Rank-43 over GF(32)

January 15, 2021

The equation

The equation of the surface is :

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

(0, 0, 1, 1, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0)
The point rank of the equation over GF(32) is 67633

General information

Number of lines	2
Number of points	1057
Number of singular points	1
Number of Eckardt points	0
Number of double points	1
Number of single points	64
Number of points off lines	992
Number of Hesse planes	0
Number of axes	0
Type of points on lines	33^2
Type of lines on points	$2, 1^{64}, 0^{992}$

Singular Points

The surface has 1 singular points:

$0: \ P_1 = \mathbf{P}(0,1,0,0) = \mathbf{P}(0,1,0,0)$

The 2 Lines

The lines and their Pluecker coordinates are:

$$\ell_0 = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1025} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1025} = \mathbf{Pl}(0,0,1,0,1,0)_{1152}$$

$$\ell_1 = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082369} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082369} = \mathbf{Pl}(0,0,0,1,0,1)_{36865}$$

Rank of lines: (1025, 1082369)
Rank of points on Klein quadric: (1152, 36865)

Eckardt Points

The surface has 0 Eckardt points:

Double Points

The surface has 1 Double points:
The double points on the surface are:

$P_{2082} = (0,0,1,1) = \ell_0 \cap \ell_1$

Single Points

The surface has 64 single points:
The single points on the surface are:

0 : $P_0 = (1,0,0,0)$ lies on line ℓ_0
1 : $P_1 = (0,1,0,0)$ lies on line ℓ_1
2 : $P_{2083} = (1,0,1,1)$ lies on line ℓ_0
3 : $P_{2084} = (2,0,1,1)$ lies on line ℓ_0
4 : $P_{2085} = (3,0,1,1)$ lies on line ℓ_0
5 : $P_{2086} = (4,0,1,1)$ lies on line ℓ_0
6 : $P_{2087} = (5,0,1,1)$ lies on line ℓ_0
7 : $P_{2088} = (6,0,1,1)$ lies on line ℓ_0
8 : $P_{2089} = (7,0,1,1)$ lies on line ℓ_0
9 : $P_{2090} = (8,0,1,1)$ lies on line ℓ_0
10 : $P_{2091} = (9,0,1,1)$ lies on line ℓ_0
11 : $P_{2092} = (10,0,1,1)$ lies on line ℓ_0
12 : $P_{2093} = (11,0,1,1)$ lies on line ℓ_0
13 : $P_{2094} = (12,0,1,1)$ lies on line ℓ_0
14 : $P_{2095} = (13,0,1,1)$ lies on line ℓ_0
15 : $P_{2096} = (14,0,1,1)$ lies on line ℓ_0
16 : $P_{2097} = (15,0,1,1)$ lies on line ℓ_0
17 : $P_{2098} = (16,0,1,1)$ lies on line ℓ_0
18 : $P_{2099} = (17,0,1,1)$ lies on line ℓ_0
19 : $P_{2100} = (18,0,1,1)$ lies on line ℓ_0
20 : $P_{2101} = (19,0,1,1)$ lies on line ℓ_0
21 : $P_{2102} = (20,0,1,1)$ lies on line ℓ_0
22 : $P_{2103} = (21,0,1,1)$ lies on line ℓ_0
23 : $P_{2104} = (22,0,1,1)$ lies on line ℓ_0
24 : $P_{2105} = (23,0,1,1)$ lies on line ℓ_0
25 : $P_{2106} = (24,0,1,1)$ lies on line ℓ_0
26 : $P_{2107} = (25,0,1,1)$ lies on line ℓ_0
27 : $P_{2108} = (26,0,1,1)$ lies on line ℓ_0
28 : $P_{2109} = (27,0,1,1)$ lies on line ℓ_0
29 : $P_{2110} = (28,0,1,1)$ lies on line ℓ_0
30 : $P_{2111} = (29,0,1,1)$ lies on line ℓ_0
31 : $P_{2112} = (30,0,1,1)$ lies on line ℓ_0
32 : $P_{2113} = (31,0,1,1)$ lies on line ℓ_0
33 : $P_{2114} = (0,1,1,1)$ lies on line ℓ_1
34 : $P_{2145} = (0,2,1,1)$ lies on line ℓ_1
35 : $P_{2177} = (0,3,1,1)$ lies on line ℓ_1
36 : $P_{2209} = (0,4,1,1)$ lies on line ℓ_1
37 : $P_{2241} = (0,5,1,1)$ lies on line ℓ_1
38 : $P_{2273} = (0,6,1,1)$ lies on line ℓ_1
39 : $P_{2305} = (0,7,1,1)$ lies on line ℓ_1
40 : $P_{2337} = (0,8,1,1)$ lies on line ℓ_1
41 : $P_{2369} = (0,9,1,1)$ lies on line ℓ_1
42 : $P_{2401} = (0,10,1,1)$ lies on line ℓ_1
43 : $P_{2433} = (0,11,1,1)$ lies on line ℓ_1
44 : $P_{2465} = (0,12,1,1)$ lies on line ℓ_1
45 : $P_{2497} = (0,13,1,1)$ lies on line ℓ_1
46 : $P_{2529} = (0,14,1,1)$ lies on line ℓ_1
47 : $P_{2561} = (0,15,1,1)$ lies on line ℓ_1
48 : $P_{2593} = (0,16,1,1)$ lies on line ℓ_1
49 : $P_{2625} = (0,17,1,1)$ lies on line ℓ_1
50 : $P_{2657} = (0,18,1,1)$ lies on line ℓ_1
51 : $P_{2689} = (0,19,1,1)$ lies on line ℓ_1
52 : $P_{2721} = (0,20,1,1)$ lies on line ℓ_1
53 : $P_{2753} = (0,21,1,1)$ lies on line ℓ_1
54 : $P_{2785} = (0,22,1,1)$ lies on line ℓ_1
55 : $P_{2817} = (0,23,1,1)$ lies on line ℓ_1
56 : $P_{2849} = (0,24,1,1)$ lies on line ℓ_1
57 : $P_{2881} = (0,25,1,1)$ lies on line ℓ_1
58 : $P_{2913} = (0,26,1,1)$ lies on line ℓ_1
59 : $P_{2945} = (0,27,1,1)$ lies on line ℓ_1
60 : $P_{2977} = (0,28,1,1)$ lies on line ℓ_1
61 : $P_{3009} = (0,29,1,1)$ lies on line ℓ_1
62 : $P_{3041} = (0,30,1,1)$ lies on line ℓ_1
63 : $P_{3073} = (0,31,1,1)$ lies on line ℓ_1

The single points on the surface are:

Points on surface but on no line

The surface has 992 points not on any line:
The points on the surface but not on lines are:

$0: P_{68} = (1,1,1,0)$
$1: P_{130} = (31,2,1,0)$
$2: P_{152} = (21,3,1,0)$
$3: P_{181} = (18,4,1,0)$
$4: P_{223} = (28,5,1,0)$
$5: P_{237} = (10,6,1,0)$
$6: P_{276} = (17,7,1,0)$
$7: P_{320} = (29,8,1,0)$
$8: P_{325} = (2,9,1,0)$
$9: P_{377} = (22,10,1,0)$
$10: P_{391} = (4,11,1,0)$
$11: P_{443} = (24,12,1,0)$
$12: P_{462} = (11,13,1,0)$
$13: P_{508} = (25,14,1,0)$
$14: P_{531} = (16,15,1,0)$
$15: P_{556} = (9,16,1,0)$
$16: P_{602} = (23,17,1,0)$
$17: P_{638} = (27,18,1,0)$
$18: P_{663} = (20,19,1,0)$
$19: P_{689} = (14,20,1,0)$
$20: P_{719} = (12,21,1,0)$
$21: P_{758} = (19,22,1,0)$
$22: P_{774} = (3,23,1,0)$
$23: P_{808} = (5,24,1,0)$
$24: P_{843} = (8,25,1,0)$
$25: P_{874} = (7,26,1,0)$
$26: P_{914} = (15,27,1,0)$
$27: P_{957} = (26,28,1,0)$
$28: P_{993} = (30,29,1,0)$
$29: P_{1001} = (6,30,1,0)$
$30: P_{1040} = (13,31,1,0)$
$31: P_{1091} = (1,1,0,1)$
$32: P_{1153} = (31,2,0,1)$
$33: P_{1175} = (21,3,0,1)$
$34: P_{1204} = (18,4,0,1)$
$35: P_{1246} = (28,5,0,1)$
$36: P_{1260} = (10,6,0,1)$
$37: P_{1299} = (17,7,0,1)$
$38: P_{1343} = (29,8,0,1)$
$39: P_{1348} = (2,9,0,1)$
$40: P_{1400} = (22,10,0,1)$
$41: P_{1414} = (4,11,0,1)$
$42: P_{1466} = (24,12,0,1)$
$43: P_{1485} = (11,13,0,1)$
$44: P_{1531} = (25,14,0,1)$
$45: P_{1554} = (16,15,0,1)$
$46: P_{1579} = (9,16,0,1)$
$47: P_{1625} = (23,17,0,1)$
$48: P_{1661} = (27,18,0,1)$
$49: P_{1686} = (20,19,0,1)$
$50: P_{1712} = (14,20,0,1)$
$51: P_{1742} = (12,21,0,1)$
$52: P_{1781} = (19,22,0,1)$
$53: P_{1797} = (3,23,0,1)$
$54: P_{1831} = (5,24,0,1)$
$55: P_{1866} = (8,25,0,1)$
$56: P_{1897} = (7,26,0,1)$
$57: P_{1937} = (15,27,0,1)$
$58: P_{1980} = (26,28,0,1)$
$59: P_{2016} = (30,29,0,1)$
$60: P_{2024} = (6,30,0,1)$
$61: P_{2063} = (13,31,0,1)$
$62: P_{3155} = (18,1,2,1)$
$63: P_{3198} = (29,2,2,1)$
$64: P_{3225} = (24,3,2,1)$
$65: P_{3242} = (9,4,2,1)$
$66: P_{3279} = (14,5,2,1)$
$67: P_{3302} = (5,6,2,1)$
$68: P_{3355} = (26,7,2,1)$
$69: P_{3389} = (28,8,2,1)$
$70: P_{3394} = (1,9,2,1)$
$71: P_{3436} = (11,10,2,1)$
$72: P_{3459} = (2,11,2,1)$
$73: P_{3501} = (12,12,2,1)$
$74: P_{3544} = (23,13,2,1)$
$75: P_{3583} = (30,14,2,1)$
$76: P_{3593} = (8,15,2,1)$
$77: P_{3639} = (22,16,2,1)$
$78: P_{3674} = (25,17,2,1)$
$79: P_{3712} = (31,18,2,1)$
$80: P_{3723} = (10,19,2,1)$
$81: P_{3752} = (7,20,2,1)$
$82: P_{3783} = (6,21,2,1)$
$83: P_{3836} = (27,22,2,1)$
$84: P_{3860} = (19,23,2,1)$
$85: P_{3889} = (16,24,2,1)$
$86: P_{3909} = (4,25,2,1)$
$87: P_{3954} = (17,26,2,1)$
$88: P_{3990} = (21,27,2,1)$
$89: P_{4014} = (13,28,2,1)$

$90: P_{4048} = (15, 29, 2, 1)$
$91: P_{4068} = (3, 30, 2, 1)$
$92: P_{4117} = (20, 31, 2, 1)$
$93: P_{4171} = (10, 1, 3, 1)$
$94: P_{4217} = (24, 2, 3, 1)$
$95: P_{4247} = (22, 3, 3, 1)$
$96: P_{4262} = (5, 4, 3, 1)$
$97: P_{4295} = (6, 5, 3, 1)$
$98: P_{4335} = (14, 6, 3, 1)$
$99: P_{4380} = (27, 7, 3, 1)$
$100: P_{4397} = (12, 8, 3, 1)$
$101: P_{4437} = (20, 9, 3, 1)$
$102: P_{4457} = (8, 10, 3, 1)$
$103: P_{4494} = (13, 11, 3, 1)$
$104: P_{4524} = (11, 12, 3, 1)$
$105: P_{4549} = (4, 13, 3, 1)$
$106: P_{4578} = (1, 14, 3, 1)$
$107: P_{4626} = (17, 15, 3, 1)$
$108: P_{4657} = (16, 16, 3, 1)$
$109: P_{4675} = (2, 17, 3, 1)$
$110: P_{4726} = (21, 18, 3, 1)$
$111: P_{4765} = (28, 19, 3, 1)$
$112: P_{4772} = (3, 20, 3, 1)$
$113: P_{4824} = (23, 21, 3, 1)$
$114: P_{4848} = (15, 22, 3, 1)$
$115: P_{4895} = (30, 23, 3, 1)$
$116: P_{4904} = (7, 24, 3, 1)$
$117: P_{4955} = (26, 25, 3, 1)$
$118: P_{4980} = (19, 26, 3, 1)$
$119: P_{5002} = (9, 27, 3, 1)$
$120: P_{5056} = (31, 28, 3, 1)$
$121: P_{5075} = (18, 29, 3, 1)$
$122: P_{5114} = (25, 30, 3, 1)$
$123: P_{5150} = (29, 31, 3, 1)$
$124: P_{5194} = (9, 1, 4, 1)$
$125: P_{5245} = (28, 2, 4, 1)$
$126: P_{5261} = (12, 3, 4, 1)$
$127: P_{5303} = (22, 4, 4, 1)$
$128: P_{5320} = (7, 5, 4, 1)$
$129: P_{5361} = (16, 6, 4, 1)$
$130: P_{5390} = (13, 7, 4, 1)$
$131: P_{5423} = (14, 8, 4, 1)$
$132: P_{5459} = (18, 9, 4, 1)$
$133: P_{5496} = (23, 10, 4, 1)$
$134: P_{5506} = (1, 11, 4, 1)$
$135: P_{5543} = (6, 12, 4, 1)$
$136: P_{5594} = (25, 13, 4, 1)$
$137: P_{5616} = (15, 14, 4, 1)$
$138: P_{5637} = (4, 15, 4, 1)$
$139: P_{5676} = (11, 16, 4, 1)$
$140: P_{5727} = (30, 17, 4, 1)$
$141: P_{5758} = (29, 18, 4, 1)$
$142: P_{5766} = (5, 19, 4, 1)$
$143: P_{5810} = (17, 20, 4, 1)$
$144: P_{5828} = (3, 21, 4, 1)$
$145: P_{5888} = (31, 22, 4, 1)$
$146: P_{5916} = (27, 23, 4, 1)$
$147: P_{5929} = (8, 24, 4, 1)$
$148: P_{5955} = (2, 25, 4, 1)$
$149: P_{6011} = (26, 26, 4, 1)$
$150: P_{6041} = (24, 27, 4, 1)$
$151: P_{6069} = (20, 28, 4, 1)$
$152: P_{6102} = (21, 29, 4, 1)$
$153: P_{6132} = (19, 30, 4, 1)$
$154: P_{6155} = (10, 31, 4, 1)$
$155: P_{6223} = (14, 1, 5, 1)$
$156: P_{6252} = (11, 2, 5, 1)$
$157: P_{6281} = (8, 3, 5, 1)$
$158: P_{6312} = (7, 4, 5, 1)$
$159: P_{6362} = (25, 5, 5, 1)$
$160: P_{6372} = (3, 6, 5, 1)$
$161: P_{6422} = (21, 7, 5, 1)$
$162: P_{6456} = (23, 8, 5, 1)$
$163: P_{6493} = (28, 9, 5, 1)$
$164: P_{6523} = (26, 10, 5, 1)$
$165: P_{6558} = (29, 11, 5, 1)$
$166: P_{6565} = (4, 12, 5, 1)$
$167: P_{6606} = (13, 13, 5, 1)$
$168: P_{6635} = (10, 14, 5, 1)$
$169: P_{6684} = (27, 15, 5, 1)$
$170: P_{6706} = (17, 16, 5, 1)$
$171: P_{6741} = (20, 17, 5, 1)$
$172: P_{6775} = (22, 18, 5, 1)$
$173: P_{6791} = (6, 19, 5, 1)$
$174: P_{6847} = (30, 20, 5, 1)$
$175: P_{6851} = (2, 21, 5, 1)$
$176: P_{6890} = (9, 22, 5, 1)$
$177: P_{6931} = (18, 23, 5, 1)$
$178: P_{6964} = (19, 24, 5, 1)$
$179: P_{7008} = (31, 25, 5, 1)$
$180: P_{7024} = (15, 26, 5, 1)$
$181: P_{7057} = (16, 27, 5, 1)$
$182: P_{7097} = (24, 28, 5, 1)$
$183: P_{7110} = (5, 29, 5, 1)$
$184: P_{7138} = (1, 30, 5, 1)$
$185: P_{7181} = (12, 31, 5, 1)$
$186: P_{7262} = (29, 1, 6, 1)$
$187: P_{7274} = (9, 2, 6, 1)$
$188: P_{7302} = (5, 3, 6, 1)$
$189: P_{7357} = (28, 4, 6, 1)$
$190: P_{7372} = (11, 5, 6, 1)$
$191: P_{7405} = (12, 6, 6, 1)$
$192: P_{7455} = (30, 7, 6, 1)$
$193: P_{7479} = (22, 8, 6, 1)$
$194: P_{7520} = (31, 9, 6, 1)$
$195: P_{7528} = (7, 10, 6, 1)$
$196: P_{7580} = (27, 11, 6, 1)$
$197: P_{7601} = (16, 12, 6, 1)$

198 : $P_{7634} = (17, 13, 6, 1)$
199 : $P_{7662} = (13, 14, 6, 1)$
200 : $P_{7684} = (3, 15, 6, 1)$
201 : $P_{7727} = (14, 16, 6, 1)$
202 : $P_{7771} = (26, 17, 6, 1)$
203 : $P_{7795} = (18, 18, 6, 1)$
204 : $P_{7833} = (24, 19, 6, 1)$
205 : $P_{7864} = (23, 20, 6, 1)$
206 : $P_{7881} = (8, 21, 6, 1)$
207 : $P_{7906} = (1, 22, 6, 1)$
208 : $P_{7939} = (2, 23, 6, 1)$
209 : $P_{7975} = (6, 24, 6, 1)$
210 : $P_{8020} = (19, 25, 6, 1)$
211 : $P_{8058} = (25, 26, 6, 1)$
212 : $P_{8075} = (10, 27, 6, 1)$
213 : $P_{8112} = (15, 28, 6, 1)$
214 : $P_{8149} = (20, 29, 6, 1)$
215 : $P_{8165} = (4, 30, 6, 1)$
216 : $P_{8214} = (21, 31, 6, 1)$
217 : $P_{8260} = (3, 1, 7, 1)$
218 : $P_{8293} = (4, 2, 7, 1)$
219 : $P_{8347} = (26, 3, 7, 1)$
220 : $P_{8372} = (19, 4, 7, 1)$
221 : $P_{8386} = (1, 5, 7, 1)$
222 : $P_{8447} = (30, 6, 7, 1)$
223 : $P_{8471} = (22, 7, 7, 1)$
224 : $P_{8483} = (2, 8, 7, 1)$
225 : $P_{8519} = (6, 9, 7, 1)$
226 : $P_{8576} = (31, 10, 7, 1)$
227 : $P_{8589} = (12, 11, 7, 1)$
228 : $P_{8622} = (13, 12, 7, 1)$
229 : $P_{8670} = (29, 13, 7, 1)$
230 : $P_{8687} = (14, 14, 7, 1)$
231 : $P_{8726} = (21, 15, 7, 1)$
232 : $P_{8764} = (27, 16, 7, 1)$
233 : $P_{8797} = (28, 17, 7, 1)$
234 : $P_{8809} = (8, 18, 7, 1)$
235 : $P_{8858} = (25, 19, 7, 1)$
236 : $P_{8883} = (18, 20, 7, 1)$
237 : $P_{8917} = (20, 21, 7, 1)$
238 : $P_{8945} = (16, 22, 7, 1)$
239 : $P_{8966} = (5, 23, 7, 1)$
240 : $P_{9008} = (15, 24, 7, 1)$
241 : $P_{9049} = (24, 25, 7, 1)$
242 : $P_{9066} = (9, 26, 7, 1)$
243 : $P_{9106} = (17, 27, 7, 1)$
244 : $P_{9132} = (11, 28, 7, 1)$
245 : $P_{9160} = (7, 29, 7, 1)$
246 : $P_{9195} = (10, 30, 7, 1)$
247 : $P_{9240} = (23, 31, 7, 1)$
248 : $P_{9294} = (13, 1, 8, 1)$
249 : $P_{9328} = (15, 2, 8, 1)$
250 : $P_{9363} = (18, 3, 8, 1)$
251 : $P_{9397} = (20, 4, 8, 1)$
252 : $P_{9433} = (24, 5, 8, 1)$
253 : $P_{9470} = (29, 6, 8, 1)$
254 : $P_{9476} = (3, 7, 8, 1)$
255 : $P_{9526} = (21, 8, 8, 1)$
256 : $P_{9563} = (26, 9, 8, 1)$
257 : $P_{9574} = (5, 10, 8, 1)$
258 : $P_{9618} = (17, 11, 8, 1)$
259 : $P_{9642} = (9, 12, 8, 1)$
260 : $P_{9681} = (16, 13, 8, 1)$
261 : $P_{9701} = (4, 14, 8, 1)$
262 : $P_{9743} = (14, 15, 8, 1)$
263 : $P_{9771} = (10, 16, 8, 1)$
264 : $P_{9801} = (8, 17, 8, 1)$
265 : $P_{9855} = (30, 18, 8, 1)$
266 : $P_{9888} = (31, 19, 8, 1)$
267 : $P_{9901} = (12, 20, 8, 1)$
268 : $P_{9943} = (22, 21, 8, 1)$
269 : $P_{9978} = (25, 22, 8, 1)$
270 : $P_{10008} = (23, 23, 8, 1)$
271 : $P_{10045} = (28, 24, 8, 1)$
272 : $P_{10056} = (7, 25, 8, 1)$
273 : $P_{10087} = (6, 26, 8, 1)$
274 : $P_{10114} = (1, 27, 8, 1)$
275 : $P_{10164} = (19, 28, 8, 1)$
276 : $P_{10179} = (2, 29, 8, 1)$
277 : $P_{10220} = (11, 30, 8, 1)$
278 : $P_{10268} = (27, 31, 8, 1)$
279 : $P_{10328} = (23, 1, 9, 1)$
280 : $P_{10354} = (17, 2, 9, 1)$
281 : $P_{10388} = (19, 3, 9, 1)$
282 : $P_{10426} = (25, 4, 9, 1)$
283 : $P_{10446} = (13, 5, 9, 1)$
284 : $P_{10467} = (2, 6, 9, 1)$
285 : $P_{10502} = (5, 7, 9, 1)$
286 : $P_{10555} = (26, 8, 9, 1)$
287 : $P_{10572} = (11, 9, 9, 1)$
288 : $P_{10608} = (15, 10, 9, 1)$
289 : $P_{10647} = (22, 11, 9, 1)$
290 : $P_{10684} = (27, 12, 9, 1)$
291 : $P_{10710} = (21, 13, 9, 1)$
292 : $P_{10733} = (12, 14, 9, 1)$
293 : $P_{10771} = (18, 15, 9, 1)$
294 : $P_{10815} = (30, 16, 9, 1)$
295 : $P_{10841} = (24, 17, 9, 1)$
296 : $P_{10856} = (7, 18, 9, 1)$
297 : $P_{10885} = (4, 19, 9, 1)$
298 : $P_{10933} = (20, 20, 9, 1)$
299 : $P_{10976} = (31, 21, 9, 1)$
300 : $P_{10991} = (14, 22, 9, 1)$
301 : $P_{11037} = (28, 23, 9, 1)$
302 : $P_{11042} = (1, 24, 9, 1)$
303 : $P_{11082} = (9, 25, 9, 1)$
304 : $P_{11115} = (10, 26, 9, 1)$
305 : $P_{11140} = (3, 27, 9, 1)$

306 : $P_{11185} = (16, 28, 9, 1)$
307 : $P_{11207} = (6, 29, 9, 1)$
308 : $P_{11262} = (29, 30, 9, 1)$
309 : $P_{11273} = (8, 31, 9, 1)$
310 : $P_{11356} = (27, 1, 10, 1)$
311 : $P_{11362} = (1, 2, 10, 1)$
312 : $P_{11413} = (20, 3, 10, 1)$
313 : $P_{11456} = (31, 4, 10, 1)$
314 : $P_{11466} = (9, 5, 10, 1)$
315 : $P_{11510} = (21, 6, 10, 1)$
316 : $P_{11544} = (23, 7, 10, 1)$
317 : $P_{11571} = (18, 8, 10, 1)$
318 : $P_{11604} = (19, 9, 10, 1)$
319 : $P_{11645} = (28, 10, 10, 1)$
320 : $P_{11652} = (3, 11, 10, 1)$
321 : $P_{11691} = (10, 12, 10, 1)$
322 : $P_{11727} = (14, 13, 10, 1)$
323 : $P_{11762} = (17, 14, 10, 1)$
324 : $P_{11789} = (12, 15, 10, 1)$
325 : $P_{11838} = (29, 16, 10, 1)$
326 : $P_{11848} = (7, 17, 10, 1)$
327 : $P_{11875} = (2, 18, 10, 1)$
328 : $P_{11920} = (15, 19, 10, 1)$
329 : $P_{11959} = (22, 20, 10, 1)$
330 : $P_{11974} = (5, 21, 10, 1)$
331 : $P_{12005} = (4, 22, 10, 1)$
332 : $P_{12041} = (8, 23, 10, 1)$
333 : $P_{12089} = (24, 24, 10, 1)$
334 : $P_{12103} = (6, 25, 10, 1)$
335 : $P_{12140} = (11, 26, 10, 1)$
336 : $P_{12174} = (13, 27, 10, 1)$
337 : $P_{12218} = (25, 28, 10, 1)$
338 : $P_{12251} = (26, 29, 10, 1)$
339 : $P_{12273} = (16, 30, 10, 1)$
340 : $P_{12319} = (30, 31, 10, 1)$
341 : $P_{12377} = (24, 1, 11, 1)$
342 : $P_{12390} = (5, 2, 11, 1)$
343 : $P_{12431} = (14, 3, 11, 1)$
344 : $P_{12461} = (12, 4, 11, 1)$
345 : $P_{12489} = (8, 5, 11, 1)$
346 : $P_{12524} = (11, 6, 11, 1)$
347 : $P_{12546} = (1, 7, 11, 1)$
348 : $P_{12593} = (16, 8, 11, 1)$
349 : $P_{12630} = (21, 9, 11, 1)$
350 : $P_{12644} = (3, 10, 11, 1)$
351 : $P_{12688} = (15, 11, 11, 1)$
352 : $P_{12712} = (7, 12, 11, 1)$
353 : $P_{12756} = (19, 13, 11, 1)$
354 : $P_{12800} = (31, 14, 11, 1)$
355 : $P_{12826} = (25, 15, 11, 1)$
356 : $P_{12839} = (6, 16, 11, 1)$
357 : $P_{12892} = (27, 17, 11, 1)$
358 : $P_{12907} = (10, 18, 11, 1)$
359 : $P_{12951} = (22, 19, 11, 1)$
360 : $P_{12965} = (4, 20, 11, 1)$
361 : $P_{13010} = (17, 21, 11, 1)$
362 : $P_{13045} = (20, 22, 11, 1)$
363 : $P_{13070} = (13, 23, 11, 1)$
364 : $P_{13112} = (23, 24, 11, 1)$
365 : $P_{13151} = (30, 25, 11, 1)$
366 : $P_{13155} = (2, 26, 11, 1)$
367 : $P_{13213} = (28, 27, 11, 1)$
368 : $P_{13235} = (18, 28, 11, 1)$
369 : $P_{13278} = (29, 29, 11, 1)$
370 : $P_{13307} = (26, 30, 11, 1)$
371 : $P_{13322} = (9, 31, 11, 1)$
372 : $P_{13396} = (19, 1, 12, 1)$
373 : $P_{13411} = (2, 2, 12, 1)$
374 : $P_{13454} = (13, 3, 12, 1)$
375 : $P_{13500} = (27, 4, 12, 1)$
376 : $P_{13523} = (18, 5, 12, 1)$
377 : $P_{13552} = (15, 6, 12, 1)$
378 : $P_{13580} = (11, 7, 12, 1)$
379 : $P_{13602} = (1, 8, 12, 1)$
380 : $P_{13636} = (3, 9, 12, 1)$
381 : $P_{13694} = (29, 10, 12, 1)$
382 : $P_{13703} = (6, 11, 12, 1)$
383 : $P_{13749} = (20, 12, 12, 1)$
384 : $P_{13789} = (28, 13, 12, 1)$
385 : $P_{13800} = (7, 14, 12, 1)$
386 : $P_{13849} = (24, 15, 12, 1)$
387 : $P_{13888} = (31, 16, 12, 1)$
388 : $P_{13903} = (14, 17, 12, 1)$
389 : $P_{13925} = (4, 18, 12, 1)$
390 : $P_{13983} = (30, 19, 12, 1)$
391 : $P_{13994} = (9, 20, 12, 1)$
392 : $P_{14027} = (10, 21, 12, 1)$
393 : $P_{14057} = (8, 22, 12, 1)$
394 : $P_{14097} = (16, 23, 12, 1)$
395 : $P_{14134} = (21, 24, 12, 1)$
396 : $P_{14157} = (12, 25, 12, 1)$
397 : $P_{14199} = (22, 26, 12, 1)$
398 : $P_{14235} = (26, 27, 12, 1)$
399 : $P_{14264} = (23, 28, 12, 1)$
400 : $P_{14290} = (17, 29, 12, 1)$
401 : $P_{14310} = (5, 30, 12, 1)$
402 : $P_{14362} = (25, 31, 12, 1)$
403 : $P_{14416} = (15, 1, 13, 1)$
404 : $P_{14453} = (20, 2, 13, 1)$
405 : $P_{14494} = (29, 3, 13, 1)$
406 : $P_{14518} = (21, 4, 13, 1)$
407 : $P_{14534} = (5, 5, 13, 1)$
408 : $P_{14570} = (9, 6, 13, 1)$
409 : $P_{14597} = (4, 7, 13, 1)$
410 : $P_{14635} = (10, 8, 13, 1)$
411 : $P_{14687} = (30, 9, 13, 1)$
412 : $P_{14701} = (12, 10, 13, 1)$
413 : $P_{14746} = (25, 11, 13, 1)$

$414: P_{14781} = (28, 12, 13, 1)$
$415: P_{14791} = (6, 13, 13, 1)$
$416: P_{14836} = (19, 14, 13, 1)$
$417: P_{14860} = (11, 15, 13, 1)$
$418: P_{14905} = (24, 16, 13, 1)$
$419: P_{14916} = (3, 17, 13, 1)$
$420: P_{14958} = (13, 18, 13, 1)$
$421: P_{14995} = (18, 19, 13, 1)$
$422: P_{15025} = (16, 20, 13, 1)$
$423: P_{15055} = (14, 21, 13, 1)$
$424: P_{15099} = (26, 22, 13, 1)$
$425: P_{15122} = (17, 23, 13, 1)$
$426: P_{15159} = (22, 24, 13, 1)$
$427: P_{15192} = (23, 25, 13, 1)$
$428: P_{15209} = (8, 26, 13, 1)$
$429: P_{15264} = (31, 27, 13, 1)$
$430: P_{15267} = (2, 28, 13, 1)$
$431: P_{15324} = (27, 29, 13, 1)$
$432: P_{15336} = (7, 30, 13, 1)$
$433: P_{15362} = (1, 31, 13, 1)$
$434: P_{15427} = (2, 1, 14, 1)$
$435: P_{15484} = (27, 2, 14, 1)$
$436: P_{15504} = (15, 3, 14, 1)$
$437: P_{15522} = (1, 4, 14, 1)$
$438: P_{15582} = (29, 5, 14, 1)$
$439: P_{15605} = (20, 6, 14, 1)$
$440: P_{15624} = (7, 7, 14, 1)$
$441: P_{15680} = (31, 8, 14, 1)$
$442: P_{15685} = (4, 9, 14, 1)$
$443: P_{15722} = (9, 10, 14, 1)$
$444: P_{15753} = (8, 11, 14, 1)$
$445: P_{15798} = (21, 12, 14, 1)$
$446: P_{15831} = (22, 13, 14, 1)$
$447: P_{15864} = (23, 14, 14, 1)$
$448: P_{15878} = (5, 15, 14, 1)$
$449: P_{15923} = (18, 16, 14, 1)$
$450: P_{15948} = (11, 17, 14, 1)$
$451: P_{15988} = (19, 18, 14, 1)$
$452: P_{16014} = (13, 19, 14, 1)$
$453: P_{16061} = (28, 20, 14, 1)$
$454: P_{16089} = (24, 21, 14, 1)$
$455: P_{16100} = (3, 22, 14, 1)$
$456: P_{16135} = (6, 23, 14, 1)$
$457: P_{16171} = (10, 24, 14, 1)$
$458: P_{16209} = (16, 25, 14, 1)$
$459: P_{16239} = (14, 26, 14, 1)$
$460: P_{16287} = (30, 27, 14, 1)$
$461: P_{16306} = (17, 28, 14, 1)$
$462: P_{16346} = (25, 29, 14, 1)$
$463: P_{16365} = (12, 30, 14, 1)$
$464: P_{16411} = (26, 31, 14, 1)$
$465: P_{16456} = (7, 1, 15, 1)$
$466: P_{16504} = (23, 2, 15, 1)$
$467: P_{16517} = (4, 3, 15, 1)$
$468: P_{16562} = (17, 4, 15, 1)$
$469: P_{16607} = (30, 5, 15, 1)$
$470: P_{16628} = (19, 6, 15, 1)$
$471: P_{16665} = (24, 7, 15, 1)$
$472: P_{16698} = (25, 8, 15, 1)$
$473: P_{16719} = (14, 9, 15, 1)$
$474: P_{16750} = (13, 10, 15, 1)$
$475: P_{16797} = (28, 11, 15, 1)$
$476: P_{16803} = (2, 12, 15, 1)$
$477: P_{16853} = (20, 13, 15, 1)$
$478: P_{16870} = (5, 14, 15, 1)$
$479: P_{16928} = (31, 15, 15, 1)$
$480: P_{16955} = (26, 16, 15, 1)$
$481: P_{16971} = (10, 17, 15, 1)$
$482: P_{17004} = (11, 18, 15, 1)$
$483: P_{17028} = (3, 19, 15, 1)$
$484: P_{17072} = (15, 20, 15, 1)$
$485: P_{17090} = (1, 21, 15, 1)$
$486: P_{17143} = (22, 22, 15, 1)$
$487: P_{17162} = (9, 23, 15, 1)$
$488: P_{17212} = (27, 24, 15, 1)$
$489: P_{17246} = (29, 25, 15, 1)$
$490: P_{17270} = (21, 26, 15, 1)$
$491: P_{17289} = (8, 27, 15, 1)$
$492: P_{17325} = (12, 28, 15, 1)$
$493: P_{17361} = (16, 29, 15, 1)$
$494: P_{17395} = (18, 30, 15, 1)$
$495: P_{17415} = (6, 31, 15, 1)$
$496: P_{17484} = (11, 1, 16, 1)$
$497: P_{17512} = (7, 2, 16, 1)$
$498: P_{17540} = (3, 3, 16, 1)$
$499: P_{17592} = (23, 4, 16, 1)$
$500: P_{17627} = (26, 5, 16, 1)$
$501: P_{17637} = (4, 6, 16, 1)$
$502: P_{17675} = (10, 7, 16, 1)$
$503: P_{17714} = (17, 8, 16, 1)$
$504: P_{17751} = (22, 9, 16, 1)$
$505: P_{17791} = (30, 10, 16, 1)$
$506: P_{17802} = (9, 11, 16, 1)$
$507: P_{17844} = (19, 12, 16, 1)$
$508: P_{17872} = (15, 13, 16, 1)$
$509: P_{17913} = (24, 14, 16, 1)$
$510: P_{17922} = (1, 15, 16, 1)$
$511: P_{17978} = (25, 16, 16, 1)$
$512: P_{18006} = (21, 17, 16, 1)$
$513: P_{18031} = (14, 18, 16, 1)$
$514: P_{18057} = (8, 19, 16, 1)$
$515: P_{18094} = (13, 20, 16, 1)$
$516: P_{18140} = (27, 21, 16, 1)$
$517: P_{18173} = (28, 22, 16, 1)$
$518: P_{18206} = (29, 23, 16, 1)$
$519: P_{18211} = (2, 24, 16, 1)$
$520: P_{18259} = (18, 25, 16, 1)$
$521: P_{18293} = (20, 26, 16, 1)$

$522: P_{18311} = (6, 27, 16, 1)$
$523: P_{18342} = (5, 28, 16, 1)$
$524: P_{18381} = (12, 29, 16, 1)$
$525: P_{18432} = (31, 30, 16, 1)$
$526: P_{18449} = (16, 31, 16, 1)$
$527: P_{18527} = (30, 1, 17, 1)$
$528: P_{18542} = (13, 2, 17, 1)$
$529: P_{18592} = (31, 3, 17, 1)$
$530: P_{18608} = (15, 4, 17, 1)$
$531: P_{18635} = (10, 5, 17, 1)$
$532: P_{18675} = (18, 6, 17, 1)$
$533: P_{18697} = (8, 7, 17, 1)$
$534: P_{18741} = (20, 8, 17, 1)$
$535: P_{18778} = (25, 9, 17, 1)$
$536: P_{18809} = (24, 10, 17, 1)$
$537: P_{18840} = (23, 11, 17, 1)$
$538: P_{18878} = (29, 12, 17, 1)$
$539: P_{18893} = (12, 13, 17, 1)$
$540: P_{18916} = (3, 14, 17, 1)$
$541: P_{18967} = (22, 15, 17, 1)$
$542: P_{18998} = (21, 16, 17, 1)$
$543: P_{19015} = (6, 17, 17, 1)$
$544: P_{19067} = (26, 18, 17, 1)$
$545: P_{19074} = (1, 19, 17, 1)$
$546: P_{19110} = (5, 20, 17, 1)$
$547: P_{19165} = (28, 21, 17, 1)$
$548: P_{19186} = (17, 22, 17, 1)$
$549: P_{19208} = (7, 23, 17, 1)$
$550: P_{19242} = (9, 24, 17, 1)$
$551: P_{19276} = (11, 25, 17, 1)$
$552: P_{19313} = (16, 26, 17, 1)$
$553: P_{19356} = (27, 27, 17, 1)$
$554: P_{19365} = (4, 28, 17, 1)$
$555: P_{19412} = (19, 29, 17, 1)$
$556: P_{19439} = (14, 30, 17, 1)$
$557: P_{19459} = (2, 31, 17, 1)$
$558: P_{19549} = (28, 1, 18, 1)$
$559: P_{19575} = (22, 2, 18, 1)$
$560: P_{19601} = (16, 3, 18, 1)$
$561: P_{19631} = (14, 4, 18, 1)$
$562: P_{19672} = (23, 5, 18, 1)$
$563: P_{19687} = (6, 6, 18, 1)$
$564: P_{19728} = (15, 7, 18, 1)$
$565: P_{19756} = (11, 8, 18, 1)$
$566: P_{19806} = (29, 9, 18, 1)$
$567: P_{19826} = (17, 10, 18, 1)$
$568: P_{19872} = (31, 11, 18, 1)$
$569: P_{19881} = (8, 12, 18, 1)$
$570: P_{19931} = (26, 13, 18, 1)$
$571: P_{19957} = (20, 14, 18, 1)$
$572: P_{19988} = (19, 15, 18, 1)$
$573: P_{20008} = (7, 16, 18, 1)$
$574: P_{20046} = (13, 17, 18, 1)$
$575: P_{20074} = (9, 18, 18, 1)$
$576: P_{20109} = (12, 19, 18, 1)$
$577: P_{20154} = (25, 20, 18, 1)$
$578: P_{20165} = (4, 21, 18, 1)$
$579: P_{20211} = (18, 22, 18, 1)$
$580: P_{20226} = (1, 23, 18, 1)$
$581: P_{20260} = (3, 24, 18, 1)$
$582: P_{20316} = (27, 25, 18, 1)$
$583: P_{20351} = (30, 26, 18, 1)$
$584: P_{20358} = (5, 27, 18, 1)$
$585: P_{20406} = (21, 28, 18, 1)$
$586: P_{20427} = (10, 29, 18, 1)$
$587: P_{20451} = (2, 30, 18, 1)$
$588: P_{20505} = (24, 31, 18, 1)$
$589: P_{20561} = (16, 1, 19, 1)$
$590: P_{20583} = (6, 2, 19, 1)$
$591: P_{20632} = (23, 3, 19, 1)$
$592: P_{20649} = (8, 4, 19, 1)$
$593: P_{20692} = (19, 5, 19, 1)$
$594: P_{20722} = (17, 6, 19, 1)$
$595: P_{20766} = (29, 7, 19, 1)$
$596: P_{20772} = (3, 8, 19, 1)$
$597: P_{20806} = (5, 9, 19, 1)$
$598: P_{20835} = (2, 10, 19, 1)$
$599: P_{20875} = (10, 11, 19, 1)$
$600: P_{20922} = (25, 12, 19, 1)$
$601: P_{20930} = (1, 13, 19, 1)$
$602: P_{20970} = (9, 14, 19, 1)$
$603: P_{21006} = (13, 15, 19, 1)$
$604: P_{21029} = (4, 16, 19, 1)$
$605: P_{21075} = (18, 17, 19, 1)$
$606: P_{21101} = (12, 18, 19, 1)$
$607: P_{21128} = (7, 19, 19, 1)$
$608: P_{21180} = (27, 20, 19, 1)$
$609: P_{21215} = (30, 21, 19, 1)$
$610: P_{21241} = (24, 22, 19, 1)$
$611: P_{21270} = (21, 23, 19, 1)$
$612: P_{21307} = (26, 24, 19, 1)$
$613: P_{21333} = (20, 25, 19, 1)$
$614: P_{21376} = (31, 26, 19, 1)$
$615: P_{21388} = (11, 27, 19, 1)$
$616: P_{21437} = (28, 28, 19, 1)$
$617: P_{21463} = (22, 29, 19, 1)$
$618: P_{21488} = (15, 30, 19, 1)$
$619: P_{21519} = (14, 31, 19, 1)$
$620: P_{21591} = (22, 1, 20, 1)$
$621: P_{21615} = (14, 2, 20, 1)$
$622: P_{21639} = (6, 3, 20, 1)$
$623: P_{21676} = (11, 4, 20, 1)$
$624: P_{21714} = (17, 5, 20, 1)$
$625: P_{21737} = (8, 6, 20, 1)$
$626: P_{21781} = (20, 7, 20, 1)$
$627: P_{21800} = (7, 8, 20, 1)$
$628: P_{21834} = (9, 9, 20, 1)$
$629: P_{21882} = (25, 10, 20, 1)$

630 : $P_{21907} = (18, 11, 20, 1)$
631 : $P_{21924} = (3, 12, 20, 1)$
632 : $P_{21983} = (30, 13, 20, 1)$
633 : $P_{22006} = (21, 14, 20, 1)$
634 : $P_{22019} = (2, 15, 20, 1)$
635 : $P_{22072} = (23, 16, 20, 1)$
636 : $P_{22096} = (15, 17, 20, 1)$
637 : $P_{22141} = (28, 18, 20, 1)$
638 : $P_{22161} = (16, 19, 20, 1)$
639 : $P_{22203} = (26, 20, 20, 1)$
640 : $P_{22228} = (19, 21, 20, 1)$
641 : $P_{22270} = (29, 22, 20, 1)$
642 : $P_{22304} = (31, 23, 20, 1)$
643 : $P_{22309} = (4, 24, 20, 1)$
644 : $P_{22338} = (1, 25, 20, 1)$
645 : $P_{22382} = (13, 26, 20, 1)$
646 : $P_{22413} = (12, 27, 20, 1)$
647 : $P_{22443} = (10, 28, 20, 1)$
648 : $P_{22489} = (24, 29, 20, 1)$
649 : $P_{22524} = (27, 30, 20, 1)$
650 : $P_{22534} = (5, 31, 20, 1)$
651 : $P_{22598} = (5, 1, 21, 1)$
652 : $P_{22637} = (12, 2, 21, 1)$
653 : $P_{22668} = (11, 3, 21, 1)$
654 : $P_{22705} = (16, 4, 21, 1)$
655 : $P_{22724} = (3, 5, 21, 1)$
656 : $P_{22760} = (7, 6, 21, 1)$
657 : $P_{22816} = (31, 7, 21, 1)$
658 : $P_{22823} = (6, 8, 21, 1)$
659 : $P_{22859} = (10, 9, 21, 1)$
660 : $P_{22885} = (4, 10, 21, 1)$
661 : $P_{22933} = (20, 11, 21, 1)$
662 : $P_{22968} = (23, 12, 21, 1)$
663 : $P_{22979} = (2, 13, 21, 1)$
664 : $P_{23027} = (18, 14, 21, 1)$
665 : $P_{23067} = (26, 15, 21, 1)$
666 : $P_{23081} = (8, 16, 21, 1)$
667 : $P_{23106} = (1, 17, 21, 1)$
668 : $P_{23161} = (24, 18, 21, 1)$
669 : $P_{23183} = (14, 19, 21, 1)$
670 : $P_{23220} = (19, 20, 21, 1)$
671 : $P_{23258} = (25, 21, 21, 1)$
672 : $P_{23286} = (21, 22, 21, 1)$
673 : $P_{23312} = (15, 23, 21, 1)$
674 : $P_{23346} = (17, 24, 21, 1)$
675 : $P_{23374} = (13, 25, 21, 1)$
676 : $P_{23420} = (27, 26, 21, 1)$
677 : $P_{23447} = (22, 27, 21, 1)$
678 : $P_{23486} = (29, 28, 21, 1)$
679 : $P_{23498} = (9, 29, 21, 1)$
680 : $P_{23551} = (30, 30, 21, 1)$
681 : $P_{23581} = (28, 31, 21, 1)$
682 : $P_{23623} = (6, 1, 22, 1)$
683 : $P_{23657} = (8, 2, 22, 1)$
684 : $P_{23698} = (17, 3, 22, 1)$
685 : $P_{23716} = (3, 4, 22, 1)$
686 : $P_{23747} = (2, 5, 22, 1)$
687 : $P_{23802} = (25, 6, 22, 1)$
688 : $P_{23818} = (9, 7, 22, 1)$
689 : $P_{23845} = (4, 8, 22, 1)$
690 : $P_{23885} = (12, 9, 22, 1)$
691 : $P_{23932} = (27, 10, 22, 1)$
692 : $P_{23961} = (24, 11, 22, 1)$
693 : $P_{23995} = (26, 12, 22, 1)$
694 : $P_{24032} = (31, 13, 22, 1)$
695 : $P_{24061} = (28, 14, 22, 1)$
696 : $P_{24080} = (15, 15, 22, 1)$
697 : $P_{24116} = (19, 16, 22, 1)$
698 : $P_{24158} = (29, 17, 22, 1)$
699 : $P_{24177} = (16, 18, 22, 1)$
700 : $P_{24216} = (23, 19, 22, 1)$
701 : $P_{24226} = (1, 20, 22, 1)$
702 : $P_{24270} = (13, 21, 22, 1)$
703 : $P_{24294} = (5, 22, 22, 1)$
704 : $P_{24331} = (10, 23, 22, 1)$
705 : $P_{24383} = (30, 24, 22, 1)$
706 : $P_{24406} = (21, 25, 22, 1)$
707 : $P_{24435} = (18, 26, 22, 1)$
708 : $P_{24456} = (7, 27, 22, 1)$
709 : $P_{24503} = (22, 28, 22, 1)$
710 : $P_{24527} = (14, 29, 22, 1)$
711 : $P_{24565} = (20, 30, 22, 1)$
712 : $P_{24588} = (11, 31, 22, 1)$
713 : $P_{24653} = (12, 1, 23, 1)$
714 : $P_{24689} = (16, 2, 23, 1)$
715 : $P_{24712} = (7, 3, 23, 1)$
716 : $P_{24743} = (6, 4, 23, 1)$
717 : $P_{24773} = (4, 5, 23, 1)$
718 : $P_{24824} = (23, 6, 23, 1)$
719 : $P_{24851} = (18, 7, 23, 1)$
720 : $P_{24873} = (8, 8, 23, 1)$
721 : $P_{24921} = (24, 9, 23, 1)$
722 : $P_{24948} = (19, 10, 23, 1)$
723 : $P_{24982} = (21, 11, 23, 1)$
724 : $P_{25010} = (17, 12, 23, 1)$
725 : $P_{25052} = (27, 13, 23, 1)$
726 : $P_{25086} = (29, 14, 23, 1)$
727 : $P_{25119} = (30, 15, 23, 1)$
728 : $P_{25124} = (3, 16, 23, 1)$
729 : $P_{25184} = (31, 17, 23, 1)$
730 : $P_{25190} = (5, 18, 23, 1)$
731 : $P_{25228} = (11, 19, 23, 1)$
732 : $P_{25251} = (2, 20, 23, 1)$
733 : $P_{25307} = (26, 21, 23, 1)$
734 : $P_{25323} = (10, 22, 23, 1)$
735 : $P_{25365} = (20, 23, 23, 1)$
736 : $P_{25402} = (25, 24, 23, 1)$
737 : $P_{25424} = (15, 25, 23, 1)$

738 : $P_{25442} = (1, 26, 23, 1)$
739 : $P_{25487} = (14, 27, 23, 1)$
740 : $P_{25514} = (9, 28, 23, 1)$
741 : $P_{25565} = (28, 29, 23, 1)$
742 : $P_{25582} = (13, 30, 23, 1)$
743 : $P_{25623} = (22, 31, 23, 1)$
744 : $P_{25691} = (26, 1, 24, 1)$
745 : $P_{25727} = (30, 2, 24, 1)$
746 : $P_{25730} = (1, 3, 24, 1)$
747 : $P_{25774} = (13, 4, 24, 1)$
748 : $P_{25814} = (21, 5, 24, 1)$
749 : $P_{25856} = (31, 6, 24, 1)$
750 : $P_{25863} = (6, 7, 24, 1)$
751 : $P_{25904} = (15, 8, 24, 1)$
752 : $P_{25938} = (17, 9, 24, 1)$
753 : $P_{25963} = (10, 10, 24, 1)$
754 : $P_{25992} = (7, 11, 24, 1)$
755 : $P_{26035} = (18, 12, 24, 1)$
756 : $P_{26054} = (5, 13, 24, 1)$
757 : $P_{26089} = (8, 14, 24, 1)$
758 : $P_{26141} = (28, 15, 24, 1)$
759 : $P_{26165} = (20, 16, 24, 1)$
760 : $P_{26193} = (16, 17, 24, 1)$
761 : $P_{26234} = (25, 18, 24, 1)$
762 : $P_{26268} = (27, 19, 24, 1)$
763 : $P_{26297} = (24, 20, 24, 1)$
764 : $P_{26314} = (9, 21, 24, 1)$
765 : $P_{26360} = (23, 22, 24, 1)$
766 : $P_{26380} = (11, 23, 24, 1)$
767 : $P_{26430} = (29, 24, 24, 1)$
768 : $P_{26447} = (14, 25, 24, 1)$
769 : $P_{26477} = (12, 26, 24, 1)$
770 : $P_{26499} = (2, 27, 24, 1)$
771 : $P_{26532} = (3, 28, 24, 1)$
772 : $P_{26565} = (4, 29, 24, 1)$
773 : $P_{26615} = (22, 30, 24, 1)$
774 : $P_{26644} = (19, 31, 24, 1)$
775 : $P_{26709} = (20, 1, 25, 1)$
776 : $P_{26742} = (21, 2, 25, 1)$
777 : $P_{26762} = (9, 3, 25, 1)$
778 : $P_{26795} = (10, 4, 25, 1)$
779 : $P_{26829} = (12, 5, 25, 1)$
780 : $P_{26877} = (28, 6, 25, 1)$
781 : $P_{26900} = (19, 7, 25, 1)$
782 : $P_{26937} = (24, 8, 25, 1)$
783 : $P_{26958} = (13, 9, 25, 1)$
784 : $P_{26993} = (16, 10, 25, 1)$
785 : $P_{27035} = (26, 11, 25, 1)$
786 : $P_{27063} = (22, 12, 25, 1)$
787 : $P_{27081} = (8, 13, 25, 1)$
788 : $P_{27107} = (2, 14, 25, 1)$
789 : $P_{27144} = (7, 15, 25, 1)$
790 : $P_{27174} = (5, 16, 25, 1)$
791 : $P_{27205} = (4, 17, 25, 1)$
792 : $P_{27248} = (15, 18, 25, 1)$
793 : $P_{27294} = (29, 19, 25, 1)$
794 : $P_{27303} = (6, 20, 25, 1)$
795 : $P_{27340} = (11, 21, 25, 1)$
796 : $P_{27391} = (30, 22, 25, 1)$
797 : $P_{27418} = (25, 23, 25, 1)$
798 : $P_{27439} = (14, 24, 25, 1)$
799 : $P_{27474} = (17, 25, 25, 1)$
800 : $P_{27492} = (3, 26, 25, 1)$
801 : $P_{27539} = (18, 27, 25, 1)$
802 : $P_{27580} = (27, 28, 25, 1)$
803 : $P_{27586} = (1, 29, 25, 1)$
804 : $P_{27640} = (23, 30, 25, 1)$
805 : $P_{27680} = (31, 31, 25, 1)$
806 : $P_{27721} = (8, 1, 26, 1)$
807 : $P_{27748} = (3, 2, 26, 1)$
808 : $P_{27802} = (25, 3, 26, 1)$
809 : $P_{27813} = (4, 4, 26, 1)$
810 : $P_{27868} = (27, 5, 26, 1)$
811 : $P_{27899} = (26, 6, 26, 1)$
812 : $P_{27933} = (28, 7, 26, 1)$
813 : $P_{27956} = (19, 8, 26, 1)$
814 : $P_{27985} = (16, 9, 26, 1)$
815 : $P_{28002} = (1, 10, 26, 1)$
816 : $P_{28038} = (5, 11, 26, 1)$
817 : $P_{28095} = (30, 12, 26, 1)$
818 : $P_{28115} = (18, 13, 26, 1)$
819 : $P_{28151} = (22, 14, 26, 1)$
820 : $P_{28181} = (20, 15, 26, 1)$
821 : $P_{28195} = (2, 16, 26, 1)$
822 : $P_{28234} = (9, 17, 26, 1)$
823 : $P_{28263} = (6, 18, 26, 1)$
824 : $P_{28306} = (17, 19, 26, 1)$
825 : $P_{28352} = (31, 20, 26, 1)$
826 : $P_{28368} = (15, 21, 26, 1)$
827 : $P_{28397} = (12, 22, 26, 1)$
828 : $P_{28441} = (24, 23, 26, 1)$
829 : $P_{28462} = (13, 24, 26, 1)$
830 : $P_{28491} = (10, 25, 26, 1)$
831 : $P_{28542} = (29, 26, 26, 1)$
832 : $P_{28568} = (23, 27, 26, 1)$
833 : $P_{28591} = (14, 28, 26, 1)$
834 : $P_{28620} = (11, 29, 26, 1)$
835 : $P_{28662} = (21, 30, 26, 1)$
836 : $P_{28680} = (7, 31, 26, 1)$
837 : $P_{28768} = (31, 1, 27, 1)$
838 : $P_{28787} = (18, 2, 27, 1)$
839 : $P_{28811} = (10, 3, 27, 1)$
840 : $P_{28862} = (29, 4, 27, 1)$
841 : $P_{28887} = (22, 5, 27, 1)$
842 : $P_{28921} = (24, 6, 27, 1)$
843 : $P_{28954} = (25, 7, 27, 1)$
844 : $P_{28970} = (9, 8, 27, 1)$
845 : $P_{29020} = (27, 9, 27, 1)$

$846: P_{29039} = (14, 10, 27, 1)$
$847: P_{29076} = (19, 11, 27, 1)$
$848: P_{29094} = (5, 12, 27, 1)$
$849: P_{29128} = (7, 13, 27, 1)$
$850: P_{29179} = (26, 14, 27, 1)$
$851: P_{29191} = (6, 15, 27, 1)$
$852: P_{29245} = (28, 16, 27, 1)$
$853: P_{29266} = (17, 17, 27, 1)$
$854: P_{29282} = (1, 18, 27, 1)$
$855: P_{29334} = (21, 19, 27, 1)$
$856: P_{29356} = (11, 20, 27, 1)$
$857: P_{29393} = (16, 21, 27, 1)$
$858: P_{29411} = (2, 22, 27, 1)$
$859: P_{29445} = (4, 23, 27, 1)$
$860: P_{29485} = (12, 24, 27, 1)$
$861: P_{29508} = (3, 25, 27, 1)$
$862: P_{29560} = (23, 26, 27, 1)$
$863: P_{29589} = (20, 27, 27, 1)$
$864: P_{29631} = (30, 28, 27, 1)$
$865: P_{29646} = (13, 29, 27, 1)$
$866: P_{29673} = (8, 30, 27, 1)$
$867: P_{29712} = (15, 31, 27, 1)$
$868: P_{29778} = (17, 1, 28, 1)$
$869: P_{29818} = (25, 2, 28, 1)$
$870: P_{29827} = (2, 3, 28, 1)$
$871: P_{29883} = (26, 4, 28, 1)$
$872: P_{29904} = (15, 5, 28, 1)$
$873: P_{29948} = (27, 6, 28, 1)$
$874: P_{29965} = (12, 7, 28, 1)$
$875: P_{30015} = (30, 8, 28, 1)$
$876: P_{30024} = (7, 9, 28, 1)$
$877: P_{30069} = (20, 10, 28, 1)$
$878: P_{30095} = (14, 11, 28, 1)$
$879: P_{30114} = (1, 12, 28, 1)$
$880: P_{30155} = (10, 13, 28, 1)$
$881: P_{30193} = (16, 14, 28, 1)$
$882: P_{30238} = (29, 15, 28, 1)$
$883: P_{30254} = (13, 16, 28, 1)$
$884: P_{30278} = (5, 17, 28, 1)$
$885: P_{30328} = (23, 18, 28, 1)$
$886: P_{30356} = (19, 19, 28, 1)$
$887: P_{30390} = (21, 20, 28, 1)$
$888: P_{30419} = (18, 21, 28, 1)$
$889: P_{30444} = (11, 22, 28, 1)$
$890: P_{30487} = (22, 23, 28, 1)$
$891: P_{30528} = (31, 24, 28, 1)$
$892: P_{30557} = (28, 25, 28, 1)$
$893: P_{30585} = (24, 26, 28, 1)$
$894: P_{30597} = (4, 27, 28, 1)$
$895: P_{30631} = (6, 28, 28, 1)$
$896: P_{30665} = (8, 29, 28, 1)$
$897: P_{30698} = (9, 30, 28, 1)$
$898: P_{30724} = (3, 31, 28, 1)$
$899: P_{30810} = (25, 1, 29, 1)$
$900: P_{30843} = (26, 2, 29, 1)$
$901: P_{30876} = (27, 3, 29, 1)$
$902: P_{30911} = (30, 4, 29, 1)$
$903: P_{30933} = (20, 5, 29, 1)$
$904: P_{30946} = (1, 6, 29, 1)$
$905: P_{30993} = (16, 7, 29, 1)$
$906: P_{31022} = (13, 8, 29, 1)$
$907: P_{31064} = (23, 9, 29, 1)$
$908: P_{31094} = (21, 10, 29, 1)$
$909: P_{31116} = (11, 11, 29, 1)$
$910: P_{31168} = (31, 12, 29, 1)$
$911: P_{31193} = (24, 13, 29, 1)$
$912: P_{31207} = (6, 14, 29, 1)$
$913: P_{31242} = (9, 15, 29, 1)$
$914: P_{31280} = (15, 16, 29, 1)$
$915: P_{31309} = (12, 17, 29, 1)$
$916: P_{31346} = (17, 18, 29, 1)$
$917: P_{31363} = (2, 19, 29, 1)$
$918: P_{31403} = (10, 20, 29, 1)$
$919: P_{31454} = (29, 21, 29, 1)$
$920: P_{31464} = (7, 22, 29, 1)$
$921: P_{31503} = (14, 23, 29, 1)$
$922: P_{31539} = (18, 24, 29, 1)$
$923: P_{31575} = (22, 25, 29, 1)$
$924: P_{31590} = (5, 26, 29, 1)$
$925: P_{31636} = (19, 27, 29, 1)$
$926: P_{31657} = (8, 28, 29, 1)$
$927: P_{31684} = (3, 29, 29, 1)$
$928: P_{31741} = (28, 30, 29, 1)$
$929: P_{31749} = (4, 31, 29, 1)$
$930: P_{31813} = (4, 1, 30, 1)$
$931: P_{31860} = (19, 2, 30, 1)$
$932: P_{31903} = (30, 3, 30, 1)$
$933: P_{31907} = (2, 4, 30, 1)$
$934: P_{31968} = (31, 5, 30, 1)$
$935: P_{31982} = (13, 6, 30, 1)$
$936: P_{32015} = (14, 7, 30, 1)$
$937: P_{32060} = (27, 8, 30, 1)$
$938: P_{32073} = (8, 9, 30, 1)$
$939: P_{32115} = (18, 10, 30, 1)$
$940: P_{32145} = (16, 11, 30, 1)$
$941: P_{32176} = (15, 12, 30, 1)$
$942: P_{32202} = (9, 13, 30, 1)$
$943: P_{32236} = (11, 14, 30, 1)$
$944: P_{32267} = (10, 15, 30, 1)$
$945: P_{32290} = (1, 16, 30, 1)$
$946: P_{32343} = (22, 17, 30, 1)$
$947: P_{32356} = (3, 18, 30, 1)$
$948: P_{32411} = (26, 19, 30, 1)$
$949: P_{32446} = (29, 20, 30, 1)$
$950: P_{32470} = (21, 21, 30, 1)$
$951: P_{32487} = (6, 22, 30, 1)$
$952: P_{32525} = (12, 23, 30, 1)$
$953: P_{32565} = (20, 24, 30, 1)$

954 : $P_{32582} = (5, 25, 30, 1)$
955 : $P_{32637} = (28, 26, 30, 1)$
956 : $P_{32666} = (25, 27, 30, 1)$
957 : $P_{32680} = (7, 28, 30, 1)$
958 : $P_{32728} = (23, 29, 30, 1)$
959 : $P_{32761} = (24, 30, 30, 1)$
960 : $P_{32786} = (17, 31, 30, 1)$
961 : $P_{32854} = (21, 1, 31, 1)$
962 : $P_{32875} = (10, 2, 31, 1)$
963 : $P_{32925} = (28, 3, 31, 1)$
964 : $P_{32953} = (24, 4, 31, 1)$
965 : $P_{32977} = (16, 5, 31, 1)$
966 : $P_{33015} = (22, 6, 31, 1)$
967 : $P_{33027} = (2, 7, 31, 1)$
968 : $P_{33062} = (5, 8, 31, 1)$
969 : $P_{33104} = (15, 9, 31, 1)$
970 : $P_{33127} = (6, 10, 31, 1)$
971 : $P_{33183} = (30, 11, 31, 1)$
972 : $P_{33199} = (14, 12, 31, 1)$
973 : $P_{33220} = (3, 13, 31, 1)$
974 : $P_{33276} = (27, 14, 31, 1)$
975 : $P_{33304} = (23, 15, 31, 1)$
976 : $P_{33325} = (12, 16, 31, 1)$
977 : $P_{33364} = (19, 17, 31, 1)$
978 : $P_{33397} = (20, 18, 31, 1)$
979 : $P_{33418} = (9, 19, 31, 1)$
980 : $P_{33449} = (8, 20, 31, 1)$
981 : $P_{33480} = (7, 21, 31, 1)$
982 : $P_{33518} = (13, 22, 31, 1)$
983 : $P_{33563} = (26, 23, 31, 1)$
984 : $P_{33580} = (11, 24, 31, 1)$
985 : $P_{33626} = (25, 25, 31, 1)$
986 : $P_{33637} = (4, 26, 31, 1)$
987 : $P_{33694} = (29, 27, 31, 1)$
988 : $P_{33698} = (1, 28, 31, 1)$
989 : $P_{33760} = (31, 29, 31, 1)$
990 : $P_{33778} = (17, 30, 31, 1)$
991 : $P_{33811} = (18, 31, 31, 1)$

Line Intersection Graph

	0	1
0	0	1
1	1	0

Neighbor sets in the line intersection graph:
Line 0 intersects

Line	ℓ_1
in point	P_{2082}

Line 1 intersects

Line	ℓ_0
in point	P_{2082}

The surface has 1057 points:
Too many to print.