

# Rank-192 over GF(32)

January 15, 2021

## The equation

The equation of the surface is :

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

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

The point rank of the equation over GF(32) is 1142982702

## General information

Number of lines	25
Number of points	801
Number of singular points	1
Number of Eckardt points	0
Number of double points	0
Number of single points	800
Number of points off lines	0
Number of Hesse planes	0
Number of axes	0
Type of points on lines	$33^{25}$
Type of lines on points	$25, 1^{800}$

## Singular Points

The surface has 1 singular points:

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

## The 25 Lines

The lines and their Pluecker coordinates are:

$$\ell_0 = \left[ \begin{array}{cccc} 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{array} \right]_{1056} = \left[ \begin{array}{cccc} 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{array} \right]_{1056} = \mathbf{P}\mathbf{l}(0, 0, 0, 0, 1, 0)_{1089}$$

$$\begin{aligned}
\ell_1 &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082400} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082400} = \mathbf{Pl}(0, 0, 0, 1, 0, 0)_{65} \\
\ell_2 &= \begin{bmatrix} 1 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{2113} = \begin{bmatrix} 1 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{2113} = \mathbf{Pl}(0, 0, 0, 1, 1, 0)_{3105} \\
\ell_3 &= \begin{bmatrix} 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{34880} = \begin{bmatrix} 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{34880} = \mathbf{Pl}(0, 1, 0, 0, 1, 0)_{1121} \\
\ell_4 &= \begin{bmatrix} 1 & 1 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{35937} = \begin{bmatrix} 1 & 1 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{35937} = \mathbf{Pl}(0, 1, 0, 1, 1, 0)_{3137} \\
\ell_5 &= \begin{bmatrix} 1 & \eta^{13} & \eta^{12} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{504188} = \begin{bmatrix} 1 & 28 & 14 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{504188} = \mathbf{Pl}(0, 14, 0, 28, 1, 0)_{4851} \\
\ell_6 &= \begin{bmatrix} 1 & \eta^7 & \eta^6 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{360436} = \begin{bmatrix} 1 & 20 & 10 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{360436} = \mathbf{Pl}(0, 10, 0, 20, 1, 0)_{4343} \\
\ell_7 &= \begin{bmatrix} 1 & \eta^{14} & \eta^{12} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{505245} = \begin{bmatrix} 1 & 29 & 14 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{505245} = \mathbf{Pl}(0, 14, 0, 29, 1, 0)_{4914} \\
\ell_8 &= \begin{bmatrix} 1 & \eta^{26} & \eta^{24} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1040087} = \begin{bmatrix} 1 & 23 & 30 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1040087} = \mathbf{Pl}(0, 30, 0, 23, 1, 0)_{4552} \\
\ell_9 &= \begin{bmatrix} 1 & \eta^{15} & \eta^{27} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{405887} = \begin{bmatrix} 1 & 31 & 11 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{405887} = \mathbf{Pl}(0, 11, 0, 31, 1, 0)_{5037} \\
\ell_{10} &= \begin{bmatrix} 1 & \eta^3 & \eta^{15} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1058056} = \begin{bmatrix} 1 & 8 & 31 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1058056} = \mathbf{Pl}(0, 31, 0, 8, 1, 0)_{3608} \\
\ell_{11} &= \begin{bmatrix} 1 & \eta^{11} & \eta^3 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{279047} = \begin{bmatrix} 1 & 7 & 8 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{279047} = \mathbf{Pl}(0, 8, 0, 7, 1, 0)_{3522} \\
\ell_{12} &= \begin{bmatrix} 1 & \eta^{25} & \eta^{17} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{670137} = \begin{bmatrix} 1 & 25 & 19 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{670137} = \mathbf{Pl}(0, 19, 0, 25, 1, 0)_{4667} \\
\ell_{13} &= \begin{bmatrix} 1 & \eta^{28} & \eta^{24} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1039030} = \begin{bmatrix} 1 & 22 & 30 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1039030} = \mathbf{Pl}(0, 30, 0, 22, 1, 0)_{4489} \\
\ell_{14} &= \begin{bmatrix} 1 & \eta^{21} & \eta^{17} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{669080} = \begin{bmatrix} 1 & 24 & 19 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{669080} = \mathbf{Pl}(0, 19, 0, 24, 1, 0)_{4604} \\
\ell_{15} &= \begin{bmatrix} 1 & \eta^6 & \eta^{30} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{620458} = \begin{bmatrix} 1 & 10 & 18 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{620458} = \mathbf{Pl}(0, 18, 0, 10, 1, 0)_{3721} \\
\ell_{16} &= \begin{bmatrix} 1 & \eta^{30} & \eta^{23} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{527442} = \begin{bmatrix} 1 & 18 & 15 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{527442} = \mathbf{Pl}(0, 15, 0, 18, 1, 0)_{4222} \\
\ell_{17} &= \begin{bmatrix} 1 & \eta^{27} & \eta^{30} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{621515} = \begin{bmatrix} 1 & 11 & 18 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{621515} = \mathbf{Pl}(0, 18, 0, 11, 1, 0)_{3784} \\
\ell_{18} &= \begin{bmatrix} 1 & \eta^{24} & \eta^{27} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{404830} = \begin{bmatrix} 1 & 30 & 11 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{404830} = \mathbf{Pl}(0, 11, 0, 30, 1, 0)_{4974} \\
\ell_{19} &= \begin{bmatrix} 1 & \eta^{23} & \eta^{29} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{321327} = \begin{bmatrix} 1 & 15 & 9 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{321327} = \mathbf{Pl}(0, 9, 0, 15, 1, 0)_{4027} \\
\ell_{20} &= \begin{bmatrix} 1 & \eta^{17} & \eta^{23} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{528499} = \begin{bmatrix} 1 & 19 & 15 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{528499} = \mathbf{Pl}(0, 15, 0, 19, 1, 0)_{4285} \\
\ell_{21} &= \begin{bmatrix} 1 & \eta^{19} & \eta^3 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{277990} = \begin{bmatrix} 1 & 6 & 8 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{277990} = \mathbf{Pl}(0, 8, 0, 6, 1, 0)_{3459}
\end{aligned}$$

$$\begin{aligned}\ell_{22} &= \begin{bmatrix} 1 & \eta^{22} & \eta^6 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{361493} = \begin{bmatrix} 1 & 21 & 10 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{361493} = \mathbf{Pl}(0, 10, 0, 21, 1, 0)_{4406} \\ \ell_{23} &= \begin{bmatrix} 1 & \eta^{12} & \eta^{29} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{320270} = \begin{bmatrix} 1 & 14 & 9 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{320270} = \mathbf{Pl}(0, 9, 0, 14, 1, 0)_{3964} \\ \ell_{24} &= \begin{bmatrix} 1 & \eta^{29} & \eta^{15} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1059113} = \begin{bmatrix} 1 & 9 & 31 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1059113} = \mathbf{Pl}(0, 31, 0, 9, 1, 0)_{3671}\end{aligned}$$

Rank of lines: ( 1056, 1082400, 2113, 34880, 35937, 504188, 360436, 505245, 1040087, 405887, 1058056, 279047, 670137, 1039030, 669080, 620458, 527442, 621515, 404830, 321327, 528499, 277990, 361493, 320270, 1059113 )

Rank of points on Klein quadric: ( 1089, 65, 3105, 1121, 3137, 4851, 4343, 4914, 4552, 5037, 3608, 3522, 4667, 4489, 4604, 3721, 4222, 3784, 4974, 4027, 4285, 3459, 4406, 3964, 3671 )

### 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 800 single points:

The single points on the surface are:

0 :  $P_0 = (1, 0, 0, 0)$  lies on line  $\ell_0$   
1 :  $P_1 = (0, 1, 0, 0)$  lies on line  $\ell_1$   
2 :  $P_4 = (1, 1, 1, 1)$  lies on line  $\ell_4$   
3 :  $P_5 = (1, 1, 0, 0)$  lies on line  $\ell_2$   
4 :  $P_{36} = (1, 0, 1, 0)$  lies on line  $\ell_3$   
5 :  $P_{68} = (1, 1, 1, 0)$  lies on line  $\ell_4$   
6 :  $P_{105} = (6, 2, 1, 0)$  lies on line  $\ell_5$   
7 :  $P_{124} = (25, 2, 1, 0)$  lies on line  $\ell_6$   
8 :  $P_{169} = (6, 4, 1, 0)$  lies on line  $\ell_7$   
9 :  $P_{183} = (20, 4, 1, 0)$  lies on line  $\ell_8$   
10 :  $P_{243} = (16, 6, 1, 0)$  lies on line  $\ell_9$   
11 :  $P_{254} = (27, 6, 1, 0)$  lies on line  $\ell_{10}$   
12 :  $P_{473} = (22, 13, 1, 0)$  lies on line  $\ell_{11}$   
13 :  $P_{480} = (29, 13, 1, 0)$  lies on line  $\ell_{12}$   
14 :  $P_{567} = (20, 16, 1, 0)$  lies on line  $\ell_{13}$   
15 :  $P_{576} = (29, 16, 1, 0)$  lies on line  $\ell_{14}$   
16 :  $P_{677} = (2, 20, 1, 0)$  lies on line  $\ell_{15}$   
17 :  $P_{688} = (13, 20, 1, 0)$  lies on line  $\ell_{16}$   
18 :  $P_{741} = (2, 22, 1, 0)$  lies on line  $\ell_{17}$   
19 :  $P_{755} = (16, 22, 1, 0)$  lies on line  $\ell_{18}$   
20 :  $P_{839} = (4, 25, 1, 0)$  lies on line  $\ell_{19}$   
21 :  $P_{848} = (13, 25, 1, 0)$  lies on line  $\ell_{20}$

22 :  $P_{921} = (22, 27, 1, 0)$  lies on line  $\ell_{21}$   
23 :  $P_{924} = (25, 27, 1, 0)$  lies on line  $\ell_{22}$   
24 :  $P_{967} = (4, 29, 1, 0)$  lies on line  $\ell_{23}$   
25 :  $P_{990} = (27, 29, 1, 0)$  lies on line  $\ell_{24}$   
26 :  $P_{1059} = (1, 0, 0, 1)$  lies on line  $\ell_0$   
27 :  $P_{1060} = (2, 0, 0, 1)$  lies on line  $\ell_0$   
28 :  $P_{1061} = (3, 0, 0, 1)$  lies on line  $\ell_0$   
29 :  $P_{1062} = (4, 0, 0, 1)$  lies on line  $\ell_0$   
30 :  $P_{1063} = (5, 0, 0, 1)$  lies on line  $\ell_0$   
31 :  $P_{1064} = (6, 0, 0, 1)$  lies on line  $\ell_0$   
32 :  $P_{1065} = (7, 0, 0, 1)$  lies on line  $\ell_0$   
33 :  $P_{1066} = (8, 0, 0, 1)$  lies on line  $\ell_0$   
34 :  $P_{1067} = (9, 0, 0, 1)$  lies on line  $\ell_0$   
35 :  $P_{1068} = (10, 0, 0, 1)$  lies on line  $\ell_0$   
36 :  $P_{1069} = (11, 0, 0, 1)$  lies on line  $\ell_0$   
37 :  $P_{1070} = (12, 0, 0, 1)$  lies on line  $\ell_0$   
38 :  $P_{1071} = (13, 0, 0, 1)$  lies on line  $\ell_0$   
39 :  $P_{1072} = (14, 0, 0, 1)$  lies on line  $\ell_0$   
40 :  $P_{1073} = (15, 0, 0, 1)$  lies on line  $\ell_0$   
41 :  $P_{1074} = (16, 0, 0, 1)$  lies on line  $\ell_0$   
42 :  $P_{1075} = (17, 0, 0, 1)$  lies on line  $\ell_0$   
43 :  $P_{1076} = (18, 0, 0, 1)$  lies on line  $\ell_0$

44 :  $P_{1077} = (19, 0, 0, 1)$  lies on line  $\ell_0$   
 45 :  $P_{1078} = (20, 0, 0, 1)$  lies on line  $\ell_0$   
 46 :  $P_{1079} = (21, 0, 0, 1)$  lies on line  $\ell_0$   
 47 :  $P_{1080} = (22, 0, 0, 1)$  lies on line  $\ell_0$   
 48 :  $P_{1081} = (23, 0, 0, 1)$  lies on line  $\ell_0$   
 49 :  $P_{1082} = (24, 0, 0, 1)$  lies on line  $\ell_0$   
 50 :  $P_{1083} = (25, 0, 0, 1)$  lies on line  $\ell_0$   
 51 :  $P_{1084} = (26, 0, 0, 1)$  lies on line  $\ell_0$   
 52 :  $P_{1085} = (27, 0, 0, 1)$  lies on line  $\ell_0$   
 53 :  $P_{1086} = (28, 0, 0, 1)$  lies on line  $\ell_0$   
 54 :  $P_{1087} = (29, 0, 0, 1)$  lies on line  $\ell_0$   
 55 :  $P_{1088} = (30, 0, 0, 1)$  lies on line  $\ell_0$   
 56 :  $P_{1089} = (31, 0, 0, 1)$  lies on line  $\ell_0$   
 57 :  $P_{1090} = (0, 1, 0, 1)$  lies on line  $\ell_1$   
 58 :  $P_{1091} = (1, 1, 0, 1)$  lies on line  $\ell_2$   
 59 :  $P_{1122} = (0, 2, 0, 1)$  lies on line  $\ell_1$   
 60 :  $P_{1124} = (2, 2, 0, 1)$  lies on line  $\ell_2$   
 61 :  $P_{1154} = (0, 3, 0, 1)$  lies on line  $\ell_1$   
 62 :  $P_{1157} = (3, 3, 0, 1)$  lies on line  $\ell_2$   
 63 :  $P_{1186} = (0, 4, 0, 1)$  lies on line  $\ell_1$   
 64 :  $P_{1190} = (4, 4, 0, 1)$  lies on line  $\ell_2$   
 65 :  $P_{1218} = (0, 5, 0, 1)$  lies on line  $\ell_1$   
 66 :  $P_{1223} = (5, 5, 0, 1)$  lies on line  $\ell_2$   
 67 :  $P_{1250} = (0, 6, 0, 1)$  lies on line  $\ell_1$   
 68 :  $P_{1256} = (6, 6, 0, 1)$  lies on line  $\ell_2$   
 69 :  $P_{1282} = (0, 7, 0, 1)$  lies on line  $\ell_1$   
 70 :  $P_{1289} = (7, 7, 0, 1)$  lies on line  $\ell_2$   
 71 :  $P_{1314} = (0, 8, 0, 1)$  lies on line  $\ell_1$   
 72 :  $P_{1322} = (8, 8, 0, 1)$  lies on line  $\ell_2$   
 73 :  $P_{1346} = (0, 9, 0, 1)$  lies on line  $\ell_1$   
 74 :  $P_{1355} = (9, 9, 0, 1)$  lies on line  $\ell_2$   
 75 :  $P_{1378} = (0, 10, 0, 1)$  lies on line  $\ell_1$   
 76 :  $P_{1388} = (10, 10, 0, 1)$  lies on line  $\ell_2$   
 77 :  $P_{1410} = (0, 11, 0, 1)$  lies on line  $\ell_1$   
 78 :  $P_{1421} = (11, 11, 0, 1)$  lies on line  $\ell_2$   
 79 :  $P_{1442} = (0, 12, 0, 1)$  lies on line  $\ell_1$   
 80 :  $P_{1454} = (12, 12, 0, 1)$  lies on line  $\ell_2$   
 81 :  $P_{1474} = (0, 13, 0, 1)$  lies on line  $\ell_1$   
 82 :  $P_{1487} = (13, 13, 0, 1)$  lies on line  $\ell_2$   
 83 :  $P_{1506} = (0, 14, 0, 1)$  lies on line  $\ell_1$   
 84 :  $P_{1520} = (14, 14, 0, 1)$  lies on line  $\ell_2$   
 85 :  $P_{1538} = (0, 15, 0, 1)$  lies on line  $\ell_1$   
 86 :  $P_{1553} = (15, 15, 0, 1)$  lies on line  $\ell_2$   
 87 :  $P_{1570} = (0, 16, 0, 1)$  lies on line  $\ell_1$   
 88 :  $P_{1586} = (16, 16, 0, 1)$  lies on line  $\ell_2$   
 89 :  $P_{1602} = (0, 17, 0, 1)$  lies on line  $\ell_1$   
 90 :  $P_{1619} = (17, 17, 0, 1)$  lies on line  $\ell_2$   
 91 :  $P_{1634} = (0, 18, 0, 1)$  lies on line  $\ell_1$   
 92 :  $P_{1652} = (18, 18, 0, 1)$  lies on line  $\ell_2$   
 93 :  $P_{1666} = (0, 19, 0, 1)$  lies on line  $\ell_1$   
 94 :  $P_{1685} = (19, 19, 0, 1)$  lies on line  $\ell_2$   
 95 :  $P_{1698} = (0, 20, 0, 1)$  lies on line  $\ell_1$   
 96 :  $P_{1718} = (20, 20, 0, 1)$  lies on line  $\ell_2$   
 97 :  $P_{1730} = (0, 21, 0, 1)$  lies on line  $\ell_1$

98 :  $P_{1751} = (21, 21, 0, 1)$  lies on line  $\ell_2$   
 99 :  $P_{1762} = (0, 22, 0, 1)$  lies on line  $\ell_1$   
 100 :  $P_{1784} = (22, 22, 0, 1)$  lies on line  $\ell_2$   
 101 :  $P_{1794} = (0, 23, 0, 1)$  lies on line  $\ell_1$   
 102 :  $P_{1817} = (23, 23, 0, 1)$  lies on line  $\ell_2$   
 103 :  $P_{1826} = (0, 24, 0, 1)$  lies on line  $\ell_1$   
 104 :  $P_{1850} = (24, 24, 0, 1)$  lies on line  $\ell_2$   
 105 :  $P_{1858} = (0, 25, 0, 1)$  lies on line  $\ell_1$   
 106 :  $P_{1883} = (25, 25, 0, 1)$  lies on line  $\ell_2$   
 107 :  $P_{1890} = (0, 26, 0, 1)$  lies on line  $\ell_1$   
 108 :  $P_{1916} = (26, 26, 0, 1)$  lies on line  $\ell_2$   
 109 :  $P_{1922} = (0, 27, 0, 1)$  lies on line  $\ell_1$   
 110 :  $P_{1949} = (27, 27, 0, 1)$  lies on line  $\ell_2$   
 111 :  $P_{1954} = (0, 28, 0, 1)$  lies on line  $\ell_1$   
 112 :  $P_{1982} = (28, 28, 0, 1)$  lies on line  $\ell_2$   
 113 :  $P_{1986} = (0, 29, 0, 1)$  lies on line  $\ell_1$   
 114 :  $P_{2015} = (29, 29, 0, 1)$  lies on line  $\ell_2$   
 115 :  $P_{2018} = (0, 30, 0, 1)$  lies on line  $\ell_1$   
 116 :  $P_{2048} = (30, 30, 0, 1)$  lies on line  $\ell_2$   
 117 :  $P_{2050} = (0, 31, 0, 1)$  lies on line  $\ell_1$   
 118 :  $P_{2081} = (31, 31, 0, 1)$  lies on line  $\ell_2$   
 119 :  $P_{2083} = (1, 0, 1, 1)$  lies on line  $\ell_3$   
 120 :  $P_{2151} = (6, 2, 1, 1)$  lies on line  $\ell_5$   
 121 :  $P_{2170} = (25, 2, 1, 1)$  lies on line  $\ell_6$   
 122 :  $P_{2215} = (6, 4, 1, 1)$  lies on line  $\ell_7$   
 123 :  $P_{2229} = (20, 4, 1, 1)$  lies on line  $\ell_8$   
 124 :  $P_{2289} = (16, 6, 1, 1)$  lies on line  $\ell_9$   
 125 :  $P_{2300} = (27, 6, 1, 1)$  lies on line  $\ell_{10}$   
 126 :  $P_{2519} = (22, 13, 1, 1)$  lies on line  $\ell_{11}$   
 127 :  $P_{2526} = (29, 13, 1, 1)$  lies on line  $\ell_{12}$   
 128 :  $P_{2613} = (20, 16, 1, 1)$  lies on line  $\ell_{13}$   
 129 :  $P_{2622} = (29, 16, 1, 1)$  lies on line  $\ell_{14}$   
 130 :  $P_{2723} = (2, 20, 1, 1)$  lies on line  $\ell_{15}$   
 131 :  $P_{2734} = (13, 20, 1, 1)$  lies on line  $\ell_{16}$   
 132 :  $P_{2787} = (2, 22, 1, 1)$  lies on line  $\ell_{17}$   
 133 :  $P_{2801} = (16, 22, 1, 1)$  lies on line  $\ell_{18}$   
 134 :  $P_{2885} = (4, 25, 1, 1)$  lies on line  $\ell_{19}$   
 135 :  $P_{2894} = (13, 25, 1, 1)$  lies on line  $\ell_{20}$   
 136 :  $P_{2967} = (22, 27, 1, 1)$  lies on line  $\ell_{21}$   
 137 :  $P_{2970} = (25, 27, 1, 1)$  lies on line  $\ell_{22}$   
 138 :  $P_{3013} = (4, 29, 1, 1)$  lies on line  $\ell_{23}$   
 139 :  $P_{3036} = (27, 29, 1, 1)$  lies on line  $\ell_{24}$   
 140 :  $P_{3107} = (2, 0, 2, 1)$  lies on line  $\ell_3$   
 141 :  $P_{3171} = (2, 2, 2, 1)$  lies on line  $\ell_4$   
 142 :  $P_{3245} = (12, 4, 2, 1)$  lies on line  $\ell_5$   
 143 :  $P_{3256} = (23, 4, 2, 1)$  lies on line  $\ell_6$   
 144 :  $P_{3278} = (13, 5, 2, 1)$  lies on line  $\ell_{13}$   
 145 :  $P_{3296} = (31, 5, 2, 1)$  lies on line  $\ell_{14}$   
 146 :  $P_{3373} = (12, 8, 2, 1)$  lies on line  $\ell_7$   
 147 :  $P_{3374} = (13, 8, 2, 1)$  lies on line  $\ell_8$   
 148 :  $P_{3397} = (4, 9, 2, 1)$  lies on line  $\ell_{17}$   
 149 :  $P_{3398} = (5, 9, 2, 1)$  lies on line  $\ell_{18}$   
 150 :  $P_{3494} = (5, 12, 2, 1)$  lies on line  $\ell_9$   
 151 :  $P_{3508} = (19, 12, 2, 1)$  lies on line  $\ell_{10}$

152 :  $P_{3525} = (4, 13, 2, 1)$  lies on line  $\ell_{15}$   
 153 :  $P_{3547} = (26, 13, 2, 1)$  lies on line  $\ell_{16}$   
 154 :  $P_{3722} = (9, 19, 2, 1)$  lies on line  $\ell_{21}$   
 155 :  $P_{3736} = (23, 19, 2, 1)$  lies on line  $\ell_{22}$   
 156 :  $P_{3849} = (8, 23, 2, 1)$  lies on line  $\ell_{19}$   
 157 :  $P_{3867} = (26, 23, 2, 1)$  lies on line  $\ell_{20}$   
 158 :  $P_{3946} = (9, 26, 2, 1)$  lies on line  $\ell_{11}$   
 159 :  $P_{3968} = (31, 26, 2, 1)$  lies on line  $\ell_{12}$   
 160 :  $P_{4105} = (8, 31, 2, 1)$  lies on line  $\ell_{23}$   
 161 :  $P_{4116} = (19, 31, 2, 1)$  lies on line  $\ell_{24}$   
 162 :  $P_{4132} = (3, 0, 3, 1)$  lies on line  $\ell_3$   
 163 :  $P_{4201} = (8, 2, 3, 1)$  lies on line  $\ell_{24}$   
 164 :  $P_{4205} = (12, 2, 3, 1)$  lies on line  $\ell_{23}$   
 165 :  $P_{4228} = (3, 3, 3, 1)$  lies on line  $\ell_4$   
 166 :  $P_{4331} = (10, 6, 3, 1)$  lies on line  $\ell_5$   
 167 :  $P_{4335} = (14, 6, 3, 1)$  lies on line  $\ell_6$   
 168 :  $P_{4399} = (14, 8, 3, 1)$  lies on line  $\ell_{22}$   
 169 :  $P_{4416} = (31, 8, 3, 1)$  lies on line  $\ell_{21}$   
 170 :  $P_{4457} = (8, 10, 3, 1)$  lies on line  $\ell_{10}$   
 171 :  $P_{4470} = (21, 10, 3, 1)$  lies on line  $\ell_9$   
 172 :  $P_{4523} = (10, 12, 3, 1)$  lies on line  $\ell_7$   
 173 :  $P_{4538} = (25, 12, 3, 1)$  lies on line  $\ell_8$   
 174 :  $P_{4589} = (12, 14, 3, 1)$  lies on line  $\ell_{19}$   
 175 :  $P_{4600} = (23, 14, 3, 1)$  lies on line  $\ell_{20}$   
 176 :  $P_{4803} = (2, 21, 3, 1)$  lies on line  $\ell_{14}$   
 177 :  $P_{4826} = (25, 21, 3, 1)$  lies on line  $\ell_{13}$   
 178 :  $P_{4867} = (2, 23, 3, 1)$  lies on line  $\ell_{12}$   
 179 :  $P_{4896} = (31, 23, 3, 1)$  lies on line  $\ell_{11}$   
 180 :  $P_{4935} = (6, 25, 3, 1)$  lies on line  $\ell_{15}$   
 181 :  $P_{4952} = (23, 25, 3, 1)$  lies on line  $\ell_{16}$   
 182 :  $P_{5127} = (6, 31, 3, 1)$  lies on line  $\ell_{17}$   
 183 :  $P_{5142} = (21, 31, 3, 1)$  lies on line  $\ell_{18}$   
 184 :  $P_{5157} = (4, 0, 4, 1)$  lies on line  $\ell_3$   
 185 :  $P_{5260} = (11, 3, 4, 1)$  lies on line  $\ell_{22}$   
 186 :  $P_{5267} = (18, 3, 4, 1)$  lies on line  $\ell_{21}$   
 187 :  $P_{5285} = (4, 4, 4, 1)$  lies on line  $\ell_4$   
 188 :  $P_{5420} = (11, 8, 4, 1)$  lies on line  $\ell_6$   
 189 :  $P_{5433} = (24, 8, 4, 1)$  lies on line  $\ell_5$   
 190 :  $P_{5499} = (26, 10, 4, 1)$  lies on line  $\ell_{13}$   
 191 :  $P_{5500} = (27, 10, 4, 1)$  lies on line  $\ell_{14}$   
 192 :  $P_{5521} = (16, 11, 4, 1)$  lies on line  $\ell_{19}$   
 193 :  $P_{5522} = (17, 11, 4, 1)$  lies on line  $\ell_{20}$   
 194 :  $P_{5689} = (24, 16, 4, 1)$  lies on line  $\ell_7$   
 195 :  $P_{5691} = (26, 16, 4, 1)$  lies on line  $\ell_8$   
 196 :  $P_{5715} = (18, 17, 4, 1)$  lies on line  $\ell_{11}$   
 197 :  $P_{5724} = (27, 17, 4, 1)$  lies on line  $\ell_{12}$   
 198 :  $P_{5737} = (8, 18, 4, 1)$  lies on line  $\ell_{17}$   
 199 :  $P_{5739} = (10, 18, 4, 1)$  lies on line  $\ell_{18}$   
 200 :  $P_{5924} = (3, 24, 4, 1)$  lies on line  $\ell_{10}$   
 201 :  $P_{5931} = (10, 24, 4, 1)$  lies on line  $\ell_9$   
 202 :  $P_{5993} = (8, 26, 4, 1)$  lies on line  $\ell_{15}$   
 203 :  $P_{6002} = (17, 26, 4, 1)$  lies on line  $\ell_{16}$   
 204 :  $P_{6020} = (3, 27, 4, 1)$  lies on line  $\ell_{24}$   
 205 :  $P_{6033} = (16, 27, 4, 1)$  lies on line  $\ell_{23}$

206 :  $P_{6182} = (5, 0, 5, 1)$  lies on line  $\ell_3$   
 207 :  $P_{6315} = (10, 4, 5, 1)$  lies on line  $\ell_{17}$   
 208 :  $P_{6331} = (26, 4, 5, 1)$  lies on line  $\ell_{18}$   
 209 :  $P_{6342} = (5, 5, 5, 1)$  lies on line  $\ell_4$   
 210 :  $P_{6389} = (20, 6, 5, 1)$  lies on line  $\ell_{23}$   
 211 :  $P_{6393} = (24, 6, 5, 1)$  lies on line  $\ell_{24}$   
 212 :  $P_{6515} = (18, 10, 5, 1)$  lies on line  $\ell_6$   
 213 :  $P_{6527} = (30, 10, 5, 1)$  lies on line  $\ell_5$   
 214 :  $P_{6635} = (10, 14, 5, 1)$  lies on line  $\ell_{15}$   
 215 :  $P_{6653} = (28, 14, 5, 1)$  lies on line  $\ell_{16}$   
 216 :  $P_{6773} = (20, 18, 5, 1)$  lies on line  $\ell_{19}$   
 217 :  $P_{6781} = (28, 18, 5, 1)$  lies on line  $\ell_{20}$   
 218 :  $P_{6831} = (14, 20, 5, 1)$  lies on line  $\ell_8$   
 219 :  $P_{6847} = (30, 20, 5, 1)$  lies on line  $\ell_7$   
 220 :  $P_{6949} = (4, 24, 5, 1)$  lies on line  $\ell_{21}$   
 221 :  $P_{6963} = (18, 24, 5, 1)$  lies on line  $\ell_{22}$   
 222 :  $P_{7015} = (6, 26, 5, 1)$  lies on line  $\ell_{14}$   
 223 :  $P_{7023} = (14, 26, 5, 1)$  lies on line  $\ell_{13}$   
 224 :  $P_{7077} = (4, 28, 5, 1)$  lies on line  $\ell_{11}$   
 225 :  $P_{7079} = (6, 28, 5, 1)$  lies on line  $\ell_{12}$   
 226 :  $P_{7161} = (24, 30, 5, 1)$  lies on line  $\ell_{10}$   
 227 :  $P_{7163} = (26, 30, 5, 1)$  lies on line  $\ell_9$   
 228 :  $P_{7207} = (6, 0, 6, 1)$  lies on line  $\ell_3$   
 229 :  $P_{7345} = (16, 4, 6, 1)$  lies on line  $\ell_{24}$   
 230 :  $P_{7353} = (24, 4, 6, 1)$  lies on line  $\ell_{23}$   
 231 :  $P_{7399} = (6, 6, 6, 1)$  lies on line  $\ell_4$   
 232 :  $P_{7557} = (4, 11, 6, 1)$  lies on line  $\ell_{12}$   
 233 :  $P_{7580} = (27, 11, 6, 1)$  lies on line  $\ell_{11}$   
 234 :  $P_{7605} = (20, 12, 6, 1)$  lies on line  $\ell_5$   
 235 :  $P_{7613} = (28, 12, 6, 1)$  lies on line  $\ell_6$   
 236 :  $P_{7685} = (4, 15, 6, 1)$  lies on line  $\ell_{14}$   
 237 :  $P_{7704} = (23, 15, 6, 1)$  lies on line  $\ell_{13}$   
 238 :  $P_{7740} = (27, 16, 6, 1)$  lies on line  $\ell_{21}$   
 239 :  $P_{7741} = (28, 16, 6, 1)$  lies on line  $\ell_{22}$   
 240 :  $P_{7856} = (15, 20, 6, 1)$  lies on line  $\ell_9$   
 241 :  $P_{7857} = (16, 20, 6, 1)$  lies on line  $\ell_{10}$   
 242 :  $P_{7948} = (11, 23, 6, 1)$  lies on line  $\ell_{16}$   
 243 :  $P_{7949} = (12, 23, 6, 1)$  lies on line  $\ell_{15}$   
 244 :  $P_{7989} = (20, 24, 6, 1)$  lies on line  $\ell_7$   
 245 :  $P_{7992} = (23, 24, 6, 1)$  lies on line  $\ell_8$   
 246 :  $P_{8077} = (12, 27, 6, 1)$  lies on line  $\ell_{17}$   
 247 :  $P_{8080} = (15, 27, 6, 1)$  lies on line  $\ell_{18}$   
 248 :  $P_{8108} = (11, 28, 6, 1)$  lies on line  $\ell_{20}$   
 249 :  $P_{8121} = (24, 28, 6, 1)$  lies on line  $\ell_{19}$   
 250 :  $P_{8232} = (7, 0, 7, 1)$  lies on line  $\ell_3$   
 251 :  $P_{8327} = (6, 3, 7, 1)$  lies on line  $\ell_{16}$   
 252 :  $P_{8335} = (14, 3, 7, 1)$  lies on line  $\ell_{15}$   
 253 :  $P_{8391} = (6, 5, 7, 1)$  lies on line  $\ell_{20}$   
 254 :  $P_{8413} = (28, 5, 7, 1)$  lies on line  $\ell_{19}$   
 255 :  $P_{8430} = (13, 6, 7, 1)$  lies on line  $\ell_{11}$   
 256 :  $P_{8442} = (25, 6, 7, 1)$  lies on line  $\ell_{12}$   
 257 :  $P_{8456} = (7, 7, 7, 1)$  lies on line  $\ell_4$   
 258 :  $P_{8582} = (5, 11, 7, 1)$  lies on line  $\ell_{22}$   
 259 :  $P_{8590} = (13, 11, 7, 1)$  lies on line  $\ell_{21}$

260 :  $P_{8655} = (14, 13, 7, 1)$  lies on line  $\ell_{17}$   
 261 :  $P_{8672} = (31, 13, 7, 1)$  lies on line  $\ell_{18}$   
 262 :  $P_{8678} = (5, 14, 7, 1)$  lies on line  $\ell_6$   
 263 :  $P_{8691} = (18, 14, 7, 1)$  lies on line  $\ell_5$   
 264 :  $P_{8812} = (11, 18, 7, 1)$  lies on line  $\ell_{10}$   
 265 :  $P_{8832} = (31, 18, 7, 1)$  lies on line  $\ell_9$   
 266 :  $P_{9036} = (11, 25, 7, 1)$  lies on line  $\ell_{24}$   
 267 :  $P_{9053} = (28, 25, 7, 1)$  lies on line  $\ell_{23}$   
 268 :  $P_{9124} = (3, 28, 7, 1)$  lies on line  $\ell_8$   
 269 :  $P_{9139} = (18, 28, 7, 1)$  lies on line  $\ell_7$   
 270 :  $P_{9220} = (3, 31, 7, 1)$  lies on line  $\ell_{13}$   
 271 :  $P_{9242} = (25, 31, 7, 1)$  lies on line  $\ell_{14}$   
 272 :  $P_{9257} = (8, 0, 8, 1)$  lies on line  $\ell_3$   
 273 :  $P_{9297} = (16, 1, 8, 1)$  lies on line  $\ell_{17}$   
 274 :  $P_{9301} = (20, 1, 8, 1)$  lies on line  $\ell_{18}$   
 275 :  $P_{9426} = (17, 5, 8, 1)$  lies on line  $\ell_8$   
 276 :  $P_{9430} = (21, 5, 8, 1)$  lies on line  $\ell_7$   
 277 :  $P_{9442} = (1, 6, 8, 1)$  lies on line  $\ell_{21}$   
 278 :  $P_{9463} = (22, 6, 8, 1)$  lies on line  $\ell_{22}$   
 279 :  $P_{9474} = (1, 7, 8, 1)$  lies on line  $\ell_{11}$   
 280 :  $P_{9492} = (19, 7, 8, 1)$  lies on line  $\ell_{12}$   
 281 :  $P_{9513} = (8, 8, 8, 1)$  lies on line  $\ell_4$   
 282 :  $P_{9782} = (21, 16, 8, 1)$  lies on line  $\ell_5$   
 283 :  $P_{9783} = (22, 16, 8, 1)$  lies on line  $\ell_6$   
 284 :  $P_{9800} = (7, 17, 8, 1)$  lies on line  $\ell_{16}$   
 285 :  $P_{9809} = (16, 17, 8, 1)$  lies on line  $\ell_{15}$   
 286 :  $P_{9862} = (5, 19, 8, 1)$  lies on line  $\ell_{23}$   
 287 :  $P_{9863} = (6, 19, 8, 1)$  lies on line  $\ell_{24}$   
 288 :  $P_{9906} = (17, 20, 8, 1)$  lies on line  $\ell_{13}$   
 289 :  $P_{9908} = (19, 20, 8, 1)$  lies on line  $\ell_{14}$   
 290 :  $P_{9927} = (6, 21, 8, 1)$  lies on line  $\ell_{10}$   
 291 :  $P_{9941} = (20, 21, 8, 1)$  lies on line  $\ell_9$   
 292 :  $P_{9958} = (5, 22, 8, 1)$  lies on line  $\ell_{19}$   
 293 :  $P_{9960} = (7, 22, 8, 1)$  lies on line  $\ell_{20}$   
 294 :  $P_{10282} = (9, 0, 9, 1)$  lies on line  $\ell_3$   
 295 :  $P_{10310} = (5, 1, 9, 1)$  lies on line  $\ell_8$   
 296 :  $P_{10324} = (19, 1, 9, 1)$  lies on line  $\ell_7$   
 297 :  $P_{10406} = (5, 4, 9, 1)$  lies on line  $\ell_{13}$   
 298 :  $P_{10415} = (14, 4, 9, 1)$  lies on line  $\ell_{14}$   
 299 :  $P_{10443} = (10, 5, 9, 1)$  lies on line  $\ell_{16}$   
 300 :  $P_{10451} = (18, 5, 9, 1)$  lies on line  $\ell_{15}$   
 301 :  $P_{10570} = (9, 9, 9, 1)$  lies on line  $\ell_4$   
 302 :  $P_{10607} = (14, 10, 9, 1)$  lies on line  $\ell_{12}$   
 303 :  $P_{10616} = (23, 10, 9, 1)$  lies on line  $\ell_{11}$   
 304 :  $P_{10722} = (1, 14, 9, 1)$  lies on line  $\ell_{23}$   
 305 :  $P_{10750} = (29, 14, 9, 1)$  lies on line  $\ell_{24}$   
 306 :  $P_{10754} = (1, 15, 9, 1)$  lies on line  $\ell_{19}$   
 307 :  $P_{10763} = (10, 15, 9, 1)$  lies on line  $\ell_{20}$   
 308 :  $P_{10864} = (15, 18, 9, 1)$  lies on line  $\ell_6$   
 309 :  $P_{10868} = (19, 18, 9, 1)$  lies on line  $\ell_5$   
 310 :  $P_{10885} = (4, 19, 9, 1)$  lies on line  $\ell_9$   
 311 :  $P_{10910} = (29, 19, 9, 1)$  lies on line  $\ell_{10}$   
 312 :  $P_{11013} = (4, 23, 9, 1)$  lies on line  $\ell_{18}$   
 313 :  $P_{11027} = (18, 23, 9, 1)$  lies on line  $\ell_{17}$

314 :  $P_{11216} = (15, 29, 9, 1)$  lies on line  $\ell_{22}$   
 315 :  $P_{11224} = (23, 29, 9, 1)$  lies on line  $\ell_{21}$   
 316 :  $P_{11307} = (10, 0, 10, 1)$  lies on line  $\ell_3$   
 317 :  $P_{11342} = (13, 1, 10, 1)$  lies on line  $\ell_{19}$   
 318 :  $P_{11358} = (29, 1, 10, 1)$  lies on line  $\ell_{20}$   
 319 :  $P_{11570} = (17, 8, 10, 1)$  lies on line  $\ell_{18}$   
 320 :  $P_{11573} = (20, 8, 10, 1)$  lies on line  $\ell_{17}$   
 321 :  $P_{11627} = (10, 10, 10, 1)$  lies on line  $\ell_4$   
 322 :  $P_{11694} = (13, 12, 10, 1)$  lies on line  $\ell_{23}$   
 323 :  $P_{11702} = (21, 12, 10, 1)$  lies on line  $\ell_{24}$   
 324 :  $P_{11738} = (25, 13, 10, 1)$  lies on line  $\ell_7$   
 325 :  $P_{11741} = (28, 13, 10, 1)$  lies on line  $\ell_8$   
 326 :  $P_{11853} = (12, 17, 10, 1)$  lies on line  $\ell_{14}$   
 327 :  $P_{11869} = (28, 17, 10, 1)$  lies on line  $\ell_{13}$   
 328 :  $P_{11938} = (1, 20, 10, 1)$  lies on line  $\ell_6$   
 329 :  $P_{11962} = (25, 20, 10, 1)$  lies on line  $\ell_5$   
 330 :  $P_{11970} = (1, 21, 10, 1)$  lies on line  $\ell_{22}$   
 331 :  $P_{11977} = (8, 21, 10, 1)$  lies on line  $\ell_{21}$   
 332 :  $P_{12114} = (17, 25, 10, 1)$  lies on line  $\ell_9$   
 333 :  $P_{12118} = (21, 25, 10, 1)$  lies on line  $\ell_{10}$   
 334 :  $P_{12213} = (20, 28, 10, 1)$  lies on line  $\ell_{15}$   
 335 :  $P_{12222} = (29, 28, 10, 1)$  lies on line  $\ell_{16}$   
 336 :  $P_{12233} = (8, 29, 10, 1)$  lies on line  $\ell_{11}$   
 337 :  $P_{12237} = (12, 29, 10, 1)$  lies on line  $\ell_{12}$   
 338 :  $P_{12332} = (11, 0, 11, 1)$  lies on line  $\ell_3$   
 339 :  $P_{12361} = (8, 1, 11, 1)$  lies on line  $\ell_{13}$   
 340 :  $P_{12370} = (17, 1, 11, 1)$  lies on line  $\ell_{14}$   
 341 :  $P_{12593} = (16, 8, 11, 1)$  lies on line  $\ell_{16}$   
 342 :  $P_{12599} = (22, 8, 11, 1)$  lies on line  $\ell_{15}$   
 343 :  $P_{12617} = (8, 9, 11, 1)$  lies on line  $\ell_8$   
 344 :  $P_{12640} = (31, 9, 11, 1)$  lies on line  $\ell_7$   
 345 :  $P_{12684} = (11, 11, 11, 1)$  lies on line  $\ell_4$   
 346 :  $P_{12793} = (24, 14, 11, 1)$  lies on line  $\ell_{22}$   
 347 :  $P_{12799} = (30, 14, 11, 1)$  lies on line  $\ell_{21}$   
 348 :  $P_{12850} = (17, 16, 11, 1)$  lies on line  $\ell_{12}$   
 349 :  $P_{12863} = (30, 16, 11, 1)$  lies on line  $\ell_{11}$   
 350 :  $P_{12874} = (9, 17, 11, 1)$  lies on line  $\ell_{23}$   
 351 :  $P_{12879} = (14, 17, 11, 1)$  lies on line  $\ell_{24}$   
 352 :  $P_{13049} = (24, 22, 11, 1)$  lies on line  $\ell_6$   
 353 :  $P_{13056} = (31, 22, 11, 1)$  lies on line  $\ell_5$   
 354 :  $P_{13098} = (9, 24, 11, 1)$  lies on line  $\ell_{19}$   
 355 :  $P_{13105} = (16, 24, 11, 1)$  lies on line  $\ell_{20}$   
 356 :  $P_{13282} = (1, 30, 11, 1)$  lies on line  $\ell_{18}$   
 357 :  $P_{13303} = (22, 30, 11, 1)$  lies on line  $\ell_{17}$   
 358 :  $P_{13314} = (1, 31, 11, 1)$  lies on line  $\ell_9$   
 359 :  $P_{13327} = (14, 31, 11, 1)$  lies on line  $\ell_{10}$   
 360 :  $P_{13357} = (12, 0, 12, 1)$  lies on line  $\ell_3$   
 361 :  $P_{13524} = (19, 5, 12, 1)$  lies on line  $\ell_{21}$   
 362 :  $P_{13534} = (29, 5, 12, 1)$  lies on line  $\ell_{22}$   
 363 :  $P_{13606} = (5, 8, 12, 1)$  lies on line  $\ell_{24}$   
 364 :  $P_{13622} = (21, 8, 12, 1)$  lies on line  $\ell_{23}$   
 365 :  $P_{13719} = (22, 11, 12, 1)$  lies on line  $\ell_{16}$   
 366 :  $P_{13721} = (24, 11, 12, 1)$  lies on line  $\ell_{15}$   
 367 :  $P_{13741} = (12, 12, 12, 1)$  lies on line  $\ell_4$

368 :  $P_{13766} = (5, 13, 12, 1)$  lies on line  $\ell_{10}$   
 369 :  $P_{13791} = (30, 13, 12, 1)$  lies on line  $\ell_9$   
 370 :  $P_{13977} = (24, 19, 12, 1)$  lies on line  $\ell_{17}$   
 371 :  $P_{13983} = (30, 19, 12, 1)$  lies on line  $\ell_{18}$   
 372 :  $P_{14028} = (11, 21, 12, 1)$  lies on line  $\ell_8$   
 373 :  $P_{14030} = (13, 21, 12, 1)$  lies on line  $\ell_7$   
 374 :  $P_{14057} = (8, 22, 12, 1)$  lies on line  $\ell_{12}$   
 375 :  $P_{14068} = (19, 22, 12, 1)$  lies on line  $\ell_{11}$   
 376 :  $P_{14126} = (13, 24, 12, 1)$  lies on line  $\ell_5$   
 377 :  $P_{14142} = (29, 24, 12, 1)$  lies on line  $\ell_6$   
 378 :  $P_{14294} = (21, 29, 12, 1)$  lies on line  $\ell_{19}$   
 379 :  $P_{14295} = (22, 29, 12, 1)$  lies on line  $\ell_{20}$   
 380 :  $P_{14313} = (8, 30, 12, 1)$  lies on line  $\ell_{14}$   
 381 :  $P_{14316} = (11, 30, 12, 1)$  lies on line  $\ell_{13}$   
 382 :  $P_{14382} = (13, 0, 13, 1)$  lies on line  $\ell_3$   
 383 :  $P_{14514} = (17, 4, 13, 1)$  lies on line  $\ell_{19}$   
 384 :  $P_{14524} = (27, 4, 13, 1)$  lies on line  $\ell_{20}$   
 385 :  $P_{14543} = (14, 5, 13, 1)$  lies on line  $\ell_{18}$   
 386 :  $P_{14555} = (26, 5, 13, 1)$  lies on line  $\ell_{17}$   
 387 :  $P_{14735} = (14, 11, 13, 1)$  lies on line  $\ell_9$   
 388 :  $P_{14751} = (30, 11, 13, 1)$  lies on line  $\ell_{10}$   
 389 :  $P_{14798} = (13, 13, 13, 1)$  lies on line  $\ell_4$   
 390 :  $P_{14838} = (21, 14, 13, 1)$  lies on line  $\ell_{14}$   
 391 :  $P_{14848} = (31, 14, 13, 1)$  lies on line  $\ell_{13}$   
 392 :  $P_{14924} = (11, 17, 13, 1)$  lies on line  $\ell_7$   
 393 :  $P_{14944} = (31, 17, 13, 1)$  lies on line  $\ell_8$   
 394 :  $P_{15058} = (17, 21, 13, 1)$  lies on line  $\ell_{23}$   
 395 :  $P_{15071} = (30, 21, 13, 1)$  lies on line  $\ell_{24}$   
 396 :  $P_{15205} = (4, 26, 13, 1)$  lies on line  $\ell_6$   
 397 :  $P_{15212} = (11, 26, 13, 1)$  lies on line  $\ell_5$   
 398 :  $P_{15238} = (5, 27, 13, 1)$  lies on line  $\ell_{11}$   
 399 :  $P_{15254} = (21, 27, 13, 1)$  lies on line  $\ell_{12}$   
 400 :  $P_{15333} = (4, 30, 13, 1)$  lies on line  $\ell_{22}$   
 401 :  $P_{15334} = (5, 30, 13, 1)$  lies on line  $\ell_{21}$   
 402 :  $P_{15387} = (26, 31, 13, 1)$  lies on line  $\ell_{15}$   
 403 :  $P_{15388} = (27, 31, 13, 1)$  lies on line  $\ell_{16}$   
 404 :  $P_{15407} = (14, 0, 14, 1)$  lies on line  $\ell_3$   
 405 :  $P_{15447} = (22, 1, 14, 1)$  lies on line  $\ell_{10}$   
 406 :  $P_{15452} = (27, 1, 14, 1)$  lies on line  $\ell_9$   
 407 :  $P_{15597} = (12, 6, 14, 1)$  lies on line  $\ell_{16}$   
 408 :  $P_{15613} = (28, 6, 14, 1)$  lies on line  $\ell_{15}$   
 409 :  $P_{15725} = (12, 10, 14, 1)$  lies on line  $\ell_{20}$   
 410 :  $P_{15742} = (29, 10, 14, 1)$  lies on line  $\ell_{19}$   
 411 :  $P_{15800} = (23, 12, 14, 1)$  lies on line  $\ell_{12}$   
 412 :  $P_{15803} = (26, 12, 14, 1)$  lies on line  $\ell_{11}$   
 413 :  $P_{15855} = (14, 14, 14, 1)$  lies on line  $\ell_4$   
 414 :  $P_{16107} = (10, 22, 14, 1)$  lies on line  $\ell_{22}$   
 415 :  $P_{16123} = (26, 22, 14, 1)$  lies on line  $\ell_{21}$   
 416 :  $P_{16151} = (22, 23, 14, 1)$  lies on line  $\ell_{24}$   
 417 :  $P_{16158} = (29, 23, 14, 1)$  lies on line  $\ell_{23}$   
 418 :  $P_{16252} = (27, 26, 14, 1)$  lies on line  $\ell_{18}$   
 419 :  $P_{16253} = (28, 26, 14, 1)$  lies on line  $\ell_{17}$   
 420 :  $P_{16263} = (6, 27, 14, 1)$  lies on line  $\ell_{13}$   
 421 :  $P_{16280} = (23, 27, 14, 1)$  lies on line  $\ell_{14}$   
 422 :  $P_{16290} = (1, 28, 14, 1)$  lies on line  $\ell_5$   
 423 :  $P_{16299} = (10, 28, 14, 1)$  lies on line  $\ell_6$   
 424 :  $P_{16322} = (1, 29, 14, 1)$  lies on line  $\ell_7$   
 425 :  $P_{16327} = (6, 29, 14, 1)$  lies on line  $\ell_8$   
 426 :  $P_{16432} = (15, 0, 15, 1)$  lies on line  $\ell_3$   
 427 :  $P_{16459} = (10, 1, 15, 1)$  lies on line  $\ell_{12}$   
 428 :  $P_{16461} = (12, 1, 15, 1)$  lies on line  $\ell_{11}$   
 429 :  $P_{16652} = (11, 7, 15, 1)$  lies on line  $\ell_9$   
 430 :  $P_{16654} = (13, 7, 15, 1)$  lies on line  $\ell_{10}$   
 431 :  $P_{16750} = (13, 10, 15, 1)$  lies on line  $\ell_{24}$   
 432 :  $P_{16762} = (25, 10, 15, 1)$  lies on line  $\ell_{23}$   
 433 :  $P_{16779} = (10, 11, 15, 1)$  lies on line  $\ell_{14}$   
 434 :  $P_{16787} = (18, 11, 15, 1)$  lies on line  $\ell_{13}$   
 435 :  $P_{16812} = (11, 12, 15, 1)$  lies on line  $\ell_{18}$   
 436 :  $P_{16831} = (30, 12, 15, 1)$  lies on line  $\ell_{17}$   
 437 :  $P_{16845} = (12, 13, 15, 1)$  lies on line  $\ell_{21}$   
 438 :  $P_{16852} = (19, 13, 15, 1)$  lies on line  $\ell_{22}$   
 439 :  $P_{16912} = (15, 15, 15, 1)$  lies on line  $\ell_4$   
 440 :  $P_{16994} = (1, 18, 15, 1)$  lies on line  $\ell_{16}$   
 441 :  $P_{17023} = (30, 18, 15, 1)$  lies on line  $\ell_{15}$   
 442 :  $P_{17026} = (1, 19, 15, 1)$  lies on line  $\ell_{20}$   
 443 :  $P_{17050} = (25, 19, 15, 1)$  lies on line  $\ell_{19}$   
 444 :  $P_{17224} = (7, 25, 15, 1)$  lies on line  $\ell_7$   
 445 :  $P_{17235} = (18, 25, 15, 1)$  lies on line  $\ell_8$   
 446 :  $P_{17384} = (7, 30, 15, 1)$  lies on line  $\ell_5$   
 447 :  $P_{17396} = (19, 30, 15, 1)$  lies on line  $\ell_6$   
 448 :  $P_{17457} = (16, 0, 16, 1)$  lies on line  $\ell_3$   
 449 :  $P_{17510} = (5, 2, 16, 1)$  lies on line  $\ell_{17}$   
 450 :  $P_{17518} = (13, 2, 16, 1)$  lies on line  $\ell_{18}$   
 451 :  $P_{17547} = (10, 3, 16, 1)$  lies on line  $\ell_{23}$   
 452 :  $P_{17549} = (12, 3, 16, 1)$  lies on line  $\ell_{24}$   
 453 :  $P_{17610} = (9, 5, 16, 1)$  lies on line  $\ell_6$   
 454 :  $P_{17616} = (15, 5, 16, 1)$  lies on line  $\ell_5$   
 455 :  $P_{17670} = (5, 7, 16, 1)$  lies on line  $\ell_{15}$   
 456 :  $P_{17679} = (14, 7, 16, 1)$  lies on line  $\ell_{16}$   
 457 :  $P_{17739} = (10, 9, 16, 1)$  lies on line  $\ell_{19}$   
 458 :  $P_{17743} = (14, 9, 16, 1)$  lies on line  $\ell_{20}$   
 459 :  $P_{17768} = (7, 10, 16, 1)$  lies on line  $\ell_8$   
 460 :  $P_{17776} = (15, 10, 16, 1)$  lies on line  $\ell_7$   
 461 :  $P_{17827} = (2, 12, 16, 1)$  lies on line  $\ell_{21}$   
 462 :  $P_{17834} = (9, 12, 16, 1)$  lies on line  $\ell_{22}$   
 463 :  $P_{17860} = (3, 13, 16, 1)$  lies on line  $\ell_{14}$   
 464 :  $P_{17864} = (7, 13, 16, 1)$  lies on line  $\ell_{13}$   
 465 :  $P_{17891} = (2, 14, 16, 1)$  lies on line  $\ell_{11}$   
 466 :  $P_{17892} = (3, 14, 16, 1)$  lies on line  $\ell_{12}$   
 467 :  $P_{17933} = (12, 15, 16, 1)$  lies on line  $\ell_{10}$   
 468 :  $P_{17934} = (13, 15, 16, 1)$  lies on line  $\ell_9$   
 469 :  $P_{17969} = (16, 16, 16, 1)$  lies on line  $\ell_4$   
 470 :  $P_{18482} = (17, 0, 17, 1)$  lies on line  $\ell_3$   
 471 :  $P_{18581} = (20, 3, 17, 1)$  lies on line  $\ell_{11}$   
 472 :  $P_{18591} = (30, 3, 17, 1)$  lies on line  $\ell_{12}$   
 473 :  $P_{18698} = (9, 7, 17, 1)$  lies on line  $\ell_5$   
 474 :  $P_{18705} = (16, 7, 17, 1)$  lies on line  $\ell_6$   
 475 :  $P_{18776} = (23, 9, 17, 1)$  lies on line  $\ell_{10}$

476 :  $P_{18782} = (29, 9, 17, 1)$  lies on line  $\ell_9$   
 477 :  $P_{18922} = (9, 14, 17, 1)$  lies on line  $\ell_7$   
 478 :  $P_{18932} = (19, 14, 17, 1)$  lies on line  $\ell_8$   
 479 :  $P_{18980} = (3, 16, 17, 1)$  lies on line  $\ell_{20}$   
 480 :  $P_{18991} = (14, 16, 17, 1)$  lies on line  $\ell_{19}$   
 481 :  $P_{19026} = (17, 17, 17, 1)$  lies on line  $\ell_4$   
 482 :  $P_{19076} = (3, 19, 17, 1)$  lies on line  $\ell_{16}$   
 483 :  $P_{19080} = (7, 19, 17, 1)$  lies on line  $\ell_{15}$   
 484 :  $P_{19112} = (7, 20, 17, 1)$  lies on line  $\ell_{17}$   
 485 :  $P_{19134} = (29, 20, 17, 1)$  lies on line  $\ell_{18}$   
 486 :  $P_{19217} = (16, 23, 17, 1)$  lies on line  $\ell_{22}$   
 487 :  $P_{19221} = (20, 23, 17, 1)$  lies on line  $\ell_{21}$   
 488 :  $P_{19412} = (19, 29, 17, 1)$  lies on line  $\ell_{13}$   
 489 :  $P_{19423} = (30, 29, 17, 1)$  lies on line  $\ell_{14}$   
 490 :  $P_{19439} = (14, 30, 17, 1)$  lies on line  $\ell_{23}$   
 491 :  $P_{19448} = (23, 30, 17, 1)$  lies on line  $\ell_{24}$   
 492 :  $P_{19507} = (18, 0, 18, 1)$  lies on line  $\ell_3$   
 493 :  $P_{19524} = (3, 1, 18, 1)$  lies on line  $\ell_5$   
 494 :  $P_{19551} = (30, 1, 18, 1)$  lies on line  $\ell_6$   
 495 :  $P_{19556} = (3, 2, 18, 1)$  lies on line  $\ell_7$   
 496 :  $P_{19563} = (10, 2, 18, 1)$  lies on line  $\ell_8$   
 497 :  $P_{19593} = (8, 3, 18, 1)$  lies on line  $\ell_9$   
 498 :  $P_{19616} = (31, 3, 18, 1)$  lies on line  $\ell_{10}$   
 499 :  $P_{19755} = (10, 8, 18, 1)$  lies on line  $\ell_{13}$   
 500 :  $P_{19773} = (28, 8, 18, 1)$  lies on line  $\ell_{14}$   
 501 :  $P_{19810} = (1, 10, 18, 1)$  lies on line  $\ell_{15}$   
 502 :  $P_{19829} = (20, 10, 18, 1)$  lies on line  $\ell_{16}$   
 503 :  $P_{19842} = (1, 11, 18, 1)$  lies on line  $\ell_{17}$   
 504 :  $P_{19849} = (8, 11, 18, 1)$  lies on line  $\ell_{18}$   
 505 :  $P_{20083} = (18, 18, 18, 1)$  lies on line  $\ell_4$   
 506 :  $P_{20140} = (11, 20, 18, 1)$  lies on line  $\ell_{11}$   
 507 :  $P_{20157} = (28, 20, 18, 1)$  lies on line  $\ell_{12}$   
 508 :  $P_{20387} = (2, 28, 18, 1)$  lies on line  $\ell_{23}$   
 509 :  $P_{20416} = (31, 28, 18, 1)$  lies on line  $\ell_{24}$   
 510 :  $P_{20451} = (2, 30, 18, 1)$  lies on line  $\ell_{19}$   
 511 :  $P_{20469} = (20, 30, 18, 1)$  lies on line  $\ell_{20}$   
 512 :  $P_{20492} = (11, 31, 18, 1)$  lies on line  $\ell_{21}$   
 513 :  $P_{20511} = (30, 31, 18, 1)$  lies on line  $\ell_{22}$   
 514 :  $P_{20532} = (19, 0, 19, 1)$  lies on line  $\ell_3$   
 515 :  $P_{20549} = (4, 1, 19, 1)$  lies on line  $\ell_{24}$   
 516 :  $P_{20551} = (6, 1, 19, 1)$  lies on line  $\ell_{23}$   
 517 :  $P_{20614} = (5, 3, 19, 1)$  lies on line  $\ell_5$   
 518 :  $P_{20616} = (7, 3, 19, 1)$  lies on line  $\ell_6$   
 519 :  $P_{20648} = (7, 4, 19, 1)$  lies on line  $\ell_{22}$   
 520 :  $P_{20670} = (29, 4, 19, 1)$  lies on line  $\ell_{21}$   
 521 :  $P_{20677} = (4, 5, 19, 1)$  lies on line  $\ell_{10}$   
 522 :  $P_{20697} = (24, 5, 19, 1)$  lies on line  $\ell_9$   
 523 :  $P_{20710} = (5, 6, 19, 1)$  lies on line  $\ell_7$   
 524 :  $P_{20735} = (30, 6, 19, 1)$  lies on line  $\ell_8$   
 525 :  $P_{20743} = (6, 7, 19, 1)$  lies on line  $\ell_{19}$   
 526 :  $P_{20762} = (25, 7, 19, 1)$  lies on line  $\ell_{20}$   
 527 :  $P_{21140} = (19, 19, 19, 1)$  lies on line  $\ell_4$   
 528 :  $P_{21282} = (1, 24, 19, 1)$  lies on line  $\ell_{14}$   
 529 :  $P_{21311} = (30, 24, 19, 1)$  lies on line  $\ell_{13}$

530 :  $P_{21314} = (1, 25, 19, 1)$  lies on line  $\ell_{12}$   
 531 :  $P_{21342} = (29, 25, 19, 1)$  lies on line  $\ell_{11}$   
 532 :  $P_{21444} = (3, 29, 19, 1)$  lies on line  $\ell_{17}$   
 533 :  $P_{21465} = (24, 29, 19, 1)$  lies on line  $\ell_{18}$   
 534 :  $P_{21476} = (3, 30, 19, 1)$  lies on line  $\ell_{15}$   
 535 :  $P_{21498} = (25, 30, 19, 1)$  lies on line  $\ell_{16}$   
 536 :  $P_{21557} = (20, 0, 20, 1)$  lies on line  $\ell_3$   
 537 :  $P_{21627} = (26, 2, 20, 1)$  lies on line  $\ell_{19}$   
 538 :  $P_{21632} = (31, 2, 20, 1)$  lies on line  $\ell_{20}$   
 539 :  $P_{21785} = (24, 7, 20, 1)$  lies on line  $\ell_{14}$   
 540 :  $P_{21790} = (29, 7, 20, 1)$  lies on line  $\ell_{13}$   
 541 :  $P_{21955} = (2, 13, 20, 1)$  lies on line  $\ell_6$   
 542 :  $P_{21976} = (23, 13, 20, 1)$  lies on line  $\ell_5$   
 543 :  $P_{22019} = (2, 15, 20, 1)$  lies on line  $\ell_{22}$   
 544 :  $P_{22033} = (16, 15, 20, 1)$  lies on line  $\ell_{21}$   
 545 :  $P_{22056} = (7, 16, 20, 1)$  lies on line  $\ell_{18}$   
 546 :  $P_{22062} = (13, 16, 20, 1)$  lies on line  $\ell_{17}$   
 547 :  $P_{22197} = (20, 20, 20, 1)$  lies on line  $\ell_4$   
 548 :  $P_{22280} = (7, 23, 20, 1)$  lies on line  $\ell_9$   
 549 :  $P_{22288} = (15, 23, 20, 1)$  lies on line  $\ell_{10}$   
 550 :  $P_{22320} = (15, 24, 20, 1)$  lies on line  $\ell_{24}$   
 551 :  $P_{22331} = (26, 24, 20, 1)$  lies on line  $\ell_{23}$   
 552 :  $P_{22392} = (23, 26, 20, 1)$  lies on line  $\ell_7$   
 553 :  $P_{22398} = (29, 26, 20, 1)$  lies on line  $\ell_8$   
 554 :  $P_{22478} = (13, 29, 20, 1)$  lies on line  $\ell_{15}$   
 555 :  $P_{22496} = (31, 29, 20, 1)$  lies on line  $\ell_{16}$   
 556 :  $P_{22545} = (16, 31, 20, 1)$  lies on line  $\ell_{11}$   
 557 :  $P_{22553} = (24, 31, 20, 1)$  lies on line  $\ell_{12}$   
 558 :  $P_{22582} = (21, 0, 21, 1)$  lies on line  $\ell_3$   
 559 :  $P_{22741} = (20, 5, 21, 1)$  lies on line  $\ell_{24}$   
 560 :  $P_{22751} = (30, 5, 21, 1)$  lies on line  $\ell_{23}$   
 561 :  $P_{22768} = (15, 6, 21, 1)$  lies on line  $\ell_{17}$   
 562 :  $P_{22776} = (23, 6, 21, 1)$  lies on line  $\ell_{18}$   
 563 :  $P_{22864} = (15, 9, 21, 1)$  lies on line  $\ell_{15}$   
 564 :  $P_{22867} = (18, 9, 21, 1)$  lies on line  $\ell_{16}$   
 565 :  $P_{23058} = (17, 15, 21, 1)$  lies on line  $\ell_5$   
 566 :  $P_{23068} = (27, 15, 21, 1)$  lies on line  $\ell_6$   
 567 :  $P_{23125} = (20, 17, 21, 1)$  lies on line  $\ell_{10}$   
 568 :  $P_{23128} = (23, 17, 21, 1)$  lies on line  $\ell_9$   
 569 :  $P_{23142} = (5, 18, 21, 1)$  lies on line  $\ell_{12}$   
 570 :  $P_{23143} = (6, 18, 21, 1)$  lies on line  $\ell_{11}$   
 571 :  $P_{23207} = (6, 20, 21, 1)$  lies on line  $\ell_{21}$   
 572 :  $P_{23228} = (27, 20, 21, 1)$  lies on line  $\ell_{22}$   
 573 :  $P_{23254} = (21, 21, 21, 1)$  lies on line  $\ell_4$   
 574 :  $P_{23302} = (5, 23, 21, 1)$  lies on line  $\ell_{14}$   
 575 :  $P_{23306} = (9, 23, 21, 1)$  lies on line  $\ell_{13}$   
 576 :  $P_{23443} = (18, 27, 21, 1)$  lies on line  $\ell_{20}$   
 577 :  $P_{23455} = (30, 27, 21, 1)$  lies on line  $\ell_{19}$   
 578 :  $P_{23530} = (9, 30, 21, 1)$  lies on line  $\ell_8$   
 579 :  $P_{23538} = (17, 30, 21, 1)$  lies on line  $\ell_7$   
 580 :  $P_{23607} = (22, 0, 22, 1)$  lies on line  $\ell_3$   
 581 :  $P_{23656} = (7, 2, 22, 1)$  lies on line  $\ell_{14}$   
 582 :  $P_{23665} = (16, 2, 22, 1)$  lies on line  $\ell_{13}$   
 583 :  $P_{23752} = (7, 5, 22, 1)$  lies on line  $\ell_{12}$



584 :  $P_{23770} = (25, 5, 22, 1)$  lies on line  $\ell_{11}$   
 585 :  $P_{23827} = (18, 7, 22, 1)$  lies on line  $\ell_{23}$   
 586 :  $P_{23837} = (28, 7, 22, 1)$  lies on line  $\ell_{24}$   
 587 :  $P_{23894} = (21, 9, 22, 1)$  lies on line  $\ell_6$   
 588 :  $P_{23900} = (27, 9, 22, 1)$  lies on line  $\ell_5$   
 589 :  $P_{24102} = (5, 16, 22, 1)$  lies on line  $\ell_{16}$   
 590 :  $P_{24106} = (9, 16, 22, 1)$  lies on line  $\ell_{15}$   
 591 :  $P_{24177} = (16, 18, 22, 1)$  lies on line  $\ell_8$   
 592 :  $P_{24188} = (27, 18, 22, 1)$  lies on line  $\ell_7$   
 593 :  $P_{24262} = (5, 21, 22, 1)$  lies on line  $\ell_{20}$   
 594 :  $P_{24275} = (18, 21, 22, 1)$  lies on line  $\ell_{19}$   
 595 :  $P_{24311} = (22, 22, 22, 1)$  lies on line  $\ell_4$   
 596 :  $P_{24387} = (2, 25, 22, 1)$  lies on line  $\ell_{18}$   
 597 :  $P_{24394} = (9, 25, 22, 1)$  lies on line  $\ell_{17}$   
 598 :  $P_{24451} = (2, 27, 22, 1)$  lies on line  $\ell_9$   
 599 :  $P_{24477} = (28, 27, 22, 1)$  lies on line  $\ell_{10}$   
 600 :  $P_{24502} = (21, 28, 22, 1)$  lies on line  $\ell_{22}$   
 601 :  $P_{24506} = (25, 28, 22, 1)$  lies on line  $\ell_{21}$   
 602 :  $P_{24632} = (23, 0, 23, 1)$  lies on line  $\ell_3$   
 603 :  $P_{24745} = (8, 4, 23, 1)$  lies on line  $\ell_{16}$   
 604 :  $P_{24748} = (11, 4, 23, 1)$  lies on line  $\ell_{15}$   
 605 :  $P_{24845} = (12, 7, 23, 1)$  lies on line  $\ell_{22}$   
 606 :  $P_{24848} = (15, 7, 23, 1)$  lies on line  $\ell_{21}$   
 607 :  $P_{24880} = (15, 8, 23, 1)$  lies on line  $\ell_{11}$   
 608 :  $P_{24891} = (26, 8, 23, 1)$  lies on line  $\ell_{12}$   
 609 :  $P_{24973} = (12, 11, 23, 1)$  lies on line  $\ell_6$   
 610 :  $P_{24990} = (29, 11, 23, 1)$  lies on line  $\ell_5$   
 611 :  $P_{25001} = (8, 12, 23, 1)$  lies on line  $\ell_{20}$   
 612 :  $P_{25015} = (22, 12, 23, 1)$  lies on line  $\ell_{19}$   
 613 :  $P_{25100} = (11, 15, 23, 1)$  lies on line  $\ell_{17}$   
 614 :  $P_{25107} = (18, 15, 23, 1)$  lies on line  $\ell_{18}$   
 615 :  $P_{25189} = (4, 18, 23, 1)$  lies on line  $\ell_{13}$   
 616 :  $P_{25211} = (26, 18, 23, 1)$  lies on line  $\ell_{14}$   
 617 :  $P_{25317} = (4, 22, 23, 1)$  lies on line  $\ell_8$   
 618 :  $P_{25342} = (29, 22, 23, 1)$  lies on line  $\ell_7$   
 619 :  $P_{25368} = (23, 23, 23, 1)$  lies on line  $\ell_4$   
 620 :  $P_{25448} = (7, 26, 23, 1)$  lies on line  $\ell_{24}$   
 621 :  $P_{25463} = (22, 26, 23, 1)$  lies on line  $\ell_{23}$   
 622 :  $P_{25544} = (7, 29, 23, 1)$  lies on line  $\ell_{10}$   
 623 :  $P_{25555} = (18, 29, 23, 1)$  lies on line  $\ell_9$   
 624 :  $P_{25657} = (24, 0, 24, 1)$  lies on line  $\ell_3$   
 625 :  $P_{25750} = (21, 3, 24, 1)$  lies on line  $\ell_{17}$   
 626 :  $P_{25754} = (25, 3, 24, 1)$  lies on line  $\ell_{18}$   
 627 :  $P_{25924} = (3, 9, 24, 1)$  lies on line  $\ell_{11}$   
 628 :  $P_{25937} = (16, 9, 24, 1)$  lies on line  $\ell_{12}$   
 629 :  $P_{25956} = (3, 10, 24, 1)$  lies on line  $\ell_{21}$   
 630 :  $P_{25984} = (31, 10, 24, 1)$  lies on line  $\ell_{22}$   
 631 :  $P_{26135} = (22, 15, 24, 1)$  lies on line  $\ell_8$   
 632 :  $P_{26139} = (26, 15, 24, 1)$  lies on line  $\ell_7$   
 633 :  $P_{26155} = (10, 16, 24, 1)$  lies on line  $\ell_{24}$   
 634 :  $P_{26160} = (15, 16, 24, 1)$  lies on line  $\ell_{23}$   
 635 :  $P_{26331} = (26, 21, 24, 1)$  lies on line  $\ell_5$   
 636 :  $P_{26336} = (31, 21, 24, 1)$  lies on line  $\ell_6$   
 637 :  $P_{26346} = (9, 22, 24, 1)$  lies on line  $\ell_{16}$

638 :  $P_{26358} = (21, 22, 24, 1)$  lies on line  $\ell_{15}$   
 639 :  $P_{26425} = (24, 24, 24, 1)$  lies on line  $\ell_4$   
 640 :  $P_{26449} = (16, 25, 24, 1)$  lies on line  $\ell_{14}$   
 641 :  $P_{26455} = (22, 25, 24, 1)$  lies on line  $\ell_{13}$   
 642 :  $P_{26475} = (10, 26, 24, 1)$  lies on line  $\ell_{10}$   
 643 :  $P_{26490} = (25, 26, 24, 1)$  lies on line  $\ell_9$   
 644 :  $P_{26634} = (9, 31, 24, 1)$  lies on line  $\ell_{20}$   
 645 :  $P_{26640} = (15, 31, 24, 1)$  lies on line  $\ell_{19}$   
 646 :  $P_{26682} = (25, 0, 25, 1)$  lies on line  $\ell_3$   
 647 :  $P_{26725} = (4, 2, 25, 1)$  lies on line  $\ell_{16}$   
 648 :  $P_{26744} = (23, 2, 25, 1)$  lies on line  $\ell_{15}$   
 649 :  $P_{26798} = (13, 4, 25, 1)$  lies on line  $\ell_{12}$   
 650 :  $P_{26806} = (21, 4, 25, 1)$  lies on line  $\ell_{11}$   
 651 :  $P_{26853} = (4, 6, 25, 1)$  lies on line  $\ell_{20}$   
 652 :  $P_{26860} = (11, 6, 25, 1)$  lies on line  $\ell_{19}$   
 653 :  $P_{26947} = (2, 9, 25, 1)$  lies on line  $\ell_{13}$   
 654 :  $P_{26958} = (13, 9, 25, 1)$  lies on line  $\ell_{14}$   
 655 :  $P_{27011} = (2, 11, 25, 1)$  lies on line  $\ell_8$   
 656 :  $P_{27037} = (28, 11, 25, 1)$  lies on line  $\ell_7$   
 657 :  $P_{27084} = (11, 13, 25, 1)$  lies on line  $\ell_{23}$   
 658 :  $P_{27090} = (17, 13, 25, 1)$  lies on line  $\ell_{24}$   
 659 :  $P_{27207} = (6, 17, 25, 1)$  lies on line  $\ell_{22}$   
 660 :  $P_{27222} = (21, 17, 25, 1)$  lies on line  $\ell_{21}$   
 661 :  $P_{27338} = (9, 21, 25, 1)$  lies on line  $\ell_{18}$   
 662 :  $P_{27352} = (23, 21, 25, 1)$  lies on line  $\ell_{17}$   
 663 :  $P_{27399} = (6, 23, 25, 1)$  lies on line  $\ell_6$   
 664 :  $P_{27421} = (28, 23, 25, 1)$  lies on line  $\ell_5$   
 665 :  $P_{27482} = (25, 25, 25, 1)$  lies on line  $\ell_4$   
 666 :  $P_{27562} = (9, 28, 25, 1)$  lies on line  $\ell_9$   
 667 :  $P_{27570} = (17, 28, 25, 1)$  lies on line  $\ell_{10}$   
 668 :  $P_{27707} = (26, 0, 26, 1)$  lies on line  $\ell_3$   
 669 :  $P_{27927} = (22, 7, 26, 1)$  lies on line  $\ell_7$   
 670 :  $P_{27932} = (27, 7, 26, 1)$  lies on line  $\ell_8$   
 671 :  $P_{27944} = (7, 8, 26, 1)$  lies on line  $\ell_{19}$   
 672 :  $P_{27956} = (19, 8, 26, 1)$  lies on line  $\ell_{20}$   
 673 :  $P_{28018} = (17, 10, 26, 1)$  lies on line  $\ell_{17}$   
 674 :  $P_{28029} = (28, 10, 26, 1)$  lies on line  $\ell_{18}$   
 675 :  $P_{28168} = (7, 15, 26, 1)$  lies on line  $\ell_{23}$   
 676 :  $P_{28186} = (25, 15, 26, 1)$  lies on line  $\ell_{24}$   
 677 :  $P_{28233} = (8, 17, 26, 1)$  lies on line  $\ell_6$   
 678 :  $P_{28247} = (22, 17, 26, 1)$  lies on line  $\ell_5$   
 679 :  $P_{28299} = (10, 19, 26, 1)$  lies on line  $\ell_{11}$   
 680 :  $P_{28304} = (15, 19, 26, 1)$  lies on line  $\ell_{12}$   
 681 :  $P_{28410} = (25, 22, 26, 1)$  lies on line  $\ell_{10}$   
 682 :  $P_{28413} = (28, 22, 26, 1)$  lies on line  $\ell_9$   
 683 :  $P_{28489} = (8, 25, 26, 1)$  lies on line  $\ell_{22}$   
 684 :  $P_{28491} = (10, 25, 26, 1)$  lies on line  $\ell_{21}$   
 685 :  $P_{28539} = (26, 26, 26, 1)$  lies on line  $\ell_4$   
 686 :  $P_{28562} = (17, 27, 26, 1)$  lies on line  $\ell_{15}$   
 687 :  $P_{28564} = (19, 27, 26, 1)$  lies on line  $\ell_{16}$   
 688 :  $P_{28592} = (15, 28, 26, 1)$  lies on line  $\ell_{14}$   
 689 :  $P_{28604} = (27, 28, 26, 1)$  lies on line  $\ell_{13}$   
 690 :  $P_{28732} = (27, 0, 27, 1)$  lies on line  $\ell_3$   
 691 :  $P_{28786} = (17, 2, 27, 1)$  lies on line  $\ell_{22}$

692 :  $P_{28797} = (28, 2, 27, 1)$  lies on line  $\ell_{21}$   
 693 :  $P_{28816} = (15, 3, 27, 1)$  lies on line  $\ell_8$   
 694 :  $P_{28817} = (16, 3, 27, 1)$  lies on line  $\ell_7$   
 695 :  $P_{29104} = (15, 12, 27, 1)$  lies on line  $\ell_{13}$   
 696 :  $P_{29107} = (18, 12, 27, 1)$  lies on line  $\ell_{14}$   
 697 :  $P_{29204} = (19, 15, 27, 1)$  lies on line  $\ell_{15}$   
 698 :  $P_{29215} = (30, 15, 27, 1)$  lies on line  $\ell_{16}$   
 699 :  $P_{29219} = (2, 16, 27, 1)$  lies on line  $\ell_{10}$   
 700 :  $P_{29229} = (12, 16, 27, 1)$  lies on line  $\ell_9$   
 701 :  $P_{29252} = (3, 17, 27, 1)$  lies on line  $\ell_{19}$   
 702 :  $P_{29279} = (30, 17, 27, 1)$  lies on line  $\ell_{20}$   
 703 :  $P_{29283} = (2, 18, 27, 1)$  lies on line  $\ell_{24}$   
 704 :  $P_{29284} = (3, 18, 27, 1)$  lies on line  $\ell_{23}$   
 705 :  $P_{29329} = (16, 19, 27, 1)$  lies on line  $\ell_5$   
 706 :  $P_{29330} = (17, 19, 27, 1)$  lies on line  $\ell_6$   
 707 :  $P_{29596} = (27, 27, 27, 1)$  lies on line  $\ell_4$   
 708 :  $P_{29613} = (12, 28, 27, 1)$  lies on line  $\ell_{18}$   
 709 :  $P_{29620} = (19, 28, 27, 1)$  lies on line  $\ell_{17}$   
 710 :  $P_{29683} = (18, 30, 27, 1)$  lies on line  $\ell_{12}$   
 711 :  $P_{29693} = (28, 30, 27, 1)$  lies on line  $\ell_{11}$   
 712 :  $P_{29757} = (28, 0, 28, 1)$  lies on line  $\ell_3$   
 713 :  $P_{29802} = (9, 2, 28, 1)$  lies on line  $\ell_{10}$   
 714 :  $P_{29812} = (19, 2, 28, 1)$  lies on line  $\ell_9$   
 715 :  $P_{30034} = (17, 9, 28, 1)$  lies on line  $\ell_{21}$   
 716 :  $P_{30037} = (20, 9, 28, 1)$  lies on line  $\ell_{22}$   
 717 :  $P_{30090} = (9, 11, 28, 1)$  lies on line  $\ell_{24}$   
 718 :  $P_{30112} = (31, 11, 28, 1)$  lies on line  $\ell_{23}$   
 719 :  $P_{30137} = (24, 12, 28, 1)$  lies on line  $\ell_{16}$   
 720 :  $P_{30142} = (29, 12, 28, 1)$  lies on line  $\ell_{15}$   
 721 :  $P_{30292} = (19, 17, 28, 1)$  lies on line  $\ell_{18}$   
 722 :  $P_{30302} = (29, 17, 28, 1)$  lies on line  $\ell_{17}$   
 723 :  $P_{30348} = (11, 19, 28, 1)$  lies on line  $\ell_{14}$   
 724 :  $P_{30349} = (12, 19, 28, 1)$  lies on line  $\ell_{13}$   
 725 :  $P_{30393} = (24, 20, 28, 1)$  lies on line  $\ell_{20}$   
 726 :  $P_{30400} = (31, 20, 28, 1)$  lies on line  $\ell_{19}$   
 727 :  $P_{30508} = (11, 24, 28, 1)$  lies on line  $\ell_{12}$   
 728 :  $P_{30514} = (17, 24, 28, 1)$  lies on line  $\ell_{11}$   
 729 :  $P_{30653} = (28, 28, 28, 1)$  lies on line  $\ell_4$   
 730 :  $P_{30659} = (2, 29, 28, 1)$  lies on line  $\ell_5$   
 731 :  $P_{30677} = (20, 29, 28, 1)$  lies on line  $\ell_6$   
 732 :  $P_{30723} = (2, 31, 28, 1)$  lies on line  $\ell_7$   
 733 :  $P_{30733} = (12, 31, 28, 1)$  lies on line  $\ell_8$   
 734 :  $P_{30782} = (29, 0, 29, 1)$  lies on line  $\ell_3$   
 735 :  $P_{30871} = (22, 3, 29, 1)$  lies on line  $\ell_{14}$   
 736 :  $P_{30873} = (24, 3, 29, 1)$  lies on line  $\ell_{13}$   
 737 :  $P_{30884} = (3, 4, 29, 1)$  lies on line  $\ell_9$   
 738 :  $P_{30899} = (18, 4, 29, 1)$  lies on line  $\ell_{10}$   
 739 :  $P_{30980} = (3, 7, 29, 1)$  lies on line  $\ell_{18}$   
 740 :  $P_{31008} = (31, 7, 29, 1)$  lies on line  $\ell_{17}$   
 741 :  $P_{31190} = (21, 13, 29, 1)$  lies on line  $\ell_{20}$   
 742 :  $P_{31196} = (27, 13, 29, 1)$  lies on line  $\ell_{19}$   
 743 :  $P_{31336} = (7, 18, 29, 1)$  lies on line  $\ell_{21}$   
 744 :  $P_{31342} = (13, 18, 29, 1)$  lies on line  $\ell_{22}$   
 745 :  $P_{31432} = (7, 21, 29, 1)$  lies on line  $\ell_{11}$   
 746 :  $P_{31447} = (22, 21, 29, 1)$  lies on line  $\ell_{12}$

747 :  $P_{31475} = (18, 22, 29, 1)$  lies on line  $\ell_{24}$   
 748 :  $P_{31484} = (27, 22, 29, 1)$  lies on line  $\ell_{23}$   
 749 :  $P_{31542} = (21, 24, 29, 1)$  lies on line  $\ell_{16}$   
 750 :  $P_{31552} = (31, 24, 29, 1)$  lies on line  $\ell_{15}$   
 751 :  $P_{31621} = (4, 27, 29, 1)$  lies on line  $\ell_7$   
 752 :  $P_{31641} = (24, 27, 29, 1)$  lies on line  $\ell_8$   
 753 :  $P_{31710} = (29, 29, 29, 1)$  lies on line  $\ell_4$   
 754 :  $P_{31749} = (4, 31, 29, 1)$  lies on line  $\ell_5$   
 755 :  $P_{31758} = (13, 31, 29, 1)$  lies on line  $\ell_6$   
 756 :  $P_{31807} = (30, 0, 30, 1)$  lies on line  $\ell_3$   
 757 :  $P_{31811} = (2, 1, 30, 1)$  lies on line  $\ell_{16}$   
 758 :  $P_{31834} = (25, 1, 30, 1)$  lies on line  $\ell_{15}$   
 759 :  $P_{31861} = (20, 2, 30, 1)$  lies on line  $\ell_{12}$   
 760 :  $P_{31865} = (24, 2, 30, 1)$  lies on line  $\ell_{11}$   
 761 :  $P_{31875} = (2, 3, 30, 1)$  lies on line  $\ell_{20}$   
 762 :  $P_{31896} = (23, 3, 30, 1)$  lies on line  $\ell_{19}$   
 763 :  $P_{32247} = (22, 14, 30, 1)$  lies on line  $\ell_9$   
 764 :  $P_{32251} = (26, 14, 30, 1)$  lies on line  $\ell_{10}$   
 765 :  $P_{32440} = (23, 20, 30, 1)$  lies on line  $\ell_{23}$   
 766 :  $P_{32443} = (26, 20, 30, 1)$  lies on line  $\ell_{24}$   
 767 :  $P_{32482} = (1, 22, 30, 1)$  lies on line  $\ell_{13}$   
 768 :  $P_{32501} = (20, 22, 30, 1)$  lies on line  $\ell_{14}$   
 769 :  $P_{32514} = (1, 23, 30, 1)$  lies on line  $\ell_8$   
 770 :  $P_{32527} = (14, 23, 30, 1)$  lies on line  $\ell_7$   
 771 :  $P_{32567} = (22, 24, 30, 1)$  lies on line  $\ell_{18}$   
 772 :  $P_{32570} = (25, 24, 30, 1)$  lies on line  $\ell_{17}$   
 773 :  $P_{32580} = (3, 25, 30, 1)$  lies on line  $\ell_6$   
 774 :  $P_{32591} = (14, 25, 30, 1)$  lies on line  $\ell_5$   
 775 :  $P_{32612} = (3, 26, 30, 1)$  lies on line  $\ell_{22}$   
 776 :  $P_{32633} = (24, 26, 30, 1)$  lies on line  $\ell_{21}$   
 777 :  $P_{32767} = (30, 30, 30, 1)$  lies on line  $\ell_4$   
 778 :  $P_{32832} = (31, 0, 31, 1)$  lies on line  $\ell_3$   
 779 :  $P_{32847} = (14, 1, 31, 1)$  lies on line  $\ell_{21}$   
 780 :  $P_{32859} = (26, 1, 31, 1)$  lies on line  $\ell_{22}$   
 781 :  $P_{33002} = (9, 6, 31, 1)$  lies on line  $\ell_{14}$   
 782 :  $P_{33014} = (21, 6, 31, 1)$  lies on line  $\ell_{13}$   
 783 :  $P_{33058} = (1, 8, 31, 1)$  lies on line  $\ell_{10}$   
 784 :  $P_{33063} = (6, 8, 31, 1)$  lies on line  $\ell_9$   
 785 :  $P_{33090} = (1, 9, 31, 1)$  lies on line  $\ell_{24}$   
 786 :  $P_{33108} = (19, 9, 31, 1)$  lies on line  $\ell_{23}$   
 787 :  $P_{33255} = (6, 14, 31, 1)$  lies on line  $\ell_{18}$   
 788 :  $P_{33276} = (27, 14, 31, 1)$  lies on line  $\ell_{17}$   
 789 :  $P_{33290} = (9, 15, 31, 1)$  lies on line  $\ell_{12}$   
 790 :  $P_{33295} = (14, 15, 31, 1)$  lies on line  $\ell_{11}$   
 791 :  $P_{33417} = (8, 19, 31, 1)$  lies on line  $\ell_7$   
 792 :  $P_{33430} = (21, 19, 31, 1)$  lies on line  $\ell_8$   
 793 :  $P_{33488} = (15, 21, 31, 1)$  lies on line  $\ell_{16}$   
 794 :  $P_{33500} = (27, 21, 31, 1)$  lies on line  $\ell_{15}$   
 795 :  $P_{33648} = (15, 26, 31, 1)$  lies on line  $\ell_{20}$   
 796 :  $P_{33652} = (19, 26, 31, 1)$  lies on line  $\ell_{19}$   
 797 :  $P_{33673} = (8, 27, 31, 1)$  lies on line  $\ell_5$   
 798 :  $P_{33691} = (26, 27, 31, 1)$  lies on line  $\ell_6$   
 799 :  $P_{33824} = (31, 31, 31, 1)$  lies on line  $\ell_4$

The single points on the surface are:

### Points on surface but on no line

The surface has 0 points not on any line:

The points on the surface but not on lines are:

### Line Intersection Graph

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
13	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1
14	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1
15	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1
16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1
17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1
19	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1
21	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1
22	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1
23	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
24	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0

Neighbor sets in the line intersection graph:

Line 0 intersects

Line	$\ell_1$	$\ell_2$	$\ell_3$	$\ell_4$	$\ell_5$	$\ell_6$	$\ell_7$	$\ell_8$	$\ell_9$	$\ell_{10}$	$\ell_{11}$	$\ell_{12}$	$\ell_{13}$	$\ell_{14}$	$\ell_{15}$	$\ell_{16}$	$\ell_{17}$	$\ell_{18}$	$\ell_{19}$	$\ell_{20}$	$\ell_{21}$	$\ell_{22}$
in point	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$

Line 1 intersects

Line	$\ell_0$	$\ell_2$	$\ell_3$	$\ell_4$	$\ell_5$	$\ell_6$	$\ell_7$	$\ell_8$	$\ell_9$	$\ell_{10}$	$\ell_{11}$	$\ell_{12}$	$\ell_{13}$	$\ell_{14}$	$\ell_{15}$	$\ell_{16}$	$\ell_{17}$	$\ell_{18}$	$\ell_{19}$	$\ell_{20}$	$\ell_{21}$	$\ell_{22}$
in point	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$

Line 2 intersects

Line	$\ell_0$	$\ell_1$	$\ell_3$	$\ell_4$	$\ell_5$	$\ell_6$	$\ell_7$	$\ell_8$	$\ell_9$	$\ell_{10}$	$\ell_{11}$	$\ell_{12}$	$\ell_{13}$	$\ell_{14}$	$\ell_{15}$	$\ell_{16}$	$\ell_{17}$	$\ell_{18}$	$\ell_{19}$	$\ell_{20}$	$\ell_{21}$	$\ell_{22}$
in point	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$

Line 3 intersects

Line	$\ell_0$	$\ell_1$	$\ell_2$	$\ell_4$	$\ell_5$	$\ell_6$	$\ell_7$	$\ell_8$	$\ell_9$	$\ell_{10}$	$\ell_{11}$	$\ell_{12}$	$\ell_{13}$	$\ell_{14}$	$\ell_{15}$	$\ell_{16}$	$\ell_{17}$	$\ell_{18}$	$\ell_{19}$	$\ell_{20}$	$\ell_{21}$	$\ell_{22}$
in point	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$

[illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible]

Line 17 intersects

Line	$\ell_0$	$\ell_1$	$\ell_2$	$\ell_3$	$\ell_4$	$\ell_5$	$\ell_6$	$\ell_7$	$\ell_8$	$\ell_9$	$\ell_{10}$	$\ell_{11}$	$\ell_{12}$	$\ell_{13}$	$\ell_{14}$	$\ell_{15}$	$\ell_{16}$	$\ell_{18}$	$\ell_{19}$	$\ell_{20}$	$\ell_{21}$	$\ell_{22}$	$\ell_{23}$
in point	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$

Line 18 intersects

Line	$\ell_0$	$\ell_1$	$\ell_2$	$\ell_3$	$\ell_4$	$\ell_5$	$\ell_6$	$\ell_7$	$\ell_8$	$\ell_9$	$\ell_{10}$	$\ell_{11}$	$\ell_{12}$	$\ell_{13}$	$\ell_{14}$	$\ell_{15}$	$\ell_{16}$	$\ell_{17}$	$\ell_{19}$	$\ell_{20}$	$\ell_{21}$	$\ell_{22}$	$\ell_{23}$
in point	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$

Line 19 intersects

Line	$\ell_0$	$\ell_1$	$\ell_2$	$\ell_3$	$\ell_4$	$\ell_5$	$\ell_6$	$\ell_7$	$\ell_8$	$\ell_9$	$\ell_{10}$	$\ell_{11}$	$\ell_{12}$	$\ell_{13}$	$\ell_{14}$	$\ell_{15}$	$\ell_{16}$	$\ell_{17}$	$\ell_{18}$	$\ell_{20}$	$\ell_{21}$	$\ell_{22}$	$\ell_{23}$
in point	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$

Line 20 intersects

Line	$\ell_0$	$\ell_1$	$\ell_2$	$\ell_3$	$\ell_4$	$\ell_5$	$\ell_6$	$\ell_7$	$\ell_8$	$\ell_9$	$\ell_{10}$	$\ell_{11}$	$\ell_{12}$	$\ell_{13}$	$\ell_{14}$	$\ell_{15}$	$\ell_{16}$	$\ell_{17}$	$\ell_{18}$	$\ell_{19}$	$\ell_{21}$	$\ell_{22}$	$\ell_{23}$
in point	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$

Line 21 intersects

Line	$\ell_0$	$\ell_1$	$\ell_2$	$\ell_3$	$\ell_4$	$\ell_5$	$\ell_6$	$\ell_7$	$\ell_8$	$\ell_9$	$\ell_{10}$	$\ell_{11}$	$\ell_{12}$	$\ell_{13}$	$\ell_{14}$	$\ell_{15}$	$\ell_{16}$	$\ell_{17}$	$\ell_{18}$	$\ell_{19}$	$\ell_{20}$	$\ell_{22}$	$\ell_{23}$
in point	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$

Line 22 intersects

Line	$\ell_0$	$\ell_1$	$\ell_2$	$\ell_3$	$\ell_4$	$\ell_5$	$\ell_6$	$\ell_7$	$\ell_8$	$\ell_9$	$\ell_{10}$	$\ell_{11}$	$\ell_{12}$	$\ell_{13}$	$\ell_{14}$	$\ell_{15}$	$\ell_{16}$	$\ell_{17}$	$\ell_{18}$	$\ell_{19}$	$\ell_{20}$	$\ell_{21}$	$\ell_{23}$
in point	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$

Line 23 intersects

Line	$\ell_0$	$\ell_1$	$\ell_2$	$\ell_3$	$\ell_4$	$\ell_5$	$\ell_6$	$\ell_7$	$\ell_8$	$\ell_9$	$\ell_{10}$	$\ell_{11}$	$\ell_{12}$	$\ell_{13}$	$\ell_{14}$	$\ell_{15}$	$\ell_{16}$	$\ell_{17}$	$\ell_{18}$	$\ell_{19}$	$\ell_{20}$	$\ell_{21}$	$\ell_{23}$
in point	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$

Line 24 intersects

Line	$\ell_0$	$\ell_1$	$\ell_2$	$\ell_3$	$\ell_4$	$\ell_5$	$\ell_6$	$\ell_7$	$\ell_8$	$\ell_9$	$\ell_{10}$	$\ell_{11}$	$\ell_{12}$	$\ell_{13}$	$\ell_{14}$	$\ell_{15}$	$\ell_{16}$	$\ell_{17}$	$\ell_{18}$	$\ell_{19}$	$\ell_{20}$	$\ell_{21}$	$\ell_{23}$
in point	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$	$P_3$

The surface has 801 points:

The points on the surface are:

0 : $P_0 = (1, 0, 0, 0)$	14 : $P_{480} = (29, 13, 1, 0)$	28 : $P_{1060} = (2, 0, 0, 1)$
1 : $P_1 = (0, 1, 0, 0)$	15 : $P_{567} = (20, 16, 1, 0)$	29 : $P_{1061} = (3, 0, 0, 1)$
2 : $P_3 = (0, 0, 0, 1)$	16 : $P_{576} = (29, 16, 1, 0)$	30 : $P_{1062} = (4, 0, 0, 1)$
3 : $P_4 = (1, 1, 1, 1)$	17 : $P_{677} = (2, 20, 1, 0)$	31 : $P_{1063} = (5, 0, 0, 1)$
4 : $P_5 = (1, 1, 0, 0)$	18 : $P_{688} = (13, 20, 1, 0)$	32 : $P_{1064} = (6, 0, 0, 1)$
5 : $P_{36} = (1, 0, 1, 0)$	19 : $P_{741} = (2, 22, 1, 0)$	33 : $P_{1065} = (7, 0, 0, 1)$
6 : $P_{68} = (1, 1, 1, 0)$	20 : $P_{755} = (16, 22, 1, 0)$	34 : $P_{1066} = (8, 0, 0, 1)$
7 : $P_{105} = (6, 2, 1, 0)$	21 : $P_{839} = (4, 25, 1, 0)$	35 : $P_{1067} = (9, 0, 0, 1)$
8 : $P_{124} = (25, 2, 1, 0)$	22 : $P_{848} = (13, 25, 1, 0)$	36 : $P_{1068} = (10, 0, 0, 1)$
9 : $P_{169} = (6, 4, 1, 0)$	23 : $P_{921} = (22, 27, 1, 0)$	37 : $P_{1069} = (11, 0, 0, 1)$
10 : $P_{183} = (20, 4, 1, 0)$	24 : $P_{924} = (25, 27, 1, 0)$	38 : $P_{1070} = (12, 0, 0, 1)$
11 : $P_{243} = (16, 6, 1, 0)$	25 : $P_{967} = (4, 29, 1, 0)$	39 : $P_{1071} = (13, 0, 0, 1)$
12 : $P_{254} = (27, 6, 1, 0)$	26 : $P_{990} = (27, 29, 1, 0)$	40 : $P_{1072} = (14, 0, 0, 1)$
13 : $P_{473} = (22, 13, 1, 0)$	27 : $P_{1059} = (1, 0, 0, 1)$	41 : $P_{1073} = (15, 0, 0, 1)$

42 : $P_{1074} = (16, 0, 0, 1)$	96 : $P_{1698} = (0, 20, 0, 1)$	150 : $P_{3398} = (5, 9, 2, 1)$
43 : $P_{1075} = (17, 0, 0, 1)$	97 : $P_{1718} = (20, 20, 0, 1)$	151 : $P_{3494} = (5, 12, 2, 1)$
44 : $P_{1076} = (18, 0, 0, 1)$	98 : $P_{1730} = (0, 21, 0, 1)$	152 : $P_{3508} = (19, 12, 2, 1)$
45 : $P_{1077} = (19, 0, 0, 1)$	99 : $P_{1751} = (21, 21, 0, 1)$	153 : $P_{3525} = (4, 13, 2, 1)$
46 : $P_{1078} = (20, 0, 0, 1)$	100 : $P_{1762} = (0, 22, 0, 1)$	154 : $P_{3547} = (26, 13, 2, 1)$
47 : $P_{1079} = (21, 0, 0, 1)$	101 : $P_{1784} = (22, 22, 0, 1)$	155 : $P_{3722} = (9, 19, 2, 1)$
48 : $P_{1080} = (22, 0, 0, 1)$	102 : $P_{1794} = (0, 23, 0, 1)$	156 : $P_{3736} = (23, 19, 2, 1)$
49 : $P_{1081} = (23, 0, 0, 1)$	103 : $P_{1817} = (23, 23, 0, 1)$	157 : $P_{3849} = (8, 23, 2, 1)$
50 : $P_{1082} = (24, 0, 0, 1)$	104 : $P_{1826} = (0, 24, 0, 1)$	158 : $P_{3867} = (26, 23, 2, 1)$
51 : $P_{1083} = (25, 0, 0, 1)$	105 : $P_{1850} = (24, 24, 0, 1)$	159 : $P_{3946} = (9, 26, 2, 1)$
52 : $P_{1084} = (26, 0, 0, 1)$	106 : $P_{1858} = (0, 25, 0, 1)$	160 : $P_{3968} = (31, 26, 2, 1)$
53 : $P_{1085} = (27, 0, 0, 1)$	107 : $P_{1883} = (25, 25, 0, 1)$	161 : $P_{4105} = (8, 31, 2, 1)$
54 : $P_{1086} = (28, 0, 0, 1)$	108 : $P_{1890} = (0, 26, 0, 1)$	162 : $P_{4116} = (19, 31, 2, 1)$
55 : $P_{1087} = (29, 0, 0, 1)$	109 : $P_{1916} = (26, 26, 0, 1)$	163 : $P_{4132} = (3, 0, 3, 1)$
56 : $P_{1088} = (30, 0, 0, 1)$	110 : $P_{1922} = (0, 27, 0, 1)$	164 : $P_{4201} = (8, 2, 3, 1)$
57 : $P_{1089} = (31, 0, 0, 1)$	111 : $P_{1949} = (27, 27, 0, 1)$	165 : $P_{4205} = (12, 2, 3, 1)$
58 : $P_{1090} = (0, 1, 0, 1)$	112 : $P_{1954} = (0, 28, 0, 1)$	166 : $P_{4228} = (3, 3, 3, 1)$
59 : $P_{1091} = (1, 1, 0, 1)$	113 : $P_{1982} = (28, 28, 0, 1)$	167 : $P_{4331} = (10, 6, 3, 1)$
60 : $P_{1122} = (0, 2, 0, 1)$	114 : $P_{1986} = (0, 29, 0, 1)$	168 : $P_{4335} = (14, 6, 3, 1)$
61 : $P_{1124} = (2, 2, 0, 1)$	115 : $P_{2015} = (29, 29, 0, 1)$	169 : $P_{4399} = (14, 8, 3, 1)$
62 : $P_{1154} = (0, 3, 0, 1)$	116 : $P_{2018} = (0, 30, 0, 1)$	170 : $P_{4416} = (31, 8, 3, 1)$
63 : $P_{1157} = (3, 3, 0, 1)$	117 : $P_{2048} = (30, 30, 0, 1)$	171 : $P_{4457} = (8, 10, 3, 1)$
64 : $P_{1186} = (0, 4, 0, 1)$	118 : $P_{2050} = (0, 31, 0, 1)$	172 : $P_{4470} = (21, 10, 3, 1)$
65 : $P_{1190} = (4, 4, 0, 1)$	119 : $P_{2081} = (31, 31, 0, 1)$	173 : $P_{4523} = (10, 12, 3, 1)$
66 : $P_{1218} = (0, 5, 0, 1)$	120 : $P_{2083} = (1, 0, 1, 1)$	174 : $P_{4538} = (25, 12, 3, 1)$
67 : $P_{1223} = (5, 5, 0, 1)$	121 : $P_{2151} = (6, 2, 1, 1)$	175 : $P_{4589} = (12, 14, 3, 1)$
68 : $P_{1250} = (0, 6, 0, 1)$	122 : $P_{2170} = (25, 2, 1, 1)$	176 : $P_{4600} = (23, 14, 3, 1)$
69 : $P_{1256} = (6, 6, 0, 1)$	123 : $P_{2215} = (6, 4, 1, 1)$	177 : $P_{4803} = (2, 21, 3, 1)$
70 : $P_{1282} = (0, 7, 0, 1)$	124 : $P_{2229} = (20, 4, 1, 1)$	178 : $P_{4826} = (25, 21, 3, 1)$
71 : $P_{1289} = (7, 7, 0, 1)$	125 : $P_{2289} = (16, 6, 1, 1)$	179 : $P_{4867} = (2, 23, 3, 1)$
72 : $P_{1314} = (0, 8, 0, 1)$	126 : $P_{2300} = (27, 6, 1, 1)$	180 : $P_{4896} = (31, 23, 3, 1)$
73 : $P_{1322} = (8, 8, 0, 1)$	127 : $P_{2519} = (22, 13, 1, 1)$	181 : $P_{4935} = (6, 25, 3, 1)$
74 : $P_{1346} = (0, 9, 0, 1)$	128 : $P_{2526} = (29, 13, 1, 1)$	182 : $P_{4952} = (23, 25, 3, 1)$
75 : $P_{1355} = (9, 9, 0, 1)$	129 : $P_{2613} = (20, 16, 1, 1)$	183 : $P_{5127} = (6, 31, 3, 1)$
76 : $P_{1378} = (0, 10, 0, 1)$	130 : $P_{2622} = (29, 16, 1, 1)$	184 : $P_{5142} = (21, 31, 3, 1)$
77 : $P_{1388} = (10, 10, 0, 1)$	131 : $P_{2723} = (2, 20, 1, 1)$	185 : $P_{5157} = (4, 0, 4, 1)$
78 : $P_{1410} = (0, 11, 0, 1)$	132 : $P_{2734} = (13, 20, 1, 1)$	186 : $P_{5260} = (11, 3, 4, 1)$
79 : $P_{1421} = (11, 11, 0, 1)$	133 : $P_{2787} = (2, 22, 1, 1)$	187 : $P_{5267} = (18, 3, 4, 1)$
80 : $P_{1442} = (0, 12, 0, 1)$	134 : $P_{2801} = (16, 22, 1, 1)$	188 : $P_{5285} = (4, 4, 4, 1)$
81 : $P_{1454} = (12, 12, 0, 1)$	135 : $P_{2885} = (4, 25, 1, 1)$	189 : $P_{5420} = (11, 8, 4, 1)$
82 : $P_{1474} = (0, 13, 0, 1)$	136 : $P_{2894} = (13, 25, 1, 1)$	190 : $P_{5433} = (24, 8, 4, 1)$
83 : $P_{1487} = (13, 13, 0, 1)$	137 : $P_{2967} = (22, 27, 1, 1)$	191 : $P_{5499} = (26, 10, 4, 1)$
84 : $P_{1506} = (0, 14, 0, 1)$	138 : $P_{2970} = (25, 27, 1, 1)$	192 : $P_{5500} = (27, 10, 4, 1)$
85 : $P_{1520} = (14, 14, 0, 1)$	139 : $P_{3013} = (4, 29, 1, 1)$	193 : $P_{5521} = (16, 11, 4, 1)$
86 : $P_{1538} = (0, 15, 0, 1)$	140 : $P_{3036} = (27, 29, 1, 1)$	194 : $P_{5522} = (17, 11, 4, 1)$
87 : $P_{1553} = (15, 15, 0, 1)$	141 : $P_{3107} = (2, 0, 2, 1)$	195 : $P_{5689} = (24, 16, 4, 1)$
88 : $P_{1570} = (0, 16, 0, 1)$	142 : $P_{3171} = (2, 2, 2, 1)$	196 : $P_{5691} = (26, 16, 4, 1)$
89 : $P_{1586} = (16, 16, 0, 1)$	143 : $P_{3245} = (12, 4, 2, 1)$	197 : $P_{5715} = (18, 17, 4, 1)$
90 : $P_{1602} = (0, 17, 0, 1)$	144 : $P_{3256} = (23, 4, 2, 1)$	198 : $P_{5724} = (27, 17, 4, 1)$
91 : $P_{1619} = (17, 17, 0, 1)$	145 : $P_{3278} = (13, 5, 2, 1)$	199 : $P_{5737} = (8, 18, 4, 1)$
92 : $P_{1634} = (0, 18, 0, 1)$	146 : $P_{3296} = (31, 5, 2, 1)$	200 : $P_{5739} = (10, 18, 4, 1)$
93 : $P_{1652} = (18, 18, 0, 1)$	147 : $P_{3373} = (12, 8, 2, 1)$	201 : $P_{5924} = (3, 24, 4, 1)$
94 : $P_{1666} = (0, 19, 0, 1)$	148 : $P_{3374} = (13, 8, 2, 1)$	202 : $P_{5931} = (10, 24, 4, 1)$
95 : $P_{1685} = (19, 19, 0, 1)$	149 : $P_{3397} = (4, 9, 2, 1)$	203 : $P_{5993} = (8, 26, 4, 1)$

204 : $P_{6002} = (17, 26, 4, 1)$	258 : $P_{8456} = (7, 7, 7, 1)$	312 : $P_{10910} = (29, 19, 9, 1)$
205 : $P_{6020} = (3, 27, 4, 1)$	259 : $P_{8582} = (5, 11, 7, 1)$	313 : $P_{11013} = (4, 23, 9, 1)$
206 : $P_{6033} = (16, 27, 4, 1)$	260 : $P_{8590} = (13, 11, 7, 1)$	314 : $P_{11027} = (18, 23, 9, 1)$
207 : $P_{6182} = (5, 0, 5, 1)$	261 : $P_{8655} = (14, 13, 7, 1)$	315 : $P_{11216} = (15, 29, 9, 1)$
208 : $P_{6315} = (10, 4, 5, 1)$	262 : $P_{8672} = (31, 13, 7, 1)$	316 : $P_{11224} = (23, 29, 9, 1)$
209 : $P_{6331} = (26, 4, 5, 1)$	263 : $P_{8678} = (5, 14, 7, 1)$	317 : $P_{11307} = (10, 0, 10, 1)$
210 : $P_{6342} = (5, 5, 5, 1)$	264 : $P_{8691} = (18, 14, 7, 1)$	318 : $P_{11342} = (13, 1, 10, 1)$
211 : $P_{6389} = (20, 6, 5, 1)$	265 : $P_{8812} = (11, 18, 7, 1)$	319 : $P_{11358} = (29, 1, 10, 1)$
212 : $P_{6393} = (24, 6, 5, 1)$	266 : $P_{8832} = (31, 18, 7, 1)$	320 : $P_{11570} = (17, 8, 10, 1)$
213 : $P_{6515} = (18, 10, 5, 1)$	267 : $P_{9036} = (11, 25, 7, 1)$	321 : $P_{11573} = (20, 8, 10, 1)$
214 : $P_{6527} = (30, 10, 5, 1)$	268 : $P_{9053} = (28, 25, 7, 1)$	322 : $P_{11627} = (10, 10, 10, 1)$
215 : $P_{6635} = (10, 14, 5, 1)$	269 : $P_{9124} = (3, 28, 7, 1)$	323 : $P_{11694} = (13, 12, 10, 1)$
216 : $P_{6653} = (28, 14, 5, 1)$	270 : $P_{9139} = (18, 28, 7, 1)$	324 : $P_{11702} = (21, 12, 10, 1)$
217 : $P_{6773} = (20, 18, 5, 1)$	271 : $P_{9220} = (3, 31, 7, 1)$	325 : $P_{11738} = (25, 13, 10, 1)$
218 : $P_{6781} = (28, 18, 5, 1)$	272 : $P_{9242} = (25, 31, 7, 1)$	326 : $P_{11741} = (28, 13, 10, 1)$
219 : $P_{6831} = (14, 20, 5, 1)$	273 : $P_{9257} = (8, 0, 8, 1)$	327 : $P_{11853} = (12, 17, 10, 1)$
220 : $P_{6847} = (30, 20, 5, 1)$	274 : $P_{9297} = (16, 1, 8, 1)$	328 : $P_{11869} = (28, 17, 10, 1)$
221 : $P_{6949} = (4, 24, 5, 1)$	275 : $P_{9301} = (20, 1, 8, 1)$	329 : $P_{11938} = (1, 20, 10, 1)$
222 : $P_{6963} = (18, 24, 5, 1)$	276 : $P_{9426} = (17, 5, 8, 1)$	330 : $P_{11962} = (25, 20, 10, 1)$
223 : $P_{7015} = (6, 26, 5, 1)$	277 : $P_{9430} = (21, 5, 8, 1)$	331 : $P_{11970} = (1, 21, 10, 1)$
224 : $P_{7023} = (14, 26, 5, 1)$	278 : $P_{9442} = (1, 6, 8, 1)$	332 : $P_{11977} = (8, 21, 10, 1)$
225 : $P_{7077} = (4, 28, 5, 1)$	279 : $P_{9463} = (22, 6, 8, 1)$	333 : $P_{12114} = (17, 25, 10, 1)$
226 : $P_{7079} = (6, 28, 5, 1)$	280 : $P_{9474} = (1, 7, 8, 1)$	334 : $P_{12118} = (21, 25, 10, 1)$
227 : $P_{7161} = (24, 30, 5, 1)$	281 : $P_{9492} = (19, 7, 8, 1)$	335 : $P_{12213} = (20, 28, 10, 1)$
228 : $P_{7163} = (26, 30, 5, 1)$	282 : $P_{9513} = (8, 8, 8, 1)$	336 : $P_{12222} = (29, 28, 10, 1)$
229 : $P_{7207} = (6, 0, 6, 1)$	283 : $P_{9782} = (21, 16, 8, 1)$	337 : $P_{12233} = (8, 29, 10, 1)$
230 : $P_{7345} = (16, 4, 6, 1)$	284 : $P_{9783} = (22, 16, 8, 1)$	338 : $P_{12237} = (12, 29, 10, 1)$
231 : $P_{7353} = (24, 4, 6, 1)$	285 : $P_{9800} = (7, 17, 8, 1)$	339 : $P_{12332} = (11, 0, 11, 1)$
232 : $P_{7399} = (6, 6, 6, 1)$	286 : $P_{9809} = (16, 17, 8, 1)$	340 : $P_{12361} = (8, 1, 11, 1)$
233 : $P_{7557} = (4, 11, 6, 1)$	287 : $P_{9862} = (5, 19, 8, 1)$	341 : $P_{12370} = (17, 1, 11, 1)$
234 : $P_{7580} = (27, 11, 6, 1)$	288 : $P_{9863} = (6, 19, 8, 1)$	342 : $P_{12593} = (16, 8, 11, 1)$
235 : $P_{7605} = (20, 12, 6, 1)$	289 : $P_{9906} = (17, 20, 8, 1)$	343 : $P_{12599} = (22, 8, 11, 1)$
236 : $P_{7613} = (28, 12, 6, 1)$	290 : $P_{9908} = (19, 20, 8, 1)$	344 : $P_{12617} = (8, 9, 11, 1)$
237 : $P_{7685} = (4, 15, 6, 1)$	291 : $P_{9927} = (6, 21, 8, 1)$	345 : $P_{12640} = (31, 9, 11, 1)$
238 : $P_{7704} = (23, 15, 6, 1)$	292 : $P_{9941} = (20, 21, 8, 1)$	346 : $P_{12684} = (11, 11, 11, 1)$
239 : $P_{7740} = (27, 16, 6, 1)$	293 : $P_{9958} = (5, 22, 8, 1)$	347 : $P_{12793} = (24, 14, 11, 1)$
240 : $P_{7741} = (28, 16, 6, 1)$	294 : $P_{9960} = (7, 22, 8, 1)$	348 : $P_{12799} = (30, 14, 11, 1)$
241 : $P_{7856} = (15, 20, 6, 1)$	295 : $P_{10282} = (9, 0, 9, 1)$	349 : $P_{12850} = (17, 16, 11, 1)$
242 : $P_{7857} = (16, 20, 6, 1)$	296 : $P_{10310} = (5, 1, 9, 1)$	350 : $P_{12863} = (30, 16, 11, 1)$
243 : $P_{7948} = (11, 23, 6, 1)$	297 : $P_{10324} = (19, 1, 9, 1)$	351 : $P_{12874} = (9, 17, 11, 1)$
244 : $P_{7949} = (12, 23, 6, 1)$	298 : $P_{10406} = (5, 4, 9, 1)$	352 : $P_{12879} = (14, 17, 11, 1)$
245 : $P_{7989} = (20, 24, 6, 1)$	299 : $P_{10415} = (14, 4, 9, 1)$	353 : $P_{13049} = (24, 22, 11, 1)$
246 : $P_{7992} = (23, 24, 6, 1)$	300 : $P_{10443} = (10, 5, 9, 1)$	354 : $P_{13056} = (31, 22, 11, 1)$
247 : $P_{8077} = (12, 27, 6, 1)$	301 : $P_{10451} = (18, 5, 9, 1)$	355 : $P_{13098} = (9, 24, 11, 1)$
248 : $P_{8080} = (15, 27, 6, 1)$	302 : $P_{10570} = (9, 9, 9, 1)$	356 : $P_{13105} = (16, 24, 11, 1)$
249 : $P_{8108} = (11, 28, 6, 1)$	303 : $P_{10607} = (14, 10, 9, 1)$	357 : $P_{13282} = (1, 30, 11, 1)$
250 : $P_{8121} = (24, 28, 6, 1)$	304 : $P_{10616} = (23, 10, 9, 1)$	358 : $P_{13303} = (22, 30, 11, 1)$
251 : $P_{8232} = (7, 0, 7, 1)$	305 : $P_{10722} = (1, 14, 9, 1)$	359 : $P_{13314} = (1, 31, 11, 1)$
252 : $P_{8327} = (6, 3, 7, 1)$	306 : $P_{10750} = (29, 14, 9, 1)$	360 : $P_{13327} = (14, 31, 11, 1)$
253 : $P_{8335} = (14, 3, 7, 1)$	307 : $P_{10754} = (1, 15, 9, 1)$	361 : $P_{13357} = (12, 0, 12, 1)$
254 : $P_{8391} = (6, 5, 7, 1)$	308 : $P_{10763} = (10, 15, 9, 1)$	362 : $P_{13524} = (19, 5, 12, 1)$
255 : $P_{8413} = (28, 5, 7, 1)$	309 : $P_{10864} = (15, 18, 9, 1)$	363 : $P_{13534} = (29, 5, 12, 1)$
256 : $P_{8430} = (13, 6, 7, 1)$	310 : $P_{10868} = (19, 18, 9, 1)$	364 : $P_{13606} = (5, 8, 12, 1)$
257 : $P_{8442} = (25, 6, 7, 1)$	311 : $P_{10885} = (4, 19, 9, 1)$	365 : $P_{13622} = (21, 8, 12, 1)$

366 : $P_{13719} = (22, 11, 12, 1)$	420 : $P_{16253} = (28, 26, 14, 1)$	474 : $P_{18698} = (9, 7, 17, 1)$
367 : $P_{13721} = (24, 11, 12, 1)$	421 : $P_{16263} = (6, 27, 14, 1)$	475 : $P_{18705} = (16, 7, 17, 1)$
368 : $P_{13741} = (12, 12, 12, 1)$	422 : $P_{16280} = (23, 27, 14, 1)$	476 : $P_{18776} = (23, 9, 17, 1)$
369 : $P_{13766} = (5, 13, 12, 1)$	423 : $P_{16290} = (1, 28, 14, 1)$	477 : $P_{18782} = (29, 9, 17, 1)$
370 : $P_{13791} = (30, 13, 12, 1)$	424 : $P_{16299} = (10, 28, 14, 1)$	478 : $P_{18922} = (9, 14, 17, 1)$
371 : $P_{13977} = (24, 19, 12, 1)$	425 : $P_{16322} = (1, 29, 14, 1)$	479 : $P_{18932} = (19, 14, 17, 1)$
372 : $P_{13983} = (30, 19, 12, 1)$	426 : $P_{16327} = (6, 29, 14, 1)$	480 : $P_{18980} = (3, 16, 17, 1)$
373 : $P_{14028} = (11, 21, 12, 1)$	427 : $P_{16432} = (15, 0, 15, 1)$	481 : $P_{18991} = (14, 16, 17, 1)$
374 : $P_{14030} = (13, 21, 12, 1)$	428 : $P_{16459} = (10, 1, 15, 1)$	482 : $P_{19026} = (17, 17, 17, 1)$
375 : $P_{14057} = (8, 22, 12, 1)$	429 : $P_{16461} = (12, 1, 15, 1)$	483 : $P_{19076} = (3, 19, 17, 1)$
376 : $P_{14068} = (19, 22, 12, 1)$	430 : $P_{16652} = (11, 7, 15, 1)$	484 : $P_{19080} = (7, 19, 17, 1)$
377 : $P_{14126} = (13, 24, 12, 1)$	431 : $P_{16654} = (13, 7, 15, 1)$	485 : $P_{19112} = (7, 20, 17, 1)$
378 : $P_{14142} = (29, 24, 12, 1)$	432 : $P_{16750} = (13, 10, 15, 1)$	486 : $P_{19134} = (29, 20, 17, 1)$
379 : $P_{14294} = (21, 29, 12, 1)$	433 : $P_{16762} = (25, 10, 15, 1)$	487 : $P_{19217} = (16, 23, 17, 1)$
380 : $P_{14295} = (22, 29, 12, 1)$	434 : $P_{16779} = (10, 11, 15, 1)$	488 : $P_{19221} = (20, 23, 17, 1)$
381 : $P_{14313} = (8, 30, 12, 1)$	435 : $P_{16787} = (18, 11, 15, 1)$	489 : $P_{19412} = (19, 29, 17, 1)$
382 : $P_{14316} = (11, 30, 12, 1)$	436 : $P_{16812} = (11, 12, 15, 1)$	490 : $P_{19423} = (30, 29, 17, 1)$
383 : $P_{14382} = (13, 0, 13, 1)$	437 : $P_{16831} = (30, 12, 15, 1)$	491 : $P_{19439} = (14, 30, 17, 1)$
384 : $P_{14514} = (17, 4, 13, 1)$	438 : $P_{16845} = (12, 13, 15, 1)$	492 : $P_{19448} = (23, 30, 17, 1)$
385 : $P_{14524} = (27, 4, 13, 1)$	439 : $P_{16852} = (19, 13, 15, 1)$	493 : $P_{19507} = (18, 0, 18, 1)$
386 : $P_{14543} = (14, 5, 13, 1)$	440 : $P_{16912} = (15, 15, 15, 1)$	494 : $P_{19524} = (3, 1, 18, 1)$
387 : $P_{14555} = (26, 5, 13, 1)$	441 : $P_{16994} = (1, 18, 15, 1)$	495 : $P_{19551} = (30, 1, 18, 1)$
388 : $P_{14735} = (14, 11, 13, 1)$	442 : $P_{17023} = (30, 18, 15, 1)$	496 : $P_{19556} = (3, 2, 18, 1)$
389 : $P_{14751} = (30, 11, 13, 1)$	443 : $P_{17026} = (1, 19, 15, 1)$	497 : $P_{19563} = (10, 2, 18, 1)$
390 : $P_{14798} = (13, 13, 13, 1)$	444 : $P_{17050} = (25, 19, 15, 1)$	498 : $P_{19593} = (8, 3, 18, 1)$
391 : $P_{14838} = (21, 14, 13, 1)$	445 : $P_{17224} = (7, 25, 15, 1)$	499 : $P_{19616} = (31, 3, 18, 1)$
392 : $P_{14848} = (31, 14, 13, 1)$	446 : $P_{17235} = (18, 25, 15, 1)$	500 : $P_{19755} = (10, 8, 18, 1)$
393 : $P_{14924} = (11, 17, 13, 1)$	447 : $P_{17384} = (7, 30, 15, 1)$	501 : $P_{19773} = (28, 8, 18, 1)$
394 : $P_{14944} = (31, 17, 13, 1)$	448 : $P_{17396} = (19, 30, 15, 1)$	502 : $P_{19810} = (1, 10, 18, 1)$
395 : $P_{15058} = (17, 21, 13, 1)$	449 : $P_{17457} = (16, 0, 16, 1)$	503 : $P_{19829} = (20, 10, 18, 1)$
396 : $P_{15071} = (30, 21, 13, 1)$	450 : $P_{17510} = (5, 2, 16, 1)$	504 : $P_{19842} = (1, 11, 18, 1)$
397 : $P_{15205} = (4, 26, 13, 1)$	451 : $P_{17518} = (13, 2, 16, 1)$	505 : $P_{19849} = (8, 11, 18, 1)$
398 : $P_{15212} = (11, 26, 13, 1)$	452 : $P_{17547} = (10, 3, 16, 1)$	506 : $P_{20083} = (18, 18, 18, 1)$
399 : $P_{15238} = (5, 27, 13, 1)$	453 : $P_{17549} = (12, 3, 16, 1)$	507 : $P_{20140} = (11, 20, 18, 1)$
400 : $P_{15254} = (21, 27, 13, 1)$	454 : $P_{17610} = (9, 5, 16, 1)$	508 : $P_{20157} = (28, 20, 18, 1)$
401 : $P_{15333} = (4, 30, 13, 1)$	455 : $P_{17616} = (15, 5, 16, 1)$	509 : $P_{20387} = (2, 28, 18, 1)$
402 : $P_{15334} = (5, 30, 13, 1)$	456 : $P_{17670} = (5, 7, 16, 1)$	510 : $P_{20416} = (31, 28, 18, 1)$
403 : $P_{15387} = (26, 31, 13, 1)$	457 : $P_{17679} = (14, 7, 16, 1)$	511 : $P_{20451} = (2, 30, 18, 1)$
404 : $P_{15388} = (27, 31, 13, 1)$	458 : $P_{17739} = (10, 9, 16, 1)$	512 : $P_{20469} = (20, 30, 18, 1)$
405 : $P_{15407} = (14, 0, 14, 1)$	459 : $P_{17743} = (14, 9, 16, 1)$	513 : $P_{20492} = (11, 31, 18, 1)$
406 : $P_{15447} = (22, 1, 14, 1)$	460 : $P_{17768} = (7, 10, 16, 1)$	514 : $P_{20511} = (30, 31, 18, 1)$
407 : $P_{15452} = (27, 1, 14, 1)$	461 : $P_{17776} = (15, 10, 16, 1)$	515 : $P_{20532} = (19, 0, 19, 1)$
408 : $P_{15597} = (12, 6, 14, 1)$	462 : $P_{17827} = (2, 12, 16, 1)$	516 : $P_{20549} = (4, 1, 19, 1)$
409 : $P_{15613} = (28, 6, 14, 1)$	463 : $P_{17834} = (9, 12, 16, 1)$	517 : $P_{20551} = (6, 1, 19, 1)$
410 : $P_{15725} = (12, 10, 14, 1)$	464 : $P_{17860} = (3, 13, 16, 1)$	518 : $P_{20614} = (5, 3, 19, 1)$
411 : $P_{15742} = (29, 10, 14, 1)$	465 : $P_{17864} = (7, 13, 16, 1)$	519 : $P_{20616} = (7, 3, 19, 1)$
412 : $P_{15800} = (23, 12, 14, 1)$	466 : $P_{17891} = (2, 14, 16, 1)$	520 : $P_{20648} = (7, 4, 19, 1)$
413 : $P_{15803} = (26, 12, 14, 1)$	467 : $P_{17892} = (3, 14, 16, 1)$	521 : $P_{20670} = (29, 4, 19, 1)$
414 : $P_{15855} = (14, 14, 14, 1)$	468 : $P_{17933} = (12, 15, 16, 1)$	522 : $P_{20677} = (4, 5, 19, 1)$
415 : $P_{16107} = (10, 22, 14, 1)$	469 : $P_{17934} = (13, 15, 16, 1)$	523 : $P_{20697} = (24, 5, 19, 1)$
416 : $P_{16123} = (26, 22, 14, 1)$	470 : $P_{17969} = (16, 16, 16, 1)$	524 : $P_{20710} = (5, 6, 19, 1)$
417 : $P_{16151} = (22, 23, 14, 1)$	471 : $P_{18482} = (17, 0, 17, 1)$	525 : $P_{20735} = (30, 6, 19, 1)$
418 : $P_{16158} = (29, 23, 14, 1)$	472 : $P_{18581} = (20, 3, 17, 1)$	526 : $P_{20743} = (6, 7, 19, 1)$
419 : $P_{16252} = (27, 26, 14, 1)$	473 : $P_{18591} = (30, 3, 17, 1)$	527 : $P_{20762} = (25, 7, 19, 1)$



528 : $P_{21140} = (19, 19, 19, 1)$	582 : $P_{23656} = (7, 2, 22, 1)$	636 : $P_{26331} = (26, 21, 24, 1)$
529 : $P_{21282} = (1, 24, 19, 1)$	583 : $P_{23665} = (16, 2, 22, 1)$	637 : $P_{26336} = (31, 21, 24, 1)$
530 : $P_{21311} = (30, 24, 19, 1)$	584 : $P_{23752} = (7, 5, 22, 1)$	638 : $P_{26346} = (9, 22, 24, 1)$
531 : $P_{21314} = (1, 25, 19, 1)$	585 : $P_{23770} = (25, 5, 22, 1)$	639 : $P_{26358} = (21, 22, 24, 1)$
532 : $P_{21342} = (29, 25, 19, 1)$	586 : $P_{23827} = (18, 7, 22, 1)$	640 : $P_{26425} = (24, 24, 24, 1)$
533 : $P_{21444} = (3, 29, 19, 1)$	587 : $P_{23837} = (28, 7, 22, 1)$	641 : $P_{26449} = (16, 25, 24, 1)$
534 : $P_{21465} = (24, 29, 19, 1)$	588 : $P_{23894} = (21, 9, 22, 1)$	642 : $P_{26455} = (22, 25, 24, 1)$
535 : $P_{21476} = (3, 30, 19, 1)$	589 : $P_{23900} = (27, 9, 22, 1)$	643 : $P_{26475} = (10, 26, 24, 1)$
536 : $P_{21498} = (25, 30, 19, 1)$	590 : $P_{24102} = (5, 16, 22, 1)$	644 : $P_{26490} = (25, 26, 24, 1)$
537 : $P_{21557} = (20, 0, 20, 1)$	591 : $P_{24106} = (9, 16, 22, 1)$	645 : $P_{26634} = (9, 31, 24, 1)$
538 : $P_{21627} = (26, 2, 20, 1)$	592 : $P_{24177} = (16, 18, 22, 1)$	646 : $P_{26640} = (15, 31, 24, 1)$
539 : $P_{21632} = (31, 2, 20, 1)$	593 : $P_{24188} = (27, 18, 22, 1)$	647 : $P_{26682} = (25, 0, 25, 1)$
540 : $P_{21785} = (24, 7, 20, 1)$	594 : $P_{24262} = (5, 21, 22, 1)$	648 : $P_{26725} = (4, 2, 25, 1)$
541 : $P_{21790} = (29, 7, 20, 1)$	595 : $P_{24275} = (18, 21, 22, 1)$	649 : $P_{26744} = (23, 2, 25, 1)$
542 : $P_{21955} = (2, 13, 20, 1)$	596 : $P_{24311} = (22, 22, 22, 1)$	650 : $P_{26798} = (13, 4, 25, 1)$
543 : $P_{21976} = (23, 13, 20, 1)$	597 : $P_{24387} = (2, 25, 22, 1)$	651 : $P_{26806} = (21, 4, 25, 1)$
544 : $P_{22019} = (2, 15, 20, 1)$	598 : $P_{24394} = (9, 25, 22, 1)$	652 : $P_{26853} = (4, 6, 25, 1)$
545 : $P_{22033} = (16, 15, 20, 1)$	599 : $P_{24451} = (2, 27, 22, 1)$	653 : $P_{26860} = (11, 6, 25, 1)$
546 : $P_{22056} = (7, 16, 20, 1)$	600 : $P_{24477} = (28, 27, 22, 1)$	654 : $P_{26947} = (2, 9, 25, 1)$
547 : $P_{22062} = (13, 16, 20, 1)$	601 : $P_{24502} = (21, 28, 22, 1)$	655 : $P_{26958} = (13, 9, 25, 1)$
548 : $P_{22197} = (20, 20, 20, 1)$	602 : $P_{24506} = (25, 28, 22, 1)$	656 : $P_{27011} = (2, 11, 25, 1)$
549 : $P_{22280} = (7, 23, 20, 1)$	603 : $P_{24632} = (23, 0, 23, 1)$	657 : $P_{27037} = (28, 11, 25, 1)$
550 : $P_{22288} = (15, 23, 20, 1)$	604 : $P_{24745} = (8, 4, 23, 1)$	658 : $P_{27084} = (11, 13, 25, 1)$
551 : $P_{22320} = (15, 24, 20, 1)$	605 : $P_{24748} = (11, 4, 23, 1)$	659 : $P_{27090} = (17, 13, 25, 1)$
552 : $P_{22331} = (26, 24, 20, 1)$	606 : $P_{24845} = (12, 7, 23, 1)$	660 : $P_{27207} = (6, 17, 25, 1)$
553 : $P_{22392} = (23, 26, 20, 1)$	607 : $P_{24848} = (15, 7, 23, 1)$	661 : $P_{27222} = (21, 17, 25, 1)$
554 : $P_{22398} = (29, 26, 20, 1)$	608 : $P_{24880} = (15, 8, 23, 1)$	662 : $P_{27338} = (9, 21, 25, 1)$
555 : $P_{22478} = (13, 29, 20, 1)$	609 : $P_{24891} = (26, 8, 23, 1)$	663 : $P_{27352} = (23, 21, 25, 1)$
556 : $P_{22496} = (31, 29, 20, 1)$	610 : $P_{24973} = (12, 11, 23, 1)$	664 : $P_{27399} = (6, 23, 25, 1)$
557 : $P_{22545} = (16, 31, 20, 1)$	611 : $P_{24990} = (29, 11, 23, 1)$	665 : $P_{27421} = (28, 23, 25, 1)$
558 : $P_{22553} = (24, 31, 20, 1)$	612 : $P_{25001} = (8, 12, 23, 1)$	666 : $P_{27482} = (25, 25, 25, 1)$
559 : $P_{22582} = (21, 0, 21, 1)$	613 : $P_{25015} = (22, 12, 23, 1)$	667 : $P_{27562} = (9, 28, 25, 1)$
560 : $P_{22741} = (20, 5, 21, 1)$	614 : $P_{25100} = (11, 15, 23, 1)$	668 : $P_{27570} = (17, 28, 25, 1)$
561 : $P_{22751} = (30, 5, 21, 1)$	615 : $P_{25107} = (18, 15, 23, 1)$	669 : $P_{27707} = (26, 0, 26, 1)$
562 : $P_{22768} = (15, 6, 21, 1)$	616 : $P_{25189} = (4, 18, 23, 1)$	670 : $P_{27927} = (22, 7, 26, 1)$
563 : $P_{22776} = (23, 6, 21, 1)$	617 : $P_{25211} = (26, 18, 23, 1)$	671 : $P_{27932} = (27, 7, 26, 1)$
564 : $P_{22864} = (15, 9, 21, 1)$	618 : $P_{25317} = (4, 22, 23, 1)$	672 : $P_{27944} = (7, 8, 26, 1)$
565 : $P_{22867} = (18, 9, 21, 1)$	619 : $P_{25342} = (29, 22, 23, 1)$	673 : $P_{27956} = (19, 8, 26, 1)$
566 : $P_{23058} = (17, 15, 21, 1)$	620 : $P_{25368} = (23, 23, 23, 1)$	674 : $P_{28018} = (17, 10, 26, 1)$
567 : $P_{23068} = (27, 15, 21, 1)$	621 : $P_{25448} = (7, 26, 23, 1)$	675 : $P_{28029} = (28, 10, 26, 1)$
568 : $P_{23125} = (20, 17, 21, 1)$	622 : $P_{25463} = (22, 26, 23, 1)$	676 : $P_{28168} = (7, 15, 26, 1)$
569 : $P_{23128} = (23, 17, 21, 1)$	623 : $P_{25544} = (7, 29, 23, 1)$	677 : $P_{28186} = (25, 15, 26, 1)$
570 : $P_{23142} = (5, 18, 21, 1)$	624 : $P_{25555} = (18, 29, 23, 1)$	678 : $P_{28233} = (8, 17, 26, 1)$
571 : $P_{23143} = (6, 18, 21, 1)$	625 : $P_{25657} = (24, 0, 24, 1)$	679 : $P_{28247} = (22, 17, 26, 1)$
572 : $P_{23207} = (6, 20, 21, 1)$	626 : $P_{25750} = (21, 3, 24, 1)$	680 : $P_{28299} = (10, 19, 26, 1)$
573 : $P_{23228} = (27, 20, 21, 1)$	627 : $P_{25754} = (25, 3, 24, 1)$	681 : $P_{28304} = (15, 19, 26, 1)$
574 : $P_{23254} = (21, 21, 21, 1)$	628 : $P_{25924} = (3, 9, 24, 1)$	682 : $P_{28410} = (25, 22, 26, 1)$
575 : $P_{23302} = (5, 23, 21, 1)$	629 : $P_{25937} = (16, 9, 24, 1)$	683 : $P_{28413} = (28, 22, 26, 1)$
576 : $P_{23306} = (9, 23, 21, 1)$	630 : $P_{25956} = (3, 10, 24, 1)$	684 : $P_{28489} = (8, 25, 26, 1)$
577 : $P_{23443} = (18, 27, 21, 1)$	631 : $P_{25984} = (31, 10, 24, 1)$	685 : $P_{28491} = (10, 25, 26, 1)$
578 : $P_{23455} = (30, 27, 21, 1)$	632 : $P_{26135} = (22, 15, 24, 1)$	686 : $P_{28539} = (26, 26, 26, 1)$
579 : $P_{23530} = (9, 30, 21, 1)$	633 : $P_{26139} = (26, 15, 24, 1)$	687 : $P_{28562} = (17, 27, 26, 1)$
580 : $P_{23538} = (17, 30, 21, 1)$	634 : $P_{26155} = (10, 16, 24, 1)$	688 : $P_{28564} = (19, 27, 26, 1)$
581 : $P_{23607} = (22, 0, 22, 1)$	635 : $P_{26160} = (15, 16, 24, 1)$	689 : $P_{28592} = (15, 28, 26, 1)$

690 : $P_{28604} = (27, 28, 26, 1)$	728 : $P_{30508} = (11, 24, 28, 1)$	766 : $P_{32440} = (23, 20, 30, 1)$
691 : $P_{28732} = (27, 0, 27, 1)$	729 : $P_{30514} = (17, 24, 28, 1)$	767 : $P_{32443} = (26, 20, 30, 1)$
692 : $P_{28786} = (17, 2, 27, 1)$	730 : $P_{30653} = (28, 28, 28, 1)$	768 : $P_{32482} = (1, 22, 30, 1)$
693 : $P_{28797} = (28, 2, 27, 1)$	731 : $P_{30659} = (2, 29, 28, 1)$	769 : $P_{32501} = (20, 22, 30, 1)$
694 : $P_{28816} = (15, 3, 27, 1)$	732 : $P_{30677} = (20, 29, 28, 1)$	770 : $P_{32514} = (1, 23, 30, 1)$
695 : $P_{28817} = (16, 3, 27, 1)$	733 : $P_{30723} = (2, 31, 28, 1)$	771 : $P_{32527} = (14, 23, 30, 1)$
696 : $P_{29104} = (15, 12, 27, 1)$	734 : $P_{30733} = (12, 31, 28, 1)$	772 : $P_{32567} = (22, 24, 30, 1)$
697 : $P_{29107} = (18, 12, 27, 1)$	735 : $P_{30782} = (29, 0, 29, 1)$	773 : $P_{32570} = (25, 24, 30, 1)$
698 : $P_{29204} = (19, 15, 27, 1)$	736 : $P_{30871} = (22, 3, 29, 1)$	774 : $P_{32580} = (3, 25, 30, 1)$
699 : $P_{29215} = (30, 15, 27, 1)$	737 : $P_{30873} = (24, 3, 29, 1)$	775 : $P_{32591} = (14, 25, 30, 1)$
700 : $P_{29219} = (2, 16, 27, 1)$	738 : $P_{30884} = (3, 4, 29, 1)$	776 : $P_{32612} = (3, 26, 30, 1)$
701 : $P_{29229} = (12, 16, 27, 1)$	739 : $P_{30899} = (18, 4, 29, 1)$	777 : $P_{32633} = (24, 26, 30, 1)$
702 : $P_{29252} = (3, 17, 27, 1)$	740 : $P_{30980} = (3, 7, 29, 1)$	778 : $P_{32767} = (30, 30, 30, 1)$
703 : $P_{29279} = (30, 17, 27, 1)$	741 : $P_{31008} = (31, 7, 29, 1)$	779 : $P_{32832} = (31, 0, 31, 1)$
704 : $P_{29283} = (2, 18, 27, 1)$	742 : $P_{31190} = (21, 13, 29, 1)$	780 : $P_{32847} = (14, 1, 31, 1)$
705 : $P_{29284} = (3, 18, 27, 1)$	743 : $P_{31196} = (27, 13, 29, 1)$	781 : $P_{32859} = (26, 1, 31, 1)$
706 : $P_{29329} = (16, 19, 27, 1)$	744 : $P_{31336} = (7, 18, 29, 1)$	782 : $P_{33002} = (9, 6, 31, 1)$
707 : $P_{29330} = (17, 19, 27, 1)$	745 : $P_{31342} = (13, 18, 29, 1)$	783 : $P_{33014} = (21, 6, 31, 1)$
708 : $P_{29596} = (27, 27, 27, 1)$	746 : $P_{31432} = (7, 21, 29, 1)$	784 : $P_{33058} = (1, 8, 31, 1)$
709 : $P_{29613} = (12, 28, 27, 1)$	747 : $P_{31447} = (22, 21, 29, 1)$	785 : $P_{33063} = (6, 8, 31, 1)$
710 : $P_{29620} = (19, 28, 27, 1)$	748 : $P_{31475} = (18, 22, 29, 1)$	786 : $P_{33090} = (1, 9, 31, 1)$
711 : $P_{29683} = (18, 30, 27, 1)$	749 : $P_{31484} = (27, 22, 29, 1)$	787 : $P_{33108} = (19, 9, 31, 1)$
712 : $P_{29693} = (28, 30, 27, 1)$	750 : $P_{31542} = (21, 24, 29, 1)$	788 : $P_{33255} = (6, 14, 31, 1)$
713 : $P_{29757} = (28, 0, 28, 1)$	751 : $P_{31552} = (31, 24, 29, 1)$	789 : $P_{33276} = (27, 14, 31, 1)$
714 : $P_{29802} = (9, 2, 28, 1)$	752 : $P_{31621} = (4, 27, 29, 1)$	790 : $P_{33290} = (9, 15, 31, 1)$
715 : $P_{29812} = (19, 2, 28, 1)$	753 : $P_{31641} = (24, 27, 29, 1)$	791 : $P_{33295} = (14, 15, 31, 1)$
716 : $P_{30034} = (17, 9, 28, 1)$	754 : $P_{31710} = (29, 29, 29, 1)$	792 : $P_{33417} = (8, 19, 31, 1)$
717 : $P_{30037} = (20, 9, 28, 1)$	755 : $P_{31749} = (4, 31, 29, 1)$	793 : $P_{33430} = (21, 19, 31, 1)$
718 : $P_{30090} = (9, 11, 28, 1)$	756 : $P_{31758} = (13, 31, 29, 1)$	794 : $P_{33488} = (15, 21, 31, 1)$
719 : $P_{30112} = (31, 11, 28, 1)$	757 : $P_{31807} = (30, 0, 30, 1)$	795 : $P_{33500} = (27, 21, 31, 1)$
720 : $P_{30137} = (24, 12, 28, 1)$	758 : $P_{31811} = (2, 1, 30, 1)$	796 : $P_{33648} = (15, 26, 31, 1)$
721 : $P_{30142} = (29, 12, 28, 1)$	759 : $P_{31834} = (25, 1, 30, 1)$	797 : $P_{33652} = (19, 26, 31, 1)$
722 : $P_{30292} = (19, 17, 28, 1)$	760 : $P_{31861} = (20, 2, 30, 1)$	798 : $P_{33673} = (8, 27, 31, 1)$
723 : $P_{30302} = (29, 17, 28, 1)$	761 : $P_{31865} = (24, 2, 30, 1)$	799 : $P_{33691} = (26, 27, 31, 1)$
724 : $P_{30348} = (11, 19, 28, 1)$	762 : $P_{31875} = (2, 3, 30, 1)$	800 : $P_{33824} = (31, 31, 31, 1)$
725 : $P_{30349} = (12, 19, 28, 1)$	763 : $P_{31896} = (23, 3, 30, 1)$	
726 : $P_{30393} = (24, 20, 28, 1)$	764 : $P_{32247} = (22, 14, 30, 1)$	
727 : $P_{30400} = (31, 20, 28, 1)$	765 : $P_{32251} = (26, 14, 30, 1)$	