

Rank-67115 over GF(32)

January 15, 2021

The equation

The equation of the surface is :

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

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

The point rank of the equation over GF(32) is 1141965861

General information

Number of lines	6
Number of points	1089
Number of singular points	3
Number of Eckardt points	0
Number of double points	9
Number of single points	180
Number of points off lines	900
Number of Hesse planes	0
Number of axes	0
Type of points on lines	33^6
Type of lines on points	$2^9, 1^{180}, 0^{900}$

Singular Points

The surface has 3 singular points:

$$\begin{aligned} 0 : P_{1090} &= \mathbf{P}(0, 1, 0, 1) = \mathbf{P}(0, 1, 0, 1) \\ 1 : P_{1091} &= \mathbf{P}(1, 1, 0, 1) = \mathbf{P}(1, 1, 0, 1) \end{aligned}$$

$$2 : P_{2114} = \mathbf{P}(0, 1, 1, 1) = \mathbf{P}(0, 1, 1, 1)$$

The 6 Lines

The lines and their Pluecker coordinates are:

$$\ell_0 = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \end{bmatrix}_0 = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \end{bmatrix}_0 = \mathbf{Pl}(1, 0, 0, 0, 0, 0)_0$$

$$\begin{aligned}
\ell_1 &= \begin{bmatrix} 1 & 0 & 1 & 0 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{1058} = \begin{bmatrix} 1 & 0 & 1 & 0 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{1058} = \mathbf{Pl}(1, 0, 1, 0, 0, 1)_{34913} \\
\ell_2 &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082368} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082368} = \mathbf{Pl}(0, 0, 0, 0, 0, 1)_{34849} \\
\ell_3 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{32} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{32} = \mathbf{Pl}(1, 0, 0, 0, 1, 0)_{1090} \\
\ell_4 &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082401} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082401} = \mathbf{Pl}(0, 1, 0, 0, 0, 1)_{34881} \\
\ell_5 &= \begin{bmatrix} 1 & 0 & 1 & 0 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1090} = \begin{bmatrix} 1 & 0 & 1 & 0 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1090} = \mathbf{Pl}(1, 1, 1, 0, 1, 1)_{68640}
\end{aligned}$$

Rank of lines: (0, 1058, 1082368, 32, 1082401, 1090)

Rank of points on Klein quadric: (0, 34913, 34849, 1090, 34881, 68640)

Eckardt Points

The surface has 0 Eckardt points:

Double Points

The surface has 9 Double points:

The double points on the surface are:

$$\begin{aligned}
P_5 &= (1, 1, 0, 0) = \ell_0 \cap \ell_1 & P_2 &= (0, 0, 1, 0) = \ell_2 \cap \ell_4 \\
P_1 &= (0, 1, 0, 0) = \ell_0 \cap \ell_2 & P_{1090} &= (0, 1, 0, 1) = \ell_3 \cap \ell_4 \\
P_0 &= (1, 0, 0, 0) = \ell_0 \cap \ell_3 & P_{1091} &= (1, 1, 0, 1) = \ell_3 \cap \ell_5 \\
P_{67} &= (0, 1, 1, 0) = \ell_1 \cap \ell_2 & P_{2114} &= (0, 1, 1, 1) = \ell_4 \cap \ell_5 \\
P_{36} &= (1, 0, 1, 0) = \ell_1 \cap \ell_5
\end{aligned}$$

Single Points

The surface has 180 single points:

The single points on the surface are:

$$\begin{aligned}
0 : P_6 &= (2, 1, 0, 0) \text{ lies on line } \ell_0 & 15 : P_{21} &= (17, 1, 0, 0) \text{ lies on line } \ell_0 \\
1 : P_7 &= (3, 1, 0, 0) \text{ lies on line } \ell_0 & 16 : P_{22} &= (18, 1, 0, 0) \text{ lies on line } \ell_0 \\
2 : P_8 &= (4, 1, 0, 0) \text{ lies on line } \ell_0 & 17 : P_{23} &= (19, 1, 0, 0) \text{ lies on line } \ell_0 \\
3 : P_9 &= (5, 1, 0, 0) \text{ lies on line } \ell_0 & 18 : P_{24} &= (20, 1, 0, 0) \text{ lies on line } \ell_0 \\
4 : P_{10} &= (6, 1, 0, 0) \text{ lies on line } \ell_0 & 19 : P_{25} &= (21, 1, 0, 0) \text{ lies on line } \ell_0 \\
5 : P_{11} &= (7, 1, 0, 0) \text{ lies on line } \ell_0 & 20 : P_{26} &= (22, 1, 0, 0) \text{ lies on line } \ell_0 \\
6 : P_{12} &= (8, 1, 0, 0) \text{ lies on line } \ell_0 & 21 : P_{27} &= (23, 1, 0, 0) \text{ lies on line } \ell_0 \\
7 : P_{13} &= (9, 1, 0, 0) \text{ lies on line } \ell_0 & 22 : P_{28} &= (24, 1, 0, 0) \text{ lies on line } \ell_0 \\
8 : P_{14} &= (10, 1, 0, 0) \text{ lies on line } \ell_0 & 23 : P_{29} &= (25, 1, 0, 0) \text{ lies on line } \ell_0 \\
9 : P_{15} &= (11, 1, 0, 0) \text{ lies on line } \ell_0 & 24 : P_{30} &= (26, 1, 0, 0) \text{ lies on line } \ell_0 \\
10 : P_{16} &= (12, 1, 0, 0) \text{ lies on line } \ell_0 & 25 : P_{31} &= (27, 1, 0, 0) \text{ lies on line } \ell_0 \\
11 : P_{17} &= (13, 1, 0, 0) \text{ lies on line } \ell_0 & 26 : P_{32} &= (28, 1, 0, 0) \text{ lies on line } \ell_0 \\
12 : P_{18} &= (14, 1, 0, 0) \text{ lies on line } \ell_0 & 27 : P_{33} &= (29, 1, 0, 0) \text{ lies on line } \ell_0 \\
13 : P_{19} &= (15, 1, 0, 0) \text{ lies on line } \ell_0 & 28 : P_{34} &= (30, 1, 0, 0) \text{ lies on line } \ell_0 \\
14 : P_{20} &= (16, 1, 0, 0) \text{ lies on line } \ell_0 & 29 : P_{35} &= (31, 1, 0, 0) \text{ lies on line } \ell_0
\end{aligned}$$

30 : $P_{99} = (0, 2, 1, 0)$ lies on line ℓ_2
 31 : $P_{102} = (3, 2, 1, 0)$ lies on line ℓ_1
 32 : $P_{131} = (0, 3, 1, 0)$ lies on line ℓ_2
 33 : $P_{133} = (2, 3, 1, 0)$ lies on line ℓ_1
 34 : $P_{163} = (0, 4, 1, 0)$ lies on line ℓ_2
 35 : $P_{168} = (5, 4, 1, 0)$ lies on line ℓ_1
 36 : $P_{195} = (0, 5, 1, 0)$ lies on line ℓ_2
 37 : $P_{199} = (4, 5, 1, 0)$ lies on line ℓ_1
 38 : $P_{227} = (0, 6, 1, 0)$ lies on line ℓ_2
 39 : $P_{234} = (7, 6, 1, 0)$ lies on line ℓ_1
 40 : $P_{259} = (0, 7, 1, 0)$ lies on line ℓ_2
 41 : $P_{265} = (6, 7, 1, 0)$ lies on line ℓ_1
 42 : $P_{291} = (0, 8, 1, 0)$ lies on line ℓ_2
 43 : $P_{300} = (9, 8, 1, 0)$ lies on line ℓ_1
 44 : $P_{323} = (0, 9, 1, 0)$ lies on line ℓ_2
 45 : $P_{331} = (8, 9, 1, 0)$ lies on line ℓ_1
 46 : $P_{355} = (0, 10, 1, 0)$ lies on line ℓ_2
 47 : $P_{366} = (11, 10, 1, 0)$ lies on line ℓ_1
 48 : $P_{387} = (0, 11, 1, 0)$ lies on line ℓ_2
 49 : $P_{397} = (10, 11, 1, 0)$ lies on line ℓ_1
 50 : $P_{419} = (0, 12, 1, 0)$ lies on line ℓ_2
 51 : $P_{432} = (13, 12, 1, 0)$ lies on line ℓ_1
 52 : $P_{451} = (0, 13, 1, 0)$ lies on line ℓ_2
 53 : $P_{463} = (12, 13, 1, 0)$ lies on line ℓ_1
 54 : $P_{483} = (0, 14, 1, 0)$ lies on line ℓ_2
 55 : $P_{498} = (15, 14, 1, 0)$ lies on line ℓ_1
 56 : $P_{515} = (0, 15, 1, 0)$ lies on line ℓ_2
 57 : $P_{529} = (14, 15, 1, 0)$ lies on line ℓ_1
 58 : $P_{547} = (0, 16, 1, 0)$ lies on line ℓ_2
 59 : $P_{564} = (17, 16, 1, 0)$ lies on line ℓ_1
 60 : $P_{579} = (0, 17, 1, 0)$ lies on line ℓ_2
 61 : $P_{595} = (16, 17, 1, 0)$ lies on line ℓ_1
 62 : $P_{611} = (0, 18, 1, 0)$ lies on line ℓ_2
 63 : $P_{630} = (19, 18, 1, 0)$ lies on line ℓ_1
 64 : $P_{643} = (0, 19, 1, 0)$ lies on line ℓ_2
 65 : $P_{661} = (18, 19, 1, 0)$ lies on line ℓ_1
 66 : $P_{675} = (0, 20, 1, 0)$ lies on line ℓ_2
 67 : $P_{696} = (21, 20, 1, 0)$ lies on line ℓ_1
 68 : $P_{707} = (0, 21, 1, 0)$ lies on line ℓ_2
 69 : $P_{727} = (20, 21, 1, 0)$ lies on line ℓ_1
 70 : $P_{739} = (0, 22, 1, 0)$ lies on line ℓ_2
 71 : $P_{762} = (23, 22, 1, 0)$ lies on line ℓ_1
 72 : $P_{771} = (0, 23, 1, 0)$ lies on line ℓ_2
 73 : $P_{793} = (22, 23, 1, 0)$ lies on line ℓ_1
 74 : $P_{803} = (0, 24, 1, 0)$ lies on line ℓ_2
 75 : $P_{828} = (25, 24, 1, 0)$ lies on line ℓ_1
 76 : $P_{835} = (0, 25, 1, 0)$ lies on line ℓ_2
 77 : $P_{859} = (24, 25, 1, 0)$ lies on line ℓ_1
 78 : $P_{867} = (0, 26, 1, 0)$ lies on line ℓ_2
 79 : $P_{894} = (27, 26, 1, 0)$ lies on line ℓ_1
 80 : $P_{899} = (0, 27, 1, 0)$ lies on line ℓ_2
 81 : $P_{925} = (26, 27, 1, 0)$ lies on line ℓ_1
 82 : $P_{931} = (0, 28, 1, 0)$ lies on line ℓ_2
 83 : $P_{960} = (29, 28, 1, 0)$ lies on line ℓ_1

84 : $P_{963} = (0, 29, 1, 0)$ lies on line ℓ_2
 85 : $P_{991} = (28, 29, 1, 0)$ lies on line ℓ_1
 86 : $P_{995} = (0, 30, 1, 0)$ lies on line ℓ_2
 87 : $P_{1026} = (31, 30, 1, 0)$ lies on line ℓ_1
 88 : $P_{1027} = (0, 31, 1, 0)$ lies on line ℓ_2
 89 : $P_{1057} = (30, 31, 1, 0)$ lies on line ℓ_1
 90 : $P_{1092} = (2, 1, 0, 1)$ lies on line ℓ_3
 91 : $P_{1093} = (3, 1, 0, 1)$ lies on line ℓ_3
 92 : $P_{1094} = (4, 1, 0, 1)$ lies on line ℓ_3
 93 : $P_{1095} = (5, 1, 0, 1)$ lies on line ℓ_3
 94 : $P_{1096} = (6, 1, 0, 1)$ lies on line ℓ_3
 95 : $P_{1097} = (7, 1, 0, 1)$ lies on line ℓ_3
 96 : $P_{1098} = (8, 1, 0, 1)$ lies on line ℓ_3
 97 : $P_{1099} = (9, 1, 0, 1)$ lies on line ℓ_3
 98 : $P_{1100} = (10, 1, 0, 1)$ lies on line ℓ_3
 99 : $P_{1101} = (11, 1, 0, 1)$ lies on line ℓ_3
 100 : $P_{1102} = (12, 1, 0, 1)$ lies on line ℓ_3
 101 : $P_{1103} = (13, 1, 0, 1)$ lies on line ℓ_3
 102 : $P_{1104} = (14, 1, 0, 1)$ lies on line ℓ_3
 103 : $P_{1105} = (15, 1, 0, 1)$ lies on line ℓ_3
 104 : $P_{1106} = (16, 1, 0, 1)$ lies on line ℓ_3
 105 : $P_{1107} = (17, 1, 0, 1)$ lies on line ℓ_3
 106 : $P_{1108} = (18, 1, 0, 1)$ lies on line ℓ_3
 107 : $P_{1109} = (19, 1, 0, 1)$ lies on line ℓ_3
 108 : $P_{1110} = (20, 1, 0, 1)$ lies on line ℓ_3
 109 : $P_{1111} = (21, 1, 0, 1)$ lies on line ℓ_3
 110 : $P_{1112} = (22, 1, 0, 1)$ lies on line ℓ_3
 111 : $P_{1113} = (23, 1, 0, 1)$ lies on line ℓ_3
 112 : $P_{1114} = (24, 1, 0, 1)$ lies on line ℓ_3
 113 : $P_{1115} = (25, 1, 0, 1)$ lies on line ℓ_3
 114 : $P_{1116} = (26, 1, 0, 1)$ lies on line ℓ_3
 115 : $P_{1117} = (27, 1, 0, 1)$ lies on line ℓ_3
 116 : $P_{1118} = (28, 1, 0, 1)$ lies on line ℓ_3
 117 : $P_{1119} = (29, 1, 0, 1)$ lies on line ℓ_3
 118 : $P_{1120} = (30, 1, 0, 1)$ lies on line ℓ_3
 119 : $P_{1121} = (31, 1, 0, 1)$ lies on line ℓ_3
 120 : $P_{3137} = (0, 1, 2, 1)$ lies on line ℓ_4
 121 : $P_{3140} = (3, 1, 2, 1)$ lies on line ℓ_5
 122 : $P_{4161} = (0, 1, 3, 1)$ lies on line ℓ_4
 123 : $P_{4163} = (2, 1, 3, 1)$ lies on line ℓ_5
 124 : $P_{5185} = (0, 1, 4, 1)$ lies on line ℓ_4
 125 : $P_{5190} = (5, 1, 4, 1)$ lies on line ℓ_5
 126 : $P_{6209} = (0, 1, 5, 1)$ lies on line ℓ_4
 127 : $P_{6213} = (4, 1, 5, 1)$ lies on line ℓ_5
 128 : $P_{7233} = (0, 1, 6, 1)$ lies on line ℓ_4
 129 : $P_{7240} = (7, 1, 6, 1)$ lies on line ℓ_5
 130 : $P_{8257} = (0, 1, 7, 1)$ lies on line ℓ_4
 131 : $P_{8263} = (6, 1, 7, 1)$ lies on line ℓ_5
 132 : $P_{9281} = (0, 1, 8, 1)$ lies on line ℓ_4
 133 : $P_{9290} = (9, 1, 8, 1)$ lies on line ℓ_5
 134 : $P_{10305} = (0, 1, 9, 1)$ lies on line ℓ_4
 135 : $P_{10313} = (8, 1, 9, 1)$ lies on line ℓ_5
 136 : $P_{11329} = (0, 1, 10, 1)$ lies on line ℓ_4
 137 : $P_{11340} = (11, 1, 10, 1)$ lies on line ℓ_5

138 : $P_{12353} = (0, 1, 11, 1)$ lies on line ℓ_4
 139 : $P_{12363} = (10, 1, 11, 1)$ lies on line ℓ_5
 140 : $P_{13377} = (0, 1, 12, 1)$ lies on line ℓ_4
 141 : $P_{13390} = (13, 1, 12, 1)$ lies on line ℓ_5
 142 : $P_{14401} = (0, 1, 13, 1)$ lies on line ℓ_4
 143 : $P_{14413} = (12, 1, 13, 1)$ lies on line ℓ_5
 144 : $P_{15425} = (0, 1, 14, 1)$ lies on line ℓ_4
 145 : $P_{15440} = (15, 1, 14, 1)$ lies on line ℓ_5
 146 : $P_{16449} = (0, 1, 15, 1)$ lies on line ℓ_4
 147 : $P_{16463} = (14, 1, 15, 1)$ lies on line ℓ_5
 148 : $P_{17473} = (0, 1, 16, 1)$ lies on line ℓ_4
 149 : $P_{17490} = (17, 1, 16, 1)$ lies on line ℓ_5
 150 : $P_{18497} = (0, 1, 17, 1)$ lies on line ℓ_4
 151 : $P_{18513} = (16, 1, 17, 1)$ lies on line ℓ_5
 152 : $P_{19521} = (0, 1, 18, 1)$ lies on line ℓ_4
 153 : $P_{19540} = (19, 1, 18, 1)$ lies on line ℓ_5
 154 : $P_{20545} = (0, 1, 19, 1)$ lies on line ℓ_4
 155 : $P_{20563} = (18, 1, 19, 1)$ lies on line ℓ_5
 156 : $P_{21569} = (0, 1, 20, 1)$ lies on line ℓ_4
 157 : $P_{21590} = (21, 1, 20, 1)$ lies on line ℓ_5
 158 : $P_{22593} = (0, 1, 21, 1)$ lies on line ℓ_4
 159 : $P_{22613} = (20, 1, 21, 1)$ lies on line ℓ_5

160 : $P_{23617} = (0, 1, 22, 1)$ lies on line ℓ_4
 161 : $P_{23640} = (23, 1, 22, 1)$ lies on line ℓ_5
 162 : $P_{24641} = (0, 1, 23, 1)$ lies on line ℓ_4
 163 : $P_{24663} = (22, 1, 23, 1)$ lies on line ℓ_5
 164 : $P_{25665} = (0, 1, 24, 1)$ lies on line ℓ_4
 165 : $P_{25690} = (25, 1, 24, 1)$ lies on line ℓ_5
 166 : $P_{26689} = (0, 1, 25, 1)$ lies on line ℓ_4
 167 : $P_{26713} = (24, 1, 25, 1)$ lies on line ℓ_5
 168 : $P_{27713} = (0, 1, 26, 1)$ lies on line ℓ_4
 169 : $P_{27740} = (27, 1, 26, 1)$ lies on line ℓ_5
 170 : $P_{28737} = (0, 1, 27, 1)$ lies on line ℓ_4
 171 : $P_{28763} = (26, 1, 27, 1)$ lies on line ℓ_5
 172 : $P_{29761} = (0, 1, 28, 1)$ lies on line ℓ_4
 173 : $P_{29790} = (29, 1, 28, 1)$ lies on line ℓ_5
 174 : $P_{30785} = (0, 1, 29, 1)$ lies on line ℓ_4
 175 : $P_{30813} = (28, 1, 29, 1)$ lies on line ℓ_5
 176 : $P_{31809} = (0, 1, 30, 1)$ lies on line ℓ_4
 177 : $P_{31840} = (31, 1, 30, 1)$ lies on line ℓ_5
 178 : $P_{32833} = (0, 1, 31, 1)$ lies on line ℓ_4
 179 : $P_{32863} = (30, 1, 31, 1)$ lies on line ℓ_5

The single points on the surface are:

Points on surface but on no line

The surface has 900 points not on any line:

The points on the surface but not on lines are:

0 : $P_{3129} = (24, 0, 2, 1)$	22 : $P_{3738} = (25, 19, 2, 1)$
1 : $P_{3131} = (26, 0, 2, 1)$	23 : $P_{3792} = (15, 21, 2, 1)$
2 : $P_{3173} = (4, 2, 2, 1)$	24 : $P_{3801} = (24, 21, 2, 1)$
3 : $P_{3209} = (8, 3, 2, 1)$	25 : $P_{3971} = (2, 27, 2, 1)$
4 : $P_{3210} = (9, 3, 2, 1)$	26 : $P_{3996} = (27, 27, 2, 1)$
5 : $P_{3258} = (25, 4, 2, 1)$	27 : $P_{4099} = (2, 31, 2, 1)$
6 : $P_{3264} = (31, 4, 2, 1)$	28 : $P_{4128} = (31, 31, 2, 1)$
7 : $P_{3332} = (3, 7, 2, 1)$	29 : $P_{4133} = (4, 0, 3, 1)$
8 : $P_{3335} = (6, 7, 2, 1)$	30 : $P_{4136} = (7, 0, 3, 1)$
9 : $P_{3378} = (17, 8, 2, 1)$	31 : $P_{4240} = (15, 3, 3, 1)$
10 : $P_{3388} = (27, 8, 2, 1)$	32 : $P_{4283} = (26, 4, 3, 1)$
11 : $P_{3429} = (4, 10, 2, 1)$	33 : $P_{4286} = (29, 4, 3, 1)$
12 : $P_{3437} = (12, 10, 2, 1)$	34 : $P_{4345} = (24, 6, 3, 1)$
13 : $P_{3463} = (6, 11, 2, 1)$	35 : $P_{4350} = (29, 6, 3, 1)$
14 : $P_{3472} = (15, 11, 2, 1)$	36 : $P_{4355} = (2, 7, 3, 1)$
15 : $P_{3602} = (17, 15, 2, 1)$	37 : $P_{4359} = (6, 7, 3, 1)$
16 : $P_{3613} = (28, 15, 2, 1)$	38 : $P_{4424} = (7, 9, 3, 1)$
17 : $P_{3658} = (9, 17, 2, 1)$	39 : $P_{4430} = (13, 9, 3, 1)$
18 : $P_{3675} = (26, 17, 2, 1)$	40 : $P_{4497} = (16, 11, 3, 1)$
19 : $P_{3693} = (12, 18, 2, 1)$	41 : $P_{4505} = (24, 11, 3, 1)$
20 : $P_{3709} = (28, 18, 2, 1)$	42 : $P_{4517} = (4, 12, 3, 1)$
21 : $P_{3721} = (8, 19, 2, 1)$	43 : $P_{4524} = (11, 12, 3, 1)$

44 : $P_{4551} = (6, 13, 3, 1)$	98 : $P_{6610} = (17, 13, 5, 1)$
45 : $P_{4553} = (8, 13, 3, 1)$	99 : $P_{6618} = (25, 13, 5, 1)$
46 : $P_{4631} = (22, 15, 3, 1)$	100 : $P_{6664} = (7, 15, 5, 1)$
47 : $P_{4635} = (26, 15, 3, 1)$	101 : $P_{6670} = (13, 15, 5, 1)$
48 : $P_{4646} = (5, 16, 3, 1)$	102 : $P_{6692} = (3, 16, 5, 1)$
49 : $P_{4663} = (22, 16, 3, 1)$	103 : $P_{6711} = (22, 16, 5, 1)$
50 : $P_{4684} = (11, 17, 3, 1)$	104 : $P_{6759} = (6, 18, 5, 1)$
51 : $P_{4698} = (25, 17, 3, 1)$	105 : $P_{6770} = (17, 18, 5, 1)$
52 : $P_{4720} = (15, 18, 3, 1)$	106 : $P_{6798} = (13, 19, 5, 1)$
53 : $P_{4735} = (30, 18, 3, 1)$	107 : $P_{6812} = (27, 19, 5, 1)$
54 : $P_{4809} = (8, 21, 3, 1)$	108 : $P_{6824} = (7, 20, 5, 1)$
55 : $P_{4831} = (30, 21, 3, 1)$	109 : $P_{6839} = (22, 20, 5, 1)$
56 : $P_{5102} = (13, 30, 3, 1)$	110 : $P_{6853} = (4, 21, 5, 1)$
57 : $P_{5105} = (16, 30, 3, 1)$	111 : $P_{6869} = (20, 21, 5, 1)$
58 : $P_{5126} = (5, 31, 3, 1)$	112 : $P_{7024} = (15, 26, 5, 1)$
59 : $P_{5146} = (25, 31, 3, 1)$	113 : $P_{7025} = (16, 26, 5, 1)$
60 : $P_{5156} = (3, 0, 4, 1)$	114 : $P_{7051} = (10, 27, 5, 1)$
61 : $P_{5160} = (7, 0, 4, 1)$	115 : $P_{7061} = (20, 27, 5, 1)$
62 : $P_{5219} = (2, 2, 4, 1)$	116 : $P_{7083} = (10, 28, 5, 1)$
63 : $P_{5221} = (4, 2, 4, 1)$	117 : $P_{7092} = (19, 28, 5, 1)$
64 : $P_{5297} = (16, 4, 4, 1)$	118 : $P_{7172} = (3, 31, 5, 1)$
65 : $P_{5323} = (10, 5, 4, 1)$	119 : $P_{7194} = (25, 31, 5, 1)$
66 : $P_{5324} = (11, 5, 4, 1)$	120 : $P_{7316} = (19, 3, 6, 1)$
67 : $P_{5415} = (6, 8, 4, 1)$	121 : $P_{7319} = (22, 3, 6, 1)$
68 : $P_{5419} = (10, 8, 4, 1)$	122 : $P_{7412} = (19, 6, 6, 1)$
69 : $P_{5464} = (23, 9, 4, 1)$	123 : $P_{7427} = (2, 7, 6, 1)$
70 : $P_{5467} = (26, 9, 4, 1)$	124 : $P_{7428} = (3, 7, 6, 1)$
71 : $P_{5475} = (2, 10, 4, 1)$	125 : $P_{7461} = (4, 8, 6, 1)$
72 : $P_{5485} = (12, 10, 4, 1)$	126 : $P_{7467} = (10, 8, 6, 1)$
73 : $P_{5540} = (3, 12, 4, 1)$	127 : $P_{7555} = (2, 11, 6, 1)$
74 : $P_{5548} = (11, 12, 4, 1)$	128 : $P_{7568} = (15, 11, 6, 1)$
75 : $P_{5617} = (16, 14, 4, 1)$	129 : $P_{7590} = (5, 12, 6, 1)$
76 : $P_{5627} = (26, 14, 4, 1)$	130 : $P_{7600} = (15, 12, 6, 1)$
77 : $P_{5653} = (20, 15, 4, 1)$	131 : $P_{7620} = (3, 13, 6, 1)$
78 : $P_{5664} = (31, 15, 4, 1)$	132 : $P_{7625} = (8, 13, 6, 1)$
79 : $P_{5671} = (6, 16, 4, 1)$	133 : $P_{7717} = (4, 16, 6, 1)$
80 : $P_{5683} = (18, 16, 4, 1)$	134 : $P_{7731} = (18, 16, 6, 1)$
81 : $P_{5733} = (4, 18, 4, 1)$	135 : $P_{7755} = (10, 17, 6, 1)$
82 : $P_{5747} = (18, 18, 4, 1)$	136 : $P_{7774} = (29, 17, 6, 1)$
83 : $P_{5830} = (5, 21, 4, 1)$	137 : $P_{7782} = (5, 18, 6, 1)$
84 : $P_{5845} = (20, 21, 4, 1)$	138 : $P_{7794} = (17, 18, 6, 1)$
85 : $P_{6056} = (7, 28, 4, 1)$	139 : $P_{7816} = (7, 19, 6, 1)$
86 : $P_{6080} = (31, 28, 4, 1)$	140 : $P_{7827} = (18, 19, 6, 1)$
87 : $P_{6157} = (12, 31, 4, 1)$	141 : $P_{7855} = (14, 20, 6, 1)$
88 : $P_{6168} = (23, 31, 4, 1)$	142 : $P_{7869} = (28, 20, 6, 1)$
89 : $P_{6193} = (16, 0, 5, 1)$	143 : $P_{7887} = (14, 21, 6, 1)$
90 : $P_{6198} = (21, 0, 5, 1)$	144 : $P_{7902} = (29, 21, 6, 1)$
91 : $P_{6368} = (31, 5, 5, 1)$	145 : $P_{7917} = (12, 22, 6, 1)$
92 : $P_{6484} = (19, 9, 5, 1)$	146 : $P_{7933} = (28, 22, 6, 1)$
93 : $P_{6496} = (31, 9, 5, 1)$	147 : $P_{7977} = (8, 24, 6, 1)$
94 : $P_{6550} = (21, 11, 5, 1)$	148 : $P_{7991} = (22, 24, 6, 1)$
95 : $P_{6556} = (27, 11, 5, 1)$	149 : $P_{8077} = (12, 27, 6, 1)$
96 : $P_{6567} = (6, 12, 5, 1)$	150 : $P_{8082} = (17, 27, 6, 1)$
97 : $P_{6576} = (15, 12, 5, 1)$	151 : $P_{8228} = (3, 0, 7, 1)$

152 : $P_{8229} = (4, 0, 7, 1)$	206 : $P_{10039} = (22, 24, 8, 1)$
153 : $P_{8307} = (18, 2, 7, 1)$	207 : $P_{10056} = (7, 25, 8, 1)$
154 : $P_{8312} = (23, 2, 7, 1)$	208 : $P_{10071} = (22, 25, 8, 1)$
155 : $P_{8361} = (8, 4, 7, 1)$	209 : $P_{10217} = (8, 30, 8, 1)$
156 : $P_{8364} = (11, 4, 7, 1)$	210 : $P_{10239} = (30, 30, 8, 1)$
157 : $P_{8458} = (9, 7, 7, 1)$	211 : $P_{10356} = (19, 2, 9, 1)$
158 : $P_{8504} = (23, 8, 7, 1)$	212 : $P_{10361} = (24, 2, 9, 1)$
159 : $P_{8505} = (24, 8, 7, 1)$	213 : $P_{10371} = (2, 3, 9, 1)$
160 : $P_{8516} = (3, 9, 7, 1)$	214 : $P_{10377} = (8, 3, 9, 1)$
161 : $P_{8526} = (13, 9, 7, 1)$	215 : $P_{10422} = (21, 4, 9, 1)$
162 : $P_{8566} = (21, 10, 7, 1)$	216 : $P_{10425} = (24, 4, 9, 1)$
163 : $P_{8569} = (24, 10, 7, 1)$	217 : $P_{10455} = (22, 5, 9, 1)$
164 : $P_{8596} = (19, 11, 7, 1)$	218 : $P_{10459} = (26, 5, 9, 1)$
165 : $P_{8608} = (31, 11, 7, 1)$	219 : $P_{10504} = (7, 7, 9, 1)$
166 : $P_{8694} = (21, 14, 7, 1)$	220 : $P_{10506} = (9, 7, 9, 1)$
167 : $P_{8701} = (28, 14, 7, 1)$	221 : $P_{10549} = (20, 8, 9, 1)$
168 : $P_{8710} = (5, 15, 7, 1)$	222 : $P_{10550} = (21, 8, 9, 1)$
169 : $P_{8718} = (13, 15, 7, 1)$	223 : $P_{10577} = (16, 9, 9, 1)$
170 : $P_{8748} = (11, 16, 7, 1)$	224 : $P_{10666} = (9, 12, 9, 1)$
171 : $P_{8765} = (28, 16, 7, 1)$	225 : $P_{10669} = (12, 12, 9, 1)$
172 : $P_{8839} = (6, 19, 7, 1)$	226 : $P_{10705} = (16, 13, 9, 1)$
173 : $P_{8851} = (18, 19, 7, 1)$	227 : $P_{10709} = (20, 13, 9, 1)$
174 : $P_{8870} = (5, 20, 7, 1)$	228 : $P_{10763} = (10, 15, 9, 1)$
175 : $P_{8887} = (22, 20, 7, 1)$	229 : $P_{10765} = (12, 15, 9, 1)$
176 : $P_{9033} = (8, 25, 7, 1)$	230 : $P_{10819} = (2, 17, 9, 1)$
177 : $P_{9047} = (22, 25, 7, 1)$	231 : $P_{10843} = (26, 17, 9, 1)$
178 : $P_{9125} = (4, 28, 7, 1)$	232 : $P_{10862} = (13, 18, 9, 1)$
179 : $P_{9152} = (31, 28, 7, 1)$	233 : $P_{10871} = (22, 18, 9, 1)$
180 : $P_{9162} = (9, 29, 7, 1)$	234 : $P_{11054} = (13, 24, 9, 1)$
181 : $P_{9172} = (19, 29, 7, 1)$	235 : $P_{11069} = (28, 24, 9, 1)$
182 : $P_{9347} = (2, 3, 8, 1)$	236 : $P_{11208} = (7, 29, 9, 1)$
183 : $P_{9354} = (9, 3, 8, 1)$	237 : $P_{11220} = (19, 29, 9, 1)$
184 : $P_{9384} = (7, 4, 8, 1)$	238 : $P_{11275} = (10, 31, 9, 1)$
185 : $P_{9388} = (11, 4, 8, 1)$	239 : $P_{11293} = (28, 31, 9, 1)$
186 : $P_{9429} = (20, 5, 8, 1)$	240 : $P_{11461} = (4, 5, 10, 1)$
187 : $P_{9434} = (25, 5, 8, 1)$	241 : $P_{11468} = (11, 5, 10, 1)$
188 : $P_{9519} = (14, 8, 8, 1)$	242 : $P_{11510} = (21, 6, 10, 1)$
189 : $P_{9618} = (17, 11, 8, 1)$	243 : $P_{11514} = (25, 6, 10, 1)$
190 : $P_{9619} = (18, 11, 8, 1)$	244 : $P_{11541} = (20, 7, 10, 1)$
191 : $P_{9668} = (3, 13, 8, 1)$	245 : $P_{11546} = (25, 7, 10, 1)$
192 : $P_{9671} = (6, 13, 8, 1)$	246 : $P_{11557} = (4, 8, 10, 1)$
193 : $P_{9747} = (18, 15, 8, 1)$	247 : $P_{11559} = (6, 8, 10, 1)$
194 : $P_{9750} = (21, 15, 8, 1)$	248 : $P_{11647} = (30, 10, 10, 1)$
195 : $P_{9859} = (2, 19, 8, 1)$	249 : $P_{11786} = (9, 15, 10, 1)$
196 : $P_{9882} = (25, 19, 8, 1)$	250 : $P_{11789} = (12, 15, 10, 1)$
197 : $P_{9897} = (8, 20, 8, 1)$	251 : $P_{11824} = (15, 16, 10, 1)$
198 : $P_{9909} = (20, 20, 8, 1)$	252 : $P_{11830} = (21, 16, 10, 1)$
199 : $P_{9924} = (3, 21, 8, 1)$	253 : $P_{11847} = (6, 17, 10, 1)$
200 : $P_{9951} = (30, 21, 8, 1)$	254 : $P_{11870} = (29, 17, 10, 1)$
201 : $P_{9964} = (11, 22, 8, 1)$	255 : $P_{11915} = (10, 19, 10, 1)$
202 : $P_{9974} = (21, 22, 8, 1)$	256 : $P_{11924} = (19, 19, 10, 1)$
203 : $P_{9999} = (14, 23, 8, 1)$	257 : $P_{12077} = (12, 24, 10, 1)$
204 : $P_{10002} = (17, 23, 8, 1)$	258 : $P_{12095} = (30, 24, 10, 1)$
205 : $P_{10023} = (6, 24, 8, 1)$	259 : $P_{12112} = (15, 25, 10, 1)$

260 : $P_{12125} = (28, 25, 10, 1)$
 261 : $P_{12166} = (5, 27, 10, 1)$
 262 : $P_{12181} = (20, 27, 10, 1)$
 263 : $P_{12198} = (5, 28, 10, 1)$
 264 : $P_{12212} = (19, 28, 10, 1)$
 265 : $P_{12235} = (10, 29, 10, 1)$
 266 : $P_{12254} = (29, 29, 10, 1)$
 267 : $P_{12298} = (9, 31, 10, 1)$
 268 : $P_{12317} = (28, 31, 10, 1)$
 269 : $P_{12456} = (7, 4, 11, 1)$
 270 : $P_{12457} = (8, 4, 11, 1)$
 271 : $P_{12485} = (4, 5, 11, 1)$
 272 : $P_{12491} = (10, 5, 11, 1)$
 273 : $P_{12568} = (23, 7, 11, 1)$
 274 : $P_{12572} = (27, 7, 11, 1)$
 275 : $P_{12634} = (25, 9, 11, 1)$
 276 : $P_{12636} = (27, 9, 11, 1)$
 277 : $P_{12669} = (28, 10, 11, 1)$
 278 : $P_{12670} = (29, 10, 11, 1)$
 279 : $P_{12686} = (13, 11, 11, 1)$
 280 : $P_{12708} = (3, 12, 11, 1)$
 281 : $P_{12709} = (4, 12, 11, 1)$
 282 : $P_{12840} = (7, 16, 11, 1)$
 283 : $P_{12861} = (28, 16, 11, 1)$
 284 : $P_{12868} = (3, 17, 11, 1)$
 285 : $P_{12890} = (25, 17, 11, 1)$
 286 : $P_{12911} = (14, 18, 11, 1)$
 287 : $P_{12920} = (23, 18, 11, 1)$
 288 : $P_{13004} = (11, 21, 11, 1)$
 289 : $P_{13014} = (21, 21, 11, 1)$
 290 : $P_{13033} = (8, 22, 11, 1)$
 291 : $P_{13046} = (21, 22, 11, 1)$
 292 : $P_{13164} = (11, 26, 11, 1)$
 293 : $P_{13179} = (26, 26, 11, 1)$
 294 : $P_{13198} = (13, 27, 11, 1)$
 295 : $P_{13214} = (29, 27, 11, 1)$
 296 : $P_{13327} = (14, 31, 11, 1)$
 297 : $P_{13339} = (26, 31, 11, 1)$
 298 : $P_{13368} = (23, 0, 12, 1)$
 299 : $P_{13372} = (27, 0, 12, 1)$
 300 : $P_{13429} = (20, 2, 12, 1)$
 301 : $P_{13435} = (26, 2, 12, 1)$
 302 : $P_{13459} = (18, 3, 12, 1)$
 303 : $P_{13470} = (29, 3, 12, 1)$
 304 : $P_{13495} = (22, 4, 12, 1)$
 305 : $P_{13503} = (30, 4, 12, 1)$
 306 : $P_{13523} = (18, 5, 12, 1)$
 307 : $P_{13532} = (27, 5, 12, 1)$
 308 : $P_{13650} = (17, 9, 12, 1)$
 309 : $P_{13653} = (20, 9, 12, 1)$
 310 : $P_{13667} = (2, 10, 12, 1)$
 311 : $P_{13669} = (4, 10, 12, 1)$
 312 : $P_{13723} = (26, 11, 12, 1)$
 313 : $P_{13726} = (29, 11, 12, 1)$

314 : $P_{13738} = (9, 12, 12, 1)$
 315 : $P_{13834} = (9, 15, 12, 1)$
 316 : $P_{13835} = (10, 15, 12, 1)$
 317 : $P_{13923} = (2, 18, 12, 1)$
 318 : $P_{13949} = (28, 18, 12, 1)$
 319 : $P_{14055} = (6, 22, 12, 1)$
 320 : $P_{14077} = (28, 22, 12, 1)$
 321 : $P_{14094} = (13, 23, 12, 1)$
 322 : $P_{14103} = (22, 23, 12, 1)$
 323 : $P_{14123} = (10, 24, 12, 1)$
 324 : $P_{14143} = (30, 24, 12, 1)$
 325 : $P_{14215} = (6, 27, 12, 1)$
 326 : $P_{14226} = (17, 27, 12, 1)$
 327 : $P_{14341} = (4, 31, 12, 1)$
 328 : $P_{14360} = (23, 31, 12, 1)$
 329 : $P_{14386} = (17, 0, 13, 1)$
 330 : $P_{14397} = (28, 0, 13, 1)$
 331 : $P_{14482} = (17, 3, 13, 1)$
 332 : $P_{14496} = (31, 3, 13, 1)$
 333 : $P_{14660} = (3, 9, 13, 1)$
 334 : $P_{14664} = (7, 9, 13, 1)$
 335 : $P_{14732} = (11, 11, 13, 1)$
 336 : $P_{14734} = (13, 11, 13, 1)$
 337 : $P_{14783} = (30, 12, 13, 1)$
 338 : $P_{14784} = (31, 12, 13, 1)$
 339 : $P_{14812} = (27, 13, 13, 1)$
 340 : $P_{14846} = (29, 14, 13, 1)$
 341 : $P_{14847} = (30, 14, 13, 1)$
 342 : $P_{14854} = (5, 15, 13, 1)$
 343 : $P_{14856} = (7, 15, 13, 1)$
 344 : $P_{14894} = (13, 16, 13, 1)$
 345 : $P_{14897} = (16, 16, 13, 1)$
 346 : $P_{14954} = (9, 18, 13, 1)$
 347 : $P_{14967} = (22, 18, 13, 1)$
 348 : $P_{14982} = (5, 19, 13, 1)$
 349 : $P_{15004} = (27, 19, 13, 1)$
 350 : $P_{15117} = (12, 23, 13, 1)$
 351 : $P_{15127} = (22, 23, 13, 1)$
 352 : $P_{15146} = (9, 24, 13, 1)$
 353 : $P_{15165} = (28, 24, 13, 1)$
 354 : $P_{15244} = (11, 27, 13, 1)$
 355 : $P_{15262} = (29, 27, 13, 1)$
 356 : $P_{15332} = (3, 30, 13, 1)$
 357 : $P_{15345} = (16, 30, 13, 1)$
 358 : $P_{15474} = (17, 2, 14, 1)$
 359 : $P_{15486} = (29, 2, 14, 1)$
 360 : $P_{15608} = (23, 6, 14, 1)$
 361 : $P_{15616} = (31, 6, 14, 1)$
 362 : $P_{15636} = (19, 7, 14, 1)$
 363 : $P_{15643} = (26, 7, 14, 1)$
 364 : $P_{15657} = (8, 8, 14, 1)$
 365 : $P_{15663} = (14, 8, 14, 1)$
 366 : $P_{15729} = (16, 10, 14, 1)$
 367 : $P_{15733} = (20, 10, 14, 1)$

368 : $P_{15797} = (20, 12, 14, 1)$
 369 : $P_{15799} = (22, 12, 14, 1)$
 370 : $P_{15837} = (28, 13, 14, 1)$
 371 : $P_{15840} = (31, 13, 14, 1)$
 372 : $P_{15860} = (19, 14, 14, 1)$
 373 : $P_{15952} = (15, 17, 14, 1)$
 374 : $P_{15953} = (16, 17, 14, 1)$
 375 : $P_{15980} = (11, 18, 14, 1)$
 376 : $P_{15992} = (23, 18, 14, 1)$
 377 : $P_{16039} = (6, 20, 14, 1)$
 378 : $P_{16061} = (28, 20, 14, 1)$
 379 : $P_{16071} = (6, 21, 14, 1)$
 380 : $P_{16094} = (29, 21, 14, 1)$
 381 : $P_{16111} = (14, 22, 14, 1)$
 382 : $P_{16119} = (22, 22, 14, 1)$
 383 : $P_{16137} = (8, 23, 14, 1)$
 384 : $P_{16146} = (17, 23, 14, 1)$
 385 : $P_{16396} = (11, 31, 14, 1)$
 386 : $P_{16411} = (26, 31, 14, 1)$
 387 : $P_{16503} = (22, 2, 15, 1)$
 388 : $P_{16508} = (27, 2, 15, 1)$
 389 : $P_{16516} = (3, 3, 15, 1)$
 390 : $P_{16528} = (15, 3, 15, 1)$
 391 : $P_{16729} = (24, 9, 15, 1)$
 392 : $P_{16735} = (30, 9, 15, 1)$
 393 : $P_{16771} = (2, 11, 15, 1)$
 394 : $P_{16775} = (6, 11, 15, 1)$
 395 : $P_{16806} = (5, 12, 15, 1)$
 396 : $P_{16807} = (6, 12, 15, 1)$
 397 : $P_{16854} = (21, 13, 15, 1)$
 398 : $P_{16856} = (23, 13, 15, 1)$
 399 : $P_{16887} = (22, 14, 15, 1)$
 400 : $P_{16888} = (23, 14, 15, 1)$
 401 : $P_{16924} = (27, 15, 15, 1)$
 402 : $P_{16939} = (10, 16, 15, 1)$
 403 : $P_{16950} = (21, 16, 15, 1)$
 404 : $P_{16975} = (14, 17, 15, 1)$
 405 : $P_{16977} = (16, 17, 15, 1)$
 406 : $P_{16996} = (3, 18, 15, 1)$
 407 : $P_{17023} = (30, 18, 15, 1)$
 408 : $P_{17091} = (2, 21, 15, 1)$
 409 : $P_{17113} = (24, 21, 15, 1)$
 410 : $P_{17227} = (10, 25, 15, 1)$
 411 : $P_{17245} = (28, 25, 15, 1)$
 412 : $P_{17254} = (5, 26, 15, 1)$
 413 : $P_{17265} = (16, 26, 15, 1)$
 414 : $P_{17328} = (15, 28, 15, 1)$
 415 : $P_{17341} = (28, 28, 15, 1)$
 416 : $P_{17446} = (5, 0, 16, 1)$
 417 : $P_{17462} = (21, 0, 16, 1)$
 418 : $P_{17573} = (4, 4, 16, 1)$
 419 : $P_{17585} = (16, 4, 16, 1)$
 420 : $P_{17738} = (9, 9, 16, 1)$
 421 : $P_{17745} = (16, 9, 16, 1)$

422 : $P_{17775} = (14, 10, 16, 1)$
 423 : $P_{17781} = (20, 10, 16, 1)$
 424 : $P_{17796} = (3, 11, 16, 1)$
 425 : $P_{17817} = (24, 11, 16, 1)$
 426 : $P_{17866} = (9, 13, 16, 1)$
 427 : $P_{17877} = (20, 13, 16, 1)$
 428 : $P_{17893} = (4, 14, 16, 1)$
 429 : $P_{17915} = (26, 14, 16, 1)$
 430 : $P_{17966} = (13, 16, 16, 1)$
 431 : $P_{17999} = (14, 17, 16, 1)$
 432 : $P_{18000} = (15, 17, 16, 1)$
 433 : $P_{18041} = (24, 18, 16, 1)$
 434 : $P_{18043} = (26, 18, 16, 1)$
 435 : $P_{18195} = (18, 23, 16, 1)$
 436 : $P_{18198} = (21, 23, 16, 1)$
 437 : $P_{18278} = (5, 26, 16, 1)$
 438 : $P_{18288} = (15, 26, 16, 1)$
 439 : $P_{18354} = (17, 28, 16, 1)$
 440 : $P_{18366} = (29, 28, 16, 1)$
 441 : $P_{18404} = (3, 30, 16, 1)$
 442 : $P_{18414} = (13, 30, 16, 1)$
 443 : $P_{18451} = (18, 31, 16, 1)$
 444 : $P_{18462} = (29, 31, 16, 1)$
 445 : $P_{18478} = (13, 0, 17, 1)$
 446 : $P_{18493} = (28, 0, 17, 1)$
 447 : $P_{18543} = (14, 2, 17, 1)$
 448 : $P_{18558} = (29, 2, 17, 1)$
 449 : $P_{18574} = (13, 3, 17, 1)$
 450 : $P_{18592} = (31, 3, 17, 1)$
 451 : $P_{18723} = (2, 8, 17, 1)$
 452 : $P_{18748} = (27, 8, 17, 1)$
 453 : $P_{18765} = (12, 9, 17, 1)$
 454 : $P_{18773} = (20, 9, 17, 1)$
 455 : $P_{18825} = (8, 11, 17, 1)$
 456 : $P_{18835} = (18, 11, 17, 1)$
 457 : $P_{18886} = (5, 13, 17, 1)$
 458 : $P_{18906} = (25, 13, 17, 1)$
 459 : $P_{18947} = (2, 15, 17, 1)$
 460 : $P_{18973} = (28, 15, 17, 1)$
 461 : $P_{19027} = (18, 17, 17, 1)$
 462 : $P_{19046} = (5, 18, 17, 1)$
 463 : $P_{19047} = (6, 18, 17, 1)$
 464 : $P_{19209} = (8, 23, 17, 1)$
 465 : $P_{19215} = (14, 23, 17, 1)$
 466 : $P_{19317} = (20, 26, 17, 1)$
 467 : $P_{19328} = (31, 26, 17, 1)$
 468 : $P_{19335} = (6, 27, 17, 1)$
 469 : $P_{19341} = (12, 27, 17, 1)$
 470 : $P_{19377} = (16, 28, 17, 1)$
 471 : $P_{19390} = (29, 28, 17, 1)$
 472 : $P_{19414} = (21, 29, 17, 1)$
 473 : $P_{19418} = (25, 29, 17, 1)$
 474 : $P_{19478} = (21, 31, 17, 1)$
 475 : $P_{19484} = (27, 31, 17, 1)$

476 : $P_{19560} = (7, 2, 18, 1)$
 477 : $P_{19576} = (23, 2, 18, 1)$
 478 : $P_{19597} = (12, 3, 18, 1)$
 479 : $P_{19614} = (29, 3, 18, 1)$
 480 : $P_{19661} = (12, 5, 18, 1)$
 481 : $P_{19676} = (27, 5, 18, 1)$
 482 : $P_{19849} = (8, 11, 18, 1)$
 483 : $P_{19858} = (17, 11, 18, 1)$
 484 : $P_{19977} = (8, 15, 18, 1)$
 485 : $P_{19990} = (21, 15, 18, 1)$
 486 : $P_{20005} = (4, 16, 18, 1)$
 487 : $P_{20007} = (6, 16, 18, 1)$
 488 : $P_{20050} = (17, 17, 18, 1)$
 489 : $P_{20051} = (18, 17, 18, 1)$
 490 : $P_{20069} = (4, 18, 18, 1)$
 491 : $P_{20103} = (6, 19, 18, 1)$
 492 : $P_{20104} = (7, 19, 18, 1)$
 493 : $P_{20153} = (24, 20, 18, 1)$
 494 : $P_{20159} = (30, 20, 18, 1)$
 495 : $P_{20241} = (16, 23, 18, 1)$
 496 : $P_{20246} = (21, 23, 18, 1)$
 497 : $P_{20275} = (18, 24, 18, 1)$
 498 : $P_{20281} = (24, 24, 18, 1)$
 499 : $P_{20340} = (19, 26, 18, 1)$
 500 : $P_{20348} = (27, 26, 18, 1)$
 501 : $P_{20376} = (23, 27, 18, 1)$
 502 : $P_{20383} = (30, 27, 18, 1)$
 503 : $P_{20497} = (16, 31, 18, 1)$
 504 : $P_{20510} = (29, 31, 18, 1)$
 505 : $P_{20586} = (9, 2, 19, 1)$
 506 : $P_{20601} = (24, 2, 19, 1)$
 507 : $P_{20615} = (6, 3, 19, 1)$
 508 : $P_{20631} = (22, 3, 19, 1)$
 509 : $P_{20711} = (6, 6, 19, 1)$
 510 : $P_{20724} = (19, 6, 19, 1)$
 511 : $P_{20751} = (14, 7, 19, 1)$
 512 : $P_{20763} = (26, 7, 19, 1)$
 513 : $P_{20806} = (5, 9, 19, 1)$
 514 : $P_{20832} = (31, 9, 19, 1)$
 515 : $P_{20872} = (7, 11, 19, 1)$
 516 : $P_{20896} = (31, 11, 19, 1)$
 517 : $P_{20975} = (14, 14, 19, 1)$
 518 : $P_{20980} = (19, 14, 19, 1)$
 519 : $P_{21050} = (25, 16, 19, 1)$
 520 : $P_{21051} = (26, 16, 19, 1)$
 521 : $P_{21131} = (10, 19, 19, 1)$
 522 : $P_{21241} = (24, 22, 19, 1)$
 523 : $P_{21246} = (29, 22, 19, 1)$
 524 : $P_{21274} = (25, 23, 19, 1)$
 525 : $P_{21278} = (29, 23, 19, 1)$
 526 : $P_{21363} = (18, 26, 19, 1)$
 527 : $P_{21372} = (27, 26, 19, 1)$
 528 : $P_{21414} = (5, 28, 19, 1)$
 529 : $P_{21419} = (10, 28, 19, 1)$

530 : $P_{21448} = (7, 29, 19, 1)$
 531 : $P_{21450} = (9, 29, 19, 1)$
 532 : $P_{21495} = (22, 30, 19, 1)$
 533 : $P_{21500} = (27, 30, 19, 1)$
 534 : $P_{21613} = (12, 2, 20, 1)$
 535 : $P_{21627} = (26, 2, 20, 1)$
 536 : $P_{21705} = (8, 5, 20, 1)$
 537 : $P_{21722} = (25, 5, 20, 1)$
 538 : $P_{21771} = (10, 7, 20, 1)$
 539 : $P_{21786} = (25, 7, 20, 1)$
 540 : $P_{21802} = (9, 8, 20, 1)$
 541 : $P_{21814} = (21, 8, 20, 1)$
 542 : $P_{21837} = (12, 9, 20, 1)$
 543 : $P_{21842} = (17, 9, 20, 1)$
 544 : $P_{21871} = (14, 10, 20, 1)$
 545 : $P_{21873} = (16, 10, 20, 1)$
 546 : $P_{21935} = (14, 12, 20, 1)$
 547 : $P_{21943} = (22, 12, 20, 1)$
 548 : $P_{21962} = (9, 13, 20, 1)$
 549 : $P_{21969} = (16, 13, 20, 1)$
 550 : $P_{22021} = (4, 15, 20, 1)$
 551 : $P_{22048} = (31, 15, 20, 1)$
 552 : $P_{22185} = (8, 20, 20, 1)$
 553 : $P_{22213} = (4, 21, 20, 1)$
 554 : $P_{22214} = (5, 21, 20, 1)$
 555 : $P_{22360} = (23, 25, 20, 1)$
 556 : $P_{22363} = (26, 25, 20, 1)$
 557 : $P_{22386} = (17, 26, 20, 1)$
 558 : $P_{22400} = (31, 26, 20, 1)$
 559 : $P_{22406} = (5, 27, 20, 1)$
 560 : $P_{22411} = (10, 27, 20, 1)$
 561 : $P_{22455} = (22, 28, 20, 1)$
 562 : $P_{22463} = (30, 28, 20, 1)$
 563 : $P_{22488} = (23, 29, 20, 1)$
 564 : $P_{22495} = (30, 29, 20, 1)$
 565 : $P_{22566} = (5, 0, 21, 1)$
 566 : $P_{22577} = (16, 0, 21, 1)$
 567 : $P_{22698} = (9, 4, 21, 1)$
 568 : $P_{22713} = (24, 4, 21, 1)$
 569 : $P_{22763} = (10, 6, 21, 1)$
 570 : $P_{22778} = (25, 6, 21, 1)$
 571 : $P_{22826} = (9, 8, 21, 1)$
 572 : $P_{22837} = (20, 8, 21, 1)$
 573 : $P_{22888} = (7, 10, 21, 1)$
 574 : $P_{22905} = (24, 10, 21, 1)$
 575 : $P_{22918} = (5, 11, 21, 1)$
 576 : $P_{22940} = (27, 11, 21, 1)$
 577 : $P_{22992} = (15, 13, 21, 1)$
 578 : $P_{23000} = (23, 13, 21, 1)$
 579 : $P_{23016} = (7, 14, 21, 1)$
 580 : $P_{23037} = (28, 14, 21, 1)$
 581 : $P_{23049} = (8, 15, 21, 1)$
 582 : $P_{23059} = (18, 15, 21, 1)$
 583 : $P_{23083} = (10, 16, 21, 1)$

584 : $P_{23088} = (15, 16, 21, 1)$
 585 : $P_{23244} = (11, 21, 21, 1)$
 586 : $P_{23273} = (8, 22, 21, 1)$
 587 : $P_{23276} = (11, 22, 21, 1)$
 588 : $P_{23313} = (16, 23, 21, 1)$
 589 : $P_{23315} = (18, 23, 21, 1)$
 590 : $P_{23506} = (17, 29, 21, 1)$
 591 : $P_{23514} = (25, 29, 21, 1)$
 592 : $P_{23544} = (23, 30, 21, 1)$
 593 : $P_{23549} = (28, 30, 21, 1)$
 594 : $P_{23570} = (17, 31, 21, 1)$
 595 : $P_{23580} = (27, 31, 21, 1)$
 596 : $P_{23664} = (15, 2, 22, 1)$
 597 : $P_{23676} = (27, 2, 22, 1)$
 598 : $P_{23687} = (6, 3, 22, 1)$
 599 : $P_{23700} = (19, 3, 22, 1)$
 600 : $P_{23725} = (12, 4, 22, 1)$
 601 : $P_{23743} = (30, 4, 22, 1)$
 602 : $P_{23754} = (9, 5, 22, 1)$
 603 : $P_{23771} = (26, 5, 22, 1)$
 604 : $P_{23983} = (14, 12, 22, 1)$
 605 : $P_{23989} = (20, 12, 22, 1)$
 606 : $P_{24048} = (15, 14, 22, 1)$
 607 : $P_{24056} = (23, 14, 22, 1)$
 608 : $P_{24068} = (3, 15, 22, 1)$
 609 : $P_{24091} = (26, 15, 22, 1)$
 610 : $P_{24100} = (3, 16, 22, 1)$
 611 : $P_{24102} = (5, 16, 22, 1)$
 612 : $P_{24170} = (9, 18, 22, 1)$
 613 : $P_{24174} = (13, 18, 22, 1)$
 614 : $P_{24230} = (5, 20, 22, 1)$
 615 : $P_{24232} = (7, 20, 22, 1)$
 616 : $P_{24303} = (14, 22, 22, 1)$
 617 : $P_{24333} = (12, 23, 22, 1)$
 618 : $P_{24334} = (13, 23, 22, 1)$
 619 : $P_{24359} = (6, 24, 22, 1)$
 620 : $P_{24361} = (8, 24, 22, 1)$
 621 : $P_{24392} = (7, 25, 22, 1)$
 622 : $P_{24393} = (8, 25, 22, 1)$
 623 : $P_{24501} = (20, 28, 22, 1)$
 624 : $P_{24511} = (30, 28, 22, 1)$
 625 : $P_{24564} = (19, 30, 22, 1)$
 626 : $P_{24572} = (27, 30, 22, 1)$
 627 : $P_{24621} = (12, 0, 23, 1)$
 628 : $P_{24636} = (27, 0, 23, 1)$
 629 : $P_{24680} = (7, 2, 23, 1)$
 630 : $P_{24691} = (18, 2, 23, 1)$
 631 : $P_{24815} = (14, 6, 23, 1)$
 632 : $P_{24832} = (31, 6, 23, 1)$
 633 : $P_{24844} = (11, 7, 23, 1)$
 634 : $P_{24860} = (27, 7, 23, 1)$
 635 : $P_{24872} = (7, 8, 23, 1)$
 636 : $P_{24889} = (24, 8, 23, 1)$
 637 : $P_{24901} = (4, 9, 23, 1)$

638 : $P_{24923} = (26, 9, 23, 1)$
 639 : $P_{25040} = (15, 13, 23, 1)$
 640 : $P_{25046} = (21, 13, 23, 1)$
 641 : $P_{25072} = (15, 14, 23, 1)$
 642 : $P_{25079} = (22, 14, 23, 1)$
 643 : $P_{25196} = (11, 18, 23, 1)$
 644 : $P_{25199} = (14, 18, 23, 1)$
 645 : $P_{25241} = (24, 19, 23, 1)$
 646 : $P_{25245} = (28, 19, 23, 1)$
 647 : $P_{25376} = (31, 23, 23, 1)$
 648 : $P_{25429} = (20, 25, 23, 1)$
 649 : $P_{25435} = (26, 25, 23, 1)$
 650 : $P_{25491} = (18, 27, 23, 1)$
 651 : $P_{25503} = (30, 27, 23, 1)$
 652 : $P_{25557} = (20, 29, 23, 1)$
 653 : $P_{25567} = (30, 29, 23, 1)$
 654 : $P_{25590} = (21, 30, 23, 1)$
 655 : $P_{25597} = (28, 30, 23, 1)$
 656 : $P_{25605} = (4, 31, 23, 1)$
 657 : $P_{25613} = (12, 31, 23, 1)$
 658 : $P_{25635} = (2, 0, 24, 1)$
 659 : $P_{25659} = (26, 0, 24, 1)$
 660 : $P_{25706} = (9, 2, 24, 1)$
 661 : $P_{25716} = (19, 2, 24, 1)$
 662 : $P_{25770} = (9, 4, 24, 1)$
 663 : $P_{25782} = (21, 4, 24, 1)$
 664 : $P_{25828} = (3, 6, 24, 1)$
 665 : $P_{25854} = (29, 6, 24, 1)$
 666 : $P_{25896} = (7, 8, 24, 1)$
 667 : $P_{25912} = (23, 8, 24, 1)$
 668 : $P_{25936} = (15, 9, 24, 1)$
 669 : $P_{25951} = (30, 9, 24, 1)$
 670 : $P_{25960} = (7, 10, 24, 1)$
 671 : $P_{25974} = (21, 10, 24, 1)$
 672 : $P_{25988} = (3, 11, 24, 1)$
 673 : $P_{26001} = (16, 11, 24, 1)$
 674 : $P_{26225} = (16, 18, 24, 1)$
 675 : $P_{26235} = (26, 18, 24, 1)$
 676 : $P_{26264} = (23, 19, 24, 1)$
 677 : $P_{26269} = (28, 19, 24, 1)$
 678 : $P_{26291} = (18, 20, 24, 1)$
 679 : $P_{26303} = (30, 20, 24, 1)$
 680 : $P_{26307} = (2, 21, 24, 1)$
 681 : $P_{26320} = (15, 21, 24, 1)$
 682 : $P_{26356} = (19, 22, 24, 1)$
 683 : $P_{26366} = (29, 22, 24, 1)$
 684 : $P_{26419} = (18, 24, 24, 1)$
 685 : $P_{26525} = (28, 27, 24, 1)$
 686 : $P_{26528} = (31, 27, 24, 1)$
 687 : $P_{26618} = (25, 30, 24, 1)$
 688 : $P_{26624} = (31, 30, 24, 1)$
 689 : $P_{26787} = (2, 4, 25, 1)$
 690 : $P_{26816} = (31, 4, 25, 1)$
 691 : $P_{26825} = (8, 5, 25, 1)$

692 : $P_{26837} = (20, 5, 25, 1)$
 693 : $P_{26859} = (10, 6, 25, 1)$
 694 : $P_{26870} = (21, 6, 25, 1)$
 695 : $P_{26891} = (10, 7, 25, 1)$
 696 : $P_{26901} = (20, 7, 25, 1)$
 697 : $P_{26956} = (11, 9, 25, 1)$
 698 : $P_{26972} = (27, 9, 25, 1)$
 699 : $P_{27078} = (5, 13, 25, 1)$
 700 : $P_{27090} = (17, 13, 25, 1)$
 701 : $P_{27188} = (19, 16, 25, 1)$
 702 : $P_{27195} = (26, 16, 25, 1)$
 703 : $P_{27204} = (3, 17, 25, 1)$
 704 : $P_{27212} = (11, 17, 25, 1)$
 705 : $P_{27267} = (2, 19, 25, 1)$
 706 : $P_{27273} = (8, 19, 25, 1)$
 707 : $P_{27412} = (19, 23, 25, 1)$
 708 : $P_{27422} = (29, 23, 25, 1)$
 709 : $P_{27451} = (26, 24, 25, 1)$
 710 : $P_{27452} = (27, 24, 25, 1)$
 711 : $P_{27487} = (30, 25, 25, 1)$
 712 : $P_{27518} = (29, 26, 25, 1)$
 713 : $P_{27519} = (30, 26, 25, 1)$
 714 : $P_{27602} = (17, 29, 25, 1)$
 715 : $P_{27606} = (21, 29, 25, 1)$
 716 : $P_{27641} = (24, 30, 25, 1)$
 717 : $P_{27648} = (31, 30, 25, 1)$
 718 : $P_{27652} = (3, 31, 25, 1)$
 719 : $P_{27654} = (5, 31, 25, 1)$
 720 : $P_{27683} = (2, 0, 26, 1)$
 721 : $P_{27705} = (24, 0, 26, 1)$
 722 : $P_{27757} = (12, 2, 26, 1)$
 723 : $P_{27765} = (20, 2, 26, 1)$
 724 : $P_{27812} = (3, 4, 26, 1)$
 725 : $P_{27838} = (29, 4, 26, 1)$
 726 : $P_{27850} = (9, 5, 26, 1)$
 727 : $P_{27863} = (22, 5, 26, 1)$
 728 : $P_{27919} = (14, 7, 26, 1)$
 729 : $P_{27924} = (19, 7, 26, 1)$
 730 : $P_{27973} = (4, 9, 26, 1)$
 731 : $P_{27992} = (23, 9, 26, 1)$
 732 : $P_{28045} = (12, 11, 26, 1)$
 733 : $P_{28062} = (29, 11, 26, 1)$
 734 : $P_{28133} = (4, 14, 26, 1)$
 735 : $P_{28145} = (16, 14, 26, 1)$
 736 : $P_{28164} = (3, 15, 26, 1)$
 737 : $P_{28183} = (22, 15, 26, 1)$
 738 : $P_{28212} = (19, 16, 26, 1)$
 739 : $P_{28218} = (25, 16, 26, 1)$
 740 : $P_{28227} = (2, 17, 26, 1)$
 741 : $P_{28234} = (9, 17, 26, 1)$
 742 : $P_{28273} = (16, 18, 26, 1)$
 743 : $P_{28281} = (24, 18, 26, 1)$
 744 : $P_{28474} = (25, 24, 26, 1)$
 745 : $P_{28476} = (27, 24, 26, 1)$

746 : $P_{28501} = (20, 25, 26, 1)$
 747 : $P_{28504} = (23, 25, 26, 1)$
 748 : $P_{28524} = (11, 26, 26, 1)$
 749 : $P_{28684} = (11, 31, 26, 1)$
 750 : $P_{28687} = (14, 31, 26, 1)$
 751 : $P_{28717} = (12, 0, 27, 1)$
 752 : $P_{28728} = (23, 0, 27, 1)$
 753 : $P_{28784} = (15, 2, 27, 1)$
 754 : $P_{28791} = (22, 2, 27, 1)$
 755 : $P_{28877} = (12, 5, 27, 1)$
 756 : $P_{28883} = (18, 5, 27, 1)$
 757 : $P_{28940} = (11, 7, 27, 1)$
 758 : $P_{28952} = (23, 7, 27, 1)$
 759 : $P_{28963} = (2, 8, 27, 1)$
 760 : $P_{28978} = (17, 8, 27, 1)$
 761 : $P_{29004} = (11, 9, 27, 1)$
 762 : $P_{29018} = (25, 9, 27, 1)$
 763 : $P_{29062} = (5, 11, 27, 1)$
 764 : $P_{29078} = (21, 11, 27, 1)$
 765 : $P_{29134} = (13, 13, 27, 1)$
 766 : $P_{29148} = (27, 13, 27, 1)$
 767 : $P_{29200} = (15, 15, 27, 1)$
 768 : $P_{29212} = (27, 15, 27, 1)$
 769 : $P_{29318} = (5, 19, 27, 1)$
 770 : $P_{29326} = (13, 19, 27, 1)$
 771 : $P_{29498} = (25, 24, 27, 1)$
 772 : $P_{29499} = (26, 24, 27, 1)$
 773 : $P_{29555} = (18, 26, 27, 1)$
 774 : $P_{29556} = (19, 26, 27, 1)$
 775 : $P_{29571} = (2, 27, 27, 1)$
 776 : $P_{29684} = (19, 30, 27, 1)$
 777 : $P_{29687} = (22, 30, 27, 1)$
 778 : $P_{29714} = (17, 31, 27, 1)$
 779 : $P_{29718} = (21, 31, 27, 1)$
 780 : $P_{29742} = (13, 0, 28, 1)$
 781 : $P_{29746} = (17, 0, 28, 1)$
 782 : $P_{30060} = (11, 10, 28, 1)$
 783 : $P_{30078} = (29, 10, 28, 1)$
 784 : $P_{30159} = (14, 13, 28, 1)$
 785 : $P_{30176} = (31, 13, 28, 1)$
 786 : $P_{30184} = (7, 14, 28, 1)$
 787 : $P_{30198} = (21, 14, 28, 1)$
 788 : $P_{30211} = (2, 15, 28, 1)$
 789 : $P_{30226} = (17, 15, 28, 1)$
 790 : $P_{30248} = (7, 16, 28, 1)$
 791 : $P_{30252} = (11, 16, 28, 1)$
 792 : $P_{30307} = (2, 18, 28, 1)$
 793 : $P_{30317} = (12, 18, 28, 1)$
 794 : $P_{30360} = (23, 19, 28, 1)$
 795 : $P_{30361} = (24, 19, 28, 1)$
 796 : $P_{30375} = (6, 20, 28, 1)$
 797 : $P_{30383} = (14, 20, 28, 1)$
 798 : $P_{30439} = (6, 22, 28, 1)$
 799 : $P_{30445} = (12, 22, 28, 1)$

800 : $P_{30506} = (9, 24, 28, 1)$
 801 : $P_{30510} = (13, 24, 28, 1)$
 802 : $P_{30539} = (10, 25, 28, 1)$
 803 : $P_{30544} = (15, 25, 28, 1)$
 804 : $P_{30617} = (24, 27, 28, 1)$
 805 : $P_{30624} = (31, 27, 28, 1)$
 806 : $P_{30640} = (15, 28, 28, 1)$
 807 : $P_{30710} = (21, 30, 28, 1)$
 808 : $P_{30712} = (23, 30, 28, 1)$
 809 : $P_{30730} = (9, 31, 28, 1)$
 810 : $P_{30731} = (10, 31, 28, 1)$
 811 : $P_{30831} = (14, 2, 29, 1)$
 812 : $P_{30834} = (17, 2, 29, 1)$
 813 : $P_{30861} = (12, 3, 29, 1)$
 814 : $P_{30867} = (18, 3, 29, 1)$
 815 : $P_{30884} = (3, 4, 29, 1)$
 816 : $P_{30907} = (26, 4, 29, 1)$
 817 : $P_{30948} = (3, 6, 29, 1)$
 818 : $P_{30969} = (24, 6, 29, 1)$
 819 : $P_{31084} = (11, 10, 29, 1)$
 820 : $P_{31101} = (28, 10, 29, 1)$
 821 : $P_{31117} = (12, 11, 29, 1)$
 822 : $P_{31131} = (26, 11, 29, 1)$
 823 : $P_{31214} = (13, 14, 29, 1)$
 824 : $P_{31231} = (30, 14, 29, 1)$
 825 : $P_{31303} = (6, 17, 29, 1)$
 826 : $P_{31307} = (10, 17, 29, 1)$
 827 : $P_{31431} = (6, 21, 29, 1)$
 828 : $P_{31439} = (14, 21, 29, 1)$
 829 : $P_{31476} = (19, 22, 29, 1)$
 830 : $P_{31481} = (24, 22, 29, 1)$
 831 : $P_{31508} = (19, 23, 29, 1)$
 832 : $P_{31514} = (25, 23, 29, 1)$
 833 : $P_{31610} = (25, 26, 29, 1)$
 834 : $P_{31615} = (30, 26, 29, 1)$
 835 : $P_{31628} = (11, 27, 29, 1)$
 836 : $P_{31630} = (13, 27, 29, 1)$
 837 : $P_{31665} = (16, 28, 29, 1)$
 838 : $P_{31666} = (17, 28, 29, 1)$
 839 : $P_{31691} = (10, 29, 29, 1)$
 840 : $P_{31761} = (16, 31, 29, 1)$
 841 : $P_{31763} = (18, 31, 29, 1)$
 842 : $P_{31917} = (12, 4, 30, 1)$
 843 : $P_{31927} = (22, 4, 30, 1)$
 844 : $P_{32080} = (15, 9, 30, 1)$
 845 : $P_{32089} = (24, 9, 30, 1)$
 846 : $P_{32107} = (10, 10, 30, 1)$
 847 : $P_{32127} = (30, 10, 30, 1)$
 848 : $P_{32174} = (13, 12, 30, 1)$
 849 : $P_{32192} = (31, 12, 30, 1)$
 850 : $P_{32238} = (13, 14, 30, 1)$

851 : $P_{32254} = (29, 14, 30, 1)$
 852 : $P_{32356} = (3, 18, 30, 1)$
 853 : $P_{32368} = (15, 18, 30, 1)$
 854 : $P_{32435} = (18, 20, 30, 1)$
 855 : $P_{32441} = (24, 20, 30, 1)$
 856 : $P_{32452} = (3, 21, 30, 1)$
 857 : $P_{32457} = (8, 21, 30, 1)$
 858 : $P_{32555} = (10, 24, 30, 1)$
 859 : $P_{32557} = (12, 24, 30, 1)$
 860 : $P_{32602} = (25, 25, 30, 1)$
 861 : $P_{32607} = (30, 25, 30, 1)$
 862 : $P_{32634} = (25, 26, 30, 1)$
 863 : $P_{32638} = (29, 26, 30, 1)$
 864 : $P_{32659} = (18, 27, 30, 1)$
 865 : $P_{32664} = (23, 27, 30, 1)$
 866 : $P_{32693} = (20, 28, 30, 1)$
 867 : $P_{32695} = (22, 28, 30, 1)$
 868 : $P_{32725} = (20, 29, 30, 1)$
 869 : $P_{32728} = (23, 29, 30, 1)$
 870 : $P_{32745} = (8, 30, 30, 1)$
 871 : $P_{32910} = (13, 3, 31, 1)$
 872 : $P_{32914} = (17, 3, 31, 1)$
 873 : $P_{32931} = (2, 4, 31, 1)$
 874 : $P_{32954} = (25, 4, 31, 1)$
 875 : $P_{32966} = (5, 5, 31, 1)$
 876 : $P_{32992} = (31, 5, 31, 1)$
 877 : $P_{33007} = (14, 6, 31, 1)$
 878 : $P_{33016} = (23, 6, 31, 1)$
 879 : $P_{33094} = (5, 9, 31, 1)$
 880 : $P_{33108} = (19, 9, 31, 1)$
 881 : $P_{33160} = (7, 11, 31, 1)$
 882 : $P_{33172} = (19, 11, 31, 1)$
 883 : $P_{33198} = (13, 12, 31, 1)$
 884 : $P_{33215} = (30, 12, 31, 1)$
 885 : $P_{33231} = (14, 13, 31, 1)$
 886 : $P_{33245} = (28, 13, 31, 1)$
 887 : $P_{33285} = (4, 15, 31, 1)$
 888 : $P_{33301} = (20, 15, 31, 1)$
 889 : $P_{33560} = (23, 23, 31, 1)$
 890 : $P_{33568} = (31, 23, 31, 1)$
 891 : $P_{33650} = (17, 26, 31, 1)$
 892 : $P_{33653} = (20, 26, 31, 1)$
 893 : $P_{33689} = (24, 27, 31, 1)$
 894 : $P_{33693} = (28, 27, 31, 1)$
 895 : $P_{33701} = (4, 28, 31, 1)$
 896 : $P_{33704} = (7, 28, 31, 1)$
 897 : $P_{33785} = (24, 30, 31, 1)$
 898 : $P_{33786} = (25, 30, 31, 1)$
 899 : $P_{33795} = (2, 31, 31, 1)$

Line Intersection Graph

	0	1	2	3	4	5
0	0	1	1	1	0	0
1	1	0	1	0	0	1
2	1	1	0	0	1	0
3	1	0	0	0	1	1
4	0	0	1	1	0	1
5	0	1	0	1	1	0

Neighbor sets in the line intersection graph:

Line 0 intersects

Line	ℓ_1	ℓ_2	ℓ_3
in point	P_5	P_1	P_0

Line 1 intersects

Line	ℓ_0	ℓ_2	ℓ_5
in point	P_5	P_{67}	P_{36}

Line 2 intersects

Line	ℓ_0	ℓ_1	ℓ_4
in point	P_1	P_{67}	P_2

Line 3 intersects

Line	ℓ_0	ℓ_4	ℓ_5
in point	P_0	P_{1090}	P_{1091}

Line 4 intersects

Line	ℓ_2	ℓ_3	ℓ_5
in point	P_2	P_{1090}	P_{2114}

Line 5 intersects

Line	ℓ_1	ℓ_3	ℓ_4
in point	P_{36}	P_{1091}	P_{2114}

The surface has 1089 points:

Too many to print.