

# Rank-74280 over GF(16)

January 15, 2021

## The equation

The equation of the surface is :

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

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

The point rank of the equation over GF(16) is 287379990

## 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 : $P_1 = (0, 1, 0, 0)$	27 : $P_{452} = (2, 11, 0, 1)$
1 : $P_3 = (0, 0, 0, 1)$	28 : $P_{459} = (9, 11, 0, 1)$
2 : $P_4 = (1, 1, 1, 1)$	29 : $P_{461} = (11, 11, 0, 1)$
3 : $P_{36} = (1, 1, 1, 0)$	30 : $P_{471} = (5, 12, 0, 1)$
4 : $P_{56} = (5, 2, 1, 0)$	31 : $P_{497} = (15, 13, 0, 1)$
5 : $P_{80} = (13, 3, 1, 0)$	32 : $P_{520} = (6, 15, 0, 1)$
6 : $P_{91} = (8, 4, 1, 0)$	33 : $P_{531} = (1, 0, 1, 1)$
7 : $P_{106} = (7, 5, 1, 0)$	34 : $P_{546} = (0, 1, 1, 1)$
8 : $P_{159} = (12, 8, 1, 0)$	35 : $P_{583} = (6, 3, 1, 1)$
9 : $P_{178} = (15, 9, 1, 0)$	36 : $P_{588} = (11, 3, 1, 1)$
10 : $P_{181} = (2, 10, 1, 0)$	37 : $P_{589} = (12, 3, 1, 1)$
11 : $P_{188} = (9, 10, 1, 0)$	38 : $P_{615} = (6, 5, 1, 1)$
12 : $P_{189} = (10, 10, 1, 0)$	39 : $P_{619} = (10, 5, 1, 1)$
13 : $P_{199} = (4, 11, 1, 0)$	40 : $P_{622} = (13, 5, 1, 1)$
14 : $P_{206} = (11, 11, 1, 0)$	41 : $P_{664} = (7, 8, 1, 1)$
15 : $P_{209} = (14, 11, 1, 0)$	42 : $P_{668} = (11, 8, 1, 1)$
16 : $P_{246} = (3, 14, 1, 0)$	43 : $P_{670} = (13, 8, 1, 1)$
17 : $P_{265} = (6, 15, 1, 0)$	44 : $P_{776} = (7, 15, 1, 1)$
18 : $P_{275} = (1, 0, 0, 1)$	45 : $P_{779} = (10, 15, 1, 1)$
19 : $P_{335} = (13, 3, 0, 1)$	46 : $P_{781} = (12, 15, 1, 1)$
20 : $P_{361} = (7, 5, 0, 1)$	47 : $P_{811} = (10, 1, 2, 1)$
21 : $P_{378} = (8, 6, 0, 1)$	48 : $P_{824} = (7, 2, 2, 1)$
22 : $P_{389} = (3, 7, 0, 1)$	49 : $P_{839} = (6, 3, 2, 1)$
23 : $P_{414} = (12, 8, 0, 1)$	50 : $P_{865} = (0, 5, 2, 1)$
24 : $P_{438} = (4, 10, 0, 1)$	51 : $P_{893} = (12, 6, 2, 1)$
25 : $P_{444} = (10, 10, 0, 1)$	52 : $P_{909} = (12, 7, 2, 1)$
26 : $P_{448} = (14, 10, 0, 1)$	53 : $P_{976} = (15, 11, 2, 1)$

54 : $P_{984} = (7, 12, 2, 1)$	108 : $P_{1882} = (9, 4, 6, 1)$
55 : $P_{987} = (10, 12, 2, 1)$	109 : $P_{1895} = (6, 5, 6, 1)$
56 : $P_{992} = (15, 12, 2, 1)$	110 : $P_{1901} = (12, 5, 6, 1)$
57 : $P_{1031} = (6, 15, 2, 1)$	111 : $P_{1907} = (2, 6, 6, 1)$
58 : $P_{1051} = (10, 0, 3, 1)$	112 : $P_{1913} = (8, 6, 6, 1)$
59 : $P_{1088} = (15, 2, 3, 1)$	113 : $P_{1917} = (12, 6, 6, 1)$
60 : $P_{1095} = (6, 3, 3, 1)$	114 : $P_{1943} = (6, 8, 6, 1)$
61 : $P_{1118} = (13, 4, 3, 1)$	115 : $P_{1952} = (15, 8, 6, 1)$
62 : $P_{1125} = (4, 5, 3, 1)$	116 : $P_{1971} = (2, 10, 6, 1)$
63 : $P_{1163} = (10, 7, 3, 1)$	117 : $P_{2005} = (4, 12, 6, 1)$
64 : $P_{1169} = (0, 8, 3, 1)$	118 : $P_{2021} = (4, 13, 6, 1)$
65 : $P_{1172} = (3, 8, 3, 1)$	119 : $P_{2056} = (7, 15, 6, 1)$
66 : $P_{1186} = (1, 9, 3, 1)$	120 : $P_{2067} = (2, 0, 7, 1)$
67 : $P_{1189} = (4, 9, 3, 1)$	121 : $P_{2086} = (5, 1, 7, 1)$
68 : $P_{1191} = (6, 9, 3, 1)$	122 : $P_{2118} = (5, 3, 7, 1)$
69 : $P_{1202} = (1, 10, 3, 1)$	123 : $P_{2120} = (7, 3, 7, 1)$
70 : $P_{1214} = (13, 10, 3, 1)$	124 : $P_{2151} = (6, 5, 7, 1)$
71 : $P_{1216} = (15, 10, 3, 1)$	125 : $P_{2180} = (3, 7, 7, 1)$
72 : $P_{1241} = (8, 12, 3, 1)$	126 : $P_{2186} = (9, 7, 7, 1)$
73 : $P_{1252} = (3, 13, 3, 1)$	127 : $P_{2190} = (13, 7, 7, 1)$
74 : $P_{1257} = (8, 13, 3, 1)$	128 : $P_{2193} = (0, 8, 7, 1)$
75 : $P_{1324} = (11, 1, 4, 1)$	129 : $P_{2234} = (9, 10, 7, 1)$
76 : $P_{1358} = (13, 3, 4, 1)$	130 : $P_{2271} = (14, 12, 7, 1)$
77 : $P_{1373} = (12, 4, 4, 1)$	131 : $P_{2287} = (14, 13, 7, 1)$
78 : $P_{1390} = (13, 5, 4, 1)$	132 : $P_{2291} = (2, 14, 7, 1)$
79 : $P_{1396} = (3, 6, 4, 1)$	133 : $P_{2292} = (3, 14, 7, 1)$
80 : $P_{1404} = (11, 6, 4, 1)$	134 : $P_{2295} = (6, 14, 7, 1)$
81 : $P_{1405} = (12, 6, 4, 1)$	135 : $P_{2312} = (7, 15, 7, 1)$
82 : $P_{1425} = (0, 8, 4, 1)$	136 : $P_{2318} = (13, 15, 7, 1)$
83 : $P_{1460} = (3, 10, 4, 1)$	137 : $P_{2331} = (10, 0, 8, 1)$
84 : $P_{1495} = (6, 12, 4, 1)$	138 : $P_{2354} = (1, 2, 8, 1)$
85 : $P_{1511} = (6, 13, 4, 1)$	139 : $P_{2360} = (7, 2, 8, 1)$
86 : $P_{1564} = (11, 0, 5, 1)$	140 : $P_{2367} = (14, 2, 8, 1)$
87 : $P_{1620} = (3, 4, 5, 1)$	141 : $P_{2369} = (0, 3, 8, 1)$
88 : $P_{1646} = (13, 5, 5, 1)$	142 : $P_{2377} = (8, 3, 8, 1)$
89 : $P_{1664} = (15, 6, 5, 1)$	143 : $P_{2427} = (10, 6, 8, 1)$
90 : $P_{1670} = (5, 7, 5, 1)$	144 : $P_{2456} = (7, 8, 8, 1)$
91 : $P_{1680} = (15, 7, 5, 1)$	145 : $P_{2470} = (5, 9, 8, 1)$
92 : $P_{1690} = (9, 8, 5, 1)$	146 : $P_{2482} = (1, 10, 8, 1)$
93 : $P_{1704} = (7, 9, 5, 1)$	147 : $P_{2486} = (5, 10, 8, 1)$
94 : $P_{1730} = (1, 11, 5, 1)$	148 : $P_{2493} = (12, 10, 8, 1)$
95 : $P_{1732} = (3, 11, 5, 1)$	149 : $P_{2516} = (3, 12, 8, 1)$
96 : $P_{1736} = (7, 11, 5, 1)$	150 : $P_{2521} = (8, 12, 8, 1)$
97 : $P_{1756} = (11, 12, 5, 1)$	151 : $P_{2532} = (3, 13, 8, 1)$
98 : $P_{1778} = (1, 14, 5, 1)$	152 : $P_{2557} = (12, 14, 8, 1)$
99 : $P_{1786} = (9, 14, 5, 1)$	153 : $P_{2575} = (14, 15, 8, 1)$
100 : $P_{1790} = (13, 14, 5, 1)$	154 : $P_{2603} = (10, 1, 9, 1)$
101 : $P_{1793} = (0, 15, 5, 1)$	155 : $P_{2664} = (7, 5, 9, 1)$
102 : $P_{1798} = (5, 15, 5, 1)$	156 : $P_{2686} = (13, 6, 9, 1)$
103 : $P_{1818} = (9, 0, 6, 1)$	157 : $P_{2702} = (13, 7, 9, 1)$
104 : $P_{1840} = (15, 1, 6, 1)$	158 : $P_{2712} = (7, 8, 9, 1)$
105 : $P_{1857} = (0, 3, 6, 1)$	159 : $P_{2727} = (6, 9, 9, 1)$
106 : $P_{1880} = (7, 4, 6, 1)$	160 : $P_{2758} = (5, 11, 9, 1)$
107 : $P_{1881} = (8, 4, 6, 1)$	161 : $P_{2790} = (5, 13, 9, 1)$

162 : $P_{2791} = (6, 13, 9, 1)$	216 : $P_{3400} = (7, 3, 12, 1)$
163 : $P_{2795} = (10, 13, 9, 1)$	217 : $P_{3405} = (12, 3, 12, 1)$
164 : $P_{2817} = (0, 15, 9, 1)$	218 : $P_{3433} = (8, 5, 12, 1)$
165 : $P_{2844} = (11, 0, 10, 1)$	219 : $P_{3437} = (12, 5, 12, 1)$
166 : $P_{2845} = (12, 0, 10, 1)$	220 : $P_{3443} = (2, 6, 12, 1)$
167 : $P_{2846} = (13, 0, 10, 1)$	221 : $P_{3459} = (2, 7, 12, 1)$
168 : $P_{2849} = (0, 1, 10, 1)$	222 : $P_{3486} = (13, 8, 12, 1)$
169 : $P_{2850} = (1, 1, 10, 1)$	223 : $P_{3535} = (14, 11, 12, 1)$
170 : $P_{2860} = (11, 1, 10, 1)$	224 : $P_{3542} = (5, 12, 12, 1)$
171 : $P_{2872} = (7, 2, 10, 1)$	225 : $P_{3544} = (7, 12, 12, 1)$
172 : $P_{2875} = (10, 2, 10, 1)$	226 : $P_{3551} = (14, 12, 12, 1)$
173 : $P_{2912} = (15, 4, 10, 1)$	227 : $P_{3585} = (0, 15, 12, 1)$
174 : $P_{2925} = (12, 5, 10, 1)$	228 : $P_{3615} = (14, 0, 13, 1)$
175 : $P_{2931} = (2, 6, 10, 1)$	229 : $P_{3620} = (3, 1, 13, 1)$
176 : $P_{2936} = (7, 6, 10, 1)$	230 : $P_{3661} = (12, 3, 13, 1)$
177 : $P_{2944} = (15, 6, 10, 1)$	231 : $P_{3681} = (0, 5, 13, 1)$
178 : $P_{2950} = (5, 7, 10, 1)$	232 : $P_{3706} = (9, 6, 13, 1)$
179 : $P_{2951} = (6, 7, 10, 1)$	233 : $P_{3722} = (9, 7, 13, 1)$
180 : $P_{2954} = (9, 7, 10, 1)$	234 : $P_{3735} = (6, 8, 13, 1)$
181 : $P_{2983} = (6, 9, 10, 1)$	235 : $P_{3742} = (13, 8, 13, 1)$
182 : $P_{2987} = (10, 9, 10, 1)$	236 : $P_{3757} = (12, 9, 13, 1)$
183 : $P_{3010} = (1, 11, 10, 1)$	237 : $P_{3759} = (14, 9, 13, 1)$
184 : $P_{3011} = (2, 11, 10, 1)$	238 : $P_{3760} = (15, 9, 13, 1)$
185 : $P_{3018} = (9, 11, 10, 1)$	239 : $P_{3781} = (4, 11, 13, 1)$
186 : $P_{3062} = (5, 14, 10, 1)$	240 : $P_{3813} = (4, 13, 13, 1)$
187 : $P_{3086} = (13, 15, 10, 1)$	241 : $P_{3815} = (6, 13, 13, 1)$
188 : $P_{3095} = (6, 0, 11, 1)$	242 : $P_{3824} = (15, 13, 13, 1)$
189 : $P_{3096} = (7, 0, 11, 1)$	243 : $P_{3844} = (3, 15, 13, 1)$
190 : $P_{3099} = (10, 0, 11, 1)$	244 : $P_{3854} = (13, 15, 13, 1)$
191 : $P_{3105} = (0, 1, 11, 1)$	245 : $P_{3884} = (11, 1, 14, 1)$
192 : $P_{3106} = (1, 1, 11, 1)$	246 : $P_{3905} = (0, 3, 14, 1)$
193 : $P_{3115} = (10, 1, 11, 1)$	247 : $P_{3977} = (8, 7, 14, 1)$
194 : $P_{3129} = (8, 2, 11, 1)$	248 : $P_{3980} = (11, 7, 14, 1)$
195 : $P_{3144} = (7, 3, 11, 1)$	249 : $P_{3982} = (13, 7, 14, 1)$
196 : $P_{3164} = (11, 4, 11, 1)$	250 : $P_{3997} = (12, 8, 14, 1)$
197 : $P_{3165} = (12, 4, 11, 1)$	251 : $P_{4025} = (8, 10, 14, 1)$
198 : $P_{3223} = (6, 8, 11, 1)$	252 : $P_{4056} = (7, 12, 14, 1)$
199 : $P_{3236} = (3, 9, 11, 1)$	253 : $P_{4072} = (7, 13, 14, 1)$
200 : $P_{3250} = (1, 10, 11, 1)$	254 : $P_{4094} = (13, 14, 14, 1)$
201 : $P_{3253} = (4, 10, 11, 1)$	255 : $P_{4109} = (12, 15, 14, 1)$
202 : $P_{3263} = (14, 10, 11, 1)$	256 : $P_{4124} = (11, 0, 15, 1)$
203 : $P_{3289} = (8, 12, 11, 1)$	257 : $P_{4151} = (6, 2, 15, 1)$
204 : $P_{3294} = (13, 12, 11, 1)$	258 : $P_{4163} = (2, 3, 15, 1)$
205 : $P_{3295} = (14, 12, 11, 1)$	259 : $P_{4178} = (1, 4, 15, 1)$
206 : $P_{3300} = (3, 13, 11, 1)$	260 : $P_{4179} = (2, 4, 15, 1)$
207 : $P_{3301} = (4, 13, 11, 1)$	261 : $P_{4189} = (12, 4, 15, 1)$
208 : $P_{3309} = (12, 13, 11, 1)$	262 : $P_{4193} = (0, 5, 15, 1)$
209 : $P_{3324} = (11, 14, 11, 1)$	263 : $P_{4208} = (15, 5, 15, 1)$
210 : $P_{3326} = (13, 14, 11, 1)$	264 : $P_{4214} = (5, 6, 15, 1)$
211 : $P_{3349} = (4, 0, 12, 1)$	265 : $P_{4224} = (15, 6, 15, 1)$
212 : $P_{3369} = (8, 1, 12, 1)$	266 : $P_{4230} = (5, 7, 15, 1)$
213 : $P_{3381} = (4, 2, 12, 1)$	267 : $P_{4290} = (1, 11, 15, 1)$
214 : $P_{3382} = (5, 2, 12, 1)$	268 : $P_{4295} = (6, 11, 15, 1)$
215 : $P_{3390} = (13, 2, 12, 1)$	269 : $P_{4297} = (8, 11, 15, 1)$

270 :  $P_{4332} = (11, 13, 15, 1)$   
 271 :  $P_{4345} = (8, 14, 15, 1)$

272 :  $P_{4365} = (12, 15, 15, 1)$

## Line Intersection Graph

┘

Neighbor sets in the line intersection graph:

The surface has 273 points:

The points on the surface are:

0 : $P_1 = (0, 1, 0, 0)$	42 : $P_{668} = (11, 8, 1, 1)$	84 : $P_{1495} = (6, 12, 4, 1)$
1 : $P_3 = (0, 0, 0, 1)$	43 : $P_{670} = (13, 8, 1, 1)$	85 : $P_{1511} = (6, 13, 4, 1)$
2 : $P_4 = (1, 1, 1, 1)$	44 : $P_{776} = (7, 15, 1, 1)$	86 : $P_{1564} = (11, 0, 5, 1)$
3 : $P_{36} = (1, 1, 1, 0)$	45 : $P_{779} = (10, 15, 1, 1)$	87 : $P_{1620} = (3, 4, 5, 1)$
4 : $P_{56} = (5, 2, 1, 0)$	46 : $P_{781} = (12, 15, 1, 1)$	88 : $P_{1646} = (13, 5, 5, 1)$
5 : $P_{80} = (13, 3, 1, 0)$	47 : $P_{811} = (10, 1, 2, 1)$	89 : $P_{1664} = (15, 6, 5, 1)$
6 : $P_{91} = (8, 4, 1, 0)$	48 : $P_{824} = (7, 2, 2, 1)$	90 : $P_{1670} = (5, 7, 5, 1)$
7 : $P_{106} = (7, 5, 1, 0)$	49 : $P_{839} = (6, 3, 2, 1)$	91 : $P_{1680} = (15, 7, 5, 1)$
8 : $P_{159} = (12, 8, 1, 0)$	50 : $P_{865} = (0, 5, 2, 1)$	92 : $P_{1690} = (9, 8, 5, 1)$
9 : $P_{178} = (15, 9, 1, 0)$	51 : $P_{893} = (12, 6, 2, 1)$	93 : $P_{1704} = (7, 9, 5, 1)$
10 : $P_{181} = (2, 10, 1, 0)$	52 : $P_{909} = (12, 7, 2, 1)$	94 : $P_{1730} = (1, 11, 5, 1)$
11 : $P_{188} = (9, 10, 1, 0)$	53 : $P_{976} = (15, 11, 2, 1)$	95 : $P_{1732} = (3, 11, 5, 1)$
12 : $P_{189} = (10, 10, 1, 0)$	54 : $P_{984} = (7, 12, 2, 1)$	96 : $P_{1736} = (7, 11, 5, 1)$
13 : $P_{199} = (4, 11, 1, 0)$	55 : $P_{987} = (10, 12, 2, 1)$	97 : $P_{1756} = (11, 12, 5, 1)$
14 : $P_{206} = (11, 11, 1, 0)$	56 : $P_{992} = (15, 12, 2, 1)$	98 : $P_{1778} = (1, 14, 5, 1)$
15 : $P_{209} = (14, 11, 1, 0)$	57 : $P_{1031} = (6, 15, 2, 1)$	99 : $P_{1786} = (9, 14, 5, 1)$
16 : $P_{246} = (3, 14, 1, 0)$	58 : $P_{1051} = (10, 0, 3, 1)$	100 : $P_{1790} = (13, 14, 5, 1)$
17 : $P_{265} = (6, 15, 1, 0)$	59 : $P_{1088} = (15, 2, 3, 1)$	101 : $P_{1793} = (0, 15, 5, 1)$
18 : $P_{275} = (1, 0, 0, 1)$	60 : $P_{1095} = (6, 3, 3, 1)$	102 : $P_{1798} = (5, 15, 5, 1)$
19 : $P_{335} = (13, 3, 0, 1)$	61 : $P_{1118} = (13, 4, 3, 1)$	103 : $P_{1818} = (9, 0, 6, 1)$
20 : $P_{361} = (7, 5, 0, 1)$	62 : $P_{1125} = (4, 5, 3, 1)$	104 : $P_{1840} = (15, 1, 6, 1)$
21 : $P_{378} = (8, 6, 0, 1)$	63 : $P_{1163} = (10, 7, 3, 1)$	105 : $P_{1857} = (0, 3, 6, 1)$
22 : $P_{389} = (3, 7, 0, 1)$	64 : $P_{1169} = (0, 8, 3, 1)$	106 : $P_{1880} = (7, 4, 6, 1)$
23 : $P_{414} = (12, 8, 0, 1)$	65 : $P_{1172} = (3, 8, 3, 1)$	107 : $P_{1881} = (8, 4, 6, 1)$
24 : $P_{438} = (4, 10, 0, 1)$	66 : $P_{1186} = (1, 9, 3, 1)$	108 : $P_{1882} = (9, 4, 6, 1)$
25 : $P_{444} = (10, 10, 0, 1)$	67 : $P_{1189} = (4, 9, 3, 1)$	109 : $P_{1895} = (6, 5, 6, 1)$
26 : $P_{448} = (14, 10, 0, 1)$	68 : $P_{1191} = (6, 9, 3, 1)$	110 : $P_{1901} = (12, 5, 6, 1)$
27 : $P_{452} = (2, 11, 0, 1)$	69 : $P_{1202} = (1, 10, 3, 1)$	111 : $P_{1907} = (2, 6, 6, 1)$
28 : $P_{459} = (9, 11, 0, 1)$	70 : $P_{1214} = (13, 10, 3, 1)$	112 : $P_{1913} = (8, 6, 6, 1)$
29 : $P_{461} = (11, 11, 0, 1)$	71 : $P_{1216} = (15, 10, 3, 1)$	113 : $P_{1917} = (12, 6, 6, 1)$
30 : $P_{471} = (5, 12, 0, 1)$	72 : $P_{1241} = (8, 12, 3, 1)$	114 : $P_{1943} = (6, 8, 6, 1)$
31 : $P_{497} = (15, 13, 0, 1)$	73 : $P_{1252} = (3, 13, 3, 1)$	115 : $P_{1952} = (15, 8, 6, 1)$
32 : $P_{520} = (6, 15, 0, 1)$	74 : $P_{1257} = (8, 13, 3, 1)$	116 : $P_{1971} = (2, 10, 6, 1)$
33 : $P_{531} = (1, 0, 1, 1)$	75 : $P_{1324} = (11, 1, 4, 1)$	117 : $P_{2005} = (4, 12, 6, 1)$
34 : $P_{546} = (0, 1, 1, 1)$	76 : $P_{1358} = (13, 3, 4, 1)$	118 : $P_{2021} = (4, 13, 6, 1)$
35 : $P_{583} = (6, 3, 1, 1)$	77 : $P_{1373} = (12, 4, 4, 1)$	119 : $P_{2056} = (7, 15, 6, 1)$
36 : $P_{588} = (11, 3, 1, 1)$	78 : $P_{1390} = (13, 5, 4, 1)$	120 : $P_{2067} = (2, 0, 7, 1)$
37 : $P_{589} = (12, 3, 1, 1)$	79 : $P_{1396} = (3, 6, 4, 1)$	121 : $P_{2086} = (5, 1, 7, 1)$
38 : $P_{615} = (6, 5, 1, 1)$	80 : $P_{1404} = (11, 6, 4, 1)$	122 : $P_{2118} = (5, 3, 7, 1)$
39 : $P_{619} = (10, 5, 1, 1)$	81 : $P_{1405} = (12, 6, 4, 1)$	123 : $P_{2120} = (7, 3, 7, 1)$
40 : $P_{622} = (13, 5, 1, 1)$	82 : $P_{1425} = (0, 8, 4, 1)$	124 : $P_{2151} = (6, 5, 7, 1)$
41 : $P_{664} = (7, 8, 1, 1)$	83 : $P_{1460} = (3, 10, 4, 1)$	125 : $P_{2180} = (3, 7, 7, 1)$

126 : $P_{2186} = (9, 7, 7, 1)$	176 : $P_{2936} = (7, 6, 10, 1)$	226 : $P_{3551} = (14, 12, 12, 1)$
127 : $P_{2190} = (13, 7, 7, 1)$	177 : $P_{2944} = (15, 6, 10, 1)$	227 : $P_{3585} = (0, 15, 12, 1)$
128 : $P_{2193} = (0, 8, 7, 1)$	178 : $P_{2950} = (5, 7, 10, 1)$	228 : $P_{3615} = (14, 0, 13, 1)$
129 : $P_{2234} = (9, 10, 7, 1)$	179 : $P_{2951} = (6, 7, 10, 1)$	229 : $P_{3620} = (3, 1, 13, 1)$
130 : $P_{2271} = (14, 12, 7, 1)$	180 : $P_{2954} = (9, 7, 10, 1)$	230 : $P_{3661} = (12, 3, 13, 1)$
131 : $P_{2287} = (14, 13, 7, 1)$	181 : $P_{2983} = (6, 9, 10, 1)$	231 : $P_{3681} = (0, 5, 13, 1)$
132 : $P_{2291} = (2, 14, 7, 1)$	182 : $P_{2987} = (10, 9, 10, 1)$	232 : $P_{3706} = (9, 6, 13, 1)$
133 : $P_{2292} = (3, 14, 7, 1)$	183 : $P_{3010} = (1, 11, 10, 1)$	233 : $P_{3722} = (9, 7, 13, 1)$
134 : $P_{2295} = (6, 14, 7, 1)$	184 : $P_{3011} = (2, 11, 10, 1)$	234 : $P_{3735} = (6, 8, 13, 1)$
135 : $P_{2312} = (7, 15, 7, 1)$	185 : $P_{3018} = (9, 11, 10, 1)$	235 : $P_{3742} = (13, 8, 13, 1)$
136 : $P_{2318} = (13, 15, 7, 1)$	186 : $P_{3062} = (5, 14, 10, 1)$	236 : $P_{3757} = (12, 9, 13, 1)$
137 : $P_{2331} = (10, 0, 8, 1)$	187 : $P_{3086} = (13, 15, 10, 1)$	237 : $P_{3759} = (14, 9, 13, 1)$
138 : $P_{2354} = (1, 2, 8, 1)$	188 : $P_{3095} = (6, 0, 11, 1)$	238 : $P_{3760} = (15, 9, 13, 1)$
139 : $P_{2360} = (7, 2, 8, 1)$	189 : $P_{3096} = (7, 0, 11, 1)$	239 : $P_{3781} = (4, 11, 13, 1)$
140 : $P_{2367} = (14, 2, 8, 1)$	190 : $P_{3099} = (10, 0, 11, 1)$	240 : $P_{3813} = (4, 13, 13, 1)$
141 : $P_{2369} = (0, 3, 8, 1)$	191 : $P_{3105} = (0, 1, 11, 1)$	241 : $P_{3815} = (6, 13, 13, 1)$
142 : $P_{2377} = (8, 3, 8, 1)$	192 : $P_{3106} = (1, 1, 11, 1)$	242 : $P_{3824} = (15, 13, 13, 1)$
143 : $P_{2427} = (10, 6, 8, 1)$	193 : $P_{3115} = (10, 1, 11, 1)$	243 : $P_{3844} = (3, 15, 13, 1)$
144 : $P_{2456} = (7, 8, 8, 1)$	194 : $P_{3129} = (8, 2, 11, 1)$	244 : $P_{3854} = (13, 15, 13, 1)$
145 : $P_{2470} = (5, 9, 8, 1)$	195 : $P_{3144} = (7, 3, 11, 1)$	245 : $P_{3884} = (11, 1, 14, 1)$
146 : $P_{2482} = (1, 10, 8, 1)$	196 : $P_{3164} = (11, 4, 11, 1)$	246 : $P_{3905} = (0, 3, 14, 1)$
147 : $P_{2486} = (5, 10, 8, 1)$	197 : $P_{3165} = (12, 4, 11, 1)$	247 : $P_{3977} = (8, 7, 14, 1)$
148 : $P_{2493} = (12, 10, 8, 1)$	198 : $P_{3223} = (6, 8, 11, 1)$	248 : $P_{3980} = (11, 7, 14, 1)$
149 : $P_{2516} = (3, 12, 8, 1)$	199 : $P_{3236} = (3, 9, 11, 1)$	249 : $P_{3982} = (13, 7, 14, 1)$
150 : $P_{2521} = (8, 12, 8, 1)$	200 : $P_{3250} = (1, 10, 11, 1)$	250 : $P_{3997} = (12, 8, 14, 1)$
151 : $P_{2532} = (3, 13, 8, 1)$	201 : $P_{3253} = (4, 10, 11, 1)$	251 : $P_{4025} = (8, 10, 14, 1)$
152 : $P_{2557} = (12, 14, 8, 1)$	202 : $P_{3263} = (14, 10, 11, 1)$	252 : $P_{4056} = (7, 12, 14, 1)$
153 : $P_{2575} = (14, 15, 8, 1)$	203 : $P_{3289} = (8, 12, 11, 1)$	253 : $P_{4072} = (7, 13, 14, 1)$
154 : $P_{2603} = (10, 1, 9, 1)$	204 : $P_{3294} = (13, 12, 11, 1)$	254 : $P_{4094} = (13, 14, 14, 1)$
155 : $P_{2664} = (7, 5, 9, 1)$	205 : $P_{3295} = (14, 12, 11, 1)$	255 : $P_{4109} = (12, 15, 14, 1)$
156 : $P_{2686} = (13, 6, 9, 1)$	206 : $P_{3300} = (3, 13, 11, 1)$	256 : $P_{4124} = (11, 0, 15, 1)$
157 : $P_{2702} = (13, 7, 9, 1)$	207 : $P_{3301} = (4, 13, 11, 1)$	257 : $P_{4151} = (6, 2, 15, 1)$
158 : $P_{2712} = (7, 8, 9, 1)$	208 : $P_{3309} = (12, 13, 11, 1)$	258 : $P_{4163} = (2, 3, 15, 1)$
159 : $P_{2727} = (6, 9, 9, 1)$	209 : $P_{3324} = (11, 14, 11, 1)$	259 : $P_{4178} = (1, 4, 15, 1)$
160 : $P_{2758} = (5, 11, 9, 1)$	210 : $P_{3326} = (13, 14, 11, 1)$	260 : $P_{4179} = (2, 4, 15, 1)$
161 : $P_{2790} = (5, 13, 9, 1)$	211 : $P_{3349} = (4, 0, 12, 1)$	261 : $P_{4189} = (12, 4, 15, 1)$
162 : $P_{2791} = (6, 13, 9, 1)$	212 : $P_{3369} = (8, 1, 12, 1)$	262 : $P_{4193} = (0, 5, 15, 1)$
163 : $P_{2795} = (10, 13, 9, 1)$	213 : $P_{3381} = (4, 2, 12, 1)$	263 : $P_{4208} = (15, 5, 15, 1)$
164 : $P_{2817} = (0, 15, 9, 1)$	214 : $P_{3382} = (5, 2, 12, 1)$	264 : $P_{4214} = (5, 6, 15, 1)$
165 : $P_{2844} = (11, 0, 10, 1)$	215 : $P_{3390} = (13, 2, 12, 1)$	265 : $P_{4224} = (15, 6, 15, 1)$
166 : $P_{2845} = (12, 0, 10, 1)$	216 : $P_{3400} = (7, 3, 12, 1)$	266 : $P_{4230} = (5, 7, 15, 1)$
167 : $P_{2846} = (13, 0, 10, 1)$	217 : $P_{3405} = (12, 3, 12, 1)$	267 : $P_{4290} = (1, 11, 15, 1)$
168 : $P_{2849} = (0, 1, 10, 1)$	218 : $P_{3433} = (8, 5, 12, 1)$	268 : $P_{4295} = (6, 11, 15, 1)$
169 : $P_{2850} = (1, 1, 10, 1)$	219 : $P_{3437} = (12, 5, 12, 1)$	269 : $P_{4297} = (8, 11, 15, 1)$
170 : $P_{2860} = (11, 1, 10, 1)$	220 : $P_{3443} = (2, 6, 12, 1)$	270 : $P_{4332} = (11, 13, 15, 1)$
171 : $P_{2872} = (7, 2, 10, 1)$	221 : $P_{3459} = (2, 7, 12, 1)$	271 : $P_{4345} = (8, 14, 15, 1)$
172 : $P_{2875} = (10, 2, 10, 1)$	222 : $P_{3486} = (13, 8, 12, 1)$	272 : $P_{4365} = (12, 15, 15, 1)$
173 : $P_{2912} = (15, 4, 10, 1)$	223 : $P_{3535} = (14, 11, 12, 1)$	
174 : $P_{2925} = (12, 5, 10, 1)$	224 : $P_{3542} = (5, 12, 12, 1)$	
175 : $P_{2931} = (2, 6, 10, 1)$	225 : $P_{3544} = (7, 12, 12, 1)$	