Rank-337 over GF(16)

January 15, 2021

The equation

The equation of the surface is :
$$X_1^3 + X_2^3 + X_0^2 X_3 + X_1^2 X_2 = 0$$
(0, 1, 1, 0, 0, 0, 1, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0)
The point rank of the equation over GF(16) is 303108653

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:

$0 :\ P_3 = \mathbf{P}(0,0,0,1) = \mathbf{P}(0,0,0,1)$

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:

$0: P_0 = (1, 0, 0, 0)$

$1: P_3 = (0, 0, 0, 1)$

$2: P_4 = (1, 1, 1, 1)$

$3: P_{291} = (1, 1, 0, 1)$

$4: P_{311} = (5, 2, 0, 1)$

$5: P_{330} = (8, 3, 0, 1)$

$6: P_{346} = (8, 4, 0, 1)$

$7: P_{369} = (15, 5, 0, 1)$

$8: P_{373} = (3, 6, 0, 1)$

$9: P_{394} = (8, 7, 0, 1)$

$10: P_{405} = (3, 8, 0, 1)$

$11: P_{433} = (15, 9, 0, 1)$

$12: P_{435} = (1, 10, 0, 1)$

$13: P_{451} = (1, 11, 0, 1)$

$14: P_{481} = (15, 12, 0, 1)$

$15: P_{487} = (5, 13, 0, 1)$

$16: P_{501} = (3, 14, 0, 1)$

$17: P_{519} = (5, 15, 0, 1)$

$18: P_{531} = (1, 0, 1, 1)$

$19: P_{567} = (6, 2, 1, 1)$

$20: P_{587} = (10, 3, 1, 1)$

$21: P_{606} = (13, 4, 1, 1)$

$22: P_{620} = (11, 5, 1, 1)$

$23: P_{629} = (4, 6, 1, 1)$

$24: P_{655} = (14, 7, 1, 1)$

$25: P_{667} = (10, 8, 1, 1)$

$26: P_{680} = (7, 9, 1, 1)$

$27: P_{699} = (10, 10, 1, 1)$

$28: P_{716} = (11, 11, 1, 1)$

$29: P_{723} = (2, 12, 1, 1)$

$30: P_{746} = (9, 13, 1, 1)$

$31: P_{765} = (12, 14, 1, 1)$

$32: P_{780} = (11, 15, 1, 1)$

$33: P_{790} = (5, 0, 2, 1)$

$34: P_{811} = (10, 1, 2, 1)$

$35: P_{822} = (5, 2, 2, 1)$

$36: P_{839} = (6, 3, 2, 1)$

$37: P_{856} = (7, 4, 2, 1)$

$38: P_{879} = (14, 5, 2, 1)$

$39: P_{890} = (9, 6, 2, 1)$

$40: P_{909} = (12, 7, 2, 1)$

$41: P_{924} = (11, 8, 2, 1)$

$42: P_{938} = (9, 9, 2, 1)$

$43: P_{957} = (12, 10, 2, 1)$

$44: P_{963} = (2, 11, 2, 1)$

$45: P_{990} = (13, 12, 2, 1)$

$46: P_{1002} = (9, 13, 2, 1)$

$47: P_{1013} = (4, 14, 2, 1)$

$48: P_{1037} = (12, 15, 2, 1)$

$49: P_{1049} = (8, 0, 3, 1)$

$50: P_{1063} = (6, 1, 3, 1)$

$51: P_{1083} = (10, 2, 3, 1)$

$52: P_{1097} = (8, 3, 3, 1)$

$53: P_{1119} = (14, 4, 3, 1)$

$54 : P_{1127} = (6, 5, 3, 1)$

$55 : P_{1139} = (2, 6, 3, 1)$

$56 : P_{1159} = (6, 7, 3, 1)$

$57 : P_{1183} = (14, 8, 3, 1)$

$58 : P_{1198} = (13, 9, 3, 1)$

$59 : P_{1212} = (11, 10, 3, 1)$

$60 : P_{1221} = (4, 11, 3, 1)$

$61 : P_{1245} = (12, 12, 3, 1)$

$62 : P_{1258} = (9, 13, 3, 1)$

$63 : P_{1272} = (7, 14, 3, 1)$

$64 : P_{1295} = (14, 15, 3, 1)$

$65 : P_{1305} = (8, 0, 4, 1)$

$66 : P_{1324} = (11, 1, 4, 1)$

$67 : P_{1338} = (9, 2, 4, 1)$

$68 : P_{1351} = (6, 3, 4, 1)$

$69 : P_{1369} = (8, 4, 4, 1)$

$70 : P_{1390} = (13, 5, 4, 1)$

$71 : P_{1400} = (7, 6, 4, 1)$

$72 : P_{1423} = (14, 7, 4, 1)$

$73 : P_{1427} = (2, 8, 4, 1)$

$74 : P_{1453} = (12, 9, 4, 1)$

$75 : P_{1461} = (4, 10, 4, 1)$

$76 : P_{1479} = (6, 11, 4, 1)$

$77 : P_{1495} = (6, 12, 4, 1)$

$78 : P_{1519} = (14, 13, 4, 1)$

$79 : P_{1535} = (14, 14, 4, 1)$

$80 : P_{1547} = (10, 15, 4, 1)$

$81 : P_{1568} = (15, 0, 5, 1)$

$82 : P_{1582} = (13, 1, 5, 1)$

$83 : P_{1597} = (12, 2, 5, 1)$

$84 : P_{1603} = (2, 3, 5, 1)$

$85 : P_{1628} = (11, 4, 5, 1)$

$86 : P_{1648} = (15, 5, 5, 1)$

$87 : P_{1655} = (6, 6, 5, 1)$

$88 : P_{1679} = (14, 7, 5, 1)$

$89 : P_{1694} = (13, 8, 5, 1)$

$90 : P_{1699} = (2, 9, 5, 1)$

$91 : P_{1722} = (9, 10, 5, 1)$

$92 : P_{1739} = (10, 11, 5, 1)$

$93 : P_{1758} = (13, 12, 5, 1)$

$94 : P_{1765} = (4, 13, 5, 1)$

$95 : P_{1784} = (7, 14, 5, 1)$

$96 : P_{1795} = (2, 15, 5, 1)$

$97 : P_{1812} = (3, 0, 6, 1)$

$98 : P_{1839} = (14, 1, 6, 1)$

$99 : P_{1848} = (7, 2, 6, 1)$

$100 : P_{1863} = (6, 3, 6, 1)$

$101 : P_{1882} = (9, 4, 6, 1)$

$102 : P_{1891} = (2, 5, 6, 1)$

$103 : P_{1908} = (3, 6, 6, 1)$

$104 : P_{1925} = (4, 7, 6, 1)$

$105 : P_{1941} = (4, 8, 6, 1)$

$106 : P_{1957} = (4, 9, 6, 1)$

$107 : P_{1976} = (7, 10, 6, 1)$

$108 : P_{1996} = (11, 11, 6, 1)$

$109 : P_{2011} = (10, 12, 6, 1)$

$110 : P_{2029} = (12, 13, 6, 1)$

$111 : P_{2040} = (7, 14, 6, 1)$

$112 : P_{2062} = (13, 15, 6, 1)$

$113 : P_{2073} = (8, 0, 7, 1)$

$114 : P_{2085} = (4, 1, 7, 1)$

$115 : P_{2111} = (14, 2, 7, 1)$

$116 : P_{2127} = (14, 3, 7, 1)$

$117 : P_{2135} = (6, 4, 7, 1)$

$118 : P_{2157} = (12, 5, 7, 1)$

$119 : P_{2175} = (14, 6, 7, 1)$

$120 : P_{2185} = (8, 7, 7, 1)$

$121 : P_{2200} = (7, 8, 7, 1)$

$122 : P_{2215} = (6, 9, 7, 1)$

$123 : P_{2231} = (6, 10, 7, 1)$

$124 : P_{2252} = (11, 11, 7, 1)$

$125 : P_{2270} = (13, 12, 7, 1)$

$126 : P_{2283} = (10, 13, 7, 1)$

$127 : P_{2291} = (2, 14, 7, 1)$

$128 : P_{2314} = (9, 15, 7, 1)$

$129 : P_{2324} = (3, 0, 8, 1)$

$130 : P_{2344} = (7, 1, 8, 1)$

$131 : P_{2365} = (12, 2, 8, 1)$

$132 : P_{2373} = (4, 3, 8, 1)$

$133 : P_{2391} = (6, 4, 8, 1)$

$134 : P_{2405} = (4, 5, 8, 1)$

$135 : P_{2424} = (7, 6, 8, 1)$

$136 : P_{2442} = (9, 7, 8, 1)$

$137 : P_{2452} = (3, 8, 8, 1)$

$138 : P_{2475} = (10, 9, 8, 1)$

$139 : P_{2492} = (11, 10, 8, 1)$

$140 : P_{2511} = (14, 11, 8, 1)$

$141 : P_{2515} = (2, 12, 8, 1)$

$142 : P_{2542} = (13, 13, 8, 1)$

$143 : P_{2549} = (4, 14, 8, 1)$

$144 : P_{2568} = (7, 15, 8, 1)$

$145 : P_{2592} = (15, 0, 9, 1)$

$146 : P_{2603} = (10, 1, 9, 1)$

$147 : P_{2611} = (2, 2, 9, 1)$

$148 : P_{2636} = (11, 3, 9, 1)$

$149 : P_{2655} = (14, 4, 9, 1)$

$150 : P_{2670} = (13, 5, 9, 1)$

$151 : P_{2686} = (13, 6, 9, 1)$

$152 : P_{2691} = (2, 7, 9, 1)$

$153 : P_{2712} = (7, 8, 9, 1)$

$154 : P_{2736} = (15, 9, 9, 1)$

$155 : P_{2750} = (13, 10, 9, 1)$

$156 : P_{2762} = (9, 11, 9, 1)$

$157 : P_{2771} = (2, 12, 9, 1)$

$158 : P_{2797} = (12, 13, 9, 1)$

$159 : P_{2807} = (6, 14, 9, 1)$

$160 : P_{2821} = (4, 15, 9, 1)$

$161 : P_{2834} = (1, 0, 10, 1)$

$162: P_{2860} = (11, 1, 10, 1)$
$163: P_{2876} = (11, 2, 10, 1)$
$164: P_{2894} = (13, 3, 10, 1)$
$165: P_{2911} = (14, 4, 10, 1)$
$166: P_{2915} = (2, 5, 10, 1)$
$167: P_{2939} = (10, 6, 10, 1)$
$168: P_{2955} = (10, 7, 10, 1)$
$169: P_{2973} = (12, 8, 10, 1)$
$170: P_{2988} = (11, 9, 10, 1)$
$171: P_{2994} = (1, 10, 10, 1)$
$172: P_{3019} = (10, 11, 10, 1)$
$173: P_{3032} = (7, 12, 10, 1)$
$174: P_{3047} = (6, 13, 10, 1)$
$175: P_{3061} = (4, 14, 10, 1)$
$176: P_{3082} = (9, 15, 10, 1)$
$177: P_{3090} = (1, 0, 11, 1)$
$178: P_{3115} = (10, 1, 11, 1)$
$179: P_{3130} = (9, 2, 11, 1)$
$180: P_{3151} = (14, 3, 11, 1)$
$181: P_{3163} = (10, 4, 11, 1)$
$182: P_{3176} = (7, 5, 11, 1)$
$183: P_{3197} = (12, 6, 11, 1)$
$184: P_{3214} = (13, 7, 11, 1)$
$185: P_{3221} = (4, 8, 11, 1)$
$186: P_{3235} = (2, 9, 11, 1)$
$187: P_{3260} = (11, 10, 11, 1)$
$188: P_{3266} = (1, 11, 11, 1)$
$189: P_{3292} = (11, 12, 11, 1)$
$190: P_{3308} = (11, 13, 11, 1)$
$191: P_{3323} = (10, 14, 11, 1)$
$192: P_{3335} = (6, 15, 11, 1)$
$193: P_{3360} = (15, 0, 12, 1)$
$194: P_{3370} = (9, 1, 12, 1)$
$195: P_{3381} = (4, 2, 12, 1)$
$196: P_{3407} = (14, 3, 12, 1)$
$197: P_{3411} = (2, 4, 12, 1)$
$198: P_{3427} = (2, 5, 12, 1)$
$199: P_{3448} = (7, 6, 12, 1)$
$200: P_{3468} = (11, 7, 12, 1)$
$201: P_{3479} = (6, 8, 12, 1)$
$202: P_{3502} = (13, 9, 12, 1)$
$203: P_{3515} = (10, 10, 12, 1)$
$204: P_{3534} = (13, 11, 12, 1)$
$205: P_{3552} = (15, 12, 12, 1)$
$206: P_{3555} = (2, 13, 12, 1)$
$207: P_{3582} = (13, 14, 12, 1)$
$208: P_{3597} = (12, 15, 12, 1)$
$209: P_{3606} = (5, 0, 13, 1)$

$210: P_{3619} = (2, 1, 13, 1)$
$211: P_{3645} = (12, 2, 13, 1)$
$212: P_{3656} = (7, 3, 13, 1)$
$213: P_{3677} = (12, 4, 13, 1)$
$214: P_{3694} = (13, 5, 13, 1)$
$215: P_{3708} = (11, 6, 13, 1)$
$216: P_{3719} = (6, 7, 13, 1)$
$217: P_{3733} = (4, 8, 13, 1)$
$218: P_{3759} = (14, 9, 13, 1)$
$219: P_{3771} = (10, 10, 13, 1)$
$220: P_{3789} = (12, 11, 13, 1)$
$221: P_{3802} = (9, 12, 13, 1)$
$222: P_{3814} = (5, 13, 13, 1)$
$223: P_{3834} = (9, 14, 13, 1)$
$224: P_{3850} = (9, 15, 13, 1)$
$225: P_{3860} = (3, 0, 14, 1)$
$226: P_{3884} = (11, 1, 14, 1)$
$227: P_{3902} = (13, 2, 14, 1)$
$228: P_{3914} = (9, 3, 14, 1)$
$229: P_{3925} = (4, 4, 14, 1)$
$230: P_{3947} = (10, 5, 14, 1)$
$231: P_{3957} = (4, 6, 14, 1)$
$232: P_{3975} = (6, 7, 14, 1)$
$233: P_{3992} = (7, 8, 14, 1)$
$234: P_{4003} = (2, 9, 14, 1)$
$235: P_{4031} = (14, 10, 14, 1)$
$236: P_{4040} = (7, 11, 14, 1)$
$237: P_{4053} = (4, 12, 14, 1)$
$238: P_{4072} = (7, 13, 14, 1)$
$239: P_{4084} = (3, 14, 14, 1)$
$240: P_{4109} = (12, 15, 14, 1)$
$241: P_{4118} = (5, 0, 15, 1)$
$242: P_{4141} = (12, 1, 15, 1)$
$243: P_{4154} = (9, 2, 15, 1)$
$244: P_{4173} = (12, 3, 15, 1)$
$245: P_{4183} = (6, 4, 15, 1)$
$246: P_{4202} = (9, 5, 15, 1)$
$247: P_{4213} = (4, 6, 15, 1)$
$248: P_{4232} = (7, 7, 15, 1)$
$249: P_{4250} = (9, 8, 15, 1)$
$250: P_{4270} = (13, 9, 15, 1)$
$251: P_{4275} = (2, 10, 15, 1)$
$252: P_{4299} = (10, 11, 15, 1)$
$253: P_{4319} = (14, 12, 15, 1)$
$254: P_{4333} = (12, 13, 15, 1)$
$255: P_{4348} = (11, 14, 15, 1)$
$256: P_{4358} = (5, 15, 15, 1)$

Line Intersection Graph

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

The points on the surface are:

0 : $P_0 = (1, 0, 0, 0)$
1 : $P_3 = (0, 0, 0, 1)$
2 : $P_4 = (1, 1, 1, 1)$
3 : $P_{291} = (1, 1, 0, 1)$
4 : $P_{311} = (5, 2, 0, 1)$
5 : $P_{330} = (8, 3, 0, 1)$
6 : $P_{346} = (8, 4, 0, 1)$
7 : $P_{369} = (15, 5, 0, 1)$
8 : $P_{373} = (3, 6, 0, 1)$
9 : $P_{394} = (8, 7, 0, 1)$
10 : $P_{405} = (3, 8, 0, 1)$
11 : $P_{433} = (15, 9, 0, 1)$
12 : $P_{435} = (1, 10, 0, 1)$
13 : $P_{451} = (1, 11, 0, 1)$
14 : $P_{481} = (15, 12, 0, 1)$
15 : $P_{487} = (5, 13, 0, 1)$
16 : $P_{501} = (3, 14, 0, 1)$
17 : $P_{519} = (5, 15, 0, 1)$
18 : $P_{531} = (1, 0, 1, 1)$
19 : $P_{567} = (6, 2, 1, 1)$
20 : $P_{587} = (10, 3, 1, 1)$
21 : $P_{606} = (13, 4, 1, 1)$
22 : $P_{620} = (11, 5, 1, 1)$
23 : $P_{629} = (4, 6, 1, 1)$
24 : $P_{655} = (14, 7, 1, 1)$
25 : $P_{667} = (10, 8, 1, 1)$
26 : $P_{680} = (7, 9, 1, 1)$
27 : $P_{699} = (10, 10, 1, 1)$
28 : $P_{716} = (11, 11, 1, 1)$
29 : $P_{723} = (2, 12, 1, 1)$
30 : $P_{746} = (9, 13, 1, 1)$
31 : $P_{765} = (12, 14, 1, 1)$
32 : $P_{780} = (11, 15, 1, 1)$
33 : $P_{790} = (5, 0, 2, 1)$
34 : $P_{811} = (10, 1, 2, 1)$
35 : $P_{822} = (5, 2, 2, 1)$
36 : $P_{839} = (6, 3, 2, 1)$
37 : $P_{856} = (7, 4, 2, 1)$
38 : $P_{879} = (14, 5, 2, 1)$
39 : $P_{890} = (9, 6, 2, 1)$
40 : $P_{909} = (12, 7, 2, 1)$
41 : $P_{924} = (11, 8, 2, 1)$
42 : $P_{938} = (9, 9, 2, 1)$
43 : $P_{957} = (12, 10, 2, 1)$
44 : $P_{963} = (2, 11, 2, 1)$
45 : $P_{990} = (13, 12, 2, 1)$
46 : $P_{1002} = (9, 13, 2, 1)$
47 : $P_{1013} = (4, 14, 2, 1)$
48 : $P_{1037} = (12, 15, 2, 1)$
49 : $P_{1049} = (8, 0, 3, 1)$
50 : $P_{1063} = (6, 1, 3, 1)$

51 : $P_{1083} = (10, 2, 3, 1)$
52 : $P_{1097} = (8, 3, 3, 1)$
53 : $P_{1119} = (14, 4, 3, 1)$
54 : $P_{1127} = (6, 5, 3, 1)$
55 : $P_{1139} = (2, 6, 3, 1)$
56 : $P_{1159} = (6, 7, 3, 1)$
57 : $P_{1183} = (14, 8, 3, 1)$
58 : $P_{1198} = (13, 9, 3, 1)$
59 : $P_{1212} = (11, 10, 3, 1)$
60 : $P_{1221} = (4, 11, 3, 1)$
61 : $P_{1245} = (12, 12, 3, 1)$
62 : $P_{1258} = (9, 13, 3, 1)$
63 : $P_{1272} = (7, 14, 3, 1)$
64 : $P_{1295} = (14, 15, 3, 1)$
65 : $P_{1305} = (8, 0, 4, 1)$
66 : $P_{1324} = (11, 1, 4, 1)$
67 : $P_{1338} = (9, 2, 4, 1)$
68 : $P_{1351} = (6, 3, 4, 1)$
69 : $P_{1369} = (8, 4, 4, 1)$
70 : $P_{1390} = (13, 5, 4, 1)$
71 : $P_{1400} = (7, 6, 4, 1)$
72 : $P_{1423} = (14, 7, 4, 1)$
73 : $P_{1427} = (2, 8, 4, 1)$
74 : $P_{1453} = (12, 9, 4, 1)$
75 : $P_{1461} = (4, 10, 4, 1)$
76 : $P_{1479} = (6, 11, 4, 1)$
77 : $P_{1495} = (6, 12, 4, 1)$
78 : $P_{1519} = (14, 13, 4, 1)$
79 : $P_{1535} = (14, 14, 4, 1)$
80 : $P_{1547} = (10, 15, 4, 1)$
81 : $P_{1568} = (15, 0, 5, 1)$
82 : $P_{1582} = (13, 1, 5, 1)$
83 : $P_{1597} = (12, 2, 5, 1)$
84 : $P_{1603} = (2, 3, 5, 1)$
85 : $P_{1628} = (11, 4, 5, 1)$
86 : $P_{1648} = (15, 5, 5, 1)$
87 : $P_{1655} = (6, 6, 5, 1)$
88 : $P_{1679} = (14, 7, 5, 1)$
89 : $P_{1694} = (13, 8, 5, 1)$
90 : $P_{1699} = (2, 9, 5, 1)$
91 : $P_{1722} = (9, 10, 5, 1)$
92 : $P_{1739} = (10, 11, 5, 1)$
93 : $P_{1758} = (13, 12, 5, 1)$
94 : $P_{1765} = (4, 13, 5, 1)$
95 : $P_{1784} = (7, 14, 5, 1)$
96 : $P_{1795} = (2, 15, 5, 1)$
97 : $P_{1812} = (3, 0, 6, 1)$
98 : $P_{1839} = (14, 1, 6, 1)$
99 : $P_{1848} = (7, 2, 6, 1)$
100 : $P_{1863} = (6, 3, 6, 1)$
101 : $P_{1882} = (9, 4, 6, 1)$

102 : $P_{1891} = (2, 5, 6, 1)$
103 : $P_{1908} = (3, 6, 6, 1)$
104 : $P_{1925} = (4, 7, 6, 1)$
105 : $P_{1941} = (4, 8, 6, 1)$
106 : $P_{1957} = (4, 9, 6, 1)$
107 : $P_{1976} = (7, 10, 6, 1)$
108 : $P_{1996} = (11, 11, 6, 1)$
109 : $P_{2011} = (10, 12, 6, 1)$
110 : $P_{2029} = (12, 13, 6, 1)$
111 : $P_{2040} = (7, 14, 6, 1)$
112 : $P_{2062} = (13, 15, 6, 1)$
113 : $P_{2073} = (8, 0, 7, 1)$
114 : $P_{2085} = (4, 1, 7, 1)$
115 : $P_{2111} = (14, 2, 7, 1)$
116 : $P_{2127} = (14, 3, 7, 1)$
117 : $P_{2135} = (6, 4, 7, 1)$
118 : $P_{2157} = (12, 5, 7, 1)$
119 : $P_{2175} = (14, 6, 7, 1)$
120 : $P_{2185} = (8, 7, 7, 1)$
121 : $P_{2200} = (7, 8, 7, 1)$
122 : $P_{2215} = (6, 9, 7, 1)$
123 : $P_{2231} = (6, 10, 7, 1)$
124 : $P_{2252} = (11, 11, 7, 1)$
125 : $P_{2270} = (13, 12, 7, 1)$
126 : $P_{2283} = (10, 13, 7, 1)$
127 : $P_{2291} = (2, 14, 7, 1)$
128 : $P_{2314} = (9, 15, 7, 1)$
129 : $P_{2324} = (3, 0, 8, 1)$
130 : $P_{2344} = (7, 1, 8, 1)$
131 : $P_{2365} = (12, 2, 8, 1)$
132 : $P_{2373} = (4, 3, 8, 1)$
133 : $P_{2391} = (6, 4, 8, 1)$
134 : $P_{2405} = (4, 5, 8, 1)$
135 : $P_{2424} = (7, 6, 8, 1)$
136 : $P_{2442} = (9, 7, 8, 1)$
137 : $P_{2452} = (3, 8, 8, 1)$
138 : $P_{2475} = (10, 9, 8, 1)$
139 : $P_{2492} = (11, 10, 8, 1)$
140 : $P_{2511} = (14, 11, 8, 1)$
141 : $P_{2515} = (2, 12, 8, 1)$
142 : $P_{2542} = (13, 13, 8, 1)$
143 : $P_{2549} = (4, 14, 8, 1)$
144 : $P_{2568} = (7, 15, 8, 1)$
145 : $P_{2592} = (15, 0, 9, 1)$
146 : $P_{2603} = (10, 1, 9, 1)$
147 : $P_{2611} = (2, 2, 9, 1)$
148 : $P_{2636} = (11, 3, 9, 1)$
149 : $P_{2655} = (14, 4, 9, 1)$
150 : $P_{2670} = (13, 5, 9, 1)$
151 : $P_{2686} = (13, 6, 9, 1)$
152 : $P_{2691} = (2, 7, 9, 1)$

$153: P_{2712} = (7, 8, 9, 1)$
$154: P_{2736} = (15, 9, 9, 1)$
$155: P_{2750} = (13, 10, 9, 1)$
$156: P_{2762} = (9, 11, 9, 1)$
$157: P_{2771} = (2, 12, 9, 1)$
$158: P_{2797} = (12, 13, 9, 1)$
$159: P_{2807} = (6, 14, 9, 1)$
$160: P_{2821} = (4, 15, 9, 1)$
$161: P_{2834} = (1, 0, 10, 1)$
$162: P_{2860} = (11, 1, 10, 1)$
$163: P_{2876} = (11, 2, 10, 1)$
$164: P_{2894} = (13, 3, 10, 1)$
$165: P_{2911} = (14, 4, 10, 1)$
$166: P_{2915} = (2, 5, 10, 1)$
$167: P_{2939} = (10, 6, 10, 1)$
$168: P_{2955} = (10, 7, 10, 1)$
$169: P_{2973} = (12, 8, 10, 1)$
$170: P_{2988} = (11, 9, 10, 1)$
$171: P_{2994} = (1, 10, 10, 1)$
$172: P_{3019} = (10, 11, 10, 1)$
$173: P_{3032} = (7, 12, 10, 1)$
$174: P_{3047} = (6, 13, 10, 1)$
$175: P_{3061} = (4, 14, 10, 1)$
$176: P_{3082} = (9, 15, 10, 1)$
$177: P_{3090} = (1, 0, 11, 1)$
$178: P_{3115} = (10, 1, 11, 1)$
$179: P_{3130} = (9, 2, 11, 1)$
$180: P_{3151} = (14, 3, 11, 1)$
$181: P_{3163} = (10, 4, 11, 1)$
$182: P_{3176} = (7, 5, 11, 1)$
$183: P_{3197} = (12, 6, 11, 1)$
$184: P_{3214} = (13, 7, 11, 1)$
$185: P_{3221} = (4, 8, 11, 1)$
$186: P_{3235} = (2, 9, 11, 1)$
$187: P_{3260} = (11, 10, 11, 1)$

$188: P_{3266} = (1, 11, 11, 1)$
$189: P_{3292} = (11, 12, 11, 1)$
$190: P_{3308} = (11, 13, 11, 1)$
$191: P_{3323} = (10, 14, 11, 1)$
$192: P_{3335} = (6, 15, 11, 1)$
$193: P_{3360} = (15, 0, 12, 1)$
$194: P_{3370} = (9, 1, 12, 1)$
$195: P_{3381} = (4, 2, 12, 1)$
$196: P_{3407} = (14, 3, 12, 1)$
$197: P_{3411} = (2, 4, 12, 1)$
$198: P_{3427} = (2, 5, 12, 1)$
$199: P_{3448} = (7, 6, 12, 1)$
$200: P_{3468} = (11, 7, 12, 1)$
$201: P_{3479} = (6, 8, 12, 1)$
$202: P_{3502} = (13, 9, 12, 1)$
$203: P_{3515} = (10, 10, 12, 1)$
$204: P_{3534} = (13, 11, 12, 1)$
$205: P_{3552} = (15, 12, 12, 1)$
$206: P_{3555} = (2, 13, 12, 1)$
$207: P_{3582} = (13, 14, 12, 1)$
$208: P_{3597} = (12, 15, 12, 1)$
$209: P_{3606} = (5, 0, 13, 1)$
$210: P_{3619} = (2, 1, 13, 1)$
$211: P_{3645} = (12, 2, 13, 1)$
$212: P_{3656} = (7, 3, 13, 1)$
$213: P_{3677} = (12, 4, 13, 1)$
$214: P_{3694} = (13, 5, 13, 1)$
$215: P_{3708} = (11, 6, 13, 1)$
$216: P_{3719} = (6, 7, 13, 1)$
$217: P_{3733} = (4, 8, 13, 1)$
$218: P_{3759} = (14, 9, 13, 1)$
$219: P_{3771} = (10, 10, 13, 1)$
$220: P_{3789} = (12, 11, 13, 1)$
$221: P_{3802} = (9, 12, 13, 1)$
$222: P_{3814} = (5, 13, 13, 1)$

$223: P_{3834} = (9, 14, 13, 1)$
$224: P_{3850} = (9, 15, 13, 1)$
$225: P_{3860} = (3, 0, 14, 1)$
$226: P_{3884} = (11, 1, 14, 1)$
$227: P_{3902} = (13, 2, 14, 1)$
$228: P_{3914} = (9, 3, 14, 1)$
$229: P_{3925} = (4, 4, 14, 1)$
$230: P_{3947} = (10, 5, 14, 1)$
$231: P_{3957} = (4, 6, 14, 1)$
$232: P_{3975} = (6, 7, 14, 1)$
$233: P_{3992} = (7, 8, 14, 1)$
$234: P_{4003} = (2, 9, 14, 1)$
$235: P_{4031} = (14, 10, 14, 1)$
$236: P_{4040} = (7, 11, 14, 1)$
$237: P_{4053} = (4, 12, 14, 1)$
$238: P_{4072} = (7, 13, 14, 1)$
$239: P_{4084} = (3, 14, 14, 1)$
$240: P_{4109} = (12, 15, 14, 1)$
$241: P_{4118} = (5, 0, 15, 1)$
$242: P_{4141} = (12, 1, 15, 1)$
$243: P_{4154} = (9, 2, 15, 1)$
$244: P_{4173} = (12, 3, 15, 1)$
$245: P_{4183} = (6, 4, 15, 1)$
$246: P_{4202} = (9, 5, 15, 1)$
$247: P_{4213} = (4, 6, 15, 1)$
$248: P_{4232} = (7, 7, 15, 1)$
$249: P_{4250} = (9, 8, 15, 1)$
$250: P_{4270} = (13, 9, 15, 1)$
$251: P_{4275} = (2, 10, 15, 1)$
$252: P_{4299} = (10, 11, 15, 1)$
$253: P_{4319} = (14, 12, 15, 1)$
$254: P_{4333} = (12, 13, 15, 1)$
$255: P_{4348} = (11, 14, 15, 1)$
$256: P_{4358} = (5, 15, 15, 1)$