

```
In[*]:= last5 = { (-15 + x)^3 (-11 + x)^15 (5 + x)^42, (-13 + x)^9 (-11 + x)^6 (-9 + x)^3 (5 + x)^42,
  (-17 + x) (-13 + x)^3 (-11 + x)^14 (5 + x)^42, (-15 + x) (-13 + x)^6 (-11 + x)^9
  (-9 + x)^2 (5 + x)^42, (-13 + x)^6 (-11 + x)^10 (5 + x)^42 (109 - 22 x + x^2) };
```

```
In[*]:= interlacingpolylast5 = Array[intpolylast5, 5];
Coeffmatlast5 = Array[Coefflast5, 5];
gveclast5 = Array[glast5, 5];
```

```
i =;
last5[[i]]
interlacingpolylast5[[i]] =;
Coeffmatlast5[[i]] =
  CoefficientList[Factor[interlacingpolylast5[[i]] / mu[last5[[i]]], x];
Coeffmatlast5[[i]] // MatrixForm
gveclast5[[i]] = CoefficientList[D[last5[[i]], x] / mu[last5[[i]]] // Factor, x]
Array[c,].Transpose[Coeffmatlast5[[i]]]
Array[c,].gveclast5[[i]]
i
Flatten[Array[c,] /. FindInstance[< 0 &&, Array[c,], Integers]]
```

```
In[*]:= i = 1;
last5[[i]]
interlacingpolylast5[[i]] = { (-15 + x)^2 (-11 + x)^14 (5 + x)^41 (94 - 21 x + x^2) };
Coeffmatlast5[[i]] =
  CoefficientList[Factor[interlacingpolylast5[[i]] / mu[last5[[i]]], x];
```

```
Out[*]= (-15 + x)^3 (-11 + x)^15 (5 + x)^42
```

```
In[*]:= Coeffmatlast5[[i]] // MatrixForm
```

```
Out[*]//MatrixForm=
```

```
( 94 -21 1 )
```

```
In[*]:= gveclast5[[i]] = CoefficientList[D[last5[[i]], x] / mu[last5[[i]]] // Factor, x]
```

```
Out[*]= {5640, -1260, 60}
```

```
In[*]:= Array[c, 3].Transpose[Coeffmatlast5[[i]]]
```

```
Out[*]= {94 c[1] - 21 c[2] + c[3]}
```

```
In[*]:= Array[c, 3].gveclast5[[i]]
```

```
Out[*]= 5640 c[1] - 1260 c[2] + 60 c[3]
```

```
In[*]:= i
```

```
Flatten[Array[c, 3] /. FindInstance[5640 c[1] - 1260 c[2] + 60 c[3] < 0 &&  
94 c[1] - 21 c[2] + c[3] ≥ 0, Array[c, 3], Integers]]
```

```
Out[*]= 1
```

```
Out[*]= {c[1], c[2], c[3]}
```

```
In[*]:= i = 2;
```

```
last5[[i]]
```

```
interlacingpolylast5[[i]] = {(-13 + x)8 (-11 + x)7 (-9 + x)2 (-6 + x) (5 + x)41,  
(-13 + x)8 (-11 + x)5 (-9 + x)3 (5 + x)41 (82 - 19 x + x2)};
```

```
Coeffmatlast5[[i]] =
```

```
CoefficientList[Factor[interlacingpolylast5[[i]]] / mu[last5[[i]]], x];
```

```
Out[*]= (-13 + x)9 (-11 + x)6 (-9 + x)3 (5 + x)42
```

```
In[*]:= Coeffmatlast5[[i]] // MatrixForm
```

```
Out[*]//MatrixForm=
```

$$\begin{pmatrix} -726 & 253 & -28 & 1 \\ -738 & 253 & -28 & 1 \end{pmatrix}$$

```
In[*]:= gveclast5[[i]] = CoefficientList[D[last5[[i]], x] / mu[last5[[i]]] // Factor, x]
```

```
Out[*]= {-43 944, 15 180, -1680, 60}
```

```
In[*]:= Solve[Array[n, 2].Coeffmatlast5[[2]] == {-43 944, 15 180, -1680, 60}, Array[n, 2]]
```

```
Out[*]= {{n[1] → 28, n[2] → 32}}
```

```
In[*]:= Array[c, 4].Transpose[Coeffmatlast5[[i]]]
```

```
Out[*]= {-726 c[1] + 253 c[2] - 28 c[3] + c[4], -738 c[1] + 253 c[2] - 28 c[3] + c[4]}
```

```
In[*]:= Array[c, 4].gveclast5[[i]]
```

```
Out[*]= -43 944 c[1] + 15 180 c[2] - 1680 c[3] + 60 c[4]
```

```
In[*]:= i
```

```
Flatten[
```

```
Array[c, 4] /. FindInstance[-43 944 c[1] + 15 180 c[2] - 1680 c[3] + 60 c[4] < 0 &&  
-726 c[1] + 253 c[2] - 28 c[3] + c[4] ≥ 0 &&  
-738 c[1] + 253 c[2] - 28 c[3] + c[4] ≥ 0, Array[c, 4], Integers]]
```

```
Out[*]= 2
```

```
Out[*]= {c[1], c[2], c[3], c[4]}
```

$$(x + 5)^{14} (x - 11)^6$$

In[ ]:= 32 \* 31

Out[ ]:= 992

In[ ]:= 14 (-5)^2 + 6 \* 11^2

Out[ ]:= 1076

In[ ]:= i = 3;

last5[[i]]

interlacingpolylast5[[i]] = { (-13 + x)^3 (-11 + x)^13 (5 + x)^41 (106 - 23 x + x^2),  
 (-13 + x)^2 (-11 + x)^13 (5 + x)^41 (-1382 + 405 x - 36 x^2 + x^3),  
 (-17 + x) (-13 + x)^2 (-11 + x)^13 (5 + x)^41 (82 - 19 x + x^2) };

Coeffmatlast5[[i]] =

CoefficientList[Factor[interlacingpolylast5[[i]]] / mu[last5[[i]]], x];

Out[ ]:= (-17 + x) (-13 + x)^3 (-11 + x)^14 (5 + x)^42

In[ ]:= Coeffmatlast5[[i]] // MatrixForm

Out[ ]//MatrixForm=

$$\begin{pmatrix} -1378 & 405 & -36 & 1 \\ -1382 & 405 & -36 & 1 \\ -1394 & 405 & -36 & 1 \end{pmatrix}$$

In[ ]:= gveclast5[[i]] = CoefficientList[D[last5[[i]], x] / mu[last5[[i]]] // Factor, x]

Out[ ]:= {-83112, 24300, -2160, 60}

In[ ]:= Solve[Array[n, 3].Coeffmatlast5[[3]] == gveclast5[[3]] && n[1] ≥ 0 && n[2] ≥ 0 && n[3] ≥ 0,  
 Array[n, 3], Integers] // Length

Out[ ]:= 12

In[ ]:= Array[c, 4].Transpose[Coeffmatlast5[[i]]]

Out[ ]:= {-1378 c[1] + 405 c[2] - 36 c[3] + c[4],  
 -1382 c[1] + 405 c[2] - 36 c[3] + c[4], -1394 c[1] + 405 c[2] - 36 c[3] + c[4]}

In[ ]:= Array[c, 4].gveclast5[[i]]

Out[ ]:= -83112 c[1] + 24300 c[2] - 2160 c[3] + 60 c[4]

```
In[*]:= i
```

```
Flatten[
```

```
Array[c, 4] /. FindInstance[-83 112 c[1] + 24 300 c[2] - 2160 c[3] + 60 c[4] < 0 &&  
-1378 c[1] + 405 c[2] - 36 c[3] + c[4] ≥ 0 && -1382 c[1] + 405 c[2] - 36 c[3] + c[4] ≥  
0 && -1394 c[1] + 405 c[2] - 36 c[3] + c[4] ≥ 0, Array[c, 4], Integers]]
```

```
Out[*]:= 3
```

```
Out[*]:= {c[1], c[2], c[3], c[4]}
```

```
In[*]:= feasibleinterlacingpolylist[
```

```
(-13 + x)2 (-11 + x)13 (5 + x)41 (-1382 + 405 x - 36 x2 + x3)] // Length
```

```
Out[*]:= 105
```

```
In[*]:= listinterlacingf2i3 = {(-13 + x) (8559 - 3878 x + 624 x2 - 42 x3 + x4),  
(-13 + x) (-7 + x) (-1225 + 379 x - 35 x2 + x3),  
(-13 + x) (8591 - 3878 x + 624 x2 - 42 x3 + x4), (-13 + x)  
(8423 - 3870 x + 624 x2 - 42 x3 + x4), (-13 + x) (8439 - 3870 x + 624 x2 - 42 x3 + x4),  
(-13 + x) (89 - 22 x + x2) (95 - 20 x + x2), (-13 + x) (8471 - 3870 x + 624 x2 - 42 x3 + x4),  
(-13 + x) (123 - 24 x + x2) (69 - 18 x + x2), (-13 + x) (8503 - 3870 x + 624 x2 - 42 x3 + x4),  
(-13 + x) (-7 + x) (-1217 + 379 x - 35 x2 + x3), (-13 + x)  
(8535 - 3870 x + 624 x2 - 42 x3 + x4), (-13 + x) (8303 - 3862 x + 624 x2 - 42 x3 + x4),  
(-13 + x) (8319 - 3862 x + 624 x2 - 42 x3 + x4), (-13 + x) (-5 + x)  
(-1667 + 439 x - 37 x2 + x3), (-13 + x) (8351 - 3862 x + 624 x2 - 42 x3 + x4),  
(-13 + x) (8367 - 3862 x + 624 x2 - 42 x3 + x4), (-13 + x)  
(8383 - 3862 x + 624 x2 - 42 x3 + x4), (-13 + x) (8399 - 3862 x + 624 x2 - 42 x3 + x4),  
(-13 + x) (8415 - 3862 x + 624 x2 - 42 x3 + x4), (-13 + x)  
(8431 - 3862 x + 624 x2 - 42 x3 + x4), (-13 + x) (8167 - 3854 x + 624 x2 - 42 x3 + x4),  
(-13 + x) (8183 - 3854 x + 624 x2 - 42 x3 + x4), (-13 + x) (-9 + x)  
(-911 + 327 x - 33 x2 + x3), (-13 + x) (8215 - 3854 x + 624 x2 - 42 x3 + x4),  
(-13 + x) (8231 - 3854 x + 624 x2 - 42 x3 + x4), (-13 + x)  
(8247 - 3854 x + 624 x2 - 42 x3 + x4), (-13 + x) (8263 - 3854 x + 624 x2 - 42 x3 + x4),  
(-13 + x) (8279 - 3854 x + 624 x2 - 42 x3 + x4), (-13 + x) (-5 + x)  
(-1659 + 439 x - 37 x2 + x3), (-13 + x) (8311 - 3854 x + 624 x2 - 42 x3 + x4),  
(-13 + x) (8327 - 3854 x + 624 x2 - 42 x3 + x4), (-13 + x) (-11 + x)  
(-733 + 283 x - 31 x2 + x3), (-13 + x) (8079 - 3846 x + 624 x2 - 42 x3 + x4),  
(-13 + x) (8095 - 3846 x + 624 x2 - 42 x3 + x4),  
(-13 + x) (8111 - 3846 x + 624 x2 - 42 x3 + x4),  
(-13 + x) (-9 + x) (-903 + 327 x - 33 x2 + x3), (-13 + x)  
(8143 - 3846 x + 624 x2 - 42 x3 + x4), (-13 + x) (8159 - 3846 x + 624 x2 - 42 x3 + x4),  
(-13 + x) (8175 - 3846 x + 624 x2 - 42 x3 + x4), (-13 + x)  
(8191 - 3846 x + 624 x2 - 42 x3 + x4), (-13 + x) (8207 - 3846 x + 624 x2 - 42 x3 + x4),  
(-13 + x) (8223 - 3846 x + 624 x2 - 42 x3 + x4), (-13 + x) (-11 + x)  
(-725 + 283 x - 31 x2 + x3), (-13 + x) (7991 - 3838 x + 624 x2 - 42 x3 + x4),  
(-13 + x) (157 - 26 x + x2) (51 - 16 x + x2), (-13 + x) (8023 - 3838 x + 624 x2 - 42 x3 + x4),
```

$$\begin{aligned}
& (-13+x) (8039 - 3838 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (-9+x) (-895 + 327 x - 33 x^2 + x^3), \\
& (-13+x) (8071 - 3838 x + 624 x^2 - 42 x^3 + x^4), (-13+x) \\
& \quad (8087 - 3838 x + 624 x^2 - 42 x^3 + x^4), (-13+x) (8103 - 3838 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (8119 - 3838 x + 624 x^2 - 42 x^3 + x^4), (-13+x) (-11+x) \\
& \quad (-717 + 283 x - 31 x^2 + x^3), (-13+x) (7903 - 3830 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (7919 - 3830 x + 624 x^2 - 42 x^3 + x^4), (-13+x) \\
& \quad (7935 - 3830 x + 624 x^2 - 42 x^3 + x^4), (-13+x) (7951 - 3830 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (7967 - 3830 x + 624 x^2 - 42 x^3 + x^4), (-13+x) (-9+x) \\
& \quad (-887 + 327 x - 33 x^2 + x^3), (-13+x) (7999 - 3830 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (8015 - 3830 x + 624 x^2 - 42 x^3 + x^4), (-13+x) (-11+x) \\
& \quad (-709 + 283 x - 31 x^2 + x^3), (-13+x) (7815 - 3822 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (191 - 28 x + x^2) (41 - 14 x + x^2), (-13+x) (7847 - 3822 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (7863 - 3822 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (7879 - 3822 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (7895 - 3822 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (-9+x) (-879 + 327 x - 33 x^2 + x^3), (-13+x) (-11+x) \\
& \quad (-701 + 283 x - 31 x^2 + x^3), (-13+x) (7727 - 3814 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (7743 - 3814 x + 624 x^2 - 42 x^3 + x^4), (-13+x) \\
& \quad (7759 - 3814 x + 624 x^2 - 42 x^3 + x^4), (-13+x) (7775 - 3814 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (7791 - 3814 x + 624 x^2 - 42 x^3 + x^4), (-13+x) \\
& \quad (7807 - 3814 x + 624 x^2 - 42 x^3 + x^4), (-13+x) (7823 - 3814 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (-11+x)^2 (63 - 20 x + x^2), (-13+x) (7639 - 3806 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (7655 - 3806 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (7671 - 3806 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (7687 - 3806 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (7703 - 3806 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (7719 - 3806 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (-11+x) (-685 + 283 x - 31 x^2 + x^3), \\
& (-13+x) (7551 - 3798 x + 624 x^2 - 42 x^3 + x^4), (-13+x) (161 - 26 x + x^2) (47 - 16 x + x^2), \\
& (-13+x) (7583 - 3798 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (7599 - 3798 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (7615 - 3798 x + 624 x^2 - 42 x^3 + x^4), (-13+x) (-11+x) \\
& \quad (-677 + 283 x - 31 x^2 + x^3), (-13+x) (7463 - 3790 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (7479 - 3790 x + 624 x^2 - 42 x^3 + x^4), (-13+x) \\
& \quad (7495 - 3790 x + 624 x^2 - 42 x^3 + x^4), (-13+x) (7511 - 3790 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (-11+x) (-669 + 283 x - 31 x^2 + x^3), (-13+x) \\
& \quad (7375 - 3782 x + 624 x^2 - 42 x^3 + x^4), (-13+x) (7391 - 3782 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (7407 - 3782 x + 624 x^2 - 42 x^3 + x^4), (-13+x) (-11+x) \\
& \quad (-661 + 283 x - 31 x^2 + x^3), (-13+x) (7287 - 3774 x + 624 x^2 - 42 x^3 + x^4), \\
& (-13+x) (7303 - 3774 x + 624 x^2 - 42 x^3 + x^4), (-13+x) (-11+x) \\
& \quad (-653 + 283 x - 31 x^2 + x^3), (-13+x) (7199 - 3766 x + 624 x^2 - 42 x^3 + x^4),
\end{aligned}$$

```

      (-15 + x) (-13 + x) (-11 + x) (43 - 16 x + x^2)};
Length[listinterlacingf2i3]

```

```
Out[*]:= 105
```

```

In[*]:= listinterlacingf2i3coeffmat = CoefficientList[listinterlacingf2i3, x];
listinterlacingf2i3coeffmat // Dimensions

```

```
Out[*]:= {105, 6}
```

```

In[*]:= CoefficientList[D[(-13 + x)^2 (-11 + x)^13 (5 + x)^41 (-1382 + 405 x - 36 x^2 + x^3), x] /
      mu[(-13 + x)^2 (-11 + x)^13 (5 + x)^41 (-1382 + 405 x - 36 x^2 + x^3)] // Factor, x]

```

```
Out[*]:= {-6493281, 3465775, -706786, 69030, -3245, 59}
```

```

In[*]:= Array[c, 6].Transpose[listinterlacingf2i3coeffmat]

```

```

Out[*]:= {-111267 c[1] + 58973 c[2] - 11990 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -111475 c[1] + 58989 c[2] - 11990 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -111683 c[1] + 59005 c[2] - 11990 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -109499 c[1] + 58733 c[2] - 11982 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -109707 c[1] + 58749 c[2] - 11982 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -109915 c[1] + 58765 c[2] - 11982 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -110123 c[1] + 58781 c[2] - 11982 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -110331 c[1] + 58797 c[2] - 11982 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -110539 c[1] + 58813 c[2] - 11982 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -110747 c[1] + 58829 c[2] - 11982 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -110955 c[1] + 58845 c[2] - 11982 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -107939 c[1] + 58509 c[2] - 11974 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -108147 c[1] + 58525 c[2] - 11974 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -108355 c[1] + 58541 c[2] - 11974 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -108563 c[1] + 58557 c[2] - 11974 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -108771 c[1] + 58573 c[2] - 11974 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -108979 c[1] + 58589 c[2] - 11974 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -109187 c[1] + 58605 c[2] - 11974 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -109395 c[1] + 58621 c[2] - 11974 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -109603 c[1] + 58637 c[2] - 11974 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -106171 c[1] + 58269 c[2] - 11966 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -106379 c[1] + 58285 c[2] - 11966 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -106587 c[1] + 58301 c[2] - 11966 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -106795 c[1] + 58317 c[2] - 11966 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -107003 c[1] + 58333 c[2] - 11966 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -107211 c[1] + 58349 c[2] - 11966 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -107419 c[1] + 58365 c[2] - 11966 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -107627 c[1] + 58381 c[2] - 11966 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -107835 c[1] + 58397 c[2] - 11966 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -108043 c[1] + 58413 c[2] - 11966 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -108251 c[1] + 58429 c[2] - 11966 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -104819 c[1] + 58061 c[2] - 11958 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -105027 c[1] + 58077 c[2] - 11958 c[3] + 1170 c[4] - 55 c[5] + c[6],
      -105235 c[1] + 58093 c[2] - 11958 c[3] + 1170 c[4] - 55 c[5] + c[6],

```

$-105\,443\,c[1] + 58\,109\,c[2] - 11\,958\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-105\,651\,c[1] + 58\,125\,c[2] - 11\,958\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-105\,859\,c[1] + 58\,141\,c[2] - 11\,958\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-106\,067\,c[1] + 58\,157\,c[2] - 11\,958\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-106\,275\,c[1] + 58\,173\,c[2] - 11\,958\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-106\,483\,c[1] + 58\,189\,c[2] - 11\,958\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-106\,691\,c[1] + 58\,205\,c[2] - 11\,958\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-106\,899\,c[1] + 58\,221\,c[2] - 11\,958\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-103\,675\,c[1] + 57\,869\,c[2] - 11\,950\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-103\,883\,c[1] + 57\,885\,c[2] - 11\,950\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-104\,091\,c[1] + 57\,901\,c[2] - 11\,950\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-104\,299\,c[1] + 57\,917\,c[2] - 11\,950\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-104\,507\,c[1] + 57\,933\,c[2] - 11\,950\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-104\,715\,c[1] + 57\,949\,c[2] - 11\,950\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-104\,923\,c[1] + 57\,965\,c[2] - 11\,950\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-105\,131\,c[1] + 57\,981\,c[2] - 11\,950\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-105\,339\,c[1] + 57\,997\,c[2] - 11\,950\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-105\,547\,c[1] + 58\,013\,c[2] - 11\,950\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-102\,531\,c[1] + 57\,677\,c[2] - 11\,942\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-102\,739\,c[1] + 57\,693\,c[2] - 11\,942\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-102\,947\,c[1] + 57\,709\,c[2] - 11\,942\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-103\,155\,c[1] + 57\,725\,c[2] - 11\,942\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-103\,363\,c[1] + 57\,741\,c[2] - 11\,942\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-103\,571\,c[1] + 57\,757\,c[2] - 11\,942\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-103\,779\,c[1] + 57\,773\,c[2] - 11\,942\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-103\,987\,c[1] + 57\,789\,c[2] - 11\,942\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-104\,195\,c[1] + 57\,805\,c[2] - 11\,942\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-101\,387\,c[1] + 57\,485\,c[2] - 11\,934\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-101\,595\,c[1] + 57\,501\,c[2] - 11\,934\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-101\,803\,c[1] + 57\,517\,c[2] - 11\,934\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-102\,011\,c[1] + 57\,533\,c[2] - 11\,934\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-102\,219\,c[1] + 57\,549\,c[2] - 11\,934\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-102\,427\,c[1] + 57\,565\,c[2] - 11\,934\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-102\,635\,c[1] + 57\,581\,c[2] - 11\,934\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-102\,843\,c[1] + 57\,597\,c[2] - 11\,934\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-100\,243\,c[1] + 57\,293\,c[2] - 11\,926\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-100\,451\,c[1] + 57\,309\,c[2] - 11\,926\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-100\,659\,c[1] + 57\,325\,c[2] - 11\,926\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-100\,867\,c[1] + 57\,341\,c[2] - 11\,926\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-101\,075\,c[1] + 57\,357\,c[2] - 11\,926\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-101\,283\,c[1] + 57\,373\,c[2] - 11\,926\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-101\,491\,c[1] + 57\,389\,c[2] - 11\,926\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-101\,699\,c[1] + 57\,405\,c[2] - 11\,926\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-99\,099\,c[1] + 57\,101\,c[2] - 11\,918\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-99\,307\,c[1] + 57\,117\,c[2] - 11\,918\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-99\,515\,c[1] + 57\,133\,c[2] - 11\,918\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$   
 $-99\,723\,c[1] + 57\,149\,c[2] - 11\,918\,c[3] + 1170\,c[4] - 55\,c[5] + c[6],$

```

-99 931 c[1] + 57 165 c[2] - 11 918 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-100 139 c[1] + 57 181 c[2] - 11 918 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-100 347 c[1] + 57 197 c[2] - 11 918 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-97 955 c[1] + 56 909 c[2] - 11 910 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-98 163 c[1] + 56 925 c[2] - 11 910 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-98 371 c[1] + 56 941 c[2] - 11 910 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-98 579 c[1] + 56 957 c[2] - 11 910 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-98 787 c[1] + 56 973 c[2] - 11 910 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-98 995 c[1] + 56 989 c[2] - 11 910 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-96 811 c[1] + 56 717 c[2] - 11 902 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-97 019 c[1] + 56 733 c[2] - 11 902 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-97 227 c[1] + 56 749 c[2] - 11 902 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-97 435 c[1] + 56 765 c[2] - 11 902 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-97 643 c[1] + 56 781 c[2] - 11 902 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-95 667 c[1] + 56 525 c[2] - 11 894 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-95 875 c[1] + 56 541 c[2] - 11 894 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-96 083 c[1] + 56 557 c[2] - 11 894 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-96 291 c[1] + 56 573 c[2] - 11 894 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-94 523 c[1] + 56 333 c[2] - 11 886 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-94 731 c[1] + 56 349 c[2] - 11 886 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-94 939 c[1] + 56 365 c[2] - 11 886 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-93 379 c[1] + 56 141 c[2] - 11 878 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-93 587 c[1] + 56 157 c[2] - 11 878 c[3] + 1170 c[4] - 55 c[5] + c[6] ,
-92 235 c[1] + 55 949 c[2] - 11 870 c[3] + 1170 c[4] - 55 c[5] + c[6] }

```

```

In[ ]:= Array[c, 6].{-6493 281, 3465 775, -706 786, 69 030, -3245, 59}

```

```

Out[ ]:= -6493 281 c[1] + 3465 775 c[2] - 706 786 c[3] + 69 030 c[4] - 3245 c[5] + 59 c[6]

```

```

In[ ]:= FindInstance[
-6493 281 c[1] + 3465 775 c[2] - 706 786 c[3] + 69 030 c[4] - 3245 c[5] + 59 c[6] < 0 &&
-111 267 c[1] + 58 973 c[2] - 11 990 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-111 475 c[1] + 58 989 c[2] - 11 990 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-111 683 c[1] + 59 005 c[2] - 11 990 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-109 499 c[1] + 58 733 c[2] - 11 982 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-109 707 c[1] + 58 749 c[2] - 11 982 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-109 915 c[1] + 58 765 c[2] - 11 982 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-110 123 c[1] + 58 781 c[2] - 11 982 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-110 331 c[1] + 58 797 c[2] - 11 982 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-110 539 c[1] + 58 813 c[2] - 11 982 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-110 747 c[1] + 58 829 c[2] - 11 982 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-110 955 c[1] + 58 845 c[2] - 11 982 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-107 939 c[1] + 58 509 c[2] - 11 974 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-108 147 c[1] + 58 525 c[2] - 11 974 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-108 355 c[1] + 58 541 c[2] - 11 974 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-108 563 c[1] + 58 557 c[2] - 11 974 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-108 771 c[1] + 58 573 c[2] - 11 974 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-108 979 c[1] + 58 589 c[2] - 11 974 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&

```



[illegible]

```

-102 011 c[1] + 57 533 c[2] - 11 934 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-102 219 c[1] + 57 549 c[2] - 11 934 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-102 427 c[1] + 57 565 c[2] - 11 934 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-102 635 c[1] + 57 581 c[2] - 11 934 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-102 843 c[1] + 57 597 c[2] - 11 934 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-100 243 c[1] + 57 293 c[2] - 11 926 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-100 451 c[1] + 57 309 c[2] - 11 926 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-100 659 c[1] + 57 325 c[2] - 11 926 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-100 867 c[1] + 57 341 c[2] - 11 926 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-101 075 c[1] + 57 357 c[2] - 11 926 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-101 283 c[1] + 57 373 c[2] - 11 926 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-101 491 c[1] + 57 389 c[2] - 11 926 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-101 699 c[1] + 57 405 c[2] - 11 926 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-99 099 c[1] + 57 101 c[2] - 11 918 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-99 307 c[1] + 57 117 c[2] - 11 918 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-99 515 c[1] + 57 133 c[2] - 11 918 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-99 723 c[1] + 57 149 c[2] - 11 918 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-99 931 c[1] + 57 165 c[2] - 11 918 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-100 139 c[1] + 57 181 c[2] - 11 918 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-100 347 c[1] + 57 197 c[2] - 11 918 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-97 955 c[1] + 56 909 c[2] - 11 910 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-98 163 c[1] + 56 925 c[2] - 11 910 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-98 371 c[1] + 56 941 c[2] - 11 910 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-98 579 c[1] + 56 957 c[2] - 11 910 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-98 787 c[1] + 56 973 c[2] - 11 910 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-98 995 c[1] + 56 989 c[2] - 11 910 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-96 811 c[1] + 56 717 c[2] - 11 902 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-97 019 c[1] + 56 733 c[2] - 11 902 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-97 227 c[1] + 56 749 c[2] - 11 902 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-97 435 c[1] + 56 765 c[2] - 11 902 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-97 643 c[1] + 56 781 c[2] - 11 902 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-95 667 c[1] + 56 525 c[2] - 11 894 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-95 875 c[1] + 56 541 c[2] - 11 894 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-96 083 c[1] + 56 557 c[2] - 11 894 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-96 291 c[1] + 56 573 c[2] - 11 894 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-94 523 c[1] + 56 333 c[2] - 11 886 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-94 731 c[1] + 56 349 c[2] - 11 886 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-94 939 c[1] + 56 365 c[2] - 11 886 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-93 379 c[1] + 56 141 c[2] - 11 878 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-93 587 c[1] + 56 157 c[2] - 11 878 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0 &&
-92 235 c[1] + 55 949 c[2] - 11 870 c[3] + 1170 c[4] - 55 c[5] + c[6] ≥ 0,
Array[c, 6], Integers]

```

```

Out[4]= { {c[1] → 37 285, c[2] → 484 710,
c[3] → 6 301 221, c[4] → 0, c[5] → 0, c[6] → 51 115 513 410} }

```

```
In[*]:= Flatten[Array[c, 6] /. {c[1] → 37 285, c[2] → 484 710,
    c[3] → 6 301 221, c[4] → 0, c[5] → 0, c[6] → 51 115 513 410}]
```

```
Out[*]:= {37 285, 484 710, 6 301 221, 0, 0, 51 115 513 410}
```

```
In[*]:= GCD[37 285, 484 710, 6 301 221, 0, 0, 51 115 513 410]
```

```
Out[*]:= 1
```

```
In[*]:= {37 285, 484 710, 6 301 221, 0, 0, 51 115 513 410}.
    Transpose[listinterlacingf2i3coeffmat]
    {37 285, 484 710, 6 301 221, 0, 0, 51 115 513 410}.
    {-6 493 281, 3 465 775, -706 786, 69 030, -3245, 59}
```

```
Out[*]:= {86 355, 86 435, 86 515, 85 603, 85 683, 85 763, 85 843, 85 923, 86 003, 86 083, 86 163,
    84 931, 85 011, 85 091, 85 171, 85 251, 85 331, 85 411, 85 491, 85 571, 84 179, 84 259,
    84 339, 84 419, 84 499, 84 579, 84 659, 84 739, 84 819, 84 899, 84 979, 83 587, 83 667,
    83 747, 83 827, 83 907, 83 987, 84 067, 84 147, 84 227, 84 307, 84 387, 83 075, 83 155,
    83 235, 83 315, 83 395, 83 475, 83 555, 83 635, 83 715, 83 795, 82 563, 82 643, 82 723,
    82 803, 82 883, 82 963, 83 043, 83 123, 83 203, 82 051, 82 131, 82 211, 82 291,
    82 371, 82 451, 82 531, 82 611, 81 539, 81 619, 81 699, 81 779, 81 859, 81 939,
    82 019, 82 099, 81 027, 81 107, 81 187, 81 267, 81 347, 81 427, 81 507, 80 515,
    80 595, 80 675, 80 755, 80 835, 80 915, 80 003, 80 083, 80 163, 80 243, 80 323,
    79 491, 79 571, 79 651, 79 731, 78 979, 79 059, 79 139, 78 467, 78 547, 77 955}
```

```
Out[*]:= -5 676 351
```

```
In[*]:= Reverse[{37 285, 484 710, 6 301 221, 0, 0, 51 115 513 410}]
```

```
Out[*]:= {51 115 513 410, 0, 0, 6 301 221, 484 710, 37 285}
```

```
In[*]:= Solve[Array[n, 3].Coeffmatlast5[[3]] == gveclast5[[3]] && n[1] ≥ 0 && n[2] ≥ 0 && n[3] ≥ 0,
    Array[n, 3], Integers]
```

```
Out[*]:= {{n[1] → 0, n[2] → 44, n[3] → 16}, {n[1] → 3, n[2] → 40, n[3] → 17},
    {n[1] → 6, n[2] → 36, n[3] → 18}, {n[1] → 9, n[2] → 32, n[3] → 19},
    {n[1] → 12, n[2] → 28, n[3] → 20}, {n[1] → 15, n[2] → 24, n[3] → 21},
    {n[1] → 18, n[2] → 20, n[3] → 22}, {n[1] → 21, n[2] → 16, n[3] → 23},
    {n[1] → 24, n[2] → 12, n[3] → 24}, {n[1] → 27, n[2] → 8, n[3] → 25},
    {n[1] → 30, n[2] → 4, n[3] → 26}, {n[1] → 33, n[2] → 0, n[3] → 27}}
```

```
In[*]:= Solve[Array[n, 3].Coeffmatlast5[[3]] == gveclast5[[3]] && n[1] ≥ 0 && n[2] == 0 && n[3] ≥ 0,
    Array[n, 3], Integers]
```

```
Out[*]:= {{n[1] → 33, n[2] → 0, n[3] → 27}}
```

$$(x + 5)^9 (x - 13)^3$$

```
In[*]:= 27 * 26
```

```
Out[*]:= 702
```

```
In[*]:= 9 (-5) ^ 2 + 3 * 13 ^ 2
```

```
Out[*]:= 732
```

```
In[*]:= i = 4;
```

```
last5[[i]]
```

```
interlacingpolylast5[[i]] =
```

```
{ (-13 + x)^5 (-11 + x)^8 (-9 + x) (5 + x)^41 (11 026 - 4529 x + 673 x^2 - 43 x^3 + x^4),
  (-13 + x)^5 (-11 + x)^8 (-9 + x) (5 + x)^41 (10 966 - 4525 x + 673 x^2 - 43 x^3 + x^4),
  (-13 + x)^6 (-11 + x)^8 (-9 + x)^2 (5 + x)^41 (94 - 21 x + x^2),
  (-13 + x)^5 (-11 + x)^8 (-9 + x) (5 + x)^41 (10 818 - 4513 x + 673 x^2 - 43 x^3 + x^4),
  (-13 + x)^5 (-11 + x)^9 (-9 + x) (5 + x)^41 (-978 + 321 x - 32 x^2 + x^3),
  (-13 + x)^6 (-11 + x)^8 (-10 + x) (-9 + x) (5 + x)^41 (83 - 20 x + x^2),
  (-13 + x)^6 (-11 + x)^9 (-9 + x) (5 + x)^41 (74 - 19 x + x^2) };
```

```
Coeffmatlast5[[i]] =
```

```
CoefficientList[Factor[interlacingpolylast5[[i]]] / mu[last5[[i]]], x];
```

```
Out[*]:= (-15 + x) (-13 + x)^6 (-11 + x)^9 (-9 + x)^2 (5 + x)^42
```

```
In[*]:= Coeffmatlast5[[i]] // MatrixForm
```

```
Out[*]//MatrixForm=
```

$$\begin{pmatrix} 11\,026 & -4529 & 673 & -43 & 1 \\ 10\,966 & -4525 & 673 & -43 & 1 \\ 10\,998 & -4525 & 673 & -43 & 1 \\ 10\,818 & -4513 & 673 & -43 & 1 \\ 10\,758 & -4509 & 673 & -43 & 1 \\ 10\,790 & -4509 & 673 & -43 & 1 \\ 10\,582 & -4493 & 673 & -43 & 1 \end{pmatrix}$$

```
In[*]:= gveclast5[[i]] = CoefficientList[D[last5[[i]], x] / mu[last5[[i]]] // Factor, x]
```

```
Out[*]:= {659 400, -271 596, 40 380, -2580, 60}
```

```
In[*]:= Solve[n[1] ≥ 0 && n[2] ≥ 0 && n[3] ≥ 0 && n[4] ≥ 0 && n[5] ≥ 0 && n[6] ≥ 0 && n[7] ≥ 0 &&
```

```
Array[n, 7].Coeffmatlast5[[i]] == gveclast5[[i]], Array[n, 7], Reals]
```

```
Out[*]:= {{n[1] → 24, n[2] → 36, n[3] → 0, n[4] → 0, n[5] → 0, n[6] → 0, n[7] → 0}}
```

```
In[*]:= Array[c, 5].Transpose[Coeffmatlast5[[i]]]
```

```
Out[*]:= {11 026 c[1] - 4529 c[2] + 673 c[3] - 43 c[4] + c[5],
  10 966 c[1] - 4525 c[2] + 673 c[3] - 43 c[4] + c[5],
  10 998 c[1] - 4525 c[2] + 673 c[3] - 43 c[4] + c[5],
  10 818 c[1] - 4513 c[2] + 673 c[3] - 43 c[4] + c[5],
  10 758 c[1] - 4509 c[2] + 673 c[3] - 43 c[4] + c[5],
  10 790 c[1] - 4509 c[2] + 673 c[3] - 43 c[4] + c[5],
  10 582 c[1] - 4493 c[2] + 673 c[3] - 43 c[4] + c[5]}
```

```
In[*]:= Array[c, 5].gveclast5[[i]]
```

```
Out[*]:= 659 400 c[1] - 271 596 c[2] + 40 380 c[3] - 2580 c[4] + 60 c[5]
```

```

In[ ]:= i
Flatten[Array[c, 5] /.
FindInstance[659400 c[1] - 271596 c[2] + 40380 c[3] - 2580 c[4] + 60 c[5] < 0 &&
11026 c[1] - 4529 c[2] + 673 c[3] - 43 c[4] + c[5] ≥ 0 &&
10966 c[1] - 4525 c[2] + 673 c[3] - 43 c[4] + c[5] ≥ 0 &&
10998 c[1] - 4525 c[2] + 673 c[3] - 43 c[4] + c[5] ≥ 0 &&
10818 c[1] - 4513 c[2] + 673 c[3] - 43 c[4] + c[5] ≥ 0 &&
10758 c[1] - 4509 c[2] + 673 c[3] - 43 c[4] + c[5] ≥ 0 &&
10790 c[1] - 4509 c[2] + 673 c[3] - 43 c[4] + c[5] ≥ 0 &&
10582 c[1] - 4493 c[2] + 673 c[3] - 43 c[4] + c[5] ≥ 0, Array[c, 5], Integers]]

```

Out[ ]:= 4

Out[ ]:= {c[1], c[2], c[3], c[4], c[5]}

```

In[ ]:= i
Flatten[Array[c, 5] /.
FindInstance[659400 c[1] - 271596 c[2] + 40380 c[3] - 2580 c[4] + 60 c[5] < 0 &&
11026 c[1] - 4529 c[2] + 673 c[3] - 43 c[4] + c[5] < 0 &&
10966 c[1] - 4525 c[2] + 673 c[3] - 43 c[4] + c[5] ≥ 0 &&
10998 c[1] - 4525 c[2] + 673 c[3] - 43 c[4] + c[5] ≥ 0 &&
10818 c[1] - 4513 c[2] + 673 c[3] - 43 c[4] + c[5] ≥ 0 &&
10758 c[1] - 4509 c[2] + 673 c[3] - 43 c[4] + c[5] ≥ 0 &&
10790 c[1] - 4509 c[2] + 673 c[3] - 43 c[4] + c[5] ≥ 0 &&
10582 c[1] - 4493 c[2] + 673 c[3] - 43 c[4] + c[5] ≥ 0, Array[c, 5], Integers]]

```

Out[ ]:= 4

Out[ ]:= {0, 10146, 0, 0, 45911387}

In[ ]:= GCD[0, 10146, 0, 0, 45911387]

Out[ ]:= 1

```

In[ ]:= {0, 10146, 0, 0, 45911387}.Transpose[Coeffmatlast5[[4]]]
{0, 10146, 0, 0, 45911387}.gvec last5[[4]]

```

Out[ ]:= {-39847, 737, 737, 122489, 163073, 163073, 325409}

Out[ ]:= -929796

In[ ]:= Reverse[{0, 10146, 0, 0, 45911387}]

Out[ ]:= {45911387, 0, 0, 10146, 0}

```

In[ ]:= feasibleinterlacingpolylist[
(-13 + x)^5 (-11 + x)^8 (-9 + x) (5 + x)^41 (11026 - 4529 x + 673 x^2 - 43 x^3 + x^4)] // Length

```

Out[ ]:= 208

```

In[ ]:= listinterlacingf1 =
{(-9 + x) (889149 - 575206 x + 151487 x^2 - 20796 x^3 + 1571 x^4 - 62 x^5 + x^6),
(-13 + x) (-9 + x) (73 - 18 x + x^2) (-937 + 303 x - 31 x^2 + x^3),
(-13 + x) (-9 + x) (-7 + x) (9767 - 4174 x + 640 x^2 - 42 x^3 + x^4),
(-13 + x) (-11 + x) (-9 + x) (6123 - 2970 x + 516 x^2 - 38 x^3 + x^4),

```

$$\begin{aligned}
& (-9+x) (875\,109 - 571\,630 x + 151\,191 x^2 - 20\,788 x^3 + 1571 x^4 - 62 x^5 + x^6), \\
& (-13+x) (-9+x) (-67\,321 + 38\,793 x - 8646 x^2 + 934 x^3 - 49 x^4 + x^5), \\
& (-9+x) (874\,693 - 571\,598 x + 151\,191 x^2 - 20\,788 x^3 + 1571 x^4 - 62 x^5 + x^6), \\
& (-13+x) (-9+x) (-67\,289 + 38\,793 x - 8646 x^2 + 934 x^3 - 49 x^4 + x^5), \\
& (-11+x) (-9+x) (-79\,839 + 44\,749 x - 9678 x^2 + 1010 x^3 - 51 x^4 + x^5), \\
& (-9+x) (877\,813 - 572\,046 x + 151\,207 x^2 - 20\,788 x^3 + 1571 x^4 - 62 x^5 + x^6), \\
& (-13+x) (-11+x) (-9+x) (-7+x) (-877 + 299 x - 31 x^2 + x^3), \\
& (-9+x) (877\,397 - 572\,014 x + 151\,207 x^2 - 20\,788 x^3 + 1571 x^4 - 62 x^5 + x^6), \\
& (-13+x) (-9+x) (-67\,497 + 38\,809 x - 8646 x^2 + 934 x^3 - 49 x^4 + x^5), \\
& (-9+x) (876\,981 - 571\,982 x + 151\,207 x^2 - 20\,788 x^3 + 1571 x^4 - 62 x^5 + x^6), \\
& (-13+x) (-9+x) (-67\,465 + 38\,809 x - 8646 x^2 + 934 x^3 - 49 x^4 + x^5), \\
& (-9+x) (95 - 20 x + x^2) (9227 - 4078 x + 636 x^2 - 42 x^3 + x^4), \\
& (-13+x) (-9+x) (-67\,433 + 38\,809 x - 8646 x^2 + 934 x^3 - 49 x^4 + x^5), \\
& (-9+x) (880\,101 - 572\,430 x + 151\,223 x^2 - 20\,788 x^3 + 1571 x^4 - 62 x^5 + x^6), \\
& (-9+x) (879\,685 - 572\,398 x + 151\,223 x^2 - 20\,788 x^3 + 1571 x^4 - 62 x^5 + x^6), \\
& (-13+x) (-9+x) (59 - 16 x + x^2) (-1147 + 347 x - 33 x^2 + x^3), \\
& (-9+x) (879\,269 - 572\,366 x + 151\,223 x^2 - 20\,788 x^3 + 1571 x^4 - 62 x^5 + x^6), \\
& (-13+x) (-9+x) (-7+x) (9663 - 4166 x + 640 x^2 - 42 x^3 + x^4), \\
& (-9+x) (69 - 18 x + x^2) (12\,737 - 4972 x + 710 x^2 - 44 x^3 + x^4), \\
& (-13+x) (-9+x) (-67\,609 + 38\,825 x - 8646 x^2 + 934 x^3 - 49 x^4 + x^5), \\
& (-13+x) (-9+x) (-67\,577 + 38\,825 x - 8646 x^2 + 934 x^3 - 49 x^4 + x^5), \\
& (-9+x) (-1087 + 343 x - 33 x^2 + x^3) (-811 + 271 x - 29 x^2 + x^3), \\
& (-13+x) (-9+x) (-67\,785 + 38\,841 x - 8646 x^2 + 934 x^3 - 49 x^4 + x^5), \\
& (-13+x) (-9+x) (-7+x) (9679 - 4166 x + 640 x^2 - 42 x^3 + x^4), \\
& (-13+x) (-9+x) (-67\,721 + 38\,841 x - 8646 x^2 + 934 x^3 - 49 x^4 + x^5), \\
& (-13+x) (-9+x) (-67\,897 + 38\,857 x - 8646 x^2 + 934 x^3 - 49 x^4 + x^5), \\
& (-13+x) (-11+x) (-9+x)^2 (-667 + 255 x - 29 x^2 + x^3), \\
& (-11+x) (-9+x) (-78\,279 + 44\,525 x - 9670 x^2 + 1010 x^3 - 51 x^4 + x^5), \\
& (-9+x) (860\,653 - 568\,022 x + 150\,895 x^2 - 20\,780 x^3 + 1571 x^4 - 62 x^5 + x^6), \\
& (-13+x) (-11+x) (-9+x) (6019 - 2962 x + 516 x^2 - 38 x^3 + x^4), \\
& (-11+x) (-9+x) (-78\,519 + 44\,541 x - 9670 x^2 + 1010 x^3 - 51 x^4 + x^5), \\
& (-9+x) (863\,293 - 568\,438 x + 150\,911 x^2 - 20\,780 x^3 + 1571 x^4 - 62 x^5 + x^6), \\
& (-11+x) (-9+x) (-78\,487 + 44\,541 x - 9670 x^2 + 1010 x^3 - 51 x^4 + x^5), \\
& (-9+x) (862\,877 - 568\,406 x + 150\,911 x^2 - 20\,780 x^3 + 1571 x^4 - 62 x^5 + x^6), \\
& (-9+x) (862\,941 - 568\,406 x + 150\,911 x^2 - 20\,780 x^3 + 1571 x^4 - 62 x^5 + x^6), \\
& (-13+x) (-11+x) (-9+x) (-5+x) (-1207 + 351 x - 33 x^2 + x^3), \\
& (-9+x) (862\,525 - 568\,374 x + 150\,911 x^2 - 20\,780 x^3 + 1571 x^4 - 62 x^5 + x^6), \\
& (-13+x) (-9+x) (-66\,353 + 38\,617 x - 8638 x^2 + 934 x^3 - 49 x^4 + x^5), \\
& (-11+x)^2 (-9+x) (7157 - 3400 x + 570 x^2 - 40 x^3 + x^4), \\
& (-9+x) (865\,581 - 568\,822 x + 150\,927 x^2 - 20\,780 x^3 + 1571 x^4 - 62 x^5 + x^6), \\
& (-11+x) (-9+x) (-78\,695 + 44\,557 x - 9670 x^2 + 1010 x^3 - 51 x^4 + x^5), \\
& (-9+x) (865\,229 - 568\,790 x + 150\,927 x^2 - 20\,780 x^3 + 1571 x^4 - 62 x^5 + x^6),
\end{aligned}$$

$$\begin{aligned}
& (-13+x)(-11+x)(-9+x)(6051-2962x+516x^2-38x^3+x^4), \\
& (-9+x)(864813-568758x+150927x^2-20780x^3+1571x^4-62x^5+x^6), \\
& (-13+x)(-9+x)(-66529+38633x-8638x^2+934x^3-49x^4+x^5), \\
& (-9+x)(864397-568726x+150927x^2-20780x^3+1571x^4-62x^5+x^6), \\
& (-13+x)(-9+x)(-66497+38633x-8638x^2+934x^3-49x^4+x^5), \\
& (-11+x)(-9+x)(-78935+44573x-9670x^2+1010x^3-51x^4+x^5), \\
& (-11+x)^2(-9+x)(7173-3400x+570x^2-40x^3+x^4), \\
& (-9+x)(867517-569174x+150943x^2-20780x^3+1571x^4-62x^5+x^6), \\
& (-13+x)(-11+x)(-9+x)(6067-2962x+516x^2-38x^3+x^4), \\
& (-9+x)(867101-569142x+150943x^2-20780x^3+1571x^4-62x^5+x^6), \\
& (-13+x)(-9+x)(-66705+38649x-8638x^2+934x^3-49x^4+x^5), \\
& (-9+x)(95-20x+x^2)(9123-4070x+636x^2-42x^3+x^4), \\
& (-13+x)(-9+x)(-66673+38649x-8638x^2+934x^3-49x^4+x^5), \\
& (-13+x)(-9+x)(-66641+38649x-8638x^2+934x^3-49x^4+x^5), \\
& (-11+x)(-9+x)(-79111+44589x-9670x^2+1010x^3-51x^4+x^5), \\
& (-9+x)(869805-569558x+150959x^2-20780x^3+1571x^4-62x^5+x^6), \\
& (-13+x)(-11+x)^2(-9+x)(-7+x)(79-20x+x^2), \\
& (-9+x)(869389-569526x+150959x^2-20780x^3+1571x^4-62x^5+x^6), \\
& (-13+x)(-9+x)(-66881+38665x-8638x^2+934x^3-49x^4+x^5), \\
& (-13+x)(-9+x)(-66849+38665x-8638x^2+934x^3-49x^4+x^5), \\
& (-13+x)(-9+x)(109-22x+x^2)(-613+231x-27x^2+x^3), \\
& (-13+x)(-9+x)(95-20x+x^2)(-703+259x-29x^2+x^3), \\
& (-9+x)(872093-569942x+150975x^2-20780x^3+1571x^4-62x^5+x^6), \\
& (-13+x)(-11+x)(-9+x)(6099-2962x+516x^2-38x^3+x^4), \\
& (-13+x)(-9+x)(-67057+38681x-8638x^2+934x^3-49x^4+x^5), \\
& (-13+x)(-9+x)(-7+x)(9575-4158x+640x^2-42x^3+x^4), \\
& (-13+x)(-9+x)(-66993+38681x-8638x^2+934x^3-49x^4+x^5), \\
& (-13+x)(-9+x)(-66961+38681x-8638x^2+934x^3-49x^4+x^5), \\
& (-13+x)(-9+x)(59-16x+x^2)(-1139+347x-33x^2+x^3), \\
& (-13+x)(-9+x)(-67169+38697x-8638x^2+934x^3-49x^4+x^5), \\
& (-13+x)(-9+x)(-7+x)(139-24x+x^2)(69-18x+x^2), \\
& (-11+x)(-9+x)^2(8551-3974x+632x^2-42x^3+x^4), \\
& (-11+x)(-9+x)(-77167+44333x-9662x^2+1010x^3-51x^4+x^5), \\
& (-9+x)^2(-94269+52281x-10926x^2+1094x^3-53x^4+x^5), \\
& (-11+x)(-9+x)(-77135+44333x-9662x^2+1010x^3-51x^4+x^5), \\
& (-13+x)(-11+x)(-9+x)^2(-659+255x-29x^2+x^3), \\
& (-11+x)(-9+x)(-77375+44349x-9662x^2+1010x^3-51x^4+x^5), \\
& (-9+x)(850709-565182x+150631x^2-20772x^3+1571x^4-62x^5+x^6), \\
& (-11+x)(-9+x)(-77343+44349x-9662x^2+1010x^3-51x^4+x^5), \\
& (-9+x)(850357-565150x+150631x^2-20772x^3+1571x^4-62x^5+x^6), \\
& (-13+x)(-11+x)(-9+x)(5947-2954x+516x^2-38x^3+x^4), \\
& (-13+x)(-9+x)^2(7265-3464x+574x^2-40x^3+x^4),
\end{aligned}$$

$$\begin{aligned}
& (-11+x)^2 (-9+x) (7053 - 3392x + 570x^2 - 40x^3 + x^4), \\
& (-11+x) (-9+x) (-77551 + 44365x - 9662x^2 + 1010x^3 - 51x^4 + x^5), \\
& (-9+x) (852645 - 565534x + 150647x^2 - 20772x^3 + 1571x^4 - 62x^5 + x^6), \\
& (-13+x) (-11+x) (-9+x) (5963 - 2954x + 516x^2 - 38x^3 + x^4), \\
& (-9+x) (-1477 + 399x - 35x^2 + x^3) (-577 + 227x - 27x^2 + x^3), \\
& (-13+x) (-9+x) (-65561 + 38457x - 8630x^2 + 934x^3 - 49x^4 + x^5), \\
& (-11+x)^2 (-9+x) (7069 - 3392x + 570x^2 - 40x^3 + x^4), \\
& (-9+x) (854933 - 565918x + 150663x^2 - 20772x^3 + 1571x^4 - 62x^5 + x^6), \\
& (-13+x) (-11+x) (-9+x) (5979 - 2954x + 516x^2 - 38x^3 + x^4), \\
& (-9+x) (854517 - 565886x + 150663x^2 - 20772x^3 + 1571x^4 - 62x^5 + x^6), \\
& (-13+x) (-9+x) (-65737 + 38473x - 8630x^2 + 934x^3 - 49x^4 + x^5), \\
& (-13+x) (-9+x) (-65705 + 38473x - 8630x^2 + 934x^3 - 49x^4 + x^5), \\
& (-11+x) (-9+x) (-77967 + 44397x - 9662x^2 + 1010x^3 - 51x^4 + x^5), \\
& (-9+x) (857221 - 566302x + 150679x^2 - 20772x^3 + 1571x^4 - 62x^5 + x^6), \\
& (-13+x) (-11+x)^2 (-9+x) (-5+x) (109 - 22x + x^2), \\
& (-9+x) (95 - 20x + x^2) (9019 - 4062x + 636x^2 - 42x^3 + x^4), \\
& (-13+x) (-9+x) (-65913 + 38489x - 8630x^2 + 934x^3 - 49x^4 + x^5), \\
& (-13+x) (-9+x) (-65881 + 38489x - 8630x^2 + 934x^3 - 49x^4 + x^5), \\
& (-13+x) (-9+x) (-65849 + 38489x - 8630x^2 + 934x^3 - 49x^4 + x^5), \\
& (-11+x) (-9+x) (-78175 + 44413x - 9662x^2 + 1010x^3 - 51x^4 + x^5), \\
& (-9+x) (859509 - 566686x + 150695x^2 - 20772x^3 + 1571x^4 - 62x^5 + x^6), \\
& (-13+x) (-11+x) (-9+x) (6011 - 2954x + 516x^2 - 38x^3 + x^4), \\
& (-13+x) (-9+x) (-66089 + 38505x - 8630x^2 + 934x^3 - 49x^4 + x^5), \\
& (-13+x) (-9+x) (-66057 + 38505x - 8630x^2 + 934x^3 - 49x^4 + x^5), \\
& (-13+x) (-9+x) (-5+x) (139 - 24x + x^2) (95 - 20x + x^2), \\
& (-13+x) (-9+x) (-65993 + 38505x - 8630x^2 + 934x^3 - 49x^4 + x^5), \\
& (-11+x) (-9+x) (-78383 + 44429x - 9662x^2 + 1010x^3 - 51x^4 + x^5), \\
& (-13+x) (-11+x) (-9+x) (-7+x) (-861 + 299x - 31x^2 + x^3), \\
& (-13+x) (-9+x) (-66265 + 38521x - 8630x^2 + 934x^3 - 49x^4 + x^5), \\
& (-13+x) (-9+x) (-66233 + 38521x - 8630x^2 + 934x^3 - 49x^4 + x^5), \\
& (-13+x) (-9+x) (-66201 + 38521x - 8630x^2 + 934x^3 - 49x^4 + x^5), \\
& (-13+x) (-11+x) (-9+x) (6043 - 2954x + 516x^2 - 38x^3 + x^4), \\
& (-13+x) (-9+x) (-66441 + 38537x - 8630x^2 + 934x^3 - 49x^4 + x^5), \\
& (-13+x) (-9+x) (-7+x) (9487 - 4150x + 640x^2 - 42x^3 + x^4), \\
& (-13+x) (-9+x) (69 - 18x + x^2) (-965 + 307x - 31x^2 + x^3), \\
& (-11+x) (-9+x)^2 (8447 - 3966x + 632x^2 - 42x^3 + x^4), \\
& (-11+x) (-9+x) (-76231 + 44157x - 9654x^2 + 1010x^3 - 51x^4 + x^5), \\
& (-11+x) (-9+x) (-76199 + 44157x - 9654x^2 + 1010x^3 - 51x^4 + x^5), \\
& (-13+x) (-11+x) (-9+x)^2 (-651 + 255x - 29x^2 + x^3), \\
& (-11+x)^2 (-9+x) (6949 - 3384x + 570x^2 - 40x^3 + x^4), \\
& (-11+x) (-9+x) (-76407 + 44173x - 9654x^2 + 1010x^3 - 51x^4 + x^5), \\
& (-9+x) (840061 - 562278x + 150367x^2 - 20764x^3 + 1571x^4 - 62x^5 + x^6),
\end{aligned}$$



$$\begin{aligned}
& (-13+x)(-11+x)(-9+x)(5875-2946x+516x^2-38x^3+x^4), \\
& (-13+x)(-9+x)^2(7177-3456x+574x^2-40x^3+x^4), \\
& (-11+x)^2(-9+x)(6965-3384x+570x^2-40x^3+x^4), \\
& (-9+x)(842349-562662x+150383x^2-20764x^3+1571x^4-62x^5+x^6), \\
& (-13+x)(-11+x)(-9+x)(5891-2946x+516x^2-38x^3+x^4), \\
& (-9+x)(841933-562630x+150383x^2-20764x^3+1571x^4-62x^5+x^6), \\
& (-13+x)(-9+x)(-64769+38297x-8622x^2+934x^3-49x^4+x^5), \\
& (-13+x)(-9+x)^2(7193-3456x+574x^2-40x^3+x^4), \\
& (-11+x)(-9+x)(-76823+44205x-9654x^2+1010x^3-51x^4+x^5), \\
& (-9+x)(844637-563046x+150399x^2-20764x^3+1571x^4-62x^5+x^6), \\
& (-13+x)(-11+x)^2(-9+x)(-537+219x-27x^2+x^3), \\
& (-13+x)(-9+x)(-64945+38313x-8622x^2+934x^3-49x^4+x^5), \\
& (-13+x)(-9+x)(139-24x+x^2)(-467+195x-25x^2+x^3), \\
& (-11+x)(-9+x)(-77031+44221x-9654x^2+1010x^3-51x^4+x^5), \\
& (-13+x)(-11+x)(-9+x)(5923-2946x+516x^2-38x^3+x^4), \\
& (-13+x)(-9+x)(-65121+38329x-8622x^2+934x^3-49x^4+x^5), \\
& (-13+x)(-9+x)(-65089+38329x-8622x^2+934x^3-49x^4+x^5), \\
& (-13+x)(-9+x)(-65057+38329x-8622x^2+934x^3-49x^4+x^5), \\
& (-11+x)(-9+x)(-77239+44237x-9654x^2+1010x^3-51x^4+x^5), \\
& (-13+x)(-11+x)(-9+x)(5939-2946x+516x^2-38x^3+x^4), \\
& (-13+x)(-9+x)(-65297+38345x-8622x^2+934x^3-49x^4+x^5), \\
& (-13+x)(-9+x)(95-20x+x^2)(-687+259x-29x^2+x^3), \\
& (-13+x)(-9+x)(-65233+38345x-8622x^2+934x^3-49x^4+x^5), \\
& (-11+x)(697087-475724x+131139x^2-18744x^3+1469x^4-60x^5+x^6), \\
& (-13+x)(-11+x)(-9+x)(-5+x)(-1191+351x-33x^2+x^3), \\
& (-13+x)(-9+x)(-65473+38361x-8622x^2+934x^3-49x^4+x^5), \\
& (-13+x)(-9+x)(-65441+38361x-8622x^2+934x^3-49x^4+x^5), \\
& (-11+x)(698959-476076x+131155x^2-18744x^3+1469x^4-60x^5+x^6), \\
& (-13+x)(-11+x)(-9+x)(-7+x)(-853+299x-31x^2+x^3), \\
& (-13+x)(-9+x)(-65649+38377x-8622x^2+934x^3-49x^4+x^5), \\
& (-13+x)(-11+x)(-9+x)(5987-2946x+516x^2-38x^3+x^4), \\
& (-11+x)(-9+x)^2(8343-3958x+632x^2-42x^3+x^4), \\
& (-11+x)(-9+x)(-75263+43981x-9646x^2+1010x^3-51x^4+x^5), \\
& (-13+x)(-11+x)(-9+x)^2(-643+255x-29x^2+x^3), \\
& (-11+x)^2(-9+x)(6861-3376x+570x^2-40x^3+x^4), \\
& (-9+x)(829765-559406x+150103x^2-20756x^3+1571x^4-62x^5+x^6), \\
& (-13+x)(-11+x)(-9+x)(5803-2938x+516x^2-38x^3+x^4), \\
& (-13+x)(-9+x)^2(139-24x+x^2)(51-16x+x^2), \\
& (-11+x)(-9+x)(-75679+44013x-9646x^2+1010x^3-51x^4+x^5), \\
& (-9+x)(832053-559790x+150119x^2-20756x^3+1571x^4-62x^5+x^6), \\
& (-13+x)(-11+x)^2(-9+x)(-529+219x-27x^2+x^3), \\
& (-13+x)(-9+x)(-63977+38137x-8614x^2+934x^3-49x^4+x^5),
\end{aligned}$$

```

(-13 + x) (-9 + x)2 (7105 - 3448 x + 574 x2 - 40 x3 + x4),
(-11 + x) (-9 + x) (-75 887 + 44 029 x - 9646 x2 + 1010 x3 - 51 x4 + x5),
(-13 + x) (-11 + x) (-9 + x) (5835 - 2938 x + 516 x2 - 38 x3 + x4),
(-13 + x) (-9 + x) (-64 153 + 38 153 x - 8614 x2 + 934 x3 - 49 x4 + x5),
(-13 + x) (-9 + x) (-64 121 + 38 153 x - 8614 x2 + 934 x3 - 49 x4 + x5),
(-13 + x) (-9 + x)2 (7121 - 3448 x + 574 x2 - 40 x3 + x4),
(-13 + x) (-11 + x) (-9 + x) (5851 - 2938 x + 516 x2 - 38 x3 + x4),
(-13 + x) (-9 + x) (-64 329 + 38 169 x - 8614 x2 + 934 x3 - 49 x4 + x5),
(-13 + x) (-9 + x) (113 - 22 x + x2) (-569 + 227 x - 27 x2 + x3),
(-13 + x) (-11 + x) (-9 + x) (5867 - 2938 x + 516 x2 - 38 x3 + x4),
(-13 + x) (-9 + x) (95 - 20 x + x2) (-679 + 259 x - 29 x2 + x3),
(-13 + x) (-11 + x) (-9 + x) (5883 - 2938 x + 516 x2 - 38 x3 + x4),
(-13 + x) (-11 + x) (-9 + x) (5899 - 2938 x + 516 x2 - 38 x3 + x4),
(-11 + x)2 (-9 + x) (6757 - 3368 x + 570 x2 - 40 x3 + x4),
(-13 + x) (-11 + x) (-9 + x)2 (-635 + 255 x - 29 x2 + x3),
(-11 + x) (-9 + x) (-74 535 + 43 821 x - 9638 x2 + 1010 x3 - 51 x4 + x5),
(-13 + x) (-11 + x)2 (-9 + x) (-521 + 219 x - 27 x2 + x3),
(-13 + x) (-9 + x)2 (7001 - 3440 x + 574 x2 - 40 x3 + x4),
(-13 + x) (-11 + x) (-9 + x) (5747 - 2930 x + 516 x2 - 38 x3 + x4),
(-13 + x) (-9 + x) (-63 185 + 37 977 x - 8606 x2 + 934 x3 - 49 x4 + x5),
(-13 + x) (-9 + x)2 (7017 - 3440 x + 574 x2 - 40 x3 + x4),
(-13 + x) (-11 + x) (-9 + x) (113 - 22 x + x2) (51 - 16 x + x2),
(-13 + x) (-9 + x) (-63 361 + 37 993 x - 8606 x2 + 934 x3 - 49 x4 + x5),
(-13 + x) (-11 + x) (-9 + x) (5779 - 2930 x + 516 x2 - 38 x3 + x4),
(-13 + x) (-9 + x) (-63 537 + 38 009 x - 8606 x2 + 934 x3 - 49 x4 + x5),
(-13 + x) (-11 + x) (-9 + x) (95 - 20 x + x2) (61 - 18 x + x2),
(-13 + x) (-11 + x)2 (-9 + x)2 (57 - 18 x + x2),
(-13 + x) (-11 + x) (-9 + x) (5659 - 2922 x + 516 x2 - 38 x3 + x4),
(-13 + x) (-9 + x)2 (6913 - 3432 x + 574 x2 - 40 x3 + x4),
(-13 + x) (-11 + x) (-9 + x) (5675 - 2922 x + 516 x2 - 38 x3 + x4),
(-13 + x) (-9 + x) (-62 393 + 37 817 x - 8598 x2 + 934 x3 - 49 x4 + x5),
(-13 + x) (-11 + x) (-9 + x) (5691 - 2922 x + 516 x2 - 38 x3 + x4),
(-13 + x) (-11 + x) (-9 + x)2 (-619 + 255 x - 29 x2 + x3),
(-13 + x) (-11 + x) (-9 + x) (5587 - 2914 x + 516 x2 - 38 x3 + x4),
(-13 + x)2 (-11 + x) (-9 + x) (-431 + 191 x - 25 x2 + x3),
(-13 + x)2 (-11 + x) (-9 + x)2 (47 - 16 x + x2)};

```

```
Length[listinterlacingf1]
```

```
Out[*]= 208
```

```

In[*]:= listinterlacingf1coeffmat = CoefficientList[listinterlacingf1, x];
listinterlacingf1coeffmat // Dimensions

```

```
Out[*]= {208, 8}
```

```
In[*]:= CoefficientList[
  D[(-13 + x)^5 (-11 + x)^8 (-9 + x) (5 + x)^41 (11 026 - 4529 x + 673 x^2 - 43 x^3 + x^4), x] /
  mu[(-13 + x)^5 (-11 + x)^8 (-9 + x) (5 + x)^41
  (11 026 - 4529 x + 673 x^2 - 43 x^3 + x^4)] // Factor, x]
```

```
Out[*]:= {-465 890 207, 355 483 889, -114 032 079, 19 958 761, -2 060 661, 125 611, -4189, 59}
```

```
In[*]:= Array[c, 8].Transpose[listinterlacingflcoeffmat]
```

```
Out[*]:= {-8 002 341 c[1] + 6 066 003 c[2] - 1 938 589 c[3] + 338 651 c[4] -
  34 935 c[5] + 2129 c[6] - 71 c[7] + c[8], -8 002 917 c[1] + 6 066 067 c[2] -
  1 938 589 c[3] + 338 651 c[4] - 34 935 c[5] + 2129 c[6] - 71 c[7] + c[8],
  -7 999 173 c[1] + 6 065 363 c[2] - 1 938 557 c[3] + 338 651 c[4] - 34 935 c[5] +
  2129 c[6] - 71 c[7] + c[8], -7 880 301 c[1] + 6 020 547 c[2] -
  1 932 381 c[3] + 338 283 c[4] - 34 927 c[5] + 2129 c[6] - 71 c[7] + c[8],
  -7 875 981 c[1] + 6 019 779 c[2] - 1 932 349 c[3] + 338 283 c[4] - 34 927 c[5] +
  2129 c[6] - 71 c[7] + c[8], -7 876 557 c[1] + 6 019 843 c[2] -
  1 932 349 c[3] + 338 283 c[4] - 34 927 c[5] + 2129 c[6] - 71 c[7] + c[8],
  -7 872 237 c[1] + 6 019 075 c[2] - 1 932 317 c[3] + 338 283 c[4] - 34 927 c[5] +
  2129 c[6] - 71 c[7] + c[8], -7 872 813 c[1] + 6 019 139 c[2] -
  1 932 317 c[3] + 338 283 c[4] - 34 927 c[5] + 2129 c[6] - 71 c[7] + c[8],
  -7 904 061 c[1] + 6 026 931 c[2] - 1 932 941 c[3] + 338 299 c[4] - 34 927 c[5] +
  2129 c[6] - 71 c[7] + c[8], -7 900 317 c[1] + 6 026 227 c[2] -
  1 932 909 c[3] + 338 299 c[4] - 34 927 c[5] + 2129 c[6] - 71 c[7] + c[8],
  -7 900 893 c[1] + 6 026 291 c[2] - 1 932 909 c[3] + 338 299 c[4] - 34 927 c[5] +
  2129 c[6] - 71 c[7] + c[8], -7 896 573 c[1] + 6 025 523 c[2] -
  1 932 877 c[3] + 338 299 c[4] - 34 927 c[5] + 2129 c[6] - 71 c[7] + c[8],
  -7 897 149 c[1] + 6 025 587 c[2] - 1 932 877 c[3] + 338 299 c[4] - 34 927 c[5] +
  2129 c[6] - 71 c[7] + c[8], -7 892 829 c[1] + 6 024 819 c[2] -
  1 932 845 c[3] + 338 299 c[4] - 34 927 c[5] + 2129 c[6] - 71 c[7] + c[8],
  -7 893 405 c[1] + 6 024 883 c[2] - 1 932 845 c[3] + 338 299 c[4] - 34 927 c[5] +
  2129 c[6] - 71 c[7] + c[8], -7 889 085 c[1] + 6 024 115 c[2] -
  1 932 813 c[3] + 338 299 c[4] - 34 927 c[5] + 2129 c[6] - 71 c[7] + c[8],
  -7 889 661 c[1] + 6 024 179 c[2] - 1 932 813 c[3] + 338 299 c[4] - 34 927 c[5] +
  2129 c[6] - 71 c[7] + c[8], -7 920 909 c[1] + 6 031 971 c[2] -
  1 933 437 c[3] + 338 315 c[4] - 34 927 c[5] + 2129 c[6] - 71 c[7] + c[8],
  -7 917 165 c[1] + 6 031 267 c[2] - 1 933 405 c[3] + 338 315 c[4] - 34 927 c[5] +
  2129 c[6] - 71 c[7] + c[8], -7 917 741 c[1] + 6 031 331 c[2] -
  1 933 405 c[3] + 338 315 c[4] - 34 927 c[5] + 2129 c[6] - 71 c[7] + c[8],
  -7 913 421 c[1] + 6 030 563 c[2] - 1 933 373 c[3] + 338 315 c[4] - 34 927 c[5] +
  2129 c[6] - 71 c[7] + c[8], -7 913 997 c[1] + 6 030 627 c[2] -
  1 933 373 c[3] + 338 315 c[4] - 34 927 c[5] + 2129 c[6] - 71 c[7] + c[8],
  -7 909 677 c[1] + 6 029 859 c[2] - 1 933 341 c[3] + 338 315 c[4] - 34 927 c[5] +
  2129 c[6] - 71 c[7] + c[8], -7 910 253 c[1] + 6 029 923 c[2] -
  1 933 341 c[3] + 338 315 c[4] - 34 927 c[5] + 2129 c[6] - 71 c[7] + c[8],
  -7 906 509 c[1] + 6 029 219 c[2] - 1 933 309 c[3] + 338 315 c[4] - 34 927 c[5] +
  2129 c[6] - 71 c[7] + c[8], -7 934 013 c[1] + 6 036 307 c[2] -
  1 933 901 c[3] + 338 331 c[4] - 34 927 c[5] + 2129 c[6] - 71 c[7] + c[8],
```

$$\begin{aligned}
& -7930845 c[1] + 6035667 c[2] - 1933869 c[3] + 338331 c[4] - 34927 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7927101 c[1] + 6034963 c[2] - \\
& 1933837 c[3] + 338331 c[4] - 34927 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7923357 c[1] + 6034259 c[2] - 1933805 c[3] + 338331 c[4] - 34927 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7943949 c[1] + 6040003 c[2] - \\
& 1934333 c[3] + 338347 c[4] - 34927 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7725861 c[1] + 5967171 c[2] - 1925549 c[3] + 337899 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7749621 c[1] + 5973555 c[2] - \\
& 1926109 c[3] + 337915 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7745877 c[1] + 5972851 c[2] - 1926077 c[3] + 337915 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7746453 c[1] + 5972915 c[2] - \\
& 1926077 c[3] + 337915 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7773381 c[1] + 5979939 c[2] - 1926669 c[3] + 337931 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7769637 c[1] + 5979235 c[2] - \\
& 1926637 c[3] + 337931 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7770213 c[1] + 5979299 c[2] - 1926637 c[3] + 337931 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7765893 c[1] + 5978531 c[2] - \\
& 1926605 c[3] + 337931 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7766469 c[1] + 5978595 c[2] - 1926605 c[3] + 337931 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7767045 c[1] + 5978659 c[2] - \\
& 1926605 c[3] + 337931 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7762725 c[1] + 5977891 c[2] - 1926573 c[3] + 337931 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7763301 c[1] + 5977955 c[2] - \\
& 1926573 c[3] + 337931 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7793973 c[1] + 5985683 c[2] - 1927197 c[3] + 337947 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7790229 c[1] + 5984979 c[2] - \\
& 1927165 c[3] + 337947 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7790805 c[1] + 5985043 c[2] - 1927165 c[3] + 337947 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7787061 c[1] + 5984339 c[2] - \\
& 1927133 c[3] + 337947 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7787637 c[1] + 5984403 c[2] - 1927133 c[3] + 337947 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7783317 c[1] + 5983635 c[2] - \\
& 1927101 c[3] + 337947 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7783893 c[1] + 5983699 c[2] - 1927101 c[3] + 337947 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7779573 c[1] + 5982931 c[2] - \\
& 1927069 c[3] + 337947 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7780149 c[1] + 5982995 c[2] - 1927069 c[3] + 337947 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7814565 c[1] + 5991427 c[2] - \\
& 1927725 c[3] + 337963 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7811397 c[1] + 5990787 c[2] - 1927693 c[3] + 337963 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7807653 c[1] + 5990083 c[2] - \\
& 1927661 c[3] + 337963 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7808229 c[1] + 5990147 c[2] - 1927661 c[3] + 337963 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7803909 c[1] + 5989379 c[2] - \\
& 1927629 c[3] + 337963 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7804485 c[1] + 5989443 c[2] - 1927629 c[3] + 337963 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7800165 c[1] + 5988675 c[2] -
\end{aligned}$$

$$\begin{aligned}
& 1927597 c[3] + 337963 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7800741 c[1] + 5988739 c[2] - 1927597 c[3] + 337963 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7796997 c[1] + 5988035 c[2] - \\
& 1927565 c[3] + 337963 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7831989 c[1] + 5996531 c[2] - 1928221 c[3] + 337979 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7828245 c[1] + 5995827 c[2] - \\
& 1928189 c[3] + 337979 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7828821 c[1] + 5995891 c[2] - 1928189 c[3] + 337979 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7824501 c[1] + 5995123 c[2] - \\
& 1928157 c[3] + 337979 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7825077 c[1] + 5995187 c[2] - 1928157 c[3] + 337979 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7821333 c[1] + 5994483 c[2] - \\
& 1928125 c[3] + 337979 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7817589 c[1] + 5993779 c[2] - 1928093 c[3] + 337979 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7813845 c[1] + 5993075 c[2] - \\
& 1928061 c[3] + 337979 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7848837 c[1] + 6001571 c[2] - 1928717 c[3] + 337995 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7849413 c[1] + 6001635 c[2] - \\
& 1928717 c[3] + 337995 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7845669 c[1] + 6000931 c[2] - 1928685 c[3] + 337995 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7841925 c[1] + 6000227 c[2] - \\
& 1928653 c[3] + 337995 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7838181 c[1] + 5999523 c[2] - 1928621 c[3] + 337995 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7834437 c[1] + 5998819 c[2] - \\
& 1928589 c[3] + 337995 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7862517 c[1] + 6005971 c[2] - 1929181 c[3] + 338011 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7858773 c[1] + 6005267 c[2] - \\
& 1929149 c[3] + 338011 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7855029 c[1] + 6004563 c[2] - 1929117 c[3] + 338011 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7618941 c[1] + 5926563 c[2] - \\
& 1919837 c[3] + 337547 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7639533 c[1] + 5932307 c[2] - 1920365 c[3] + 337563 c[4] - 34911 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7635789 c[1] + 5931603 c[2] - \\
& 1920333 c[3] + 337563 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7636365 c[1] + 5931667 c[2] - 1920333 c[3] + 337563 c[4] - 34911 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7633197 c[1] + 5931027 c[2] - \\
& 1920301 c[3] + 337563 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7660125 c[1] + 5938051 c[2] - 1920893 c[3] + 337579 c[4] - 34911 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7656381 c[1] + 5937347 c[2] - \\
& 1920861 c[3] + 337579 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7656957 c[1] + 5937411 c[2] - 1920861 c[3] + 337579 c[4] - 34911 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7653213 c[1] + 5936707 c[2] - \\
& 1920829 c[3] + 337579 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7653789 c[1] + 5936771 c[2] - 1920829 c[3] + 337579 c[4] - 34911 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7650045 c[1] + 5936067 c[2] - \\
& 1920797 c[3] + 337579 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7680717 c[1] + 5943795 c[2] - 1921421 c[3] + 337595 c[4] - 34911 c[5] +
\end{aligned}$$

$$\begin{aligned}
& 2129 c[6] - 71 c[7] + c[8], -7677549 c[1] + 5943155 c[2] - \\
& 1921389 c[3] + 337595 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7673805 c[1] + 5942451 c[2] - 1921357 c[3] + 337595 c[4] - 34911 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7674381 c[1] + 5942515 c[2] - \\
& 1921357 c[3] + 337595 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7670061 c[1] + 5941747 c[2] - 1921325 c[3] + 337595 c[4] - 34911 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7670637 c[1] + 5941811 c[2] - \\
& 1921325 c[3] + 337595 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7698141 c[1] + 5948899 c[2] - 1921917 c[3] + 337611 c[4] - 34911 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7694397 c[1] + 5948195 c[2] - \\
& 1921885 c[3] + 337611 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7694973 c[1] + 5948259 c[2] - 1921885 c[3] + 337611 c[4] - 34911 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7690653 c[1] + 5947491 c[2] - \\
& 1921853 c[3] + 337611 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7691229 c[1] + 5947555 c[2] - 1921853 c[3] + 337611 c[4] - 34911 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7687485 c[1] + 5946851 c[2] - \\
& 1921821 c[3] + 337611 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7718733 c[1] + 5954643 c[2] - 1922445 c[3] + 337627 c[4] - 34911 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7714989 c[1] + 5953939 c[2] - \\
& 1922413 c[3] + 337627 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7715565 c[1] + 5954003 c[2] - 1922413 c[3] + 337627 c[4] - 34911 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7711245 c[1] + 5953235 c[2] - \\
& 1922381 c[3] + 337627 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7711821 c[1] + 5953299 c[2] - 1922381 c[3] + 337627 c[4] - 34911 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7708077 c[1] + 5952595 c[2] - \\
& 1922349 c[3] + 337627 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7704333 c[1] + 5951891 c[2] - 1922317 c[3] + 337627 c[4] - 34911 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7739325 c[1] + 5960387 c[2] - \\
& 1922973 c[3] + 337643 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7735581 c[1] + 5959683 c[2] - 1922941 c[3] + 337643 c[4] - 34911 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7736157 c[1] + 5959747 c[2] - \\
& 1922941 c[3] + 337643 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7732413 c[1] + 5959043 c[2] - 1922909 c[3] + 337643 c[4] - 34911 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7728669 c[1] + 5958339 c[2] - \\
& 1922877 c[3] + 337643 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7724925 c[1] + 5957635 c[2] - 1922845 c[3] + 337643 c[4] - 34911 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7721181 c[1] + 5956931 c[2] - \\
& 1922813 c[3] + 337643 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7759917 c[1] + 5966131 c[2] - 1923501 c[3] + 337659 c[4] - 34911 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7756749 c[1] + 5965491 c[2] - \\
& 1923469 c[3] + 337659 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7753005 c[1] + 5964787 c[2] - 1923437 c[3] + 337659 c[4] - 34911 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7749261 c[1] + 5964083 c[2] - \\
& 1923405 c[3] + 337659 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7745517 c[1] + 5963379 c[2] - 1923373 c[3] + 337659 c[4] - 34911 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7777341 c[1] + 5971235 c[2] - \\
& 1923997 c[3] + 337675 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8],
\end{aligned}$$

$$\begin{aligned}
& -7773597c[1] + 5970531c[2] - 1923965c[3] + 337675c[4] - 34911c[5] + \\
& 2129c[6] - 71c[7] + c[8], -7769853c[1] + 5969827c[2] - \\
& 1923933c[3] + 337675c[4] - 34911c[5] + 2129c[6] - 71c[7] + c[8], \\
& -7790445c[1] + 5975571c[2] - 1924461c[3] + 337691c[4] - 34911c[5] + \\
& 2129c[6] - 71c[7] + c[8], -7526277c[1] + 5890419c[2] - \\
& 1914589c[3] + 337211c[4] - 34903c[5] + 2129c[6] - 71c[7] + c[8], \\
& -7546869c[1] + 5896163c[2] - 1915117c[3] + 337227c[4] - 34903c[5] + \\
& 2129c[6] - 71c[7] + c[8], -7543701c[1] + 5895523c[2] - \\
& 1915085c[3] + 337227c[4] - 34903c[5] + 2129c[6] - 71c[7] + c[8], \\
& -7540533c[1] + 5894883c[2] - 1915053c[3] + 337227c[4] - 34903c[5] + \\
& 2129c[6] - 71c[7] + c[8], -7567461c[1] + 5901907c[2] - \\
& 1915645c[3] + 337243c[4] - 34903c[5] + 2129c[6] - 71c[7] + c[8], \\
& -7564293c[1] + 5901267c[2] - 1915613c[3] + 337243c[4] - 34903c[5] + \\
& 2129c[6] - 71c[7] + c[8], -7560549c[1] + 5900563c[2] - \\
& 1915581c[3] + 337243c[4] - 34903c[5] + 2129c[6] - 71c[7] + c[8], \\
& -7561125c[1] + 5900627c[2] - 1915581c[3] + 337243c[4] - 34903c[5] + \\
& 2129c[6] - 71c[7] + c[8], -7557381c[1] + 5899923c[2] - \\
& 1915549c[3] + 337243c[4] - 34903c[5] + 2129c[6] - 71c[7] + c[8], \\
& -7584885c[1] + 5907011c[2] - 1916141c[3] + 337259c[4] - 34903c[5] + \\
& 2129c[6] - 71c[7] + c[8], -7581141c[1] + 5906307c[2] - \\
& 1916109c[3] + 337259c[4] - 34903c[5] + 2129c[6] - 71c[7] + c[8], \\
& -7581717c[1] + 5906371c[2] - 1916109c[3] + 337259c[4] - 34903c[5] + \\
& 2129c[6] - 71c[7] + c[8], -7577397c[1] + 5905603c[2] - \\
& 1916077c[3] + 337259c[4] - 34903c[5] + 2129c[6] - 71c[7] + c[8], \\
& -7577973c[1] + 5905667c[2] - 1916077c[3] + 337259c[4] - 34903c[5] + \\
& 2129c[6] - 71c[7] + c[8], -7574229c[1] + 5904963c[2] - \\
& 1916045c[3] + 337259c[4] - 34903c[5] + 2129c[6] - 71c[7] + c[8], \\
& -7605477c[1] + 5912755c[2] - 1916669c[3] + 337275c[4] - 34903c[5] + \\
& 2129c[6] - 71c[7] + c[8], -7601733c[1] + 5912051c[2] - \\
& 1916637c[3] + 337275c[4] - 34903c[5] + 2129c[6] - 71c[7] + c[8], \\
& -7602309c[1] + 5912115c[2] - 1916637c[3] + 337275c[4] - 34903c[5] + \\
& 2129c[6] - 71c[7] + c[8], -7598565c[1] + 5911411c[2] - \\
& 1916605c[3] + 337275c[4] - 34903c[5] + 2129c[6] - 71c[7] + c[8], \\
& -7594821c[1] + 5910707c[2] - 1916573c[3] + 337275c[4] - 34903c[5] + \\
& 2129c[6] - 71c[7] + c[8], -7626069c[1] + 5918499c[2] - \\
& 1917197c[3] + 337291c[4] - 34903c[5] + 2129c[6] - 71c[7] + c[8], \\
& -7622901c[1] + 5917859c[2] - 1917165c[3] + 337291c[4] - 34903c[5] + \\
& 2129c[6] - 71c[7] + c[8], -7619157c[1] + 5917155c[2] - \\
& 1917133c[3] + 337291c[4] - 34903c[5] + 2129c[6] - 71c[7] + c[8], \\
& -7615413c[1] + 5916451c[2] - 1917101c[3] + 337291c[4] - 34903c[5] + \\
& 2129c[6] - 71c[7] + c[8], -7611669c[1] + 5915747c[2] - \\
& 1917069c[3] + 337291c[4] - 34903c[5] + 2129c[6] - 71c[7] + c[8], \\
& -7646661c[1] + 5924243c[2] - 1917725c[3] + 337307c[4] - 34903c[5] + \\
& 2129c[6] - 71c[7] + c[8], -7643493c[1] + 5923603c[2] - \\
& 1917693c[3] + 337307c[4] - 34903c[5] + 2129c[6] - 71c[7] + c[8], \\
& -7639749c[1] + 5922899c[2] - 1917661c[3] + 337307c[4] - 34903c[5] + \\
& 2129c[6] - 71c[7] + c[8], -7636005c[1] + 5922195c[2] -
\end{aligned}$$

$$\begin{aligned}
& 1917629 c[3] + 337307 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7632261 c[1] + 5921491 c[2] - 1917597 c[3] + 337307 c[4] - 34903 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7667957 c[1] + 5930051 c[2] - \\
& 1918253 c[3] + 337323 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7664085 c[1] + 5929347 c[2] - 1918221 c[3] + 337323 c[4] - 34903 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7660341 c[1] + 5928643 c[2] - \\
& 1918189 c[3] + 337323 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7656597 c[1] + 5927939 c[2] - 1918157 c[3] + 337323 c[4] - 34903 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7688549 c[1] + 5935795 c[2] - \\
& 1918781 c[3] + 337339 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7684677 c[1] + 5935091 c[2] - 1918749 c[3] + 337339 c[4] - 34903 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7680933 c[1] + 5934387 c[2] - \\
& 1918717 c[3] + 337339 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7705269 c[1] + 5940835 c[2] - 1919277 c[3] + 337355 c[4] - 34903 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7433613 c[1] + 5854275 c[2] - \\
& 1909341 c[3] + 336875 c[4] - 34895 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7451037 c[1] + 5859379 c[2] - 1909837 c[3] + 336891 c[4] - 34895 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7447869 c[1] + 5858739 c[2] - \\
& 1909805 c[3] + 336891 c[4] - 34895 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7471629 c[1] + 5865123 c[2] - 1910365 c[3] + 336907 c[4] - 34895 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7467885 c[1] + 5864419 c[2] - \\
& 1910333 c[3] + 336907 c[4] - 34895 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7468461 c[1] + 5864483 c[2] - 1910333 c[3] + 336907 c[4] - 34895 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7464717 c[1] + 5863779 c[2] - \\
& 1910301 c[3] + 336907 c[4] - 34895 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7492221 c[1] + 5870867 c[2] - 1910893 c[3] + 336923 c[4] - 34895 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7488477 c[1] + 5870163 c[2] - \\
& 1910861 c[3] + 336923 c[4] - 34895 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7489053 c[1] + 5870227 c[2] - 1910861 c[3] + 336923 c[4] - 34895 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7485309 c[1] + 5869523 c[2] - \\
& 1910829 c[3] + 336923 c[4] - 34895 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7481565 c[1] + 5868819 c[2] - 1910797 c[3] + 336923 c[4] - 34895 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7512813 c[1] + 5876611 c[2] - \\
& 1911421 c[3] + 336939 c[4] - 34895 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7509645 c[1] + 5875971 c[2] - 1911389 c[3] + 336939 c[4] - 34895 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7505901 c[1] + 5875267 c[2] - \\
& 1911357 c[3] + 336939 c[4] - 34895 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7502157 c[1] + 5874563 c[2] - 1911325 c[3] + 336939 c[4] - 34895 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7498413 c[1] + 5873859 c[2] - \\
& 1911293 c[3] + 336939 c[4] - 34895 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7530237 c[1] + 5881715 c[2] - 1911917 c[3] + 336955 c[4] - 34895 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7526493 c[1] + 5881011 c[2] - \\
& 1911885 c[3] + 336955 c[4] - 34895 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7522749 c[1] + 5880307 c[2] - 1911853 c[3] + 336955 c[4] - 34895 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7550829 c[1] + 5887459 c[2] - \\
& 1912445 c[3] + 336971 c[4] - 34895 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7547085 c[1] + 5886755 c[2] - 1912413 c[3] + 336971 c[4] - 34895 c[5] +
\end{aligned}$$



$$\begin{aligned}
& 2129 c[6] - 71 c[7] + c[8], -7571421 c[1] + 5893203 c[2] - \\
& 1912973 c[3] + 336987 c[4] - 34895 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7592013 c[1] + 5898947 c[2] - 1913501 c[3] + 337003 c[4] - 34895 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7358373 c[1] + 5823235 c[2] - \\
& 1904589 c[3] + 336555 c[4] - 34887 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7355205 c[1] + 5822595 c[2] - 1904557 c[3] + 336555 c[4] - 34887 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7378965 c[1] + 5828979 c[2] - \\
& 1905117 c[3] + 336571 c[4] - 34887 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7375797 c[1] + 5828339 c[2] - 1905085 c[3] + 336571 c[4] - 34887 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7372053 c[1] + 5827635 c[2] - \\
& 1905053 c[3] + 336571 c[4] - 34887 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7396389 c[1] + 5834083 c[2] - 1905613 c[3] + 336587 c[4] - 34887 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7392645 c[1] + 5833379 c[2] - \\
& 1905581 c[3] + 336587 c[4] - 34887 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7388901 c[1] + 5832675 c[2] - 1905549 c[3] + 336587 c[4] - 34887 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7416981 c[1] + 5839827 c[2] - \\
& 1906141 c[3] + 336603 c[4] - 34887 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7413237 c[1] + 5839123 c[2] - 1906109 c[3] + 336603 c[4] - 34887 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7437573 c[1] + 5845571 c[2] - \\
& 1906669 c[3] + 336619 c[4] - 34887 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7433829 c[1] + 5844867 c[2] - 1906637 c[3] + 336619 c[4] - 34887 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7458165 c[1] + 5851315 c[2] - \\
& 1907197 c[3] + 336635 c[4] - 34887 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7262541 c[1] + 5786451 c[2] - 1899309 c[3] + 336219 c[4] - 34879 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7283133 c[1] + 5792195 c[2] - \\
& 1899837 c[3] + 336235 c[4] - 34879 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7279389 c[1] + 5791491 c[2] - 1899805 c[3] + 336235 c[4] - 34879 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7303725 c[1] + 5797939 c[2] - \\
& 1900365 c[3] + 336251 c[4] - 34879 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7299981 c[1] + 5797235 c[2] - 1900333 c[3] + 336251 c[4] - 34879 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7324317 c[1] + 5803683 c[2] - \\
& 1900893 c[3] + 336267 c[4] - 34879 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7169877 c[1] + 5750307 c[2] - 1894061 c[3] + 335883 c[4] - 34871 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7190469 c[1] + 5756051 c[2] - \\
& 1894589 c[3] + 335899 c[4] - 34871 c[5] + 2129 c[6] - 71 c[7] + c[8], \\
& -7211061 c[1] + 5761795 c[2] - 1895117 c[3] + 335915 c[4] - 34871 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8], -7077213 c[1] + 5714163 c[2] - \\
& 1888813 c[3] + 335547 c[4] - 34863 c[5] + 2129 c[6] - 71 c[7] + c[8] \}
\end{aligned}$$

In[\*]:= Array[c, 8].

{-465890207, 355483889, -114032079, 19958761, -2060661, 125611, -4189, 59}

Out[\*]:= -465890207 c[1] + 355483889 c[2] - 114032079 c[3] +

19958761 c[4] - 2060661 c[5] + 125611 c[6] - 4189 c[7] + 59 c[8]

In[\*]:= FindInstance[

-465890207 c[1] + 355483889 c[2] - 114032079 c[3] + 19958761 c[4] - 2060661 c[5] +  
125611 c[6] - 4189 c[7] + 59 c[8] < 0 && -8002341 c[1] + 6066003 c[2] -

$$\begin{aligned}
& 1\,938\,589\,c[3] + 338\,651\,c[4] - 34\,935\,c[5] + 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& \\
& -8\,002\,917\,c[1] + 6\,066\,067\,c[2] - 1\,938\,589\,c[3] + 338\,651\,c[4] - 34\,935\,c[5] + \\
& 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& -7\,999\,173\,c[1] + 6\,065\,363\,c[2] - \\
& 1\,938\,557\,c[3] + 338\,651\,c[4] - 34\,935\,c[5] + 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& \\
& -7\,880\,301\,c[1] + 6\,020\,547\,c[2] - 1\,932\,381\,c[3] + 338\,283\,c[4] - 34\,927\,c[5] + \\
& 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& -7\,875\,981\,c[1] + 6\,019\,779\,c[2] - \\
& 1\,932\,349\,c[3] + 338\,283\,c[4] - 34\,927\,c[5] + 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& \\
& -7\,876\,557\,c[1] + 6\,019\,843\,c[2] - 1\,932\,349\,c[3] + 338\,283\,c[4] - 34\,927\,c[5] + \\
& 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& -7\,872\,237\,c[1] + 6\,019\,075\,c[2] - \\
& 1\,932\,317\,c[3] + 338\,283\,c[4] - 34\,927\,c[5] + 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& \\
& -7\,872\,813\,c[1] + 6\,019\,139\,c[2] - 1\,932\,317\,c[3] + 338\,283\,c[4] - 34\,927\,c[5] + \\
& 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& -7\,904\,061\,c[1] + 6\,026\,931\,c[2] - \\
& 1\,932\,941\,c[3] + 338\,299\,c[4] - 34\,927\,c[5] + 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& \\
& -7\,900\,317\,c[1] + 6\,026\,227\,c[2] - 1\,932\,909\,c[3] + 338\,299\,c[4] - 34\,927\,c[5] + \\
& 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& -7\,900\,893\,c[1] + 6\,026\,291\,c[2] - \\
& 1\,932\,909\,c[3] + 338\,299\,c[4] - 34\,927\,c[5] + 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& \\
& -7\,896\,573\,c[1] + 6\,025\,523\,c[2] - 1\,932\,877\,c[3] + 338\,299\,c[4] - 34\,927\,c[5] + \\
& 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& -7\,897\,149\,c[1] + 6\,025\,587\,c[2] - \\
& 1\,932\,877\,c[3] + 338\,299\,c[4] - 34\,927\,c[5] + 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& \\
& -7\,892\,829\,c[1] + 6\,024\,819\,c[2] - 1\,932\,845\,c[3] + 338\,299\,c[4] - 34\,927\,c[5] + \\
& 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& -7\,893\,405\,c[1] + 6\,024\,883\,c[2] - \\
& 1\,932\,845\,c[3] + 338\,299\,c[4] - 34\,927\,c[5] + 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& \\
& -7\,889\,085\,c[1] + 6\,024\,115\,c[2] - 1\,932\,813\,c[3] + 338\,299\,c[4] - 34\,927\,c[5] + \\
& 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& -7\,889\,661\,c[1] + 6\,024\,179\,c[2] - \\
& 1\,932\,813\,c[3] + 338\,299\,c[4] - 34\,927\,c[5] + 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& \\
& -7\,920\,909\,c[1] + 6\,031\,971\,c[2] - 1\,933\,437\,c[3] + 338\,315\,c[4] - 34\,927\,c[5] + \\
& 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& -7\,917\,165\,c[1] + 6\,031\,267\,c[2] - \\
& 1\,933\,405\,c[3] + 338\,315\,c[4] - 34\,927\,c[5] + 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& \\
& -7\,917\,741\,c[1] + 6\,031\,331\,c[2] - 1\,933\,405\,c[3] + 338\,315\,c[4] - 34\,927\,c[5] + \\
& 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& -7\,913\,421\,c[1] + 6\,030\,563\,c[2] - \\
& 1\,933\,373\,c[3] + 338\,315\,c[4] - 34\,927\,c[5] + 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& \\
& -7\,913\,997\,c[1] + 6\,030\,627\,c[2] - 1\,933\,373\,c[3] + 338\,315\,c[4] - 34\,927\,c[5] + \\
& 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& -7\,909\,677\,c[1] + 6\,029\,859\,c[2] - \\
& 1\,933\,341\,c[3] + 338\,315\,c[4] - 34\,927\,c[5] + 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& \\
& -7\,910\,253\,c[1] + 6\,029\,923\,c[2] - 1\,933\,341\,c[3] + 338\,315\,c[4] - 34\,927\,c[5] + \\
& 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& -7\,906\,509\,c[1] + 6\,029\,219\,c[2] - \\
& 1\,933\,309\,c[3] + 338\,315\,c[4] - 34\,927\,c[5] + 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& \\
& -7\,934\,013\,c[1] + 6\,036\,307\,c[2] - 1\,933\,901\,c[3] + 338\,331\,c[4] - 34\,927\,c[5] + \\
& 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& -7\,930\,845\,c[1] + 6\,035\,667\,c[2] - \\
& 1\,933\,869\,c[3] + 338\,331\,c[4] - 34\,927\,c[5] + 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& \\
& -7\,927\,101\,c[1] + 6\,034\,963\,c[2] - 1\,933\,837\,c[3] + 338\,331\,c[4] - 34\,927\,c[5] + \\
& 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& -7\,923\,357\,c[1] + 6\,034\,259\,c[2] - \\
& 1\,933\,805\,c[3] + 338\,331\,c[4] - 34\,927\,c[5] + 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& \\
& -7\,943\,949\,c[1] + 6\,040\,003\,c[2] - 1\,934\,333\,c[3] + 338\,347\,c[4] - 34\,927\,c[5] + \\
& 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& -7\,725\,861\,c[1] + 5\,967\,171\,c[2] - \\
& 1\,925\,549\,c[3] + 337\,899\,c[4] - 34\,919\,c[5] + 2129\,c[6] - 71\,c[7] + c[8] \geq 0 \&\& \\
& -7\,749\,621\,c[1] + 5\,973\,555\,c[2] - 1\,926\,109\,c[3] + 337\,915\,c[4] - 34\,919\,c[5] +
\end{aligned}$$

$$\begin{aligned}
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7745877 c[1] + 5972851 c[2] - \\
& 1926077 c[3] + 337915 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7746453 c[1] + 5972915 c[2] - 1926077 c[3] + 337915 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7773381 c[1] + 5979939 c[2] - \\
& 1926669 c[3] + 337931 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7769637 c[1] + 5979235 c[2] - 1926637 c[3] + 337931 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7770213 c[1] + 5979299 c[2] - \\
& 1926637 c[3] + 337931 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7765893 c[1] + 5978531 c[2] - 1926605 c[3] + 337931 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7766469 c[1] + 5978595 c[2] - \\
& 1926605 c[3] + 337931 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7767045 c[1] + 5978659 c[2] - 1926605 c[3] + 337931 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7762725 c[1] + 5977891 c[2] - \\
& 1926573 c[3] + 337931 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7763301 c[1] + 5977955 c[2] - 1926573 c[3] + 337931 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7793973 c[1] + 5985683 c[2] - \\
& 1927197 c[3] + 337947 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7790229 c[1] + 5984979 c[2] - 1927165 c[3] + 337947 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7790805 c[1] + 5985043 c[2] - \\
& 1927165 c[3] + 337947 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7787061 c[1] + 5984339 c[2] - 1927133 c[3] + 337947 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7787637 c[1] + 5984403 c[2] - \\
& 1927133 c[3] + 337947 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7783317 c[1] + 5983635 c[2] - 1927101 c[3] + 337947 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7783893 c[1] + 5983699 c[2] - \\
& 1927101 c[3] + 337947 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7779573 c[1] + 5982931 c[2] - 1927069 c[3] + 337947 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7780149 c[1] + 5982995 c[2] - \\
& 1927069 c[3] + 337947 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7814565 c[1] + 5991427 c[2] - 1927725 c[3] + 337963 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7811397 c[1] + 5990787 c[2] - \\
& 1927693 c[3] + 337963 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7807653 c[1] + 5990083 c[2] - 1927661 c[3] + 337963 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7808229 c[1] + 5990147 c[2] - \\
& 1927661 c[3] + 337963 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7803909 c[1] + 5989379 c[2] - 1927629 c[3] + 337963 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7804485 c[1] + 5989443 c[2] - \\
& 1927629 c[3] + 337963 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7800165 c[1] + 5988675 c[2] - 1927597 c[3] + 337963 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7800741 c[1] + 5988739 c[2] - \\
& 1927597 c[3] + 337963 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7796997 c[1] + 5988035 c[2] - 1927565 c[3] + 337963 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7831989 c[1] + 5996531 c[2] - \\
& 1928221 c[3] + 337979 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7828245 c[1] + 5995827 c[2] - 1928189 c[3] + 337979 c[4] - 34919 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7828821 c[1] + 5995891 c[2] - \\
& 1928189 c[3] + 337979 c[4] - 34919 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\&
\end{aligned}$$

$$\begin{aligned}
& -7824501c[1] + 5995123c[2] - 1928157c[3] + 337979c[4] - 34919c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7825077c[1] + 5995187c[2] - \\
& \quad 1928157c[3] + 337979c[4] - 34919c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7821333c[1] + 5994483c[2] - 1928125c[3] + 337979c[4] - 34919c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7817589c[1] + 5993779c[2] - \\
& \quad 1928093c[3] + 337979c[4] - 34919c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7813845c[1] + 5993075c[2] - 1928061c[3] + 337979c[4] - 34919c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7848837c[1] + 6001571c[2] - \\
& \quad 1928717c[3] + 337995c[4] - 34919c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7849413c[1] + 6001635c[2] - 1928717c[3] + 337995c[4] - 34919c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7845669c[1] + 6000931c[2] - \\
& \quad 1928685c[3] + 337995c[4] - 34919c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7841925c[1] + 6000227c[2] - 1928653c[3] + 337995c[4] - 34919c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7838181c[1] + 5999523c[2] - \\
& \quad 1928621c[3] + 337995c[4] - 34919c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7834437c[1] + 5998819c[2] - 1928589c[3] + 337995c[4] - 34919c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7862517c[1] + 6005971c[2] - \\
& \quad 1929181c[3] + 338011c[4] - 34919c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7858773c[1] + 6005267c[2] - 1929149c[3] + 338011c[4] - 34919c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7855029c[1] + 6004563c[2] - \\
& \quad 1929117c[3] + 338011c[4] - 34919c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7618941c[1] + 5926563c[2] - 1919837c[3] + 337547c[4] - 34911c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7639533c[1] + 5932307c[2] - \\
& \quad 1920365c[3] + 337563c[4] - 34911c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7635789c[1] + 5931603c[2] - 1920333c[3] + 337563c[4] - 34911c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7636365c[1] + 5931667c[2] - \\
& \quad 1920333c[3] + 337563c[4] - 34911c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7633197c[1] + 5931027c[2] - 1920301c[3] + 337563c[4] - 34911c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7660125c[1] + 5938051c[2] - \\
& \quad 1920893c[3] + 337579c[4] - 34911c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7656381c[1] + 5937347c[2] - 1920861c[3] + 337579c[4] - 34911c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7656957c[1] + 5937411c[2] - \\
& \quad 1920861c[3] + 337579c[4] - 34911c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7653213c[1] + 5936707c[2] - 1920829c[3] + 337579c[4] - 34911c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7653789c[1] + 5936771c[2] - \\
& \quad 1920829c[3] + 337579c[4] - 34911c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7650045c[1] + 5936067c[2] - 1920797c[3] + 337579c[4] - 34911c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7680717c[1] + 5943795c[2] - \\
& \quad 1921421c[3] + 337595c[4] - 34911c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7677549c[1] + 5943155c[2] - 1921389c[3] + 337595c[4] - 34911c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7673805c[1] + 5942451c[2] - \\
& \quad 1921357c[3] + 337595c[4] - 34911c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7674381c[1] + 5942515c[2] - 1921357c[3] + 337595c[4] - 34911c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7670061c[1] + 5941747c[2] - \\
& \quad 1921325c[3] + 337595c[4] - 34911c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7670637c[1] + 5941811c[2] - 1921325c[3] + 337595c[4] - 34911c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7698141c[1] + 5948899c[2] -
\end{aligned}$$

$$\begin{aligned}
& 1921917 c[3] + 337611 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& -7694397 c[1] + 5948195 c[2] - 1921885 c[3] + 337611 c[4] - 34911 c[5] + \\
& \quad 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& -7694973 c[1] + 5948259 c[2] - \\
& \quad 1921885 c[3] + 337611 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& -7690653 c[1] + 5947491 c[2] - 1921853 c[3] + 337611 c[4] - 34911 c[5] + \\
& \quad 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& -7691229 c[1] + 5947555 c[2] - \\
& \quad 1921853 c[3] + 337611 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& -7687485 c[1] + 5946851 c[2] - 1921821 c[3] + 337611 c[4] - 34911 c[5] + \\
& \quad 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& -7718733 c[1] + 5954643 c[2] - \\
& \quad 1922445 c[3] + 337627 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& -7714989 c[1] + 5953939 c[2] - 1922413 c[3] + 337627 c[4] - 34911 c[5] + \\
& \quad 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& -7715565 c[1] + 5954003 c[2] - \\
& \quad 1922413 c[3] + 337627 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& -7711245 c[1] + 5953235 c[2] - 1922381 c[3] + 337627 c[4] - 34911 c[5] + \\
& \quad 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& -7711821 c[1] + 5953299 c[2] - \\
& \quad 1922381 c[3] + 337627 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& -7708077 c[1] + 5952595 c[2] - 1922349 c[3] + 337627 c[4] - 34911 c[5] + \\
& \quad 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& -7704333 c[1] + 5951891 c[2] - \\
& \quad 1922317 c[3] + 337627 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& -7739325 c[1] + 5960387 c[2] - 1922973 c[3] + 337643 c[4] - 34911 c[5] + \\
& \quad 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& -7735581 c[1] + 5959683 c[2] - \\
& \quad 1922941 c[3] + 337643 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& -7736157 c[1] + 5959747 c[2] - 1922941 c[3] + 337643 c[4] - 34911 c[5] + \\
& \quad 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& -7732413 c[1] + 5959043 c[2] - \\
& \quad 1922909 c[3] + 337643 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& -7728669 c[1] + 5958339 c[2] - 1922877 c[3] + 337643 c[4] - 34911 c[5] + \\
& \quad 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& -7724925 c[1] + 5957635 c[2] - \\
& \quad 1922845 c[3] + 337643 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& -7721181 c[1] + 5956931 c[2] - 1922813 c[3] + 337643 c[4] - 34911 c[5] + \\
& \quad 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& -7759917 c[1] + 5966131 c[2] - \\
& \quad 1923501 c[3] + 337659 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& -7756749 c[1] + 5965491 c[2] - 1923469 c[3] + 337659 c[4] - 34911 c[5] + \\
& \quad 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& -7753005 c[1] + 5964787 c[2] - \\
& \quad 1923437 c[3] + 337659 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& -7749261 c[1] + 5964083 c[2] - 1923405 c[3] + 337659 c[4] - 34911 c[5] + \\
& \quad 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& -7745517 c[1] + 5963379 c[2] - \\
& \quad 1923373 c[3] + 337659 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& -7777341 c[1] + 5971235 c[2] - 1923997 c[3] + 337675 c[4] - 34911 c[5] + \\
& \quad 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& -7773597 c[1] + 5970531 c[2] - \\
& \quad 1923965 c[3] + 337675 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& -7769853 c[1] + 5969827 c[2] - 1923933 c[3] + 337675 c[4] - 34911 c[5] + \\
& \quad 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& -7790445 c[1] + 5975571 c[2] - \\
& \quad 1924461 c[3] + 337691 c[4] - 34911 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& -7526277 c[1] + 5890419 c[2] - 1914589 c[3] + 337211 c[4] - 34903 c[5] + \\
& \quad 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& -7546869 c[1] + 5896163 c[2] - \\
& \quad 1915117 c[3] + 337227 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& -7543701 c[1] + 5895523 c[2] - 1915085 c[3] + 337227 c[4] - 34903 c[5] +
\end{aligned}$$

$$\begin{aligned}
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7540533 c[1] + 5894883 c[2] - \\
& 1915053 c[3] + 337227 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7567461 c[1] + 5901907 c[2] - 1915645 c[3] + 337243 c[4] - 34903 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7564293 c[1] + 5901267 c[2] - \\
& 1915613 c[3] + 337243 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7560549 c[1] + 5900563 c[2] - 1915581 c[3] + 337243 c[4] - 34903 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7561125 c[1] + 5900627 c[2] - \\
& 1915581 c[3] + 337243 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7557381 c[1] + 5899923 c[2] - 1915549 c[3] + 337243 c[4] - 34903 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7584885 c[1] + 5907011 c[2] - \\
& 1916141 c[3] + 337259 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7581141 c[1] + 5906307 c[2] - 1916109 c[3] + 337259 c[4] - 34903 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7581717 c[1] + 5906371 c[2] - \\
& 1916109 c[3] + 337259 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7577397 c[1] + 5905603 c[2] - 1916077 c[3] + 337259 c[4] - 34903 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7577973 c[1] + 5905667 c[2] - \\
& 1916077 c[3] + 337259 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7574229 c[1] + 5904963 c[2] - 1916045 c[3] + 337259 c[4] - 34903 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7605477 c[1] + 5912755 c[2] - \\
& 1916669 c[3] + 337275 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7601733 c[1] + 5912051 c[2] - 1916637 c[3] + 337275 c[4] - 34903 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7602309 c[1] + 5912115 c[2] - \\
& 1916637 c[3] + 337275 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7598565 c[1] + 5911411 c[2] - 1916605 c[3] + 337275 c[4] - 34903 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7594821 c[1] + 5910707 c[2] - \\
& 1916573 c[3] + 337275 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7626069 c[1] + 5918499 c[2] - 1917197 c[3] + 337291 c[4] - 34903 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7622901 c[1] + 5917859 c[2] - \\
& 1917165 c[3] + 337291 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7619157 c[1] + 5917155 c[2] - 1917133 c[3] + 337291 c[4] - 34903 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7615413 c[1] + 5916451 c[2] - \\
& 1917101 c[3] + 337291 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7611669 c[1] + 5915747 c[2] - 1917069 c[3] + 337291 c[4] - 34903 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7646661 c[1] + 5924243 c[2] - \\
& 1917725 c[3] + 337307 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7643493 c[1] + 5923603 c[2] - 1917693 c[3] + 337307 c[4] - 34903 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7639749 c[1] + 5922899 c[2] - \\
& 1917661 c[3] + 337307 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7636005 c[1] + 5922195 c[2] - 1917629 c[3] + 337307 c[4] - 34903 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7632261 c[1] + 5921491 c[2] - \\
& 1917597 c[3] + 337307 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7667957 c[1] + 5930051 c[2] - 1918253 c[3] + 337323 c[4] - 34903 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7664085 c[1] + 5929347 c[2] - \\
& 1918221 c[3] + 337323 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& \\
& - 7660341 c[1] + 5928643 c[2] - 1918189 c[3] + 337323 c[4] - 34903 c[5] + \\
& 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\& - 7656597 c[1] + 5927939 c[2] - \\
& 1918157 c[3] + 337323 c[4] - 34903 c[5] + 2129 c[6] - 71 c[7] + c[8] \geq 0 \&\&
\end{aligned}$$

$$\begin{aligned}
& -7688549c[1] + 5935795c[2] - 1918781c[3] + 337339c[4] - 34903c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7684677c[1] + 5935091c[2] - \\
& \quad 1918749c[3] + 337339c[4] - 34903c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7680933c[1] + 5934387c[2] - 1918717c[3] + 337339c[4] - 34903c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7705269c[1] + 5940835c[2] - \\
& \quad 1919277c[3] + 337355c[4] - 34903c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7433613c[1] + 5854275c[2] - 1909341c[3] + 336875c[4] - 34895c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7451037c[1] + 5859379c[2] - \\
& \quad 1909837c[3] + 336891c[4] - 34895c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7447869c[1] + 5858739c[2] - 1909805c[3] + 336891c[4] - 34895c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7471629c[1] + 5865123c[2] - \\
& \quad 1910365c[3] + 336907c[4] - 34895c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7467885c[1] + 5864419c[2] - 1910333c[3] + 336907c[4] - 34895c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7468461c[1] + 5864483c[2] - \\
& \quad 1910333c[3] + 336907c[4] - 34895c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7464717c[1] + 5863779c[2] - 1910301c[3] + 336907c[4] - 34895c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7492221c[1] + 5870867c[2] - \\
& \quad 1910893c[3] + 336923c[4] - 34895c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7488477c[1] + 5870163c[2] - 1910861c[3] + 336923c[4] - 34895c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7489053c[1] + 5870227c[2] - \\
& \quad 1910861c[3] + 336923c[4] - 34895c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7485309c[1] + 5869523c[2] - 1910829c[3] + 336923c[4] - 34895c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7481565c[1] + 5868819c[2] - \\
& \quad 1910797c[3] + 336923c[4] - 34895c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7512813c[1] + 5876611c[2] - 1911421c[3] + 336939c[4] - 34895c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7509645c[1] + 5875971c[2] - \\
& \quad 1911389c[3] + 336939c[4] - 34895c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7505901c[1] + 5875267c[2] - 1911357c[3] + 336939c[4] - 34895c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7502157c[1] + 5874563c[2] - \\
& \quad 1911325c[3] + 336939c[4] - 34895c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7498413c[1] + 5873859c[2] - 1911293c[3] + 336939c[4] - 34895c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7530237c[1] + 5881715c[2] - \\
& \quad 1911917c[3] + 336955c[4] - 34895c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7526493c[1] + 5881011c[2] - 1911885c[3] + 336955c[4] - 34895c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7522749c[1] + 5880307c[2] - \\
& \quad 1911853c[3] + 336955c[4] - 34895c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7550829c[1] + 5887459c[2] - 1912445c[3] + 336971c[4] - 34895c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7547085c[1] + 5886755c[2] - \\
& \quad 1912413c[3] + 336971c[4] - 34895c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7571421c[1] + 5893203c[2] - 1912973c[3] + 336987c[4] - 34895c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7592013c[1] + 5898947c[2] - \\
& \quad 1913501c[3] + 337003c[4] - 34895c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7358373c[1] + 5823235c[2] - 1904589c[3] + 336555c[4] - 34887c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7355205c[1] + 5822595c[2] - \\
& \quad 1904557c[3] + 336555c[4] - 34887c[5] + 2129c[6] - 71c[7] + c[8] \geq 0 \&\& \\
& -7378965c[1] + 5828979c[2] - 1905117c[3] + 336571c[4] - 34887c[5] + \\
& \quad 2129c[6] - 71c[7] + c[8] \geq 0 \&\& -7375797c[1] + 5828339c[2] -
\end{aligned}$$

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1 905 085 c[3] + 336 571 c[4] - 34 887 c[5] + 2129 c[6] - 71 c[7] + c[8] ≥ 0 &&
- 7 372 053 c[1] + 5 827 635 c[2] - 1 905 053 c[3] + 336 571 c[4] - 34 887 c[5] +
2129 c[6] - 71 c[7] + c[8] ≥ 0 && - 7 396 389 c[1] + 5 834 083 c[2] -
1 905 613 c[3] + 336 587 c[4] - 34 887 c[5] + 2129 c[6] - 71 c[7] + c[8] ≥ 0 &&
- 7 392 645 c[1] + 5 833 379 c[2] - 1 905 581 c[3] + 336 587 c[4] - 34 887 c[5] +
2129 c[6] - 71 c[7] + c[8] ≥ 0 && - 7 388 901 c[1] + 5 832 675 c[2] -
1 905 549 c[3] + 336 587 c[4] - 34 887 c[5] + 2129 c[6] - 71 c[7] + c[8] ≥ 0 &&
- 7 416 981 c[1] + 5 839 827 c[2] - 1 906 141 c[3] + 336 603 c[4] - 34 887 c[5] +
2129 c[6] - 71 c[7] + c[8] ≥ 0 && - 7 413 237 c[1] + 5 839 123 c[2] -
1 906 109 c[3] + 336 603 c[4] - 34 887 c[5] + 2129 c[6] - 71 c[7] + c[8] ≥ 0 &&
- 7 437 573 c[1] + 5 845 571 c[2] - 1 906 669 c[3] + 336 619 c[4] - 34 887 c[5] +
2129 c[6] - 71 c[7] + c[8] ≥ 0 && - 7 433 829 c[1] + 5 844 867 c[2] -
1 906 637 c[3] + 336 619 c[4] - 34 887 c[5] + 2129 c[6] - 71 c[7] + c[8] ≥ 0 &&
- 7 458 165 c[1] + 5 851 315 c[2] - 1 907 197 c[3] + 336 635 c[4] - 34 887 c[5] +
2129 c[6] - 71 c[7] + c[8] ≥ 0 && - 7 262 541 c[1] + 5 786 451 c[2] -
1 899 309 c[3] + 336 219 c[4] - 34 879 c[5] + 2129 c[6] - 71 c[7] + c[8] ≥ 0 &&
- 7 283 133 c[1] + 5 792 195 c[2] - 1 899 837 c[3] + 336 235 c[4] - 34 879 c[5] +
2129 c[6] - 71 c[7] + c[8] ≥ 0 && - 7 279 389 c[1] + 5 791 491 c[2] -
1 899 805 c[3] + 336 235 c[4] - 34 879 c[5] + 2129 c[6] - 71 c[7] + c[8] ≥ 0 &&
- 7 303 725 c[1] + 5 797 939 c[2] - 1 900 365 c[3] + 336 251 c[4] - 34 879 c[5] +
2129 c[6] - 71 c[7] + c[8] ≥ 0 && - 7 299 981 c[1] + 5 797 235 c[2] -
1 900 333 c[3] + 336 251 c[4] - 34 879 c[5] + 2129 c[6] - 71 c[7] + c[8] ≥ 0 &&
- 7 324 317 c[1] + 5 803 683 c[2] - 1 900 893 c[3] + 336 267 c[4] - 34 879 c[5] +
2129 c[6] - 71 c[7] + c[8] ≥ 0 && - 7 169 877 c[1] + 5 750 307 c[2] -
1 894 061 c[3] + 335 883 c[4] - 34 871 c[5] + 2129 c[6] - 71 c[7] + c[8] ≥ 0 &&
- 7 190 469 c[1] + 5 756 051 c[2] - 1 894 589 c[3] + 335 899 c[4] - 34 871 c[5] +
2129 c[6] - 71 c[7] + c[8] ≥ 0 && - 7 211 061 c[1] + 5 761 795 c[2] -
1 895 117 c[3] + 335 915 c[4] - 34 871 c[5] + 2129 c[6] - 71 c[7] + c[8] ≥ 0 &&
- 7 077 213 c[1] + 5 714 163 c[2] - 1 888 813 c[3] + 335 547 c[4] - 34 863 c[5] +
2129 c[6] - 71 c[7] + c[8] ≥ 0, Array[c, 8], Integers]

Out[*]:= { {c[1] → 6 545 789, c[2] → 64 522 780, c[3] → 649 903 361, c[4] → 6 707 563 763,
c[5] → 71 075 114 863, c[6] → 0, c[7] → 0, c[8] → 1 132 367 732 240 930} }

In[*]:= Flatten[Array[c, 8] /.
{c[1] → 6 545 789, c[2] → 64 522 780, c[3] → 649 903 361, c[4] → 6 707 563 763,
c[5] → 71 075 114 863, c[6] → 0, c[7] → 0, c[8] → 1 132 367 732 240 930}]

Out[*]:= {6 545 789, 64 522 780, 649 903 361,
6 707 563 763, 71 075 114 863, 0, 0, 1 132 367 732 240 930}

In[*]:= GCD[6 545 789, 64 522 780, 649 903 361,
6 707 563 763, 71 075 114 863, 0, 0, 1 132 367 732 240 930]

Out[*]:= 1

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In[*]:= {6 545 789, 64 522 780, 649 903 361, 6 707 563 763, 71 075 114 863,
         0, 0, 1 132 367 732 240 930}.Transpose[listinterlacingf1coeffmat]
{6 545 789, 64 522 780, 649 903 361,
 6 707 563 763, 71 075 114 863, 0, 0, 1 132 367 732 240 930}.
{-465 890 207, 355 483 889, -114 032 079, 19 958 761, -2 060 661, 125 611, -4189, 59}

Out[*]:= {5 064 400, 364 147 856, 244 452 304, 723 185 488, 244 406 480, 603 489 936, 124 710 928,
483 794 384, 483 804 416, 364 108 864, 723 192 320, 244 413 312, 603 496 768,
124 717 760, 483 801 216, 5 022 208, 364 105 664, 364 115 696, 244 420 144, 603 503 600,
124 724 592, 483 808 048, 5 029 040, 364 112 496, 244 416 944, 124 731 424, 364 119 328,
244 423 776, 124 728 224, 124 735 056, 723 129 632, 483 748 560, 364 053 008,
723 136 464, 244 367 488, 124 671 936, 483 755 392, 4 976 384, 364 059 840,
723 143 296, 244 364 288, 603 447 744, 244 374 320, 124 678 768, 483 762 224,
364 066 672, 723 150 128, 244 371 120, 603 454 576, 124 675 568, 483 759 024,
244 381 152, 483 769 056, 364 073 504, 723 156 960, 244 377 952, 603 461 408,
124 682 400, 483 765 856, 364 070 304, 483 775 888, 364 080 336, 723 163 792,
244 384 784, 603 468 240, 483 772 688, 364 077 136, 244 381 584, 364 087 168,
723 170 624, 603 475 072, 483 779 520, 364 083 968, 244 388 416, 483 786 352,
364 090 800, 244 395 248, 244 311 632, 244 318 464, 124 622 912, 483 706 368,
723 094 272, 244 325 296, 124 629 744, 483 713 200, 364 017 648, 723 101 104,
603 405 552, 244 332 128, 483 720 032, 364 024 480, 723 107 936, 244 328 928,
603 412 384, 483 726 864, 364 031 312, 723 114 768, 244 335 760, 603 419 216,
483 723 664, 483 733 696, 364 038 144, 723 121 600, 244 342 592, 603 426 048,
483 730 496, 364 034 944, 483 740 528, 364 044 976, 723 128 432, 603 432 880,
483 737 328, 364 041 776, 244 346 224, 483 747 360, 723 135 264, 603 439 712,
483 744 160, 364 048 608, 723 142 096, 603 446 544, 483 750 992, 483 757 824,
244 276 272, 244 283 104, 483 671 008, 723 058 912, 244 289 936, 483 677 840,
363 982 288, 723 065 744, 603 370 192, 483 684 672, 363 989 120, 723 072 576,
244 293 568, 603 377 024, 483 681 472, 483 691 504, 363 995 952, 723 079 408,
603 383 856, 483 688 304, 483 698 336, 723 086 240, 603 390 688, 483 695 136,
363 999 584, 483 705 168, 723 093 072, 603 397 520, 483 701 968, 364 006 416,
4 934 464, 723 099 904, 603 404 352, 483 708 800, 4 941 296, 723 106 736, 603 411 184,
723 113 568, 244 240 912, 483 635 648, 723 023 552, 483 642 480, 363 946 928,
723 030 384, 603 334 832, 483 649 312, 363 953 760, 723 037 216, 603 341 664,
483 646 112, 483 656 144, 723 044 048, 603 348 496, 483 652 944, 363 957 392,
723 050 880, 603 355 328, 483 659 776, 723 057 712, 603 362 160, 723 064 544,
723 071 376, 483 600 288, 722 988 192, 483 607 120, 722 995 024, 603 299 472,
723 001 856, 603 306 304, 483 610 752, 723 008 688, 603 313 136, 723 015 520,
603 319 968, 723 022 352, 722 952 832, 722 959 664, 603 264 112, 722 966 496,
603 270 944, 722 973 328, 722 917 472, 722 924 304, 722 931 136, 722 882 112}

Out[*]:= -661 126 352

In[*]:= Reverse[{6 545 789, 64 522 780, 649 903 361,
 6 707 563 763, 71 075 114 863, 0, 0, 1 132 367 732 240 930}]

Out[*]:= {1 132 367 732 240 930, 0, 0, 71 075 114 863,
 6 707 563 763, 649 903 361, 64 522 780, 6 545 789}

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In[*]:= i = 5;
last5[[i]]
interlacingpolylast5[[i]] =
{ (-13 + x)5 (-11 + x)9 (5 + x)41 (8886 - 3871 x + 609 x2 - 41 x3 + x4),
  (-13 + x)5 (-11 + x)9 (5 + x)41 (8834 - 3867 x + 609 x2 - 41 x3 + x4),
  (-13 + x)6 (-11 + x)9 (5 + x)41 (-682 + 245 x - 28 x2 + x3),
  (-13 + x)5 (-11 + x)9 (5 + x)41 (8678 - 3855 x + 609 x2 - 41 x3 + x4),
  (-13 + x)6 (-11 + x)9 (5 + x)41 (-670 + 245 x - 28 x2 + x3),
  (-13 + x)5 (-11 + x)9 (5 + x)41 (8626 - 3851 x + 609 x2 - 41 x3 + x4),
  (-13 + x)6 (-11 + x)9 (-9 + x) (5 + x)41 (74 - 19 x + x2),
  (-14 + x) (-13 + x)5 (-11 + x)11 (-5 + x) (5 + x)41,
  (-13 + x)6 (-11 + x)9 (5 + x)41 (-654 + 245 x - 28 x2 + x3),
  (-13 + x)7 (-11 + x)9 (-10 + x) (-5 + x) (5 + x)41,
  (-13 + x)6 (-11 + x)10 (5 + x)41 (58 - 17 x + x2) };
Coeffmatlast5[[i]] =
CoefficientList[Factor[interlacingpolylast5[[i]] / mu[last5[[i]]], x];
Out[*]= (-13 + x)6 (-11 + x)10 (5 + x)42 (109 - 22 x + x2)

In[*]:= Coeffmatlast5[[i]] // MatrixForm
Out[*] // MatrixForm=

$$\begin{pmatrix} 8886 & -3871 & 609 & -41 & 1 \\ 8834 & -3867 & 609 & -41 & 1 \\ 8866 & -3867 & 609 & -41 & 1 \\ 8678 & -3855 & 609 & -41 & 1 \\ 8710 & -3855 & 609 & -41 & 1 \\ 8626 & -3851 & 609 & -41 & 1 \\ 8658 & -3851 & 609 & -41 & 1 \\ 8470 & -3839 & 609 & -41 & 1 \\ 8502 & -3839 & 609 & -41 & 1 \\ 8450 & -3835 & 609 & -41 & 1 \\ 8294 & -3823 & 609 & -41 & 1 \end{pmatrix}$$


In[*]:= gveclast5[[i]] = CoefficientList[D[last5[[i]], x] / mu[last5[[i]]] // Factor, x]
Out[*]= {532104, -232164, 36540, -2460, 60}

```

```
In[*]:= Array[c, 5].Transpose[Coeffmatlast5[[i]]]
```

```
Out[*]= { 8886 c[1] - 3871 c[2] + 609 c[3] - 41 c[4] + c[5],
          8834 c[1] - 3867 c[2] + 609 c[3] - 41 c[4] + c[5],
          8866 c[1] - 3867 c[2] + 609 c[3] - 41 c[4] + c[5],
          8678 c[1] - 3855 c[2] + 609 c[3] - 41 c[4] + c[5],
          8710 c[1] - 3855 c[2] + 609 c[3] - 41 c[4] + c[5],
          8626 c[1] - 3851 c[2] + 609 c[3] - 41 c[4] + c[5],
          8658 c[1] - 3851 c[2] + 609 c[3] - 41 c[4] + c[5],
          8470 c[1] - 3839 c[2] + 609 c[3] - 41 c[4] + c[5],
          8502 c[1] - 3839 c[2] + 609 c[3] - 41 c[4] + c[5],
          8450 c[1] - 3835 c[2] + 609 c[3] - 41 c[4] + c[5],
          8294 c[1] - 3823 c[2] + 609 c[3] - 41 c[4] + c[5] }
```

```
In[*]:= Array[c, 5].gveclast5[[i]]
```

```
Out[*]= 532 104 c[1] - 232 164 c[2] + 36 540 c[3] - 2460 c[4] + 60 c[5]
```

```
In[*]:= i
```

```
Flatten[Array[c, 5] /.
```

```
FindInstance[532 104 c[1] - 232 164 c[2] + 36 540 c[3] - 2460 c[4] + 60 c[5] < 0 &&
  8886 c[1] - 3871 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0 &&
  8834 c[1] - 3867 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0 &&
  8866 c[1] - 3867 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0 &&
  8678 c[1] - 3855 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0 &&
  8710 c[1] - 3855 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0 &&
  8626 c[1] - 3851 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0 &&
  8658 c[1] - 3851 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0 &&
  8470 c[1] - 3839 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0 &&
  8502 c[1] - 3839 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0 &&
  8450 c[1] - 3835 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0 &&
  8294 c[1] - 3823 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0, Array[c, 5], Integers]]
```

```
Out[*]= 5
```

```
Out[*]= { c[1], c[2], c[3], c[4], c[5] }
```

```

In[*]:= i
Flatten[Array[c, 5] /.
  FindInstance[532 104 c[1] - 232 164 c[2] + 36 540 c[3] - 2460 c[4] + 60 c[5] < 0 &&
    8886 c[1] - 3871 c[2] + 609 c[3] - 41 c[4] + c[5] < 0 &&
    8834 c[1] - 3867 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0 &&
    8866 c[1] - 3867 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0 &&
    8678 c[1] - 3855 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0 &&
    8710 c[1] - 3855 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0 &&
    8626 c[1] - 3851 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0 &&
    8658 c[1] - 3851 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0 &&
    8470 c[1] - 3839 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0 &&
    8502 c[1] - 3839 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0 &&
    8450 c[1] - 3835 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0 &&
    8294 c[1] - 3823 c[2] + 609 c[3] - 41 c[4] + c[5] ≥ 0, Array[c, 5], Integers]]

Out[*]= 5

Out[*]= {-5577, 0, 0, 0, 49 456 281}

In[*]:= GCD[-5577, 0, 0, 0, 49 456 281]

Out[*]= 3

In[*]:= {-5577, 0, 0, 0, 49 456 281} / 3

Out[*]= {-1859, 0, 0, 0, 16 485 427}

In[*]:= {-1859, 0, 0, 0, 16 485 427}.Transpose[Coeffmatlast5[[5]]]
{-1859, 0, 0, 0, 16 485 427}.gvecLast5[[5]]

Out[*]= {-33 647, 63 021, 3533, 353 025, 293 537,
  449 693, 390 205, 739 697, 680 209, 776 877, 1 066 881}

Out[*]= -55 716

In[*]:= Reverse[{-1859, 0, 0, 0, 16 485 427}]

Out[*]= {16 485 427, 0, 0, 0, -1859}

```