Rank-65868 over GF(16)

January 15, 2021

The equation

The equation of the surface is :

$$X_0^3 + X_3^3 + X_0^2X_3 + X_1^2X_2 + X_0X_1X_2 = 0$$

(1, 0, 0, 1, 0, 0, 1, 0, 1, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0)
The point rank of the equation over GF(16) is 303112470

General information

Number of lines	0
Number of points	241
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	241
Number of Hesse planes	0
Number of axes	0
Type of points on lines	
Type of lines on points	0^{241}

Singular Points

The surface has 1 singular points:

$0 : \ P_2 = \mathbf{P}(0,0,1,0) = \mathbf{P}(0,0,1,0)$

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

$0: P_1 = (0,1,0,0)$
$1: P_2 = (0,0,1,0)$
$2: P_{78} = (11,3,1,0)$
$3: P_{109} = (10,5,1,0)$
$4: P_{128} = (13,6,1,0)$
$5: P_{143} = (12,7,1,0)$
$6: P_{158} = (11,8,1,0)$
$7: P_{180} = (1,10,1,0)$
$8: P_{185} = (6,10,1,0)$
$9: P_{186} = (7,10,1,0)$
$10: P_{196} = (1,11,1,0)$
$11: P_{207} = (12,11,1,0)$
$12: P_{208} = (13,11,1,0)$
$13: P_{217} = (6,12,1,0)$
$14: P_{234} = (7,13,1,0)$
$15: P_{269} = (10,15,1,0)$
$16: P_{546} = (0,1,1,1)$
$17: P_{555} = (10,1,1,1)$
$18: P_{556} = (11,1,1,1)$
$19: P_{582} = (5,3,1,1)$
$20: P_{617} = (8,5,1,1)$
$21: P_{630} = (5,6,1,1)$
$22: P_{656} = (15,7,1,1)$
$23: P_{672} = (15,8,1,1)$
$24: P_{690} = (1,10,1,1)$
$25: P_{700} = (11,10,1,1)$
$26: P_{706} = (1,11,1,1)$
$27: P_{715} = (10,11,1,1)$
$28: P_{724} = (3,12,1,1)$
$29: P_{745} = (8,13,1,1)$
$30: P_{772} = (3,15,1,1)$
$31: P_{809} = (8,1,2,1)$
$32: P_{823} = (6,2,2,1)$
$33: P_{827} = (10,2,2,1)$
$34: P_{830} = (13,2,2,1)$
$35: P_{855} = (6,4,2,1)$
$36: P_{858} = (9,4,2,1)$
$37: P_{863} = (14,4,2,1)$
$38: P_{892} = (11,6,2,1)$
$39: P_{897} = (0,7,2,1)$
$40: P_{923} = (10,8,2,1)$
$41: P_{937} = (8,9,2,1)$
$42: P_{959} = (14,10,2,1)$
$43: P_{996} = (3,13,2,1)$
$44: P_{1002} = (9,13,2,1)$
$45: P_{1004} = (11,13,2,1)$
$46: P_{1010} = (1,14,2,1)$
$47: P_{1012} = (3,14,2,1)$
$48: P_{1026} = (1,15,2,1)$
$49: P_{1038} = (13,15,2,1)$
$50: P_{1063} = (6,1,3,1)$
$51: P_{1117} = (12,4,3,1)$
$52: P_{1121} = (0,5,3,1)$
$53: P_{1151} = (14,6,3,1)$

$54: P_{1159} = (6, 7, 3, 1)$
$55: P_{1172} = (3, 8, 3, 1)$
$56: P_{1181} = (12, 8, 3, 1)$
$57: P_{1183} = (14, 8, 3, 1)$
$58: P_{1220} = (3, 11, 3, 1)$
$59: P_{1222} = (5, 11, 3, 1)$
$60: P_{1224} = (7, 11, 3, 1)$
$61: P_{1240} = (7, 12, 3, 1)$
$62: P_{1270} = (5, 14, 3, 1)$
$63: P_{1328} = (15, 1, 4, 1)$
$64: P_{1330} = (1, 2, 4, 1)$
$65: P_{1334} = (5, 2, 4, 1)$
$66: P_{1346} = (1, 3, 4, 1)$
$67: P_{1352} = (7, 3, 4, 1)$
$68: P_{1368} = (7, 4, 4, 1)$
$69: P_{1372} = (11, 4, 4, 1)$
$70: P_{1374} = (13, 4, 4, 1)$
$71: P_{1414} = (5, 7, 4, 1)$
$72: P_{1419} = (10, 7, 4, 1)$
$73: P_{1423} = (14, 7, 4, 1)$
$74: P_{1443} = (2, 9, 4, 1)$
$75: P_{1454} = (13, 9, 4, 1)$
$76: P_{1455} = (14, 9, 4, 1)$
$77: P_{1475} = (2, 11, 4, 1)$
$78: P_{1489} = (0, 12, 4, 1)$
$79: P_{1515} = (10, 13, 4, 1)$
$80: P_{1536} = (15, 14, 4, 1)$
$81: P_{1548} = (11, 15, 4, 1)$
$82: P_{1582} = (13, 1, 5, 1)$
$83: P_{1593} = (8, 2, 5, 1)$
$84: P_{1661} = (12, 6, 5, 1)$
$85: P_{1681} = (0, 8, 5, 1)$
$86: P_{1703} = (6, 9, 5, 1)$
$87: P_{1718} = (5, 10, 5, 1)$
$88: P_{1721} = (8, 10, 5, 1)$
$89: P_{1725} = (12, 10, 5, 1)$
$90: P_{1758} = (13, 12, 5, 1)$
$91: P_{1763} = (2, 13, 5, 1)$
$92: P_{1795} = (2, 15, 5, 1)$
$93: P_{1798} = (5, 15, 5, 1)$
$94: P_{1799} = (6, 15, 5, 1)$
$95: P_{1829} = (4, 1, 6, 1)$
$96: P_{1841} = (0, 2, 6, 1)$
$97: P_{1855} = (14, 2, 6, 1)$
$98: P_{1856} = (15, 2, 6, 1)$
$99: P_{1863} = (6, 3, 6, 1)$
$100: P_{1892} = (3, 5, 6, 1)$
$101: P_{1893} = (4, 5, 6, 1)$
$102: P_{1895} = (6, 5, 6, 1)$
$103: P_{1908} = (3, 6, 6, 1)$
$104: P_{1939} = (2, 8, 6, 1)$
$105: P_{1971} = (2, 10, 6, 1)$
$106: P_{2015} = (14, 12, 6, 1)$
$107: P_{2032} = (15, 13, 6, 1)$
$108: P_{2095} = (14, 1, 7, 1)$
$109: P_{2122} = (9, 3, 7, 1)$
$110: P_{2185} = (8, 7, 7, 1)$
$111: P_{2200} = (7, 8, 7, 1)$
$112: P_{2209} = (0, 9, 7, 1)$
$113: P_{2213} = (4, 9, 7, 1)$
$114: P_{2214} = (5, 9, 7, 1)$
$115: P_{2234} = (9, 10, 7, 1)$
$116: P_{2262} = (5, 12, 7, 1)$
$117: P_{2277} = (4, 13, 7, 1)$
$118: P_{2312} = (7, 15, 7, 1)$
$119: P_{2313} = (8, 15, 7, 1)$
$120: P_{2319} = (14, 15, 7, 1)$
$121: P_{2344} = (7, 1, 8, 1)$
$122: P_{2373} = (4, 3, 8, 1)$
$123: P_{2377} = (8, 3, 8, 1)$
$124: P_{2382} = (13, 3, 8, 1)$
$125: P_{2400} = (15, 4, 8, 1)$
$126: P_{2424} = (7, 6, 8, 1)$
$127: P_{2437} = (4, 7, 8, 1)$
$128: P_{2503} = (6, 11, 8, 1)$
$129: P_{2505} = (8, 11, 8, 1)$
$130: P_{2512} = (15, 11, 8, 1)$
$131: P_{2535} = (6, 13, 8, 1)$
$132: P_{2558} = (13, 14, 8, 1)$
$133: P_{2561} = (0, 15, 8, 1)$
$134: P_{2596} = (3, 1, 9, 1)$
$135: P_{2612} = (3, 2, 9, 1)$
$136: P_{2635} = (10, 3, 9, 1)$
$137: P_{2642} = (1, 4, 9, 1)$
$138: P_{2649} = (8, 4, 9, 1)$
$139: P_{2658} = (1, 5, 9, 1)$
$140: P_{2669} = (12, 5, 9, 1)$
$141: P_{2673} = (0, 6, 9, 1)$
$142: P_{2700} = (11, 7, 9, 1)$
$143: P_{2728} = (7, 9, 9, 1)$
$144: P_{2731} = (10, 9, 9, 1)$
$145: P_{2733} = (12, 9, 9, 1)$
$146: P_{2741} = (4, 10, 9, 1)$
$147: P_{2771} = (2, 12, 9, 1)$
$148: P_{2777} = (8, 12, 9, 1)$
$149: P_{2780} = (11, 12, 9, 1)$
$150: P_{2803} = (2, 14, 9, 1)$
$151: P_{2805} = (4, 14, 9, 1)$
$152: P_{2808} = (7, 14, 9, 1)$
$153: P_{2892} = (11, 3, 10, 1)$
$154: P_{2907} = (10, 4, 10, 1)$
$155: P_{2915} = (2, 5, 10, 1)$
$156: P_{2930} = (1, 6, 10, 1)$
$157: P_{2938} = (9, 6, 10, 1)$
$158: P_{2946} = (1, 7, 10, 1)$
$159: P_{2947} = (2, 7, 10, 1)$
$160: P_{2972} = (11, 8, 10, 1)$
$161: P_{2993} = (0, 10, 10, 1)$

162 : $P_{2999} = (6, 10, 10, 1)$
163 : $P_{3000} = (7, 10, 10, 1)$
164 : $P_{3031} = (6, 12, 10, 1)$
165 : $P_{3048} = (7, 13, 10, 1)$
166 : $P_{3067} = (10, 14, 10, 1)$
167 : $P_{3082} = (9, 15, 10, 1)$
168 : $P_{3132} = (11, 2, 11, 1)$
169 : $P_{3151} = (14, 3, 11, 1)$
170 : $P_{3179} = (10, 5, 11, 1)$
171 : $P_{3198} = (13, 6, 11, 1)$
172 : $P_{3213} = (12, 7, 11, 1)$
173 : $P_{3221} = (4, 8, 11, 1)$
174 : $P_{3244} = (11, 9, 11, 1)$
175 : $P_{3265} = (0, 11, 11, 1)$
176 : $P_{3277} = (12, 11, 11, 1)$
177 : $P_{3278} = (13, 11, 11, 1)$
178 : $P_{3282} = (1, 12, 11, 1)$
179 : $P_{3285} = (4, 12, 11, 1)$
180 : $P_{3298} = (1, 13, 11, 1)$
181 : $P_{3311} = (14, 13, 11, 1)$
182 : $P_{3339} = (10, 15, 11, 1)$
183 : $P_{3363} = (2, 1, 12, 1)$
184 : $P_{3395} = (2, 3, 12, 1)$
185 : $P_{3405} = (12, 3, 12, 1)$
186 : $P_{3408} = (15, 3, 12, 1)$
187 : $P_{3439} = (14, 5, 12, 1)$
188 : $P_{3449} = (8, 6, 12, 1)$
189 : $P_{3466} = (9, 7, 12, 1)$
190 : $P_{3535} = (14, 11, 12, 1)$
191 : $P_{3552} = (15, 12, 12, 1)$
192 : $P_{3569} = (0, 14, 12, 1)$
193 : $P_{3577} = (8, 14, 12, 1)$
194 : $P_{3578} = (9, 14, 12, 1)$
195 : $P_{3597} = (12, 15, 12, 1)$
196 : $P_{3626} = (9, 1, 13, 1)$
197 : $P_{3665} = (0, 4, 13, 1)$
198 : $P_{3667} = (2, 4, 13, 1)$
199 : $P_{3668} = (3, 4, 13, 1)$
200 : $P_{3694} = (13, 5, 13, 1)$
201 : $P_{3699} = (2, 6, 13, 1)$
202 : $P_{3716} = (3, 7, 13, 1)$
203 : $P_{3734} = (5, 8, 13, 1)$
204 : $P_{3738} = (9, 8, 13, 1)$
205 : $P_{3742} = (13, 8, 13, 1)$
206 : $P_{3781} = (4, 11, 13, 1)$
207 : $P_{3814} = (5, 13, 13, 1)$
208 : $P_{3845} = (4, 15, 13, 1)$
209 : $P_{3878} = (5, 1, 14, 1)$
210 : $P_{3893} = (4, 2, 14, 1)$
211 : $P_{3898} = (9, 2, 14, 1)$
212 : $P_{3901} = (12, 2, 14, 1)$
213 : $P_{3926} = (5, 4, 14, 1)$
214 : $P_{3948} = (11, 5, 14, 1)$
215 : $P_{3957} = (4, 6, 14, 1)$
216 : $P_{3963} = (10, 6, 14, 1)$
217 : $P_{3968} = (15, 6, 14, 1)$
218 : $P_{3986} = (1, 8, 14, 1)$
219 : $P_{3991} = (6, 8, 14, 1)$
220 : $P_{4002} = (1, 9, 14, 1)$
221 : $P_{4016} = (15, 9, 14, 1)$
222 : $P_{4042} = (9, 11, 14, 1)$
223 : $P_{4059} = (10, 12, 14, 1)$
224 : $P_{4065} = (0, 13, 14, 1)$
225 : $P_{4087} = (6, 14, 14, 1)$
226 : $P_{4092} = (11, 14, 14, 1)$
227 : $P_{4093} = (12, 14, 14, 1)$
228 : $P_{4141} = (12, 1, 15, 1)$
229 : $P_{4152} = (7, 2, 15, 1)$
230 : $P_{4161} = (0, 3, 15, 1)$
231 : $P_{4200} = (7, 5, 15, 1)$
232 : $P_{4202} = (9, 5, 15, 1)$
233 : $P_{4208} = (15, 5, 15, 1)$
234 : $P_{4238} = (13, 7, 15, 1)$
235 : $P_{4260} = (3, 9, 15, 1)$
236 : $P_{4276} = (3, 10, 15, 1)$
237 : $P_{4286} = (13, 10, 15, 1)$
238 : $P_{4288} = (15, 10, 15, 1)$
239 : $P_{4314} = (9, 12, 15, 1)$
240 : $P_{4333} = (12, 13, 15, 1)$

Line Intersection Graph

Neighbor sets in the line intersection graph:
The surface has 241 points:
The points on the surface are:

0 : $P_1 = (0, 1, 0, 0)$
1 : $P_2 = (0, 0, 1, 0)$
2 : $P_{78} = (11, 3, 1, 0)$
3 : $P_{109} = (10, 5, 1, 0)$
4 : $P_{128} = (13, 6, 1, 0)$
5 : $P_{143} = (12, 7, 1, 0)$
6 : $P_{158} = (11, 8, 1, 0)$
7 : $P_{180} = (1, 10, 1, 0)$
8 : $P_{185} = (6, 10, 1, 0)$
9 : $P_{186} = (7, 10, 1, 0)$
10 : $P_{196} = (1, 11, 1, 0)$
11 : $P_{207} = (12, 11, 1, 0)$

12 : $P_{208} = (13, 11, 1, 0)$
13 : $P_{217} = (6, 12, 1, 0)$
14 : $P_{234} = (7, 13, 1, 0)$
15 : $P_{269} = (10, 15, 1, 0)$
16 : $P_{546} = (0, 1, 1, 1)$
17 : $P_{555} = (10, 1, 1, 1)$
18 : $P_{556} = (11, 1, 1, 1)$
19 : $P_{582} = (5, 3, 1, 1)$
20 : $P_{617} = (8, 5, 1, 1)$
21 : $P_{630} = (5, 6, 1, 1)$
22 : $P_{656} = (15, 7, 1, 1)$
23 : $P_{672} = (15, 8, 1, 1)$
24 : $P_{690} = (1, 10, 1, 1)$
25 : $P_{700} = (11, 10, 1, 1)$
26 : $P_{706} = (1, 11, 1, 1)$
27 : $P_{715} = (10, 11, 1, 1)$
28 : $P_{724} = (3, 12, 1, 1)$
29 : $P_{745} = (8, 13, 1, 1)$
30 : $P_{772} = (3, 15, 1, 1)$
31 : $P_{809} = (8, 1, 2, 1)$
32 : $P_{823} = (6, 2, 2, 1)$
33 : $P_{827} = (10, 2, 2, 1)$
34 : $P_{830} = (13, 2, 2, 1)$
35 : $P_{855} = (6, 4, 2, 1)$
36 : $P_{858} = (9, 4, 2, 1)$
37 : $P_{863} = (14, 4, 2, 1)$
38 : $P_{892} = (11, 6, 2, 1)$
39 : $P_{897} = (0, 7, 2, 1)$
40 : $P_{923} = (10, 8, 2, 1)$
41 : $P_{937} = (8, 9, 2, 1)$
42 : $P_{959} = (14, 10, 2, 1)$
43 : $P_{996} = (3, 13, 2, 1)$
44 : $P_{1002} = (9, 13, 2, 1)$
45 : $P_{1004} = (11, 13, 2, 1)$
46 : $P_{1010} = (1, 14, 2, 1)$
47 : $P_{1012} = (3, 14, 2, 1)$
48 : $P_{1026} = (1, 15, 2, 1)$
49 : $P_{1038} = (13, 15, 2, 1)$
50 : $P_{1063} = (6, 1, 3, 1)$
51 : $P_{1117} = (12, 4, 3, 1)$
52 : $P_{1121} = (0, 5, 3, 1)$
53 : $P_{1151} = (14, 6, 3, 1)$
54 : $P_{1159} = (6, 7, 3, 1)$
55 : $P_{1172} = (3, 8, 3, 1)$
56 : $P_{1181} = (12, 8, 3, 1)$
57 : $P_{1183} = (14, 8, 3, 1)$
58 : $P_{1220} = (3, 11, 3, 1)$
59 : $P_{1222} = (5, 11, 3, 1)$
60 : $P_{1224} = (7, 11, 3, 1)$
61 : $P_{1240} = (7, 12, 3, 1)$
62 : $P_{1270} = (5, 14, 3, 1)$
63 : $P_{1328} = (15, 1, 4, 1)$
64 : $P_{1330} = (1, 2, 4, 1)$
65 : $P_{1334} = (5, 2, 4, 1)$
66 : $P_{1346} = (1, 3, 4, 1)$
67 : $P_{1352} = (7, 3, 4, 1)$
68 : $P_{1368} = (7, 4, 4, 1)$
69 : $P_{1372} = (11, 4, 4, 1)$
70 : $P_{1374} = (13, 4, 4, 1)$
71 : $P_{1414} = (5, 7, 4, 1)$
72 : $P_{1419} = (10, 7, 4, 1)$
73 : $P_{1423} = (14, 7, 4, 1)$
74 : $P_{1443} = (2, 9, 4, 1)$
75 : $P_{1454} = (13, 9, 4, 1)$
76 : $P_{1455} = (14, 9, 4, 1)$
77 : $P_{1475} = (2, 11, 4, 1)$
78 : $P_{1489} = (0, 12, 4, 1)$
79 : $P_{1515} = (10, 13, 4, 1)$
80 : $P_{1536} = (15, 14, 4, 1)$
81 : $P_{1548} = (11, 15, 4, 1)$
82 : $P_{1582} = (13, 1, 5, 1)$
83 : $P_{1593} = (8, 2, 5, 1)$
84 : $P_{1661} = (12, 6, 5, 1)$
85 : $P_{1681} = (0, 8, 5, 1)$
86 : $P_{1703} = (6, 9, 5, 1)$
87 : $P_{1718} = (5, 10, 5, 1)$
88 : $P_{1721} = (8, 10, 5, 1)$
89 : $P_{1725} = (12, 10, 5, 1)$
90 : $P_{1758} = (13, 12, 5, 1)$
91 : $P_{1763} = (2, 13, 5, 1)$
92 : $P_{1795} = (2, 15, 5, 1)$
93 : $P_{1798} = (5, 15, 5, 1)$
94 : $P_{1799} = (6, 15, 5, 1)$
95 : $P_{1829} = (4, 1, 6, 1)$
96 : $P_{1841} = (0, 2, 6, 1)$
97 : $P_{1855} = (14, 2, 6, 1)$
98 : $P_{1856} = (15, 2, 6, 1)$
99 : $P_{1863} = (6, 3, 6, 1)$
100 : $P_{1892} = (3, 5, 6, 1)$
101 : $P_{1893} = (4, 5, 6, 1)$
102 : $P_{1895} = (6, 5, 6, 1)$
103 : $P_{1908} = (3, 6, 6, 1)$
104 : $P_{1939} = (2, 8, 6, 1)$
105 : $P_{1971} = (2, 10, 6, 1)$
106 : $P_{2015} = (14, 12, 6, 1)$
107 : $P_{2032} = (15, 13, 6, 1)$
108 : $P_{2095} = (14, 1, 7, 1)$
109 : $P_{2122} = (9, 3, 7, 1)$
110 : $P_{2185} = (8, 7, 7, 1)$
111 : $P_{2200} = (7, 8, 7, 1)$
112 : $P_{2209} = (0, 9, 7, 1)$
113 : $P_{2213} = (4, 9, 7, 1)$
114 : $P_{2214} = (5, 9, 7, 1)$
115 : $P_{2234} = (9, 10, 7, 1)$
116 : $P_{2262} = (5, 12, 7, 1)$
117 : $P_{2277} = (4, 13, 7, 1)$
118 : $P_{2312} = (7, 15, 7, 1)$
119 : $P_{2313} = (8, 15, 7, 1)$
120 : $P_{2319} = (14, 15, 7, 1)$
121 : $P_{2344} = (7, 1, 8, 1)$
122 : $P_{2373} = (4, 3, 8, 1)$
123 : $P_{2377} = (8, 3, 8, 1)$
124 : $P_{2382} = (13, 3, 8, 1)$
125 : $P_{2400} = (15, 4, 8, 1)$
126 : $P_{2424} = (7, 6, 8, 1)$
127 : $P_{2437} = (4, 7, 8, 1)$
128 : $P_{2503} = (6, 11, 8, 1)$
129 : $P_{2505} = (8, 11, 8, 1)$
130 : $P_{2512} = (15, 11, 8, 1)$
131 : $P_{2535} = (6, 13, 8, 1)$
132 : $P_{2558} = (13, 14, 8, 1)$
133 : $P_{2561} = (0, 15, 8, 1)$
134 : $P_{2596} = (3, 1, 9, 1)$
135 : $P_{2612} = (3, 2, 9, 1)$
136 : $P_{2635} = (10, 3, 9, 1)$
137 : $P_{2642} = (1, 4, 9, 1)$
138 : $P_{2649} = (8, 4, 9, 1)$
139 : $P_{2658} = (1, 5, 9, 1)$
140 : $P_{2669} = (12, 5, 9, 1)$
141 : $P_{2673} = (0, 6, 9, 1)$
142 : $P_{2700} = (11, 7, 9, 1)$
143 : $P_{2728} = (7, 9, 9, 1)$
144 : $P_{2731} = (10, 9, 9, 1)$
145 : $P_{2733} = (12, 9, 9, 1)$
146 : $P_{2741} = (4, 10, 9, 1)$
147 : $P_{2771} = (2, 12, 9, 1)$
148 : $P_{2777} = (8, 12, 9, 1)$
149 : $P_{2780} = (11, 12, 9, 1)$
150 : $P_{2803} = (2, 14, 9, 1)$
151 : $P_{2805} = (4, 14, 9, 1)$
152 : $P_{2808} = (7, 14, 9, 1)$
153 : $P_{2892} = (11, 3, 10, 1)$
154 : $P_{2907} = (10, 4, 10, 1)$
155 : $P_{2915} = (2, 5, 10, 1)$
156 : $P_{2930} = (1, 6, 10, 1)$
157 : $P_{2938} = (9, 6, 10, 1)$
158 : $P_{2946} = (1, 7, 10, 1)$
159 : $P_{2947} = (2, 7, 10, 1)$
160 : $P_{2972} = (11, 8, 10, 1)$
161 : $P_{2993} = (0, 10, 10, 1)$
162 : $P_{2999} = (6, 10, 10, 1)$
163 : $P_{3000} = (7, 10, 10, 1)$
164 : $P_{3031} = (6, 12, 10, 1)$
165 : $P_{3048} = (7, 13, 10, 1)$
166 : $P_{3067} = (10, 14, 10, 1)$
167 : $P_{3082} = (9, 15, 10, 1)$
168 : $P_{3132} = (11, 2, 11, 1)$
169 : $P_{3151} = (14, 3, 11, 1)$
170 : $P_{3179} = (10, 5, 11, 1)$
171 : $P_{3198} = (13, 6, 11, 1)$
172 : $P_{3213} = (12, 7, 11, 1)$
173 : $P_{3221} = (4, 8, 11, 1)$

174 : $P_{3244} = (11, 9, 11, 1)$
175 : $P_{3265} = (0, 11, 11, 1)$
176 : $P_{3277} = (12, 11, 11, 1)$
177 : $P_{3278} = (13, 11, 11, 1)$
178 : $P_{3282} = (1, 12, 11, 1)$
179 : $P_{3285} = (4, 12, 11, 1)$
180 : $P_{3298} = (1, 13, 11, 1)$
181 : $P_{3311} = (14, 13, 11, 1)$
182 : $P_{3339} = (10, 15, 11, 1)$
183 : $P_{3363} = (2, 1, 12, 1)$
184 : $P_{3395} = (2, 3, 12, 1)$
185 : $P_{3405} = (12, 3, 12, 1)$
186 : $P_{3408} = (15, 3, 12, 1)$
187 : $P_{3439} = (14, 5, 12, 1)$
188 : $P_{3449} = (8, 6, 12, 1)$
189 : $P_{3466} = (9, 7, 12, 1)$
190 : $P_{3535} = (14, 11, 12, 1)$
191 : $P_{3552} = (15, 12, 12, 1)$
192 : $P_{3569} = (0, 14, 12, 1)$
193 : $P_{3577} = (8, 14, 12, 1)$
194 : $P_{3578} = (9, 14, 12, 1)$
195 : $P_{3597} = (12, 15, 12, 1)$
196 : $P_{3626} = (9, 1, 13, 1)$
197 : $P_{3665} = (0, 4, 13, 1)$
198 : $P_{3667} = (2, 4, 13, 1)$
199 : $P_{3668} = (3, 4, 13, 1)$
200 : $P_{3694} = (13, 5, 13, 1)$
201 : $P_{3699} = (2, 6, 13, 1)$
202 : $P_{3716} = (3, 7, 13, 1)$
203 : $P_{3734} = (5, 8, 13, 1)$
204 : $P_{3738} = (9, 8, 13, 1)$
205 : $P_{3742} = (13, 8, 13, 1)$
206 : $P_{3781} = (4, 11, 13, 1)$
207 : $P_{3814} = (5, 13, 13, 1)$
208 : $P_{3845} = (4, 15, 13, 1)$
209 : $P_{3878} = (5, 1, 14, 1)$
210 : $P_{3893} = (4, 2, 14, 1)$
211 : $P_{3898} = (9, 2, 14, 1)$
212 : $P_{3901} = (12, 2, 14, 1)$
213 : $P_{3926} = (5, 4, 14, 1)$
214 : $P_{3948} = (11, 5, 14, 1)$
215 : $P_{3957} = (4, 6, 14, 1)$
216 : $P_{3963} = (10, 6, 14, 1)$
217 : $P_{3968} = (15, 6, 14, 1)$
218 : $P_{3986} = (1, 8, 14, 1)$
219 : $P_{3991} = (6, 8, 14, 1)$
220 : $P_{4002} = (1, 9, 14, 1)$
221 : $P_{4016} = (15, 9, 14, 1)$
222 : $P_{4042} = (9, 11, 14, 1)$
223 : $P_{4059} = (10, 12, 14, 1)$
224 : $P_{4065} = (0, 13, 14, 1)$
225 : $P_{4087} = (6, 14, 14, 1)$
226 : $P_{4092} = (11, 14, 14, 1)$
227 : $P_{4093} = (12, 14, 14, 1)$
228 : $P_{4141} = (12, 1, 15, 1)$
229 : $P_{4152} = (7, 2, 15, 1)$
230 : $P_{4161} = (0, 3, 15, 1)$
231 : $P_{4200} = (7, 5, 15, 1)$
232 : $P_{4202} = (9, 5, 15, 1)$
233 : $P_{4208} = (15, 5, 15, 1)$
234 : $P_{4238} = (13, 7, 15, 1)$
235 : $P_{4260} = (3, 9, 15, 1)$
236 : $P_{4276} = (3, 10, 15, 1)$
237 : $P_{4286} = (13, 10, 15, 1)$
238 : $P_{4288} = (15, 10, 15, 1)$
239 : $P_{4314} = (9, 12, 15, 1)$
240 : $P_{4333} = (12, 13, 15, 1)$