terms is 16)

S-pol added.

1097. Creating S-polynomial from the pair  $(p_3, p_{366})$ .

Forming S-pol of  $p_3$  and  $p_{366}$ : Polynomial too big for output (text size is 1190 characters, number of terms is 9)

S-pol added.

1098. Creating S-polynomial from the pair  $(p_3, p_{367})$ .

Forming S-pol of  $p_3$  and  $p_{367}$ : Polynomial too big for output (text size is 2251 characters, number of terms is 9)

S-pol added.

1099. Creating S-polynomial from the pair  $(p_3, p_{368})$ .  
 Forming S-pol of  $p_3$  and  $p_{368}$ : Polynomial too big for output (text size is 6225 characters, number of terms is 16)  
 S-pol added.
1100. Creating S-polynomial from the pair  $(p_3, p_{369})$ .  
 Forming S-pol of  $p_3$  and  $p_{369}$ : Polynomial too big for output (text size is 1202 characters, number of terms is 9)  
 S-pol added.
1101. Creating S-polynomial from the pair  $(p_3, p_{370})$ .  
 Forming S-pol of  $p_3$  and  $p_{370}$ : Polynomial too big for output (text size is 2252 characters, number of terms is 9)  
 S-pol added.
1102. Creating S-polynomial from the pair  $(p_3, p_{371})$ .  
 Forming S-pol of  $p_3$  and  $p_{371}$ : Polynomial too big for output (text size is 2856 characters, number of terms is 9)  
 S-pol added.
1103. Creating S-polynomial from the pair  $(p_3, p_{372})$ .  
 Forming S-pol of  $p_3$  and  $p_{372}$ : Polynomial too big for output (text size is 2971 characters, number of terms is 9)  
 S-pol added.
1104. Creating S-polynomial from the pair  $(p_3, p_{373})$ .  
 Forming S-pol of  $p_3$  and  $p_{373}$ : Polynomial too big for output (text size is 1583 characters, number of terms is 8)  
 S-pol added.
1105. Creating S-polynomial from the pair  $(p_3, p_{374})$ .  
 Forming S-pol of  $p_3$  and  $p_{374}$ : Polynomial too big for output (text size is 2249 characters, number of terms is 8)  
 S-pol added.
1106. Creating S-polynomial from the pair  $(p_3, p_{375})$ .  
 Forming S-pol of  $p_3$  and  $p_{375}$ : Polynomial too big for output (text size is 6175 characters, number of terms is 16)  
 S-pol added.
1107. Creating S-polynomial from the pair  $(p_3, p_{376})$ .  
 Forming S-pol of  $p_3$  and  $p_{376}$ :

$$\begin{aligned}
 p_{1631} = & -262144u_2^{29}u_1^{18}x_5x_4^2 + \\
 & (-262144u_5^2u_2^{27}u_1^{18} + 131072u_5^2u_2^{27}u_1^{17} + 1048576u_2^{27}u_1^{20} - \\
 & 524288u_2^{27}u_1^{19})x_5x_4x_1 + 131072u_5^2u_2^{29}u_1^{17}x_5x_4 +
 \end{aligned}$$

$$\begin{aligned}
&(-524288u_5^2u_2^{27}u_1^{19} + 262144u_5^2u_2^{27}u_1^{18})x_5x_1 + \\
&262144u_6u_2^{28}u_1^{18}x_4x_1 - 262144u_6u_2^{28}u_1^{18}x_4^2 - \\
&131072u_6u_5^2u_2^{28}u_1^{17}x_4x_1 + 131072u_6u_5^2u_2^{28}u_1^{17}x_4
\end{aligned}$$

S-pol added.

1108. Creating S-polynomial from the pair  $(p_3, p_{377})$ .  
 Forming S-pol of  $p_3$  and  $p_{377}$ : Polynomial too big for output (text size is 1188 characters, number of terms is 9)  
 S-pol added.
1109. Creating S-polynomial from the pair  $(p_3, p_{378})$ .  
 Forming S-pol of  $p_3$  and  $p_{378}$ : Polynomial too big for output (text size is 2856 characters, number of terms is 9)  
 S-pol added.
1110. Creating S-polynomial from the pair  $(p_3, p_{379})$ .  
 Forming S-pol of  $p_3$  and  $p_{379}$ : Polynomial too big for output (text size is 6225 characters, number of terms is 16)  
 S-pol added.
1111. Creating S-polynomial from the pair  $(p_3, p_{380})$ .  
 Forming S-pol of  $p_3$  and  $p_{380}$ : Polynomial too big for output (text size is 1202 characters, number of terms is 9)  
 S-pol added.
1112. Creating S-polynomial from the pair  $(p_3, p_{381})$ .  
 Forming S-pol of  $p_3$  and  $p_{381}$ : Polynomial too big for output (text size is 2252 characters, number of terms is 9)  
 S-pol added.
1113. Creating S-polynomial from the pair  $(p_3, p_{382})$ .  
 Forming S-pol of  $p_3$  and  $p_{382}$ : Polynomial too big for output (text size is 2971 characters, number of terms is 9)  
 S-pol added.
1114. Creating S-polynomial from the pair  $(p_3, p_{383})$ .  
 Forming S-pol of  $p_3$  and  $p_{383}$ : Polynomial too big for output (text size is 1583 characters, number of terms is 8)  
 S-pol added.
1115. Creating S-polynomial from the pair  $(p_3, p_{384})$ .  
 Forming S-pol of  $p_3$  and  $p_{384}$ : Polynomial too big for output (text size is 2249 characters, number of terms is 8)  
 S-pol added.

1116. Creating S-polynomial from the pair  $(p_3, p_{385})$ .

Forming S-pol of  $p_3$  and  $p_{385}$ :

$$\begin{aligned} p_{1632} = & -262144u_4^{29}u_1^{18}x_5x_4^2 + \\ & (-262144u_5^2u_4^{27}u_1^{18} + 131072u_5^2u_4^{27}u_1^{17} + 1048576u_4^{27}u_1^{20} - \\ & 524288u_4^{27}u_1^{19})x_5x_4x_3 + 131072u_5^2u_4^{29}u_1^{17}x_5x_4 + \\ & (-524288u_5^2u_4^{27}u_1^{19} + 262144u_5^2u_4^{27}u_1^{18})x_5x_3 + \\ & 262144u_6u_4^{28}u_1^{18}x_4^2x_3 - 262144u_6u_4^{28}u_1^{18}x_4^2 - \\ & 131072u_6u_5^2u_4^{28}u_1^{17}x_4x_3 + 131072u_6u_5^2u_4^{28}u_1^{17}x_4 \end{aligned}$$

S-pol added.

1117. Creating S-polynomial from the pair  $(p_4, p_{107})$ .

Forming S-pol of  $p_4$  and  $p_{107}$ :

$$\begin{aligned} p_{1633} = & 131072u_2^{31}u_1^{17}x_5^2x_4 + \\ & (131072u_5^2u_2^{29}u_1^{17} - 65536u_5^2u_2^{29}u_1^{16})x_5^2x_1 - \\ & 65536u_5^2u_2^{31}u_1^{16}x_5^2 + \\ & (-131072u_6u_2^{30}u_1^{17} - 524288u_2^{29}u_1^{19} + 262144u_2^{29}u_1^{18})x_5x_4x_1 + \\ & 131072u_6u_2^{30}u_1^{17}x_5x_4 + 65536u_6u_5^2u_2^{30}u_1^{16}x_5x_1 - \\ & 65536u_6u_5^2u_2^{30}u_1^{16}x_5 + \\ & (262144u_6^2u_2^{29}u_1^{18} - 131072u_6^2u_2^{29}u_1^{17})x_4x_1 \end{aligned}$$

S-pol added.

1118. Creating S-polynomial from the pair  $(p_4, p_{108})$ .

Forming S-pol of  $p_4$  and  $p_{108}$ :

$$\begin{aligned} p_{1634} = & 131072u_3^{31}u_1^{17}x_5^2x_4 + \\ & (131072u_5^2u_3^{29}u_1^{17} - 65536u_5^2u_3^{29}u_1^{16})x_5^2x_2 - \\ & 65536u_5^2u_3^{31}u_1^{16}x_5^2 + \\ & (-131072u_6u_3^{30}u_1^{17} - 524288u_3^{29}u_1^{19} + 262144u_3^{29}u_1^{18})x_5x_4x_2 + \\ & 131072u_6u_3^{30}u_1^{17}x_5x_4 + 65536u_6u_5^2u_3^{30}u_1^{16}x_5x_2 - \\ & 65536u_6u_5^2u_3^{30}u_1^{16}x_5 + \\ & (262144u_6^2u_3^{29}u_1^{18} - 131072u_6^2u_3^{29}u_1^{17})x_4x_2 \end{aligned}$$

S-pol added.

1119. Creating S-polynomial from the pair  $(p_4, p_{109})$ .

Forming S-pol of  $p_4$  and  $p_{109}$ :

$$\begin{aligned}
p_{1635} = & 131072u_4^{31}u_1^{17}x_5^2x_4 + \\
& (131072u_5^2u_4^{29}u_1^{17} - 65536u_5^2u_4^{29}u_1^{16})x_5^2x_3 - \\
& 65536u_5^2u_4^{31}u_1^{16}x_5^2 + \\
& (-131072u_6u_4^{30}u_1^{17} - 524288u_4^{29}u_1^{19} + 262144u_4^{29}u_1^{18})x_5x_4x_3 + \\
& 131072u_6u_4^{30}u_1^{17}x_5x_4 + 65536u_6u_5^2u_4^{30}u_1^{16}x_5x_3 - \\
& 65536u_6u_5^2u_4^{30}u_1^{16}x_5 + \\
& (262144u_6^2u_4^{29}u_1^{18} - 131072u_6^2u_4^{29}u_1^{17})x_4x_3
\end{aligned}$$

S-pol added.

1120. Creating S-polynomial from the pair  $(p_4, p_{110})$ .

Forming S-pol of  $p_4$  and  $p_{110}$ :

$$\begin{aligned}
p_{1636} = & 65536u_3^{30}u_1^{16}x_5^2x_4 + \\
& (65536u_5^2u_3^{28}u_1^{16} - 32768u_5^2u_3^{28}u_1^{15})x_5^2x_2 - \\
& 32768u_5^2u_3^{30}u_1^{15}x_5^2 + \\
& (-65536u_6u_3^{29}u_1^{16} - 262144u_3^{28}u_1^{18} + 131072u_3^{28}u_1^{17})x_5x_4x_2 + \\
& 65536u_6u_3^{29}u_1^{16}x_5x_4 + 32768u_6u_5^2u_3^{29}u_1^{15}x_5x_2 - \\
& 32768u_6u_5^2u_3^{29}u_1^{15}x_5 + \\
& (131072u_6^2u_3^{28}u_1^{17} - 65536u_6^2u_3^{28}u_1^{16})x_4x_2
\end{aligned}$$

S-pol added.

1121. Creating S-polynomial from the pair  $(p_4, p_{111})$ .

Forming S-pol of  $p_4$  and  $p_{111}$ :

$$\begin{aligned}
p_{1637} = & 65536u_2^{30}u_1^{16}x_5^2x_4 + \\
& (65536u_5^2u_2^{28}u_1^{16} - 32768u_5^2u_2^{28}u_1^{15})x_5^2x_1 - \\
& 32768u_5^2u_2^{30}u_1^{15}x_5^2 + \\
& (-65536u_6u_2^{29}u_1^{16} - 262144u_2^{28}u_1^{18} + 131072u_2^{28}u_1^{17})x_5x_4x_1 + \\
& 65536u_6u_2^{29}u_1^{16}x_5x_4 + 32768u_6u_5^2u_2^{29}u_1^{15}x_5x_1 - \\
& 32768u_6u_5^2u_2^{29}u_1^{15}x_5 + \\
& (131072u_6^2u_2^{28}u_1^{17} - 65536u_6^2u_2^{28}u_1^{16})x_4x_1
\end{aligned}$$

S-pol added.

1122. Creating S-polynomial from the pair  $(p_4, p_{112})$ .

Forming S-pol of  $p_4$  and  $p_{112}$ :

$$\begin{aligned} p_{1638} = & 65536u_4^{30}u_1^{16}x_5^2x_4 + \\ & (65536u_5^2u_4^{28}u_1^{16} - 32768u_5^2u_4^{28}u_1^{15})x_5^2x_3 - \\ & 32768u_5^2u_4^{30}u_1^{15}x_5^2 + \\ & (-65536u_6u_4^{29}u_1^{16} - 262144u_4^{28}u_1^{18} + 131072u_4^{28}u_1^{17})x_5x_4x_3 + \\ & 65536u_6u_4^{29}u_1^{16}x_5x_4 + 32768u_6u_5^2u_4^{29}u_1^{15}x_5x_3 - \\ & 32768u_6u_5^2u_4^{29}u_1^{15}x_5 + \\ & (131072u_6^2u_4^{28}u_1^{17} - 65536u_6^2u_4^{28}u_1^{16})x_4x_3 \end{aligned}$$

S-pol added.

1123. Creating S-polynomial from the pair  $(p_4, p_{113})$ .

Forming S-pol of  $p_4$  and  $p_{113}$ :

$$\begin{aligned} p_{1639} = & (524288u_2^{27}u_1^{19} - 262144u_2^{27}u_1^{18})x_5^2x_4 + \\ & (-524288u_6u_2^{26}u_1^{19} + 262144u_6u_2^{26}u_1^{18} + 524288u_2^{27}u_1^{19} - 2097152u_2^{25}u_1^{21} + \\ & 1048576u_2^{25}u_1^{20})x_5x_4x_1 + 262144u_6u_2^{28}u_1^{18}x_5x_4 + \\ & (-262144u_6^2u_2^{27}u_1^{18} + 1048576u_6^2u_2^{25}u_1^{20} - 524288u_6^2u_2^{25}u_1^{19})x_4x_1 \end{aligned}$$

S-pol added.

1124. Creating S-polynomial from the pair  $(p_4, p_{114})$ .

Forming S-pol of  $p_4$  and  $p_{114}$ :

$$\begin{aligned} p_{1640} = & (262144u_2^{26}u_1^{18} - 131072u_2^{26}u_1^{17})x_5^2x_4 + \\ & (-262144u_6u_2^{25}u_1^{18} + 131072u_6u_2^{25}u_1^{17} + 262144u_2^{26}u_1^{18} - 1048576u_2^{24}u_1^{20} + \\ & 524288u_2^{24}u_1^{19})x_5x_4x_1 + 131072u_6u_2^{27}u_1^{17}x_5x_4 + \\ & (-131072u_6^2u_2^{26}u_1^{17} + 524288u_6^2u_2^{24}u_1^{19} - 262144u_6^2u_2^{24}u_1^{18})x_4x_1 \end{aligned}$$

S-pol added.

1125. Creating S-polynomial from the pair  $(p_4, p_{115})$ .

Forming S-pol of  $p_4$  and  $p_{115}$ :

$$\begin{aligned} p_{1641} = & (524288u_3^{27}u_1^{19} - 262144u_3^{27}u_1^{18})x_5^2x_4 + \\ & (-524288u_6u_3^{26}u_1^{19} + 262144u_6u_3^{26}u_1^{18} + 524288u_3^{27}u_1^{19} - 2097152u_3^{25}u_1^{21} + \\ & 1048576u_3^{25}u_1^{20})x_5x_4x_2 + 262144u_6u_3^{28}u_1^{18}x_5x_4 + \\ & (-262144u_6^2u_3^{27}u_1^{18} + 1048576u_6^2u_3^{25}u_1^{20} - 524288u_6^2u_3^{25}u_1^{19})x_4x_2 \end{aligned}$$

S-pol added.

1126. Creating S-polynomial from the pair  $(p_4, p_{116})$ .

Forming S-pol of  $p_4$  and  $p_{116}$ :

$$\begin{aligned} p_{1642} = & (262144u_3^{26}u_1^{18} - 131072u_3^{26}u_1^{17})x_5^2x_4 + \\ & (-262144u_6u_3^{25}u_1^{18} + 131072u_6u_3^{25}u_1^{17} + 262144u_3^{26}u_1^{18} - 1048576u_3^{24}u_1^{20} + \\ & 524288u_3^{24}u_1^{19})x_5x_4x_2 + 131072u_6u_3^{27}u_1^{17}x_5x_4 + \\ & (-131072u_6^2u_3^{26}u_1^{17} + 524288u_6^2u_3^{24}u_1^{19} - 262144u_6^2u_3^{24}u_1^{18})x_4x_2 \end{aligned}$$

S-pol added.

1127. Creating S-polynomial from the pair  $(p_4, p_{117})$ .

Forming S-pol of  $p_4$  and  $p_{117}$ :

$$\begin{aligned} p_{1643} = & (524288u_4^{27}u_1^{19} - 262144u_4^{27}u_1^{18})x_5^2x_4 + \\ & (-524288u_6u_4^{26}u_1^{19} + 262144u_6u_4^{26}u_1^{18} + 524288u_4^{27}u_1^{19} - 2097152u_4^{25}u_1^{21} + \\ & 1048576u_4^{25}u_1^{20})x_5x_4x_3 + 262144u_6u_4^{28}u_1^{18}x_5x_4 + \\ & (-262144u_6^2u_4^{27}u_1^{18} + 1048576u_6^2u_4^{25}u_1^{20} - 524288u_6^2u_4^{25}u_1^{19})x_4x_3 \end{aligned}$$

S-pol added.

1128. Creating S-polynomial from the pair  $(p_4, p_{118})$ .

Forming S-pol of  $p_4$  and  $p_{118}$ :

$$\begin{aligned} p_{1644} = & (262144u_4^{26}u_1^{18} - 131072u_4^{26}u_1^{17})x_5^2x_4 + \\ & (-262144u_6u_4^{25}u_1^{18} + 131072u_6u_4^{25}u_1^{17} + 262144u_4^{26}u_1^{18} - 1048576u_4^{24}u_1^{20} + \\ & 524288u_4^{24}u_1^{19})x_5x_4x_3 + 131072u_6u_4^{27}u_1^{17}x_5x_4 + \\ & (-131072u_6^2u_4^{26}u_1^{17} + 524288u_6^2u_4^{24}u_1^{19} - 262144u_6^2u_4^{24}u_1^{18})x_4x_3 \end{aligned}$$

S-pol added.

1129. Creating S-polynomial from the pair  $(p_4, p_{119})$ .

Forming S-pol of  $p_4$  and  $p_{119}$ : Polynomial too big for output (text size is 2231 characters, number of terms is 8)

S-pol added.

1130. Creating S-polynomial from the pair  $(p_4, p_{120})$ .

Forming S-pol of  $p_4$  and  $p_{120}$ : Polynomial too big for output (text size is 1325 characters, number of terms is 8)

S-pol added.

1131. Creating S-polynomial from the pair  $(p_4, p_{121})$ .

Forming S-pol of  $p_4$  and  $p_{121}$ : Polynomial too big for output (text size is 1107 characters, number of terms is 8)

S-pol added.



1132. Creating S-polynomial from the pair  $(p_4, p_{122})$ .

Forming S-pol of  $p_4$  and  $p_{122}$ :

$$\begin{aligned}
p_{1645} = & (-134217728u_3^{45}u_1^{27} + 67108864u_3^{45}u_1^{26})x_5^2x_4 + \\
& (33554432u_5^2u_3^{45}u_1^{25} - 134217728u_5^2u_3^{43}u_1^{27} + \\
& 67108864u_5^2u_3^{43}u_1^{26})x_5^2x_2 + \\
& (67108864u_5^2u_3^{45}u_1^{26} - 33554432u_5^2u_3^{45}u_1^{25})x_5^2 + \\
& (134217728u_6u_3^{44}u_1^{27} - 67108864u_6u_3^{44}u_1^{26} - 134217728u_3^{45}u_1^{27} + \\
& 536870912u_3^{43}u_1^{29} - 268435456u_3^{43}u_1^{28})x_5x_4x_2 - 67108864u_6u_3^{46}u_1^{26}x_5x_4 + \\
& (-67108864u_6u_5^2u_3^{44}u_1^{26} + 33554432u_6u_5^2u_3^{44}u_1^{25})x_5x_2 + \\
& 33554432u_6u_5^2u_3^{46}u_1^{25}x_5 + \\
& (67108864u_6^2u_3^{45}u_1^{26} - 268435456u_6^2u_3^{43}u_1^{28} + \\
& 134217728u_6^2u_3^{43}u_1^{27})x_4x_2
\end{aligned}$$

S-pol added.

1133. Creating S-polynomial from the pair  $(p_4, p_{123})$ .

Forming S-pol of  $p_4$  and  $p_{123}$ : Polynomial too big for output (text size is 1035 characters, number of terms is 8)

S-pol added.

1134. Creating S-polynomial from the pair  $(p_4, p_{124})$ .

Forming S-pol of  $p_4$  and  $p_{124}$ : Polynomial too big for output (text size is 1185 characters, number of terms is 8)

S-pol added.

1135. Creating S-polynomial from the pair  $(p_4, p_{125})$ .

Forming S-pol of  $p_4$  and  $p_{125}$ :

$$\begin{aligned}
p_{1646} = & (-16777216u_3^{43}u_1^{24} + 8388608u_3^{43}u_1^{23})x_5^2x_4 + \\
& (4194304u_5^2u_3^{43}u_1^{22} - 16777216u_5^2u_3^{41}u_1^{24} + \\
& 8388608u_5^2u_3^{41}u_1^{23})x_5^2x_2 + \\
& (8388608u_5^2u_3^{43}u_1^{23} - 4194304u_5^2u_3^{43}u_1^{22})x_5^2 + \\
& (16777216u_6u_3^{42}u_1^{24} - 8388608u_6u_3^{42}u_1^{23} - 16777216u_3^{43}u_1^{24} + \\
& 67108864u_3^{41}u_1^{26} - 33554432u_3^{41}u_1^{25})x_5x_4x_2 - 8388608u_6u_3^{44}u_1^{23}x_5x_4 + \\
& (-8388608u_6u_5^2u_3^{42}u_1^{23} + 4194304u_6u_5^2u_3^{42}u_1^{22})x_5x_2 + \\
& 4194304u_6u_5^2u_3^{44}u_1^{22}x_5 + \\
& (8388608u_6^2u_3^{43}u_1^{23} - 33554432u_6^2u_3^{41}u_1^{25} + \\
& 16777216u_6^2u_3^{41}u_1^{24})x_4x_2
\end{aligned}$$

S-pol added.

1136. Creating S-polynomial from the pair  $(p_4, p_{126})$ .

Forming S-pol of  $p_4$  and  $p_{126}$ : Polynomial too big for output (text size is 1102 characters, number of terms is 8)

S-pol added.

1137. Creating S-polynomial from the pair  $(p_4, p_{127})$ .

Forming S-pol of  $p_4$  and  $p_{127}$ : Polynomial too big for output (text size is 1027 characters, number of terms is 8)

S-pol added.

1138. Creating S-polynomial from the pair  $(p_4, p_{128})$ .

Forming S-pol of  $p_4$  and  $p_{128}$ :

$$\begin{aligned} p_{1647} = & (-65536u_3^{20}u_1^{16} + 32768u_3^{20}u_1^{15})x_5^2x_4 + \\ & (65536u_6u_3^{19}u_1^{16} - 32768u_6u_3^{19}u_1^{15} - 65536u_3^{20}u_1^{16} + 262144u_3^{18}u_1^{18} - \\ & 131072u_3^{18}u_1^{17})x_5x_4x_2 - 32768u_6u_3^{21}u_1^{15}x_5x_4 + \\ & (32768u_6^2u_3^{20}u_1^{15} - 131072u_6^2u_3^{18}u_1^{17} + 65536u_6^2u_3^{18}u_1^{16})x_4x_2 \end{aligned}$$

S-pol added.

1139. Creating S-polynomial from the pair  $(p_4, p_{129})$ .

Forming S-pol of  $p_4$  and  $p_{129}$ :

$$\begin{aligned} p_{1648} = & (-32768u_3^{19}u_1^{15} + 16384u_3^{19}u_1^{14})x_5^2x_4 + \\ & (32768u_6u_3^{18}u_1^{15} - 16384u_6u_3^{18}u_1^{14} - 32768u_3^{19}u_1^{15} + 131072u_3^{17}u_1^{17} - \\ & 65536u_3^{17}u_1^{16})x_5x_4x_2 - 16384u_6u_3^{20}u_1^{14}x_5x_4 + \\ & (16384u_6^2u_3^{19}u_1^{14} - 65536u_6^2u_3^{17}u_1^{16} + 32768u_6^2u_3^{17}u_1^{15})x_4x_2 \end{aligned}$$

S-pol added.

1140. Creating S-polynomial from the pair  $(p_4, p_{130})$ .

Forming S-pol of  $p_4$  and  $p_{130}$ : Polynomial too big for output (text size is 2231 characters, number of terms is 8)

S-pol added.

1141. Creating S-polynomial from the pair  $(p_4, p_{131})$ .

Forming S-pol of  $p_4$  and  $p_{131}$ : Polynomial too big for output (text size is 1325 characters, number of terms is 8)

S-pol added.

1142. Creating S-polynomial from the pair  $(p_4, p_{132})$ .

Forming S-pol of  $p_4$  and  $p_{132}$ :

$$\begin{aligned} p_{1649} = & (-134217728u_2^{45}u_1^{27} + 67108864u_2^{45}u_1^{26})x_5^2x_4 + \\ & (33554432u_5^2u_2^{45}u_1^{25} - 134217728u_5^2u_2^{43}u_1^{27} + \end{aligned}$$

$$\begin{aligned}
& 67108864u_5^2u_2^{43}u_1^{26})x_5^2x_1+ \\
& (67108864u_5^2u_2^{45}u_1^{26} - 33554432u_5^2u_2^{45}u_1^{25})x_5^2+ \\
& (134217728u_6u_2^{44}u_1^{27} - 67108864u_6u_2^{44}u_1^{26} - 134217728u_2^{45}u_1^{27} + \\
& 536870912u_2^{43}u_1^{29} - 268435456u_2^{43}u_1^{28})x_5x_4x_1 - 67108864u_6u_2^{46}u_1^{26}x_5x_4+ \\
& (-67108864u_6u_5^2u_2^{44}u_1^{26} + 33554432u_6u_5^2u_2^{44}u_1^{25})x_5x_1+ \\
& 33554432u_6u_5^2u_2^{46}u_1^{25}x_5+ \\
& (67108864u_6^2u_2^{45}u_1^{26} - 268435456u_6^2u_2^{43}u_1^{28} + \\
& 134217728u_6^2u_2^{43}u_1^{27})x_4x_1
\end{aligned}$$

S-pol added.

1143. Creating S-polynomial from the pair  $(p_4, p_{133})$ .

Forming S-pol of  $p_4$  and  $p_{133}$ : Polynomial too big for output (text size is 1035 characters, number of terms is 8)

S-pol added.

1144. Creating S-polynomial from the pair  $(p_4, p_{134})$ .

Forming S-pol of  $p_4$  and  $p_{134}$ : Polynomial too big for output (text size is 1035 characters, number of terms is 8)

S-pol added.

1145. Creating S-polynomial from the pair  $(p_4, p_{135})$ .

Forming S-pol of  $p_4$  and  $p_{135}$ : Polynomial too big for output (text size is 1027 characters, number of terms is 8)

S-pol added.

1146. Creating S-polynomial from the pair  $(p_4, p_{136})$ .

Forming S-pol of  $p_4$  and  $p_{136}$ : Polynomial too big for output (text size is 1185 characters, number of terms is 8)

S-pol added.

1147. Creating S-polynomial from the pair  $(p_4, p_{137})$ .

Forming S-pol of  $p_4$  and  $p_{137}$ :

$$\begin{aligned}
p_{1650} = & (-16777216u_2^{43}u_1^{24} + 8388608u_2^{43}u_1^{23})x_5^2x_4+ \\
& (4194304u_5^2u_2^{43}u_1^{22} - 16777216u_5^2u_2^{41}u_1^{24} + \\
& 8388608u_5^2u_2^{41}u_1^{23})x_5^2x_1+ \\
& (8388608u_5^2u_2^{43}u_1^{23} - 4194304u_5^2u_2^{43}u_1^{22})x_5^2+ \\
& (16777216u_6u_2^{42}u_1^{24} - 8388608u_6u_2^{42}u_1^{23} - 16777216u_2^{43}u_1^{24} + \\
& 67108864u_2^{41}u_1^{26} - 33554432u_2^{41}u_1^{25})x_5x_4x_1 - 8388608u_6u_2^{44}u_1^{23}x_5x_4+ \\
& (-8388608u_6u_5^2u_2^{42}u_1^{23} + 4194304u_6u_5^2u_2^{42}u_1^{22})x_5x_1+ \\
& 4194304u_6u_5^2u_2^{44}u_1^{22}x_5+ \\
& (8388608u_6^2u_2^{43}u_1^{23} - 33554432u_6^2u_2^{41}u_1^{25} + \\
& 16777216u_6^2u_2^{41}u_1^{24})x_4x_1
\end{aligned}$$

S-pol added.

1148. Creating S-polynomial from the pair  $(p_4, p_{138})$ .

Forming S-pol of  $p_4$  and  $p_{138}$ : Polynomial too big for output (text size is 1027 characters, number of terms is 8)

S-pol added.

1149. Creating S-polynomial from the pair  $(p_4, p_{139})$ .

Forming S-pol of  $p_4$  and  $p_{139}$ :

$$\begin{aligned} p_{1651} = & (-65536u_2^{20}u_1^{16} + 32768u_2^{20}u_1^{15})x_5^2x_4 + \\ & (65536u_6u_2^{19}u_1^{16} - 32768u_6u_2^{19}u_1^{15} - 65536u_2^{20}u_1^{16} + 262144u_2^{18}u_1^{18} - \\ & 131072u_2^{18}u_1^{17})x_5x_4x_1 - 32768u_6u_2^{21}u_1^{15}x_5x_4 + \\ & (32768u_6^2u_2^{20}u_1^{15} - 131072u_6^2u_2^{18}u_1^{17} + 65536u_6^2u_2^{18}u_1^{16})x_4x_1 \end{aligned}$$

S-pol added.

1150. Creating S-polynomial from the pair  $(p_4, p_{140})$ .

Forming S-pol of  $p_4$  and  $p_{140}$ :

$$\begin{aligned} p_{1652} = & (-32768u_2^{19}u_1^{15} + 16384u_2^{19}u_1^{14})x_5^2x_4 + \\ & (32768u_6u_2^{18}u_1^{15} - 16384u_6u_2^{18}u_1^{14} - 32768u_2^{19}u_1^{15} + 131072u_2^{17}u_1^{17} - \\ & 65536u_2^{17}u_1^{16})x_5x_4x_1 - 16384u_6u_2^{20}u_1^{14}x_5x_4 + \\ & (16384u_6^2u_2^{19}u_1^{14} - 65536u_6^2u_2^{17}u_1^{16} + 32768u_6^2u_2^{17}u_1^{15})x_4x_1 \end{aligned}$$

S-pol added.

1151. Creating S-polynomial from the pair  $(p_4, p_{141})$ .

Forming S-pol of  $p_4$  and  $p_{141}$ : Polynomial too big for output (text size is 2231 characters, number of terms is 8)

S-pol added.

1152. Creating S-polynomial from the pair  $(p_4, p_{142})$ .

Forming S-pol of  $p_4$  and  $p_{142}$ : Polynomial too big for output (text size is 1325 characters, number of terms is 8)

S-pol added.

1153. Creating S-polynomial from the pair  $(p_4, p_{143})$ .

Forming S-pol of  $p_4$  and  $p_{143}$ : Polynomial too big for output (text size is 1107 characters, number of terms is 8)

S-pol added.

1154. Creating S-polynomial from the pair  $(p_4, p_{144})$ .

Forming S-pol of  $p_4$  and  $p_{144}$ : Polynomial too big for output (text size is 1107 characters, number of terms is 8)

S-pol added.

1155. Creating S-polynomial from the pair  $(p_4, p_{145})$ .

Forming S-pol of  $p_4$  and  $p_{145}$ :

$$\begin{aligned} p_{1653} = & (-134217728u_4^{45}u_1^{27} + 67108864u_4^{45}u_1^{26})x_5^2x_4 + \\ & (33554432u_5^2u_4^{45}u_1^{25} - 134217728u_5^2u_4^{43}u_1^{27} + \\ & 67108864u_5^2u_4^{43}u_1^{26})x_5^2x_3 + \\ & (67108864u_5^2u_4^{45}u_1^{26} - 33554432u_5^2u_4^{45}u_1^{25})x_5^2 + \\ & (134217728u_6u_4^{44}u_1^{27} - 67108864u_6u_4^{44}u_1^{26} - 134217728u_4^{45}u_1^{27} + \\ & 536870912u_4^{43}u_1^{29} - 268435456u_4^{43}u_1^{28})x_5x_4x_3 - 67108864u_6u_4^{46}u_1^{26}x_5x_4 + \\ & (-67108864u_6u_5^2u_4^{44}u_1^{26} + 33554432u_6u_5^2u_4^{44}u_1^{25})x_5x_3 + \\ & 33554432u_6u_5^2u_4^{46}u_1^{25}x_5 + \\ & (67108864u_6^2u_4^{45}u_1^{26} - 268435456u_6^2u_4^{43}u_1^{28} + \\ & 134217728u_6^2u_4^{43}u_1^{27})x_4x_3 \end{aligned}$$

S-pol added.

1156. Creating S-polynomial from the pair  $(p_4, p_{146})$ .

Forming S-pol of  $p_4$  and  $p_{146}$ : Polynomial too big for output (text size is 1102 characters, number of terms is 8)

S-pol added.

1157. Creating S-polynomial from the pair  $(p_4, p_{147})$ .

Forming S-pol of  $p_4$  and  $p_{147}$ : Polynomial too big for output (text size is 1102 characters, number of terms is 8)

S-pol added.

1158. Creating S-polynomial from the pair  $(p_4, p_{148})$ .

Forming S-pol of  $p_4$  and  $p_{148}$ : Polynomial too big for output (text size is 1185 characters, number of terms is 8)

S-pol added.

1159. Creating S-polynomial from the pair  $(p_4, p_{149})$ .

Forming S-pol of  $p_4$  and  $p_{149}$ :

$$\begin{aligned} p_{1654} = & (-16777216u_4^{43}u_1^{24} + 8388608u_4^{43}u_1^{23})x_5^2x_4 + \\ & (4194304u_5^2u_4^{43}u_1^{22} - 16777216u_5^2u_4^{41}u_1^{24} + \\ & 8388608u_5^2u_4^{41}u_1^{23})x_5^2x_3 + \\ & (8388608u_5^2u_4^{43}u_1^{23} - 4194304u_5^2u_4^{43}u_1^{22})x_5^2 + \\ & (16777216u_6u_4^{42}u_1^{24} - 8388608u_6u_4^{42}u_1^{23} - 16777216u_4^{43}u_1^{24} + \\ & 67108864u_4^{41}u_1^{26} - 33554432u_4^{41}u_1^{25})x_5x_4x_3 - 8388608u_6u_4^{44}u_1^{23}x_5x_4 + \\ & (-8388608u_6u_5^2u_4^{42}u_1^{23} + 4194304u_6u_5^2u_4^{42}u_1^{22})x_5x_3 + \\ & 4194304u_6u_5^2u_4^{44}u_1^{22}x_5 + \\ & (8388608u_6^2u_4^{43}u_1^{23} - 33554432u_6^2u_4^{41}u_1^{25} + \\ & 16777216u_6^2u_4^{41}u_1^{24})x_4x_3 \end{aligned}$$

S-pol added.

1160. Creating S-polynomial from the pair  $(p_4, p_{150})$ .

Forming S-pol of  $p_4$  and  $p_{150}$ :

$$\begin{aligned} p_{1655} = & (-65536u_4^{20}u_1^{16} + 32768u_4^{20}u_1^{15})x_5^2x_4 + \\ & (65536u_6u_4^{19}u_1^{16} - 32768u_6u_4^{19}u_1^{15} - 65536u_4^{20}u_1^{16} + 262144u_4^{18}u_1^{18} - \\ & 131072u_4^{18}u_1^{17})x_5x_4x_3 - 32768u_6u_4^{21}u_1^{15}x_5x_4 + \\ & (32768u_6^2u_4^{20}u_1^{15} - 131072u_6^2u_4^{18}u_1^{17} + 65536u_6^2u_4^{18}u_1^{16})x_4x_3 \end{aligned}$$

S-pol added.

1161. Creating S-polynomial from the pair  $(p_4, p_{151})$ .

Forming S-pol of  $p_4$  and  $p_{151}$ :

$$\begin{aligned} p_{1656} = & (-32768u_4^{19}u_1^{15} + 16384u_4^{19}u_1^{14})x_5^2x_4 + \\ & (32768u_6u_4^{18}u_1^{15} - 16384u_6u_4^{18}u_1^{14} - 32768u_4^{19}u_1^{15} + 131072u_4^{17}u_1^{17} - \\ & 65536u_4^{17}u_1^{16})x_5x_4x_3 - 16384u_6u_4^{20}u_1^{14}x_5x_4 + \\ & (16384u_6^2u_4^{19}u_1^{14} - 65536u_6^2u_4^{17}u_1^{16} + 32768u_6^2u_4^{17}u_1^{15})x_4x_3 \end{aligned}$$

S-pol added.

1162. Creating S-polynomial from the pair  $(p_4, p_{152})$ .

Forming S-pol of  $p_4$  and  $p_{152}$ :

$$\begin{aligned} p_{1657} = & 16384u_2^{25}u_1^{14}x_5^2x_4 + \\ & (-16384u_6u_2^{24}u_1^{14} - 65536u_2^{23}u_1^{16} + 32768u_2^{23}u_1^{15})x_5x_4x_1 + \\ & 16384u_6u_2^{24}u_1^{14}x_5x_4 + \\ & (32768u_6^2u_2^{23}u_1^{15} - 16384u_6^2u_2^{23}u_1^{14})x_4x_1 \end{aligned}$$

S-pol added.

1163. Creating S-polynomial from the pair  $(p_4, p_{153})$ .

Forming S-pol of  $p_4$  and  $p_{153}$ :

$$\begin{aligned} p_{1658} = & 8192u_2^{24}u_1^{13}x_5^2x_4 + \\ & (-8192u_6u_2^{23}u_1^{13} - 32768u_2^{22}u_1^{15} + 16384u_2^{22}u_1^{14})x_5x_4x_1 + \\ & 8192u_6u_2^{23}u_1^{13}x_5x_4 + (16384u_6^2u_2^{22}u_1^{14} - 8192u_6^2u_2^{22}u_1^{13})x_4x_1 \end{aligned}$$

S-pol added.

1164. Creating S-polynomial from the pair  $(p_4, p_{154})$ .

Forming S-pol of  $p_4$  and  $p_{154}$ : Polynomial too big for output (text size is 2649 characters, number of terms is 8)

S-pol added.

1165. Creating S-polynomial from the pair  $(p_4, p_{155})$ .

Forming S-pol of  $p_4$  and  $p_{155}$ : Polynomial too big for output (text size is 1617 characters, number of terms is 8)

S-pol added.

1166. Creating S-polynomial from the pair  $(p_4, p_{156})$ .

Forming S-pol of  $p_4$  and  $p_{156}$ :

$$\begin{aligned} p_{1659} = & -1048576u_2^{32}u_1^{20}x_5^2x_4 + \\ & (-1048576u_5^2u_2^{30}u_1^{20} + 524288u_5^2u_2^{30}u_1^{19})x_5^2x_1 + \\ & 524288u_5^2u_2^{32}u_1^{19}x_5^2 + \\ & (1048576u_6u_2^{31}u_1^{20} + 4194304u_2^{30}u_1^{22} - 2097152u_2^{30}u_1^{21})x_5x_4x_1 - \\ & 1048576u_6u_2^{31}u_1^{20}x_5x_4 - 524288u_6u_5^2u_2^{31}u_1^{19}x_5x_1 + \\ & 524288u_6u_5^2u_2^{31}u_1^{19}x_5 + \\ & (-2097152u_6^2u_2^{30}u_1^{21} + 1048576u_6^2u_2^{30}u_1^{20})x_4x_1 \end{aligned}$$

S-pol added.

1167. Creating S-polynomial from the pair  $(p_4, p_{157})$ .

Forming S-pol of  $p_4$  and  $p_{157}$ : Polynomial too big for output (text size is 1162 characters, number of terms is 8)

S-pol added.

1168. Creating S-polynomial from the pair  $(p_4, p_{158})$ .

Forming S-pol of  $p_4$  and  $p_{158}$ : Polynomial too big for output (text size is 1162 characters, number of terms is 8)

S-pol added.

1169. Creating S-polynomial from the pair  $(p_4, p_{159})$ .

Forming S-pol of  $p_4$  and  $p_{159}$ : Polynomial too big for output (text size is 1154 characters, number of terms is 8)

S-pol added.

1170. Creating S-polynomial from the pair  $(p_4, p_{160})$ .

Forming S-pol of  $p_4$  and  $p_{160}$ : Polynomial too big for output (text size is 1525 characters, number of terms is 8)

S-pol added.

1171. Creating S-polynomial from the pair  $(p_4, p_{161})$ .

Forming S-pol of  $p_4$  and  $p_{161}$ :

$$\begin{aligned} p_{1660} = & -131072u_2^{25}u_1^{17}x_5^2x_4 + \\ & (-131072u_5^2u_2^{23}u_1^{17} + 65536u_5^2u_2^{23}u_1^{16})x_5^2x_1 + \\ & 65536u_5^2u_2^{25}u_1^{16}x_5^2 + \end{aligned}$$

$$\begin{aligned}
& (131072u_6u_2^{24}u_1^{17} + 524288u_2^{23}u_1^{19} - 262144u_2^{23}u_1^{18})x_5x_4x_1 - \\
& 131072u_6u_2^{24}u_1^{17}x_5x_4 - 65536u_6u_5^2u_2^{24}u_1^{16}x_5x_1 + \\
& 65536u_6u_5^2u_2^{24}u_1^{16}x_5 + \\
& (-262144u_6^2u_2^{23}u_1^{18} + 131072u_6^2u_2^{23}u_1^{17})x_4x_1
\end{aligned}$$

S-pol added.

1172. Creating S-polynomial from the pair  $(p_4, p_{162})$ .

Forming S-pol of  $p_4$  and  $p_{162}$ : Polynomial too big for output (text size is 1154 characters, number of terms is 8)

S-pol added.

1173. Creating S-polynomial from the pair  $(p_4, p_{163})$ .

Forming S-pol of  $p_4$  and  $p_{163}$ :

$$\begin{aligned}
p_{1661} &= 16384u_3^{25}u_1^{14}x_5^2x_4 + \\
& (-16384u_6u_3^{24}u_1^{14} - 65536u_3^{23}u_1^{16} + 32768u_3^{23}u_1^{15})x_5x_4x_2 + \\
& 16384u_6u_3^{24}u_1^{14}x_5x_4 + \\
& (32768u_6^2u_3^{23}u_1^{15} - 16384u_6^2u_3^{23}u_1^{14})x_4x_2
\end{aligned}$$

S-pol added.

1174. Creating S-polynomial from the pair  $(p_4, p_{164})$ .

Forming S-pol of  $p_4$  and  $p_{164}$ :

$$\begin{aligned}
p_{1662} &= 8192u_3^{24}u_1^{13}x_5^2x_4 + \\
& (-8192u_6u_3^{23}u_1^{13} - 32768u_3^{22}u_1^{15} + 16384u_3^{22}u_1^{14})x_5x_4x_2 + \\
& 8192u_6u_3^{23}u_1^{13}x_5x_4 + (16384u_6^2u_3^{22}u_1^{14} - 8192u_6^2u_3^{22}u_1^{13})x_4x_2
\end{aligned}$$

S-pol added.

1175. Creating S-polynomial from the pair  $(p_4, p_{165})$ .

Forming S-pol of  $p_4$  and  $p_{165}$ : Polynomial too big for output (text size is 2649 characters, number of terms is 8)

S-pol added.

1176. Creating S-polynomial from the pair  $(p_4, p_{166})$ .

Forming S-pol of  $p_4$  and  $p_{166}$ : Polynomial too big for output (text size is 1617 characters, number of terms is 8)

S-pol added.

1177. Creating S-polynomial from the pair  $(p_4, p_{167})$ .

Forming S-pol of  $p_4$  and  $p_{167}$ : Polynomial too big for output (text size is 1146 characters, number of terms is 8)

S-pol added.



1178. Creating S-polynomial from the pair  $(p_4, p_{168})$ .

Forming S-pol of  $p_4$  and  $p_{168}$ :

$$\begin{aligned} p_{1663} = & -1048576u_3^{32}u_1^{20}x_5^2x_4 + \\ & (-1048576u_5^2u_3^{30}u_1^{20} + 524288u_5^2u_3^{30}u_1^{19})x_5^2x_2 + \\ & 524288u_5^2u_3^{32}u_1^{19}x_5^2 + \\ & (1048576u_6u_3^{31}u_1^{20} + 4194304u_3^{30}u_1^{22} - 2097152u_3^{30}u_1^{21})x_5x_4x_2 - \\ & 1048576u_6u_3^{31}u_1^{20}x_5x_4 - 524288u_6u_5^2u_3^{31}u_1^{19}x_5x_2 + \\ & 524288u_6u_5^2u_3^{31}u_1^{19}x_5 + \\ & (-2097152u_6^2u_3^{30}u_1^{21} + 1048576u_6^2u_3^{30}u_1^{20})x_4x_2 \end{aligned}$$

S-pol added.

1179. Creating S-polynomial from the pair  $(p_4, p_{169})$ .

Forming S-pol of  $p_4$  and  $p_{169}$ : Polynomial too big for output (text size is 1162 characters, number of terms is 8)

S-pol added.

1180. Creating S-polynomial from the pair  $(p_4, p_{170})$ .

Forming S-pol of  $p_4$  and  $p_{170}$ : Polynomial too big for output (text size is 1525 characters, number of terms is 8)

S-pol added.

1181. Creating S-polynomial from the pair  $(p_4, p_{171})$ .

Forming S-pol of  $p_4$  and  $p_{171}$ :

$$\begin{aligned} p_{1664} = & -131072u_3^{25}u_1^{17}x_5^2x_4 + \\ & (-131072u_5^2u_3^{23}u_1^{17} + 65536u_5^2u_3^{23}u_1^{16})x_5^2x_2 + \\ & 65536u_5^2u_3^{25}u_1^{16}x_5^2 + \\ & (131072u_6u_3^{24}u_1^{17} + 524288u_3^{23}u_1^{19} - 262144u_3^{23}u_1^{18})x_5x_4x_2 - \\ & 131072u_6u_3^{24}u_1^{17}x_5x_4 - 65536u_6u_3^{24}u_1^{16}x_5x_2 + \\ & 65536u_6u_5^2u_3^{24}u_1^{16}x_5 + \\ & (-262144u_6^2u_3^{23}u_1^{18} + 131072u_6^2u_3^{23}u_1^{17})x_4x_2 \end{aligned}$$

S-pol added.

1182. Creating S-polynomial from the pair  $(p_4, p_{172})$ .

Forming S-pol of  $p_4$  and  $p_{172}$ : Polynomial too big for output (text size is 1143 characters, number of terms is 8)

S-pol added.

1183. Creating S-polynomial from the pair  $(p_4, p_{173})$ .

Forming S-pol of  $p_4$  and  $p_{173}$ : Polynomial too big for output (text size is 1154 characters, number of terms is 8)

S-pol added.

1184. Creating S-polynomial from the pair  $(p_4, p_{174})$ .

Forming S-pol of  $p_4$  and  $p_{174}$ :

$$\begin{aligned} p_{1665} = & 16384u_4^{25}u_1^{14}x_5^2x_4 + \\ & (-16384u_6u_4^{24}u_1^{14} - 65536u_4^{23}u_1^{16} + 32768u_4^{23}u_1^{15})x_5x_4x_3 + \\ & 16384u_6u_4^{24}u_1^{14}x_5x_4 + \\ & (32768u_6^2u_4^{23}u_1^{15} - 16384u_6^2u_4^{23}u_1^{14})x_4x_3 \end{aligned}$$

S-pol added.

1185. Creating S-polynomial from the pair  $(p_4, p_{175})$ .

Forming S-pol of  $p_4$  and  $p_{175}$ :

$$\begin{aligned} p_{1666} = & 8192u_4^{24}u_1^{13}x_5^2x_4 + \\ & (-8192u_6u_4^{23}u_1^{13} - 32768u_4^{22}u_1^{15} + 16384u_4^{22}u_1^{14})x_5x_4x_3 + \\ & 8192u_6u_4^{23}u_1^{13}x_5x_4 + (16384u_6^2u_4^{22}u_1^{14} - 8192u_6^2u_4^{22}u_1^{13})x_4x_3 \end{aligned}$$

S-pol added.

1186. Creating S-polynomial from the pair  $(p_4, p_{176})$ .

Forming S-pol of  $p_4$  and  $p_{176}$ : Polynomial too big for output (text size is 2649 characters, number of terms is 8)

S-pol added.

1187. Creating S-polynomial from the pair  $(p_4, p_{177})$ .

Forming S-pol of  $p_4$  and  $p_{177}$ : Polynomial too big for output (text size is 1617 characters, number of terms is 8)

S-pol added.

1188. Creating S-polynomial from the pair  $(p_4, p_{178})$ .

Forming S-pol of  $p_4$  and  $p_{178}$ : Polynomial too big for output (text size is 1146 characters, number of terms is 8)

S-pol added.

1189. Creating S-polynomial from the pair  $(p_4, p_{179})$ .

Forming S-pol of  $p_4$  and  $p_{179}$ : Polynomial too big for output (text size is 1146 characters, number of terms is 8)

S-pol added.

1190. Creating S-polynomial from the pair  $(p_4, p_{180})$ .

Forming S-pol of  $p_4$  and  $p_{180}$ :

$$\begin{aligned} p_{1667} = & -1048576u_4^{32}u_1^{20}x_5^2x_4 + \\ & (-1048576u_5^2u_4^{30}u_1^{20} + 524288u_5^2u_4^{30}u_1^{19})x_5^2x_3 + \\ & 524288u_5^2u_4^{32}u_1^{19}x_5^2 + \end{aligned}$$

$$\begin{aligned}
& (1048576u_6u_4^{31}u_1^{20} + 4194304u_4^{30}u_1^{22} - 2097152u_4^{30}u_1^{21})x_5x_4x_3 - \\
& 1048576u_6u_4^{31}u_1^{20}x_5x_4 - 524288u_6u_5^2u_4^{31}u_1^{19}x_5x_3 + \\
& 524288u_6u_5^2u_4^{31}u_1^{19}x_5 + \\
& (-2097152u_6^2u_4^{30}u_1^{21} + 1048576u_6^2u_4^{30}u_1^{20})x_4x_3
\end{aligned}$$

S-pol added.

1191. Creating S-polynomial from the pair  $(p_4, p_{181})$ .

Forming S-pol of  $p_4$  and  $p_{181}$ : Polynomial too big for output (text size is 1143 characters, number of terms is 8)

S-pol added.

1192. Creating S-polynomial from the pair  $(p_4, p_{182})$ .

Forming S-pol of  $p_4$  and  $p_{182}$ : Polynomial too big for output (text size is 1143 characters, number of terms is 8)

S-pol added.

1193. Creating S-polynomial from the pair  $(p_4, p_{183})$ .

Forming S-pol of  $p_4$  and  $p_{183}$ : Polynomial too big for output (text size is 1525 characters, number of terms is 8)

S-pol added.

1194. Creating S-polynomial from the pair  $(p_4, p_{184})$ .

Forming S-pol of  $p_4$  and  $p_{184}$ :

$$\begin{aligned}
p_{1668} = & -131072u_4^{25}u_1^{17}x_5^2x_4 + \\
& (-131072u_5^2u_4^{23}u_1^{17} + 65536u_5^2u_4^{23}u_1^{16})x_5^2x_3 + \\
& 65536u_5^2u_4^{25}u_1^{16}x_5^2 + \\
& (131072u_6u_4^{24}u_1^{17} + 524288u_4^{23}u_1^{19} - 262144u_4^{23}u_1^{18})x_5x_4x_3 - \\
& 131072u_6u_4^{24}u_1^{17}x_5x_4 - 65536u_6u_5^2u_4^{24}u_1^{16}x_5x_3 + \\
& 65536u_6u_5^2u_4^{24}u_1^{16}x_5 + \\
& (-262144u_6^2u_4^{23}u_1^{18} + 131072u_6^2u_4^{23}u_1^{17})x_4x_3
\end{aligned}$$

S-pol added.

1195. Creating S-polynomial from the pair  $(p_4, p_{185})$ .

Forming S-pol of  $p_4$  and  $p_{185}$ : Polynomial too big for output (text size is 2787 characters, number of terms is 8)

S-pol added.

1196. Creating S-polynomial from the pair  $(p_4, p_{186})$ .

Forming S-pol of  $p_4$  and  $p_{186}$ : Polynomial too big for output (text size is 1745 characters, number of terms is 8)

S-pol added.

1197. Creating S-polynomial from the pair  $(p_4, p_{187})$ .

Forming S-pol of  $p_4$  and  $p_{187}$ : Polynomial too big for output (text size is 1244 characters, number of terms is 8)

S-pol added.

1198. Creating S-polynomial from the pair  $(p_4, p_{188})$ .

Forming S-pol of  $p_4$  and  $p_{188}$ :

$$\begin{aligned} p_{1669} = & 16777216u_5u_3^{43}u_1^{24}x_5^2x_4 + \\ & (16777216u_5^3u_3^{41}u_1^{24} - 8388608u_5^3u_3^{41}u_1^{23})x_5^2x_2 - \\ & 8388608u_5^3u_3^{43}u_1^{23}x_5^2 + \\ & (-16777216u_6u_5u_3^{42}u_1^{24} - 67108864u_5u_3^{41}u_1^{26} + \\ & 33554432u_5u_3^{41}u_1^{25})x_5x_4x_2 + 16777216u_6u_5u_3^{42}u_1^{24}x_5x_4 + \\ & 8388608u_6u_5^3u_3^{42}u_1^{23}x_5x_2 - 8388608u_6u_5^3u_3^{42}u_1^{23}x_5 + \\ & (33554432u_6^2u_5u_3^{41}u_1^{25} - 16777216u_6^2u_5u_3^{41}u_1^{24})x_4x_2 \end{aligned}$$

S-pol added.

1199. Creating S-polynomial from the pair  $(p_4, p_{189})$ .

Forming S-pol of  $p_4$  and  $p_{189}$ : Polynomial too big for output (text size is 1264 characters, number of terms is 8)

S-pol added.

1200. Creating S-polynomial from the pair  $(p_4, p_{190})$ .

Forming S-pol of  $p_4$  and  $p_{190}$ : Polynomial too big for output (text size is 1581 characters, number of terms is 8)

S-pol added.

1201. Creating S-polynomial from the pair  $(p_4, p_{191})$ .

Forming S-pol of  $p_4$  and  $p_{191}$ :

$$\begin{aligned} p_{1670} = & 8388608u_5u_3^{42}u_1^{23}x_5^2x_4 + \\ & (8388608u_5^3u_3^{40}u_1^{23} - 4194304u_5^3u_3^{40}u_1^{22})x_5^2x_2 - \\ & 4194304u_5^3u_3^{42}u_1^{22}x_5^2 + \\ & (-8388608u_6u_5u_3^{41}u_1^{23} - 33554432u_5u_3^{40}u_1^{25} + \\ & 16777216u_5u_3^{40}u_1^{24})x_5x_4x_2 + 8388608u_6u_5u_3^{41}u_1^{23}x_5x_4 + \\ & 4194304u_6u_5^3u_3^{41}u_1^{22}x_5x_2 - 4194304u_6u_5^3u_3^{41}u_1^{22}x_5 + \\ & (16777216u_6^2u_5u_3^{40}u_1^{24} - 8388608u_6^2u_5u_3^{40}u_1^{23})x_4x_2 \end{aligned}$$

S-pol added.

1202. Creating S-polynomial from the pair  $(p_4, p_{192})$ .

Forming S-pol of  $p_4$  and  $p_{192}$ : Polynomial too big for output (text size is 1236 characters, number of terms is 8)

S-pol added.

1203. Creating S-polynomial from the pair  $(p_4, p_{193})$ .  
 Forming S-pol of  $p_4$  and  $p_{193}$ : Polynomial too big for output (text size is 1256 characters, number of terms is 8)  
 S-pol added.
1204. Creating S-polynomial from the pair  $(p_4, p_{194})$ .  
 Forming S-pol of  $p_4$  and  $p_{194}$ : Polynomial too big for output (text size is 2787 characters, number of terms is 8)  
 S-pol added.
1205. Creating S-polynomial from the pair  $(p_4, p_{195})$ .  
 Forming S-pol of  $p_4$  and  $p_{195}$ : Polynomial too big for output (text size is 1745 characters, number of terms is 8)  
 S-pol added.
1206. Creating S-polynomial from the pair  $(p_4, p_{196})$ .  
 Forming S-pol of  $p_4$  and  $p_{196}$ :  

$$p_{1671} = 16777216u_5u_2^{43}u_1^{24}x_5^2x_4 +$$

$$(16777216u_5^3u_2^{41}u_1^{24} - 8388608u_5^3u_2^{41}u_1^{23})x_5^2x_1 -$$

$$8388608u_5^3u_2^{43}u_1^{23}x_5^2 +$$

$$(-16777216u_6u_5u_2^{42}u_1^{24} - 67108864u_5u_2^{41}u_1^{26} +$$

$$33554432u_5u_2^{41}u_1^{25})x_5x_4x_1 + 16777216u_6u_5u_2^{42}u_1^{24}x_5x_4 +$$

$$8388608u_6u_5^3u_2^{42}u_1^{23}x_5x_1 - 8388608u_6u_5^3u_2^{42}u_1^{23}x_5 +$$

$$(33554432u_6^2u_5u_2^{41}u_1^{25} - 16777216u_6^2u_5u_2^{41}u_1^{24})x_4x_1$$
 S-pol added.
1207. Creating S-polynomial from the pair  $(p_4, p_{197})$ .  
 Forming S-pol of  $p_4$  and  $p_{197}$ : Polynomial too big for output (text size is 1264 characters, number of terms is 8)  
 S-pol added.
1208. Creating S-polynomial from the pair  $(p_4, p_{198})$ .  
 Forming S-pol of  $p_4$  and  $p_{198}$ : Polynomial too big for output (text size is 1264 characters, number of terms is 8)  
 S-pol added.
1209. Creating S-polynomial from the pair  $(p_4, p_{199})$ .  
 Forming S-pol of  $p_4$  and  $p_{199}$ : Polynomial too big for output (text size is 1256 characters, number of terms is 8)  
 S-pol added.

1210. Creating S-polynomial from the pair  $(p_4, p_{200})$ .

Forming S-pol of  $p_4$  and  $p_{200}$ : Polynomial too big for output (text size is 1581 characters, number of terms is 8)

S-pol added.

1211. Creating S-polynomial from the pair  $(p_4, p_{201})$ .

Forming S-pol of  $p_4$  and  $p_{201}$ :

$$\begin{aligned} p_{1672} = & 8388608u_5u_2^{42}u_1^{23}x_5^2x_4 + \\ & (8388608u_5^3u_2^{40}u_1^{23} - 4194304u_5^3u_2^{40}u_1^{22})x_5^2x_1 - \\ & 4194304u_5^3u_2^{42}u_1^{22}x_5^2 + \\ & (-8388608u_6u_5u_2^{41}u_1^{23} - 33554432u_5u_2^{40}u_1^{25} + \\ & 16777216u_5u_2^{40}u_1^{24})x_5x_4x_1 + 8388608u_6u_5u_2^{41}u_1^{23}x_5x_4 + \\ & 4194304u_6u_5^3u_2^{41}u_1^{22}x_5x_1 - 4194304u_6u_5^3u_2^{41}u_1^{22}x_5 + \\ & (16777216u_6^2u_5u_2^{40}u_1^{24} - 8388608u_6^2u_5u_2^{40}u_1^{23})x_4x_1 \end{aligned}$$

S-pol added.

1212. Creating S-polynomial from the pair  $(p_4, p_{202})$ .

Forming S-pol of  $p_4$  and  $p_{202}$ : Polynomial too big for output (text size is 1256 characters, number of terms is 8)

S-pol added.

1213. Creating S-polynomial from the pair  $(p_4, p_{203})$ .

Forming S-pol of  $p_4$  and  $p_{203}$ : Polynomial too big for output (text size is 2787 characters, number of terms is 8)

S-pol added.

1214. Creating S-polynomial from the pair  $(p_4, p_{204})$ .

Forming S-pol of  $p_4$  and  $p_{204}$ : Polynomial too big for output (text size is 1745 characters, number of terms is 8)

S-pol added.

1215. Creating S-polynomial from the pair  $(p_4, p_{205})$ .

Forming S-pol of  $p_4$  and  $p_{205}$ : Polynomial too big for output (text size is 1244 characters, number of terms is 8)

S-pol added.

1216. Creating S-polynomial from the pair  $(p_4, p_{206})$ .

Forming S-pol of  $p_4$  and  $p_{206}$ : Polynomial too big for output (text size is 1244 characters, number of terms is 8)

S-pol added.

1217. Creating S-polynomial from the pair  $(p_4, p_{207})$ .

Forming S-pol of  $p_4$  and  $p_{207}$ :

$$\begin{aligned} p_{1673} = & 16777216u_5u_4^{43}u_1^{24}x_5^2x_4 + \\ & (16777216u_5^3u_4^{41}u_1^{24} - 8388608u_5^3u_4^{41}u_1^{23})x_5^2x_3 - \\ & 8388608u_5^3u_4^{43}u_1^{23}x_5^2 + \\ & (-16777216u_6u_5u_4^{42}u_1^{24} - 67108864u_5u_4^{41}u_1^{26} + \\ & 33554432u_5u_4^{41}u_1^{25})x_5x_4x_3 + 16777216u_6u_5u_4^{42}u_1^{24}x_5x_4 + \\ & 8388608u_6u_5^3u_4^{42}u_1^{23}x_5x_3 - 8388608u_6u_5^3u_4^{42}u_1^{23}x_5 + \\ & (33554432u_6^2u_5u_4^{41}u_1^{25} - 16777216u_6^2u_5u_4^{41}u_1^{24})x_4x_3 \end{aligned}$$

S-pol added.

1218. Creating S-polynomial from the pair  $(p_4, p_{208})$ .

Forming S-pol of  $p_4$  and  $p_{208}$ : Polynomial too big for output (text size is 1236 characters, number of terms is 8)

S-pol added.

1219. Creating S-polynomial from the pair  $(p_4, p_{209})$ .

Forming S-pol of  $p_4$  and  $p_{209}$ : Polynomial too big for output (text size is 1236 characters, number of terms is 8)

S-pol added.

1220. Creating S-polynomial from the pair  $(p_4, p_{210})$ .

Forming S-pol of  $p_4$  and  $p_{210}$ : Polynomial too big for output (text size is 1581 characters, number of terms is 8)

S-pol added.

1221. Creating S-polynomial from the pair  $(p_4, p_{211})$ .

Forming S-pol of  $p_4$  and  $p_{211}$ :

$$\begin{aligned} p_{1674} = & 8388608u_5u_4^{42}u_1^{23}x_5^2x_4 + \\ & (8388608u_5^3u_4^{40}u_1^{23} - 4194304u_5^3u_4^{40}u_1^{22})x_5^2x_3 - \\ & 4194304u_5^3u_4^{42}u_1^{22}x_5^2 + \\ & (-8388608u_6u_5u_4^{41}u_1^{23} - 33554432u_5u_4^{40}u_1^{25} + \\ & 16777216u_5u_4^{40}u_1^{24})x_5x_4x_3 + 8388608u_6u_5u_4^{41}u_1^{23}x_5x_4 + \\ & 4194304u_6u_5^3u_4^{41}u_1^{22}x_5x_3 - 4194304u_6u_5^3u_4^{41}u_1^{22}x_5 + \\ & (16777216u_6^2u_5u_4^{40}u_1^{24} - 8388608u_6^2u_5u_4^{40}u_1^{23})x_4x_3 \end{aligned}$$

S-pol added.

1222. Creating S-polynomial from the pair  $(p_4, p_{212})$ .

Forming S-pol of  $p_4$  and  $p_{212}$ : Polynomial too big for output (text size is 1528 characters, number of terms is 8)

S-pol added.

1223. Creating S-polynomial from the pair  $(p_4, p_{213})$ .  
 Forming S-pol of  $p_4$  and  $p_{213}$ : Polynomial too big for output (text size is 1519 characters, number of terms is 8)  
 S-pol added.
1224. Creating S-polynomial from the pair  $(p_4, p_{214})$ .  
 Forming S-pol of  $p_4$  and  $p_{214}$ : Polynomial too big for output (text size is 10973 characters, number of terms is 16)  
 S-pol added.
1225. Creating S-polynomial from the pair  $(p_4, p_{215})$ .  
 Forming S-pol of  $p_4$  and  $p_{215}$ : Polynomial too big for output (text size is 4965 characters, number of terms is 8)  
 S-pol added.
1226. Creating S-polynomial from the pair  $(p_4, p_{216})$ .  
 Forming S-pol of  $p_4$  and  $p_{216}$ : Polynomial too big for output (text size is 11199 characters, number of terms is 16)  
 S-pol added.
1227. Creating S-polynomial from the pair  $(p_4, p_{217})$ .  
 Forming S-pol of  $p_4$  and  $p_{217}$ : Polynomial too big for output (text size is 2776 characters, number of terms is 8)  
 S-pol added.
1228. Creating S-polynomial from the pair  $(p_4, p_{218})$ .  
 Forming S-pol of  $p_4$  and  $p_{218}$ : Polynomial too big for output (text size is 3879 characters, number of terms is 8)  
 S-pol added.
1229. Creating S-polynomial from the pair  $(p_4, p_{219})$ .  
 Forming S-pol of  $p_4$  and  $p_{219}$ : Polynomial too big for output (text size is 10922 characters, number of terms is 16)  
 S-pol added.
1230. Creating S-polynomial from the pair  $(p_4, p_{220})$ .  
 Forming S-pol of  $p_4$  and  $p_{220}$ : Polynomial too big for output (text size is 11162 characters, number of terms is 16)  
 S-pol added.
1231. Creating S-polynomial from the pair  $(p_4, p_{221})$ .  
 Forming S-pol of  $p_4$  and  $p_{221}$ :

$$\begin{aligned}
 p_{1675} = & (268435456u_5u_3^{45}u_1^{28} + 536870912u_3^{46}u_1^{29})x_5^2x_4 + \\
 & (536870912u_5^2u_3^{44}u_1^{29} - 268435456u_5^2u_3^{44}u_1^{28})x_5^2x_2 - \\
 & 268435456u_5^2u_3^{46}u_1^{28}x_5^2 +
 \end{aligned}$$



$$\begin{aligned}
& (-268435456u_6u_5u_3^{44}u_1^{28} - 536870912u_6u_3^{45}u_1^{29} - 536870912u_5u_3^{45}u_1^{29} - \\
& 2147483648u_3^{44}u_1^{31} + 1073741824u_3^{44}u_1^{30})x_5x_4x_2 + \\
& (-268435456u_6u_5u_3^{46}u_1^{28} + 536870912u_6u_5u_3^{44}u_1^{29} + \\
& 536870912u_6u_3^{45}u_1^{29})x_5x_4 + 268435456u_6u_5^2u_3^{45}u_1^{28}x_5x_2 - \\
& 268435456u_6u_5^2u_3^{45}u_1^{28}x_5 + \\
& (268435456u_6^2u_5u_3^{45}u_1^{28} + 1073741824u_6^2u_3^{44}u_1^{30} - \\
& 536870912u_6^2u_3^{44}u_1^{29})x_4x_2
\end{aligned}$$

S-pol added.

1232. Creating S-polynomial from the pair  $(p_4, p_{222})$ .

Forming S-pol of  $p_4$  and  $p_{222}$ :

$$\begin{aligned}
p_{1676} = & (536870912u_5u_3^{50}u_1^{29} + 1073741824u_3^{51}u_1^{30})x_5^2x_4 + \\
& (1073741824u_5^2u_3^{49}u_1^{30} - 536870912u_5^2u_3^{49}u_1^{29})x_5^2x_2 - \\
& 536870912u_5^2u_3^{51}u_1^{29}x_5^2 + \\
& (-536870912u_6u_5u_3^{49}u_1^{29} - 1073741824u_6u_3^{50}u_1^{30} - 1073741824u_5u_3^{50}u_1^{30} - \\
& 4294967296u_3^{49}u_1^{32} + 2147483648u_3^{49}u_1^{31})x_5x_4x_2 + \\
& (-536870912u_6u_5u_3^{51}u_1^{29} + 1073741824u_6u_5u_3^{49}u_1^{30} + \\
& 1073741824u_6u_3^{50}u_1^{30})x_5x_4 + 536870912u_6u_5^2u_3^{50}u_1^{29}x_5x_2 - \\
& 536870912u_6u_5^2u_3^{50}u_1^{29}x_5 + \\
& (536870912u_6^2u_5u_3^{50}u_1^{29} + 2147483648u_6^2u_3^{49}u_1^{31} - \\
& 1073741824u_6^2u_3^{49}u_1^{30})x_4x_2
\end{aligned}$$

S-pol added.

1233. Creating S-polynomial from the pair  $(p_4, p_{223})$ .

Forming S-pol of  $p_4$  and  $p_{223}$ : Polynomial too big for output (text size is 1508 characters, number of terms is 8)

S-pol added.

1234. Creating S-polynomial from the pair  $(p_4, p_{224})$ .

Forming S-pol of  $p_4$  and  $p_{224}$ : Polynomial too big for output (text size is 1500 characters, number of terms is 8)

S-pol added.

1235. Creating S-polynomial from the pair  $(p_4, p_{225})$ .

Forming S-pol of  $p_4$  and  $p_{225}$ :

$$\begin{aligned}
p_{1677} = & (-16777216u_6u_3^{43}u_1^{23} - 67108864u_6u_3^{41}u_1^{25} - 16777216u_3^{44}u_1^{24} - \\
& 67108864u_3^{42}u_1^{26})x_5^2x_4 + \\
& (-16777216u_6^2u_3^{42}u_1^{24} + 16777216u_6^2u_3^{42}u_1^{23} - 67108864u_6^2u_3^{40}u_1^{26} + \\
& 67108864u_6^2u_3^{40}u_1^{25} + 33554432u_6u_3^{43}u_1^{24} + 134217728u_6u_3^{41}u_1^{26} + \\
& 67108864u_3^{42}u_1^{26} - 33554432u_3^{42}u_1^{25} + 268435456u_3^{40}u_1^{28} - \\
& 134217728u_3^{40}u_1^{27})x_5x_4x_2 + \\
& (16777216u_6^2u_3^{44}u_1^{23} + 67108864u_6^2u_3^{42}u_1^{25} - 16777216u_6^2u_3^{42}u_1^{24} - \\
& 67108864u_6^2u_3^{40}u_1^{26})x_5x_4 + \\
& (-16777216u_6^3u_3^{43}u_1^{23} - 67108864u_6^3u_3^{41}u_1^{25} - 33554432u_6^2u_3^{42}u_1^{25} + \\
& 16777216u_6^2u_3^{42}u_1^{24} - 134217728u_6^2u_3^{40}u_1^{27} + \\
& 67108864u_6^2u_3^{40}u_1^{26})x_4x_2
\end{aligned}$$

S-pol added.

1236. Creating S-polynomial from the pair  $(p_4, p_{226})$ .

Forming S-pol of  $p_4$  and  $p_{226}$ :

$$\begin{aligned}
p_{1678} = & (-8388608u_6u_3^{42}u_1^{22} - 33554432u_6u_3^{40}u_1^{24} - 8388608u_3^{43}u_1^{23} - \\
& 33554432u_3^{41}u_1^{25})x_5^2x_4 + \\
& (-8388608u_6^2u_3^{41}u_1^{23} + 8388608u_6^2u_3^{41}u_1^{22} - 33554432u_6^2u_3^{39}u_1^{25} + \\
& 33554432u_6^2u_3^{39}u_1^{24} + 16777216u_6u_3^{42}u_1^{23} + 67108864u_6u_3^{40}u_1^{25} + \\
& 33554432u_3^{41}u_1^{25} - 16777216u_3^{41}u_1^{24} + 134217728u_3^{39}u_1^{27} - \\
& 67108864u_3^{39}u_1^{26})x_5x_4x_2 + \\
& (8388608u_6^2u_3^{43}u_1^{22} + 33554432u_6^2u_3^{41}u_1^{24} - 8388608u_6^2u_3^{41}u_1^{23} - \\
& 33554432u_6^2u_3^{39}u_1^{25})x_5x_4 + \\
& (-8388608u_6^3u_3^{42}u_1^{22} - 33554432u_6^3u_3^{40}u_1^{24} - 16777216u_6^2u_3^{41}u_1^{24} + \\
& 8388608u_6^2u_3^{41}u_1^{23} - 67108864u_6^2u_3^{39}u_1^{26} + \\
& 33554432u_6^2u_3^{39}u_1^{25})x_4x_2
\end{aligned}$$

S-pol added.

1237. Creating S-polynomial from the pair  $(p_4, p_{227})$ .

Forming S-pol of  $p_4$  and  $p_{227}$ :

$$\begin{aligned}
p_{1679} = & (268435456u_5u_3^{45}u_1^{28} + 536870912u_3^{46}u_1^{29})x_5^2x_4 + \\
& (536870912u_5^2u_3^{44}u_1^{29} - 268435456u_5^2u_3^{44}u_1^{28})x_5^2x_2 - \\
& 268435456u_5^2u_3^{46}u_1^{28}x_5^2 + \\
& (-268435456u_6u_5u_3^{44}u_1^{28} - 536870912u_6u_3^{45}u_1^{29} - 536870912u_5u_3^{45}u_1^{29} - \\
& 2147483648u_3^{44}u_1^{31} + 1073741824u_3^{44}u_1^{30})x_5x_4x_2 + \\
& (-268435456u_6u_5u_3^{46}u_1^{28} + 536870912u_6u_5u_3^{44}u_1^{29} + \\
& 536870912u_6u_3^{45}u_1^{29})x_5x_4 + 268435456u_6u_5^2u_3^{45}u_1^{28}x_5x_2 - \\
& 268435456u_6u_5^2u_3^{45}u_1^{28}x_5 + \\
& (268435456u_6^2u_5u_3^{45}u_1^{28} + 1073741824u_6^2u_3^{44}u_1^{30} - \\
& 536870912u_6^2u_3^{44}u_1^{29})x_4x_2
\end{aligned}$$

S-pol added.

1238. Creating S-polynomial from the pair  $(p_4, p_{228})$ .

Forming S-pol of  $p_4$  and  $p_{228}$ :

$$\begin{aligned}
p_{1680} = & (134217728u_5u_3^{44}u_1^{27} + 268435456u_3^{45}u_1^{28})x_5^2x_4 + \\
& (268435456u_5^2u_3^{43}u_1^{28} - 134217728u_5^2u_3^{43}u_1^{27})x_5^2x_2 - \\
& 134217728u_5^2u_3^{45}u_1^{27}x_5^2 + \\
& (-134217728u_6u_5u_3^{43}u_1^{27} - 268435456u_6u_3^{44}u_1^{28} - 268435456u_5u_3^{44}u_1^{28} - \\
& 1073741824u_3^{43}u_1^{30} + 536870912u_3^{43}u_1^{29})x_5x_4x_2 + \\
& (-134217728u_6u_5u_3^{45}u_1^{27} + 268435456u_6u_5u_3^{43}u_1^{28} + \\
& 268435456u_6u_3^{44}u_1^{28})x_5x_4 + 134217728u_6u_5^2u_3^{44}u_1^{27}x_5x_2 - \\
& 134217728u_6u_5^2u_3^{44}u_1^{27}x_5 + \\
& (134217728u_6^2u_5u_3^{44}u_1^{27} + 536870912u_6^2u_3^{43}u_1^{29} - \\
& 268435456u_6^2u_3^{43}u_1^{28})x_4x_2
\end{aligned}$$

S-pol added.

1239. Creating S-polynomial from the pair  $(p_4, p_{229})$ .

Forming S-pol of  $p_4$  and  $p_{229}$ : Polynomial too big for output (text size is 5433 characters, number of terms is 8)

S-pol added.

1240. Creating S-polynomial from the pair  $(p_4, p_{230})$ .

Forming S-pol of  $p_4$  and  $p_{230}$ : Polynomial too big for output (text size is 3055 characters, number of terms is 8)

S-pol added.

1241. Creating S-polynomial from the pair  $(p_4, p_{231})$ .  
Forming S-pol of  $p_4$  and  $p_{231}$ : Polynomial too big for output (text size is 5806 characters, number of terms is 8)  
S-pol added.
1242. Creating S-polynomial from the pair  $(p_4, p_{232})$ .  
Forming S-pol of  $p_4$  and  $p_{232}$ : Polynomial too big for output (text size is 1631 characters, number of terms is 8)  
S-pol added.
1243. Creating S-polynomial from the pair  $(p_4, p_{233})$ .  
Forming S-pol of  $p_4$  and  $p_{233}$ : Polynomial too big for output (text size is 2289 characters, number of terms is 8)  
S-pol added.
1244. Creating S-polynomial from the pair  $(p_4, p_{234})$ .  
Forming S-pol of  $p_4$  and  $p_{234}$ : Polynomial too big for output (text size is 5409 characters, number of terms is 8)  
S-pol added.
1245. Creating S-polynomial from the pair  $(p_4, p_{235})$ .  
Forming S-pol of  $p_4$  and  $p_{235}$ : Polynomial too big for output (text size is 5784 characters, number of terms is 8)  
S-pol added.
1246. Creating S-polynomial from the pair  $(p_4, p_{236})$ .  
Forming S-pol of  $p_4$  and  $p_{236}$ :  

$$p_{1681} = (8388608u_6u_3^{37}u_1^{22} + 8388608u_3^{38}u_1^{23})x_5^2x_4 +$$

$$(8388608u_6^2u_3^{36}u_1^{23} - 8388608u_6^2u_3^{36}u_1^{22} - 16777216u_6u_3^{37}u_1^{23} -$$

$$33554432u_3^{36}u_1^{25} + 16777216u_3^{36}u_1^{24})x_5x_4x_2 +$$

$$(-8388608u_6^2u_3^{38}u_1^{22} + 8388608u_6^2u_3^{36}u_1^{23})x_5x_4 +$$

$$(8388608u_6^3u_3^{37}u_1^{22} + 16777216u_6^2u_3^{36}u_1^{24} -$$

$$8388608u_6^2u_3^{36}u_1^{23})x_4x_2$$
S-pol added.
1247. Creating S-polynomial from the pair  $(p_4, p_{237})$ .  
Forming S-pol of  $p_4$  and  $p_{237}$ :  

$$p_{1682} = (4194304u_6u_3^{36}u_1^{21} + 4194304u_3^{37}u_1^{22})x_5^2x_4 +$$

$$(4194304u_6^2u_3^{35}u_1^{22} - 4194304u_6^2u_3^{35}u_1^{21} - 8388608u_6u_3^{36}u_1^{22} -$$

$$16777216u_3^{35}u_1^{24} + 8388608u_3^{35}u_1^{23})x_5x_4x_2 +$$

$$(-4194304u_6^2u_3^{37}u_1^{21} + 4194304u_6^2u_3^{35}u_1^{22})x_5x_4 +$$

$$(4194304u_6^3u_3^{36}u_1^{21} + 8388608u_6^2u_3^{35}u_1^{23} -$$

$$4194304u_6^2u_3^{35}u_1^{22})x_4x_2$$
S-pol added.

1248. Creating S-polynomial from the pair  $(p_4, p_{238})$ .  
 Forming S-pol of  $p_4$  and  $p_{238}$ : Polynomial too big for output (text size is 1528 characters, number of terms is 8)  
 S-pol added.
1249. Creating S-polynomial from the pair  $(p_4, p_{239})$ .  
 Forming S-pol of  $p_4$  and  $p_{239}$ : Polynomial too big for output (text size is 1519 characters, number of terms is 8)  
 S-pol added.
1250. Creating S-polynomial from the pair  $(p_4, p_{240})$ .  
 Forming S-pol of  $p_4$  and  $p_{240}$ : Polynomial too big for output (text size is 4965 characters, number of terms is 8)  
 S-pol added.
1251. Creating S-polynomial from the pair  $(p_4, p_{241})$ .  
 Forming S-pol of  $p_4$  and  $p_{241}$ : Polynomial too big for output (text size is 11199 characters, number of terms is 16)  
 S-pol added.
1252. Creating S-polynomial from the pair  $(p_4, p_{242})$ .  
 Forming S-pol of  $p_4$  and  $p_{242}$ : Polynomial too big for output (text size is 11199 characters, number of terms is 16)  
 S-pol added.
1253. Creating S-polynomial from the pair  $(p_4, p_{243})$ .  
 Forming S-pol of  $p_4$  and  $p_{243}$ : Polynomial too big for output (text size is 11162 characters, number of terms is 16)  
 S-pol added.
1254. Creating S-polynomial from the pair  $(p_4, p_{244})$ .  
 Forming S-pol of  $p_4$  and  $p_{244}$ : Polynomial too big for output (text size is 2776 characters, number of terms is 8)  
 S-pol added.
1255. Creating S-polynomial from the pair  $(p_4, p_{245})$ .  
 Forming S-pol of  $p_4$  and  $p_{245}$ : Polynomial too big for output (text size is 3879 characters, number of terms is 8)  
 S-pol added.
1256. Creating S-polynomial from the pair  $(p_4, p_{246})$ .  
 Forming S-pol of  $p_4$  and  $p_{246}$ : Polynomial too big for output (text size is 11162 characters, number of terms is 16)  
 S-pol added.

1257. Creating S-polynomial from the pair  $(p_4, p_{247})$ .

Forming S-pol of  $p_4$  and  $p_{247}$ :

$$\begin{aligned}
p_{1683} = & (268435456u_5u_2^{45}u_1^{28} + 536870912u_2^{46}u_1^{29})x_5^2x_4 + \\
& (536870912u_5^2u_2^{44}u_1^{29} - 268435456u_5^2u_2^{44}u_1^{28})x_5^2x_1 - \\
& 268435456u_5^2u_2^{46}u_1^{28}x_5^2 + \\
& (-268435456u_6u_5u_2^{44}u_1^{28} - 536870912u_6u_2^{45}u_1^{29} - 536870912u_5u_2^{45}u_1^{29} - \\
& 2147483648u_2^{44}u_1^{31} + 1073741824u_2^{44}u_1^{30})x_5x_4x_1 + \\
& (-268435456u_6u_5u_2^{46}u_1^{28} + 536870912u_6u_5u_2^{44}u_1^{29} + \\
& 536870912u_6u_2^{45}u_1^{29})x_5x_4 + 268435456u_6u_5^2u_2^{45}u_1^{28}x_5x_1 - \\
& 268435456u_6u_5^2u_2^{45}u_1^{28}x_5 + \\
& (268435456u_6^2u_5u_2^{45}u_1^{28} + 1073741824u_6^2u_2^{44}u_1^{30} - \\
& 536870912u_6^2u_2^{44}u_1^{29})x_4x_1
\end{aligned}$$

S-pol added.

1258. Creating S-polynomial from the pair  $(p_4, p_{248})$ .

Forming S-pol of  $p_4$  and  $p_{248}$ :

$$\begin{aligned}
p_{1684} = & (536870912u_5u_2^{50}u_1^{29} + 1073741824u_2^{51}u_1^{30})x_5^2x_4 + \\
& (1073741824u_5^2u_2^{49}u_1^{30} - 536870912u_5^2u_2^{49}u_1^{29})x_5^2x_1 - \\
& 536870912u_5^2u_2^{51}u_1^{29}x_5^2 + \\
& (-536870912u_6u_5u_2^{49}u_1^{29} - 1073741824u_6u_2^{50}u_1^{30} - 1073741824u_5u_2^{50}u_1^{30} - \\
& 4294967296u_2^{49}u_1^{32} + 2147483648u_2^{49}u_1^{31})x_5x_4x_1 + \\
& (-536870912u_6u_5u_2^{51}u_1^{29} + 1073741824u_6u_5u_2^{49}u_1^{30} + \\
& 1073741824u_6u_2^{50}u_1^{30})x_5x_4 + 536870912u_6u_5^2u_2^{50}u_1^{29}x_5x_1 - \\
& 536870912u_6u_5^2u_2^{50}u_1^{29}x_5 + \\
& (536870912u_6^2u_5u_2^{50}u_1^{29} + 2147483648u_6^2u_2^{49}u_1^{31} - \\
& 1073741824u_6^2u_2^{49}u_1^{30})x_4x_1
\end{aligned}$$

S-pol added.

1259. Creating S-polynomial from the pair  $(p_4, p_{249})$ .

Forming S-pol of  $p_4$  and  $p_{249}$ : Polynomial too big for output (text size is 1508 characters, number of terms is 8)

S-pol added.

1260. Creating S-polynomial from the pair  $(p_4, p_{250})$ .

Forming S-pol of  $p_4$  and  $p_{250}$ : Polynomial too big for output (text size is 1500 characters, number of terms is 8)

S-pol added.

1261. Creating S-polynomial from the pair  $(p_4, p_{251})$ .

Forming S-pol of  $p_4$  and  $p_{251}$ :

$$\begin{aligned}
p_{1685} = & (-16777216u_6u_2^{43}u_1^{23} - 67108864u_6u_2^{41}u_1^{25} - 16777216u_2^{44}u_1^{24} - \\
& 67108864u_2^{42}u_1^{26})x_5^2x_4 + \\
& (-16777216u_6^2u_2^{42}u_1^{24} + 16777216u_6^2u_2^{42}u_1^{23} - 67108864u_6^2u_2^{40}u_1^{26} + \\
& 67108864u_6^2u_2^{40}u_1^{25} + 33554432u_6u_2^{43}u_1^{24} + 134217728u_6u_2^{41}u_1^{26} + \\
& 67108864u_2^{42}u_1^{26} - 33554432u_2^{42}u_1^{25} + 268435456u_2^{40}u_1^{28} - \\
& 134217728u_2^{40}u_1^{27})x_5x_4x_1 + \\
& (16777216u_6^2u_2^{44}u_1^{23} + 67108864u_6^2u_2^{42}u_1^{25} - 16777216u_6^2u_2^{42}u_1^{24} - \\
& 67108864u_6^2u_2^{40}u_1^{26})x_5x_4 + \\
& (-16777216u_6^3u_2^{43}u_1^{23} - 67108864u_6^3u_2^{41}u_1^{25} - 33554432u_6^2u_2^{42}u_1^{25} + \\
& 16777216u_6^2u_2^{42}u_1^{24} - 134217728u_6^2u_2^{40}u_1^{27} + \\
& 67108864u_6^2u_2^{40}u_1^{26})x_4x_1
\end{aligned}$$

S-pol added.

1262. Creating S-polynomial from the pair  $(p_4, p_{252})$ .

Forming S-pol of  $p_4$  and  $p_{252}$ :

$$\begin{aligned}
p_{1686} = & (-8388608u_6u_2^{42}u_1^{22} - 33554432u_6u_2^{40}u_1^{24} - 8388608u_2^{43}u_1^{23} - \\
& 33554432u_2^{41}u_1^{25})x_5^2x_4 + \\
& (-8388608u_6^2u_2^{41}u_1^{23} + 8388608u_6^2u_2^{41}u_1^{22} - 33554432u_6^2u_2^{39}u_1^{25} + \\
& 33554432u_6^2u_2^{39}u_1^{24} + 16777216u_6u_2^{42}u_1^{23} + 67108864u_6u_2^{40}u_1^{25} + \\
& 33554432u_2^{41}u_1^{25} - 16777216u_2^{41}u_1^{24} + 134217728u_2^{39}u_1^{27} - \\
& 67108864u_2^{39}u_1^{26})x_5x_4x_1 + \\
& (8388608u_6^2u_2^{43}u_1^{22} + 33554432u_6^2u_2^{41}u_1^{24} - 8388608u_6^2u_2^{41}u_1^{23} - \\
& 33554432u_6^2u_2^{39}u_1^{25})x_5x_4 + \\
& (-8388608u_6^3u_2^{42}u_1^{22} - 33554432u_6^3u_2^{40}u_1^{24} - 16777216u_6^2u_2^{41}u_1^{24} + \\
& 8388608u_6^2u_2^{41}u_1^{23} - 67108864u_6^2u_2^{39}u_1^{26} + \\
& 33554432u_6^2u_2^{39}u_1^{25})x_4x_1
\end{aligned}$$

S-pol added.

1263. Creating S-polynomial from the pair  $(p_4, p_{253})$ .

Forming S-pol of  $p_4$  and  $p_{253}$ :

$$\begin{aligned}
p_{1687} = & (268435456u_5u_2^{45}u_1^{28} + 536870912u_2^{46}u_1^{29})x_5^2x_4 + \\
& (536870912u_5^2u_2^{44}u_1^{29} - 268435456u_5^2u_2^{44}u_1^{28})x_5^2x_1 - \\
& 268435456u_5^2u_2^{46}u_1^{28}x_5^2 + \\
& (-268435456u_6u_5u_2^{44}u_1^{28} - 536870912u_6u_2^{45}u_1^{29} - 536870912u_5u_2^{45}u_1^{29} - \\
& 2147483648u_2^{44}u_1^{31} + 1073741824u_2^{44}u_1^{30})x_5x_4x_1 + \\
& (-268435456u_6u_5u_2^{46}u_1^{28} + 536870912u_6u_5u_2^{44}u_1^{29} + \\
& 536870912u_6u_2^{45}u_1^{29})x_5x_4 + 268435456u_6u_5^2u_2^{45}u_1^{28}x_5x_1 - \\
& 268435456u_6u_5^2u_2^{45}u_1^{28}x_5 + \\
& (268435456u_6^2u_5u_2^{45}u_1^{28} + 1073741824u_6^2u_2^{44}u_1^{30} - \\
& 536870912u_6^2u_2^{44}u_1^{29})x_4x_1
\end{aligned}$$

S-pol added.

1264. Creating S-polynomial from the pair  $(p_4, p_{254})$ .

Forming S-pol of  $p_4$  and  $p_{254}$ :

$$\begin{aligned}
p_{1688} = & (134217728u_5u_2^{44}u_1^{27} + 268435456u_2^{45}u_1^{28})x_5^2x_4 + \\
& (268435456u_5^2u_2^{43}u_1^{28} - 134217728u_5^2u_2^{43}u_1^{27})x_5^2x_1 - \\
& 134217728u_5^2u_2^{45}u_1^{27}x_5^2 + \\
& (-134217728u_6u_5u_2^{43}u_1^{27} - 268435456u_6u_2^{44}u_1^{28} - 268435456u_5u_2^{44}u_1^{28} - \\
& 1073741824u_2^{43}u_1^{30} + 536870912u_2^{43}u_1^{29})x_5x_4x_1 + \\
& (-134217728u_6u_5u_2^{45}u_1^{27} + 268435456u_6u_5u_2^{43}u_1^{28} + \\
& 268435456u_6u_2^{44}u_1^{28})x_5x_4 + 134217728u_6u_5^2u_2^{44}u_1^{27}x_5x_1 - \\
& 134217728u_6u_5^2u_2^{44}u_1^{27}x_5 + \\
& (134217728u_6^2u_5u_2^{44}u_1^{27} + 536870912u_6^2u_2^{43}u_1^{29} - \\
& 268435456u_6^2u_2^{43}u_1^{28})x_4x_1
\end{aligned}$$

S-pol added.

1265. Creating S-polynomial from the pair  $(p_4, p_{255})$ .

Forming S-pol of  $p_4$  and  $p_{255}$ : Polynomial too big for output (text size is 3055 characters, number of terms is 8)

S-pol added.

1266. Creating S-polynomial from the pair  $(p_4, p_{256})$ .

Forming S-pol of  $p_4$  and  $p_{256}$ : Polynomial too big for output (text size is 5806 characters, number of terms is 8)

S-pol added.



1267. Creating S-polynomial from the pair  $(p_4, p_{257})$ .  
Forming S-pol of  $p_4$  and  $p_{257}$ : Polynomial too big for output (text size is 5806 characters, number of terms is 8)  
S-pol added.
1268. Creating S-polynomial from the pair  $(p_4, p_{258})$ .  
Forming S-pol of  $p_4$  and  $p_{258}$ : Polynomial too big for output (text size is 5784 characters, number of terms is 8)  
S-pol added.
1269. Creating S-polynomial from the pair  $(p_4, p_{259})$ .  
Forming S-pol of  $p_4$  and  $p_{259}$ : Polynomial too big for output (text size is 1631 characters, number of terms is 8)  
S-pol added.
1270. Creating S-polynomial from the pair  $(p_4, p_{260})$ .  
Forming S-pol of  $p_4$  and  $p_{260}$ : Polynomial too big for output (text size is 2289 characters, number of terms is 8)  
S-pol added.
1271. Creating S-polynomial from the pair  $(p_4, p_{261})$ .  
Forming S-pol of  $p_4$  and  $p_{261}$ : Polynomial too big for output (text size is 5784 characters, number of terms is 8)  
S-pol added.
1272. Creating S-polynomial from the pair  $(p_4, p_{262})$ .  
Forming S-pol of  $p_4$  and  $p_{262}$ :  

$$p_{1689} = (8388608u_6u_2^{37}u_1^{22} + 8388608u_2^{38}u_1^{23})x_5^2x_4 +$$

$$(8388608u_6^2u_2^{36}u_1^{23} - 8388608u_6^2u_2^{36}u_1^{22} - 16777216u_6u_2^{37}u_1^{23} -$$

$$33554432u_2^{36}u_1^{25} + 16777216u_2^{36}u_1^{24})x_5x_4x_1 +$$

$$(-8388608u_6^2u_2^{38}u_1^{22} + 8388608u_6^2u_2^{36}u_1^{23})x_5x_4 +$$

$$(8388608u_6^3u_2^{37}u_1^{22} + 16777216u_6^2u_2^{36}u_1^{24} -$$

$$8388608u_6^2u_2^{36}u_1^{23})x_4x_1$$
  
S-pol added.
1273. Creating S-polynomial from the pair  $(p_4, p_{263})$ .  
Forming S-pol of  $p_4$  and  $p_{263}$ :  

$$p_{1690} = (4194304u_6u_2^{36}u_1^{21} + 4194304u_2^{37}u_1^{22})x_5^2x_4 +$$

$$(4194304u_6^2u_2^{35}u_1^{22} - 4194304u_6^2u_2^{35}u_1^{21} - 8388608u_6u_2^{36}u_1^{22} -$$

$$16777216u_2^{35}u_1^{24} + 8388608u_2^{35}u_1^{23})x_5x_4x_1 +$$

$$(-4194304u_6^2u_2^{37}u_1^{21} + 4194304u_6^2u_2^{35}u_1^{22})x_5x_4 +$$

$$(4194304u_6^3u_2^{36}u_1^{21} + 8388608u_6^2u_2^{35}u_1^{23} -$$

$$4194304u_6^2u_2^{35}u_1^{22})x_4x_1$$
  
S-pol added.

1274. Creating S-polynomial from the pair  $(p_4, p_{264})$ .  
 Forming S-pol of  $p_4$  and  $p_{264}$ : Polynomial too big for output (text size is 1528 characters, number of terms is 8)  
 S-pol added.
1275. Creating S-polynomial from the pair  $(p_4, p_{265})$ .  
 Forming S-pol of  $p_4$  and  $p_{265}$ : Polynomial too big for output (text size is 1519 characters, number of terms is 8)  
 S-pol added.
1276. Creating S-polynomial from the pair  $(p_4, p_{266})$ .  
 Forming S-pol of  $p_4$  and  $p_{266}$ : Polynomial too big for output (text size is 10973 characters, number of terms is 16)  
 S-pol added.
1277. Creating S-polynomial from the pair  $(p_4, p_{267})$ .  
 Forming S-pol of  $p_4$  and  $p_{267}$ : Polynomial too big for output (text size is 10973 characters, number of terms is 16)  
 S-pol added.
1278. Creating S-polynomial from the pair  $(p_4, p_{268})$ .  
 Forming S-pol of  $p_4$  and  $p_{268}$ : Polynomial too big for output (text size is 4965 characters, number of terms is 8)  
 S-pol added.
1279. Creating S-polynomial from the pair  $(p_4, p_{269})$ .  
 Forming S-pol of  $p_4$  and  $p_{269}$ : Polynomial too big for output (text size is 10922 characters, number of terms is 16)  
 S-pol added.
1280. Creating S-polynomial from the pair  $(p_4, p_{270})$ .  
 Forming S-pol of  $p_4$  and  $p_{270}$ : Polynomial too big for output (text size is 10922 characters, number of terms is 16)  
 S-pol added.
1281. Creating S-polynomial from the pair  $(p_4, p_{271})$ .  
 Forming S-pol of  $p_4$  and  $p_{271}$ : Polynomial too big for output (text size is 2776 characters, number of terms is 8)  
 S-pol added.
1282. Creating S-polynomial from the pair  $(p_4, p_{272})$ .  
 Forming S-pol of  $p_4$  and  $p_{272}$ : Polynomial too big for output (text size is 3879 characters, number of terms is 8)  
 S-pol added.

1283. Creating S-polynomial from the pair  $(p_4, p_{273})$ .

Forming S-pol of  $p_4$  and  $p_{273}$ :

$$\begin{aligned}
p_{1691} = & (268435456u_5u_4^{45}u_1^{28} + 536870912u_4^{46}u_1^{29})x_5^2x_4 + \\
& (536870912u_5^2u_4^{44}u_1^{29} - 268435456u_5^2u_4^{44}u_1^{28})x_5^2x_3 - \\
& 268435456u_5^2u_4^{46}u_1^{28}x_5^2 + \\
& (-268435456u_6u_5u_4^{44}u_1^{28} - 536870912u_6u_4^{45}u_1^{29} - 536870912u_5u_4^{45}u_1^{29} - \\
& 2147483648u_4^{44}u_1^{31} + 1073741824u_4^{44}u_1^{30})x_5x_4x_3 + \\
& (-268435456u_6u_5u_4^{46}u_1^{28} + 536870912u_6u_5u_4^{44}u_1^{29} + \\
& 536870912u_6u_4^{45}u_1^{29})x_5x_4 + 268435456u_6u_5^2u_4^{45}u_1^{28}x_5x_3 - \\
& 268435456u_6u_5^2u_4^{45}u_1^{28}x_5 + \\
& (268435456u_6^2u_5u_4^{45}u_1^{28} + 1073741824u_6^2u_4^{44}u_1^{30} - \\
& 536870912u_6^2u_4^{44}u_1^{29})x_4x_3
\end{aligned}$$

S-pol added.

1284. Creating S-polynomial from the pair  $(p_4, p_{274})$ .

Forming S-pol of  $p_4$  and  $p_{274}$ :

$$\begin{aligned}
p_{1692} = & (536870912u_5u_4^{50}u_1^{29} + 1073741824u_4^{51}u_1^{30})x_5^2x_4 + \\
& (1073741824u_5^2u_4^{49}u_1^{30} - 536870912u_5^2u_4^{49}u_1^{29})x_5^2x_3 - \\
& 536870912u_5^2u_4^{51}u_1^{29}x_5^2 + \\
& (-536870912u_6u_5u_4^{49}u_1^{29} - 1073741824u_6u_4^{50}u_1^{30} - 1073741824u_5u_4^{50}u_1^{30} - \\
& 4294967296u_4^{49}u_1^{32} + 2147483648u_4^{49}u_1^{31})x_5x_4x_3 + \\
& (-536870912u_6u_5u_4^{51}u_1^{29} + 1073741824u_6u_5u_4^{49}u_1^{30} + \\
& 1073741824u_6u_4^{50}u_1^{30})x_5x_4 + 536870912u_6u_5^2u_4^{50}u_1^{29}x_5x_3 - \\
& 536870912u_6u_5^2u_4^{50}u_1^{29}x_5 + \\
& (536870912u_6^2u_5u_4^{50}u_1^{29} + 2147483648u_6^2u_4^{49}u_1^{31} - \\
& 1073741824u_6^2u_4^{49}u_1^{30})x_4x_3
\end{aligned}$$

S-pol added.

1285. Creating S-polynomial from the pair  $(p_4, p_{275})$ .

Forming S-pol of  $p_4$  and  $p_{275}$ : Polynomial too big for output (text size is 1508 characters, number of terms is 8)

S-pol added.

1286. Creating S-polynomial from the pair  $(p_4, p_{276})$ .

Forming S-pol of  $p_4$  and  $p_{276}$ : Polynomial too big for output (text size is 1500 characters, number of terms is 8)

S-pol added.

1287. Creating S-polynomial from the pair  $(p_4, p_{277})$ .

Forming S-pol of  $p_4$  and  $p_{277}$ :

$$\begin{aligned}
p_{1693} = & (-16777216u_6u_4^{43}u_1^{23} - 67108864u_6u_4^{41}u_1^{25} - 16777216u_4^{44}u_1^{24} - \\
& 67108864u_4^{42}u_1^{26})x_5^2x_4 + \\
& (-16777216u_6^2u_4^{42}u_1^{24} + 16777216u_6^2u_4^{42}u_1^{23} - 67108864u_6^2u_4^{40}u_1^{26} + \\
& 67108864u_6^2u_4^{40}u_1^{25} + 33554432u_6u_4^{43}u_1^{24} + 134217728u_6u_4^{41}u_1^{26} + \\
& 67108864u_4^{42}u_1^{26} - 33554432u_4^{42}u_1^{25} + 268435456u_4^{40}u_1^{28} - \\
& 134217728u_4^{40}u_1^{27})x_5x_4x_3 + \\
& (16777216u_6^2u_4^{44}u_1^{23} + 67108864u_6^2u_4^{42}u_1^{25} - 16777216u_6^2u_4^{42}u_1^{24} - \\
& 67108864u_6^2u_4^{40}u_1^{26})x_5x_4 + \\
& (-16777216u_6^3u_4^{43}u_1^{23} - 67108864u_6^3u_4^{41}u_1^{25} - 33554432u_6^2u_4^{42}u_1^{25} + \\
& 16777216u_6^2u_4^{42}u_1^{24} - 134217728u_6^2u_4^{40}u_1^{27} + \\
& 67108864u_6^2u_4^{40}u_1^{26})x_4x_3
\end{aligned}$$

S-pol added.

1288. Creating S-polynomial from the pair  $(p_4, p_{278})$ .

Forming S-pol of  $p_4$  and  $p_{278}$ :

$$\begin{aligned}
p_{1694} = & (-8388608u_6u_4^{42}u_1^{22} - 33554432u_6u_4^{40}u_1^{24} - 8388608u_4^{43}u_1^{23} - \\
& 33554432u_4^{41}u_1^{25})x_5^2x_4 + \\
& (-8388608u_6^2u_4^{41}u_1^{23} + 8388608u_6^2u_4^{41}u_1^{22} - 33554432u_6^2u_4^{39}u_1^{25} + \\
& 33554432u_6^2u_4^{39}u_1^{24} + 16777216u_6u_4^{42}u_1^{23} + 67108864u_6u_4^{40}u_1^{25} + \\
& 33554432u_4^{41}u_1^{25} - 16777216u_4^{41}u_1^{24} + 134217728u_4^{39}u_1^{27} - \\
& 67108864u_4^{39}u_1^{26})x_5x_4x_3 + \\
& (8388608u_6^2u_4^{43}u_1^{22} + 33554432u_6^2u_4^{41}u_1^{24} - 8388608u_6^2u_4^{41}u_1^{23} - \\
& 33554432u_6^2u_4^{39}u_1^{25})x_5x_4 + \\
& (-8388608u_6^3u_4^{42}u_1^{22} - 33554432u_6^3u_4^{40}u_1^{24} - 16777216u_6^2u_4^{41}u_1^{24} + \\
& 8388608u_6^2u_4^{41}u_1^{23} - 67108864u_6^2u_4^{39}u_1^{26} + \\
& 33554432u_6^2u_4^{39}u_1^{25})x_4x_3
\end{aligned}$$

S-pol added.

1289. Creating S-polynomial from the pair  $(p_4, p_{279})$ .

Forming S-pol of  $p_4$  and  $p_{279}$ :

$$\begin{aligned}
p_{1695} = & (268435456u_5u_4^{45}u_1^{28} + 536870912u_4^{46}u_1^{29})x_5^2x_4 + \\
& (536870912u_5^2u_4^{44}u_1^{29} - 268435456u_5^2u_4^{44}u_1^{28})x_5^2x_3 - \\
& 268435456u_5^2u_4^{46}u_1^{28}x_5^2 + \\
& (-268435456u_6u_5u_4^{44}u_1^{28} - 536870912u_6u_4^{45}u_1^{29} - 536870912u_5u_4^{45}u_1^{29} - \\
& 2147483648u_4^{44}u_1^{31} + 1073741824u_4^{44}u_1^{30})x_5x_4x_3 + \\
& (-268435456u_6u_5u_4^{46}u_1^{28} + 536870912u_6u_5u_4^{44}u_1^{29} + \\
& 536870912u_6u_4^{45}u_1^{29})x_5x_4 + 268435456u_6u_5^2u_4^{45}u_1^{28}x_5x_3 - \\
& 268435456u_6u_5^2u_4^{45}u_1^{28}x_5 + \\
& (268435456u_6^2u_5u_4^{45}u_1^{28} + 1073741824u_6^2u_4^{44}u_1^{30} - \\
& 536870912u_6^2u_4^{44}u_1^{29})x_4x_3
\end{aligned}$$

S-pol added.

1290. Creating S-polynomial from the pair  $(p_4, p_{280})$ .

Forming S-pol of  $p_4$  and  $p_{280}$ :

$$\begin{aligned}
p_{1696} = & (134217728u_5u_4^{44}u_1^{27} + 268435456u_4^{45}u_1^{28})x_5^2x_4 + \\
& (268435456u_5^2u_4^{43}u_1^{28} - 134217728u_5^2u_4^{43}u_1^{27})x_5^2x_3 - \\
& 134217728u_5^2u_4^{45}u_1^{27}x_5^2 + \\
& (-134217728u_6u_5u_4^{43}u_1^{27} - 268435456u_6u_4^{44}u_1^{28} - 268435456u_5u_4^{44}u_1^{28} - \\
& 1073741824u_4^{43}u_1^{30} + 536870912u_4^{43}u_1^{29})x_5x_4x_3 + \\
& (-134217728u_6u_5u_4^{45}u_1^{27} + 268435456u_6u_5u_4^{43}u_1^{28} + \\
& 268435456u_6u_4^{44}u_1^{28})x_5x_4 + 134217728u_6u_5^2u_4^{44}u_1^{27}x_5x_3 - \\
& 134217728u_6u_5^2u_4^{44}u_1^{27}x_5 + \\
& (134217728u_6^2u_5u_4^{44}u_1^{27} + 536870912u_6^2u_4^{43}u_1^{29} - \\
& 268435456u_6^2u_4^{43}u_1^{28})x_4x_3
\end{aligned}$$

S-pol added.

1291. Creating S-polynomial from the pair  $(p_4, p_{281})$ .

Forming S-pol of  $p_4$  and  $p_{281}$ : Polynomial too big for output (text size is 5433 characters, number of terms is 8)

S-pol added.

1292. Creating S-polynomial from the pair  $(p_4, p_{282})$ .

Forming S-pol of  $p_4$  and  $p_{282}$ : Polynomial too big for output (text size is 5433 characters, number of terms is 8)

S-pol added.

1293. Creating S-polynomial from the pair  $(p_4, p_{283})$ .  
Forming S-pol of  $p_4$  and  $p_{283}$ : Polynomial too big for output (text size is 3055 characters, number of terms is 8)  
S-pol added.
1294. Creating S-polynomial from the pair  $(p_4, p_{284})$ .  
Forming S-pol of  $p_4$  and  $p_{284}$ : Polynomial too big for output (text size is 5409 characters, number of terms is 8)  
S-pol added.
1295. Creating S-polynomial from the pair  $(p_4, p_{285})$ .  
Forming S-pol of  $p_4$  and  $p_{285}$ : Polynomial too big for output (text size is 5409 characters, number of terms is 8)  
S-pol added.
1296. Creating S-polynomial from the pair  $(p_4, p_{286})$ .  
Forming S-pol of  $p_4$  and  $p_{286}$ : Polynomial too big for output (text size is 1631 characters, number of terms is 8)  
S-pol added.
1297. Creating S-polynomial from the pair  $(p_4, p_{287})$ .  
Forming S-pol of  $p_4$  and  $p_{287}$ : Polynomial too big for output (text size is 2289 characters, number of terms is 8)  
S-pol added.
1298. Creating S-polynomial from the pair  $(p_4, p_{288})$ .  
Forming S-pol of  $p_4$  and  $p_{288}$ :  

$$p_{1697} = (8388608u_6u_4^{37}u_1^{22} + 8388608u_4^{38}u_1^{23})x_5^2x_4 +$$

$$(8388608u_6^2u_4^{36}u_1^{23} - 8388608u_6^2u_4^{36}u_1^{22} - 16777216u_6u_4^{37}u_1^{23} -$$

$$33554432u_4^{36}u_1^{25} + 16777216u_4^{36}u_1^{24})x_5x_4x_3 +$$

$$(-8388608u_6^2u_4^{38}u_1^{22} + 8388608u_6^2u_4^{36}u_1^{23})x_5x_4 +$$

$$(8388608u_6^3u_4^{37}u_1^{22} + 16777216u_6^2u_4^{36}u_1^{24} -$$

$$8388608u_6^2u_4^{36}u_1^{23})x_4x_3$$
S-pol added.
1299. Creating S-polynomial from the pair  $(p_4, p_{289})$ .  
Forming S-pol of  $p_4$  and  $p_{289}$ :  

$$p_{1698} = (4194304u_6u_4^{36}u_1^{21} + 4194304u_4^{37}u_1^{22})x_5^2x_4 +$$

$$(4194304u_6^2u_4^{35}u_1^{22} - 4194304u_6^2u_4^{35}u_1^{21} - 8388608u_6u_4^{36}u_1^{22} -$$

$$16777216u_4^{35}u_1^{24} + 8388608u_4^{35}u_1^{23})x_5x_4x_3 +$$

$$(-4194304u_6^2u_4^{37}u_1^{21} + 4194304u_6^2u_4^{35}u_1^{22})x_5x_4 +$$

$$(4194304u_6^3u_4^{36}u_1^{21} + 8388608u_6^2u_4^{35}u_1^{23} -$$

$$4194304u_6^2u_4^{35}u_1^{22})x_4x_3$$
S-pol added.

1300. Creating S-polynomial from the pair  $(p_4, p_{290})$ .

Forming S-pol of  $p_4$  and  $p_{290}$ :

$$\begin{aligned} p_{1699} = & -8388608u_5u_2^{35}u_1^{23}x_5^2x_4 + \\ & (8388608u_6u_5u_2^{34}u_1^{23} + 33554432u_5u_2^{33}u_1^{25} - \\ & 16777216u_5u_2^{33}u_1^{24})x_5x_4x_1 - 8388608u_6u_5u_2^{34}u_1^{23}x_5x_4 + \\ & (-16777216u_6^2u_5u_2^{33}u_1^{24} + 8388608u_6^2u_5u_2^{33}u_1^{23})x_4x_1 \end{aligned}$$

S-pol added.

1301. Creating S-polynomial from the pair  $(p_4, p_{291})$ .

Forming S-pol of  $p_4$  and  $p_{291}$ :

$$\begin{aligned} p_{1700} = & -4194304u_5u_2^{34}u_1^{22}x_5^2x_4 + \\ & (4194304u_6u_5u_2^{33}u_1^{22} + 16777216u_5u_2^{32}u_1^{24} - 8388608u_5u_2^{32}u_1^{23})x_5x_4x_1 - \\ & 4194304u_6u_5u_2^{33}u_1^{22}x_5x_4 + \\ & (-8388608u_6^2u_5u_2^{32}u_1^{23} + 4194304u_6^2u_5u_2^{32}u_1^{22})x_4x_1 \end{aligned}$$

S-pol added.

1302. Creating S-polynomial from the pair  $(p_4, p_{292})$ .

Forming S-pol of  $p_4$  and  $p_{292}$ :

$$\begin{aligned} p_{1701} = & (70368744177664u_5^2u_2^{75}u_1^{46} + 140737488355328u_5u_2^{76}u_1^{47})x_5^2x_4 + \\ & (140737488355328u_5^3u_2^{74}u_1^{47} - 70368744177664u_5^3u_2^{74}u_1^{46})x_5^2x_1 - \\ & 70368744177664u_5^3u_2^{76}u_1^{46}x_5^2 + \\ & (-70368744177664u_6u_5^2u_2^{74}u_1^{46} - 140737488355328u_6u_5u_2^{75}u_1^{47} - \\ & 140737488355328u_5^2u_2^{75}u_1^{47} - 562949953421312u_5u_2^{74}u_1^{49} + \\ & 281474976710656u_5u_2^{74}u_1^{48})x_5x_4x_1 + \\ & (-70368744177664u_6u_5^2u_2^{76}u_1^{46} + 140737488355328u_6u_5^2u_2^{74}u_1^{47} + \\ & 140737488355328u_6u_5u_2^{75}u_1^{47})x_5x_4 + 70368744177664u_6u_5^3u_2^{75}u_1^{46}x_5x_1 - \\ & 70368744177664u_6u_5^3u_2^{75}u_1^{46}x_5 + \\ & (70368744177664u_6^2u_5^2u_2^{75}u_1^{46} + 281474976710656u_6^2u_5u_2^{74}u_1^{48} - \\ & 140737488355328u_6^2u_5u_2^{74}u_1^{47})x_4x_1 \end{aligned}$$

S-pol added.

1303. Creating S-polynomial from the pair  $(p_4, p_{293})$ .

Forming S-pol of  $p_4$  and  $p_{293}$ :

$$\begin{aligned}
p_{1702} = & (35184372088832u_5^2u_2^{74}u_1^{45} + 70368744177664u_5u_2^{75}u_1^{46})x_5^2x_4 + \\
& (70368744177664u_5^3u_2^{73}u_1^{46} - 35184372088832u_5^3u_2^{73}u_1^{45})x_5^2x_1 - \\
& 35184372088832u_5^3u_2^{75}u_1^{45}x_5^2 + \\
& (-35184372088832u_6u_5^2u_2^{73}u_1^{45} - 70368744177664u_6u_5u_2^{74}u_1^{46} - \\
& 70368744177664u_5^2u_2^{74}u_1^{46} - 281474976710656u_5u_2^{73}u_1^{48} + \\
& 140737488355328u_5u_2^{73}u_1^{47})x_5x_4x_1 + \\
& (-35184372088832u_6u_5^2u_2^{75}u_1^{45} + 70368744177664u_6u_5^2u_2^{73}u_1^{46} + \\
& 70368744177664u_6u_5u_2^{74}u_1^{46})x_5x_4 + 35184372088832u_6u_5^3u_2^{74}u_1^{45}x_5x_1 - \\
& 35184372088832u_6u_5^3u_2^{74}u_1^{45}x_5 + \\
& (35184372088832u_6^2u_5^2u_2^{74}u_1^{45} + 140737488355328u_6^2u_5u_2^{73}u_1^{47} - \\
& 70368744177664u_6^2u_5u_2^{73}u_1^{46})x_4x_1
\end{aligned}$$

S-pol added.

1304. Creating S-polynomial from the pair  $(p_4, p_{294})$ .

Forming S-pol of  $p_4$  and  $p_{294}$ :

$$\begin{aligned}
p_{1703} = & (536870912u_5u_2^{45}u_1^{29} + 1073741824u_2^{46}u_1^{30})x_5^2x_4 + \\
& (1073741824u_5^2u_2^{44}u_1^{30} - 536870912u_5^2u_2^{44}u_1^{29})x_5^2x_1 - \\
& 536870912u_5^2u_2^{46}u_1^{29}x_5^2 + \\
& (-536870912u_6u_5u_2^{44}u_1^{29} - 1073741824u_6u_2^{45}u_1^{30} - 1073741824u_5u_2^{45}u_1^{30} - \\
& 4294967296u_2^{44}u_1^{32} + 2147483648u_2^{44}u_1^{31})x_5x_4x_1 + \\
& (-536870912u_6u_5u_2^{46}u_1^{29} + 1073741824u_6u_5u_2^{44}u_1^{30} + \\
& 1073741824u_6u_2^{45}u_1^{30})x_5x_4 + 536870912u_6u_5^2u_2^{45}u_1^{29}x_5x_1 - \\
& 536870912u_6u_5^2u_2^{45}u_1^{29}x_5 + \\
& (536870912u_6^2u_5u_2^{45}u_1^{29} + 2147483648u_6^2u_2^{44}u_1^{31} - \\
& 1073741824u_6^2u_2^{44}u_1^{30})x_4x_1
\end{aligned}$$

S-pol added.

1305. Creating S-polynomial from the pair  $(p_4, p_{295})$ .

Forming S-pol of  $p_4$  and  $p_{295}$ :

$$\begin{aligned}
p_{1704} = & (268435456u_5u_2^{44}u_1^{28} + 536870912u_2^{45}u_1^{29})x_5^2x_4 + \\
& (536870912u_5^2u_2^{43}u_1^{29} - 268435456u_5^2u_2^{43}u_1^{28})x_5^2x_1 - \\
& 268435456u_5^2u_2^{45}u_1^{28}x_5^2 + \\
& (-268435456u_6u_5u_2^{43}u_1^{28} - 536870912u_6u_2^{44}u_1^{29} - 536870912u_5u_2^{44}u_1^{29} -
\end{aligned}$$



$$\begin{aligned}
& 2147483648u_2^{43}u_1^{31} + 1073741824u_2^{43}u_1^{30})x_5x_4x_1 + \\
& (-268435456u_6u_5u_2^{45}u_1^{28} + 536870912u_6u_5u_2^{43}u_1^{29} + \\
& 536870912u_6u_2^{44}u_1^{29})x_5x_4 + 268435456u_6u_5^2u_2^{44}u_1^{28}x_5x_1 - \\
& 268435456u_6u_5^2u_2^{44}u_1^{28}x_5 + \\
& (268435456u_6^2u_5u_2^{44}u_1^{28} + 1073741824u_6^2u_2^{43}u_1^{30} - \\
& 536870912u_6^2u_2^{43}u_1^{29})x_4x_1
\end{aligned}$$

S-pol added.

1306. Creating S-polynomial from the pair  $(p_4, p_{296})$ .

Forming S-pol of  $p_4$  and  $p_{296}$ :

$$\begin{aligned}
p_{1705} = & (536870912u_5u_2^{45}u_1^{29} + 1073741824u_2^{46}u_1^{30})x_5^2x_4 + \\
& (1073741824u_5^2u_2^{44}u_1^{30} - 536870912u_5^2u_2^{44}u_1^{29})x_5^2x_1 - \\
& 536870912u_5^2u_2^{46}u_1^{29}x_5^2 + \\
& (-536870912u_6u_5u_2^{44}u_1^{29} - 1073741824u_6u_2^{45}u_1^{30} - 1073741824u_5u_2^{45}u_1^{30} - \\
& 4294967296u_2^{44}u_1^{32} + 2147483648u_2^{44}u_1^{31})x_5x_4x_1 + \\
& (-536870912u_6u_5u_2^{46}u_1^{29} + 1073741824u_6u_5u_2^{44}u_1^{30} + \\
& 1073741824u_6u_2^{45}u_1^{30})x_5x_4 + 536870912u_6u_5^2u_2^{45}u_1^{29}x_5x_1 - \\
& 536870912u_6u_5^2u_2^{45}u_1^{29}x_5 + \\
& (536870912u_6^2u_5u_2^{45}u_1^{29} + 2147483648u_6^2u_2^{44}u_1^{31} - \\
& 1073741824u_6^2u_2^{44}u_1^{30})x_4x_1
\end{aligned}$$

S-pol added.

1307. Creating S-polynomial from the pair  $(p_4, p_{297})$ .

Forming S-pol of  $p_4$  and  $p_{297}$ :

$$\begin{aligned}
p_{1706} = & (1073741824u_5u_2^{50}u_1^{30} + 2147483648u_2^{51}u_1^{31})x_5^2x_4 + \\
& (2147483648u_5^2u_2^{49}u_1^{31} - 1073741824u_5^2u_2^{49}u_1^{30})x_5^2x_1 - \\
& 1073741824u_5^2u_2^{51}u_1^{30}x_5^2 + \\
& (-1073741824u_6u_5u_2^{49}u_1^{30} - 2147483648u_6u_2^{50}u_1^{31} - 2147483648u_5u_2^{50}u_1^{31} - \\
& 8589934592u_2^{49}u_1^{33} + 4294967296u_2^{49}u_1^{32})x_5x_4x_1 + \\
& (-1073741824u_6u_5u_2^{51}u_1^{30} + 2147483648u_6u_5u_2^{49}u_1^{31} + \\
& 2147483648u_6u_2^{50}u_1^{31})x_5x_4 + 1073741824u_6u_5^2u_2^{50}u_1^{30}x_5x_1 - \\
& 1073741824u_6u_5^2u_2^{50}u_1^{30}x_5 + \\
& (1073741824u_6^2u_5u_2^{50}u_1^{30} + 4294967296u_6^2u_2^{49}u_1^{32} - \\
& 2147483648u_6^2u_2^{49}u_1^{31})x_4x_1
\end{aligned}$$

S-pol added.

1308. Creating S-polynomial from the pair  $(p_4, p_{298})$ .

Forming S-pol of  $p_4$  and  $p_{298}$ :

$$\begin{aligned} p_{1707} = & -32768u_2^{25}u_1^{15}x_5^2x_4 + \\ & (32768u_6u_2^{24}u_1^{15} + 131072u_2^{23}u_1^{17} - 65536u_2^{23}u_1^{16})x_5x_4x_1 - \\ & 32768u_6u_2^{24}u_1^{15}x_5x_4 + \\ & (-65536u_6^2u_2^{23}u_1^{16} + 32768u_6^2u_2^{23}u_1^{15})x_4x_1 \end{aligned}$$

S-pol added.

1309. Creating S-polynomial from the pair  $(p_4, p_{299})$ .

Forming S-pol of  $p_4$  and  $p_{299}$ : Polynomial too big for output (text size is 3712 characters, number of terms is 8)

S-pol added.

1310. Creating S-polynomial from the pair  $(p_4, p_{300})$ .

Forming S-pol of  $p_4$  and  $p_{300}$ : Polynomial too big for output (text size is 3712 characters, number of terms is 8)

S-pol added.

1311. Creating S-polynomial from the pair  $(p_4, p_{301})$ .

Forming S-pol of  $p_4$  and  $p_{301}$ : Polynomial too big for output (text size is 6247 characters, number of terms is 16)

S-pol added.

1312. Creating S-polynomial from the pair  $(p_4, p_{302})$ .

Forming S-pol of  $p_4$  and  $p_{302}$ : Polynomial too big for output (text size is 1184 characters, number of terms is 8)

S-pol added.

1313. Creating S-polynomial from the pair  $(p_4, p_{303})$ .

Forming S-pol of  $p_4$  and  $p_{303}$ : Polynomial too big for output (text size is 3274 characters, number of terms is 8)

S-pol added.

1314. Creating S-polynomial from the pair  $(p_4, p_{304})$ .

Forming S-pol of  $p_4$  and  $p_{304}$ : Polynomial too big for output (text size is 2843 characters, number of terms is 8)

S-pol added.

1315. Creating S-polynomial from the pair  $(p_4, p_{305})$ .

Forming S-pol of  $p_4$  and  $p_{305}$ : Polynomial too big for output (text size is 3025 characters, number of terms is 8)

S-pol added.

1316. Creating S-polynomial from the pair  $(p_4, p_{306})$ .

Forming S-pol of  $p_4$  and  $p_{306}$ :

$$\begin{aligned} p_{1708} = & 2097152u_2^{36}u_1^{21}x_5^2x_4 + \\ & (2097152u_5^2u_2^{34}u_1^{21} - 1048576u_5^2u_2^{34}u_1^{20})x_5^2x_1 - \\ & 1048576u_5^2u_2^{36}u_1^{20}x_5^2 + \\ & (-2097152u_6u_2^{35}u_1^{21} - 8388608u_2^{34}u_1^{23} + 4194304u_2^{34}u_1^{22})x_5x_4x_1 + \\ & 2097152u_6u_2^{35}u_1^{21}x_5x_4 + 1048576u_6u_2^{35}u_1^{20}x_5x_1 - \\ & 1048576u_6u_2^{35}u_1^{20}x_5 + \\ & (4194304u_6^2u_2^{34}u_1^{22} - 2097152u_6^2u_2^{34}u_1^{21})x_4x_1 \end{aligned}$$

S-pol added.

1317. Creating S-polynomial from the pair  $(p_4, p_{307})$ .

Forming S-pol of  $p_4$  and  $p_{307}$ :

$$\begin{aligned} p_{1709} = & 4194304u_2^{30}u_1^{22}x_5^2x_4 + \\ & (4194304u_5^2u_2^{28}u_1^{22} - 2097152u_5^2u_2^{28}u_1^{21})x_5^2x_1 - \\ & 2097152u_5^2u_2^{30}u_1^{21}x_5^2 + \\ & (-4194304u_6u_2^{29}u_1^{22} - 16777216u_2^{28}u_1^{24} + 8388608u_2^{28}u_1^{23})x_5x_4x_1 + \\ & 4194304u_6u_2^{29}u_1^{22}x_5x_4 + 2097152u_6u_2^{29}u_1^{21}x_5x_1 - \\ & 2097152u_6u_2^{29}u_1^{21}x_5 + \\ & (8388608u_6^2u_2^{28}u_1^{23} - 4194304u_6^2u_2^{28}u_1^{22})x_4x_1 \end{aligned}$$

S-pol added.

1318. Creating S-polynomial from the pair  $(p_4, p_{308})$ .

Forming S-pol of  $p_4$  and  $p_{308}$ : Polynomial too big for output (text size is 2845 characters, number of terms is 8)

S-pol added.

1319. Creating S-polynomial from the pair  $(p_4, p_{309})$ .

Forming S-pol of  $p_4$  and  $p_{309}$ : Polynomial too big for output (text size is 6247 characters, number of terms is 16)

S-pol added.

1320. Creating S-polynomial from the pair  $(p_4, p_{310})$ .

Forming S-pol of  $p_4$  and  $p_{310}$ : Polynomial too big for output (text size is 1184 characters, number of terms is 8)

S-pol added.

1321. Creating S-polynomial from the pair  $(p_4, p_{311})$ .

Forming S-pol of  $p_4$  and  $p_{311}$ : Polynomial too big for output (text size is 3274 characters, number of terms is 8)

S-pol added.

1322. Creating S-polynomial from the pair  $(p_4, p_{312})$ .

Forming S-pol of  $p_4$  and  $p_{312}$ :

$$\begin{aligned} p_{1710} = & 16384u_2^{24}u_1^{14}x_5^2x_4 + \\ & (-16384u_6u_2^{23}u_1^{14} - 65536u_2^{22}u_1^{16} + 32768u_2^{22}u_1^{15})x_5x_4x_1 + \\ & 16384u_6u_2^{23}u_1^{14}x_5x_4 + \\ & (32768u_6^2u_2^{22}u_1^{15} - 16384u_6^2u_2^{22}u_1^{14})x_4x_1 \end{aligned}$$

S-pol added.

1323. Creating S-polynomial from the pair  $(p_4, p_{313})$ .

Forming S-pol of  $p_4$  and  $p_{313}$ :

$$\begin{aligned} p_{1711} = & -8388608u_5u_3^{35}u_1^{23}x_5^2x_4 + \\ & (8388608u_6u_5u_3^{34}u_1^{23} + 33554432u_5u_3^{33}u_1^{25} - \\ & 16777216u_5u_3^{33}u_1^{24})x_5x_4x_2 - 8388608u_6u_5u_3^{34}u_1^{23}x_5x_4 + \\ & (-16777216u_6^2u_5u_3^{33}u_1^{24} + 8388608u_6^2u_5u_3^{33}u_1^{23})x_4x_2 \end{aligned}$$

S-pol added.

1324. Creating S-polynomial from the pair  $(p_4, p_{314})$ .

Forming S-pol of  $p_4$  and  $p_{314}$ :

$$\begin{aligned} p_{1712} = & -4194304u_5u_3^{34}u_1^{22}x_5^2x_4 + \\ & (4194304u_6u_5u_3^{33}u_1^{22} + 16777216u_5u_3^{32}u_1^{24} - 8388608u_5u_3^{32}u_1^{23})x_5x_4x_2 - \\ & 4194304u_6u_5u_3^{33}u_1^{22}x_5x_4 + \\ & (-8388608u_6^2u_5u_3^{32}u_1^{23} + 4194304u_6^2u_5u_3^{32}u_1^{22})x_4x_2 \end{aligned}$$

S-pol added.

1325. Creating S-polynomial from the pair  $(p_4, p_{315})$ .

Forming S-pol of  $p_4$  and  $p_{315}$ :

$$\begin{aligned} p_{1713} = & (70368744177664u_5^2u_3^{75}u_1^{46} + 140737488355328u_5u_3^{76}u_1^{47})x_5^2x_4 + \\ & (140737488355328u_5^3u_3^{74}u_1^{47} - 70368744177664u_5^3u_3^{74}u_1^{46})x_5^2x_2 - \\ & 70368744177664u_5^3u_3^{76}u_1^{46}x_5^2 + \\ & (-70368744177664u_6u_5^2u_3^{74}u_1^{46} - 140737488355328u_6u_5u_3^{75}u_1^{47} - \\ & 140737488355328u_5^2u_3^{75}u_1^{47} - 562949953421312u_5u_3^{74}u_1^{49} + \\ & 281474976710656u_5u_3^{74}u_1^{48})x_5x_4x_2 + \\ & (-70368744177664u_6u_5^2u_3^{76}u_1^{46} + 140737488355328u_6u_5^2u_3^{74}u_1^{47} + \\ & 140737488355328u_6u_5u_3^{75}u_1^{47})x_5x_4 + 70368744177664u_6u_5^3u_3^{75}u_1^{46}x_5x_2 - \\ & 70368744177664u_6u_5^3u_3^{75}u_1^{46}x_5 + \\ & (70368744177664u_6^2u_5^2u_3^{75}u_1^{46} + 281474976710656u_6^2u_5u_3^{74}u_1^{48} - \\ & 140737488355328u_6^2u_5u_3^{74}u_1^{47})x_4x_2 \end{aligned}$$

S-pol added.

1326. Creating S-polynomial from the pair  $(p_4, p_{316})$ .

Forming S-pol of  $p_4$  and  $p_{316}$ :

$$\begin{aligned}
p_{1714} = & (35184372088832u_5^2u_3^{74}u_1^{45} + 70368744177664u_5u_3^{75}u_1^{46})x_5^2x_4 + \\
& (70368744177664u_5^3u_3^{73}u_1^{46} - 35184372088832u_5^3u_3^{73}u_1^{45})x_5^2x_2 - \\
& 35184372088832u_5^3u_3^{75}u_1^{45}x_5^2 + \\
& (-35184372088832u_6u_5^2u_3^{73}u_1^{45} - 70368744177664u_6u_5u_3^{74}u_1^{46} - \\
& 70368744177664u_5^2u_3^{74}u_1^{46} - 281474976710656u_5u_3^{73}u_1^{48} + \\
& 140737488355328u_5u_3^{73}u_1^{47})x_5x_4x_2 + \\
& (-35184372088832u_6u_5^2u_3^{75}u_1^{45} + 70368744177664u_6u_5^2u_3^{73}u_1^{46} + \\
& 70368744177664u_6u_5u_3^{74}u_1^{46})x_5x_4 + 35184372088832u_6u_5^3u_3^{74}u_1^{45}x_5x_2 - \\
& 35184372088832u_6u_5^3u_3^{74}u_1^{45}x_5 + \\
& (35184372088832u_6^2u_5^2u_3^{74}u_1^{45} + 140737488355328u_6^2u_5u_3^{73}u_1^{47} - \\
& 70368744177664u_6^2u_5u_3^{73}u_1^{46})x_4x_2
\end{aligned}$$

S-pol added.

1327. Creating S-polynomial from the pair  $(p_4, p_{317})$ .

Forming S-pol of  $p_4$  and  $p_{317}$ :

$$\begin{aligned}
p_{1715} = & (536870912u_5u_3^{45}u_1^{29} + 1073741824u_3^{46}u_1^{30})x_5^2x_4 + \\
& (1073741824u_5^2u_3^{44}u_1^{30} - 536870912u_5^2u_3^{44}u_1^{29})x_5^2x_2 - \\
& 536870912u_5^2u_3^{46}u_1^{29}x_5^2 + \\
& (-536870912u_6u_5u_3^{44}u_1^{29} - 1073741824u_6u_3^{45}u_1^{30} - 1073741824u_5u_3^{45}u_1^{30} - \\
& 4294967296u_3^{44}u_1^{32} + 2147483648u_3^{44}u_1^{31})x_5x_4x_2 + \\
& (-536870912u_6u_5u_3^{46}u_1^{29} + 1073741824u_6u_5u_3^{44}u_1^{30} + \\
& 1073741824u_6u_3^{45}u_1^{30})x_5x_4 + 536870912u_6u_5^2u_3^{45}u_1^{29}x_5x_2 - \\
& 536870912u_6u_5^2u_3^{45}u_1^{29}x_5 + \\
& (536870912u_6^2u_5u_3^{45}u_1^{29} + 2147483648u_6^2u_3^{44}u_1^{31} - \\
& 1073741824u_6^2u_3^{44}u_1^{30})x_4x_2
\end{aligned}$$

S-pol added.

1328. Creating S-polynomial from the pair  $(p_4, p_{318})$ .

Forming S-pol of  $p_4$  and  $p_{318}$ :

$$\begin{aligned}
p_{1716} = & (268435456u_5u_3^{44}u_1^{28} + 536870912u_3^{45}u_1^{29})x_5^2x_4 + \\
& (536870912u_5^2u_3^{43}u_1^{29} - 268435456u_5^2u_3^{43}u_1^{28})x_5^2x_2 - \\
& 268435456u_5^2u_3^{45}u_1^{28}x_5^2 + \\
& (-268435456u_6u_5u_3^{43}u_1^{28} - 536870912u_6u_3^{44}u_1^{29} - 536870912u_5u_3^{44}u_1^{29} -
\end{aligned}$$

$$\begin{aligned}
& 2147483648u_3^{43}u_1^{31} + 1073741824u_3^{43}u_1^{30})x_5x_4x_2 + \\
& (-268435456u_6u_5u_3^{45}u_1^{28} + 536870912u_6u_5u_3^{43}u_1^{29} + \\
& 536870912u_6u_3^{44}u_1^{29})x_5x_4 + 268435456u_6u_5^2u_3^{44}u_1^{28}x_5x_2 - \\
& 268435456u_6u_5^2u_3^{44}u_1^{28}x_5 + \\
& (268435456u_6^2u_5u_3^{44}u_1^{28} + 1073741824u_6^2u_3^{43}u_1^{30} - \\
& 536870912u_6^2u_3^{43}u_1^{29})x_4x_2
\end{aligned}$$

S-pol added.

1329. Creating S-polynomial from the pair  $(p_4, p_{319})$ .

Forming S-pol of  $p_4$  and  $p_{319}$ :

$$\begin{aligned}
p_{1717} = & (536870912u_5u_3^{45}u_1^{29} + 1073741824u_3^{46}u_1^{30})x_5^2x_4 + \\
& (1073741824u_5^2u_3^{44}u_1^{30} - 536870912u_5^2u_3^{44}u_1^{29})x_5^2x_2 - \\
& 536870912u_5^2u_3^{46}u_1^{29}x_5^2 + \\
& (-536870912u_6u_5u_3^{44}u_1^{29} - 1073741824u_6u_3^{45}u_1^{30} - 1073741824u_5u_3^{45}u_1^{30} - \\
& 4294967296u_3^{44}u_1^{32} + 2147483648u_3^{44}u_1^{31})x_5x_4x_2 + \\
& (-536870912u_6u_5u_3^{46}u_1^{29} + 1073741824u_6u_5u_3^{44}u_1^{30} + \\
& 1073741824u_6u_3^{45}u_1^{30})x_5x_4 + 536870912u_6u_5^2u_3^{45}u_1^{29}x_5x_2 - \\
& 536870912u_6u_5^2u_3^{45}u_1^{29}x_5 + \\
& (536870912u_6^2u_5u_3^{45}u_1^{29} + 2147483648u_6^2u_3^{44}u_1^{31} - \\
& 1073741824u_6^2u_3^{44}u_1^{30})x_4x_2
\end{aligned}$$

S-pol added.

1330. Creating S-polynomial from the pair  $(p_4, p_{320})$ .

Forming S-pol of  $p_4$  and  $p_{320}$ :

$$\begin{aligned}
p_{1718} = & (1073741824u_5u_3^{50}u_1^{30} + 2147483648u_3^{51}u_1^{31})x_5^2x_4 + \\
& (2147483648u_5^2u_3^{49}u_1^{31} - 1073741824u_5^2u_3^{49}u_1^{30})x_5^2x_2 - \\
& 1073741824u_5^2u_3^{51}u_1^{30}x_5^2 + \\
& (-1073741824u_6u_5u_3^{49}u_1^{30} - 2147483648u_6u_3^{50}u_1^{31} - 2147483648u_5u_3^{50}u_1^{31} - \\
& 8589934592u_3^{49}u_1^{33} + 4294967296u_3^{49}u_1^{32})x_5x_4x_2 + \\
& (-1073741824u_6u_5u_3^{51}u_1^{30} + 2147483648u_6u_5u_3^{49}u_1^{31} + \\
& 2147483648u_6u_3^{50}u_1^{31})x_5x_4 + 1073741824u_6u_5^2u_3^{50}u_1^{30}x_5x_2 - \\
& 1073741824u_6u_5^2u_3^{50}u_1^{30}x_5 + \\
& (1073741824u_6^2u_5u_3^{50}u_1^{30} + 4294967296u_6^2u_3^{49}u_1^{32} - \\
& 2147483648u_6^2u_3^{49}u_1^{31})x_4x_2
\end{aligned}$$

S-pol added.

1331. Creating S-polynomial from the pair  $(p_4, p_{321})$ .

Forming S-pol of  $p_4$  and  $p_{321}$ :

$$\begin{aligned} p_{1719} = & -32768u_3^{25}u_1^{15}x_5^2x_4 + \\ & (32768u_6u_3^{24}u_1^{15} + 131072u_3^{23}u_1^{17} - 65536u_3^{23}u_1^{16})x_5x_4x_2 - \\ & 32768u_6u_3^{24}u_1^{15}x_5x_4 + \\ & (-65536u_6^2u_3^{23}u_1^{16} + 32768u_6^2u_3^{23}u_1^{15})x_4x_2 \end{aligned}$$

S-pol added.

1332. Creating S-polynomial from the pair  $(p_4, p_{322})$ .

Forming S-pol of  $p_4$  and  $p_{322}$ : Polynomial too big for output (text size is 3712 characters, number of terms is 8)

S-pol added.

1333. Creating S-polynomial from the pair  $(p_4, p_{323})$ .

Forming S-pol of  $p_4$  and  $p_{323}$ : Polynomial too big for output (text size is 3025 characters, number of terms is 8)

S-pol added.

1334. Creating S-polynomial from the pair  $(p_4, p_{324})$ .

Forming S-pol of  $p_4$  and  $p_{324}$ :

$$\begin{aligned} p_{1720} = & 2097152u_3^{36}u_1^{21}x_5^2x_4 + \\ & (2097152u_5^2u_3^{34}u_1^{21} - 1048576u_5^2u_3^{34}u_1^{20})x_5^2x_2 - \\ & 1048576u_5^2u_3^{36}u_1^{20}x_5^2 + \\ & (-2097152u_6u_3^{35}u_1^{21} - 8388608u_3^{34}u_1^{23} + 4194304u_3^{34}u_1^{22})x_5x_4x_2 + \\ & 2097152u_6u_3^{35}u_1^{21}x_5x_4 + 1048576u_6u_5^2u_3^{35}u_1^{20}x_5x_2 - \\ & 1048576u_6u_5^2u_3^{35}u_1^{20}x_5 + \\ & (4194304u_6^2u_3^{34}u_1^{22} - 2097152u_6^2u_3^{34}u_1^{21})x_4x_2 \end{aligned}$$

S-pol added.

1335. Creating S-polynomial from the pair  $(p_4, p_{325})$ .

Forming S-pol of  $p_4$  and  $p_{325}$ :

$$\begin{aligned} p_{1721} = & 4194304u_3^{30}u_1^{22}x_5^2x_4 + \\ & (4194304u_5^2u_3^{28}u_1^{22} - 2097152u_5^2u_3^{28}u_1^{21})x_5^2x_2 - \\ & 2097152u_5^2u_3^{30}u_1^{21}x_5^2 + \\ & (-4194304u_6u_3^{29}u_1^{22} - 16777216u_3^{28}u_1^{24} + 8388608u_3^{28}u_1^{23})x_5x_4x_2 + \\ & 4194304u_6u_3^{29}u_1^{22}x_5x_4 + 2097152u_6u_5^2u_3^{29}u_1^{21}x_5x_2 - \\ & 2097152u_6u_5^2u_3^{29}u_1^{21}x_5 + \\ & (8388608u_6^2u_3^{28}u_1^{23} - 4194304u_6^2u_3^{28}u_1^{22})x_4x_2 \end{aligned}$$

S-pol added.

1336. Creating S-polynomial from the pair  $(p_4, p_{326})$ .  
 Forming S-pol of  $p_4$  and  $p_{326}$ : Polynomial too big for output (text size is 2965 characters, number of terms is 8)  
 S-pol added.
1337. Creating S-polynomial from the pair  $(p_4, p_{327})$ .  
 Forming S-pol of  $p_4$  and  $p_{327}$ : Polynomial too big for output (text size is 2845 characters, number of terms is 8)  
 S-pol added.
1338. Creating S-polynomial from the pair  $(p_4, p_{328})$ .  
 Forming S-pol of  $p_4$  and  $p_{328}$ : Polynomial too big for output (text size is 6203 characters, number of terms is 16)  
 S-pol added.
1339. Creating S-polynomial from the pair  $(p_4, p_{329})$ .  
 Forming S-pol of  $p_4$  and  $p_{329}$ : Polynomial too big for output (text size is 1167 characters, number of terms is 8)  
 S-pol added.
1340. Creating S-polynomial from the pair  $(p_4, p_{330})$ .  
 Forming S-pol of  $p_4$  and  $p_{330}$ : Polynomial too big for output (text size is 3272 characters, number of terms is 8)  
 S-pol added.
1341. Creating S-polynomial from the pair  $(p_4, p_{331})$ .  
 Forming S-pol of  $p_4$  and  $p_{331}$ : Polynomial too big for output (text size is 6247 characters, number of terms is 16)  
 S-pol added.
1342. Creating S-polynomial from the pair  $(p_4, p_{332})$ .  
 Forming S-pol of  $p_4$  and  $p_{332}$ : Polynomial too big for output (text size is 1184 characters, number of terms is 8)  
 S-pol added.
1343. Creating S-polynomial from the pair  $(p_4, p_{333})$ .  
 Forming S-pol of  $p_4$  and  $p_{333}$ : Polynomial too big for output (text size is 3274 characters, number of terms is 8)  
 S-pol added.
1344. Creating S-polynomial from the pair  $(p_4, p_{334})$ .  
 Forming S-pol of  $p_4$  and  $p_{334}$ :

$$\begin{aligned}
 p_{1722} = & 16384u_3^{24}u_1^{14}x_5^2x_4 + \\
 & (-16384u_6u_3^{23}u_1^{14} - 65536u_3^{22}u_1^{16} + 32768u_3^{22}u_1^{15})x_5x_4x_2 + \\
 & 16384u_6u_3^{23}u_1^{14}x_5x_4 + \\
 & (32768u_6^2u_3^{22}u_1^{15} - 16384u_6^2u_3^{22}u_1^{14})x_4x_2
 \end{aligned}$$

S-pol added.



1345. Creating S-polynomial from the pair  $(p_4, p_{335})$ .

Forming S-pol of  $p_4$  and  $p_{335}$ :

$$\begin{aligned} p_{1723} = & -8388608u_5u_4^{35}u_1^{23}x_5^2x_4 + \\ & (8388608u_6u_5u_4^{34}u_1^{23} + 33554432u_5u_4^{33}u_1^{25} - \\ & 16777216u_5u_4^{33}u_1^{24})x_5x_4x_3 - 8388608u_6u_5u_4^{34}u_1^{23}x_5x_4 + \\ & (-16777216u_6^2u_5u_4^{33}u_1^{24} + 8388608u_6^2u_5u_4^{33}u_1^{23})x_4x_3 \end{aligned}$$

S-pol added.

1346. Creating S-polynomial from the pair  $(p_4, p_{336})$ .

Forming S-pol of  $p_4$  and  $p_{336}$ :

$$\begin{aligned} p_{1724} = & -4194304u_5u_4^{34}u_1^{22}x_5^2x_4 + \\ & (4194304u_6u_5u_4^{33}u_1^{22} + 16777216u_5u_4^{32}u_1^{24} - 8388608u_5u_4^{32}u_1^{23})x_5x_4x_3 - \\ & 4194304u_6u_5u_4^{33}u_1^{22}x_5x_4 + \\ & (-8388608u_6^2u_5u_4^{32}u_1^{23} + 4194304u_6^2u_5u_4^{32}u_1^{22})x_4x_3 \end{aligned}$$

S-pol added.

1347. Creating S-polynomial from the pair  $(p_4, p_{337})$ .

Forming S-pol of  $p_4$  and  $p_{337}$ :

$$\begin{aligned} p_{1725} = & (70368744177664u_5^2u_4^{75}u_1^{46} + 140737488355328u_5u_4^{76}u_1^{47})x_5^2x_4 + \\ & (140737488355328u_5^3u_4^{74}u_1^{47} - 70368744177664u_5^3u_4^{74}u_1^{46})x_5^2x_3 - \\ & 70368744177664u_5^3u_4^{76}u_1^{46}x_5^2 + \\ & (-70368744177664u_6u_5^2u_4^{74}u_1^{46} - 140737488355328u_6u_5u_4^{75}u_1^{47} - \\ & 140737488355328u_5^2u_4^{75}u_1^{47} - 562949953421312u_5u_4^{74}u_1^{49} + \\ & 281474976710656u_5u_4^{74}u_1^{48})x_5x_4x_3 + \\ & (-70368744177664u_6u_5^2u_4^{76}u_1^{46} + 140737488355328u_6u_5^2u_4^{74}u_1^{47} + \\ & 140737488355328u_6u_5u_4^{75}u_1^{47})x_5x_4 + 70368744177664u_6u_5^3u_4^{75}u_1^{46}x_5x_3 - \\ & 70368744177664u_6u_5^3u_4^{75}u_1^{46}x_5 + \\ & (70368744177664u_6^2u_5^2u_4^{75}u_1^{46} + 281474976710656u_6^2u_5u_4^{74}u_1^{48} - \\ & 140737488355328u_6^2u_5u_4^{74}u_1^{47})x_4x_3 \end{aligned}$$

S-pol added.

1348. Creating S-polynomial from the pair  $(p_4, p_{338})$ .

Forming S-pol of  $p_4$  and  $p_{338}$ :

$$\begin{aligned}
p_{1726} = & (35184372088832u_5^2u_4^{74}u_1^{45} + 70368744177664u_5u_4^{75}u_1^{46})x_5^2x_4 + \\
& (70368744177664u_5^3u_4^{73}u_1^{46} - 35184372088832u_5^3u_4^{73}u_1^{45})x_5^2x_3 - \\
& 35184372088832u_5^3u_4^{75}u_1^{45}x_5^2 + \\
& (-35184372088832u_6u_5^2u_4^{73}u_1^{45} - 70368744177664u_6u_5u_4^{74}u_1^{46} - \\
& 70368744177664u_5^2u_4^{74}u_1^{46} - 281474976710656u_5u_4^{73}u_1^{48} + \\
& 140737488355328u_5u_4^{73}u_1^{47})x_5x_4x_3 + \\
& (-35184372088832u_6u_5^2u_4^{75}u_1^{45} + 70368744177664u_6u_5^2u_4^{73}u_1^{46} + \\
& 70368744177664u_6u_5u_4^{74}u_1^{46})x_5x_4 + 35184372088832u_6u_5^3u_4^{74}u_1^{45}x_5x_3 - \\
& 35184372088832u_6u_5^3u_4^{74}u_1^{45}x_5 + \\
& (35184372088832u_6^2u_5^2u_4^{74}u_1^{45} + 140737488355328u_6^2u_5u_4^{73}u_1^{47} - \\
& 70368744177664u_6^2u_5u_4^{73}u_1^{46})x_4x_3
\end{aligned}$$

S-pol added.

1349. Creating S-polynomial from the pair  $(p_4, p_{339})$ .

Forming S-pol of  $p_4$  and  $p_{339}$ :

$$\begin{aligned}
p_{1727} = & (536870912u_5u_4^{45}u_1^{29} + 1073741824u_4^{46}u_1^{30})x_5^2x_4 + \\
& (1073741824u_5^2u_4^{44}u_1^{30} - 536870912u_5^2u_4^{44}u_1^{29})x_5^2x_3 - \\
& 536870912u_5^2u_4^{46}u_1^{29}x_5^2 + \\
& (-536870912u_6u_5u_4^{44}u_1^{29} - 1073741824u_6u_4^{45}u_1^{30} - 1073741824u_5u_4^{45}u_1^{30} - \\
& 4294967296u_4^{44}u_1^{32} + 2147483648u_4^{44}u_1^{31})x_5x_4x_3 + \\
& (-536870912u_6u_5u_4^{46}u_1^{29} + 1073741824u_6u_5u_4^{44}u_1^{30} + \\
& 1073741824u_6u_4^{45}u_1^{30})x_5x_4 + 536870912u_6u_5^2u_4^{45}u_1^{29}x_5x_3 - \\
& 536870912u_6u_5^2u_4^{45}u_1^{29}x_5 + \\
& (536870912u_6^2u_5u_4^{45}u_1^{29} + 2147483648u_6^2u_4^{44}u_1^{31} - \\
& 1073741824u_6^2u_4^{44}u_1^{30})x_4x_3
\end{aligned}$$

S-pol added.

1350. Creating S-polynomial from the pair  $(p_4, p_{340})$ .

Forming S-pol of  $p_4$  and  $p_{340}$ :

$$\begin{aligned}
p_{1728} = & (268435456u_5u_4^{44}u_1^{28} + 536870912u_4^{45}u_1^{29})x_5^2x_4 + \\
& (536870912u_5^2u_4^{43}u_1^{29} - 268435456u_5^2u_4^{43}u_1^{28})x_5^2x_3 - \\
& 268435456u_5^2u_4^{45}u_1^{28}x_5^2 + \\
& (-268435456u_6u_5u_4^{43}u_1^{28} - 536870912u_6u_4^{44}u_1^{29} - 536870912u_5u_4^{44}u_1^{29} -
\end{aligned}$$

$$\begin{aligned}
& 2147483648u_4^{43}u_1^{31} + 1073741824u_4^{43}u_1^{30})x_5x_4x_3 + \\
& (-268435456u_6u_5u_4^{45}u_1^{28} + 536870912u_6u_5u_4^{43}u_1^{29} + \\
& 536870912u_6u_4^{44}u_1^{29})x_5x_4 + 268435456u_6u_5^2u_4^{44}u_1^{28}x_5x_3 - \\
& 268435456u_6u_5^2u_4^{44}u_1^{28}x_5 + \\
& (268435456u_6^2u_5u_4^{44}u_1^{28} + 1073741824u_6^2u_4^{43}u_1^{30} - \\
& 536870912u_6^2u_4^{43}u_1^{29})x_4x_3
\end{aligned}$$

S-pol added.

1351. Creating S-polynomial from the pair  $(p_4, p_{341})$ .

Forming S-pol of  $p_4$  and  $p_{341}$ :

$$\begin{aligned}
p_{1729} = & (536870912u_5u_4^{45}u_1^{29} + 1073741824u_4^{46}u_1^{30})x_5^2x_4 + \\
& (1073741824u_5^2u_4^{44}u_1^{30} - 536870912u_5^2u_4^{44}u_1^{29})x_5^2x_3 - \\
& 536870912u_5^2u_4^{46}u_1^{29}x_5^2 + \\
& (-536870912u_6u_5u_4^{44}u_1^{29} - 1073741824u_6u_4^{45}u_1^{30} - 1073741824u_5u_4^{45}u_1^{30} - \\
& 4294967296u_4^{44}u_1^{32} + 2147483648u_4^{44}u_1^{31})x_5x_4x_3 + \\
& (-536870912u_6u_5u_4^{46}u_1^{29} + 1073741824u_6u_5u_4^{44}u_1^{30} + \\
& 1073741824u_6u_4^{45}u_1^{30})x_5x_4 + 536870912u_6u_5^2u_4^{45}u_1^{29}x_5x_3 - \\
& 536870912u_6u_5^2u_4^{45}u_1^{29}x_5 + \\
& (536870912u_6^2u_5u_4^{45}u_1^{29} + 2147483648u_6^2u_4^{44}u_1^{31} - \\
& 1073741824u_6^2u_4^{44}u_1^{30})x_4x_3
\end{aligned}$$

S-pol added.

1352. Creating S-polynomial from the pair  $(p_4, p_{342})$ .

Forming S-pol of  $p_4$  and  $p_{342}$ :

$$\begin{aligned}
p_{1730} = & (1073741824u_5u_4^{50}u_1^{30} + 2147483648u_4^{51}u_1^{31})x_5^2x_4 + \\
& (2147483648u_5^2u_4^{49}u_1^{31} - 1073741824u_5^2u_4^{49}u_1^{30})x_5^2x_3 - \\
& 1073741824u_5^2u_4^{51}u_1^{30}x_5^2 + \\
& (-1073741824u_6u_5u_4^{49}u_1^{30} - 2147483648u_6u_4^{50}u_1^{31} - 2147483648u_5u_4^{50}u_1^{31} - \\
& 8589934592u_4^{49}u_1^{33} + 4294967296u_4^{49}u_1^{32})x_5x_4x_3 + \\
& (-1073741824u_6u_5u_4^{51}u_1^{30} + 2147483648u_6u_5u_4^{49}u_1^{31} + \\
& 2147483648u_6u_4^{50}u_1^{31})x_5x_4 + 1073741824u_6u_5^2u_4^{50}u_1^{30}x_5x_3 - \\
& 1073741824u_6u_5^2u_4^{50}u_1^{30}x_5 + \\
& (1073741824u_6^2u_5u_4^{50}u_1^{30} + 4294967296u_6^2u_4^{49}u_1^{32} - \\
& 2147483648u_6^2u_4^{49}u_1^{31})x_4x_3
\end{aligned}$$

S-pol added.

1353. Creating S-polynomial from the pair  $(p_4, p_{343})$ .

Forming S-pol of  $p_4$  and  $p_{343}$ :

$$\begin{aligned} p_{1731} = & -32768u_4^{25}u_1^{15}x_5^2x_4 + \\ & (32768u_6u_4^{24}u_1^{15} + 131072u_4^{23}u_1^{17} - 65536u_4^{23}u_1^{16})x_5x_4x_3 - \\ & 32768u_6u_4^{24}u_1^{15}x_5x_4 + \\ & (-65536u_6^2u_4^{23}u_1^{16} + 32768u_6^2u_4^{23}u_1^{15})x_4x_3 \end{aligned}$$

S-pol added.

1354. Creating S-polynomial from the pair  $(p_4, p_{344})$ .

Forming S-pol of  $p_4$  and  $p_{344}$ : Polynomial too big for output (text size is 6203 characters, number of terms is 16)

S-pol added.

1355. Creating S-polynomial from the pair  $(p_4, p_{345})$ .

Forming S-pol of  $p_4$  and  $p_{345}$ : Polynomial too big for output (text size is 1167 characters, number of terms is 8)

S-pol added.

1356. Creating S-polynomial from the pair  $(p_4, p_{346})$ .

Forming S-pol of  $p_4$  and  $p_{346}$ : Polynomial too big for output (text size is 3272 characters, number of terms is 8)

S-pol added.

1357. Creating S-polynomial from the pair  $(p_4, p_{347})$ .

Forming S-pol of  $p_4$  and  $p_{347}$ : Polynomial too big for output (text size is 2969 characters, number of terms is 8)

S-pol added.

1358. Creating S-polynomial from the pair  $(p_4, p_{348})$ .

Forming S-pol of  $p_4$  and  $p_{348}$ : Polynomial too big for output (text size is 6203 characters, number of terms is 16)

S-pol added.

1359. Creating S-polynomial from the pair  $(p_4, p_{349})$ .

Forming S-pol of  $p_4$  and  $p_{349}$ : Polynomial too big for output (text size is 1167 characters, number of terms is 8)

S-pol added.

1360. Creating S-polynomial from the pair  $(p_4, p_{350})$ .

Forming S-pol of  $p_4$  and  $p_{350}$ : Polynomial too big for output (text size is 3272 characters, number of terms is 8)

S-pol added.

1361. Creating S-polynomial from the pair  $(p_4, p_{351})$ .

Forming S-pol of  $p_4$  and  $p_{351}$ : Polynomial too big for output (text size is 2969 characters, number of terms is 8)

S-pol added.

1362. Creating S-polynomial from the pair  $(p_4, p_{352})$ .

Forming S-pol of  $p_4$  and  $p_{352}$ : Polynomial too big for output (text size is 3025 characters, number of terms is 8)

S-pol added.

1363. Creating S-polynomial from the pair  $(p_4, p_{353})$ .

Forming S-pol of  $p_4$  and  $p_{353}$ :

$$\begin{aligned} p_{1732} = & 2097152u_4^{36}u_1^{21}x_5^2x_4 + \\ & (2097152u_5^2u_4^{34}u_1^{21} - 1048576u_5^2u_4^{34}u_1^{20})x_5^2x_3 - \\ & 1048576u_5^2u_4^{36}u_1^{20}x_5^2 + \\ & (-2097152u_6u_4^{35}u_1^{21} - 8388608u_4^{34}u_1^{23} + 4194304u_4^{34}u_1^{22})x_5x_4x_3 + \\ & 2097152u_6u_4^{35}u_1^{21}x_5x_4 + 1048576u_6u_5^2u_4^{35}u_1^{20}x_5x_3 - \\ & 1048576u_6u_5^2u_4^{35}u_1^{20}x_5 + \\ & (4194304u_6^2u_4^{34}u_1^{22} - 2097152u_6^2u_4^{34}u_1^{21})x_4x_3 \end{aligned}$$

S-pol added.

1364. Creating S-polynomial from the pair  $(p_4, p_{354})$ .

Forming S-pol of  $p_4$  and  $p_{354}$ :

$$\begin{aligned} p_{1733} = & 4194304u_4^{30}u_1^{22}x_5^2x_4 + \\ & (4194304u_5^2u_4^{28}u_1^{22} - 2097152u_5^2u_4^{28}u_1^{21})x_5^2x_3 - \\ & 2097152u_5^2u_4^{30}u_1^{21}x_5^2 + \\ & (-4194304u_6u_4^{29}u_1^{22} - 16777216u_4^{28}u_1^{24} + 8388608u_4^{28}u_1^{23})x_5x_4x_3 + \\ & 4194304u_6u_4^{29}u_1^{22}x_5x_4 + 2097152u_6u_5^2u_4^{29}u_1^{21}x_5x_3 - \\ & 2097152u_6u_5^2u_4^{29}u_1^{21}x_5 + \\ & (8388608u_6^2u_4^{28}u_1^{23} - 4194304u_6^2u_4^{28}u_1^{22})x_4x_3 \end{aligned}$$

S-pol added.

1365. Creating S-polynomial from the pair  $(p_4, p_{355})$ .

Forming S-pol of  $p_4$  and  $p_{355}$ :

$$\begin{aligned} p_{1734} = & 16384u_4^{24}u_1^{14}x_5^2x_4 + \\ & (-16384u_6u_4^{23}u_1^{14} - 65536u_4^{22}u_1^{16} + 32768u_4^{22}u_1^{15})x_5x_4x_3 + \\ & 16384u_6u_4^{23}u_1^{14}x_5x_4 + \\ & (32768u_6^2u_4^{22}u_1^{15} - 16384u_6^2u_4^{22}u_1^{14})x_4x_3 \end{aligned}$$

S-pol added.

1366. Creating S-polynomial from the pair  $(p_4, p_{356})$ .  
 Forming S-pol of  $p_4$  and  $p_{356}$ : Polynomial too big for output (text size is 1590 characters, number of terms is 8)  
 S-pol added.
1367. Creating S-polynomial from the pair  $(p_4, p_{357})$ .  
 Forming S-pol of  $p_4$  and  $p_{357}$ : Polynomial too big for output (text size is 2264 characters, number of terms is 8)  
 S-pol added.
1368. Creating S-polynomial from the pair  $(p_4, p_{358})$ .  
 Forming S-pol of  $p_4$  and  $p_{358}$ : Polynomial too big for output (text size is 6228 characters, number of terms is 16)  
 S-pol added.
1369. Creating S-polynomial from the pair  $(p_4, p_{359})$ .  
 Forming S-pol of  $p_4$  and  $p_{359}$ : Polynomial too big for output (text size is 6175 characters, number of terms is 16)  
 S-pol added.
1370. Creating S-polynomial from the pair  $(p_4, p_{360})$ .  
 Forming S-pol of  $p_4$  and  $p_{360}$ :

$$\begin{aligned}
 p_{1735} = & -262144u_3^{29}u_1^{18}x_5^2x_4 + \\
 & (-262144u_5^2u_3^{27}u_1^{18} + 131072u_5^2u_3^{27}u_1^{17})x_5^2x_2 + \\
 & 131072u_5^2u_3^{29}u_1^{17}x_5^2 + \\
 & (262144u_6u_3^{28}u_1^{18} + 1048576u_3^{27}u_1^{20} - 524288u_3^{27}u_1^{19})x_5x_4x_2 - \\
 & 262144u_6u_3^{28}u_1^{18}x_5x_4 - 131072u_6u_5^2u_3^{28}u_1^{17}x_5x_2 + \\
 & 131072u_6u_5^2u_3^{28}u_1^{17}x_5 + \\
 & (-524288u_6^2u_3^{27}u_1^{19} + 262144u_6^2u_3^{27}u_1^{18})x_4x_2
 \end{aligned}$$

S-pol added.

1371. Creating S-polynomial from the pair  $(p_4, p_{361})$ .  
 Forming S-pol of  $p_4$  and  $p_{361}$ : Polynomial too big for output (text size is 1175 characters, number of terms is 8)  
 S-pol added.
1372. Creating S-polynomial from the pair  $(p_4, p_{362})$ .  
 Forming S-pol of  $p_4$  and  $p_{362}$ : Polynomial too big for output (text size is 1162 characters, number of terms is 8)  
 S-pol added.

1373. Creating S-polynomial from the pair  $(p_4, p_{363})$ .  
 Forming S-pol of  $p_4$  and  $p_{363}$ : Polynomial too big for output (text size is 2952 characters, number of terms is 8)  
 S-pol added.
1374. Creating S-polynomial from the pair  $(p_4, p_{364})$ .  
 Forming S-pol of  $p_4$  and  $p_{364}$ : Polynomial too big for output (text size is 2838 characters, number of terms is 8)  
 S-pol added.
1375. Creating S-polynomial from the pair  $(p_4, p_{365})$ .  
 Forming S-pol of  $p_4$  and  $p_{365}$ : Polynomial too big for output (text size is 6174 characters, number of terms is 16)  
 S-pol added.
1376. Creating S-polynomial from the pair  $(p_4, p_{366})$ .  
 Forming S-pol of  $p_4$  and  $p_{366}$ : Polynomial too big for output (text size is 1164 characters, number of terms is 8)  
 S-pol added.
1377. Creating S-polynomial from the pair  $(p_4, p_{367})$ .  
 Forming S-pol of  $p_4$  and  $p_{367}$ : Polynomial too big for output (text size is 2212 characters, number of terms is 8)  
 S-pol added.
1378. Creating S-polynomial from the pair  $(p_4, p_{368})$ .  
 Forming S-pol of  $p_4$  and  $p_{368}$ : Polynomial too big for output (text size is 6225 characters, number of terms is 16)  
 S-pol added.
1379. Creating S-polynomial from the pair  $(p_4, p_{369})$ .  
 Forming S-pol of  $p_4$  and  $p_{369}$ : Polynomial too big for output (text size is 1176 characters, number of terms is 8)  
 S-pol added.
1380. Creating S-polynomial from the pair  $(p_4, p_{370})$ .  
 Forming S-pol of  $p_4$  and  $p_{370}$ : Polynomial too big for output (text size is 2214 characters, number of terms is 8)  
 S-pol added.
1381. Creating S-polynomial from the pair  $(p_4, p_{371})$ .  
 Forming S-pol of  $p_4$  and  $p_{371}$ : Polynomial too big for output (text size is 2838 characters, number of terms is 8)  
 S-pol added.

1382. Creating S-polynomial from the pair  $(p_4, p_{372})$ .  
 Forming S-pol of  $p_4$  and  $p_{372}$ : Polynomial too big for output (text size is 2952 characters, number of terms is 8)  
 S-pol added.
1383. Creating S-polynomial from the pair  $(p_4, p_{373})$ .  
 Forming S-pol of  $p_4$  and  $p_{373}$ : Polynomial too big for output (text size is 1590 characters, number of terms is 8)  
 S-pol added.
1384. Creating S-polynomial from the pair  $(p_4, p_{374})$ .  
 Forming S-pol of  $p_4$  and  $p_{374}$ : Polynomial too big for output (text size is 2264 characters, number of terms is 8)  
 S-pol added.
1385. Creating S-polynomial from the pair  $(p_4, p_{375})$ .  
 Forming S-pol of  $p_4$  and  $p_{375}$ : Polynomial too big for output (text size is 6175 characters, number of terms is 16)  
 S-pol added.
1386. Creating S-polynomial from the pair  $(p_4, p_{376})$ .  
 Forming S-pol of  $p_4$  and  $p_{376}$ :

$$\begin{aligned}
 p_{1736} = & -262144u_2^{29}u_1^{18}x_5^2x_4 + \\
 & (-262144u_5^2u_2^{27}u_1^{18} + 131072u_5^2u_2^{27}u_1^{17})x_5^2x_1 + \\
 & 131072u_5^2u_2^{29}u_1^{17}x_5^2 + \\
 & (262144u_6u_2^{28}u_1^{18} + 1048576u_2^{27}u_1^{20} - 524288u_2^{27}u_1^{19})x_5x_4x_1 - \\
 & 262144u_6u_2^{28}u_1^{18}x_5x_4 - 131072u_6u_5^2u_2^{28}u_1^{17}x_5x_1 + \\
 & 131072u_6u_5^2u_2^{28}u_1^{17}x_5 + \\
 & (-524288u_6^2u_2^{27}u_1^{19} + 262144u_6^2u_2^{27}u_1^{18})x_4x_1
 \end{aligned}$$

S-pol added.

1387. Creating S-polynomial from the pair  $(p_4, p_{377})$ .  
 Forming S-pol of  $p_4$  and  $p_{377}$ : Polynomial too big for output (text size is 1162 characters, number of terms is 8)  
 S-pol added.
1388. Creating S-polynomial from the pair  $(p_4, p_{378})$ .  
 Forming S-pol of  $p_4$  and  $p_{378}$ : Polynomial too big for output (text size is 2838 characters, number of terms is 8)  
 S-pol added.



1389. Creating S-polynomial from the pair  $(p_4, p_{379})$ .  
 Forming S-pol of  $p_4$  and  $p_{379}$ : Polynomial too big for output (text size is 6225 characters, number of terms is 16)  
 S-pol added.
1390. Creating S-polynomial from the pair  $(p_4, p_{380})$ .  
 Forming S-pol of  $p_4$  and  $p_{380}$ : Polynomial too big for output (text size is 1176 characters, number of terms is 8)  
 S-pol added.
1391. Creating S-polynomial from the pair  $(p_4, p_{381})$ .  
 Forming S-pol of  $p_4$  and  $p_{381}$ : Polynomial too big for output (text size is 2214 characters, number of terms is 8)  
 S-pol added.
1392. Creating S-polynomial from the pair  $(p_4, p_{382})$ .  
 Forming S-pol of  $p_4$  and  $p_{382}$ : Polynomial too big for output (text size is 2952 characters, number of terms is 8)  
 S-pol added.
1393. Creating S-polynomial from the pair  $(p_4, p_{383})$ .  
 Forming S-pol of  $p_4$  and  $p_{383}$ : Polynomial too big for output (text size is 1590 characters, number of terms is 8)  
 S-pol added.
1394. Creating S-polynomial from the pair  $(p_4, p_{384})$ .  
 Forming S-pol of  $p_4$  and  $p_{384}$ : Polynomial too big for output (text size is 2264 characters, number of terms is 8)  
 S-pol added.
1395. Creating S-polynomial from the pair  $(p_4, p_{385})$ .  
 Forming S-pol of  $p_4$  and  $p_{385}$ :

$$\begin{aligned}
 p_{1737} = & -262144u_4^{29}u_1^{18}x_5^2x_4 + \\
 & (-262144u_5^2u_4^{27}u_1^{18} + 131072u_5^2u_4^{27}u_1^{17})x_5^2x_3 + \\
 & 131072u_5^2u_4^{29}u_1^{17}x_5^2 + \\
 & (262144u_6u_4^{28}u_1^{18} + 1048576u_4^{27}u_1^{20} - 524288u_4^{27}u_1^{19})x_5x_4x_3 - \\
 & 262144u_6u_4^{28}u_1^{18}x_5x_4 - 131072u_6u_5^2u_4^{28}u_1^{17}x_5x_3 + \\
 & 131072u_6u_5^2u_4^{28}u_1^{17}x_5 + \\
 & (-524288u_6^2u_4^{27}u_1^{19} + 262144u_6^2u_4^{27}u_1^{18})x_4x_3
 \end{aligned}$$

S-pol added.

1396. Creating S-polynomial from the pair  $(p_5, p_{107})$ .  
 Skipping pair  $p_5$  and  $p_{107}$  because gcd of their leading monoms is zero.

1397. Creating S-polynomial from the pair  $(p_5, p_{108})$ .  
 Skipping pair  $p_5$  and  $p_{108}$  because gcd of their leading monoms is zero.
1398. Creating S-polynomial from the pair  $(p_5, p_{109})$ .  
 Skipping pair  $p_5$  and  $p_{109}$  because gcd of their leading monoms is zero.
1399. Creating S-polynomial from the pair  $(p_5, p_{110})$ .  
 Skipping pair  $p_5$  and  $p_{110}$  because gcd of their leading monoms is zero.
1400. Creating S-polynomial from the pair  $(p_5, p_{111})$ .  
 Skipping pair  $p_5$  and  $p_{111}$  because gcd of their leading monoms is zero.
1401. Creating S-polynomial from the pair  $(p_5, p_{112})$ .  
 Skipping pair  $p_5$  and  $p_{112}$  because gcd of their leading monoms is zero.
1402. Creating S-polynomial from the pair  $(p_5, p_{113})$ .  
 Skipping pair  $p_5$  and  $p_{113}$  because gcd of their leading monoms is zero.
1403. Creating S-polynomial from the pair  $(p_5, p_{114})$ .  
 Skipping pair  $p_5$  and  $p_{114}$  because gcd of their leading monoms is zero.
1404. Creating S-polynomial from the pair  $(p_5, p_{115})$ .  
 Skipping pair  $p_5$  and  $p_{115}$  because gcd of their leading monoms is zero.
1405. Creating S-polynomial from the pair  $(p_5, p_{116})$ .  
 Skipping pair  $p_5$  and  $p_{116}$  because gcd of their leading monoms is zero.
1406. Creating S-polynomial from the pair  $(p_5, p_{117})$ .  
 Skipping pair  $p_5$  and  $p_{117}$  because gcd of their leading monoms is zero.
1407. Creating S-polynomial from the pair  $(p_5, p_{118})$ .  
 Skipping pair  $p_5$  and  $p_{118}$  because gcd of their leading monoms is zero.
1408. Creating S-polynomial from the pair  $(p_5, p_{119})$ .  
 Skipping pair  $p_5$  and  $p_{119}$  because gcd of their leading monoms is zero.
1409. Creating S-polynomial from the pair  $(p_5, p_{120})$ .  
 Skipping pair  $p_5$  and  $p_{120}$  because gcd of their leading monoms is zero.
1410. Creating S-polynomial from the pair  $(p_5, p_{121})$ .  
 Skipping pair  $p_5$  and  $p_{121}$  because gcd of their leading monoms is zero.
1411. Creating S-polynomial from the pair  $(p_5, p_{122})$ .  
 Skipping pair  $p_5$  and  $p_{122}$  because gcd of their leading monoms is zero.
1412. Creating S-polynomial from the pair  $(p_5, p_{123})$ .  
 Skipping pair  $p_5$  and  $p_{123}$  because gcd of their leading monoms is zero.
1413. Creating S-polynomial from the pair  $(p_5, p_{124})$ .  
 Skipping pair  $p_5$  and  $p_{124}$  because gcd of their leading monoms is zero.

- 1414. Creating S-polynomial from the pair  $(p_5, p_{125})$ .  
 Skipping pair  $p_5$  and  $p_{125}$  because gcd of their leading monoms is zero.
- 1415. Creating S-polynomial from the pair  $(p_5, p_{126})$ .  
 Skipping pair  $p_5$  and  $p_{126}$  because gcd of their leading monoms is zero.
- 1416. Creating S-polynomial from the pair  $(p_5, p_{127})$ .  
 Skipping pair  $p_5$  and  $p_{127}$  because gcd of their leading monoms is zero.
- 1417. Creating S-polynomial from the pair  $(p_5, p_{128})$ .  
 Skipping pair  $p_5$  and  $p_{128}$  because gcd of their leading monoms is zero.
- 1418. Creating S-polynomial from the pair  $(p_5, p_{129})$ .  
 Skipping pair  $p_5$  and  $p_{129}$  because gcd of their leading monoms is zero.
- 1419. Creating S-polynomial from the pair  $(p_5, p_{130})$ .  
 Skipping pair  $p_5$  and  $p_{130}$  because gcd of their leading monoms is zero.
- 1420. Creating S-polynomial from the pair  $(p_5, p_{131})$ .  
 Skipping pair  $p_5$  and  $p_{131}$  because gcd of their leading monoms is zero.
- 1421. Creating S-polynomial from the pair  $(p_5, p_{132})$ .  
 Skipping pair  $p_5$  and  $p_{132}$  because gcd of their leading monoms is zero.
- 1422. Creating S-polynomial from the pair  $(p_5, p_{133})$ .  
 Skipping pair  $p_5$  and  $p_{133}$  because gcd of their leading monoms is zero.
- 1423. Creating S-polynomial from the pair  $(p_5, p_{134})$ .  
 Skipping pair  $p_5$  and  $p_{134}$  because gcd of their leading monoms is zero.
- 1424. Creating S-polynomial from the pair  $(p_5, p_{135})$ .  
 Skipping pair  $p_5$  and  $p_{135}$  because gcd of their leading monoms is zero.
- 1425. Creating S-polynomial from the pair  $(p_5, p_{136})$ .  
 Skipping pair  $p_5$  and  $p_{136}$  because gcd of their leading monoms is zero.
- 1426. Creating S-polynomial from the pair  $(p_5, p_{137})$ .  
 Skipping pair  $p_5$  and  $p_{137}$  because gcd of their leading monoms is zero.
- 1427. Creating S-polynomial from the pair  $(p_5, p_{138})$ .  
 Skipping pair  $p_5$  and  $p_{138}$  because gcd of their leading monoms is zero.
- 1428. Creating S-polynomial from the pair  $(p_5, p_{139})$ .  
 Skipping pair  $p_5$  and  $p_{139}$  because gcd of their leading monoms is zero.
- 1429. Creating S-polynomial from the pair  $(p_5, p_{140})$ .  
 Skipping pair  $p_5$  and  $p_{140}$  because gcd of their leading monoms is zero.
- 1430. Creating S-polynomial from the pair  $(p_5, p_{141})$ .  
 Skipping pair  $p_5$  and  $p_{141}$  because gcd of their leading monoms is zero.

1431. Creating S-polynomial from the pair  $(p_5, p_{142})$ .  
 Skipping pair  $p_5$  and  $p_{142}$  because gcd of their leading monoms is zero.
1432. Creating S-polynomial from the pair  $(p_5, p_{143})$ .  
 Skipping pair  $p_5$  and  $p_{143}$  because gcd of their leading monoms is zero.
1433. Creating S-polynomial from the pair  $(p_5, p_{144})$ .  
 Skipping pair  $p_5$  and  $p_{144}$  because gcd of their leading monoms is zero.
1434. Creating S-polynomial from the pair  $(p_5, p_{145})$ .  
 Skipping pair  $p_5$  and  $p_{145}$  because gcd of their leading monoms is zero.
1435. Creating S-polynomial from the pair  $(p_5, p_{146})$ .  
 Skipping pair  $p_5$  and  $p_{146}$  because gcd of their leading monoms is zero.
1436. Creating S-polynomial from the pair  $(p_5, p_{147})$ .  
 Skipping pair  $p_5$  and  $p_{147}$  because gcd of their leading monoms is zero.
1437. Creating S-polynomial from the pair  $(p_5, p_{148})$ .  
 Skipping pair  $p_5$  and  $p_{148}$  because gcd of their leading monoms is zero.
1438. Creating S-polynomial from the pair  $(p_5, p_{149})$ .  
 Skipping pair  $p_5$  and  $p_{149}$  because gcd of their leading monoms is zero.
1439. Creating S-polynomial from the pair  $(p_5, p_{150})$ .  
 Skipping pair  $p_5$  and  $p_{150}$  because gcd of their leading monoms is zero.
1440. Creating S-polynomial from the pair  $(p_5, p_{151})$ .  
 Skipping pair  $p_5$  and  $p_{151}$  because gcd of their leading monoms is zero.
1441. Creating S-polynomial from the pair  $(p_5, p_{152})$ .  
 Skipping pair  $p_5$  and  $p_{152}$  because gcd of their leading monoms is zero.
1442. Creating S-polynomial from the pair  $(p_5, p_{153})$ .  
 Skipping pair  $p_5$  and  $p_{153}$  because gcd of their leading monoms is zero.
1443. Creating S-polynomial from the pair  $(p_5, p_{154})$ .  
 Skipping pair  $p_5$  and  $p_{154}$  because gcd of their leading monoms is zero.
1444. Creating S-polynomial from the pair  $(p_5, p_{155})$ .  
 Skipping pair  $p_5$  and  $p_{155}$  because gcd of their leading monoms is zero.
1445. Creating S-polynomial from the pair  $(p_5, p_{156})$ .  
 Skipping pair  $p_5$  and  $p_{156}$  because gcd of their leading monoms is zero.
1446. Creating S-polynomial from the pair  $(p_5, p_{157})$ .  
 Skipping pair  $p_5$  and  $p_{157}$  because gcd of their leading monoms is zero.
1447. Creating S-polynomial from the pair  $(p_5, p_{158})$ .  
 Skipping pair  $p_5$  and  $p_{158}$  because gcd of their leading monoms is zero.

1448. Creating S-polynomial from the pair  $(p_5, p_{159})$ .  
 Skipping pair  $p_5$  and  $p_{159}$  because gcd of their leading monoms is zero.
1449. Creating S-polynomial from the pair  $(p_5, p_{160})$ .  
 Skipping pair  $p_5$  and  $p_{160}$  because gcd of their leading monoms is zero.
1450. Creating S-polynomial from the pair  $(p_5, p_{161})$ .  
 Skipping pair  $p_5$  and  $p_{161}$  because gcd of their leading monoms is zero.
1451. Creating S-polynomial from the pair  $(p_5, p_{162})$ .  
 Skipping pair  $p_5$  and  $p_{162}$  because gcd of their leading monoms is zero.
1452. Creating S-polynomial from the pair  $(p_5, p_{163})$ .  
 Skipping pair  $p_5$  and  $p_{163}$  because gcd of their leading monoms is zero.
1453. Creating S-polynomial from the pair  $(p_5, p_{164})$ .  
 Skipping pair  $p_5$  and  $p_{164}$  because gcd of their leading monoms is zero.
1454. Creating S-polynomial from the pair  $(p_5, p_{165})$ .  
 Skipping pair  $p_5$  and  $p_{165}$  because gcd of their leading monoms is zero.
1455. Creating S-polynomial from the pair  $(p_5, p_{166})$ .  
 Skipping pair  $p_5$  and  $p_{166}$  because gcd of their leading monoms is zero.
1456. Creating S-polynomial from the pair  $(p_5, p_{167})$ .  
 Skipping pair  $p_5$  and  $p_{167}$  because gcd of their leading monoms is zero.
1457. Creating S-polynomial from the pair  $(p_5, p_{168})$ .  
 Skipping pair  $p_5$  and  $p_{168}$  because gcd of their leading monoms is zero.
1458. Creating S-polynomial from the pair  $(p_5, p_{169})$ .  
 Skipping pair  $p_5$  and  $p_{169}$  because gcd of their leading monoms is zero.
1459. Creating S-polynomial from the pair  $(p_5, p_{170})$ .  
 Skipping pair  $p_5$  and  $p_{170}$  because gcd of their leading monoms is zero.
1460. Creating S-polynomial from the pair  $(p_5, p_{171})$ .  
 Skipping pair  $p_5$  and  $p_{171}$  because gcd of their leading monoms is zero.
1461. Creating S-polynomial from the pair  $(p_5, p_{172})$ .  
 Skipping pair  $p_5$  and  $p_{172}$  because gcd of their leading monoms is zero.
1462. Creating S-polynomial from the pair  $(p_5, p_{173})$ .  
 Skipping pair  $p_5$  and  $p_{173}$  because gcd of their leading monoms is zero.
1463. Creating S-polynomial from the pair  $(p_5, p_{174})$ .  
 Skipping pair  $p_5$  and  $p_{174}$  because gcd of their leading monoms is zero.
1464. Creating S-polynomial from the pair  $(p_5, p_{175})$ .  
 Skipping pair  $p_5$  and  $p_{175}$  because gcd of their leading monoms is zero.

1465. Creating S-polynomial from the pair  $(p_5, p_{176})$ .  
 Skipping pair  $p_5$  and  $p_{176}$  because gcd of their leading monoms is zero.
1466. Creating S-polynomial from the pair  $(p_5, p_{177})$ .  
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1467. Creating S-polynomial from the pair  $(p_5, p_{178})$ .  
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1468. Creating S-polynomial from the pair  $(p_5, p_{179})$ .  
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1469. Creating S-polynomial from the pair  $(p_5, p_{180})$ .  
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1470. Creating S-polynomial from the pair  $(p_5, p_{181})$ .  
 Skipping pair  $p_5$  and  $p_{181}$  because gcd of their leading monoms is zero.
1471. Creating S-polynomial from the pair  $(p_5, p_{182})$ .  
 Skipping pair  $p_5$  and  $p_{182}$  because gcd of their leading monoms is zero.
1472. Creating S-polynomial from the pair  $(p_5, p_{183})$ .  
 Skipping pair  $p_5$  and  $p_{183}$  because gcd of their leading monoms is zero.
1473. Creating S-polynomial from the pair  $(p_5, p_{184})$ .  
 Skipping pair  $p_5$  and  $p_{184}$  because gcd of their leading monoms is zero.
1474. Creating S-polynomial from the pair  $(p_5, p_{185})$ .  
 Skipping pair  $p_5$  and  $p_{185}$  because gcd of their leading monoms is zero.
1475. Creating S-polynomial from the pair  $(p_5, p_{186})$ .  
 Skipping pair  $p_5$  and  $p_{186}$  because gcd of their leading monoms is zero.
1476. Creating S-polynomial from the pair  $(p_5, p_{187})$ .  
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1477. Creating S-polynomial from the pair  $(p_5, p_{188})$ .  
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1478. Creating S-polynomial from the pair  $(p_5, p_{189})$ .  
 Skipping pair  $p_5$  and  $p_{189}$  because gcd of their leading monoms is zero.
1479. Creating S-polynomial from the pair  $(p_5, p_{190})$ .  
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1480. Creating S-polynomial from the pair  $(p_5, p_{191})$ .  
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1481. Creating S-polynomial from the pair  $(p_5, p_{192})$ .  
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1482. Creating S-polynomial from the pair  $(p_5, p_{193})$ .  
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1483. Creating S-polynomial from the pair  $(p_5, p_{194})$ .  
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1484. Creating S-polynomial from the pair  $(p_5, p_{195})$ .  
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1485. Creating S-polynomial from the pair  $(p_5, p_{196})$ .  
 Skipping pair  $p_5$  and  $p_{196}$  because gcd of their leading monoms is zero.
1486. Creating S-polynomial from the pair  $(p_5, p_{197})$ .  
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1487. Creating S-polynomial from the pair  $(p_5, p_{198})$ .  
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1488. Creating S-polynomial from the pair  $(p_5, p_{199})$ .  
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1489. Creating S-polynomial from the pair  $(p_5, p_{200})$ .  
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1490. Creating S-polynomial from the pair  $(p_5, p_{201})$ .  
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1491. Creating S-polynomial from the pair  $(p_5, p_{202})$ .  
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1492. Creating S-polynomial from the pair  $(p_5, p_{203})$ .  
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1493. Creating S-polynomial from the pair  $(p_5, p_{204})$ .  
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1494. Creating S-polynomial from the pair  $(p_5, p_{205})$ .  
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1495. Creating S-polynomial from the pair  $(p_5, p_{206})$ .  
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1496. Creating S-polynomial from the pair  $(p_5, p_{207})$ .  
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1497. Creating S-polynomial from the pair  $(p_5, p_{208})$ .  
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1498. Creating S-polynomial from the pair  $(p_5, p_{209})$ .  
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1499. Creating S-polynomial from the pair  $(p_5, p_{210})$ .  
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1500. Creating S-polynomial from the pair  $(p_5, p_{211})$ .  
 Skipping pair  $p_5$  and  $p_{211}$  because gcd of their leading monoms is zero.
1501. Creating S-polynomial from the pair  $(p_5, p_{212})$ .  
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1502. Creating S-polynomial from the pair  $(p_5, p_{213})$ .  
 Skipping pair  $p_5$  and  $p_{213}$  because gcd of their leading monoms is zero.
1503. Creating S-polynomial from the pair  $(p_5, p_{214})$ .  
 Skipping pair  $p_5$  and  $p_{214}$  because gcd of their leading monoms is zero.
1504. Creating S-polynomial from the pair  $(p_5, p_{215})$ .  
 Skipping pair  $p_5$  and  $p_{215}$  because gcd of their leading monoms is zero.
1505. Creating S-polynomial from the pair  $(p_5, p_{216})$ .  
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1506. Creating S-polynomial from the pair  $(p_5, p_{217})$ .  
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1507. Creating S-polynomial from the pair  $(p_5, p_{218})$ .  
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1508. Creating S-polynomial from the pair  $(p_5, p_{219})$ .  
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1509. Creating S-polynomial from the pair  $(p_5, p_{220})$ .  
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1510. Creating S-polynomial from the pair  $(p_5, p_{221})$ .  
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1511. Creating S-polynomial from the pair  $(p_5, p_{222})$ .  
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1512. Creating S-polynomial from the pair  $(p_5, p_{223})$ .  
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1513. Creating S-polynomial from the pair  $(p_5, p_{224})$ .  
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1514. Creating S-polynomial from the pair  $(p_5, p_{225})$ .  
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1515. Creating S-polynomial from the pair  $(p_5, p_{226})$ .  
 Skipping pair  $p_5$  and  $p_{226}$  because gcd of their leading monoms is zero.



1516. Creating S-polynomial from the pair  $(p_5, p_{227})$ .  
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1517. Creating S-polynomial from the pair  $(p_5, p_{228})$ .  
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1518. Creating S-polynomial from the pair  $(p_5, p_{229})$ .  
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1519. Creating S-polynomial from the pair  $(p_5, p_{230})$ .  
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1520. Creating S-polynomial from the pair  $(p_5, p_{231})$ .  
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1521. Creating S-polynomial from the pair  $(p_5, p_{232})$ .  
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1522. Creating S-polynomial from the pair  $(p_5, p_{233})$ .  
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1523. Creating S-polynomial from the pair  $(p_5, p_{234})$ .  
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1524. Creating S-polynomial from the pair  $(p_5, p_{235})$ .  
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1525. Creating S-polynomial from the pair  $(p_5, p_{236})$ .  
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1526. Creating S-polynomial from the pair  $(p_5, p_{237})$ .  
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1527. Creating S-polynomial from the pair  $(p_5, p_{238})$ .  
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1528. Creating S-polynomial from the pair  $(p_5, p_{239})$ .  
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1529. Creating S-polynomial from the pair  $(p_5, p_{240})$ .  
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1530. Creating S-polynomial from the pair  $(p_5, p_{241})$ .  
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1531. Creating S-polynomial from the pair  $(p_5, p_{242})$ .  
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1532. Creating S-polynomial from the pair  $(p_5, p_{243})$ .  
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1533. Creating S-polynomial from the pair  $(p_5, p_{244})$ .  
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1534. Creating S-polynomial from the pair  $(p_5, p_{245})$ .  
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1535. Creating S-polynomial from the pair  $(p_5, p_{246})$ .  
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1536. Creating S-polynomial from the pair  $(p_5, p_{247})$ .  
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1537. Creating S-polynomial from the pair  $(p_5, p_{248})$ .  
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1538. Creating S-polynomial from the pair  $(p_5, p_{249})$ .  
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1539. Creating S-polynomial from the pair  $(p_5, p_{250})$ .  
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1540. Creating S-polynomial from the pair  $(p_5, p_{251})$ .  
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1541. Creating S-polynomial from the pair  $(p_5, p_{252})$ .  
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1542. Creating S-polynomial from the pair  $(p_5, p_{253})$ .  
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1543. Creating S-polynomial from the pair  $(p_5, p_{254})$ .  
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1544. Creating S-polynomial from the pair  $(p_5, p_{255})$ .  
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1545. Creating S-polynomial from the pair  $(p_5, p_{256})$ .  
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1546. Creating S-polynomial from the pair  $(p_5, p_{257})$ .  
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1547. Creating S-polynomial from the pair  $(p_5, p_{258})$ .  
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1548. Creating S-polynomial from the pair  $(p_5, p_{259})$ .  
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1549. Creating S-polynomial from the pair  $(p_5, p_{260})$ .  
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1550. Creating S-polynomial from the pair  $(p_5, p_{261})$ .  
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1551. Creating S-polynomial from the pair  $(p_5, p_{262})$ .  
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1552. Creating S-polynomial from the pair  $(p_5, p_{263})$ .  
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1553. Creating S-polynomial from the pair  $(p_5, p_{264})$ .  
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1554. Creating S-polynomial from the pair  $(p_5, p_{265})$ .  
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1555. Creating S-polynomial from the pair  $(p_5, p_{266})$ .  
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1556. Creating S-polynomial from the pair  $(p_5, p_{267})$ .  
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1557. Creating S-polynomial from the pair  $(p_5, p_{268})$ .  
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1558. Creating S-polynomial from the pair  $(p_5, p_{269})$ .  
 Skipping pair  $p_5$  and  $p_{269}$  because gcd of their leading monoms is zero.
1559. Creating S-polynomial from the pair  $(p_5, p_{270})$ .  
 Skipping pair  $p_5$  and  $p_{270}$  because gcd of their leading monoms is zero.
1560. Creating S-polynomial from the pair  $(p_5, p_{271})$ .  
 Skipping pair  $p_5$  and  $p_{271}$  because gcd of their leading monoms is zero.
1561. Creating S-polynomial from the pair  $(p_5, p_{272})$ .  
 Skipping pair  $p_5$  and  $p_{272}$  because gcd of their leading monoms is zero.
1562. Creating S-polynomial from the pair  $(p_5, p_{273})$ .  
 Skipping pair  $p_5$  and  $p_{273}$  because gcd of their leading monoms is zero.
1563. Creating S-polynomial from the pair  $(p_5, p_{274})$ .  
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1564. Creating S-polynomial from the pair  $(p_5, p_{275})$ .  
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1565. Creating S-polynomial from the pair  $(p_5, p_{276})$ .  
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1566. Creating S-polynomial from the pair  $(p_5, p_{277})$ .  
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1567. Creating S-polynomial from the pair  $(p_5, p_{278})$ .  
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1568. Creating S-polynomial from the pair  $(p_5, p_{279})$ .  
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1569. Creating S-polynomial from the pair  $(p_5, p_{280})$ .  
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1570. Creating S-polynomial from the pair  $(p_5, p_{281})$ .  
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1571. Creating S-polynomial from the pair  $(p_5, p_{282})$ .  
 Skipping pair  $p_5$  and  $p_{282}$  because gcd of their leading monoms is zero.
1572. Creating S-polynomial from the pair  $(p_5, p_{283})$ .  
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1573. Creating S-polynomial from the pair  $(p_5, p_{284})$ .  
 Skipping pair  $p_5$  and  $p_{284}$  because gcd of their leading monoms is zero.
1574. Creating S-polynomial from the pair  $(p_5, p_{285})$ .  
 Skipping pair  $p_5$  and  $p_{285}$  because gcd of their leading monoms is zero.
1575. Creating S-polynomial from the pair  $(p_5, p_{286})$ .  
 Skipping pair  $p_5$  and  $p_{286}$  because gcd of their leading monoms is zero.
1576. Creating S-polynomial from the pair  $(p_5, p_{287})$ .  
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1577. Creating S-polynomial from the pair  $(p_5, p_{288})$ .  
 Skipping pair  $p_5$  and  $p_{288}$  because gcd of their leading monoms is zero.
1578. Creating S-polynomial from the pair  $(p_5, p_{289})$ .  
 Skipping pair  $p_5$  and  $p_{289}$  because gcd of their leading monoms is zero.
1579. Creating S-polynomial from the pair  $(p_5, p_{290})$ .  
 Skipping pair  $p_5$  and  $p_{290}$  because gcd of their leading monoms is zero.
1580. Creating S-polynomial from the pair  $(p_5, p_{291})$ .  
 Skipping pair  $p_5$  and  $p_{291}$  because gcd of their leading monoms is zero.
1581. Creating S-polynomial from the pair  $(p_5, p_{292})$ .  
 Skipping pair  $p_5$  and  $p_{292}$  because gcd of their leading monoms is zero.
1582. Creating S-polynomial from the pair  $(p_5, p_{293})$ .  
 Skipping pair  $p_5$  and  $p_{293}$  because gcd of their leading monoms is zero.
1583. Creating S-polynomial from the pair  $(p_5, p_{294})$ .  
 Skipping pair  $p_5$  and  $p_{294}$  because gcd of their leading monoms is zero.

1584. Creating S-polynomial from the pair  $(p_5, p_{295})$ .  
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1585. Creating S-polynomial from the pair  $(p_5, p_{296})$ .  
 Skipping pair  $p_5$  and  $p_{296}$  because gcd of their leading monoms is zero.
1586. Creating S-polynomial from the pair  $(p_5, p_{297})$ .  
 Skipping pair  $p_5$  and  $p_{297}$  because gcd of their leading monoms is zero.
1587. Creating S-polynomial from the pair  $(p_5, p_{298})$ .  
 Skipping pair  $p_5$  and  $p_{298}$  because gcd of their leading monoms is zero.
1588. Creating S-polynomial from the pair  $(p_5, p_{299})$ .  
 Skipping pair  $p_5$  and  $p_{299}$  because gcd of their leading monoms is zero.
1589. Creating S-polynomial from the pair  $(p_5, p_{300})$ .  
 Skipping pair  $p_5$  and  $p_{300}$  because gcd of their leading monoms is zero.
1590. Creating S-polynomial from the pair  $(p_5, p_{301})$ .  
 Skipping pair  $p_5$  and  $p_{301}$  because gcd of their leading monoms is zero.
1591. Creating S-polynomial from the pair  $(p_5, p_{302})$ .  
 Skipping pair  $p_5$  and  $p_{302}$  because gcd of their leading monoms is zero.
1592. Creating S-polynomial from the pair  $(p_5, p_{303})$ .  
 Skipping pair  $p_5$  and  $p_{303}$  because gcd of their leading monoms is zero.
1593. Creating S-polynomial from the pair  $(p_5, p_{304})$ .  
 Skipping pair  $p_5$  and  $p_{304}$  because gcd of their leading monoms is zero.
1594. Creating S-polynomial from the pair  $(p_5, p_{305})$ .  
 Skipping pair  $p_5$  and  $p_{305}$  because gcd of their leading monoms is zero.
1595. Creating S-polynomial from the pair  $(p_5, p_{306})$ .  
 Skipping pair  $p_5$  and  $p_{306}$  because gcd of their leading monoms is zero.
1596. Creating S-polynomial from the pair  $(p_5, p_{307})$ .  
 Skipping pair  $p_5$  and  $p_{307}$  because gcd of their leading monoms is zero.
1597. Creating S-polynomial from the pair  $(p_5, p_{308})$ .  
 Skipping pair  $p_5$  and  $p_{308}$  because gcd of their leading monoms is zero.
1598. Creating S-polynomial from the pair  $(p_5, p_{309})$ .  
 Skipping pair  $p_5$  and  $p_{309}$  because gcd of their leading monoms is zero.
1599. Creating S-polynomial from the pair  $(p_5, p_{310})$ .  
 Skipping pair  $p_5$  and  $p_{310}$  because gcd of their leading monoms is zero.
1600. Creating S-polynomial from the pair  $(p_5, p_{311})$ .  
 Skipping pair  $p_5$  and  $p_{311}$  because gcd of their leading monoms is zero.

1601. Creating S-polynomial from the pair  $(p_5, p_{312})$ .  
 Skipping pair  $p_5$  and  $p_{312}$  because gcd of their leading monoms is zero.
1602. Creating S-polynomial from the pair  $(p_5, p_{313})$ .  
 Skipping pair  $p_5$  and  $p_{313}$  because gcd of their leading monoms is zero.
1603. Creating S-polynomial from the pair  $(p_5, p_{314})$ .  
 Skipping pair  $p_5$  and  $p_{314}$  because gcd of their leading monoms is zero.
1604. Creating S-polynomial from the pair  $(p_5, p_{315})$ .  
 Skipping pair  $p_5$  and  $p_{315}$  because gcd of their leading monoms is zero.
1605. Creating S-polynomial from the pair  $(p_5, p_{316})$ .  
 Skipping pair  $p_5$  and  $p_{316}$  because gcd of their leading monoms is zero.
1606. Creating S-polynomial from the pair  $(p_5, p_{317})$ .  
 Skipping pair  $p_5$  and  $p_{317}$  because gcd of their leading monoms is zero.
1607. Creating S-polynomial from the pair  $(p_5, p_{318})$ .  
 Skipping pair  $p_5$  and  $p_{318}$  because gcd of their leading monoms is zero.
1608. Creating S-polynomial from the pair  $(p_5, p_{319})$ .  
 Skipping pair  $p_5$  and  $p_{319}$  because gcd of their leading monoms is zero.
1609. Creating S-polynomial from the pair  $(p_5, p_{320})$ .  
 Skipping pair  $p_5$  and  $p_{320}$  because gcd of their leading monoms is zero.
1610. Creating S-polynomial from the pair  $(p_5, p_{321})$ .  
 Skipping pair  $p_5$  and  $p_{321}$  because gcd of their leading monoms is zero.
1611. Creating S-polynomial from the pair  $(p_5, p_{322})$ .  
 Skipping pair  $p_5$  and  $p_{322}$  because gcd of their leading monoms is zero.
1612. Creating S-polynomial from the pair  $(p_5, p_{323})$ .  
 Skipping pair  $p_5$  and  $p_{323}$  because gcd of their leading monoms is zero.
1613. Creating S-polynomial from the pair  $(p_5, p_{324})$ .  
 Skipping pair  $p_5$  and  $p_{324}$  because gcd of their leading monoms is zero.
1614. Creating S-polynomial from the pair  $(p_5, p_{325})$ .  
 Skipping pair  $p_5$  and  $p_{325}$  because gcd of their leading monoms is zero.
1615. Creating S-polynomial from the pair  $(p_5, p_{326})$ .  
 Skipping pair  $p_5$  and  $p_{326}$  because gcd of their leading monoms is zero.
1616. Creating S-polynomial from the pair  $(p_5, p_{327})$ .  
 Skipping pair  $p_5$  and  $p_{327}$  because gcd of their leading monoms is zero.
1617. Creating S-polynomial from the pair  $(p_5, p_{328})$ .  
 Skipping pair  $p_5$  and  $p_{328}$  because gcd of their leading monoms is zero.

1618. Creating S-polynomial from the pair  $(p_5, p_{329})$ .  
 Skipping pair  $p_5$  and  $p_{329}$  because gcd of their leading monoms is zero.
1619. Creating S-polynomial from the pair  $(p_5, p_{330})$ .  
 Skipping pair  $p_5$  and  $p_{330}$  because gcd of their leading monoms is zero.
1620. Creating S-polynomial from the pair  $(p_5, p_{331})$ .  
 Skipping pair  $p_5$  and  $p_{331}$  because gcd of their leading monoms is zero.
1621. Creating S-polynomial from the pair  $(p_5, p_{332})$ .  
 Skipping pair  $p_5$  and  $p_{332}$  because gcd of their leading monoms is zero.
1622. Creating S-polynomial from the pair  $(p_5, p_{333})$ .  
 Skipping pair  $p_5$  and  $p_{333}$  because gcd of their leading monoms is zero.
1623. Creating S-polynomial from the pair  $(p_5, p_{334})$ .  
 Skipping pair  $p_5$  and  $p_{334}$  because gcd of their leading monoms is zero.
1624. Creating S-polynomial from the pair  $(p_5, p_{335})$ .  
 Skipping pair  $p_5$  and  $p_{335}$  because gcd of their leading monoms is zero.
1625. Creating S-polynomial from the pair  $(p_5, p_{336})$ .  
 Skipping pair  $p_5$  and  $p_{336}$  because gcd of their leading monoms is zero.
1626. Creating S-polynomial from the pair  $(p_5, p_{337})$ .  
 Skipping pair  $p_5$  and  $p_{337}$  because gcd of their leading monoms is zero.
1627. Creating S-polynomial from the pair  $(p_5, p_{338})$ .  
 Skipping pair  $p_5$  and  $p_{338}$  because gcd of their leading monoms is zero.
1628. Creating S-polynomial from the pair  $(p_5, p_{339})$ .  
 Skipping pair  $p_5$  and  $p_{339}$  because gcd of their leading monoms is zero.
1629. Creating S-polynomial from the pair  $(p_5, p_{340})$ .  
 Skipping pair  $p_5$  and  $p_{340}$  because gcd of their leading monoms is zero.
1630. Creating S-polynomial from the pair  $(p_5, p_{341})$ .  
 Skipping pair  $p_5$  and  $p_{341}$  because gcd of their leading monoms is zero.
1631. Creating S-polynomial from the pair  $(p_5, p_{342})$ .  
 Skipping pair  $p_5$  and  $p_{342}$  because gcd of their leading monoms is zero.
1632. Creating S-polynomial from the pair  $(p_5, p_{343})$ .  
 Skipping pair  $p_5$  and  $p_{343}$  because gcd of their leading monoms is zero.
1633. Creating S-polynomial from the pair  $(p_5, p_{344})$ .  
 Skipping pair  $p_5$  and  $p_{344}$  because gcd of their leading monoms is zero.
1634. Creating S-polynomial from the pair  $(p_5, p_{345})$ .  
 Skipping pair  $p_5$  and  $p_{345}$  because gcd of their leading monoms is zero.

1635. Creating S-polynomial from the pair  $(p_5, p_{346})$ .  
 Skipping pair  $p_5$  and  $p_{346}$  because gcd of their leading monoms is zero.
1636. Creating S-polynomial from the pair  $(p_5, p_{347})$ .  
 Skipping pair  $p_5$  and  $p_{347}$  because gcd of their leading monoms is zero.
1637. Creating S-polynomial from the pair  $(p_5, p_{348})$ .  
 Skipping pair  $p_5$  and  $p_{348}$  because gcd of their leading monoms is zero.
1638. Creating S-polynomial from the pair  $(p_5, p_{349})$ .  
 Skipping pair  $p_5$  and  $p_{349}$  because gcd of their leading monoms is zero.
1639. Creating S-polynomial from the pair  $(p_5, p_{350})$ .  
 Skipping pair  $p_5$  and  $p_{350}$  because gcd of their leading monoms is zero.
1640. Creating S-polynomial from the pair  $(p_5, p_{351})$ .  
 Skipping pair  $p_5$  and  $p_{351}$  because gcd of their leading monoms is zero.
1641. Creating S-polynomial from the pair  $(p_5, p_{352})$ .  
 Skipping pair  $p_5$  and  $p_{352}$  because gcd of their leading monoms is zero.
1642. Creating S-polynomial from the pair  $(p_5, p_{353})$ .  
 Skipping pair  $p_5$  and  $p_{353}$  because gcd of their leading monoms is zero.
1643. Creating S-polynomial from the pair  $(p_5, p_{354})$ .  
 Skipping pair  $p_5$  and  $p_{354}$  because gcd of their leading monoms is zero.
1644. Creating S-polynomial from the pair  $(p_5, p_{355})$ .  
 Skipping pair  $p_5$  and  $p_{355}$  because gcd of their leading monoms is zero.
1645. Creating S-polynomial from the pair  $(p_5, p_{356})$ .  
 Skipping pair  $p_5$  and  $p_{356}$  because gcd of their leading monoms is zero.
1646. Creating S-polynomial from the pair  $(p_5, p_{357})$ .  
 Skipping pair  $p_5$  and  $p_{357}$  because gcd of their leading monoms is zero.
1647. Creating S-polynomial from the pair  $(p_5, p_{358})$ .  
 Skipping pair  $p_5$  and  $p_{358}$  because gcd of their leading monoms is zero.
1648. Creating S-polynomial from the pair  $(p_5, p_{359})$ .  
 Skipping pair  $p_5$  and  $p_{359}$  because gcd of their leading monoms is zero.
1649. Creating S-polynomial from the pair  $(p_5, p_{360})$ .  
 Skipping pair  $p_5$  and  $p_{360}$  because gcd of their leading monoms is zero.
1650. Creating S-polynomial from the pair  $(p_5, p_{361})$ .  
 Skipping pair  $p_5$  and  $p_{361}$  because gcd of their leading monoms is zero.
1651. Creating S-polynomial from the pair  $(p_5, p_{362})$ .  
 Skipping pair  $p_5$  and  $p_{362}$  because gcd of their leading monoms is zero.



1652. Creating S-polynomial from the pair  $(p_5, p_{363})$ .  
 Skipping pair  $p_5$  and  $p_{363}$  because gcd of their leading monoms is zero.
1653. Creating S-polynomial from the pair  $(p_5, p_{364})$ .  
 Skipping pair  $p_5$  and  $p_{364}$  because gcd of their leading monoms is zero.
1654. Creating S-polynomial from the pair  $(p_5, p_{365})$ .  
 Skipping pair  $p_5$  and  $p_{365}$  because gcd of their leading monoms is zero.
1655. Creating S-polynomial from the pair  $(p_5, p_{366})$ .  
 Skipping pair  $p_5$  and  $p_{366}$  because gcd of their leading monoms is zero.
1656. Creating S-polynomial from the pair  $(p_5, p_{367})$ .  
 Skipping pair  $p_5$  and  $p_{367}$  because gcd of their leading monoms is zero.
1657. Creating S-polynomial from the pair  $(p_5, p_{368})$ .  
 Skipping pair  $p_5$  and  $p_{368}$  because gcd of their leading monoms is zero.
1658. Creating S-polynomial from the pair  $(p_5, p_{369})$ .  
 Skipping pair  $p_5$  and  $p_{369}$  because gcd of their leading monoms is zero.
1659. Creating S-polynomial from the pair  $(p_5, p_{370})$ .  
 Skipping pair  $p_5$  and  $p_{370}$  because gcd of their leading monoms is zero.
1660. Creating S-polynomial from the pair  $(p_5, p_{371})$ .  
 Skipping pair  $p_5$  and  $p_{371}$  because gcd of their leading monoms is zero.
1661. Creating S-polynomial from the pair  $(p_5, p_{372})$ .  
 Skipping pair  $p_5$  and  $p_{372}$  because gcd of their leading monoms is zero.
1662. Creating S-polynomial from the pair  $(p_5, p_{373})$ .  
 Skipping pair  $p_5$  and  $p_{373}$  because gcd of their leading monoms is zero.
1663. Creating S-polynomial from the pair  $(p_5, p_{374})$ .  
 Skipping pair  $p_5$  and  $p_{374}$  because gcd of their leading monoms is zero.
1664. Creating S-polynomial from the pair  $(p_5, p_{375})$ .  
 Skipping pair  $p_5$  and  $p_{375}$  because gcd of their leading monoms is zero.
1665. Creating S-polynomial from the pair  $(p_5, p_{376})$ .  
 Skipping pair  $p_5$  and  $p_{376}$  because gcd of their leading monoms is zero.
1666. Creating S-polynomial from the pair  $(p_5, p_{377})$ .  
 Skipping pair  $p_5$  and  $p_{377}$  because gcd of their leading monoms is zero.
1667. Creating S-polynomial from the pair  $(p_5, p_{378})$ .  
 Skipping pair  $p_5$  and  $p_{378}$  because gcd of their leading monoms is zero.
1668. Creating S-polynomial from the pair  $(p_5, p_{379})$ .  
 Skipping pair  $p_5$  and  $p_{379}$  because gcd of their leading monoms is zero.

1669. Creating S-polynomial from the pair  $(p_5, p_{380})$ .  
 Skipping pair  $p_5$  and  $p_{380}$  because gcd of their leading monoms is zero.
1670. Creating S-polynomial from the pair  $(p_5, p_{381})$ .  
 Skipping pair  $p_5$  and  $p_{381}$  because gcd of their leading monoms is zero.
1671. Creating S-polynomial from the pair  $(p_5, p_{382})$ .  
 Skipping pair  $p_5$  and  $p_{382}$  because gcd of their leading monoms is zero.
1672. Creating S-polynomial from the pair  $(p_5, p_{383})$ .  
 Skipping pair  $p_5$  and  $p_{383}$  because gcd of their leading monoms is zero.
1673. Creating S-polynomial from the pair  $(p_5, p_{384})$ .  
 Skipping pair  $p_5$  and  $p_{384}$  because gcd of their leading monoms is zero.
1674. Creating S-polynomial from the pair  $(p_5, p_{385})$ .  
 Skipping pair  $p_5$  and  $p_{385}$  because gcd of their leading monoms is zero.
1675. Creating S-polynomial from the pair  $(p_6, p_{107})$ .  
 Skipping pair  $p_6$  and  $p_{107}$  because gcd of their leading monoms is zero.
1676. Creating S-polynomial from the pair  $(p_6, p_{108})$ .  
 Forming S-pol of  $p_6$  and  $p_{108}$ :

$$\begin{aligned}
 p_{1738} = & -131072u_3^{31}u_1^{17}x_7x_5x_4 + \\
 & (-131072u_5^2u_3^{29}u_1^{17} + 65536u_5^2u_3^{29}u_1^{16})x_7x_5x_2 + \\
 & 65536u_5^2u_3^{31}u_1^{16}x_7x_5 + 131072u_6u_3^{30}u_1^{17}x_7x_4x_2 - \\
 & 131072u_6u_3^{30}u_1^{17}x_7x_4 - 65536u_6u_5^2u_3^{30}u_1^{16}x_7x_2 + \\
 & 65536u_6u_5^2u_3^{30}u_1^{16}x_7 + (-262144u_3^{30}u_1^{18} + 131072u_3^{30}u_1^{17})x_6x_5x_4 + \\
 & (262144u_3^{29}u_1^{18} - 131072u_3^{29}u_1^{17})x_5x_4^2x_2 + \\
 & (262144u_5u_3^{30}u_1^{18} - 131072u_5u_3^{30}u_1^{17})x_5x_4
 \end{aligned}$$

S-pol added.

1677. Creating S-polynomial from the pair  $(p_6, p_{109})$ .  
 Skipping pair  $p_6$  and  $p_{109}$  because gcd of their leading monoms is zero.
1678. Creating S-polynomial from the pair  $(p_6, p_{110})$ .  
 Forming S-pol of  $p_6$  and  $p_{110}$ :

$$\begin{aligned}
 p_{1739} = & -65536u_3^{30}u_1^{16}x_7x_5x_4 + \\
 & (-65536u_5^2u_3^{28}u_1^{16} + 32768u_5^2u_3^{28}u_1^{15})x_7x_5x_2 + \\
 & 32768u_5^2u_3^{30}u_1^{15}x_7x_5 + 65536u_6u_3^{29}u_1^{16}x_7x_4x_2 - \\
 & 65536u_6u_3^{29}u_1^{16}x_7x_4 - 32768u_6u_5^2u_3^{29}u_1^{15}x_7x_2 + \\
 & 32768u_6u_5^2u_3^{29}u_1^{15}x_7 + (-131072u_3^{29}u_1^{17} + 65536u_3^{29}u_1^{16})x_6x_5x_4 + \\
 & (131072u_3^{28}u_1^{17} - 65536u_3^{28}u_1^{16})x_5x_4^2x_2 + \\
 & (131072u_5u_3^{29}u_1^{17} - 65536u_5u_3^{29}u_1^{16})x_5x_4
 \end{aligned}$$

S-pol added.

1679. Creating S-polynomial from the pair  $(p_6, p_{111})$ .  
 Skipping pair  $p_6$  and  $p_{111}$  because gcd of their leading monoms is zero.
1680. Creating S-polynomial from the pair  $(p_6, p_{112})$ .  
 Skipping pair  $p_6$  and  $p_{112}$  because gcd of their leading monoms is zero.
1681. Creating S-polynomial from the pair  $(p_6, p_{113})$ .  
 Skipping pair  $p_6$  and  $p_{113}$  because gcd of their leading monoms is zero.
1682. Creating S-polynomial from the pair  $(p_6, p_{114})$ .  
 Skipping pair  $p_6$  and  $p_{114}$  because gcd of their leading monoms is zero.
1683. Creating S-polynomial from the pair  $(p_6, p_{115})$ .  
 Forming S-pol of  $p_6$  and  $p_{115}$ :

$$\begin{aligned}
 p_{1740} = & (-524288u_3^{27}u_1^{19} + 262144u_3^{27}u_1^{18})x_7x_5x_4 + \\
 & (524288u_6u_3^{26}u_1^{19} - 262144u_6u_3^{26}u_1^{18})x_7x_4x_2 - \\
 & 262144u_6u_3^{28}u_1^{18}x_7x_4 + \\
 & (262144u_3^{28}u_1^{18} - 1048576u_3^{26}u_1^{20} + 524288u_3^{26}u_1^{19})x_6x_5x_4 + \\
 & (-262144u_3^{27}u_1^{18} + 1048576u_3^{25}u_1^{20} - 524288u_3^{25}u_1^{19})x_5x_4^2x_2 + \\
 & (-262144u_5u_3^{28}u_1^{18} + 1048576u_5u_3^{26}u_1^{20} - 524288u_5u_3^{26}u_1^{19})x_5x_4
 \end{aligned}$$

S-pol added.

1684. Creating S-polynomial from the pair  $(p_6, p_{116})$ .  
 Forming S-pol of  $p_6$  and  $p_{116}$ :

$$\begin{aligned}
 p_{1741} = & (-262144u_3^{26}u_1^{18} + 131072u_3^{26}u_1^{17})x_7x_5x_4 + \\
 & (262144u_6u_3^{25}u_1^{18} - 131072u_6u_3^{25}u_1^{17})x_7x_4x_2 - \\
 & 131072u_6u_3^{27}u_1^{17}x_7x_4 + \\
 & (131072u_3^{27}u_1^{17} - 524288u_3^{25}u_1^{19} + 262144u_3^{25}u_1^{18})x_6x_5x_4 + \\
 & (-131072u_3^{26}u_1^{17} + 524288u_3^{24}u_1^{19} - 262144u_3^{24}u_1^{18})x_5x_4^2x_2 + \\
 & (-131072u_5u_3^{27}u_1^{17} + 524288u_5u_3^{25}u_1^{19} - 262144u_5u_3^{25}u_1^{18})x_5x_4
 \end{aligned}$$

S-pol added.

1685. Creating S-polynomial from the pair  $(p_6, p_{117})$ .  
 Skipping pair  $p_6$  and  $p_{117}$  because gcd of their leading monoms is zero.
1686. Creating S-polynomial from the pair  $(p_6, p_{118})$ .  
 Skipping pair  $p_6$  and  $p_{118}$  because gcd of their leading monoms is zero.
1687. Creating S-polynomial from the pair  $(p_6, p_{119})$ .  
 Forming S-pol of  $p_6$  and  $p_{119}$ : Polynomial too big for output (text size is 2498 characters, number of terms is 10)  
 S-pol added.

1688. Creating S-polynomial from the pair  $(p_6, p_{120})$ .

Forming S-pol of  $p_6$  and  $p_{120}$ : Polynomial too big for output (text size is 1489 characters, number of terms is 10)

S-pol added.

1689. Creating S-polynomial from the pair  $(p_6, p_{121})$ .

Forming S-pol of  $p_6$  and  $p_{121}$ : Polynomial too big for output (text size is 1319 characters, number of terms is 10)

S-pol added.

1690. Creating S-polynomial from the pair  $(p_6, p_{122})$ .

Forming S-pol of  $p_6$  and  $p_{122}$ :

$$\begin{aligned} p_{1742} = & (134217728u_3^{45}u_1^{27} - 67108864u_3^{45}u_1^{26})x_7x_5x_4 + \\ & (-33554432u_5^2u_3^{45}u_1^{25} + 134217728u_5^2u_3^{43}u_1^{27} - \\ & 67108864u_5^2u_3^{43}u_1^{26})x_7x_5x_2 + \\ & (-67108864u_5^2u_3^{45}u_1^{26} + 33554432u_5^2u_3^{45}u_1^{25})x_7x_5 + \\ & (-134217728u_6u_3^{44}u_1^{27} + 67108864u_6u_3^{44}u_1^{26})x_7x_4x_2 + \\ & 67108864u_6u_3^{46}u_1^{26}x_7x_4 + \\ & (67108864u_6u_5^2u_3^{44}u_1^{26} - 33554432u_6u_5^2u_3^{44}u_1^{25})x_7x_2 - \\ & 33554432u_6u_5^2u_3^{46}u_1^{25}x_7 + \\ & (-67108864u_3^{46}u_1^{26} + 268435456u_3^{44}u_1^{28} - 134217728u_3^{44}u_1^{27})x_6x_5x_4 + \\ & (67108864u_3^{45}u_1^{26} - 268435456u_3^{43}u_1^{28} + 134217728u_3^{43}u_1^{27})x_5x_4^2x_2 + \\ & (67108864u_5u_3^{46}u_1^{26} - 268435456u_5u_3^{44}u_1^{28} + 134217728u_5u_3^{44}u_1^{27})x_5x_4 \end{aligned}$$

S-pol added.

1691. Creating S-polynomial from the pair  $(p_6, p_{123})$ .

Forming S-pol of  $p_6$  and  $p_{123}$ : Polynomial too big for output (text size is 1234 characters, number of terms is 10)

S-pol added.

1692. Creating S-polynomial from the pair  $(p_6, p_{124})$ .

Forming S-pol of  $p_6$  and  $p_{124}$ : Polynomial too big for output (text size is 1336 characters, number of terms is 10)

S-pol added.

1693. Creating S-polynomial from the pair  $(p_6, p_{125})$ .

Forming S-pol of  $p_6$  and  $p_{125}$ :

$$\begin{aligned} p_{1743} = & (16777216u_3^{43}u_1^{24} - 8388608u_3^{43}u_1^{23})x_7x_5x_4 + \\ & (-4194304u_5^2u_3^{43}u_1^{22} + 16777216u_5^2u_3^{41}u_1^{24} - \\ & 8388608u_5^2u_3^{41}u_1^{23})x_7x_5x_2 + \end{aligned}$$

$$\begin{aligned}
& (-8388608u_5^2u_3^{43}u_1^{23} + 4194304u_5^2u_3^{43}u_1^{22})x_7x_5 + \\
& (-16777216u_6u_3^{42}u_1^{24} + 8388608u_6u_3^{42}u_1^{23})x_7x_4x_2 + \\
& 8388608u_6u_3^{44}u_1^{23}x_7x_4 + \\
& (8388608u_6u_5^2u_3^{42}u_1^{23} - 4194304u_6u_5^2u_3^{42}u_1^{22})x_7x_2 - \\
& 4194304u_6u_5^2u_3^{44}u_1^{22}x_7 + \\
& (-8388608u_3^{44}u_1^{23} + 33554432u_3^{42}u_1^{25} - 16777216u_3^{42}u_1^{24})x_6x_5x_4 + \\
& (8388608u_3^{43}u_1^{23} - 33554432u_3^{41}u_1^{25} + 16777216u_3^{41}u_1^{24})x_5x_4^2x_2 + \\
& (8388608u_5u_3^{44}u_1^{23} - 33554432u_5u_3^{42}u_1^{25} + 16777216u_5u_3^{42}u_1^{24})x_5x_4
\end{aligned}$$

S-pol added.

1694. Creating S-polynomial from the pair  $(p_6, p_{126})$ .

Forming S-pol of  $p_6$  and  $p_{126}$ : Polynomial too big for output (text size is 1313 characters, number of terms is 10)

S-pol added.

1695. Creating S-polynomial from the pair  $(p_6, p_{127})$ .

Forming S-pol of  $p_6$  and  $p_{127}$ : Polynomial too big for output (text size is 1224 characters, number of terms is 10)

S-pol added.

1696. Creating S-polynomial from the pair  $(p_6, p_{128})$ .

Forming S-pol of  $p_6$  and  $p_{128}$ :

$$\begin{aligned}
p_{1744} = & (65536u_3^{20}u_1^{16} - 32768u_3^{20}u_1^{15})x_7x_5x_4 + \\
& (-65536u_6u_3^{19}u_1^{16} + 32768u_6u_3^{19}u_1^{15})x_7x_4x_2 + 32768u_6u_3^{21}u_1^{15}x_7x_4 + \\
& (-32768u_3^{21}u_1^{15} + 131072u_3^{19}u_1^{17} - 65536u_3^{19}u_1^{16})x_6x_5x_4 + \\
& (32768u_3^{20}u_1^{15} - 131072u_3^{18}u_1^{17} + 65536u_3^{18}u_1^{16})x_5x_4^2x_2 + \\
& (32768u_5u_3^{21}u_1^{15} - 131072u_5u_3^{19}u_1^{17} + 65536u_5u_3^{19}u_1^{16})x_5x_4
\end{aligned}$$

S-pol added.

1697. Creating S-polynomial from the pair  $(p_6, p_{129})$ .

Forming S-pol of  $p_6$  and  $p_{129}$ :

$$\begin{aligned}
p_{1745} = & (32768u_3^{19}u_1^{15} - 16384u_3^{19}u_1^{14})x_7x_5x_4 + \\
& (-32768u_6u_3^{18}u_1^{15} + 16384u_6u_3^{18}u_1^{14})x_7x_4x_2 + 16384u_6u_3^{20}u_1^{14}x_7x_4 + \\
& (-16384u_3^{20}u_1^{14} + 65536u_3^{18}u_1^{16} - 32768u_3^{18}u_1^{15})x_6x_5x_4 + \\
& (16384u_3^{19}u_1^{14} - 65536u_3^{17}u_1^{16} + 32768u_3^{17}u_1^{15})x_5x_4^2x_2 + \\
& (16384u_5u_3^{20}u_1^{14} - 65536u_5u_3^{18}u_1^{16} + 32768u_5u_3^{18}u_1^{15})x_5x_4
\end{aligned}$$

S-pol added.

1698. Creating S-polynomial from the pair  $(p_6, p_{130})$ .  
 Skipping pair  $p_6$  and  $p_{130}$  because gcd of their leading monoms is zero.
1699. Creating S-polynomial from the pair  $(p_6, p_{131})$ .  
 Skipping pair  $p_6$  and  $p_{131}$  because gcd of their leading monoms is zero.
1700. Creating S-polynomial from the pair  $(p_6, p_{132})$ .  
 Skipping pair  $p_6$  and  $p_{132}$  because gcd of their leading monoms is zero.
1701. Creating S-polynomial from the pair  $(p_6, p_{133})$ .  
 Forming S-pol of  $p_6$  and  $p_{133}$ : Polynomial too big for output (text size is 1234 characters, number of terms is 10)  
 S-pol added.
1702. Creating S-polynomial from the pair  $(p_6, p_{134})$ .  
 Skipping pair  $p_6$  and  $p_{134}$  because gcd of their leading monoms is zero.
1703. Creating S-polynomial from the pair  $(p_6, p_{135})$ .  
 Forming S-pol of  $p_6$  and  $p_{135}$ : Polynomial too big for output (text size is 1224 characters, number of terms is 10)  
 S-pol added.
1704. Creating S-polynomial from the pair  $(p_6, p_{136})$ .  
 Skipping pair  $p_6$  and  $p_{136}$  because gcd of their leading monoms is zero.
1705. Creating S-polynomial from the pair  $(p_6, p_{137})$ .  
 Skipping pair  $p_6$  and  $p_{137}$  because gcd of their leading monoms is zero.
1706. Creating S-polynomial from the pair  $(p_6, p_{138})$ .  
 Skipping pair  $p_6$  and  $p_{138}$  because gcd of their leading monoms is zero.
1707. Creating S-polynomial from the pair  $(p_6, p_{139})$ .  
 Skipping pair  $p_6$  and  $p_{139}$  because gcd of their leading monoms is zero.
1708. Creating S-polynomial from the pair  $(p_6, p_{140})$ .  
 Skipping pair  $p_6$  and  $p_{140}$  because gcd of their leading monoms is zero.
1709. Creating S-polynomial from the pair  $(p_6, p_{141})$ .  
 Skipping pair  $p_6$  and  $p_{141}$  because gcd of their leading monoms is zero.
1710. Creating S-polynomial from the pair  $(p_6, p_{142})$ .  
 Skipping pair  $p_6$  and  $p_{142}$  because gcd of their leading monoms is zero.
1711. Creating S-polynomial from the pair  $(p_6, p_{143})$ .  
 Skipping pair  $p_6$  and  $p_{143}$  because gcd of their leading monoms is zero.
1712. Creating S-polynomial from the pair  $(p_6, p_{144})$ .  
 Forming S-pol of  $p_6$  and  $p_{144}$ : Polynomial too big for output (text size is 1319 characters, number of terms is 10)  
 S-pol added.

1713. Creating S-polynomial from the pair  $(p_6, p_{145})$ .  
 Skipping pair  $p_6$  and  $p_{145}$  because gcd of their leading monoms is zero.
1714. Creating S-polynomial from the pair  $(p_6, p_{146})$ .  
 Forming S-pol of  $p_6$  and  $p_{146}$ : Polynomial too big for output (text size is 1313 characters, number of terms is 10)  
 S-pol added.
1715. Creating S-polynomial from the pair  $(p_6, p_{147})$ .  
 Skipping pair  $p_6$  and  $p_{147}$  because gcd of their leading monoms is zero.
1716. Creating S-polynomial from the pair  $(p_6, p_{148})$ .  
 Skipping pair  $p_6$  and  $p_{148}$  because gcd of their leading monoms is zero.
1717. Creating S-polynomial from the pair  $(p_6, p_{149})$ .  
 Skipping pair  $p_6$  and  $p_{149}$  because gcd of their leading monoms is zero.
1718. Creating S-polynomial from the pair  $(p_6, p_{150})$ .  
 Skipping pair  $p_6$  and  $p_{150}$  because gcd of their leading monoms is zero.
1719. Creating S-polynomial from the pair  $(p_6, p_{151})$ .  
 Skipping pair  $p_6$  and  $p_{151}$  because gcd of their leading monoms is zero.
1720. Creating S-polynomial from the pair  $(p_6, p_{152})$ .  
 Skipping pair  $p_6$  and  $p_{152}$  because gcd of their leading monoms is zero.
1721. Creating S-polynomial from the pair  $(p_6, p_{153})$ .  
 Skipping pair  $p_6$  and  $p_{153}$  because gcd of their leading monoms is zero.
1722. Creating S-polynomial from the pair  $(p_6, p_{154})$ .  
 Skipping pair  $p_6$  and  $p_{154}$  because gcd of their leading monoms is zero.
1723. Creating S-polynomial from the pair  $(p_6, p_{155})$ .  
 Skipping pair  $p_6$  and  $p_{155}$  because gcd of their leading monoms is zero.
1724. Creating S-polynomial from the pair  $(p_6, p_{156})$ .  
 Skipping pair  $p_6$  and  $p_{156}$  because gcd of their leading monoms is zero.
1725. Creating S-polynomial from the pair  $(p_6, p_{157})$ .  
 Forming S-pol of  $p_6$  and  $p_{157}$ : Polynomial too big for output (text size is 1315 characters, number of terms is 10)  
 S-pol added.
1726. Creating S-polynomial from the pair  $(p_6, p_{158})$ .  
 Skipping pair  $p_6$  and  $p_{158}$  because gcd of their leading monoms is zero.
1727. Creating S-polynomial from the pair  $(p_6, p_{159})$ .  
 Forming S-pol of  $p_6$  and  $p_{159}$ : Polynomial too big for output (text size is 1305 characters, number of terms is 10)  
 S-pol added.

1728. Creating S-polynomial from the pair  $(p_6, p_{160})$ .

Skipping pair  $p_6$  and  $p_{160}$  because gcd of their leading monoms is zero.

1729. Creating S-polynomial from the pair  $(p_6, p_{161})$ .

Skipping pair  $p_6$  and  $p_{161}$  because gcd of their leading monoms is zero.

1730. Creating S-polynomial from the pair  $(p_6, p_{162})$ .

Skipping pair  $p_6$  and  $p_{162}$  because gcd of their leading monoms is zero.

1731. Creating S-polynomial from the pair  $(p_6, p_{163})$ .

Forming S-pol of  $p_6$  and  $p_{163}$ :

$$\begin{aligned} p_{1746} = & -16384u_3^{25}u_1^{14}x_7x_5x_4 + 16384u_6u_3^{24}u_1^{14}x_7x_4x_2 - \\ & 16384u_6u_3^{24}u_1^{14}x_7x_4 + (-32768u_3^{24}u_1^{15} + 16384u_3^{24}u_1^{14})x_6x_5x_4 + \\ & (32768u_3^{23}u_1^{15} - 16384u_3^{23}u_1^{14})x_5x_4^2x_2 + \\ & (32768u_5u_3^{24}u_1^{15} - 16384u_5u_3^{24}u_1^{14})x_5x_4 \end{aligned}$$

S-pol added.

1732. Creating S-polynomial from the pair  $(p_6, p_{164})$ .

Forming S-pol of  $p_6$  and  $p_{164}$ :

$$\begin{aligned} p_{1747} = & -8192u_3^{24}u_1^{13}x_7x_5x_4 + 8192u_6u_3^{23}u_1^{13}x_7x_4x_2 - \\ & 8192u_6u_3^{23}u_1^{13}x_7x_4 + (-16384u_3^{23}u_1^{14} + 8192u_3^{23}u_1^{13})x_6x_5x_4 + \\ & (16384u_3^{22}u_1^{14} - 8192u_3^{22}u_1^{13})x_5x_4^2x_2 + \\ & (16384u_5u_3^{23}u_1^{14} - 8192u_5u_3^{23}u_1^{13})x_5x_4 \end{aligned}$$

S-pol added.

1733. Creating S-polynomial from the pair  $(p_6, p_{165})$ .

Forming S-pol of  $p_6$  and  $p_{165}$ : Polynomial too big for output (text size is 2827 characters, number of terms is 10)

S-pol added.

1734. Creating S-polynomial from the pair  $(p_6, p_{166})$ .

Forming S-pol of  $p_6$  and  $p_{166}$ : Polynomial too big for output (text size is 1807 characters, number of terms is 10)

S-pol added.

1735. Creating S-polynomial from the pair  $(p_6, p_{167})$ .

Forming S-pol of  $p_6$  and  $p_{167}$ : Polynomial too big for output (text size is 1295 characters, number of terms is 10)

S-pol added.



1736. Creating S-polynomial from the pair  $(p_6, p_{168})$ .

Forming S-pol of  $p_6$  and  $p_{168}$ :

$$\begin{aligned} p_{1748} = & 1048576u_3^{32}u_1^{20}x_7x_5x_4 + \\ & (1048576u_5^2u_3^{30}u_1^{20} - 524288u_5^2u_3^{30}u_1^{19})x_7x_5x_2 - \\ & 524288u_5^2u_3^{32}u_1^{19}x_7x_5 - 1048576u_6u_3^{31}u_1^{20}x_7x_4x_2 + \\ & 1048576u_6u_3^{31}u_1^{20}x_7x_4 + 524288u_6u_5^2u_3^{31}u_1^{19}x_7x_2 - \\ & 524288u_6u_5^2u_3^{31}u_1^{19}x_7 + (2097152u_3^{31}u_1^{21} - 1048576u_3^{31}u_1^{20})x_6x_5x_4 + \\ & (-2097152u_3^{30}u_1^{21} + 1048576u_3^{30}u_1^{20})x_5x_4x_2 + \\ & (-2097152u_5u_3^{31}u_1^{21} + 1048576u_5u_3^{31}u_1^{20})x_5x_4 \end{aligned}$$

S-pol added.

1737. Creating S-polynomial from the pair  $(p_6, p_{169})$ .

Forming S-pol of  $p_6$  and  $p_{169}$ : Polynomial too big for output (text size is 1315 characters, number of terms is 10)

S-pol added.

1738. Creating S-polynomial from the pair  $(p_6, p_{170})$ .

Forming S-pol of  $p_6$  and  $p_{170}$ : Polynomial too big for output (text size is 1637 characters, number of terms is 10)

S-pol added.

1739. Creating S-polynomial from the pair  $(p_6, p_{171})$ .

Forming S-pol of  $p_6$  and  $p_{171}$ :

$$\begin{aligned} p_{1749} = & 131072u_3^{25}u_1^{17}x_7x_5x_4 + \\ & (131072u_5^2u_3^{23}u_1^{17} - 65536u_5^2u_3^{23}u_1^{16})x_7x_5x_2 - \\ & 65536u_5^2u_3^{25}u_1^{16}x_7x_5 - 131072u_6u_3^{24}u_1^{17}x_7x_4x_2 + \\ & 131072u_6u_3^{24}u_1^{17}x_7x_4 + 65536u_6u_5^2u_3^{24}u_1^{16}x_7x_2 - \\ & 65536u_6u_5^2u_3^{24}u_1^{16}x_7 + (262144u_3^{24}u_1^{18} - 131072u_3^{24}u_1^{17})x_6x_5x_4 + \\ & (-262144u_3^{23}u_1^{18} + 131072u_3^{23}u_1^{17})x_5x_4x_2 + \\ & (-262144u_5u_3^{24}u_1^{18} + 131072u_5u_3^{24}u_1^{17})x_5x_4 \end{aligned}$$

S-pol added.

1740. Creating S-polynomial from the pair  $(p_6, p_{172})$ .

Forming S-pol of  $p_6$  and  $p_{172}$ : Polynomial too big for output (text size is 1293 characters, number of terms is 10)

S-pol added.

1741. Creating S-polynomial from the pair  $(p_6, p_{173})$ .

Forming S-pol of  $p_6$  and  $p_{173}$ : Polynomial too big for output (text size is 1305 characters, number of terms is 10)

S-pol added.

1742. Creating S-polynomial from the pair  $(p_6, p_{174})$ .  
 Skipping pair  $p_6$  and  $p_{174}$  because gcd of their leading monoms is zero.
1743. Creating S-polynomial from the pair  $(p_6, p_{175})$ .  
 Skipping pair  $p_6$  and  $p_{175}$  because gcd of their leading monoms is zero.
1744. Creating S-polynomial from the pair  $(p_6, p_{176})$ .  
 Skipping pair  $p_6$  and  $p_{176}$  because gcd of their leading monoms is zero.
1745. Creating S-polynomial from the pair  $(p_6, p_{177})$ .  
 Skipping pair  $p_6$  and  $p_{177}$  because gcd of their leading monoms is zero.
1746. Creating S-polynomial from the pair  $(p_6, p_{178})$ .  
 Skipping pair  $p_6$  and  $p_{178}$  because gcd of their leading monoms is zero.
1747. Creating S-polynomial from the pair  $(p_6, p_{179})$ .  
 Forming S-pol of  $p_6$  and  $p_{179}$ : Polynomial too big for output (text size is 1295 characters, number of terms is 10)  
 S-pol added.
1748. Creating S-polynomial from the pair  $(p_6, p_{180})$ .  
 Skipping pair  $p_6$  and  $p_{180}$  because gcd of their leading monoms is zero.
1749. Creating S-polynomial from the pair  $(p_6, p_{181})$ .  
 Forming S-pol of  $p_6$  and  $p_{181}$ : Polynomial too big for output (text size is 1293 characters, number of terms is 10)  
 S-pol added.
1750. Creating S-polynomial from the pair  $(p_6, p_{182})$ .  
 Skipping pair  $p_6$  and  $p_{182}$  because gcd of their leading monoms is zero.
1751. Creating S-polynomial from the pair  $(p_6, p_{183})$ .  
 Skipping pair  $p_6$  and  $p_{183}$  because gcd of their leading monoms is zero.
1752. Creating S-polynomial from the pair  $(p_6, p_{184})$ .  
 Skipping pair  $p_6$  and  $p_{184}$  because gcd of their leading monoms is zero.
1753. Creating S-polynomial from the pair  $(p_6, p_{185})$ .  
 Forming S-pol of  $p_6$  and  $p_{185}$ : Polynomial too big for output (text size is 2967 characters, number of terms is 10)  
 S-pol added.
1754. Creating S-polynomial from the pair  $(p_6, p_{186})$ .  
 Forming S-pol of  $p_6$  and  $p_{186}$ : Polynomial too big for output (text size is 1953 characters, number of terms is 10)  
 S-pol added.

1755. Creating S-polynomial from the pair  $(p_6, p_{187})$ .

Forming S-pol of  $p_6$  and  $p_{187}$ : Polynomial too big for output (text size is 1401 characters, number of terms is 10)

S-pol added.

1756. Creating S-polynomial from the pair  $(p_6, p_{188})$ .

Forming S-pol of  $p_6$  and  $p_{188}$ :

$$\begin{aligned} p_{1750} = & -16777216u_5u_3^{43}u_1^{24}x_7x_5x_4 + \\ & (-16777216u_5^3u_3^{41}u_1^{24} + 8388608u_5^3u_3^{41}u_1^{23})x_7x_5x_2 + \\ & 8388608u_5^3u_3^{43}u_1^{23}x_7x_5 + 16777216u_6u_5u_3^{42}u_1^{24}x_7x_4x_2 - \\ & 16777216u_6u_5u_3^{42}u_1^{24}x_7x_4 - 8388608u_6u_5^3u_3^{42}u_1^{23}x_7x_2 + \\ & 8388608u_6u_5^3u_3^{42}u_1^{23}x_7 + \\ & (-33554432u_5u_3^{42}u_1^{25} + 16777216u_5u_3^{42}u_1^{24})x_6x_5x_4 + \\ & (33554432u_5u_3^{41}u_1^{25} - 16777216u_5u_3^{41}u_1^{24})x_5x_4^2x_2 + \\ & (33554432u_5^2u_3^{42}u_1^{25} - 16777216u_5^2u_3^{42}u_1^{24})x_5x_4 \end{aligned}$$

S-pol added.

1757. Creating S-polynomial from the pair  $(p_6, p_{189})$ .

Forming S-pol of  $p_6$  and  $p_{189}$ : Polynomial too big for output (text size is 1422 characters, number of terms is 10)

S-pol added.

1758. Creating S-polynomial from the pair  $(p_6, p_{190})$ .

Forming S-pol of  $p_6$  and  $p_{190}$ : Polynomial too big for output (text size is 1690 characters, number of terms is 10)

S-pol added.

1759. Creating S-polynomial from the pair  $(p_6, p_{191})$ .

Forming S-pol of  $p_6$  and  $p_{191}$ :

$$\begin{aligned} p_{1751} = & -8388608u_5u_3^{42}u_1^{23}x_7x_5x_4 + \\ & (-8388608u_5^3u_3^{40}u_1^{23} + 4194304u_5^3u_3^{40}u_1^{22})x_7x_5x_2 + \\ & 4194304u_5^3u_3^{42}u_1^{22}x_7x_5 + 8388608u_6u_5u_3^{41}u_1^{23}x_7x_4x_2 - \\ & 8388608u_6u_5u_3^{41}u_1^{23}x_7x_4 - 4194304u_6u_5^3u_3^{41}u_1^{22}x_7x_2 + \\ & 4194304u_6u_5^3u_3^{41}u_1^{22}x_7 + \\ & (-16777216u_5u_3^{41}u_1^{24} + 8388608u_5u_3^{41}u_1^{23})x_6x_5x_4 + \\ & (16777216u_5u_3^{40}u_1^{24} - 8388608u_5u_3^{40}u_1^{23})x_5x_4^2x_2 + \\ & (16777216u_5^2u_3^{41}u_1^{24} - 8388608u_5^2u_3^{41}u_1^{23})x_5x_4 \end{aligned}$$

S-pol added.

1760. Creating S-polynomial from the pair  $(p_6, p_{192})$ .  
Forming S-pol of  $p_6$  and  $p_{192}$ : Polynomial too big for output (text size is 1391 characters, number of terms is 10)  
S-pol added.
1761. Creating S-polynomial from the pair  $(p_6, p_{193})$ .  
Forming S-pol of  $p_6$  and  $p_{193}$ : Polynomial too big for output (text size is 1412 characters, number of terms is 10)  
S-pol added.
1762. Creating S-polynomial from the pair  $(p_6, p_{194})$ .  
Skipping pair  $p_6$  and  $p_{194}$  because gcd of their leading monoms is zero.
1763. Creating S-polynomial from the pair  $(p_6, p_{195})$ .  
Skipping pair  $p_6$  and  $p_{195}$  because gcd of their leading monoms is zero.
1764. Creating S-polynomial from the pair  $(p_6, p_{196})$ .  
Skipping pair  $p_6$  and  $p_{196}$  because gcd of their leading monoms is zero.
1765. Creating S-polynomial from the pair  $(p_6, p_{197})$ .  
Forming S-pol of  $p_6$  and  $p_{197}$ : Polynomial too big for output (text size is 1422 characters, number of terms is 10)  
S-pol added.
1766. Creating S-polynomial from the pair  $(p_6, p_{198})$ .  
Skipping pair  $p_6$  and  $p_{198}$  because gcd of their leading monoms is zero.
1767. Creating S-polynomial from the pair  $(p_6, p_{199})$ .  
Forming S-pol of  $p_6$  and  $p_{199}$ : Polynomial too big for output (text size is 1412 characters, number of terms is 10)  
S-pol added.
1768. Creating S-polynomial from the pair  $(p_6, p_{200})$ .  
Skipping pair  $p_6$  and  $p_{200}$  because gcd of their leading monoms is zero.
1769. Creating S-polynomial from the pair  $(p_6, p_{201})$ .  
Skipping pair  $p_6$  and  $p_{201}$  because gcd of their leading monoms is zero.
1770. Creating S-polynomial from the pair  $(p_6, p_{202})$ .  
Skipping pair  $p_6$  and  $p_{202}$  because gcd of their leading monoms is zero.
1771. Creating S-polynomial from the pair  $(p_6, p_{203})$ .  
Skipping pair  $p_6$  and  $p_{203}$  because gcd of their leading monoms is zero.
1772. Creating S-polynomial from the pair  $(p_6, p_{204})$ .  
Skipping pair  $p_6$  and  $p_{204}$  because gcd of their leading monoms is zero.
1773. Creating S-polynomial from the pair  $(p_6, p_{205})$ .  
Skipping pair  $p_6$  and  $p_{205}$  because gcd of their leading monoms is zero.

1774. Creating S-polynomial from the pair  $(p_6, p_{206})$ .  
 Forming S-pol of  $p_6$  and  $p_{206}$ : Polynomial too big for output (text size is 1401 characters, number of terms is 10)  
 S-pol added.
1775. Creating S-polynomial from the pair  $(p_6, p_{207})$ .  
 Skipping pair  $p_6$  and  $p_{207}$  because gcd of their leading monoms is zero.
1776. Creating S-polynomial from the pair  $(p_6, p_{208})$ .  
 Forming S-pol of  $p_6$  and  $p_{208}$ : Polynomial too big for output (text size is 1391 characters, number of terms is 10)  
 S-pol added.
1777. Creating S-polynomial from the pair  $(p_6, p_{209})$ .  
 Skipping pair  $p_6$  and  $p_{209}$  because gcd of their leading monoms is zero.
1778. Creating S-polynomial from the pair  $(p_6, p_{210})$ .  
 Skipping pair  $p_6$  and  $p_{210}$  because gcd of their leading monoms is zero.
1779. Creating S-polynomial from the pair  $(p_6, p_{211})$ .  
 Skipping pair  $p_6$  and  $p_{211}$  because gcd of their leading monoms is zero.
1780. Creating S-polynomial from the pair  $(p_6, p_{212})$ .  
 Forming S-pol of  $p_6$  and  $p_{212}$ : Polynomial too big for output (text size is 1745 characters, number of terms is 10)  
 S-pol added.
1781. Creating S-polynomial from the pair  $(p_6, p_{213})$ .  
 Forming S-pol of  $p_6$  and  $p_{213}$ : Polynomial too big for output (text size is 1734 characters, number of terms is 10)  
 S-pol added.
1782. Creating S-polynomial from the pair  $(p_6, p_{214})$ .  
 Forming S-pol of  $p_6$  and  $p_{214}$ : Polynomial too big for output (text size is 12050 characters, number of terms is 18)  
 S-pol added.
1783. Creating S-polynomial from the pair  $(p_6, p_{215})$ .  
 Forming S-pol of  $p_6$  and  $p_{215}$ : Polynomial too big for output (text size is 5384 characters, number of terms is 10)  
 S-pol added.
1784. Creating S-polynomial from the pair  $(p_6, p_{216})$ .  
 Forming S-pol of  $p_6$  and  $p_{216}$ : Polynomial too big for output (text size is 12294 characters, number of terms is 18)  
 S-pol added.

1785. Creating S-polynomial from the pair  $(p_6, p_{217})$ .

Forming S-pol of  $p_6$  and  $p_{217}$ : Polynomial too big for output (text size is 2965 characters, number of terms is 10)

S-pol added.

1786. Creating S-polynomial from the pair  $(p_6, p_{218})$ .

Forming S-pol of  $p_6$  and  $p_{218}$ : Polynomial too big for output (text size is 4219 characters, number of terms is 10)

S-pol added.

1787. Creating S-polynomial from the pair  $(p_6, p_{219})$ .

Forming S-pol of  $p_6$  and  $p_{219}$ : Polynomial too big for output (text size is 11991 characters, number of terms is 18)

S-pol added.

1788. Creating S-polynomial from the pair  $(p_6, p_{220})$ .

Forming S-pol of  $p_6$  and  $p_{220}$ : Polynomial too big for output (text size is 12255 characters, number of terms is 18)

S-pol added.

1789. Creating S-polynomial from the pair  $(p_6, p_{221})$ .

Forming S-pol of  $p_6$  and  $p_{221}$ :

$$\begin{aligned}
p_{1752} = & (-268435456u_5u_3^{45}u_1^{28} - 536870912u_3^{46}u_1^{29})x_7x_5x_4 + \\
& (-536870912u_5^2u_3^{44}u_1^{29} + 268435456u_5^2u_3^{44}u_1^{28})x_7x_5x_2 + \\
& 268435456u_5^2u_3^{46}u_1^{28}x_7x_5 + \\
& (268435456u_6u_5u_3^{44}u_1^{28} + 536870912u_6u_3^{45}u_1^{29})x_7x_4x_2 + \\
& (268435456u_6u_5u_3^{46}u_1^{28} - 536870912u_6u_5u_3^{44}u_1^{29} - \\
& 536870912u_6u_3^{45}u_1^{29})x_7x_4 - 268435456u_6u_5^2u_3^{45}u_1^{28}x_7x_2 + \\
& 268435456u_6u_5^2u_3^{45}u_1^{28}x_7 + \\
& (-268435456u_5u_3^{46}u_1^{28} - 1073741824u_3^{45}u_1^{30} + 536870912u_3^{45}u_1^{29})x_6x_5x_4 + \\
& (268435456u_5u_3^{45}u_1^{28} + 1073741824u_3^{44}u_1^{30} - 536870912u_3^{44}u_1^{29})x_5x_4^2x_2 + \\
& (268435456u_5^2u_3^{46}u_1^{28} + 1073741824u_5u_3^{45}u_1^{30} - 536870912u_5u_3^{45}u_1^{29})x_5x_4
\end{aligned}$$

S-pol added.

1790. Creating S-polynomial from the pair  $(p_6, p_{222})$ .

Forming S-pol of  $p_6$  and  $p_{222}$ :

$$\begin{aligned}
p_{1753} = & (-536870912u_5u_3^{50}u_1^{29} - 1073741824u_3^{51}u_1^{30})x_7x_5x_4 + \\
& (-1073741824u_5^2u_3^{49}u_1^{30} + 536870912u_5^2u_3^{49}u_1^{29})x_7x_5x_2 + \\
& 536870912u_5^2u_3^{51}u_1^{29}x_7x_5 + \\
& (536870912u_6u_5u_3^{49}u_1^{29} + 1073741824u_6u_3^{50}u_1^{30})x_7x_4x_2 +
\end{aligned}$$

$$\begin{aligned}
& (536870912u_6u_5u_3^{51}u_1^{29} - 1073741824u_6u_5u_3^{49}u_1^{30} - \\
& 1073741824u_6u_3^{50}u_1^{30})x_7x_4 - 536870912u_6u_5^2u_3^{50}u_1^{29}x_7x_2 + \\
& 536870912u_6u_5^2u_3^{50}u_1^{29}x_7 + \\
& (-536870912u_5u_3^{51}u_1^{29} - 2147483648u_3^{50}u_1^{31} + 1073741824u_3^{50}u_1^{30})x_6x_5x_4 + \\
& (536870912u_5u_3^{50}u_1^{29} + 2147483648u_3^{49}u_1^{31} - 1073741824u_3^{49}u_1^{30})x_5x_4^2x_2 + \\
& (536870912u_5^2u_3^{51}u_1^{29} + 2147483648u_5u_3^{50}u_1^{31} - \\
& 1073741824u_5u_3^{50}u_1^{30})x_5x_4
\end{aligned}$$

S-pol added.

1791. Creating S-polynomial from the pair  $(p_6, p_{223})$ .

Forming S-pol of  $p_6$  and  $p_{223}$ : Polynomial too big for output (text size is 1721 characters, number of terms is 10)

S-pol added.

1792. Creating S-polynomial from the pair  $(p_6, p_{224})$ .

Forming S-pol of  $p_6$  and  $p_{224}$ : Polynomial too big for output (text size is 1713 characters, number of terms is 10)

S-pol added.

1793. Creating S-polynomial from the pair  $(p_6, p_{225})$ .

Forming S-pol of  $p_6$  and  $p_{225}$ : Polynomial too big for output (text size is 1114 characters, number of terms is 6)

S-pol added.

1794. Creating S-polynomial from the pair  $(p_6, p_{226})$ .

Forming S-pol of  $p_6$  and  $p_{226}$ : Polynomial too big for output (text size is 1099 characters, number of terms is 6)

S-pol added.

1795. Creating S-polynomial from the pair  $(p_6, p_{227})$ .

Forming S-pol of  $p_6$  and  $p_{227}$ :

$$\begin{aligned}
p_{1754} = & (-268435456u_5u_3^{45}u_1^{28} - 536870912u_3^{46}u_1^{29})x_7x_5x_4 + \\
& (-536870912u_5^2u_3^{44}u_1^{29} + 268435456u_5^2u_3^{44}u_1^{28})x_7x_5x_2 + \\
& 268435456u_5^2u_3^{46}u_1^{28}x_7x_5 + \\
& (268435456u_6u_5u_3^{44}u_1^{28} + 536870912u_6u_3^{45}u_1^{29})x_7x_4x_2 + \\
& (268435456u_6u_5u_3^{46}u_1^{28} - 536870912u_6u_5u_3^{44}u_1^{29} - \\
& 536870912u_6u_3^{45}u_1^{29})x_7x_4 - 268435456u_6u_5^2u_3^{45}u_1^{28}x_7x_2 + \\
& 268435456u_6u_5^2u_3^{45}u_1^{28}x_7 + \\
& (-268435456u_5u_3^{46}u_1^{28} - 1073741824u_3^{45}u_1^{30} + 536870912u_3^{45}u_1^{29})x_6x_5x_4 + \\
& (268435456u_5u_3^{45}u_1^{28} + 1073741824u_3^{44}u_1^{30} - 536870912u_3^{44}u_1^{29})x_5x_4^2x_2 + \\
& (268435456u_5^2u_3^{46}u_1^{28} + 1073741824u_5u_3^{45}u_1^{30} - 536870912u_5u_3^{45}u_1^{29})x_5x_4
\end{aligned}$$

S-pol added.

1796. Creating S-polynomial from the pair  $(p_6, p_{228})$ .

Forming S-pol of  $p_6$  and  $p_{228}$ :

$$\begin{aligned}
p_{1755} = & (-134217728u_5u_3^{44}u_1^{27} - 268435456u_3^{45}u_1^{28})x_7x_5x_4 + \\
& (-268435456u_5^2u_3^{43}u_1^{28} + 134217728u_5^2u_3^{43}u_1^{27})x_7x_5x_2 + \\
& 134217728u_5^2u_3^{45}u_1^{27}x_7x_5 + \\
& (134217728u_6u_5u_3^{43}u_1^{27} + 268435456u_6u_3^{44}u_1^{28})x_7x_4x_2 + \\
& (134217728u_6u_5u_3^{45}u_1^{27} - 268435456u_6u_5u_3^{43}u_1^{28} - \\
& 268435456u_6u_3^{44}u_1^{28})x_7x_4 - 134217728u_6u_5^2u_3^{44}u_1^{27}x_7x_2 + \\
& 134217728u_6u_5^2u_3^{44}u_1^{27}x_7 + \\
& (-134217728u_5u_3^{45}u_1^{27} - 536870912u_3^{44}u_1^{29} + 268435456u_3^{44}u_1^{28})x_6x_5x_4 + \\
& (134217728u_5u_3^{44}u_1^{27} + 536870912u_3^{43}u_1^{29} - 268435456u_3^{43}u_1^{28})x_5x_4^2x_2 + \\
& (134217728u_5^2u_3^{45}u_1^{27} + 536870912u_5u_3^{44}u_1^{29} - 268435456u_5u_3^{44}u_1^{28})x_5x_4
\end{aligned}$$

S-pol added.

1797. Creating S-polynomial from the pair  $(p_6, p_{229})$ .

Forming S-pol of  $p_6$  and  $p_{229}$ : Polynomial too big for output (text size is 6153 characters, number of terms is 10)

S-pol added.

1798. Creating S-polynomial from the pair  $(p_6, p_{230})$ .

Forming S-pol of  $p_6$  and  $p_{230}$ : Polynomial too big for output (text size is 3483 characters, number of terms is 10)

S-pol added.

1799. Creating S-polynomial from the pair  $(p_6, p_{231})$ .

Forming S-pol of  $p_6$  and  $p_{231}$ : Polynomial too big for output (text size is 6570 characters, number of terms is 10)

S-pol added.

1800. Creating S-polynomial from the pair  $(p_6, p_{232})$ .

Forming S-pol of  $p_6$  and  $p_{232}$ : Polynomial too big for output (text size is 1826 characters, number of terms is 10)

S-pol added.

1801. Creating S-polynomial from the pair  $(p_6, p_{233})$ .

Forming S-pol of  $p_6$  and  $p_{233}$ : Polynomial too big for output (text size is 2638 characters, number of terms is 10)

S-pol added.

1802. Creating S-polynomial from the pair  $(p_6, p_{234})$ .

Forming S-pol of  $p_6$  and  $p_{234}$ : Polynomial too big for output (text size is 6125 characters, number of terms is 10)

S-pol added.



1803. Creating S-polynomial from the pair  $(p_6, p_{235})$ .

Forming S-pol of  $p_6$  and  $p_{235}$ : Polynomial too big for output (text size is 6545 characters, number of terms is 10)

S-pol added.

1804. Creating S-polynomial from the pair  $(p_6, p_{236})$ .

Forming S-pol of  $p_6$  and  $p_{236}$ :

$$\begin{aligned} p_{1756} = & (-8388608u_6u_3^{37}u_1^{22} - 8388608u_3^{38}u_1^{23})x_7x_5x_4 + \\ & (-8388608u_6^2u_3^{36}u_1^{23} + 8388608u_6^2u_3^{36}u_1^{22})x_7x_4x_2 + \\ & (8388608u_6^2u_3^{38}u_1^{22} - 8388608u_6^2u_3^{36}u_1^{23})x_7x_4 + \\ & (-8388608u_6u_3^{38}u_1^{22} - 16777216u_3^{37}u_1^{24} + 8388608u_3^{37}u_1^{23})x_6x_5x_4 + \\ & (8388608u_6u_3^{37}u_1^{22} + 16777216u_3^{36}u_1^{24} - 8388608u_3^{36}u_1^{23})x_5x_4^2x_2 + \\ & (8388608u_6u_5u_3^{38}u_1^{22} + 16777216u_5u_3^{37}u_1^{24} - 8388608u_5u_3^{37}u_1^{23})x_5x_4 \end{aligned}$$

S-pol added.

1805. Creating S-polynomial from the pair  $(p_6, p_{237})$ .

Forming S-pol of  $p_6$  and  $p_{237}$ :

$$\begin{aligned} p_{1757} = & (-4194304u_6u_3^{36}u_1^{21} - 4194304u_3^{37}u_1^{22})x_7x_5x_4 + \\ & (-4194304u_6^2u_3^{35}u_1^{22} + 4194304u_6^2u_3^{35}u_1^{21})x_7x_4x_2 + \\ & (4194304u_6^2u_3^{37}u_1^{21} - 4194304u_6^2u_3^{35}u_1^{22})x_7x_4 + \\ & (-4194304u_6u_3^{37}u_1^{21} - 8388608u_3^{36}u_1^{23} + 4194304u_3^{36}u_1^{22})x_6x_5x_4 + \\ & (4194304u_6u_3^{36}u_1^{21} + 8388608u_3^{35}u_1^{23} - 4194304u_3^{35}u_1^{22})x_5x_4^2x_2 + \\ & (4194304u_6u_5u_3^{37}u_1^{21} + 8388608u_5u_3^{36}u_1^{23} - 4194304u_5u_3^{36}u_1^{22})x_5x_4 \end{aligned}$$

S-pol added.

1806. Creating S-polynomial from the pair  $(p_6, p_{238})$ .

Skipping pair  $p_6$  and  $p_{238}$  because gcd of their leading monoms is zero.

1807. Creating S-polynomial from the pair  $(p_6, p_{239})$ .

Skipping pair  $p_6$  and  $p_{239}$  because gcd of their leading monoms is zero.

1808. Creating S-polynomial from the pair  $(p_6, p_{240})$ .

Skipping pair  $p_6$  and  $p_{240}$  because gcd of their leading monoms is zero.

1809. Creating S-polynomial from the pair  $(p_6, p_{241})$ .

Forming S-pol of  $p_6$  and  $p_{241}$ : Polynomial too big for output (text size is 12294 characters, number of terms is 18)

S-pol added.

1810. Creating S-polynomial from the pair  $(p_6, p_{242})$ .

Skipping pair  $p_6$  and  $p_{242}$  because gcd of their leading monoms is zero.

1811. Creating S-polynomial from the pair  $(p_6, p_{243})$ .  
Forming S-pol of  $p_6$  and  $p_{243}$ : Polynomial too big for output (text size is 12255 characters, number of terms is 18)  
S-pol added.
1812. Creating S-polynomial from the pair  $(p_6, p_{244})$ .  
Skipping pair  $p_6$  and  $p_{244}$  because gcd of their leading monoms is zero.
1813. Creating S-polynomial from the pair  $(p_6, p_{245})$ .  
Skipping pair  $p_6$  and  $p_{245}$  because gcd of their leading monoms is zero.
1814. Creating S-polynomial from the pair  $(p_6, p_{246})$ .  
Skipping pair  $p_6$  and  $p_{246}$  because gcd of their leading monoms is zero.
1815. Creating S-polynomial from the pair  $(p_6, p_{247})$ .  
Skipping pair  $p_6$  and  $p_{247}$  because gcd of their leading monoms is zero.
1816. Creating S-polynomial from the pair  $(p_6, p_{248})$ .  
Skipping pair  $p_6$  and  $p_{248}$  because gcd of their leading monoms is zero.
1817. Creating S-polynomial from the pair  $(p_6, p_{249})$ .  
Skipping pair  $p_6$  and  $p_{249}$  because gcd of their leading monoms is zero.
1818. Creating S-polynomial from the pair  $(p_6, p_{250})$ .  
Skipping pair  $p_6$  and  $p_{250}$  because gcd of their leading monoms is zero.
1819. Creating S-polynomial from the pair  $(p_6, p_{251})$ .  
Skipping pair  $p_6$  and  $p_{251}$  because gcd of their leading monoms is zero.
1820. Creating S-polynomial from the pair  $(p_6, p_{252})$ .  
Skipping pair  $p_6$  and  $p_{252}$  because gcd of their leading monoms is zero.
1821. Creating S-polynomial from the pair  $(p_6, p_{253})$ .  
Skipping pair  $p_6$  and  $p_{253}$  because gcd of their leading monoms is zero.
1822. Creating S-polynomial from the pair  $(p_6, p_{254})$ .  
Skipping pair  $p_6$  and  $p_{254}$  because gcd of their leading monoms is zero.
1823. Creating S-polynomial from the pair  $(p_6, p_{255})$ .  
Skipping pair  $p_6$  and  $p_{255}$  because gcd of their leading monoms is zero.
1824. Creating S-polynomial from the pair  $(p_6, p_{256})$ .  
Forming S-pol of  $p_6$  and  $p_{256}$ : Polynomial too big for output (text size is 6570 characters, number of terms is 10)  
S-pol added.
1825. Creating S-polynomial from the pair  $(p_6, p_{257})$ .  
Skipping pair  $p_6$  and  $p_{257}$  because gcd of their leading monoms is zero.

1826. Creating S-polynomial from the pair  $(p_6, p_{258})$ .  
Forming S-pol of  $p_6$  and  $p_{258}$ : Polynomial too big for output (text size is 6545 characters, number of terms is 10)  
S-pol added.
1827. Creating S-polynomial from the pair  $(p_6, p_{259})$ .  
Skipping pair  $p_6$  and  $p_{259}$  because gcd of their leading monoms is zero.
1828. Creating S-polynomial from the pair  $(p_6, p_{260})$ .  
Skipping pair  $p_6$  and  $p_{260}$  because gcd of their leading monoms is zero.
1829. Creating S-polynomial from the pair  $(p_6, p_{261})$ .  
Skipping pair  $p_6$  and  $p_{261}$  because gcd of their leading monoms is zero.
1830. Creating S-polynomial from the pair  $(p_6, p_{262})$ .  
Skipping pair  $p_6$  and  $p_{262}$  because gcd of their leading monoms is zero.
1831. Creating S-polynomial from the pair  $(p_6, p_{263})$ .  
Skipping pair  $p_6$  and  $p_{263}$  because gcd of their leading monoms is zero.
1832. Creating S-polynomial from the pair  $(p_6, p_{264})$ .  
Skipping pair  $p_6$  and  $p_{264}$  because gcd of their leading monoms is zero.
1833. Creating S-polynomial from the pair  $(p_6, p_{265})$ .  
Skipping pair  $p_6$  and  $p_{265}$  because gcd of their leading monoms is zero.
1834. Creating S-polynomial from the pair  $(p_6, p_{266})$ .  
Skipping pair  $p_6$  and  $p_{266}$  because gcd of their leading monoms is zero.
1835. Creating S-polynomial from the pair  $(p_6, p_{267})$ .  
Forming S-pol of  $p_6$  and  $p_{267}$ : Polynomial too big for output (text size is 12050 characters, number of terms is 18)  
S-pol added.
1836. Creating S-polynomial from the pair  $(p_6, p_{268})$ .  
Skipping pair  $p_6$  and  $p_{268}$  because gcd of their leading monoms is zero.
1837. Creating S-polynomial from the pair  $(p_6, p_{269})$ .  
Forming S-pol of  $p_6$  and  $p_{269}$ : Polynomial too big for output (text size is 11991 characters, number of terms is 18)  
S-pol added.
1838. Creating S-polynomial from the pair  $(p_6, p_{270})$ .  
Skipping pair  $p_6$  and  $p_{270}$  because gcd of their leading monoms is zero.
1839. Creating S-polynomial from the pair  $(p_6, p_{271})$ .  
Skipping pair  $p_6$  and  $p_{271}$  because gcd of their leading monoms is zero.

1840. Creating S-polynomial from the pair  $(p_6, p_{272})$ .  
 Skipping pair  $p_6$  and  $p_{272}$  because gcd of their leading monoms is zero.
1841. Creating S-polynomial from the pair  $(p_6, p_{273})$ .  
 Skipping pair  $p_6$  and  $p_{273}$  because gcd of their leading monoms is zero.
1842. Creating S-polynomial from the pair  $(p_6, p_{274})$ .  
 Skipping pair  $p_6$  and  $p_{274}$  because gcd of their leading monoms is zero.
1843. Creating S-polynomial from the pair  $(p_6, p_{275})$ .  
 Skipping pair  $p_6$  and  $p_{275}$  because gcd of their leading monoms is zero.
1844. Creating S-polynomial from the pair  $(p_6, p_{276})$ .  
 Skipping pair  $p_6$  and  $p_{276}$  because gcd of their leading monoms is zero.
1845. Creating S-polynomial from the pair  $(p_6, p_{277})$ .  
 Skipping pair  $p_6$  and  $p_{277}$  because gcd of their leading monoms is zero.
1846. Creating S-polynomial from the pair  $(p_6, p_{278})$ .  
 Skipping pair  $p_6$  and  $p_{278}$  because gcd of their leading monoms is zero.
1847. Creating S-polynomial from the pair  $(p_6, p_{279})$ .  
 Skipping pair  $p_6$  and  $p_{279}$  because gcd of their leading monoms is zero.
1848. Creating S-polynomial from the pair  $(p_6, p_{280})$ .  
 Skipping pair  $p_6$  and  $p_{280}$  because gcd of their leading monoms is zero.
1849. Creating S-polynomial from the pair  $(p_6, p_{281})$ .  
 Skipping pair  $p_6$  and  $p_{281}$  because gcd of their leading monoms is zero.
1850. Creating S-polynomial from the pair  $(p_6, p_{282})$ .  
 Forming S-pol of  $p_6$  and  $p_{282}$ : Polynomial too big for output (text size is 6153 characters, number of terms is 10)  
 S-pol added.
1851. Creating S-polynomial from the pair  $(p_6, p_{283})$ .  
 Skipping pair  $p_6$  and  $p_{283}$  because gcd of their leading monoms is zero.
1852. Creating S-polynomial from the pair  $(p_6, p_{284})$ .  
 Forming S-pol of  $p_6$  and  $p_{284}$ : Polynomial too big for output (text size is 6125 characters, number of terms is 10)  
 S-pol added.
1853. Creating S-polynomial from the pair  $(p_6, p_{285})$ .  
 Skipping pair  $p_6$  and  $p_{285}$  because gcd of their leading monoms is zero.
1854. Creating S-polynomial from the pair  $(p_6, p_{286})$ .  
 Skipping pair  $p_6$  and  $p_{286}$  because gcd of their leading monoms is zero.

1855. Creating S-polynomial from the pair  $(p_6, p_{287})$ .  
 Skipping pair  $p_6$  and  $p_{287}$  because gcd of their leading monoms is zero.
1856. Creating S-polynomial from the pair  $(p_6, p_{288})$ .  
 Skipping pair  $p_6$  and  $p_{288}$  because gcd of their leading monoms is zero.
1857. Creating S-polynomial from the pair  $(p_6, p_{289})$ .  
 Skipping pair  $p_6$  and  $p_{289}$  because gcd of their leading monoms is zero.
1858. Creating S-polynomial from the pair  $(p_6, p_{290})$ .  
 Skipping pair  $p_6$  and  $p_{290}$  because gcd of their leading monoms is zero.
1859. Creating S-polynomial from the pair  $(p_6, p_{291})$ .  
 Skipping pair  $p_6$  and  $p_{291}$  because gcd of their leading monoms is zero.
1860. Creating S-polynomial from the pair  $(p_6, p_{292})$ .  
 Skipping pair  $p_6$  and  $p_{292}$  because gcd of their leading monoms is zero.
1861. Creating S-polynomial from the pair  $(p_6, p_{293})$ .  
 Skipping pair  $p_6$  and  $p_{293}$  because gcd of their leading monoms is zero.
1862. Creating S-polynomial from the pair  $(p_6, p_{294})$ .  
 Skipping pair  $p_6$  and  $p_{294}$  because gcd of their leading monoms is zero.
1863. Creating S-polynomial from the pair  $(p_6, p_{295})$ .  
 Skipping pair  $p_6$  and  $p_{295}$  because gcd of their leading monoms is zero.
1864. Creating S-polynomial from the pair  $(p_6, p_{296})$ .  
 Skipping pair  $p_6$  and  $p_{296}$  because gcd of their leading monoms is zero.
1865. Creating S-polynomial from the pair  $(p_6, p_{297})$ .  
 Skipping pair  $p_6$  and  $p_{297}$  because gcd of their leading monoms is zero.
1866. Creating S-polynomial from the pair  $(p_6, p_{298})$ .  
 Skipping pair  $p_6$  and  $p_{298}$  because gcd of their leading monoms is zero.
1867. Creating S-polynomial from the pair  $(p_6, p_{299})$ .  
 Forming S-pol of  $p_6$  and  $p_{299}$ : Polynomial too big for output (text size is 4177 characters, number of terms is 10)  
 S-pol added.
1868. Creating S-polynomial from the pair  $(p_6, p_{300})$ .  
 Skipping pair  $p_6$  and  $p_{300}$  because gcd of their leading monoms is zero.
1869. Creating S-polynomial from the pair  $(p_6, p_{301})$ .  
 Forming S-pol of  $p_6$  and  $p_{301}$ : Polynomial too big for output (text size is 6837 characters, number of terms is 18)  
 S-pol added.

1870. Creating S-polynomial from the pair  $(p_6, p_{302})$ .  
 Forming S-pol of  $p_6$  and  $p_{302}$ : Polynomial too big for output (text size is 1337 characters, number of terms is 10)  
 S-pol added.
1871. Creating S-polynomial from the pair  $(p_6, p_{303})$ .  
 Forming S-pol of  $p_6$  and  $p_{303}$ : Polynomial too big for output (text size is 3636 characters, number of terms is 10)  
 S-pol added.
1872. Creating S-polynomial from the pair  $(p_6, p_{304})$ .  
 Forming S-pol of  $p_6$  and  $p_{304}$ : Polynomial too big for output (text size is 3166 characters, number of terms is 10)  
 S-pol added.
1873. Creating S-polynomial from the pair  $(p_6, p_{305})$ .  
 Skipping pair  $p_6$  and  $p_{305}$  because gcd of their leading monoms is zero.
1874. Creating S-polynomial from the pair  $(p_6, p_{306})$ .  
 Skipping pair  $p_6$  and  $p_{306}$  because gcd of their leading monoms is zero.
1875. Creating S-polynomial from the pair  $(p_6, p_{307})$ .  
 Skipping pair  $p_6$  and  $p_{307}$  because gcd of their leading monoms is zero.
1876. Creating S-polynomial from the pair  $(p_6, p_{308})$ .  
 Skipping pair  $p_6$  and  $p_{308}$  because gcd of their leading monoms is zero.
1877. Creating S-polynomial from the pair  $(p_6, p_{309})$ .  
 Skipping pair  $p_6$  and  $p_{309}$  because gcd of their leading monoms is zero.
1878. Creating S-polynomial from the pair  $(p_6, p_{310})$ .  
 Skipping pair  $p_6$  and  $p_{310}$  because gcd of their leading monoms is zero.
1879. Creating S-polynomial from the pair  $(p_6, p_{311})$ .  
 Skipping pair  $p_6$  and  $p_{311}$  because gcd of their leading monoms is zero.
1880. Creating S-polynomial from the pair  $(p_6, p_{312})$ .  
 Skipping pair  $p_6$  and  $p_{312}$  because gcd of their leading monoms is zero.
1881. Creating S-polynomial from the pair  $(p_6, p_{313})$ .  
 Forming S-pol of  $p_6$  and  $p_{313}$ :

$$\begin{aligned}
 p_{1758} = & 8388608u_5u_3^{35}u_1^{23}x_7x_5x_4 - 8388608u_6u_5u_3^{34}u_1^{23}x_7x_4x_2 + \\
 & 8388608u_6u_5u_3^{34}u_1^{23}x_7x_4 + \\
 & (16777216u_5u_3^{34}u_1^{24} - 8388608u_5u_3^{34}u_1^{23})x_6x_5x_4 + \\
 & (-16777216u_5u_3^{33}u_1^{24} + 8388608u_5u_3^{33}u_1^{23})x_5x_4^2x_2 + \\
 & (-16777216u_5^2u_3^{34}u_1^{24} + 8388608u_5^2u_3^{34}u_1^{23})x_5x_4
 \end{aligned}$$

S-pol added.

1882. Creating S-polynomial from the pair  $(p_6, p_{314})$ .

Forming S-pol of  $p_6$  and  $p_{314}$ :

$$\begin{aligned} p_{1759} = & 4194304u_5u_3^{34}u_1^{22}x_7x_5x_4 - 4194304u_6u_5u_3^{33}u_1^{22}x_7x_4x_2 + \\ & 4194304u_6u_5u_3^{33}u_1^{22}x_7x_4 + \\ & (8388608u_5u_3^{33}u_1^{23} - 4194304u_5u_3^{33}u_1^{22})x_6x_5x_4 + \\ & (-8388608u_5u_3^{32}u_1^{23} + 4194304u_5u_3^{32}u_1^{22})x_5x_4^2x_2 + \\ & (-8388608u_5^2u_3^{33}u_1^{23} + 4194304u_5^2u_3^{33}u_1^{22})x_5x_4 \end{aligned}$$

S-pol added.

1883. Creating S-polynomial from the pair  $(p_6, p_{315})$ .

Forming S-pol of  $p_6$  and  $p_{315}$ : Polynomial too big for output (text size is 1083 characters, number of terms is 10)

S-pol added.

1884. Creating S-polynomial from the pair  $(p_6, p_{316})$ .

Forming S-pol of  $p_6$  and  $p_{316}$ : Polynomial too big for output (text size is 1075 characters, number of terms is 10)

S-pol added.

1885. Creating S-polynomial from the pair  $(p_6, p_{317})$ .

Forming S-pol of  $p_6$  and  $p_{317}$ :

$$\begin{aligned} p_{1760} = & (-536870912u_5u_3^{45}u_1^{29} - 1073741824u_3^{46}u_1^{30})x_7x_5x_4 + \\ & (-1073741824u_5^2u_3^{44}u_1^{30} + 536870912u_5^2u_3^{44}u_1^{29})x_7x_5x_2 + \\ & 536870912u_5^2u_3^{46}u_1^{29}x_7x_5 + \\ & (536870912u_6u_5u_3^{44}u_1^{29} + 1073741824u_6u_3^{45}u_1^{30})x_7x_4x_2 + \\ & (536870912u_6u_5u_3^{46}u_1^{29} - 1073741824u_6u_5u_3^{44}u_1^{30} - \\ & 1073741824u_6u_3^{45}u_1^{30})x_7x_4 - 536870912u_6u_5^2u_3^{45}u_1^{29}x_7x_2 + \\ & 536870912u_6u_5^2u_3^{45}u_1^{29}x_7 + \\ & (-536870912u_5u_3^{46}u_1^{29} - 2147483648u_3^{45}u_1^{31} + 1073741824u_3^{45}u_1^{30})x_6x_5x_4 + \\ & (536870912u_5u_3^{45}u_1^{29} + 2147483648u_3^{44}u_1^{31} - 1073741824u_3^{44}u_1^{30})x_5x_4^2x_2 + \\ & (536870912u_5^2u_3^{46}u_1^{29} + 2147483648u_5u_3^{45}u_1^{31} - \\ & 1073741824u_5u_3^{45}u_1^{30})x_5x_4 \end{aligned}$$

S-pol added.

1886. Creating S-polynomial from the pair  $(p_6, p_{318})$ .

Forming S-pol of  $p_6$  and  $p_{318}$ :

$$\begin{aligned}
p_{1761} = & (-268435456u_5u_3^{44}u_1^{28} - 536870912u_3^{45}u_1^{29})x_7x_5x_4 + \\
& (-536870912u_5^2u_3^{43}u_1^{29} + 268435456u_5^2u_3^{43}u_1^{28})x_7x_5x_2 + \\
& 268435456u_5^2u_3^{45}u_1^{28}x_7x_5 + \\
& (268435456u_6u_5u_3^{43}u_1^{28} + 536870912u_6u_3^{44}u_1^{29})x_7x_4x_2 + \\
& (268435456u_6u_5u_3^{45}u_1^{28} - 536870912u_6u_5u_3^{43}u_1^{29} - \\
& 536870912u_6u_3^{44}u_1^{29})x_7x_4 - 268435456u_6u_5^2u_3^{44}u_1^{28}x_7x_2 + \\
& 268435456u_6u_5^2u_3^{44}u_1^{28}x_7 + \\
& (-268435456u_5u_3^{45}u_1^{28} - 1073741824u_3^{44}u_1^{30} + 536870912u_3^{44}u_1^{29})x_6x_5x_4 + \\
& (268435456u_5u_3^{44}u_1^{28} + 1073741824u_3^{43}u_1^{30} - 536870912u_3^{43}u_1^{29})x_5x_4^2x_2 + \\
& (268435456u_5^2u_3^{45}u_1^{28} + 1073741824u_5u_3^{44}u_1^{30} - 536870912u_5u_3^{44}u_1^{29})x_5x_4
\end{aligned}$$

S-pol added.

1887. Creating S-polynomial from the pair  $(p_6, p_{319})$ .

Forming S-pol of  $p_6$  and  $p_{319}$ :

$$\begin{aligned}
p_{1762} = & (-536870912u_5u_3^{45}u_1^{29} - 1073741824u_3^{46}u_1^{30})x_7x_5x_4 + \\
& (-1073741824u_5^2u_3^{44}u_1^{30} + 536870912u_5^2u_3^{44}u_1^{29})x_7x_5x_2 + \\
& 536870912u_5^2u_3^{46}u_1^{29}x_7x_5 + \\
& (536870912u_6u_5u_3^{44}u_1^{29} + 1073741824u_6u_3^{45}u_1^{30})x_7x_4x_2 + \\
& (536870912u_6u_5u_3^{46}u_1^{29} - 1073741824u_6u_5u_3^{44}u_1^{30} - \\
& 1073741824u_6u_3^{45}u_1^{30})x_7x_4 - 536870912u_6u_5^2u_3^{45}u_1^{29}x_7x_2 + \\
& 536870912u_6u_5^2u_3^{45}u_1^{29}x_7 + \\
& (-536870912u_5u_3^{46}u_1^{29} - 2147483648u_3^{45}u_1^{31} + 1073741824u_3^{45}u_1^{30})x_6x_5x_4 + \\
& (536870912u_5u_3^{45}u_1^{29} + 2147483648u_3^{44}u_1^{31} - 1073741824u_3^{44}u_1^{30})x_5x_4^2x_2 + \\
& (536870912u_5^2u_3^{46}u_1^{29} + 2147483648u_5u_3^{45}u_1^{31} - \\
& 1073741824u_5u_3^{45}u_1^{30})x_5x_4
\end{aligned}$$

S-pol added.

1888. Creating S-polynomial from the pair  $(p_6, p_{320})$ .

Forming S-pol of  $p_6$  and  $p_{320}$ :

$$\begin{aligned}
p_{1763} = & (-1073741824u_5u_3^{50}u_1^{30} - 2147483648u_3^{51}u_1^{31})x_7x_5x_4 + \\
& (-2147483648u_5^2u_3^{49}u_1^{31} + 1073741824u_5^2u_3^{49}u_1^{30})x_7x_5x_2 + \\
& 1073741824u_5^2u_3^{51}u_1^{30}x_7x_5 + \\
& (1073741824u_6u_5u_3^{49}u_1^{30} + 2147483648u_6u_3^{50}u_1^{31})x_7x_4x_2 +
\end{aligned}$$



$$\begin{aligned}
& (1073741824u_6u_5u_3^{51}u_1^{30} - 2147483648u_6u_5u_3^{49}u_1^{31} - \\
& 2147483648u_6u_3^{50}u_1^{31})x_7x_4 - 1073741824u_6u_5^2u_3^{50}u_1^{30}x_7x_2 + \\
& 1073741824u_6u_5^2u_3^{50}u_1^{30}x_7 + \\
& (-1073741824u_5u_3^{51}u_1^{30} - 4294967296u_3^{50}u_1^{32} + 2147483648u_3^{50}u_1^{31})x_6x_5x_4 + \\
& (1073741824u_5u_3^{50}u_1^{30} + 4294967296u_3^{49}u_1^{32} - 2147483648u_3^{49}u_1^{31})x_5x_4^2x_2 + \\
& (1073741824u_5^2u_3^{51}u_1^{30} + 4294967296u_5u_3^{50}u_1^{32} - \\
& 2147483648u_5u_3^{50}u_1^{31})x_5x_4
\end{aligned}$$

S-pol added.

1889. Creating S-polynomial from the pair  $(p_6, p_{321})$ .

Forming S-pol of  $p_6$  and  $p_{321}$ :

$$\begin{aligned}
p_{1764} = & 32768u_3^{25}u_1^{15}x_7x_5x_4 - 32768u_6u_3^{24}u_1^{15}x_7x_4x_2 + \\
& 32768u_6u_3^{24}u_1^{15}x_7x_4 + (65536u_3^{24}u_1^{16} - 32768u_3^{24}u_1^{15})x_6x_5x_4 + \\
& (-65536u_3^{23}u_1^{16} + 32768u_3^{23}u_1^{15})x_5x_4^2x_2 + \\
& (-65536u_5u_3^{24}u_1^{16} + 32768u_5u_3^{24}u_1^{15})x_5x_4
\end{aligned}$$

S-pol added.

1890. Creating S-polynomial from the pair  $(p_6, p_{322})$ .

Forming S-pol of  $p_6$  and  $p_{322}$ : Polynomial too big for output (text size is 4177 characters, number of terms is 10)

S-pol added.

1891. Creating S-polynomial from the pair  $(p_6, p_{323})$ .

Forming S-pol of  $p_6$  and  $p_{323}$ : Polynomial too big for output (text size is 3277 characters, number of terms is 10)

S-pol added.

1892. Creating S-polynomial from the pair  $(p_6, p_{324})$ .

Forming S-pol of  $p_6$  and  $p_{324}$ :

$$\begin{aligned}
p_{1765} = & -2097152u_3^{36}u_1^{21}x_7x_5x_4 + \\
& (-2097152u_5^2u_3^{34}u_1^{21} + 1048576u_5^2u_3^{34}u_1^{20})x_7x_5x_2 + \\
& 1048576u_5^2u_3^{36}u_1^{20}x_7x_5 + 2097152u_6u_3^{35}u_1^{21}x_7x_4x_2 - \\
& 2097152u_6u_3^{35}u_1^{21}x_7x_4 - 1048576u_6u_5^2u_3^{35}u_1^{20}x_7x_2 + \\
& 1048576u_6u_5^2u_3^{35}u_1^{20}x_7 + (-4194304u_3^{35}u_1^{22} + 2097152u_3^{35}u_1^{21})x_6x_5x_4 + \\
& (4194304u_3^{34}u_1^{22} - 2097152u_3^{34}u_1^{21})x_5x_4^2x_2 + \\
& (4194304u_5u_3^{35}u_1^{22} - 2097152u_5u_3^{35}u_1^{21})x_5x_4
\end{aligned}$$

S-pol added.

1893. Creating S-polynomial from the pair  $(p_6, p_{325})$ .

Forming S-pol of  $p_6$  and  $p_{325}$ :

$$\begin{aligned}
p_{1766} = & -4194304u_3^{30}u_1^{22}x_7x_5x_4 + \\
& (-4194304u_5^2u_3^{28}u_1^{22} + 2097152u_5^2u_3^{28}u_1^{21})x_7x_5x_2 + \\
& 2097152u_5^2u_3^{30}u_1^{21}x_7x_5 + 4194304u_6u_3^{29}u_1^{22}x_7x_4x_2 - \\
& 4194304u_6u_3^{29}u_1^{22}x_7x_4 - 2097152u_6u_5^2u_3^{29}u_1^{21}x_7x_2 + \\
& 2097152u_6u_5^2u_3^{29}u_1^{21}x_7 + (-8388608u_3^{29}u_1^{23} + 4194304u_3^{29}u_1^{22})x_6x_5x_4 + \\
& (8388608u_3^{28}u_1^{23} - 4194304u_3^{28}u_1^{22})x_5x_4^2x_2 + \\
& (8388608u_5u_3^{29}u_1^{23} - 4194304u_5u_3^{29}u_1^{22})x_5x_4
\end{aligned}$$

S-pol added.

1894. Creating S-polynomial from the pair  $(p_6, p_{326})$ .

Forming S-pol of  $p_6$  and  $p_{326}$ : Polynomial too big for output (text size is 3300 characters, number of terms is 10)

S-pol added.

1895. Creating S-polynomial from the pair  $(p_6, p_{327})$ .

Forming S-pol of  $p_6$  and  $p_{327}$ : Polynomial too big for output (text size is 3166 characters, number of terms is 10)

S-pol added.

1896. Creating S-polynomial from the pair  $(p_6, p_{328})$ .

Forming S-pol of  $p_6$  and  $p_{328}$ : Polynomial too big for output (text size is 6789 characters, number of terms is 18)

## 6 Prover report

**Status:** Program has reach its timeout!

**Space Complexity:** The biggest polynomial obtained during proof process contained 1448 terms.

**Time Complexity:** Time spent by the prover is 112.004 seconds. There are no ndg conditions.