Rank-74057 over GF(16)

January 15, 2021

The equation

The equation of the surface is:

$$X_1^3 + X_2^3 + X_0^2 X_3 + X_1^2 X_2 + X_0 X_3^2 + X_0 X_1 X_2 = 0$$

(0, 1, 1, 0, 0, 0, 1, 0, 1, 0, 0, 0, 0, 1, 0, 0, 1, 0, 0, 0) The point rank of the equation over $\mathrm{GF}(16)$ is 303108645

General information

Number of lines	0
Number of points	225
Number of singular points	0
Number of Eckardt points	0
Number of double points	0
Number of single points	0
Number of points off lines	225
Number of Hesse planes	0
Number of axes	0
Type of points on lines	
Type of lines on points	0^{225}

Singular Points

The surface has 0 singular points:

The 0 Lines

The lines and their Pluecker coordinates are:

Rank of lines: ()

Rank of points on Klein quadric: ()

Eckardt Points

The surface has 0 Eckardt points:

Double Points

The surface has 0 Double points: The double points on the surface are:

Single Points

The surface has 0 single points: The single points on the surface are:

The single points on the surface are:

Points on surface but on no line

The surface has 225 points not on any line: The points on the surface but not on lines are:

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0: P_0 = (1, 0, 0, 0)
                                                                  27: P_{636} = (11, 6, 1, 1)
1: P_3 = (0,0,0,1)
                                                                  28: P_{637} = (12, 6, 1, 1)
2: P_4 = (1, 1, 1, 1)
                                                                  29: P_{652} = (11, 7, 1, 1)
3: P_{36} = (1, 1, 1, 0)
                                                                  30: P_{654} = (13, 7, 1, 1)
4: P_{61} = (10, 2, 1, 0)
                                                                  31: P_{691} = (2, 10, 1, 1)
5: P_{81} = (14, 3, 1, 0)
                                                                  32: P_{698} = (9, 10, 1, 1)
6: P_{94} = (11, 4, 1, 0)
                                                                  33: P_{709} = (4, 11, 1, 1)
7: P_{101} = (2, 5, 1, 0)
                                                                  34: P_{719} = (14, 11, 1, 1)
8: P_{130} = (15, 6, 1, 0)
                                                                  35: P_{728} = (7, 12, 1, 1)
9: P_{136} = (5, 7, 1, 0)
                                                                  36: P_{731} = (10, 12, 1, 1)
10: P_{151} = (4, 8, 1, 0)
                                                                  37: P_{743} = (6, 13, 1, 1)
11: P_{173} = (10, 9, 1, 0)
                                                                  38: P_{747} = (10, 13, 1, 1)
12: P_{189} = (10, 10, 1, 0)
                                                                  39: P_{813} = (12, 1, 2, 1)
13: P_{206} = (11, 11, 1, 0)
                                                                  40: P_{816} = (15, 1, 2, 1)
14: P_{219} = (8, 12, 1, 0)
                                                                  41: P_{826} = (9, 2, 2, 1)
                                                                  42: P_{829} = (12, 2, 2, 1)
15: P_{230} = (3, 13, 1, 0)
16: P_{254} = (11, 14, 1, 0)
                                                                  43: P_{950} = (5, 10, 2, 1)
17: P_{268} = (9, 15, 1, 0)
                                                                  44: P_{954} = (9, 10, 2, 1)
                                                                  45: P_{990} = (13, 12, 2, 1)
18: P_{275} = (1, 0, 0, 1)
19: P_{300} = (10, 1, 0, 1)
                                                                  46: P_{1012} = (3, 14, 2, 1)
20: P_{301} = (11, 1, 0, 1)
                                                                  47: P_{1016} = (7, 14, 2, 1)
                                                                  48: P_{1128} = (7, 5, 3, 1)
21: P_{444} = (10, 10, 0, 1)
22: P_{445} = (11, 10, 0, 1)
                                                                  49: P_{1130} = (9, 5, 3, 1)
23: P_{460} = (10, 11, 0, 1)
                                                                  50: P_{1142} = (5, 6, 3, 1)
                                                                  51: P_{1151} = (14, 6, 3, 1)
24: P_{461} = (11, 11, 0, 1)
25: P_{540} = (10, 0, 1, 1)
                                                                  52: P_{1155} = (2,7,3,1)
26: P_{541} = (11, 0, 1, 1)
                                                                  53: P_{1163} = (10, 7, 3, 1)
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108: P_{2291} = (2, 14, 7, 1)
54: P_{1183} = (14, 8, 3, 1)
55: P_{1190} = (5, 9, 3, 1)
                                                                 109: P_{2360} = (7, 2, 8, 1)
                                                                 110: P_{2368} = (15, 2, 8, 1)
56: P_{1191} = (6, 9, 3, 1)
                                                                 111: P_{2373} = (4, 3, 8, 1)
57: P_{1210} = (9, 10, 3, 1)
58: P_{1216} = (15, 10, 3, 1)
                                                                 112: P_{2426} = (9, 6, 8, 1)
59: P_{1238} = (5, 12, 3, 1)
                                                                 113: P_{2427} = (10, 6, 8, 1)
60: P_{1242} = (9, 12, 3, 1)
                                                                 114: P_{2437} = (4,7,8,1)
61: P_{1250} = (1, 13, 3, 1)
                                                                 115: P_{2448} = (15, 7, 8, 1)
62: P_{1263} = (14, 13, 3, 1)
                                                                 116: P_{2483} = (2, 10, 8, 1)
63: P_{1316} = (3, 1, 4, 1)
                                                                 117: P_{2486} = (5, 10, 8, 1)
64: P_{1319} = (6, 1, 4, 1)
                                                                 118: P_{2514} = (1, 12, 8, 1)
65: P_{1334} = (5, 2, 4, 1)
                                                                 119: P_{2517} = (4, 12, 8, 1)
66: P_{1341} = (12, 2, 4, 1)
                                                                 120: P_{2531} = (2, 13, 8, 1)
67: P_{1367} = (6, 4, 4, 1)
                                                                 121: P_{2544} = (15, 13, 8, 1)
68: P_{1375} = (14, 4, 4, 1)
                                                                 122: P_{2563} = (2, 15, 8, 1)
69: P_{1400} = (7, 6, 4, 1)
                                                                 123: P_{2567} = (6, 15, 8, 1)
                                                                 124: P_{2598} = (5, 1, 9, 1)
70: P_{1481} = (8, 11, 4, 1)
                                                                 125: P_{2606} = (13, 1, 9, 1)
71: P_{1487} = (14, 11, 4, 1)
                                                                 126: P_{2647} = (6, 4, 9, 1)
72: P_{1657} = (8, 6, 5, 1)
73: P_{1663} = (14, 6, 5, 1)
                                                                 127: P_{2649} = (8, 4, 9, 1)
74: P_{1666} = (1, 7, 5, 1)
                                                                 128: P_{2723} = (2, 9, 9, 1)
                                                                 129: P_{2734} = (13, 9, 9, 1)
75: P_{1667} = (2, 7, 5, 1)
                                                                 130: P_{2739} = (2, 10, 9, 1)
76: P_{1693} = (12, 8, 5, 1)
77: P_{1695} = (14, 8, 5, 1)
                                                                 131: P_{2752} = (15, 10, 9, 1)
78: P_{1732} = (3, 11, 5, 1)
                                                                 132: P_{2797} = (12, 13, 9, 1)
79: P_{1743} = (14, 11, 5, 1)
                                                                 133: P_{2843} = (10, 0, 10, 1)
80: P_{1749} = (4, 12, 5, 1)
                                                                 134: P_{2844} = (11, 0, 10, 1)
81: P_{1756} = (11, 12, 5, 1)
                                                                 135: P_{2850} = (1, 1, 10, 1)
82: P_{1763} = (2, 13, 5, 1)
                                                                 136: P_{2859} = (10, 1, 10, 1)
83: P_{1769} = (8, 13, 5, 1)
                                                                 137: P_{2882} = (1, 3, 10, 1)
84: P_{1785} = (8, 14, 5, 1)
                                                                 138: P_{2888} = (7, 3, 10, 1)
85: P_{1790} = (13, 14, 5, 1)
                                                                 139: P_{2902} = (5, 4, 10, 1)
86: P_{1795} = (2, 15, 5, 1)
                                                                 140: P_{2904} = (7, 4, 10, 1)
87: P_{1842} = (1, 2, 6, 1)
                                                                 141: P_{2916} = (3, 5, 10, 1)
88: P_{1853} = (12, 2, 6, 1)
                                                                 142: P_{2924} = (11, 5, 10, 1)
89: P_{1882} = (9, 4, 6, 1)
                                                                 143: P_{2962} = (1, 8, 10, 1)
90: P_{1907} = (2, 6, 6, 1)
                                                                 144: P_{2967} = (6, 8, 10, 1)
91: P_{1919} = (14, 6, 6, 1)
                                                                 145: P_{2998} = (5, 10, 10, 1)
92: P_{1923} = (2,7,6,1)
                                                                 146: P_{3008} = (15, 10, 10, 1)
93: P_{1929} = (8,7,6,1)
                                                                 147: P_{3019} = (10, 11, 10, 1)
94: P_{1950} = (13, 8, 6, 1)
                                                                 148: P_{3027} = (2, 12, 10, 1)
                                                                 149: P_{3031} = (6, 12, 10, 1)
95: P_{1951} = (14, 8, 6, 1)
96: P_{2038} = (5, 14, 6, 1)
                                                                 150: P_{3048} = (7, 13, 10, 1)
97: P_{2044} = (11, 14, 6, 1)
                                                                 151: P_{3050} = (9, 13, 10, 1)
98: P_{2117} = (4, 3, 7, 1)
                                                                 152: P_{3063} = (6, 14, 10, 1)
99: P_{2125} = (12, 3, 7, 1)
                                                                 153: P_{3072} = (15, 14, 10, 1)
100: P_{2140} = (11, 4, 7, 1)
                                                                 154: P_{3081} = (8, 15, 10, 1)
101: P_{2144} = (15, 4, 7, 1)
                                                                 155: P_{3084} = (11, 15, 10, 1)
102: P_{2164} = (3, 6, 7, 1)
                                                                 156: P_{3099} = (10, 0, 11, 1)
103: P_{2170} = (9, 6, 7, 1)
                                                                 157: P_{3100} = (11, 0, 11, 1)
104: P_{2181} = (4,7,7,1)
                                                                 158: P_{3106} = (1, 1, 11, 1)
105: P_{2186} = (9,7,7,1)
                                                                 159: P_{3116} = (11, 1, 11, 1)
106: P_{2210} = (1, 9, 7, 1)
                                                                 160: P_{3124} = (3, 2, 11, 1)
107: P_{2222} = (13, 9, 7, 1)
                                                                 161: P_{3134} = (13, 2, 11, 1)
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162: P_{3147} = (10, 3, 11, 1)
                                                                 194: P_{3759} = (14, 9, 13, 1)
163: P_{3152} = (15, 3, 11, 1)
                                                                 195: P_{3797} = (4, 12, 13, 1)
                                                                 196: P_{3808} = (15, 12, 13, 1)
164: P_{3170} = (1, 5, 11, 1)
165: P_{3181} = (12, 5, 11, 1)
                                                                 197: P_{3811} = (2, 13, 13, 1)
166: P_{3189} = (4, 6, 11, 1)
                                                                 198: P_{3813} = (4, 13, 13, 1)
167: P_{3198} = (13, 6, 11, 1)
                                                                 199: P_{3843} = (2, 15, 13, 1)
168: P_{3213} = (12, 7, 11, 1)
                                                                 200: P_{3848} = (7, 15, 13, 1)
169: P_{3215} = (14, 7, 11, 1)
                                                                 201: P_{3880} = (7, 1, 14, 1)
170: P_{3222} = (5, 8, 11, 1)
                                                                 202: P_{3881} = (8, 1, 14, 1)
171: P_{3227} = (10, 8, 11, 1)
                                                                 203: P_{3975} = (6, 7, 14, 1)
172: P_{3241} = (8, 9, 11, 1)
                                                                 204: P_{4014} = (13, 9, 14, 1)
173: P_{3245} = (12, 9, 11, 1)
                                                                 205: P_{4016} = (15, 9, 14, 1)
174: P_{3260} = (11, 10, 11, 1)
                                                                 206: P_{4036} = (3, 11, 14, 1)
175: P_{3268} = (3, 11, 11, 1)
                                                                 207: P_{4037} = (4, 11, 14, 1)
                                                                 208: P_{4085} = (4, 14, 14, 1)
176: P_{3273} = (8, 11, 11, 1)
177: P_{3330} = (1, 15, 11, 1)
                                                                 209: P_{4088} = (7, 14, 14, 1)
178: P_{3342} = (13, 15, 11, 1)
                                                                 210: P_{4165} = (4, 3, 15, 1)
179: P_{3381} = (4, 2, 12, 1)
                                                                 211: P_{4174} = (13, 3, 15, 1)
180: P_{3431} = (6, 5, 12, 1)
                                                                 212: P_{4180} = (3, 4, 15, 1)
181: P_{3434} = (9, 5, 12, 1)
                                                                 213: P_{4189} = (12, 4, 15, 1)
182: P_{3492} = (3, 9, 12, 1)
                                                                 214: P_{4202} = (9, 5, 15, 1)
                                                                 215: P_{4210} = (1, 6, 15, 1)
183: P_{3499} = (10, 9, 12, 1)
184: P_{3546} = (9, 12, 12, 1)
                                                                 216: P_{4218} = (9, 6, 15, 1)
185: P_{3551} = (14, 12, 12, 1)
                                                                 217: P_{4228} = (3, 7, 15, 1)
186: P_{3558} = (5, 13, 12, 1)
                                                                 218: P_{4229} = (4, 7, 15, 1)
187: P_{3567} = (14, 13, 12, 1)
                                                                 219: P_{4293} = (4, 11, 15, 1)
188: P_{3570} = (1, 14, 12, 1)
                                                                 220: P_{4297} = (8, 11, 15, 1)
189 : P_{3576} = (7, 14, 12, 1)
                                                                 221: P_{4308} = (3, 12, 15, 1)
                                                                 222: P_{4314} = (9, 12, 15, 1)
190: P_{3641} = (8, 2, 13, 1)
191: P_{3643} = (10, 2, 13, 1)
                                                                 223: P_{4332} = (11, 13, 15, 1)
192: P_{3666} = (1, 4, 13, 1)
                                                                 224: P_{4335} = (14, 13, 15, 1)
193: P_{3671} = (6, 4, 13, 1)
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Line Intersection Graph

Neighbor sets in the line intersection graph:

The surface has 225 points:

The points on the surface are:

```
0: P_0 = (1,0,0,0)
                                            12: P_{189} = (10, 10, 1, 0)
                                                                                        24: P_{461} = (11, 11, 0, 1)
1: P_3 = (0,0,0,1)
                                            13: P_{206} = (11, 11, 1, 0)
                                                                                        25: P_{540} = (10, 0, 1, 1)
                                                                                        26: P_{541} = (11, 0, 1, 1)
2: P_4 = (1, 1, 1, 1)
                                            14: P_{219} = (8, 12, 1, 0)
3: P_{36} = (1, 1, 1, 0)
                                            15: P_{230} = (3, 13, 1, 0)
                                                                                        27: P_{636} = (11, 6, 1, 1)
4: P_{61} = (10, 2, 1, 0)
                                            16: P_{254} = (11, 14, 1, 0)
                                                                                        28: P_{637} = (12, 6, 1, 1)
5: P_{81} = (14, 3, 1, 0)
                                            17: P_{268} = (9, 15, 1, 0)
                                                                                        29: P_{652} = (11, 7, 1, 1)
6: P_{94} = (11, 4, 1, 0)
                                            18: P_{275} = (1, 0, 0, 1)
                                                                                        30: P_{654} = (13, 7, 1, 1)
7: P_{101} = (2, 5, 1, 0)
                                            19: P_{300} = (10, 1, 0, 1)
                                                                                        31: P_{691} = (2, 10, 1, 1)
8: P_{130} = (15, 6, 1, 0)
                                            20: P_{301} = (11, 1, 0, 1)
                                                                                        32: P_{698} = (9, 10, 1, 1)
9: P_{136} = (5, 7, 1, 0)
                                            21: P_{444} = (10, 10, 0, 1)
                                                                                        33: P_{709} = (4, 11, 1, 1)
10: P_{151} = (4, 8, 1, 0)
                                            22: P_{445} = (11, 10, 0, 1)
                                                                                        34: P_{719} = (14, 11, 1, 1)
                                                                                        35: P_{728} = (7, 12, 1, 1)
11: P_{173} = (10, 9, 1, 0)
                                            23: P_{460} = (10, 11, 0, 1)
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36: P_{731} = (10, 12, 1, 1)
                                           90: P_{1907} = (2, 6, 6, 1)
                                                                                       144: P_{2967} = (6, 8, 10, 1)
37: P_{743} = (6, 13, 1, 1)
                                           91: P_{1919} = (14, 6, 6, 1)
                                                                                       145: P_{2998} = (5, 10, 10, 1)
38: P_{747} = (10, 13, 1, 1)
                                                                                       146: P_{3008} = (15, 10, 10, 1)
                                           92: P_{1923} = (2,7,6,1)
39: P_{813} = (12, 1, 2, 1)
                                           93: P_{1929} = (8, 7, 6, 1)
                                                                                       147: P_{3019} = (10, 11, 10, 1)
40: P_{816} = (15, 1, 2, 1)
                                           94: P_{1950} = (13, 8, 6, 1)
                                                                                       148: P_{3027} = (2, 12, 10, 1)
41: P_{826} = (9, 2, 2, 1)
                                           95: P_{1951} = (14, 8, 6, 1)
                                                                                       149: P_{3031} = (6, 12, 10, 1)
42: P_{829} = (12, 2, 2, 1)
                                           96: P_{2038} = (5, 14, 6, 1)
                                                                                       150: P_{3048} = (7, 13, 10, 1)
                                           97: P_{2044} = (11, 14, 6, 1)
43: P_{950} = (5, 10, 2, 1)
                                                                                       151: P_{3050} = (9, 13, 10, 1)
44: P_{954} = (9, 10, 2, 1)
                                           98: P_{2117} = (4, 3, 7, 1)
                                                                                       152: P_{3063} = (6, 14, 10, 1)
45: P_{990} = (13, 12, 2, 1)
                                           99: P_{2125} = (12, 3, 7, 1)
                                                                                       153: P_{3072} = (15, 14, 10, 1)
46: P_{1012} = (3, 14, 2, 1)
                                           100: P_{2140} = (11, 4, 7, 1)
                                                                                       154: P_{3081} = (8, 15, 10, 1)
47: P_{1016} = (7, 14, 2, 1)
                                           101: P_{2144} = (15, 4, 7, 1)
                                                                                       155: P_{3084} = (11, 15, 10, 1)
48: P_{1128} = (7, 5, 3, 1)
                                           102: P_{2164} = (3, 6, 7, 1)
                                                                                       156: P_{3099} = (10, 0, 11, 1)
                                           103: P_{2170} = (9, 6, 7, 1)
49: P_{1130} = (9, 5, 3, 1)
                                                                                       157: P_{3100} = (11, 0, 11, 1)
                                           104: P_{2181} = (4,7,7,1)
50: P_{1142} = (5, 6, 3, 1)
                                                                                       158: P_{3106} = (1, 1, 11, 1)
51: P_{1151} = (14, 6, 3, 1)
                                           105: P_{2186} = (9,7,7,1)
                                                                                       159: P_{3116} = (11, 1, 11, 1)
52: P_{1155} = (2,7,3,1)
                                           106: P_{2210} = (1, 9, 7, 1)
                                                                                       160: P_{3124} = (3, 2, 11, 1)
                                           107: P_{2222} = (13, 9, 7, 1)
                                                                                       161: P_{3134} = (13, 2, 11, 1)
53: P_{1163} = (10, 7, 3, 1)
                                           108: P_{2291} = (2, 14, 7, 1)
                                                                                       162: P_{3147} = (10, 3, 11, 1)
54: P_{1183} = (14, 8, 3, 1)
55: P_{1190} = (5, 9, 3, 1)
                                           109: P_{2360} = (7, 2, 8, 1)
                                                                                       163: P_{3152} = (15, 3, 11, 1)
56: P_{1191} = (6, 9, 3, 1)
                                           110: P_{2368} = (15, 2, 8, 1)
                                                                                       164: P_{3170} = (1, 5, 11, 1)
                                                                                       165: P_{3181} = (12, 5, 11, 1)
57: P_{1210} = (9, 10, 3, 1)
                                           111: P_{2373} = (4, 3, 8, 1)
                                                                                       166: P_{3189} = (4, 6, 11, 1)
58: P_{1216} = (15, 10, 3, 1)
                                           112: P_{2426} = (9, 6, 8, 1)
59: P_{1238} = (5, 12, 3, 1)
                                           113: P_{2427} = (10, 6, 8, 1)
                                                                                       167: P_{3198} = (13, 6, 11, 1)
60: P_{1242} = (9, 12, 3, 1)
                                           114: P_{2437} = (4,7,8,1)
                                                                                       168: P_{3213} = (12, 7, 11, 1)
61: P_{1250} = (1, 13, 3, 1)
                                           115: P_{2448} = (15, 7, 8, 1)
                                                                                       169: P_{3215} = (14, 7, 11, 1)
                                                                                       170: P_{3222} = (5, 8, 11, 1)
62: P_{1263} = (14, 13, 3, 1)
                                           116: P_{2483} = (2, 10, 8, 1)
63: P_{1316} = (3, 1, 4, 1)
                                           117: P_{2486} = (5, 10, 8, 1)
                                                                                       171: P_{3227} = (10, 8, 11, 1)
                                           118: P_{2514} = (1, 12, 8, 1)
                                                                                       172: P_{3241} = (8, 9, 11, 1)
64: P_{1319} = (6, 1, 4, 1)
65: P_{1334} = (5, 2, 4, 1)
                                           119: P_{2517} = (4, 12, 8, 1)
                                                                                       173: P_{3245} = (12, 9, 11, 1)
66: P_{1341} = (12, 2, 4, 1)
                                           120: P_{2531} = (2, 13, 8, 1)
                                                                                       174: P_{3260} = (11, 10, 11, 1)
67: P_{1367} = (6, 4, 4, 1)
                                           121: P_{2544} = (15, 13, 8, 1)
                                                                                       175: P_{3268} = (3, 11, 11, 1)
                                           122: P_{2563} = (2, 15, 8, 1)
68: P_{1375} = (14, 4, 4, 1)
                                                                                       176: P_{3273} = (8, 11, 11, 1)
                                           123: P_{2567} = (6, 15, 8, 1)
                                                                                       177: P_{3330} = (1, 15, 11, 1)
69: P_{1400} = (7, 6, 4, 1)
70: P_{1481} = (8, 11, 4, 1)
                                           124: P_{2598} = (5, 1, 9, 1)
                                                                                       178: P_{3342} = (13, 15, 11, 1)
71: P_{1487} = (14, 11, 4, 1)
                                           125: P_{2606} = (13, 1, 9, 1)
                                                                                       179: P_{3381} = (4, 2, 12, 1)
72: P_{1657} = (8, 6, 5, 1)
                                           126: P_{2647} = (6, 4, 9, 1)
                                                                                       180: P_{3431} = (6, 5, 12, 1)
                                           127: P_{2649} = (8, 4, 9, 1)
                                                                                       181: P_{3434} = (9, 5, 12, 1)
73: P_{1663} = (14, 6, 5, 1)
74: P_{1666} = (1, 7, 5, 1)
                                           128: P_{2723} = (2, 9, 9, 1)
                                                                                       182: P_{3492} = (3, 9, 12, 1)
75: P_{1667} = (2, 7, 5, 1)
                                           129: P_{2734} = (13, 9, 9, 1)
                                                                                       183: P_{3499} = (10, 9, 12, 1)
76: P_{1693} = (12, 8, 5, 1)
                                           130: P_{2739} = (2, 10, 9, 1)
                                                                                       184: P_{3546} = (9, 12, 12, 1)
                                           131: P_{2752} = (15, 10, 9, 1)
                                                                                       185: P_{3551} = (14, 12, 12, 1)
77: P_{1695} = (14, 8, 5, 1)
78: P_{1732} = (3, 11, 5, 1)
                                           132: P_{2797} = (12, 13, 9, 1)
                                                                                       186: P_{3558} = (5, 13, 12, 1)
79: P_{1743} = (14, 11, 5, 1)
                                           133: P_{2843} = (10, 0, 10, 1)
                                                                                       187: P_{3567} = (14, 13, 12, 1)
80: P_{1749} = (4, 12, 5, 1)
                                           134: P_{2844} = (11, 0, 10, 1)
                                                                                       188: P_{3570} = (1, 14, 12, 1)
                                           135: P_{2850} = (1, 1, 10, 1)
                                                                                       189: P_{3576} = (7, 14, 12, 1)
81: P_{1756} = (11, 12, 5, 1)
82: P_{1763} = (2, 13, 5, 1)
                                           136: P_{2859} = (10, 1, 10, 1)
                                                                                       190: P_{3641} = (8, 2, 13, 1)
83: P_{1769} = (8, 13, 5, 1)
                                           137: P_{2882} = (1, 3, 10, 1)
                                                                                       191: P_{3643} = (10, 2, 13, 1)
84: P_{1785} = (8, 14, 5, 1)
                                           138: P_{2888} = (7, 3, 10, 1)
                                                                                       192: P_{3666} = (1, 4, 13, 1)
85: P_{1790} = (13, 14, 5, 1)
                                           139: P_{2902} = (5, 4, 10, 1)
                                                                                       193: P_{3671} = (6, 4, 13, 1)
86: P_{1795} = (2, 15, 5, 1)
                                           140: P_{2904} = (7, 4, 10, 1)
                                                                                       194: P_{3759} = (14, 9, 13, 1)
                                           141: P_{2916} = (3, 5, 10, 1)
87: P_{1842} = (1, 2, 6, 1)
                                                                                       195: P_{3797} = (4, 12, 13, 1)
88: P_{1853} = (12, 2, 6, 1)
                                           142: P_{2924} = (11, 5, 10, 1)
                                                                                       196: P_{3808} = (15, 12, 13, 1)
89: P_{1882} = (9, 4, 6, 1)
                                           143: P_{2962} = (1, 8, 10, 1)
                                                                                       197: P_{3811} = (2, 13, 13, 1)
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218: P_{4229} = (4, 7, 15, 1)
198: P_{3813} = (4, 13, 13, 1)
                                           208: P_{4085} = (4, 14, 14, 1)
199 : P_{3843} = (2, 15, 13, 1)
                                           209: P_{4088} = (7, 14, 14, 1)
                                                                                      219: P_{4293} = (4, 11, 15, 1)
                                                                                      220: P_{4297} = (8, 11, 15, 1)
200: P_{3848} = (7, 15, 13, 1)
                                           210: P_{4165} = (4, 3, 15, 1)
201: P_{3880} = (7, 1, 14, 1)
                                           211: P_{4174} = (13, 3, 15, 1)
                                                                                      221: P_{4308} = (3, 12, 15, 1)
202: P_{3881} = (8, 1, 14, 1)
                                           212: P_{4180} = (3, 4, 15, 1)
                                                                                      222: P_{4314} = (9, 12, 15, 1)
203: P_{3975} = (6, 7, 14, 1)
                                           213: P_{4189} = (12, 4, 15, 1)
                                                                                      223: P_{4332} = (11, 13, 15, 1)
204: P_{4014} = (13, 9, 14, 1)
                                           214: P_{4202} = (9, 5, 15, 1)
                                                                                      224: P_{4335} = (14, 13, 15, 1)
205: P_{4016} = (15, 9, 14, 1)
                                           215: P_{4210} = (1, 6, 15, 1)
206: P_{4036} = (3, 11, 14, 1)
                                           216: P_{4218} = (9, 6, 15, 1)
207: P_{4037} = (4, 11, 14, 1)
                                           217: P_{4228} = (3, 7, 15, 1)
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