Rank-74105 over GF(16)

January 15, 2021

The equation

The equation of the surface is:

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

(0, 1, 1, 0, 1, 1, 1, 0, 1, 0, 0, 0, 0, 1, 0, 0, 1, 0, 0, 0) The point rank of the equation over GF(16) is 304222757

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:

```
0: P_0 = (1, 0, 0, 0)
                                                                 27: P_{369} = (15, 5, 0, 1)
1: P_3 = (0,0,0,1)
                                                                 28: P_{405} = (3, 8, 0, 1)
2: P_4 = (1, 1, 1, 1)
                                                                 29: P_{416} = (14, 8, 0, 1)
3: P_5 = (1, 1, 0, 0)
                                                                 30: P_{422} = (4, 9, 0, 1)
4: P_{20} = (1,0,1,0)
                                                                 31: P_{425} = (7, 9, 0, 1)
5: P_{36} = (1, 1, 1, 0)
                                                                 32: P_{438} = (4, 10, 0, 1)
6: P_{117} = (2, 6, 1, 0)
                                                                 33: P_{448} = (14, 10, 0, 1)
7: P_{128} = (13, 6, 1, 0)
                                                                 34: P_{452} = (2, 11, 0, 1)
8: P_{140} = (9,7,1,0)
                                                                 35: P_{459} = (9, 11, 0, 1)
9: P_{143} = (12, 7, 1, 0)
                                                                 36: P_{507} = (9, 14, 0, 1)
10: P_{182} = (3, 10, 1, 0)
                                                                 37: P_{510} = (12, 14, 0, 1)
11: P_{187} = (8, 10, 1, 0)
                                                                 38: P_{516} = (2, 15, 0, 1)
12: P_{200} = (5, 11, 1, 0)
                                                                 39: P_{519} = (5, 15, 0, 1)
                                                                 40: P_{531} = (1,0,1,1)
13: P_{210} = (15, 11, 1, 0)
14: P_{217} = (6, 12, 1, 0)
                                                                 41: P_{582} = (5, 3, 1, 1)
15: P_{225} = (14, 12, 1, 0)
                                                                 42: P_{589} = (12, 3, 1, 1)
16: P_{231} = (4, 13, 1, 0)
                                                                 43: P_{615} = (6,5,1,1)
17: P_{234} = (7, 13, 1, 0)
                                                                 44: P_{617} = (8, 5, 1, 1)
18: P_{275} = (1, 0, 0, 1)
                                                                 45: P_{670} = (13, 8, 1, 1)
19: P_{291} = (1, 1, 0, 1)
                                                                 46: P_{672} = (15, 8, 1, 1)
20: P_{312} = (6, 2, 0, 1)
                                                                 47: P_{693} = (4, 10, 1, 1)
21: P_{320} = (14, 2, 0, 1)
                                                                 48: P_{703} = (14, 10, 1, 1)
22: P_{326} = (4, 3, 0, 1)
                                                                 49: P_{707} = (2, 11, 1, 1)
23: P_{330} = (8, 3, 0, 1)
                                                                 50: P_{714} = (9, 11, 1, 1)
                                                                 51: P_{772} = (3, 15, 1, 1)
24: P_{340} = (2, 4, 0, 1)
25: P_{351} = (13, 4, 0, 1)
                                                                 52: P_{776} = (7, 15, 1, 1)
26: P_{363} = (9, 5, 0, 1)
                                                                 53: P_{791} = (6,0,2,1)
```

```
54: P_{799} = (14, 0, 2, 1)
                                                                 108: P_{1890} = (1, 5, 6, 1)
55: P_{826} = (9, 2, 2, 1)
                                                                 109: P_{1891} = (2, 5, 6, 1)
                                                                 110: P_{1907} = (2, 6, 6, 1)
56: P_{829} = (12, 2, 2, 1)
57: P_{842} = (9, 3, 2, 1)
                                                                 111: P_{1919} = (14, 6, 6, 1)
58: P_{854} = (5, 4, 2, 1)
                                                                 112: P_{1926} = (5, 7, 6, 1)
59: P_{855} = (6,4,2,1)
                                                                 113: P_{1976} = (7, 10, 6, 1)
60: P_{883} = (2, 6, 2, 1)
                                                                 114: P_{1982} = (13, 10, 6, 1)
61: P_{887} = (6, 6, 2, 1)
                                                                 115: P_{2083} = (2, 1, 7, 1)
62: P_{931} = (2, 9, 2, 1)
                                                                 116: P_{2094} = (13, 1, 7, 1)
63: P_{932} = (3, 9, 2, 1)
                                                                 117: P_{2176} = (15, 6, 7, 1)
64: P_{991} = (14, 12, 2, 1)
                                                                 118: P_{2181} = (4,7,7,1)
65: P_{995} = (2, 13, 2, 1)
                                                                 119: P_{2186} = (9, 7, 7, 1)
66: P_{1005} = (12, 13, 2, 1)
                                                                 120: P_{2231} = (6, 10, 7, 1)
67: P_{1010} = (1, 14, 2, 1)
                                                                 121: P_{2237} = (12, 10, 7, 1)
68: P_{1023} = (14, 14, 2, 1)
                                                                 122: P_{2296} = (7, 14, 7, 1)
69: P_{1045} = (4, 0, 3, 1)
                                                                 123: P_{2306} = (1, 15, 7, 1)
                                                                 124: P_{2314} = (9, 15, 7, 1)
70: P_{1049} = (8, 0, 3, 1)
71: P_{1079} = (6, 2, 3, 1)
                                                                 125: P_{2324} = (3, 0, 8, 1)
                                                                 126: P_{2335} = (14, 0, 8, 1)
72: P_{1107} = (2,4,3,1)
73: P_{1109} = (4, 4, 3, 1)
                                                                 127: P_{2372} = (3, 3, 8, 1)
74: P_{1154} = (1,7,3,1)
                                                                 128: P_{2418} = (1, 6, 8, 1)
75: P_{1157} = (4,7,3,1)
                                                                 129: P_{2431} = (14, 6, 8, 1)
76: P_{1177} = (8, 8, 3, 1)
                                                                 130: P_{2472} = (7, 9, 8, 1)
77: P_{1220} = (3, 11, 3, 1)
                                                                 131: P_{2500} = (3, 11, 8, 1)
78: P_{1225} = (8, 11, 3, 1)
                                                                 132: P_{2505} = (8, 11, 8, 1)
79: P_{1299} = (2, 0, 4, 1)
                                                                 133: P_{2554} = (9, 14, 8, 1)
                                                                 134: P_{2559} = (14, 14, 8, 1)
80: P_{1310} = (13, 0, 4, 1)
81: P_{1330} = (1, 2, 4, 1)
                                                                 135: P_{2581} = (4, 0, 9, 1)
                                                                 136: P_{2584} = (7, 0, 9, 1)
82: P_{1331} = (2, 2, 4, 1)
83: P_{1367} = (6, 4, 4, 1)
                                                                 137: P_{2617} = (8, 2, 9, 1)
84: P_{1375} = (14, 4, 4, 1)
                                                                 138: P_{2618} = (9, 2, 9, 1)
85: P_{1391} = (14, 5, 4, 1)
                                                                 139: P_{2642} = (1, 4, 9, 1)
86: P_{1395} = (2, 6, 4, 1)
                                                                 140: P_{2645} = (4, 4, 9, 1)
87: P_{1413} = (4,7,4,1)
                                                                 141: P_{2696} = (7, 7, 9, 1)
88: P_{1415} = (6,7,4,1)
                                                                 142: P_{2698} = (9,7,9,1)
89: P_{1449} = (8, 9, 4, 1)
                                                                 143: P_{2707} = (2, 8, 9, 1)
90: P_{1454} = (13, 9, 4, 1)
                                                                 144: P_{2723} = (2, 9, 9, 1)
                                                                 145: P_{2734} = (13, 9, 9, 1)
91: P_{1509} = (4, 13, 4, 1)
92: P_{1518} = (13, 13, 4, 1)
                                                                 146: P_{2778} = (9, 12, 9, 1)
93: P_{1525} = (4, 14, 4, 1)
                                                                 147: P_{2782} = (13, 12, 9, 1)
94: P_{1526} = (5, 14, 4, 1)
                                                                 148: P_{2789} = (4, 13, 9, 1)
                                                                 149: P_{2808} = (7, 14, 9, 1)
95: P_{1562} = (9,0,5,1)
96: P_{1568} = (15, 0, 5, 1)
                                                                 150: P_{2816} = (15, 14, 9, 1)
                                                                 151: P_{2837} = (4, 0, 10, 1)
97: P_{1630} = (13, 4, 5, 1)
98: P_{1701} = (4, 9, 5, 1)
                                                                 152: P_{2847} = (14, 0, 10, 1)
99: P_{1706} = (9, 9, 5, 1)
                                                                 153: P_{2854} = (5, 1, 10, 1)
100: P_{1718} = (5, 10, 5, 1)
                                                                 154: P_{2864} = (15, 1, 10, 1)
101: P_{1728} = (15, 10, 5, 1)
                                                                 155: P_{2883} = (2, 3, 10, 1)
                                                                 156: P_{2889} = (8, 3, 10, 1)
102: P_{1746} = (1, 12, 5, 1)
103: P_{1754} = (9, 12, 5, 1)
                                                                 157: P_{2901} = (4, 4, 10, 1)
104: P_{1808} = (15, 15, 5, 1)
                                                                 158: P_{2911} = (14, 4, 10, 1)
105: P_{1834} = (9, 1, 6, 1)
                                                                 159: P_{2964} = (3, 8, 10, 1)
106: P_{1837} = (12, 1, 6, 1)
                                                                 160: P_{2970} = (9, 8, 10, 1)
107: P_{1879} = (6, 4, 6, 1)
                                                                 161: P_{2998} = (5, 10, 10, 1)
```

```
162: P_{3008} = (15, 10, 10, 1)
                                                                194: P_{3784} = (7, 11, 13, 1)
163: P_{3061} = (4, 14, 10, 1)
                                                                195: P_{3789} = (12, 11, 13, 1)
                                                                196: P_{3801} = (8, 12, 13, 1)
164: P_{3071} = (14, 14, 10, 1)
165: P_{3091} = (2, 0, 11, 1)
                                                                197: P_{3811} = (2, 13, 13, 1)
166: P_{3098} = (9, 0, 11, 1)
                                                                198: P_{3813} = (4, 13, 13, 1)
167: P_{3108} = (3, 1, 11, 1)
                                                                199: P_{3866} = (9, 0, 14, 1)
168: P_{3113} = (8, 1, 11, 1)
                                                                200: P_{3869} = (12, 0, 14, 1)
169: P_{3123} = (2, 2, 11, 1)
                                                                201: P_{3892} = (3, 2, 14, 1)
170: P_{3130} = (9, 2, 11, 1)
                                                                202: P_{3901} = (12, 2, 14, 1)
171: P_{3173} = (4, 5, 11, 1)
                                                                203: P_{3935} = (14, 4, 14, 1)
172: P_{3184} = (15, 5, 11, 1)
                                                                204: P_{3936} = (15, 4, 14, 1)
173: P_{3235} = (2, 9, 11, 1)
                                                                205: P_{3960} = (7, 6, 14, 1)
174: P_{3242} = (9, 9, 11, 1)
                                                                206: P_{3967} = (14, 6, 14, 1)
175: P_{3268} = (3, 11, 11, 1)
                                                                207: P_{3978} = (9, 7, 14, 1)
176: P_{3273} = (8, 11, 11, 1)
                                                                208: P_{4002} = (1, 9, 14, 1)
177: P_{3334} = (5, 15, 11, 1)
                                                                209: P_{4010} = (9, 9, 14, 1)
178: P_{3343} = (14, 15, 11, 1)
                                                                210: P_{4061} = (12, 12, 14, 1)
                                                                211: P_{4063} = (14, 12, 14, 1)
179: P_{3365} = (4, 1, 12, 1)
180: P_{3368} = (7, 1, 12, 1)
                                                                212: P_{4085} = (4, 14, 14, 1)
181: P_{3389} = (12, 2, 12, 1)
                                                                213: P_{4088} = (7, 14, 14, 1)
182: P_{3394} = (1, 3, 12, 1)
                                                                214: P_{4101} = (4, 15, 14, 1)
                                                                215: P_{4115} = (2, 0, 15, 1)
183: P_{3407} = (14, 3, 12, 1)
                                                                216: P_{4118} = (5, 0, 15, 1)
184: P_{3527} = (6, 11, 12, 1)
185: P_{3534} = (13, 11, 12, 1)
                                                                217: P_{4147} = (2, 2, 15, 1)
186: P_{3546} = (9, 12, 12, 1)
                                                                218: P_{4159} = (14, 2, 15, 1)
187: P_{3551} = (14, 12, 12, 1)
                                                                219: P_{4198} = (5, 5, 15, 1)
188: P_{3556} = (3, 13, 12, 1)
                                                                220: P_{4278} = (5, 10, 15, 1)
189 : P_{3623} = (6, 1, 13, 1)
                                                                221: P_{4288} = (15, 10, 15, 1)
                                                                222: P_{4322} = (1, 13, 15, 1)
190: P_{3631} = (14, 1, 13, 1)
191: P_{3730} = (1, 8, 13, 1)
                                                                223: P_{4323} = (2, 13, 15, 1)
192: P_{3733} = (4, 8, 13, 1)
                                                                224: P_{4349} = (12, 14, 15, 1)
193: P_{3758} = (13, 9, 13, 1)
```

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_{200} = (5, 11, 1, 0)
                                                                                       24: P_{340} = (2,4,0,1)
1: P_3 = (0,0,0,1)
                                            13: P_{210} = (15, 11, 1, 0)
                                                                                       25: P_{351} = (13, 4, 0, 1)
2: P_4 = (1, 1, 1, 1)
                                           14: P_{217} = (6, 12, 1, 0)
                                                                                       26: P_{363} = (9, 5, 0, 1)
3: P_5 = (1, 1, 0, 0)
                                            15: P_{225} = (14, 12, 1, 0)
                                                                                       27: P_{369} = (15, 5, 0, 1)
4: P_{20} = (1,0,1,0)
                                           16: P_{231} = (4, 13, 1, 0)
                                                                                       28: P_{405} = (3, 8, 0, 1)
5: P_{36} = (1, 1, 1, 0)
                                           17: P_{234} = (7, 13, 1, 0)
                                                                                       29: P_{416} = (14, 8, 0, 1)
                                           18: P_{275} = (1, 0, 0, 1)
                                                                                       30: P_{422} = (4, 9, 0, 1)
6: P_{117} = (2, 6, 1, 0)
7: P_{128} = (13, 6, 1, 0)
                                            19: P_{291} = (1, 1, 0, 1)
                                                                                       31: P_{425} = (7, 9, 0, 1)
8: P_{140} = (9,7,1,0)
                                            20: P_{312} = (6, 2, 0, 1)
                                                                                       32: P_{438} = (4, 10, 0, 1)
9: P_{143} = (12, 7, 1, 0)
                                            21: P_{320} = (14, 2, 0, 1)
                                                                                       33: P_{448} = (14, 10, 0, 1)
10: P_{182} = (3, 10, 1, 0)
                                            22: P_{326} = (4,3,0,1)
                                                                                       34: P_{452} = (2, 11, 0, 1)
                                                                                       35: P_{459} = (9, 11, 0, 1)
11: P_{187} = (8, 10, 1, 0)
                                           23: P_{330} = (8, 3, 0, 1)
```

```
36: P_{507} = (9, 14, 0, 1)
                                                                                       144: P_{2723} = (2, 9, 9, 1)
                                           90: P_{1454} = (13, 9, 4, 1)
37: P_{510} = (12, 14, 0, 1)
                                                                                       145: P_{2734} = (13, 9, 9, 1)
                                           91: P_{1509} = (4, 13, 4, 1)
38: P_{516} = (2, 15, 0, 1)
                                           92: P_{1518} = (13, 13, 4, 1)
                                                                                       146: P_{2778} = (9, 12, 9, 1)
39: P_{519} = (5, 15, 0, 1)
                                                                                       147: P_{2782} = (13, 12, 9, 1)
                                           93: P_{1525} = (4, 14, 4, 1)
                                           94: P_{1526} = (5, 14, 4, 1)
40: P_{531} = (1,0,1,1)
                                                                                       148: P_{2789} = (4, 13, 9, 1)
41: P_{582} = (5, 3, 1, 1)
                                           95: P_{1562} = (9, 0, 5, 1)
                                                                                       149: P_{2808} = (7, 14, 9, 1)
42: P_{589} = (12, 3, 1, 1)
                                           96: P_{1568} = (15, 0, 5, 1)
                                                                                       150: P_{2816} = (15, 14, 9, 1)
43: P_{615} = (6, 5, 1, 1)
                                           97: P_{1630} = (13, 4, 5, 1)
                                                                                       151: P_{2837} = (4, 0, 10, 1)
44: P_{617} = (8, 5, 1, 1)
                                           98: P_{1701} = (4, 9, 5, 1)
                                                                                       152: P_{2847} = (14, 0, 10, 1)
45: P_{670} = (13, 8, 1, 1)
                                           99: P_{1706} = (9, 9, 5, 1)
                                                                                       153: P_{2854} = (5, 1, 10, 1)
46: P_{672} = (15, 8, 1, 1)
                                           100: P_{1718} = (5, 10, 5, 1)
                                                                                       154: P_{2864} = (15, 1, 10, 1)
47: P_{693} = (4, 10, 1, 1)
                                           101: P_{1728} = (15, 10, 5, 1)
                                                                                       155: P_{2883} = (2, 3, 10, 1)
48: P_{703} = (14, 10, 1, 1)
                                           102: P_{1746} = (1, 12, 5, 1)
                                                                                       156: P_{2889} = (8, 3, 10, 1)
49: P_{707} = (2, 11, 1, 1)
                                           103: P_{1754} = (9, 12, 5, 1)
                                                                                       157: P_{2901} = (4, 4, 10, 1)
50: P_{714} = (9, 11, 1, 1)
                                                                                       158: P_{2911} = (14, 4, 10, 1)
                                           104: P_{1808} = (15, 15, 5, 1)
51: P_{772} = (3, 15, 1, 1)
                                           105: P_{1834} = (9, 1, 6, 1)
                                                                                       159: P_{2964} = (3, 8, 10, 1)
                                                                                       160: P_{2970} = (9, 8, 10, 1)
52: P_{776} = (7, 15, 1, 1)
                                           106: P_{1837} = (12, 1, 6, 1)
                                           107: P_{1879} = (6, 4, 6, 1)
53: P_{791} = (6,0,2,1)
                                                                                       161: P_{2998} = (5, 10, 10, 1)
54: P_{799} = (14, 0, 2, 1)
                                                                                       162: P_{3008} = (15, 10, 10, 1)
                                           108: P_{1890} = (1, 5, 6, 1)
55: P_{826} = (9, 2, 2, 1)
                                           109: P_{1891} = (2, 5, 6, 1)
                                                                                       163: P_{3061} = (4, 14, 10, 1)
56: P_{829} = (12, 2, 2, 1)
                                           110: P_{1907} = (2, 6, 6, 1)
                                                                                       164: P_{3071} = (14, 14, 10, 1)
57: P_{842} = (9, 3, 2, 1)
                                                                                       165: P_{3091} = (2, 0, 11, 1)
                                           111: P_{1919} = (14, 6, 6, 1)
58: P_{854} = (5, 4, 2, 1)
                                                                                       166: P_{3098} = (9, 0, 11, 1)
                                           112: P_{1926} = (5,7,6,1)
59: P_{855} = (6, 4, 2, 1)
                                           113: P_{1976} = (7, 10, 6, 1)
                                                                                       167: P_{3108} = (3, 1, 11, 1)
60: P_{883} = (2, 6, 2, 1)
                                           114: P_{1982} = (13, 10, 6, 1)
                                                                                       168: P_{3113} = (8, 1, 11, 1)
61: P_{887} = (6, 6, 2, 1)
                                           115: P_{2083} = (2, 1, 7, 1)
                                                                                       169: P_{3123} = (2, 2, 11, 1)
62: P_{931} = (2, 9, 2, 1)
                                                                                       170: P_{3130} = (9, 2, 11, 1)
                                           116: P_{2094} = (13, 1, 7, 1)
63: P_{932} = (3, 9, 2, 1)
                                           117: P_{2176} = (15, 6, 7, 1)
                                                                                       171: P_{3173} = (4, 5, 11, 1)
                                                                                       172: P_{3184} = (15, 5, 11, 1)
64: P_{991} = (14, 12, 2, 1)
                                           118: P_{2181} = (4,7,7,1)
65: P_{995} = (2, 13, 2, 1)
                                           119: P_{2186} = (9,7,7,1)
                                                                                       173: P_{3235} = (2, 9, 11, 1)
66: P_{1005} = (12, 13, 2, 1)
                                           120: P_{2231} = (6, 10, 7, 1)
                                                                                       174: P_{3242} = (9, 9, 11, 1)
67: P_{1010} = (1, 14, 2, 1)
                                           121: P_{2237} = (12, 10, 7, 1)
                                                                                       175: P_{3268} = (3, 11, 11, 1)
                                           122: P_{2296} = (7, 14, 7, 1)
68: P_{1023} = (14, 14, 2, 1)
                                                                                       176: P_{3273} = (8, 11, 11, 1)
69: P_{1045} = (4, 0, 3, 1)
                                           123: P_{2306} = (1, 15, 7, 1)
                                                                                       177: P_{3334} = (5, 15, 11, 1)
70: P_{1049} = (8, 0, 3, 1)
                                           124: P_{2314} = (9, 15, 7, 1)
                                                                                       178: P_{3343} = (14, 15, 11, 1)
                                           125: P_{2324} = (3, 0, 8, 1)
71: P_{1079} = (6, 2, 3, 1)
                                                                                       179: P_{3365} = (4, 1, 12, 1)
72: P_{1107} = (2,4,3,1)
                                           126: P_{2335} = (14, 0, 8, 1)
                                                                                       180: P_{3368} = (7, 1, 12, 1)
                                           127: P_{2372} = (3, 3, 8, 1)
                                                                                       181 : P_{3389} = (12, 2, 12, 1)
73: P_{1109} = (4, 4, 3, 1)
74: P_{1154} = (1,7,3,1)
                                           128: P_{2418} = (1, 6, 8, 1)
                                                                                       182: P_{3394} = (1, 3, 12, 1)
75: P_{1157} = (4,7,3,1)
                                           129: P_{2431} = (14, 6, 8, 1)
                                                                                       183: P_{3407} = (14, 3, 12, 1)
76: P_{1177} = (8, 8, 3, 1)
                                           130: P_{2472} = (7, 9, 8, 1)
                                                                                       184: P_{3527} = (6, 11, 12, 1)
                                           131: P_{2500} = (3, 11, 8, 1)
                                                                                       185: P_{3534} = (13, 11, 12, 1)
77: P_{1220} = (3, 11, 3, 1)
78: P_{1225} = (8, 11, 3, 1)
                                           132: P_{2505} = (8, 11, 8, 1)
                                                                                       186: P_{3546} = (9, 12, 12, 1)
79: P_{1299} = (2,0,4,1)
                                           133: P_{2554} = (9, 14, 8, 1)
                                                                                       187: P_{3551} = (14, 12, 12, 1)
80: P_{1310} = (13, 0, 4, 1)
                                           134: P_{2559} = (14, 14, 8, 1)
                                                                                       188: P_{3556} = (3, 13, 12, 1)
                                           135 : P_{2581} = (4, 0, 9, 1)
                                                                                       189: P_{3623} = (6, 1, 13, 1)
81: P_{1330} = (1, 2, 4, 1)
82: P_{1331} = (2, 2, 4, 1)
                                           136: P_{2584} = (7, 0, 9, 1)
                                                                                       190: P_{3631} = (14, 1, 13, 1)
83: P_{1367} = (6, 4, 4, 1)
                                           137: P_{2617} = (8, 2, 9, 1)
                                                                                       191: P_{3730} = (1, 8, 13, 1)
                                                                                       192: P_{3733} = (4, 8, 13, 1)
84: P_{1375} = (14, 4, 4, 1)
                                           138: P_{2618} = (9, 2, 9, 1)
85: P_{1391} = (14, 5, 4, 1)
                                           139: P_{2642} = (1, 4, 9, 1)
                                                                                       193: P_{3758} = (13, 9, 13, 1)
86: P_{1395} = (2, 6, 4, 1)
                                           140: P_{2645} = (4, 4, 9, 1)
                                                                                       194: P_{3784} = (7, 11, 13, 1)
87: P_{1413} = (4,7,4,1)
                                           141: P_{2696} = (7,7,9,1)
                                                                                       195: P_{3789} = (12, 11, 13, 1)
88: P_{1415} = (6,7,4,1)
                                           142: P_{2698} = (9,7,9,1)
                                                                                       196: P_{3801} = (8, 12, 13, 1)
89: P_{1449} = (8, 9, 4, 1)
                                           143: P_{2707} = (2, 8, 9, 1)
                                                                                       197: P_{3811} = (2, 13, 13, 1)
```

```
208: P_{4002} = (1, 9, 14, 1)
                                                                                     218: P_{4159} = (14, 2, 15, 1)
198: P_{3813} = (4, 13, 13, 1)
199: P_{3866} = (9, 0, 14, 1)
                                          209: P_{4010} = (9, 9, 14, 1)
                                                                                     219: P_{4198} = (5, 5, 15, 1)
                                                                                     220: P_{4278} = (5, 10, 15, 1)
200: P_{3869} = (12, 0, 14, 1)
                                          210: P_{4061} = (12, 12, 14, 1)
201: P_{3892} = (3, 2, 14, 1)
                                          211:\,P_{4063}=(14,12,14,1)
                                                                                     221: P_{4288} = (15, 10, 15, 1)
202: P_{3901} = (12, 2, 14, 1)
                                          212: P_{4085} = (4, 14, 14, 1)
                                                                                     222: P_{4322} = (1, 13, 15, 1)
203: P_{3935} = (14, 4, 14, 1)
                                          213: P_{4088} = (7, 14, 14, 1)
                                                                                     223: P_{4323} = (2, 13, 15, 1)
204: P_{3936} = (15, 4, 14, 1)
                                          214: P_{4101} = (4, 15, 14, 1)
                                                                                     224: P_{4349} = (12, 14, 15, 1)
205: P_{3960} = (7, 6, 14, 1)
                                          215: P_{4115} = (2, 0, 15, 1)
206: P_{3967} = (14, 6, 14, 1)
                                          216: P_{4118} = (5, 0, 15, 1)
207: P_{3978} = (9, 7, 14, 1)
                                          217: P_{4147} = (2, 2, 15, 1)
```