

Rank-67117 over GF(16)

January 15, 2021

The equation

The equation of the surface is :

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

(0, 1, 0, 1, 0, 1, 0, 0, 0, 1, 1, 0, 0, 0, 0, 1, 0, 0, 0)

The point rank of the equation over GF(16) is 287383845

General information

Number of lines	0
Number of points	257
Number of singular points	1
Number of Eckardt points	0
Number of double points	0
Number of single points	0
Number of points off lines	257
Number of Hesse planes	0
Number of axes	0
Type of points on lines	
Type of lines on points	0^{257}

Singular Points

The surface has 1 singular points:

$$0 : P_4 = \mathbf{P}(1, 1, 1, 1) = \mathbf{P}(1, 1, 1, 1)$$

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 257 points not on any line:

The points on the surface but not on lines are:

0 : $P_0 = (1, 0, 0, 0)$	27 : $P_{728} = (7, 12, 1, 1)$
1 : $P_2 = (0, 0, 1, 0)$	28 : $P_{731} = (10, 12, 1, 1)$
2 : $P_4 = (1, 1, 1, 1)$	29 : $P_{743} = (6, 13, 1, 1)$
3 : $P_{20} = (1, 0, 1, 0)$	30 : $P_{747} = (10, 13, 1, 1)$
4 : $P_{36} = (1, 1, 1, 0)$	31 : $P_{810} = (9, 1, 2, 1)$
5 : $P_{123} = (8, 6, 1, 0)$	32 : $P_{811} = (10, 1, 2, 1)$
6 : $P_{130} = (15, 6, 1, 0)$	33 : $P_{828} = (11, 2, 2, 1)$
7 : $P_{134} = (3, 7, 1, 0)$	34 : $P_{852} = (3, 4, 2, 1)$
8 : $P_{136} = (5, 7, 1, 0)$	35 : $P_{854} = (5, 4, 2, 1)$
9 : $P_{182} = (3, 10, 1, 0)$	36 : $P_{873} = (8, 5, 2, 1)$
10 : $P_{187} = (8, 10, 1, 0)$	37 : $P_{880} = (15, 5, 2, 1)$
11 : $P_{200} = (5, 11, 1, 0)$	38 : $P_{891} = (10, 6, 2, 1)$
12 : $P_{210} = (15, 11, 1, 0)$	39 : $P_{895} = (14, 6, 2, 1)$
13 : $P_{216} = (5, 12, 1, 0)$	40 : $P_{915} = (2, 8, 2, 1)$
14 : $P_{219} = (8, 12, 1, 0)$	41 : $P_{921} = (8, 8, 2, 1)$
15 : $P_{230} = (3, 13, 1, 0)$	42 : $P_{946} = (1, 10, 2, 1)$
16 : $P_{242} = (15, 13, 1, 0)$	43 : $P_{954} = (9, 10, 2, 1)$
17 : $P_{540} = (10, 0, 1, 1)$	44 : $P_{983} = (6, 12, 2, 1)$
18 : $P_{541} = (11, 0, 1, 1)$	45 : $P_{985} = (8, 12, 2, 1)$
19 : $P_{636} = (11, 6, 1, 1)$	46 : $P_{997} = (4, 13, 2, 1)$
20 : $P_{637} = (12, 6, 1, 1)$	47 : $P_{1004} = (11, 13, 2, 1)$
21 : $P_{652} = (11, 7, 1, 1)$	48 : $P_{1016} = (7, 14, 2, 1)$
22 : $P_{654} = (13, 7, 1, 1)$	49 : $P_{1020} = (11, 14, 2, 1)$
23 : $P_{691} = (2, 10, 1, 1)$	50 : $P_{1087} = (14, 2, 3, 1)$
24 : $P_{698} = (9, 10, 1, 1)$	51 : $P_{1088} = (15, 2, 3, 1)$
25 : $P_{709} = (4, 11, 1, 1)$	52 : $P_{1098} = (9, 3, 3, 1)$
26 : $P_{719} = (14, 11, 1, 1)$	53 : $P_{1107} = (2, 4, 3, 1)$

54 : $P_{1110} = (5, 4, 3, 1)$	108 : $P_{2003} = (2, 12, 6, 1)$
55 : $P_{1156} = (3, 7, 3, 1)$	109 : $P_{2009} = (8, 12, 6, 1)$
56 : $P_{1160} = (7, 7, 3, 1)$	110 : $P_{2018} = (1, 13, 6, 1)$
57 : $P_{1173} = (4, 8, 3, 1)$	111 : $P_{2027} = (10, 13, 6, 1)$
58 : $P_{1184} = (15, 8, 3, 1)$	112 : $P_{2180} = (3, 7, 7, 1)$
59 : $P_{1206} = (5, 10, 3, 1)$	113 : $P_{2244} = (3, 11, 7, 1)$
60 : $P_{1213} = (12, 10, 3, 1)$	114 : $P_{2256} = (15, 11, 7, 1)$
61 : $P_{1224} = (7, 11, 3, 1)$	115 : $P_{2258} = (1, 12, 7, 1)$
62 : $P_{1232} = (15, 11, 3, 1)$	116 : $P_{2267} = (10, 12, 7, 1)$
63 : $P_{1256} = (7, 13, 3, 1)$	117 : $P_{2276} = (3, 13, 7, 1)$
64 : $P_{1258} = (9, 13, 3, 1)$	118 : $P_{2282} = (9, 13, 7, 1)$
65 : $P_{1286} = (5, 15, 3, 1)$	119 : $P_{2291} = (2, 14, 7, 1)$
66 : $P_{1290} = (9, 15, 3, 1)$	120 : $P_{2300} = (11, 14, 7, 1)$
67 : $P_{1324} = (11, 1, 4, 1)$	121 : $P_{2374} = (5, 3, 8, 1)$
68 : $P_{1327} = (14, 1, 4, 1)$	122 : $P_{2383} = (14, 3, 8, 1)$
69 : $P_{1339} = (10, 2, 4, 1)$	123 : $P_{2403} = (2, 5, 8, 1)$
70 : $P_{1341} = (12, 2, 4, 1)$	124 : $P_{2416} = (15, 5, 8, 1)$
71 : $P_{1371} = (10, 4, 4, 1)$	125 : $P_{2423} = (6, 6, 8, 1)$
72 : $P_{1406} = (13, 6, 4, 1)$	126 : $P_{2425} = (8, 6, 8, 1)$
73 : $P_{1408} = (15, 6, 4, 1)$	127 : $P_{2451} = (2, 8, 8, 1)$
74 : $P_{1418} = (9, 7, 4, 1)$	128 : $P_{2469} = (4, 9, 8, 1)$
75 : $P_{1419} = (10, 7, 4, 1)$	129 : $P_{2470} = (5, 9, 8, 1)$
76 : $P_{1428} = (3, 8, 4, 1)$	130 : $P_{2494} = (13, 10, 8, 1)$
77 : $P_{1440} = (15, 8, 4, 1)$	131 : $P_{2496} = (15, 10, 8, 1)$
78 : $P_{1446} = (5, 9, 4, 1)$	132 : $P_{2502} = (5, 11, 8, 1)$
79 : $P_{1449} = (8, 9, 4, 1)$	133 : $P_{2503} = (6, 11, 8, 1)$
80 : $P_{1474} = (1, 11, 4, 1)$	134 : $P_{2515} = (2, 12, 8, 1)$
81 : $P_{1487} = (14, 11, 4, 1)$	135 : $P_{2519} = (6, 12, 8, 1)$
82 : $P_{1507} = (2, 13, 4, 1)$	136 : $P_{2554} = (9, 14, 8, 1)$
83 : $P_{1516} = (11, 13, 4, 1)$	137 : $P_{2560} = (15, 14, 8, 1)$
84 : $P_{1541} = (4, 15, 4, 1)$	138 : $P_{2595} = (2, 1, 9, 1)$
85 : $P_{1552} = (15, 15, 4, 1)$	139 : $P_{2603} = (10, 1, 9, 1)$
86 : $P_{1609} = (8, 3, 5, 1)$	140 : $P_{2628} = (3, 3, 9, 1)$
87 : $P_{1615} = (14, 3, 5, 1)$	141 : $P_{2634} = (9, 3, 9, 1)$
88 : $P_{1619} = (2, 4, 5, 1)$	142 : $P_{2647} = (6, 4, 9, 1)$
89 : $P_{1620} = (3, 4, 5, 1)$	143 : $P_{2652} = (11, 4, 9, 1)$
90 : $P_{1647} = (14, 5, 5, 1)$	144 : $P_{2693} = (4, 7, 9, 1)$
91 : $P_{1677} = (12, 7, 5, 1)$	145 : $P_{2699} = (10, 7, 9, 1)$
92 : $P_{1679} = (14, 7, 5, 1)$	146 : $P_{2732} = (11, 9, 9, 1)$
93 : $P_{1701} = (4, 9, 5, 1)$	147 : $P_{2738} = (1, 10, 9, 1)$
94 : $P_{1705} = (8, 9, 5, 1)$	148 : $P_{2739} = (2, 10, 9, 1)$
95 : $P_{1716} = (3, 10, 5, 1)$	149 : $P_{2780} = (11, 12, 9, 1)$
96 : $P_{1725} = (12, 10, 5, 1)$	150 : $P_{2783} = (14, 12, 9, 1)$
97 : $P_{1735} = (6, 11, 5, 1)$	151 : $P_{2788} = (3, 13, 9, 1)$
98 : $P_{1737} = (8, 11, 5, 1)$	152 : $P_{2792} = (7, 13, 9, 1)$
99 : $P_{1750} = (5, 12, 5, 1)$	153 : $P_{2809} = (8, 14, 9, 1)$
100 : $P_{1757} = (12, 12, 5, 1)$	154 : $P_{2816} = (15, 14, 9, 1)$
101 : $P_{1796} = (3, 15, 5, 1)$	155 : $P_{2820} = (3, 15, 9, 1)$
102 : $P_{1802} = (9, 15, 5, 1)$	156 : $P_{2822} = (5, 15, 9, 1)$
103 : $P_{1882} = (9, 4, 6, 1)$	157 : $P_{2834} = (1, 0, 10, 1)$
104 : $P_{1884} = (11, 4, 6, 1)$	158 : $P_{2844} = (11, 0, 10, 1)$
105 : $P_{1913} = (8, 6, 6, 1)$	159 : $P_{2851} = (2, 1, 10, 1)$
106 : $P_{1990} = (5, 11, 6, 1)$	160 : $P_{2858} = (9, 1, 10, 1)$
107 : $P_{1993} = (8, 11, 6, 1)$	161 : $P_{2869} = (4, 2, 10, 1)$

162 : $P_{2877} = (12, 2, 10, 1)$	210 : $P_{3510} = (5, 10, 12, 1)$
163 : $P_{2901} = (4, 4, 10, 1)$	211 : $P_{3542} = (5, 12, 12, 1)$
164 : $P_{2907} = (10, 4, 10, 1)$	212 : $P_{3701} = (4, 6, 13, 1)$
165 : $P_{2931} = (2, 6, 10, 1)$	213 : $P_{3712} = (15, 6, 13, 1)$
166 : $P_{2943} = (14, 6, 10, 1)$	214 : $P_{3714} = (1, 7, 13, 1)$
167 : $P_{2949} = (4, 7, 10, 1)$	215 : $P_{3724} = (11, 7, 13, 1)$
168 : $P_{2954} = (9, 7, 10, 1)$	216 : $P_{3755} = (10, 9, 13, 1)$
169 : $P_{2990} = (13, 9, 10, 1)$	217 : $P_{3759} = (14, 9, 13, 1)$
170 : $P_{2991} = (14, 9, 10, 1)$	218 : $P_{3769} = (8, 10, 13, 1)$
171 : $P_{3004} = (11, 10, 10, 1)$	219 : $P_{3776} = (15, 10, 13, 1)$
172 : $P_{3019} = (10, 11, 10, 1)$	220 : $P_{3824} = (15, 13, 13, 1)$
173 : $P_{3020} = (11, 11, 10, 1)$	221 : $P_{3877} = (4, 1, 14, 1)$
174 : $P_{3026} = (1, 12, 10, 1)$	222 : $P_{3884} = (11, 1, 14, 1)$
175 : $P_{3032} = (7, 12, 10, 1)$	223 : $P_{3892} = (3, 2, 14, 1)$
176 : $P_{3042} = (1, 13, 10, 1)$	224 : $P_{3904} = (15, 2, 14, 1)$
177 : $P_{3047} = (6, 13, 10, 1)$	225 : $P_{3910} = (5, 3, 14, 1)$
178 : $P_{3067} = (10, 14, 10, 1)$	226 : $P_{3913} = (8, 3, 14, 1)$
179 : $P_{3071} = (14, 14, 10, 1)$	227 : $P_{3942} = (5, 5, 14, 1)$
180 : $P_{3090} = (1, 0, 11, 1)$	228 : $P_{3951} = (14, 5, 14, 1)$
181 : $P_{3099} = (10, 0, 11, 1)$	229 : $P_{3955} = (2, 6, 14, 1)$
182 : $P_{3109} = (4, 1, 11, 1)$	230 : $P_{3963} = (10, 6, 14, 1)$
183 : $P_{3119} = (14, 1, 11, 1)$	231 : $P_{3974} = (5, 7, 14, 1)$
184 : $P_{3123} = (2, 2, 11, 1)$	232 : $P_{3981} = (12, 7, 14, 1)$
185 : $P_{3132} = (11, 2, 11, 1)$	233 : $P_{4011} = (10, 9, 14, 1)$
186 : $P_{3159} = (6, 4, 11, 1)$	234 : $P_{4014} = (13, 9, 14, 1)$
187 : $P_{3162} = (9, 4, 11, 1)$	235 : $P_{4034} = (1, 11, 14, 1)$
188 : $P_{3186} = (1, 6, 11, 1)$	236 : $P_{4037} = (4, 11, 14, 1)$
189 : $P_{3197} = (12, 6, 11, 1)$	237 : $P_{4058} = (9, 12, 14, 1)$
190 : $P_{3202} = (1, 7, 11, 1)$	238 : $P_{4060} = (11, 12, 14, 1)$
191 : $P_{3214} = (13, 7, 11, 1)$	239 : $P_{4091} = (10, 14, 14, 1)$
192 : $P_{3242} = (9, 9, 11, 1)$	240 : $P_{4148} = (3, 2, 15, 1)$
193 : $P_{3244} = (11, 9, 11, 1)$	241 : $P_{4159} = (14, 2, 15, 1)$
194 : $P_{3259} = (10, 10, 11, 1)$	242 : $P_{4195} = (2, 5, 15, 1)$
195 : $P_{3260} = (11, 10, 11, 1)$	243 : $P_{4201} = (8, 5, 15, 1)$
196 : $P_{3275} = (10, 11, 11, 1)$	244 : $P_{4213} = (4, 6, 15, 1)$
197 : $P_{3290} = (9, 12, 11, 1)$	245 : $P_{4222} = (13, 6, 15, 1)$
198 : $P_{3295} = (14, 12, 11, 1)$	246 : $P_{4244} = (3, 8, 15, 1)$
199 : $P_{3299} = (2, 13, 11, 1)$	247 : $P_{4245} = (4, 8, 15, 1)$
200 : $P_{3301} = (4, 13, 11, 1)$	248 : $P_{4281} = (8, 10, 15, 1)$
201 : $P_{3315} = (2, 14, 11, 1)$	249 : $P_{4286} = (13, 10, 15, 1)$
202 : $P_{3320} = (7, 14, 11, 1)$	250 : $P_{4292} = (3, 11, 15, 1)$
203 : $P_{3381} = (4, 2, 12, 1)$	251 : $P_{4296} = (7, 11, 15, 1)$
204 : $P_{3387} = (10, 2, 12, 1)$	252 : $P_{4334} = (13, 13, 15, 1)$
205 : $P_{3442} = (1, 6, 12, 1)$	253 : $P_{4336} = (15, 13, 15, 1)$
206 : $P_{3452} = (11, 6, 12, 1)$	254 : $P_{4345} = (8, 14, 15, 1)$
207 : $P_{3462} = (5, 7, 12, 1)$	255 : $P_{4346} = (9, 14, 15, 1)$
208 : $P_{3471} = (14, 7, 12, 1)$	256 : $P_{4357} = (4, 15, 15, 1)$
209 : $P_{3508} = (3, 10, 12, 1)$	

Line Intersection Graph

]

Neighbor sets in the line intersection graph:
The surface has 257 points:

The points on the surface are:

0 : $P_0 = (1, 0, 0, 0)$	51 : $P_{1088} = (15, 2, 3, 1)$	102 : $P_{1802} = (9, 15, 5, 1)$
1 : $P_2 = (0, 0, 1, 0)$	52 : $P_{1098} = (9, 3, 3, 1)$	103 : $P_{1882} = (9, 4, 6, 1)$
2 : $P_4 = (1, 1, 1, 1)$	53 : $P_{1107} = (2, 4, 3, 1)$	104 : $P_{1884} = (11, 4, 6, 1)$
3 : $P_{20} = (1, 0, 1, 0)$	54 : $P_{1110} = (5, 4, 3, 1)$	105 : $P_{1913} = (8, 6, 6, 1)$
4 : $P_{36} = (1, 1, 1, 0)$	55 : $P_{1156} = (3, 7, 3, 1)$	106 : $P_{1990} = (5, 11, 6, 1)$
5 : $P_{123} = (8, 6, 1, 0)$	56 : $P_{1160} = (7, 7, 3, 1)$	107 : $P_{1993} = (8, 11, 6, 1)$
6 : $P_{130} = (15, 6, 1, 0)$	57 : $P_{1173} = (4, 8, 3, 1)$	108 : $P_{2003} = (2, 12, 6, 1)$
7 : $P_{134} = (3, 7, 1, 0)$	58 : $P_{1184} = (15, 8, 3, 1)$	109 : $P_{2009} = (8, 12, 6, 1)$
8 : $P_{136} = (5, 7, 1, 0)$	59 : $P_{1206} = (5, 10, 3, 1)$	110 : $P_{2018} = (1, 13, 6, 1)$
9 : $P_{182} = (3, 10, 1, 0)$	60 : $P_{1213} = (12, 10, 3, 1)$	111 : $P_{2027} = (10, 13, 6, 1)$
10 : $P_{187} = (8, 10, 1, 0)$	61 : $P_{1224} = (7, 11, 3, 1)$	112 : $P_{2180} = (3, 7, 7, 1)$
11 : $P_{200} = (5, 11, 1, 0)$	62 : $P_{1232} = (15, 11, 3, 1)$	113 : $P_{2244} = (3, 11, 7, 1)$
12 : $P_{210} = (15, 11, 1, 0)$	63 : $P_{1256} = (7, 13, 3, 1)$	114 : $P_{2256} = (15, 11, 7, 1)$
13 : $P_{216} = (5, 12, 1, 0)$	64 : $P_{1258} = (9, 13, 3, 1)$	115 : $P_{2258} = (1, 12, 7, 1)$
14 : $P_{219} = (8, 12, 1, 0)$	65 : $P_{1286} = (5, 15, 3, 1)$	116 : $P_{2267} = (10, 12, 7, 1)$
15 : $P_{230} = (3, 13, 1, 0)$	66 : $P_{1290} = (9, 15, 3, 1)$	117 : $P_{2276} = (3, 13, 7, 1)$
16 : $P_{242} = (15, 13, 1, 0)$	67 : $P_{1324} = (11, 1, 4, 1)$	118 : $P_{2282} = (9, 13, 7, 1)$
17 : $P_{540} = (10, 0, 1, 1)$	68 : $P_{1327} = (14, 1, 4, 1)$	119 : $P_{2291} = (2, 14, 7, 1)$
18 : $P_{541} = (11, 0, 1, 1)$	69 : $P_{1339} = (10, 2, 4, 1)$	120 : $P_{2300} = (11, 14, 7, 1)$
19 : $P_{636} = (11, 6, 1, 1)$	70 : $P_{1341} = (12, 2, 4, 1)$	121 : $P_{2374} = (5, 3, 8, 1)$
20 : $P_{637} = (12, 6, 1, 1)$	71 : $P_{1371} = (10, 4, 4, 1)$	122 : $P_{2383} = (14, 3, 8, 1)$
21 : $P_{652} = (11, 7, 1, 1)$	72 : $P_{1406} = (13, 6, 4, 1)$	123 : $P_{2403} = (2, 5, 8, 1)$
22 : $P_{654} = (13, 7, 1, 1)$	73 : $P_{1408} = (15, 6, 4, 1)$	124 : $P_{2416} = (15, 5, 8, 1)$
23 : $P_{691} = (2, 10, 1, 1)$	74 : $P_{1418} = (9, 7, 4, 1)$	125 : $P_{2423} = (6, 6, 8, 1)$
24 : $P_{698} = (9, 10, 1, 1)$	75 : $P_{1419} = (10, 7, 4, 1)$	126 : $P_{2425} = (8, 6, 8, 1)$
25 : $P_{709} = (4, 11, 1, 1)$	76 : $P_{1428} = (3, 8, 4, 1)$	127 : $P_{2451} = (2, 8, 8, 1)$
26 : $P_{719} = (14, 11, 1, 1)$	77 : $P_{1440} = (15, 8, 4, 1)$	128 : $P_{2469} = (4, 9, 8, 1)$
27 : $P_{728} = (7, 12, 1, 1)$	78 : $P_{1446} = (5, 9, 4, 1)$	129 : $P_{2470} = (5, 9, 8, 1)$
28 : $P_{731} = (10, 12, 1, 1)$	79 : $P_{1449} = (8, 9, 4, 1)$	130 : $P_{2494} = (13, 10, 8, 1)$
29 : $P_{743} = (6, 13, 1, 1)$	80 : $P_{1474} = (1, 11, 4, 1)$	131 : $P_{2496} = (15, 10, 8, 1)$
30 : $P_{747} = (10, 13, 1, 1)$	81 : $P_{1487} = (14, 11, 4, 1)$	132 : $P_{2502} = (5, 11, 8, 1)$
31 : $P_{810} = (9, 1, 2, 1)$	82 : $P_{1507} = (2, 13, 4, 1)$	133 : $P_{2503} = (6, 11, 8, 1)$
32 : $P_{811} = (10, 1, 2, 1)$	83 : $P_{1516} = (11, 13, 4, 1)$	134 : $P_{2515} = (2, 12, 8, 1)$
33 : $P_{828} = (11, 2, 2, 1)$	84 : $P_{1541} = (4, 15, 4, 1)$	135 : $P_{2519} = (6, 12, 8, 1)$
34 : $P_{852} = (3, 4, 2, 1)$	85 : $P_{1552} = (15, 15, 4, 1)$	136 : $P_{2554} = (9, 14, 8, 1)$
35 : $P_{854} = (5, 4, 2, 1)$	86 : $P_{1609} = (8, 3, 5, 1)$	137 : $P_{2560} = (15, 14, 8, 1)$
36 : $P_{873} = (8, 5, 2, 1)$	87 : $P_{1615} = (14, 3, 5, 1)$	138 : $P_{2595} = (2, 1, 9, 1)$
37 : $P_{880} = (15, 5, 2, 1)$	88 : $P_{1619} = (2, 4, 5, 1)$	139 : $P_{2603} = (10, 1, 9, 1)$
38 : $P_{891} = (10, 6, 2, 1)$	89 : $P_{1620} = (3, 4, 5, 1)$	140 : $P_{2628} = (3, 3, 9, 1)$
39 : $P_{895} = (14, 6, 2, 1)$	90 : $P_{1647} = (14, 5, 5, 1)$	141 : $P_{2634} = (9, 3, 9, 1)$
40 : $P_{915} = (2, 8, 2, 1)$	91 : $P_{1677} = (12, 7, 5, 1)$	142 : $P_{2647} = (6, 4, 9, 1)$
41 : $P_{921} = (8, 8, 2, 1)$	92 : $P_{1679} = (14, 7, 5, 1)$	143 : $P_{2652} = (11, 4, 9, 1)$
42 : $P_{946} = (1, 10, 2, 1)$	93 : $P_{1701} = (4, 9, 5, 1)$	144 : $P_{2693} = (4, 7, 9, 1)$
43 : $P_{954} = (9, 10, 2, 1)$	94 : $P_{1705} = (8, 9, 5, 1)$	145 : $P_{2699} = (10, 7, 9, 1)$
44 : $P_{983} = (6, 12, 2, 1)$	95 : $P_{1716} = (3, 10, 5, 1)$	146 : $P_{2732} = (11, 9, 9, 1)$
45 : $P_{985} = (8, 12, 2, 1)$	96 : $P_{1725} = (12, 10, 5, 1)$	147 : $P_{2738} = (1, 10, 9, 1)$
46 : $P_{997} = (4, 13, 2, 1)$	97 : $P_{1735} = (6, 11, 5, 1)$	148 : $P_{2739} = (2, 10, 9, 1)$
47 : $P_{1004} = (11, 13, 2, 1)$	98 : $P_{1737} = (8, 11, 5, 1)$	149 : $P_{2780} = (11, 12, 9, 1)$
48 : $P_{1016} = (7, 14, 2, 1)$	99 : $P_{1750} = (5, 12, 5, 1)$	150 : $P_{2783} = (14, 12, 9, 1)$
49 : $P_{1020} = (11, 14, 2, 1)$	100 : $P_{1757} = (12, 12, 5, 1)$	151 : $P_{2788} = (3, 13, 9, 1)$
50 : $P_{1087} = (14, 2, 3, 1)$	101 : $P_{1796} = (3, 15, 5, 1)$	152 : $P_{2792} = (7, 13, 9, 1)$

153 : $P_{2809} = (8, 14, 9, 1)$	188 : $P_{3186} = (1, 6, 11, 1)$	223 : $P_{3892} = (3, 2, 14, 1)$
154 : $P_{2816} = (15, 14, 9, 1)$	189 : $P_{3197} = (12, 6, 11, 1)$	224 : $P_{3904} = (15, 2, 14, 1)$
155 : $P_{2820} = (3, 15, 9, 1)$	190 : $P_{3202} = (1, 7, 11, 1)$	225 : $P_{3910} = (5, 3, 14, 1)$
156 : $P_{2822} = (5, 15, 9, 1)$	191 : $P_{3214} = (13, 7, 11, 1)$	226 : $P_{3913} = (8, 3, 14, 1)$
157 : $P_{2834} = (1, 0, 10, 1)$	192 : $P_{3242} = (9, 9, 11, 1)$	227 : $P_{3942} = (5, 5, 14, 1)$
158 : $P_{2844} = (11, 0, 10, 1)$	193 : $P_{3244} = (11, 9, 11, 1)$	228 : $P_{3951} = (14, 5, 14, 1)$
159 : $P_{2851} = (2, 1, 10, 1)$	194 : $P_{3259} = (10, 10, 11, 1)$	229 : $P_{3955} = (2, 6, 14, 1)$
160 : $P_{2858} = (9, 1, 10, 1)$	195 : $P_{3260} = (11, 10, 11, 1)$	230 : $P_{3963} = (10, 6, 14, 1)$
161 : $P_{2869} = (4, 2, 10, 1)$	196 : $P_{3275} = (10, 11, 11, 1)$	231 : $P_{3974} = (5, 7, 14, 1)$
162 : $P_{2877} = (12, 2, 10, 1)$	197 : $P_{3290} = (9, 12, 11, 1)$	232 : $P_{3981} = (12, 7, 14, 1)$
163 : $P_{2901} = (4, 4, 10, 1)$	198 : $P_{3295} = (14, 12, 11, 1)$	233 : $P_{4011} = (10, 9, 14, 1)$
164 : $P_{2907} = (10, 4, 10, 1)$	199 : $P_{3299} = (2, 13, 11, 1)$	234 : $P_{4014} = (13, 9, 14, 1)$
165 : $P_{2931} = (2, 6, 10, 1)$	200 : $P_{3301} = (4, 13, 11, 1)$	235 : $P_{4034} = (1, 11, 14, 1)$
166 : $P_{2943} = (14, 6, 10, 1)$	201 : $P_{3315} = (2, 14, 11, 1)$	236 : $P_{4037} = (4, 11, 14, 1)$
167 : $P_{2949} = (4, 7, 10, 1)$	202 : $P_{3320} = (7, 14, 11, 1)$	237 : $P_{4058} = (9, 12, 14, 1)$
168 : $P_{2954} = (9, 7, 10, 1)$	203 : $P_{3381} = (4, 2, 12, 1)$	238 : $P_{4060} = (11, 12, 14, 1)$
169 : $P_{2990} = (13, 9, 10, 1)$	204 : $P_{3387} = (10, 2, 12, 1)$	239 : $P_{4091} = (10, 14, 14, 1)$
170 : $P_{2991} = (14, 9, 10, 1)$	205 : $P_{3442} = (1, 6, 12, 1)$	240 : $P_{4148} = (3, 2, 15, 1)$
171 : $P_{3004} = (11, 10, 10, 1)$	206 : $P_{3452} = (11, 6, 12, 1)$	241 : $P_{4159} = (14, 2, 15, 1)$
172 : $P_{3019} = (10, 11, 10, 1)$	207 : $P_{3462} = (5, 7, 12, 1)$	242 : $P_{4195} = (2, 5, 15, 1)$
173 : $P_{3020} = (11, 11, 10, 1)$	208 : $P_{3471} = (14, 7, 12, 1)$	243 : $P_{4201} = (8, 5, 15, 1)$
174 : $P_{3026} = (1, 12, 10, 1)$	209 : $P_{3508} = (3, 10, 12, 1)$	244 : $P_{4213} = (4, 6, 15, 1)$
175 : $P_{3032} = (7, 12, 10, 1)$	210 : $P_{3510} = (5, 10, 12, 1)$	245 : $P_{4222} = (13, 6, 15, 1)$
176 : $P_{3042} = (1, 13, 10, 1)$	211 : $P_{3542} = (5, 12, 12, 1)$	246 : $P_{4244} = (3, 8, 15, 1)$
177 : $P_{3047} = (6, 13, 10, 1)$	212 : $P_{3701} = (4, 6, 13, 1)$	247 : $P_{4245} = (4, 8, 15, 1)$
178 : $P_{3067} = (10, 14, 10, 1)$	213 : $P_{3712} = (15, 6, 13, 1)$	248 : $P_{4281} = (8, 10, 15, 1)$
179 : $P_{3071} = (14, 14, 10, 1)$	214 : $P_{3714} = (1, 7, 13, 1)$	249 : $P_{4286} = (13, 10, 15, 1)$
180 : $P_{3090} = (1, 0, 11, 1)$	215 : $P_{3724} = (11, 7, 13, 1)$	250 : $P_{4292} = (3, 11, 15, 1)$
181 : $P_{3099} = (10, 0, 11, 1)$	216 : $P_{3755} = (10, 9, 13, 1)$	251 : $P_{4296} = (7, 11, 15, 1)$
182 : $P_{3109} = (4, 1, 11, 1)$	217 : $P_{3759} = (14, 9, 13, 1)$	252 : $P_{4334} = (13, 13, 15, 1)$
183 : $P_{3119} = (14, 1, 11, 1)$	218 : $P_{3769} = (8, 10, 13, 1)$	253 : $P_{4336} = (15, 13, 15, 1)$
184 : $P_{3123} = (2, 2, 11, 1)$	219 : $P_{3776} = (15, 10, 13, 1)$	254 : $P_{4345} = (8, 14, 15, 1)$
185 : $P_{3132} = (11, 2, 11, 1)$	220 : $P_{3824} = (15, 13, 13, 1)$	255 : $P_{4346} = (9, 14, 15, 1)$
186 : $P_{3159} = (6, 4, 11, 1)$	221 : $P_{3877} = (4, 1, 14, 1)$	256 : $P_{4357} = (4, 15, 15, 1)$
187 : $P_{3162} = (9, 4, 11, 1)$	222 : $P_{3884} = (11, 1, 14, 1)$	