

Rank-65858 over GF(16)

January 15, 2021

The equation

The equation of the surface is :

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

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

The point rank of the equation over GF(16) is 287449638

General information

Number of lines	0
Number of points	273
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	273
Number of Hesse planes	0
Number of axes	0
Type of points on lines	
Type of lines on points	0^{273}

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 273 points not on any line:

The points on the surface but not on lines are:

0 : $P_4 = (1, 1, 1, 1)$	27 : $P_{871} = (6, 5, 2, 1)$
1 : $P_{275} = (1, 0, 0, 1)$	28 : $P_{879} = (14, 5, 2, 1)$
2 : $P_{284} = (10, 0, 0, 1)$	29 : $P_{880} = (15, 5, 2, 1)$
3 : $P_{285} = (11, 0, 0, 1)$	30 : $P_{884} = (3, 6, 2, 1)$
4 : $P_{290} = (0, 1, 0, 1)$	31 : $P_{889} = (8, 6, 2, 1)$
5 : $P_{291} = (1, 1, 0, 1)$	32 : $P_{896} = (15, 6, 2, 1)$
6 : $P_{434} = (0, 10, 0, 1)$	33 : $P_{927} = (14, 8, 2, 1)$
7 : $P_{444} = (10, 10, 0, 1)$	34 : $P_{935} = (6, 9, 2, 1)$
8 : $P_{450} = (0, 11, 0, 1)$	35 : $P_{950} = (5, 10, 2, 1)$
9 : $P_{461} = (11, 11, 0, 1)$	36 : $P_{966} = (5, 11, 2, 1)$
10 : $P_{530} = (0, 0, 1, 1)$	37 : $P_{1010} = (1, 14, 2, 1)$
11 : $P_{531} = (1, 0, 1, 1)$	38 : $P_{1015} = (6, 14, 2, 1)$
12 : $P_{546} = (0, 1, 1, 1)$	39 : $P_{1020} = (11, 14, 2, 1)$
13 : $P_{568} = (7, 2, 1, 1)$	40 : $P_{1034} = (9, 15, 2, 1)$
14 : $P_{591} = (14, 3, 1, 1)$	41 : $P_{1035} = (10, 15, 2, 1)$
15 : $P_{605} = (12, 4, 1, 1)$	42 : $P_{1039} = (14, 15, 2, 1)$
16 : $P_{611} = (2, 5, 1, 1)$	43 : $P_{1063} = (6, 1, 3, 1)$
17 : $P_{640} = (15, 6, 1, 1)$	44 : $P_{1086} = (13, 2, 3, 1)$
18 : $P_{646} = (5, 7, 1, 1)$	45 : $P_{1144} = (7, 6, 3, 1)$
19 : $P_{661} = (4, 8, 1, 1)$	46 : $P_{1150} = (13, 6, 3, 1)$
20 : $P_{679} = (6, 9, 1, 1)$	47 : $P_{1152} = (15, 6, 3, 1)$
21 : $P_{729} = (8, 12, 1, 1)$	48 : $P_{1154} = (1, 7, 3, 1)$
22 : $P_{740} = (3, 13, 1, 1)$	49 : $P_{1161} = (8, 7, 3, 1)$
23 : $P_{766} = (13, 14, 1, 1)$	50 : $P_{1166} = (13, 7, 3, 1)$
24 : $P_{778} = (9, 15, 1, 1)$	51 : $P_{1184} = (15, 8, 3, 1)$
25 : $P_{816} = (15, 1, 2, 1)$	52 : $P_{1191} = (6, 9, 3, 1)$
26 : $P_{838} = (5, 3, 2, 1)$	53 : $P_{1208} = (7, 10, 3, 1)$

54 : $P_{1223} = (6, 11, 3, 1)$	108 : $P_{1973} = (4, 10, 6, 1)$
55 : $P_{1259} = (10, 13, 3, 1)$	109 : $P_{1999} = (14, 11, 6, 1)$
56 : $P_{1260} = (11, 13, 3, 1)$	110 : $P_{2006} = (5, 12, 6, 1)$
57 : $P_{1264} = (15, 13, 3, 1)$	111 : $P_{2021} = (4, 13, 6, 1)$
58 : $P_{1283} = (2, 15, 3, 1)$	112 : $P_{2038} = (5, 14, 6, 1)$
59 : $P_{1288} = (7, 15, 3, 1)$	113 : $P_{2040} = (7, 14, 6, 1)$
60 : $P_{1290} = (9, 15, 3, 1)$	114 : $P_{2043} = (10, 14, 6, 1)$
61 : $P_{1316} = (3, 1, 4, 1)$	115 : $P_{2095} = (14, 1, 7, 1)$
62 : $P_{1330} = (1, 2, 4, 1)$	116 : $P_{2101} = (4, 2, 7, 1)$
63 : $P_{1339} = (10, 2, 4, 1)$	117 : $P_{2109} = (12, 2, 7, 1)$
64 : $P_{1342} = (13, 2, 4, 1)$	118 : $P_{2110} = (13, 2, 7, 1)$
65 : $P_{1347} = (2, 3, 4, 1)$	119 : $P_{2135} = (6, 4, 7, 1)$
66 : $P_{1356} = (11, 3, 4, 1)$	120 : $P_{2139} = (10, 4, 7, 1)$
67 : $P_{1359} = (14, 3, 4, 1)$	121 : $P_{2144} = (15, 4, 7, 1)$
68 : $P_{1385} = (8, 5, 4, 1)$	122 : $P_{2163} = (2, 6, 7, 1)$
69 : $P_{1427} = (2, 8, 4, 1)$	123 : $P_{2239} = (14, 10, 7, 1)$
70 : $P_{1428} = (3, 8, 4, 1)$	124 : $P_{2245} = (4, 11, 7, 1)$
71 : $P_{1438} = (13, 8, 4, 1)$	125 : $P_{2271} = (14, 12, 7, 1)$
72 : $P_{1465} = (8, 10, 4, 1)$	126 : $P_{2288} = (15, 13, 7, 1)$
73 : $P_{1481} = (8, 11, 4, 1)$	127 : $P_{2291} = (2, 14, 7, 1)$
74 : $P_{1508} = (3, 13, 4, 1)$	128 : $P_{2293} = (4, 14, 7, 1)$
75 : $P_{1510} = (5, 13, 4, 1)$	129 : $P_{2304} = (15, 14, 7, 1)$
76 : $P_{1520} = (15, 13, 4, 1)$	130 : $P_{2306} = (1, 15, 7, 1)$
77 : $P_{1534} = (13, 14, 4, 1)$	131 : $P_{2307} = (2, 15, 7, 1)$
78 : $P_{1539} = (2, 15, 4, 1)$	132 : $P_{2316} = (11, 15, 7, 1)$
79 : $P_{1582} = (13, 1, 5, 1)$	133 : $P_{2344} = (7, 1, 8, 1)$
80 : $P_{1605} = (4, 3, 5, 1)$	134 : $P_{2360} = (7, 2, 8, 1)$
81 : $P_{1613} = (12, 3, 5, 1)$	135 : $P_{2374} = (5, 3, 8, 1)$
82 : $P_{1615} = (14, 3, 5, 1)$	136 : $P_{2403} = (2, 5, 8, 1)$
83 : $P_{1624} = (7, 4, 5, 1)$	137 : $P_{2407} = (6, 5, 8, 1)$
84 : $P_{1668} = (3, 7, 5, 1)$	138 : $P_{2410} = (9, 5, 8, 1)$
85 : $P_{1675} = (10, 7, 5, 1)$	139 : $P_{2418} = (1, 6, 8, 1)$
86 : $P_{1676} = (11, 7, 5, 1)$	140 : $P_{2420} = (3, 6, 8, 1)$
87 : $P_{1726} = (13, 10, 5, 1)$	141 : $P_{2429} = (12, 6, 8, 1)$
88 : $P_{1741} = (12, 11, 5, 1)$	142 : $P_{2438} = (5, 7, 8, 1)$
89 : $P_{1746} = (1, 12, 5, 1)$	143 : $P_{2439} = (6, 7, 8, 1)$
90 : $P_{1752} = (7, 12, 5, 1)$	144 : $P_{2445} = (12, 7, 8, 1)$
91 : $P_{1760} = (15, 12, 5, 1)$	145 : $P_{2477} = (12, 9, 8, 1)$
92 : $P_{1764} = (3, 13, 5, 1)$	146 : $P_{2487} = (6, 10, 8, 1)$
93 : $P_{1768} = (7, 13, 5, 1)$	147 : $P_{2504} = (7, 11, 8, 1)$
94 : $P_{1773} = (12, 13, 5, 1)$	148 : $P_{2518} = (5, 12, 8, 1)$
95 : $P_{1790} = (13, 14, 5, 1)$	149 : $P_{2523} = (10, 12, 8, 1)$
96 : $P_{1796} = (3, 15, 5, 1)$	150 : $P_{2524} = (11, 12, 8, 1)$
97 : $P_{1829} = (4, 1, 6, 1)$	151 : $P_{2598} = (5, 1, 9, 1)$
98 : $P_{1878} = (5, 4, 6, 1)$	152 : $P_{2616} = (7, 2, 9, 1)$
99 : $P_{1882} = (9, 4, 6, 1)$	153 : $P_{2629} = (4, 3, 9, 1)$
100 : $P_{1887} = (14, 4, 6, 1)$	154 : $P_{2642} = (1, 4, 9, 1)$
101 : $P_{1890} = (1, 5, 6, 1)$	155 : $P_{2648} = (7, 4, 9, 1)$
102 : $P_{1898} = (9, 5, 6, 1)$	156 : $P_{2652} = (11, 4, 9, 1)$
103 : $P_{1900} = (11, 5, 6, 1)$	157 : $P_{2659} = (2, 5, 9, 1)$
104 : $P_{1930} = (9, 7, 6, 1)$	158 : $P_{2661} = (4, 5, 9, 1)$
105 : $P_{1965} = (12, 9, 6, 1)$	159 : $P_{2667} = (10, 5, 9, 1)$
106 : $P_{1966} = (13, 9, 6, 1)$	160 : $P_{2692} = (3, 7, 9, 1)$
107 : $P_{1967} = (14, 9, 6, 1)$	161 : $P_{2694} = (5, 7, 9, 1)$

162 : $P_{2697} = (8, 7, 9, 1)$	216 : $P_{3514} = (9, 10, 12, 1)$
163 : $P_{2720} = (15, 8, 9, 1)$	217 : $P_{3523} = (2, 11, 12, 1)$
164 : $P_{2752} = (15, 10, 9, 1)$	218 : $P_{3557} = (4, 13, 12, 1)$
165 : $P_{2768} = (15, 11, 9, 1)$	219 : $P_{3626} = (9, 1, 13, 1)$
166 : $P_{2821} = (4, 15, 9, 1)$	220 : $P_{3641} = (8, 2, 13, 1)$
167 : $P_{2822} = (5, 15, 9, 1)$	221 : $P_{3644} = (11, 2, 13, 1)$
168 : $P_{2824} = (7, 15, 9, 1)$	222 : $P_{3645} = (12, 2, 13, 1)$
169 : $P_{2833} = (0, 0, 10, 1)$	223 : $P_{3705} = (8, 6, 13, 1)$
170 : $P_{2843} = (10, 0, 10, 1)$	224 : $P_{3722} = (9, 7, 13, 1)$
171 : $P_{2877} = (12, 2, 10, 1)$	225 : $P_{3730} = (1, 8, 13, 1)$
172 : $P_{2886} = (5, 3, 10, 1)$	226 : $P_{3739} = (10, 8, 13, 1)$
173 : $P_{2906} = (9, 4, 10, 1)$	227 : $P_{3743} = (14, 8, 13, 1)$
174 : $P_{2919} = (6, 5, 10, 1)$	228 : $P_{3747} = (2, 9, 13, 1)$
175 : $P_{2932} = (3, 6, 10, 1)$	229 : $P_{3753} = (8, 9, 13, 1)$
176 : $P_{2953} = (8, 7, 10, 1)$	230 : $P_{3759} = (14, 9, 13, 1)$
177 : $P_{2976} = (15, 8, 10, 1)$	231 : $P_{3763} = (2, 10, 13, 1)$
178 : $P_{2990} = (13, 9, 10, 1)$	232 : $P_{3786} = (9, 11, 13, 1)$
179 : $P_{2993} = (0, 10, 10, 1)$	233 : $P_{3807} = (14, 12, 13, 1)$
180 : $P_{3003} = (10, 10, 10, 1)$	234 : $P_{3827} = (2, 14, 13, 1)$
181 : $P_{3039} = (14, 12, 10, 1)$	235 : $P_{3831} = (6, 14, 13, 1)$
182 : $P_{3045} = (4, 13, 10, 1)$	236 : $P_{3832} = (7, 14, 13, 1)$
183 : $P_{3059} = (2, 14, 10, 1)$	237 : $P_{3881} = (8, 1, 14, 1)$
184 : $P_{3080} = (7, 15, 10, 1)$	238 : $P_{3913} = (8, 3, 14, 1)$
185 : $P_{3089} = (0, 0, 11, 1)$	239 : $P_{3914} = (9, 3, 14, 1)$
186 : $P_{3100} = (11, 0, 11, 1)$	240 : $P_{3917} = (12, 3, 14, 1)$
187 : $P_{3125} = (4, 2, 11, 1)$	241 : $P_{3933} = (12, 4, 14, 1)$
188 : $P_{3149} = (12, 3, 11, 1)$	242 : $P_{3946} = (9, 5, 14, 1)$
189 : $P_{3159} = (6, 4, 11, 1)$	243 : $P_{3989} = (4, 8, 14, 1)$
190 : $P_{3177} = (8, 5, 11, 1)$	244 : $P_{3994} = (9, 8, 14, 1)$
191 : $P_{3187} = (2, 6, 11, 1)$	245 : $P_{3996} = (11, 8, 14, 1)$
192 : $P_{3210} = (9, 7, 11, 1)$	246 : $P_{4002} = (1, 9, 14, 1)$
193 : $P_{3230} = (13, 8, 11, 1)$	247 : $P_{4011} = (10, 9, 14, 1)$
194 : $P_{3247} = (14, 9, 11, 1)$	248 : $P_{4013} = (12, 9, 14, 1)$
195 : $P_{3265} = (0, 11, 11, 1)$	249 : $P_{4020} = (3, 10, 14, 1)$
196 : $P_{3276} = (11, 11, 11, 1)$	250 : $P_{4036} = (3, 11, 14, 1)$
197 : $P_{3296} = (15, 12, 11, 1)$	251 : $P_{4054} = (5, 12, 14, 1)$
198 : $P_{3302} = (5, 13, 11, 1)$	252 : $P_{4057} = (8, 12, 14, 1)$
199 : $P_{3320} = (7, 14, 11, 1)$	253 : $P_{4064} = (15, 12, 14, 1)$
200 : $P_{3332} = (3, 15, 11, 1)$	254 : $P_{4100} = (3, 15, 14, 1)$
201 : $P_{3363} = (2, 1, 12, 1)$	255 : $P_{4141} = (12, 1, 15, 1)$
202 : $P_{3380} = (3, 2, 12, 1)$	256 : $P_{4189} = (12, 4, 15, 1)$
203 : $P_{3381} = (4, 2, 12, 1)$	257 : $P_{4201} = (8, 5, 15, 1)$
204 : $P_{3386} = (9, 2, 12, 1)$	258 : $P_{4217} = (8, 6, 15, 1)$
205 : $P_{3394} = (1, 3, 12, 1)$	259 : $P_{4219} = (10, 6, 15, 1)$
206 : $P_{3397} = (4, 3, 12, 1)$	260 : $P_{4220} = (11, 6, 15, 1)$
207 : $P_{3403} = (10, 3, 12, 1)$	261 : $P_{4245} = (4, 8, 15, 1)$
208 : $P_{3415} = (6, 4, 12, 1)$	262 : $P_{4254} = (13, 8, 15, 1)$
209 : $P_{3416} = (7, 4, 12, 1)$	263 : $P_{4255} = (14, 8, 15, 1)$
210 : $P_{3418} = (9, 4, 12, 1)$	264 : $P_{4285} = (12, 10, 15, 1)$
211 : $P_{3443} = (2, 6, 12, 1)$	265 : $P_{4302} = (13, 11, 15, 1)$
212 : $P_{3460} = (3, 7, 12, 1)$	266 : $P_{4311} = (6, 12, 15, 1)$
213 : $P_{3492} = (3, 9, 12, 1)$	267 : $P_{4313} = (8, 12, 15, 1)$
214 : $P_{3500} = (11, 9, 12, 1)$	268 : $P_{4318} = (13, 12, 15, 1)$
215 : $P_{3502} = (13, 9, 12, 1)$	269 : $P_{4322} = (1, 13, 15, 1)$

270 : $P_{4326} = (5, 13, 15, 1)$
 271 : $P_{4327} = (6, 13, 15, 1)$

272 : $P_{4343} = (6, 14, 15, 1)$

Line Intersection Graph

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Neighbor sets in the line intersection graph:

The surface has 273 points:

The points on the surface are:

0 : $P_4 = (1, 1, 1, 1)$	42 : $P_{1039} = (14, 15, 2, 1)$	84 : $P_{1668} = (3, 7, 5, 1)$
1 : $P_{275} = (1, 0, 0, 1)$	43 : $P_{1063} = (6, 1, 3, 1)$	85 : $P_{1675} = (10, 7, 5, 1)$
2 : $P_{284} = (10, 0, 0, 1)$	44 : $P_{1086} = (13, 2, 3, 1)$	86 : $P_{1676} = (11, 7, 5, 1)$
3 : $P_{285} = (11, 0, 0, 1)$	45 : $P_{1144} = (7, 6, 3, 1)$	87 : $P_{1726} = (13, 10, 5, 1)$
4 : $P_{290} = (0, 1, 0, 1)$	46 : $P_{1150} = (13, 6, 3, 1)$	88 : $P_{1741} = (12, 11, 5, 1)$
5 : $P_{291} = (1, 1, 0, 1)$	47 : $P_{1152} = (15, 6, 3, 1)$	89 : $P_{1746} = (1, 12, 5, 1)$
6 : $P_{434} = (0, 10, 0, 1)$	48 : $P_{1154} = (1, 7, 3, 1)$	90 : $P_{1752} = (7, 12, 5, 1)$
7 : $P_{444} = (10, 10, 0, 1)$	49 : $P_{1161} = (8, 7, 3, 1)$	91 : $P_{1760} = (15, 12, 5, 1)$
8 : $P_{450} = (0, 11, 0, 1)$	50 : $P_{1166} = (13, 7, 3, 1)$	92 : $P_{1764} = (3, 13, 5, 1)$
9 : $P_{461} = (11, 11, 0, 1)$	51 : $P_{1184} = (15, 8, 3, 1)$	93 : $P_{1768} = (7, 13, 5, 1)$
10 : $P_{530} = (0, 0, 1, 1)$	52 : $P_{1191} = (6, 9, 3, 1)$	94 : $P_{1773} = (12, 13, 5, 1)$
11 : $P_{531} = (1, 0, 1, 1)$	53 : $P_{1208} = (7, 10, 3, 1)$	95 : $P_{1790} = (13, 14, 5, 1)$
12 : $P_{546} = (0, 1, 1, 1)$	54 : $P_{1223} = (6, 11, 3, 1)$	96 : $P_{1796} = (3, 15, 5, 1)$
13 : $P_{568} = (7, 2, 1, 1)$	55 : $P_{1259} = (10, 13, 3, 1)$	97 : $P_{1829} = (4, 1, 6, 1)$
14 : $P_{591} = (14, 3, 1, 1)$	56 : $P_{1260} = (11, 13, 3, 1)$	98 : $P_{1878} = (5, 4, 6, 1)$
15 : $P_{605} = (12, 4, 1, 1)$	57 : $P_{1264} = (15, 13, 3, 1)$	99 : $P_{1882} = (9, 4, 6, 1)$
16 : $P_{611} = (2, 5, 1, 1)$	58 : $P_{1283} = (2, 15, 3, 1)$	100 : $P_{1887} = (14, 4, 6, 1)$
17 : $P_{640} = (15, 6, 1, 1)$	59 : $P_{1288} = (7, 15, 3, 1)$	101 : $P_{1890} = (1, 5, 6, 1)$
18 : $P_{646} = (5, 7, 1, 1)$	60 : $P_{1290} = (9, 15, 3, 1)$	102 : $P_{1898} = (9, 5, 6, 1)$
19 : $P_{661} = (4, 8, 1, 1)$	61 : $P_{1316} = (3, 1, 4, 1)$	103 : $P_{1900} = (11, 5, 6, 1)$
20 : $P_{679} = (6, 9, 1, 1)$	62 : $P_{1330} = (1, 2, 4, 1)$	104 : $P_{1930} = (9, 7, 6, 1)$
21 : $P_{729} = (8, 12, 1, 1)$	63 : $P_{1339} = (10, 2, 4, 1)$	105 : $P_{1965} = (12, 9, 6, 1)$
22 : $P_{740} = (3, 13, 1, 1)$	64 : $P_{1342} = (13, 2, 4, 1)$	106 : $P_{1966} = (13, 9, 6, 1)$
23 : $P_{766} = (13, 14, 1, 1)$	65 : $P_{1347} = (2, 3, 4, 1)$	107 : $P_{1967} = (14, 9, 6, 1)$
24 : $P_{778} = (9, 15, 1, 1)$	66 : $P_{1356} = (11, 3, 4, 1)$	108 : $P_{1973} = (4, 10, 6, 1)$
25 : $P_{816} = (15, 1, 2, 1)$	67 : $P_{1359} = (14, 3, 4, 1)$	109 : $P_{1999} = (14, 11, 6, 1)$
26 : $P_{838} = (5, 3, 2, 1)$	68 : $P_{1385} = (8, 5, 4, 1)$	110 : $P_{2006} = (5, 12, 6, 1)$
27 : $P_{871} = (6, 5, 2, 1)$	69 : $P_{1427} = (2, 8, 4, 1)$	111 : $P_{2021} = (4, 13, 6, 1)$
28 : $P_{879} = (14, 5, 2, 1)$	70 : $P_{1428} = (3, 8, 4, 1)$	112 : $P_{2038} = (5, 14, 6, 1)$
29 : $P_{880} = (15, 5, 2, 1)$	71 : $P_{1438} = (13, 8, 4, 1)$	113 : $P_{2040} = (7, 14, 6, 1)$
30 : $P_{884} = (3, 6, 2, 1)$	72 : $P_{1465} = (8, 10, 4, 1)$	114 : $P_{2043} = (10, 14, 6, 1)$
31 : $P_{889} = (8, 6, 2, 1)$	73 : $P_{1481} = (8, 11, 4, 1)$	115 : $P_{2095} = (14, 1, 7, 1)$
32 : $P_{896} = (15, 6, 2, 1)$	74 : $P_{1508} = (3, 13, 4, 1)$	116 : $P_{2101} = (4, 2, 7, 1)$
33 : $P_{927} = (14, 8, 2, 1)$	75 : $P_{1510} = (5, 13, 4, 1)$	117 : $P_{2109} = (12, 2, 7, 1)$
34 : $P_{935} = (6, 9, 2, 1)$	76 : $P_{1520} = (15, 13, 4, 1)$	118 : $P_{2110} = (13, 2, 7, 1)$
35 : $P_{950} = (5, 10, 2, 1)$	77 : $P_{1534} = (13, 14, 4, 1)$	119 : $P_{2135} = (6, 4, 7, 1)$
36 : $P_{966} = (5, 11, 2, 1)$	78 : $P_{1539} = (2, 15, 4, 1)$	120 : $P_{2139} = (10, 4, 7, 1)$
37 : $P_{1010} = (1, 14, 2, 1)$	79 : $P_{1582} = (13, 1, 5, 1)$	121 : $P_{2144} = (15, 4, 7, 1)$
38 : $P_{1015} = (6, 14, 2, 1)$	80 : $P_{1605} = (4, 3, 5, 1)$	122 : $P_{2163} = (2, 6, 7, 1)$
39 : $P_{1020} = (11, 14, 2, 1)$	81 : $P_{1613} = (12, 3, 5, 1)$	123 : $P_{2239} = (14, 10, 7, 1)$
40 : $P_{1034} = (9, 15, 2, 1)$	82 : $P_{1615} = (14, 3, 5, 1)$	124 : $P_{2245} = (4, 11, 7, 1)$
41 : $P_{1035} = (10, 15, 2, 1)$	83 : $P_{1624} = (7, 4, 5, 1)$	125 : $P_{2271} = (14, 12, 7, 1)$

126 : $P_{2288} = (15, 13, 7, 1)$	176 : $P_{2953} = (8, 7, 10, 1)$	226 : $P_{3739} = (10, 8, 13, 1)$
127 : $P_{2291} = (2, 14, 7, 1)$	177 : $P_{2976} = (15, 8, 10, 1)$	227 : $P_{3743} = (14, 8, 13, 1)$
128 : $P_{2293} = (4, 14, 7, 1)$	178 : $P_{2990} = (13, 9, 10, 1)$	228 : $P_{3747} = (2, 9, 13, 1)$
129 : $P_{2304} = (15, 14, 7, 1)$	179 : $P_{2993} = (0, 10, 10, 1)$	229 : $P_{3753} = (8, 9, 13, 1)$
130 : $P_{2306} = (1, 15, 7, 1)$	180 : $P_{3003} = (10, 10, 10, 1)$	230 : $P_{3759} = (14, 9, 13, 1)$
131 : $P_{2307} = (2, 15, 7, 1)$	181 : $P_{3039} = (14, 12, 10, 1)$	231 : $P_{3763} = (2, 10, 13, 1)$
132 : $P_{2316} = (11, 15, 7, 1)$	182 : $P_{3045} = (4, 13, 10, 1)$	232 : $P_{3786} = (9, 11, 13, 1)$
133 : $P_{2344} = (7, 1, 8, 1)$	183 : $P_{3059} = (2, 14, 10, 1)$	233 : $P_{3807} = (14, 12, 13, 1)$
134 : $P_{2360} = (7, 2, 8, 1)$	184 : $P_{3080} = (7, 15, 10, 1)$	234 : $P_{3827} = (2, 14, 13, 1)$
135 : $P_{2374} = (5, 3, 8, 1)$	185 : $P_{3089} = (0, 0, 11, 1)$	235 : $P_{3831} = (6, 14, 13, 1)$
136 : $P_{2403} = (2, 5, 8, 1)$	186 : $P_{3100} = (11, 0, 11, 1)$	236 : $P_{3832} = (7, 14, 13, 1)$
137 : $P_{2407} = (6, 5, 8, 1)$	187 : $P_{3125} = (4, 2, 11, 1)$	237 : $P_{3881} = (8, 1, 14, 1)$
138 : $P_{2410} = (9, 5, 8, 1)$	188 : $P_{3149} = (12, 3, 11, 1)$	238 : $P_{3913} = (8, 3, 14, 1)$
139 : $P_{2418} = (1, 6, 8, 1)$	189 : $P_{3159} = (6, 4, 11, 1)$	239 : $P_{3914} = (9, 3, 14, 1)$
140 : $P_{2420} = (3, 6, 8, 1)$	190 : $P_{3177} = (8, 5, 11, 1)$	240 : $P_{3917} = (12, 3, 14, 1)$
141 : $P_{2429} = (12, 6, 8, 1)$	191 : $P_{3187} = (2, 6, 11, 1)$	241 : $P_{3933} = (12, 4, 14, 1)$
142 : $P_{2438} = (5, 7, 8, 1)$	192 : $P_{3210} = (9, 7, 11, 1)$	242 : $P_{3946} = (9, 5, 14, 1)$
143 : $P_{2439} = (6, 7, 8, 1)$	193 : $P_{3230} = (13, 8, 11, 1)$	243 : $P_{3989} = (4, 8, 14, 1)$
144 : $P_{2445} = (12, 7, 8, 1)$	194 : $P_{3247} = (14, 9, 11, 1)$	244 : $P_{3994} = (9, 8, 14, 1)$
145 : $P_{2477} = (12, 9, 8, 1)$	195 : $P_{3265} = (0, 11, 11, 1)$	245 : $P_{3996} = (11, 8, 14, 1)$
146 : $P_{2487} = (6, 10, 8, 1)$	196 : $P_{3276} = (11, 11, 11, 1)$	246 : $P_{4002} = (1, 9, 14, 1)$
147 : $P_{2504} = (7, 11, 8, 1)$	197 : $P_{3296} = (15, 12, 11, 1)$	247 : $P_{4011} = (10, 9, 14, 1)$
148 : $P_{2518} = (5, 12, 8, 1)$	198 : $P_{3302} = (5, 13, 11, 1)$	248 : $P_{4013} = (12, 9, 14, 1)$
149 : $P_{2523} = (10, 12, 8, 1)$	199 : $P_{3320} = (7, 14, 11, 1)$	249 : $P_{4020} = (3, 10, 14, 1)$
150 : $P_{2524} = (11, 12, 8, 1)$	200 : $P_{3332} = (3, 15, 11, 1)$	250 : $P_{4036} = (3, 11, 14, 1)$
151 : $P_{2598} = (5, 1, 9, 1)$	201 : $P_{3363} = (2, 1, 12, 1)$	251 : $P_{4054} = (5, 12, 14, 1)$
152 : $P_{2616} = (7, 2, 9, 1)$	202 : $P_{3380} = (3, 2, 12, 1)$	252 : $P_{4057} = (8, 12, 14, 1)$
153 : $P_{2629} = (4, 3, 9, 1)$	203 : $P_{3381} = (4, 2, 12, 1)$	253 : $P_{4064} = (15, 12, 14, 1)$
154 : $P_{2642} = (1, 4, 9, 1)$	204 : $P_{3386} = (9, 2, 12, 1)$	254 : $P_{4100} = (3, 15, 14, 1)$
155 : $P_{2648} = (7, 4, 9, 1)$	205 : $P_{3394} = (1, 3, 12, 1)$	255 : $P_{4141} = (12, 1, 15, 1)$
156 : $P_{2652} = (11, 4, 9, 1)$	206 : $P_{3397} = (4, 3, 12, 1)$	256 : $P_{4189} = (12, 4, 15, 1)$
157 : $P_{2659} = (2, 5, 9, 1)$	207 : $P_{3403} = (10, 3, 12, 1)$	257 : $P_{4201} = (8, 5, 15, 1)$
158 : $P_{2661} = (4, 5, 9, 1)$	208 : $P_{3415} = (6, 4, 12, 1)$	258 : $P_{4217} = (8, 6, 15, 1)$
159 : $P_{2667} = (10, 5, 9, 1)$	209 : $P_{3416} = (7, 4, 12, 1)$	259 : $P_{4219} = (10, 6, 15, 1)$
160 : $P_{2692} = (3, 7, 9, 1)$	210 : $P_{3418} = (9, 4, 12, 1)$	260 : $P_{4220} = (11, 6, 15, 1)$
161 : $P_{2694} = (5, 7, 9, 1)$	211 : $P_{3443} = (2, 6, 12, 1)$	261 : $P_{4245} = (4, 8, 15, 1)$
162 : $P_{2697} = (8, 7, 9, 1)$	212 : $P_{3460} = (3, 7, 12, 1)$	262 : $P_{4254} = (13, 8, 15, 1)$
163 : $P_{2720} = (15, 8, 9, 1)$	213 : $P_{3492} = (3, 9, 12, 1)$	263 : $P_{4255} = (14, 8, 15, 1)$
164 : $P_{2752} = (15, 10, 9, 1)$	214 : $P_{3500} = (11, 9, 12, 1)$	264 : $P_{4285} = (12, 10, 15, 1)$
165 : $P_{2768} = (15, 11, 9, 1)$	215 : $P_{3502} = (13, 9, 12, 1)$	265 : $P_{4302} = (13, 11, 15, 1)$
166 : $P_{2821} = (4, 15, 9, 1)$	216 : $P_{3514} = (9, 10, 12, 1)$	266 : $P_{4311} = (6, 12, 15, 1)$
167 : $P_{2822} = (5, 15, 9, 1)$	217 : $P_{3523} = (2, 11, 12, 1)$	267 : $P_{4313} = (8, 12, 15, 1)$
168 : $P_{2824} = (7, 15, 9, 1)$	218 : $P_{3557} = (4, 13, 12, 1)$	268 : $P_{4318} = (13, 12, 15, 1)$
169 : $P_{2833} = (0, 0, 10, 1)$	219 : $P_{3626} = (9, 1, 13, 1)$	269 : $P_{4322} = (1, 13, 15, 1)$
170 : $P_{2843} = (10, 0, 10, 1)$	220 : $P_{3641} = (8, 2, 13, 1)$	270 : $P_{4326} = (5, 13, 15, 1)$
171 : $P_{2877} = (12, 2, 10, 1)$	221 : $P_{3644} = (11, 2, 13, 1)$	271 : $P_{4327} = (6, 13, 15, 1)$
172 : $P_{2886} = (5, 3, 10, 1)$	222 : $P_{3645} = (12, 2, 13, 1)$	272 : $P_{4343} = (6, 14, 15, 1)$
173 : $P_{2906} = (9, 4, 10, 1)$	223 : $P_{3705} = (8, 6, 13, 1)$	
174 : $P_{2919} = (6, 5, 10, 1)$	224 : $P_{3722} = (9, 7, 13, 1)$	
175 : $P_{2932} = (3, 6, 10, 1)$	225 : $P_{3730} = (1, 8, 13, 1)$	