

# Rank-76389 over GF(64)

January 15, 2021

## The equation

The equation of the surface is :

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

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

The point rank of the equation over GF(64) is -2130440059

## General information

Number of lines	16
Number of points	4417
Number of singular points	2
Number of Eckardt points	3
Number of double points	29
Number of single points	963
Number of points off lines	3420
Number of Hesse planes	0
Number of axes	0
Type of points on lines	$65^{16}$
Type of lines on points	$5^2, 3^3, 2^{29}, 1^{963}, 0^{3420}$

## Singular Points

The surface has 2 singular points:

$$0 : P_{237242} = \mathbf{P}(\epsilon^{21}, \epsilon^{21}, \epsilon^{42}, 1) = \mathbf{P}(57, 57, 56, 1)$$

$$1 : P_{241273} = \mathbf{P}(\epsilon^{42}, \epsilon^{42}, \epsilon^{21}, 1) = \mathbf{P}(56, 56, 57, 1)$$

## The 16 Lines

The lines and their Pluecker coordinates are:

$$\ell_0 = \left[ \begin{array}{cccc} 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{array} \right]_{17047616} = \left[ \begin{array}{cccc} 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{array} \right]_{17047616} = \mathbf{Pl}(0, 1, 0, 0, 0, 0)_1$$

$$\begin{aligned}
\ell_1 &= \begin{bmatrix} 1 & 1 & 0 & 1 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{274562} = \begin{bmatrix} 1 & 1 & 0 & 1 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{274562} = \mathbf{Pl}(0, 1, 1, 1, 1, 1)_{544642} \\
\ell_2 &= \begin{bmatrix} 1 & 0 & \epsilon^{36} & \epsilon^{27} \\ 0 & 1 & \epsilon^{13} & \epsilon^{19} \end{bmatrix}_{12401217} = \begin{bmatrix} 1 & 0 & 36 & 46 \\ 0 & 1 & 29 & 22 \end{bmatrix}_{12401217} = \mathbf{Pl}(16, 6, 47, 10, 43, 1)_{11740449} \\
\ell_3 &= \begin{bmatrix} 1 & 0 & \epsilon^9 & \epsilon^{54} \\ 0 & 1 & \epsilon^{26} & \epsilon^{38} \end{bmatrix}_{2861894} = \begin{bmatrix} 1 & 0 & 47 & 10 \\ 0 & 1 & 23 & 51 \end{bmatrix}_{2861894} = \mathbf{Pl}(39, 20, 11, 37, 27, 1)_{7408907} \\
\ell_4 &= \begin{bmatrix} 1 & 0 & \epsilon^{18} & \epsilon^{45} \\ 0 & 1 & \epsilon^{52} & \epsilon^{13} \end{bmatrix}_{9900925} = \begin{bmatrix} 1 & 0 & 11 & 37 \\ 0 & 1 & 50 & 29 \end{bmatrix}_{9900925} = \mathbf{Pl}(42, 55, 36, 46, 3, 1)_{1213868} \\
\ell_5 &= \begin{bmatrix} 1 & \epsilon^9 & 0 & \epsilon^{10} \\ 0 & 0 & 1 & \epsilon^{36} \end{bmatrix}_{16976851} = \begin{bmatrix} 1 & 47 & 0 & 63 \\ 0 & 0 & 1 & 36 \end{bmatrix}_{16976851} = \mathbf{Pl}(0, 2, 46, 36, 46, 1)_{12343958} \\
\ell_6 &= \begin{bmatrix} 1 & 0 & \epsilon^{18} & \epsilon^{45} \\ 0 & 1 & \epsilon^{38} & \epsilon^{41} \end{bmatrix}_{9900862} = \begin{bmatrix} 1 & 0 & 11 & 37 \\ 0 & 1 & 51 & 28 \end{bmatrix}_{9900862} = \mathbf{Pl}(4, 24, 36, 46, 38, 1)_{10388961} \\
\ell_7 &= \begin{bmatrix} 1 & \epsilon^{36} & 0 & \epsilon^5 \\ 0 & 0 & 1 & \epsilon^{18} \end{bmatrix}_{8675631} = \begin{bmatrix} 1 & 36 & 0 & 32 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{8675631} = \mathbf{Pl}(0, 26, 37, 11, 37, 1)_{9984119} \\
\ell_8 &= \begin{bmatrix} 1 & \epsilon^{18} & 0 & \epsilon^{20} \\ 0 & 0 & 1 & \epsilon^9 \end{bmatrix}_{11767290} = \begin{bmatrix} 1 & 11 & 0 & 44 \\ 0 & 0 & 1 & 47 \end{bmatrix}_{11767290} = \mathbf{Pl}(0, 4, 10, 47, 10, 1)_{2904508} \\
\ell_9 &= \begin{bmatrix} 1 & 0 & \epsilon^{36} & \epsilon^{27} \\ 0 & 1 & \epsilon^{41} & \epsilon^{26} \end{bmatrix}_{12401280} = \begin{bmatrix} 1 & 0 & 36 & 46 \\ 0 & 1 & 28 & 23 \end{bmatrix}_{12401280} = \mathbf{Pl}(26, 13, 47, 10, 5, 1)_{1782553} \\
\ell_{10} &= \begin{bmatrix} 1 & \epsilon^{18} & 0 & \epsilon^{34} \\ 0 & 0 & 1 & \epsilon^9 \end{bmatrix}_{2446650} = \begin{bmatrix} 1 & 11 & 0 & 9 \\ 0 & 0 & 1 & 47 \end{bmatrix}_{2446650} = \mathbf{Pl}(0, 42, 10, 47, 10, 1)_{2904546} \\
\ell_{11} &= \begin{bmatrix} 1 & 0 & \epsilon^9 & \epsilon^{54} \\ 0 & 1 & \epsilon^{19} & \epsilon^{52} \end{bmatrix}_{2861829} = \begin{bmatrix} 1 & 0 & 47 & 10 \\ 0 & 1 & 22 & 50 \end{bmatrix}_{2861829} = \mathbf{Pl}(2, 48, 11, 37, 17, 1)_{4788700} \\
\ell_{12} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & \epsilon^{21} & \epsilon^{21} \end{bmatrix}_{270009} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 57 & 57 \end{bmatrix}_{270009} = \mathbf{Pl}(1, 1, 1, 56, 1, 0)_{238649} \\
\ell_{13} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & \epsilon^{42} & \epsilon^{42} \end{bmatrix}_{269944} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 56 & 56 \end{bmatrix}_{269944} = \mathbf{Pl}(1, 1, 1, 57, 1, 0)_{242618} \\
\ell_{14} &= \begin{bmatrix} 1 & \epsilon^{36} & 0 & \epsilon^{40} \\ 0 & 0 & 1 & \epsilon^{18} \end{bmatrix}_{3882159} = \begin{bmatrix} 1 & 36 & 0 & 14 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{3882159} = \mathbf{Pl}(0, 16, 37, 11, 37, 1)_{9984109} \\
\ell_{15} &= \begin{bmatrix} 1 & \epsilon^9 & 0 & \epsilon^{17} \\ 0 & 0 & 1 & \epsilon^{36} \end{bmatrix}_{14313811} = \begin{bmatrix} 1 & 47 & 0 & 53 \\ 0 & 0 & 1 & 36 \end{bmatrix}_{14313811} = \mathbf{Pl}(0, 39, 46, 36, 46, 1)_{12343995}
\end{aligned}$$

Rank of lines: ( 17047616, 274562, 12401217, 2861894, 9900925, 16976851, 9900862, 8675631, 11767290, 12401280, 2446650, 2861829, 270009, 269944, 3882159, 14313811 )

Rank of points on Klein quadric: ( 1, 544642, 11740449, 7408907, 1213868, 12343958, 10388961, 9984119, 2904508, 1782553, 2904546, 4788700, 238649, 242618, 9984109, 12343995 )

### Eckardt Points

The surface has 3 Eckardt points:

$$\begin{aligned}
0 : P_{45121} &= \mathbf{P}(0, 0, \epsilon^{54}, 1) = \mathbf{P}(0, 0, 10, 1), \\
1 : P_{155713} &= \mathbf{P}(0, 0, \epsilon^{45}, 1) = \mathbf{P}(0, 0, 37, 1), \\
2 : P_{192577} &= \mathbf{P}(0, 0, \epsilon^{27}, 1) = \mathbf{P}(0, 0, 46, 1).
\end{aligned}$$

### Double Points

The surface has 29 Double points:

The double points on the surface are:

$$\begin{aligned}
P_{8258} &= (0, 0, 1, 1) = \ell_0 \cap \ell_1 \\
P_{249693} &= (28, 60, 59, 1) = \ell_2 \cap \ell_5 \\
P_{9503} &= (30, 19, 1, 1) = \ell_2 \cap \ell_7 \\
P_{106094} &= (45, 56, 24, 1) = \ell_2 \cap \ell_8 \\
P_{196709} &= (36, 0, 47, 1) = \ell_2 \cap \ell_9 \\
P_{10451} &= (18, 34, 1, 1) = \ell_3 \cap \ell_5 \\
P_{252567} &= (22, 41, 60, 1) = \ell_3 \cap \ell_8 \\
P_{49264} &= (47, 0, 11, 1) = \ell_3 \cap \ell_{11} \\
P_{32400} &= (15, 57, 6, 1) = \ell_3 \cap \ell_{14} \\
P_{151628} &= (11, 0, 36, 1) = \ell_4 \cap \ell_6 \\
P_{12068} &= (35, 59, 1, 1) = \ell_4 \cap \ell_8 \\
P_{174132} &= (51, 31, 41, 1) = \ell_4 \cap \ell_{14} \\
P_{89717} &= (52, 56, 20, 1) = \ell_4 \cap \ell_{15} \\
P_{204479} &= (62, 57, 48, 1) = \ell_5 \cap \ell_6 \\
P_{184107} &= (42, 59, 43, 1) = \ell_5 \cap \ell_{12}
\end{aligned}$$

$$\begin{aligned}
P_{147251} &= (50, 59, 34, 1) = \ell_6 \cap \ell_7 \\
P_{10281} &= (40, 31, 1, 1) = \ell_6 \cap \ell_{10} \\
P_{61026} &= (33, 56, 13, 1) = \ell_7 \cap \ell_{11} \\
P_{162024} &= (39, 34, 38, 1) = \ell_7 \cap \ell_{13} \\
P_{118619} &= (26, 60, 27, 1) = \ell_8 \cap \ell_{13} \\
P_{233097} &= (8, 57, 55, 1) = \ell_9 \cap \ell_{10} \\
P_{12155} &= (58, 60, 1, 1) = \ell_9 \cap \ell_{14} \\
P_{132382} &= (29, 19, 31, 1) = \ell_9 \cap \ell_{15} \\
P_{84184} &= (23, 34, 19, 1) = \ell_{10} \cap \ell_{11} \\
P_{75025} &= (16, 19, 17, 1) = \ell_{10} \cap \ell_{12} \\
P_{10942} &= (61, 41, 1, 1) = \ell_{11} \cap \ell_{15} \\
P_{4163} &= (1, 0, 0, 1) = \ell_{12} \cap \ell_{13} \\
P_{19075} &= (2, 41, 3, 1) = \ell_{12} \cap \ell_{14} \\
P_{26629} &= (4, 31, 5, 1) = \ell_{13} \cap \ell_{15}
\end{aligned}$$

### Single Points

The surface has 963 single points:  
The single points on the surface are:

$$\begin{aligned}
0 : P_2 &= (0, 0, 1, 0) \text{ lies on line } \ell_0 \\
1 : P_3 &= (0, 0, 0, 1) \text{ lies on line } \ell_0 \\
2 : P_{132} &= (1, 1, 1, 0) \text{ lies on line } \ell_1 \\
3 : P_{319} &= (60, 3, 1, 0) \text{ lies on line } \ell_2 \\
4 : P_{428} &= (41, 5, 1, 0) \text{ lies on line } \ell_3 \\
5 : P_{1186} &= (31, 17, 1, 0) \text{ lies on line } \ell_4 \\
6 : P_{1242} &= (23, 18, 1, 0) \text{ lies on line } \ell_5 \\
7 : P_{1854} &= (59, 27, 1, 0) \text{ lies on line } \ell_6 \\
8 : P_{2016} &= (29, 30, 1, 0) \text{ lies on line } \ell_7 \\
9 : P_{2357} &= (50, 35, 1, 0) \text{ lies on line } \ell_8 \\
10 : P_{2518} &= (19, 38, 1, 0) \text{ lies on line } \ell_9 \\
11 : P_{2678} &= (51, 40, 1, 0) \text{ lies on line } \ell_{10} \\
12 : P_{2853} &= (34, 43, 1, 0) \text{ lies on line } \ell_{11} \\
13 : P_{3652} &= (1, 56, 1, 0) \text{ lies on line } \ell_{12} \\
14 : P_{3716} &= (1, 57, 1, 0) \text{ lies on line } \ell_{13} \\
15 : P_{3807} &= (28, 58, 1, 0) \text{ lies on line } \ell_{14} \\
16 : P_{3993} &= (22, 61, 1, 0) \text{ lies on line } \ell_{15} \\
17 : P_{4227} &= (1, 1, 0, 1) \text{ lies on line } \ell_1 \\
18 : P_{4321} &= (31, 2, 0, 1) \text{ lies on line } \ell_{11} \\
19 : P_{4437} &= (19, 4, 0, 1) \text{ lies on line } \ell_6 \\
20 : P_{4584} &= (38, 6, 0, 1) \text{ lies on line } \ell_{14} \\
21 : P_{4997} &= (3, 13, 0, 1) \text{ lies on line } \ell_7 \\
22 : P_{5220} &= (34, 16, 0, 1) \text{ lies on line } \ell_2 \\
23 : P_{5485} &= (43, 20, 0, 1) \text{ lies on line } \ell_{15} \\
24 : P_{5715} &= (17, 24, 0, 1) \text{ lies on line } \ell_8 \\
25 : P_{5867} &= (41, 26, 0, 1) \text{ lies on line } \ell_9 \\
26 : P_{6717} &= (59, 39, 0, 1) \text{ lies on line } \ell_3 \\
27 : P_{6910} &= (60, 42, 0, 1) \text{ lies on line } \ell_4 \\
28 : P_{7239} &= (5, 48, 0, 1) \text{ lies on line } \ell_5 \\
29 : P_{7709} &= (27, 55, 0, 1) \text{ lies on line } \ell_{10} \\
30 : P_{11841} &= (0, 56, 1, 1) \text{ lies on line } \ell_{12} \\
31 : P_{11905} &= (0, 57, 1, 1) \text{ lies on line } \ell_{13}
\end{aligned}$$

$$\begin{aligned}
32 : P_{12353} &= (0, 0, 2, 1) \text{ lies on line } \ell_0 \\
33 : P_{12548} &= (3, 3, 2, 1) \text{ lies on line } \ell_1 \\
34 : P_{12765} &= (28, 6, 2, 1) \text{ lies on line } \ell_{10} \\
35 : P_{12867} &= (2, 8, 2, 1) \text{ lies on line } \ell_4 \\
36 : P_{13320} &= (7, 15, 2, 1) \text{ lies on line } \ell_{15} \\
37 : P_{13444} &= (3, 17, 2, 1) \text{ lies on line } \ell_{12} \\
38 : P_{13572} &= (3, 19, 2, 1) \text{ lies on line } \ell_{13} \\
39 : P_{13599} &= (30, 19, 2, 1) \text{ lies on line } \ell_{14} \\
40 : P_{13676} &= (43, 20, 2, 1) \text{ lies on line } \ell_5 \\
41 : P_{13820} &= (59, 22, 2, 1) \text{ lies on line } \ell_2 \\
42 : P_{15241} &= (8, 45, 2, 1) \text{ lies on line } \ell_3 \\
43 : P_{15546} &= (57, 49, 2, 1) \text{ lies on line } \ell_7 \\
44 : P_{15557} &= (4, 50, 2, 1) \text{ lies on line } \ell_6 \\
45 : P_{15803} &= (58, 53, 2, 1) \text{ lies on line } \ell_{11} \\
46 : P_{15888} &= (15, 55, 2, 1) \text{ lies on line } \ell_9 \\
47 : P_{16405} &= (20, 63, 2, 1) \text{ lies on line } \ell_8 \\
48 : P_{16449} &= (0, 0, 3, 1) \text{ lies on line } \ell_0 \\
49 : P_{16579} &= (2, 2, 3, 1) \text{ lies on line } \ell_1 \\
50 : P_{16893} &= (60, 6, 3, 1) \text{ lies on line } \ell_5 \\
51 : P_{17565} &= (28, 17, 3, 1) \text{ lies on line } \ell_9 \\
52 : P_{17800} &= (7, 21, 3, 1) \text{ lies on line } \ell_2 \\
53 : P_{18078} &= (29, 25, 3, 1) \text{ lies on line } \ell_4 \\
54 : P_{18279} &= (38, 28, 3, 1) \text{ lies on line } \ell_8 \\
55 : P_{18393} &= (24, 30, 3, 1) \text{ lies on line } \ell_{11} \\
56 : P_{19042} &= (33, 40, 3, 1) \text{ lies on line } \ell_3 \\
57 : P_{19136} &= (63, 41, 3, 1) \text{ lies on line } \ell_6 \\
58 : P_{19139} &= (2, 42, 3, 1) \text{ lies on line } \ell_{13} \\
59 : P_{19440} &= (47, 46, 3, 1) \text{ lies on line } \ell_{10} \\
60 : P_{19493} &= (36, 47, 3, 1) \text{ lies on line } \ell_7 \\
61 : P_{19666} &= (17, 50, 3, 1) \text{ lies on line } \ell_{15} \\
62 : P_{20545} &= (0, 0, 4, 1) \text{ lies on line } \ell_0 \\
63 : P_{20870} &= (5, 5, 4, 1) \text{ lies on line } \ell_1
\end{aligned}$$

- 64 :  $P_{21182} = (61, 9, 4, 1)$  lies on line  $\ell_6$   
 65 :  $P_{21429} = (52, 13, 4, 1)$  lies on line  $\ell_{11}$   
 66 :  $P_{21538} = (33, 15, 4, 1)$  lies on line  $\ell_4$   
 67 :  $P_{21847} = (22, 20, 4, 1)$  lies on line  $\ell_7$   
 68 :  $P_{22201} = (56, 25, 4, 1)$  lies on line  $\ell_5$   
 69 :  $P_{22353} = (16, 28, 4, 1)$  lies on line  $\ell_2$   
 70 :  $P_{22661} = (4, 33, 4, 1)$  lies on line  $\ell_9$   
 71 :  $P_{22726} = (5, 34, 4, 1)$  lies on line  $\ell_{12}$   
 72 :  $P_{22739} = (18, 34, 4, 1)$  lies on line  $\ell_{15}$   
 73 :  $P_{22982} = (5, 38, 4, 1)$  lies on line  $\ell_{13}$   
 74 :  $P_{23416} = (55, 44, 4, 1)$  lies on line  $\ell_{14}$   
 75 :  $P_{23869} = (60, 51, 4, 1)$  lies on line  $\ell_3$   
 76 :  $P_{23894} = (21, 52, 4, 1)$  lies on line  $\ell_{10}$   
 77 :  $P_{24092} = (27, 55, 4, 1)$  lies on line  $\ell_8$   
 78 :  $P_{24641} = (0, 0, 5, 1)$  lies on line  $\ell_0$   
 79 :  $P_{24901} = (4, 4, 5, 1)$  lies on line  $\ell_1$   
 80 :  $P_{25112} = (23, 7, 5, 1)$  lies on line  $\ell_9$   
 81 :  $P_{25292} = (11, 10, 5, 1)$  lies on line  $\ell_7$   
 82 :  $P_{25392} = (47, 11, 5, 1)$  lies on line  $\ell_5$   
 83 :  $P_{25799} = (6, 18, 5, 1)$  lies on line  $\ell_6$   
 84 :  $P_{25962} = (41, 20, 5, 1)$  lies on line  $\ell_8$   
 85 :  $P_{26092} = (43, 22, 5, 1)$  lies on line  $\ell_{14}$   
 86 :  $P_{26309} = (4, 26, 5, 1)$  lies on line  $\ell_{12}$   
 87 :  $P_{26471} = (38, 28, 5, 1)$  lies on line  $\ell_{10}$   
 88 :  $P_{26623} = (62, 30, 5, 1)$  lies on line  $\ell_4$   
 89 :  $P_{26669} = (44, 31, 5, 1)$  lies on line  $\ell_2$   
 90 :  $P_{27095} = (22, 38, 5, 1)$  lies on line  $\ell_{11}$   
 91 :  $P_{28118} = (21, 54, 5, 1)$  lies on line  $\ell_3$   
 92 :  $P_{28737} = (0, 0, 6, 1)$  lies on line  $\ell_0$   
 93 :  $P_{29075} = (18, 5, 6, 1)$  lies on line  $\ell_{10}$   
 94 :  $P_{29192} = (7, 7, 6, 1)$  lies on line  $\ell_1$   
 95 :  $P_{29539} = (34, 12, 6, 1)$  lies on line  $\ell_9$   
 96 :  $P_{29791} = (30, 16, 6, 1)$  lies on line  $\ell_8$   
 97 :  $P_{30410} = (9, 26, 6, 1)$  lies on line  $\ell_2$   
 98 :  $P_{31341} = (44, 40, 6, 1)$  lies on line  $\ell_7$   
 99 :  $P_{31648} = (31, 45, 6, 1)$  lies on line  $\ell_4$   
 100 :  $P_{32008} = (7, 51, 6, 1)$  lies on line  $\ell_{12}$   
 101 :  $P_{32136} = (7, 53, 6, 1)$  lies on line  $\ell_{13}$   
 102 :  $P_{32447} = (62, 57, 6, 1)$  lies on line  $\ell_{15}$   
 103 :  $P_{32466} = (17, 58, 6, 1)$  lies on line  $\ell_{11}$   
 104 :  $P_{32663} = (22, 61, 6, 1)$  lies on line  $\ell_5$   
 105 :  $P_{32811} = (42, 63, 6, 1)$  lies on line  $\ell_6$   
 106 :  $P_{32833} = (0, 0, 7, 1)$  lies on line  $\ell_0$   
 107 :  $P_{33044} = (19, 3, 7, 1)$  lies on line  $\ell_{14}$   
 108 :  $P_{33129} = (40, 4, 7, 1)$  lies on line  $\ell_{15}$   
 109 :  $P_{33223} = (6, 6, 7, 1)$  lies on line  $\ell_1$   
 110 :  $P_{33543} = (6, 11, 7, 1)$  lies on line  $\ell_{12}$   
 111 :  $P_{33607} = (6, 12, 7, 1)$  lies on line  $\ell_{13}$   
 112 :  $P_{33972} = (51, 17, 7, 1)$  lies on line  $\ell_{11}$   
 113 :  $P_{34486} = (53, 25, 7, 1)$  lies on line  $\ell_2$   
 114 :  $P_{35154} = (17, 36, 7, 1)$  lies on line  $\ell_6$   
 115 :  $P_{35570} = (49, 42, 7, 1)$  lies on line  $\ell_9$   
 116 :  $P_{35746} = (33, 45, 7, 1)$  lies on line  $\ell_{10}$   
 117 :  $P_{35842} = (1, 47, 7, 1)$  lies on line  $\ell_5$   
 118 :  $P_{36141} = (44, 51, 7, 1)$  lies on line  $\ell_8$   
 119 :  $P_{36338} = (49, 54, 7, 1)$  lies on line  $\ell_7$   
 120 :  $P_{36673} = (0, 60, 7, 1)$  lies on line  $\ell_4$   
 121 :  $P_{36711} = (38, 60, 7, 1)$  lies on line  $\ell_3$   
 122 :  $P_{36929} = (0, 0, 8, 1)$  lies on line  $\ell_0$   
 123 :  $P_{36999} = (6, 1, 8, 1)$  lies on line  $\ell_4$   
 124 :  $P_{37151} = (30, 3, 8, 1)$  lies on line  $\ell_5$   
 125 :  $P_{37480} = (39, 8, 8, 1)$  lies on line  $\ell_2$   
 126 :  $P_{37514} = (9, 9, 8, 1)$  lies on line  $\ell_1$   
 127 :  $P_{37779} = (18, 13, 8, 1)$  lies on line  $\ell_9$   
 128 :  $P_{37942} = (53, 15, 8, 1)$  lies on line  $\ell_3$   
 129 :  $P_{38585} = (56, 25, 8, 1)$  lies on line  $\ell_{15}$   
 130 :  $P_{38761} = (40, 28, 8, 1)$  lies on line  $\ell_{11}$   
 131 :  $P_{38895} = (46, 30, 8, 1)$  lies on line  $\ell_6$   
 132 :  $P_{39306} = (9, 37, 8, 1)$  lies on line  $\ell_{12}$   
 133 :  $P_{39430} = (5, 39, 8, 1)$  lies on line  $\ell_8$   
 134 :  $P_{39818} = (9, 45, 8, 1)$  lies on line  $\ell_{13}$   
 135 :  $P_{40072} = (7, 49, 8, 1)$  lies on line  $\ell_{10}$   
 136 :  $P_{40197} = (4, 51, 8, 1)$  lies on line  $\ell_{14}$   
 137 :  $P_{41002} = (41, 63, 8, 1)$  lies on line  $\ell_7$   
 138 :  $P_{41025} = (0, 0, 9, 1)$  lies on line  $\ell_0$   
 139 :  $P_{41336} = (55, 4, 9, 1)$  lies on line  $\ell_8$   
 140 :  $P_{41366} = (21, 5, 9, 1)$  lies on line  $\ell_6$   
 141 :  $P_{41545} = (8, 8, 9, 1)$  lies on line  $\ell_1$   
 142 :  $P_{41625} = (24, 9, 9, 1)$  lies on line  $\ell_{14}$   
 143 :  $P_{41693} = (28, 10, 9, 1)$  lies on line  $\ell_3$   
 144 :  $P_{41756} = (27, 11, 9, 1)$  lies on line  $\ell_2$   
 145 :  $P_{42074} = (25, 16, 9, 1)$  lies on line  $\ell_4$   
 146 :  $P_{42122} = (9, 17, 9, 1)$  lies on line  $\ell_5$   
 147 :  $P_{42313} = (8, 20, 9, 1)$  lies on line  $\ell_{13}$   
 148 :  $P_{42677} = (52, 25, 9, 1)$  lies on line  $\ell_{10}$   
 149 :  $P_{42889} = (8, 29, 9, 1)$  lies on line  $\ell_{12}$   
 150 :  $P_{43189} = (52, 33, 9, 1)$  lies on line  $\ell_7$   
 151 :  $P_{43375} = (46, 36, 9, 1)$  lies on line  $\ell_{15}$   
 152 :  $P_{43778} = (1, 43, 9, 1)$  lies on line  $\ell_9$   
 153 :  $P_{44555} = (10, 55, 9, 1)$  lies on line  $\ell_{11}$   
 154 :  $P_{45269} = (20, 2, 10, 1)$  lies on line  $\ell_{15}$   
 155 :  $P_{45332} = (19, 3, 10, 1)$  lies on line  $\ell_7$   
 156 :  $P_{45447} = (6, 5, 10, 1)$  lies on line  $\ell_3$   
 157 :  $P_{45836} = (11, 11, 10, 1)$  lies on line  $\ell_1$   
 158 :  $P_{46079} = (62, 14, 10, 1)$  lies on line  $\ell_2$   
 159 :  $P_{47221} = (52, 32, 10, 1)$  lies on line  $\ell_9$   
 160 :  $P_{47417} = (56, 35, 10, 1)$  lies on line  $\ell_4$   
 161 :  $P_{47613} = (60, 38, 10, 1)$  lies on line  $\ell_{14}$   
 162 :  $P_{47665} = (48, 39, 10, 1)$  lies on line  $\ell_5$   
 163 :  $P_{47738} = (57, 40, 10, 1)$  lies on line  $\ell_6$   
 164 :  $P_{47886} = (13, 43, 10, 1)$  lies on line  $\ell_{11}$   
 165 :  $P_{48460} = (11, 52, 10, 1)$  lies on line  $\ell_{12}$   
 166 :  $P_{49100} = (11, 62, 10, 1)$  lies on line  $\ell_{13}$   
 167 :  $P_{49217} = (0, 0, 11, 1)$  lies on line  $\ell_0$   
 168 :  $P_{49640} = (39, 6, 11, 1)$  lies on line  $\ell_9$   
 169 :  $P_{49675} = (10, 7, 11, 1)$  lies on line  $\ell_{13}$   
 170 :  $P_{49867} = (10, 10, 11, 1)$  lies on line  $\ell_1$   
 171 :  $P_{49995} = (10, 12, 11, 1)$  lies on line  $\ell_{12}$

172 :  $P_{50051} = (2, 13, 11, 1)$  lies on line  $\ell_2$   
173 :  $P_{51041} = (32, 28, 11, 1)$  lies on line  $\ell_{14}$   
174 :  $P_{51087} = (14, 29, 11, 1)$  lies on line  $\ell_7$   
175 :  $P_{51507} = (50, 35, 11, 1)$  lies on line  $\ell_8$   
176 :  $P_{51828} = (51, 40, 11, 1)$  lies on line  $\ell_{10}$   
177 :  $P_{52456} = (39, 50, 11, 1)$  lies on line  $\ell_4$   
178 :  $P_{52483} = (2, 51, 11, 1)$  lies on line  $\ell_6$   
179 :  $P_{52648} = (39, 53, 11, 1)$  lies on line  $\ell_5$   
180 :  $P_{53251} = (2, 63, 11, 1)$  lies on line  $\ell_{15}$   
181 :  $P_{53313} = (0, 0, 12, 1)$  lies on line  $\ell_0$   
182 :  $P_{53590} = (21, 4, 12, 1)$  lies on line  $\ell_2$   
183 :  $P_{53774} = (13, 7, 12, 1)$  lies on line  $\ell_{12}$   
184 :  $P_{53840} = (15, 8, 12, 1)$  lies on line  $\ell_8$   
185 :  $P_{54030} = (13, 11, 12, 1)$  lies on line  $\ell_{13}$   
186 :  $P_{54158} = (13, 13, 12, 1)$  lies on line  $\ell_1$   
187 :  $P_{54529} = (0, 19, 12, 1)$  lies on line  $\ell_6$   
188 :  $P_{54532} = (3, 19, 12, 1)$  lies on line  $\ell_{11}$   
189 :  $P_{54934} = (21, 25, 12, 1)$  lies on line  $\ell_{14}$   
190 :  $P_{55091} = (50, 27, 12, 1)$  lies on line  $\ell_3$   
191 :  $P_{55644} = (27, 36, 12, 1)$  lies on line  $\ell_4$   
192 :  $P_{55805} = (60, 38, 12, 1)$  lies on line  $\ell_7$   
193 :  $P_{56036} = (35, 42, 12, 1)$  lies on line  $\ell_5$   
194 :  $P_{56322} = (1, 47, 12, 1)$  lies on line  $\ell_{15}$   
195 :  $P_{56522} = (9, 50, 12, 1)$  lies on line  $\ell_{10}$   
196 :  $P_{56832} = (63, 54, 12, 1)$  lies on line  $\ell_9$   
197 :  $P_{57409} = (0, 0, 13, 1)$  lies on line  $\ell_0$   
198 :  $P_{57898} = (41, 7, 13, 1)$  lies on line  $\ell_2$   
199 :  $P_{57980} = (59, 8, 13, 1)$  lies on line  $\ell_6$   
200 :  $P_{58189} = (12, 12, 13, 1)$  lies on line  $\ell_1$   
201 :  $P_{58477} = (44, 16, 13, 1)$  lies on line  $\ell_9$   
202 :  $P_{58584} = (23, 18, 13, 1)$  lies on line  $\ell_{15}$   
203 :  $P_{59131} = (58, 26, 13, 1)$  lies on line  $\ell_{10}$   
204 :  $P_{59356} = (27, 30, 13, 1)$  lies on line  $\ell_3$   
205 :  $P_{59658} = (9, 35, 13, 1)$  lies on line  $\ell_{14}$   
206 :  $P_{60222} = (61, 43, 13, 1)$  lies on line  $\ell_8$   
207 :  $P_{60621} = (12, 50, 13, 1)$  lies on line  $\ell_{13}$   
208 :  $P_{60805} = (4, 53, 13, 1)$  lies on line  $\ell_4$   
209 :  $P_{61045} = (52, 56, 13, 1)$  lies on line  $\ell_5$   
210 :  $P_{61453} = (12, 63, 13, 1)$  lies on line  $\ell_{12}$   
211 :  $P_{61505} = (0, 0, 14, 1)$  lies on line  $\ell_0$   
212 :  $P_{61645} = (12, 2, 14, 1)$  lies on line  $\ell_2$   
213 :  $P_{61711} = (14, 3, 14, 1)$  lies on line  $\ell_{10}$   
214 :  $P_{61926} = (37, 6, 14, 1)$  lies on line  $\ell_4$   
215 :  $P_{62318} = (45, 12, 14, 1)$  lies on line  $\ell_{14}$   
216 :  $P_{62414} = (13, 14, 14, 1)$  lies on line  $\ell_5$   
217 :  $P_{62480} = (15, 15, 14, 1)$  lies on line  $\ell_1$   
218 :  $P_{62594} = (1, 17, 14, 1)$  lies on line  $\ell_3$   
219 :  $P_{62928} = (15, 22, 14, 1)$  lies on line  $\ell_{12}$   
220 :  $P_{63056} = (15, 24, 14, 1)$  lies on line  $\ell_{13}$   
221 :  $P_{63175} = (6, 26, 14, 1)$  lies on line  $\ell_7$   
222 :  $P_{63258} = (25, 27, 14, 1)$  lies on line  $\ell_9$   
223 :  $P_{63847} = (38, 36, 14, 1)$  lies on line  $\ell_{11}$   
224 :  $P_{63896} = (23, 37, 14, 1)$  lies on line  $\ell_6$   
225 :  $P_{64523} = (10, 47, 14, 1)$  lies on line  $\ell_8$   
226 :  $P_{64878} = (45, 52, 14, 1)$  lies on line  $\ell_{15}$   
227 :  $P_{65601} = (0, 0, 15, 1)$  lies on line  $\ell_0$   
228 :  $P_{65713} = (48, 1, 15, 1)$  lies on line  $\ell_2$   
229 :  $P_{65884} = (27, 4, 15, 1)$  lies on line  $\ell_7$   
230 :  $P_{66236} = (59, 9, 15, 1)$  lies on line  $\ell_{15}$   
231 :  $P_{66425} = (56, 12, 15, 1)$  lies on line  $\ell_8$   
232 :  $P_{66511} = (14, 14, 15, 1)$  lies on line  $\ell_1$   
233 :  $P_{66565} = (4, 15, 15, 1)$  lies on line  $\ell_{11}$   
234 :  $P_{66921} = (40, 20, 15, 1)$  lies on line  $\ell_3$   
235 :  $P_{67131} = (58, 23, 15, 1)$  lies on line  $\ell_4$   
236 :  $P_{67419} = (26, 28, 15, 1)$  lies on line  $\ell_5$   
237 :  $P_{67727} = (14, 33, 15, 1)$  lies on line  $\ell_{13}$   
238 :  $P_{68414} = (61, 43, 15, 1)$  lies on line  $\ell_{10}$   
239 :  $P_{68559} = (14, 46, 15, 1)$  lies on line  $\ell_{12}$   
240 :  $P_{69106} = (49, 54, 15, 1)$  lies on line  $\ell_{14}$   
241 :  $P_{69515} = (10, 61, 15, 1)$  lies on line  $\ell_9$   
242 :  $P_{69613} = (44, 62, 15, 1)$  lies on line  $\ell_6$   
243 :  $P_{69697} = (0, 0, 16, 1)$  lies on line  $\ell_0$   
244 :  $P_{70202} = (57, 7, 16, 1)$  lies on line  $\ell_8$   
245 :  $P_{70263} = (54, 8, 16, 1)$  lies on line  $\ell_7$   
246 :  $P_{70532} = (3, 13, 16, 1)$  lies on line  $\ell_{14}$   
247 :  $P_{70606} = (13, 14, 16, 1)$  lies on line  $\ell_{15}$   
248 :  $P_{70802} = (17, 17, 16, 1)$  lies on line  $\ell_1$   
249 :  $P_{71144} = (39, 22, 16, 1)$  lies on line  $\ell_3$   
250 :  $P_{71594} = (41, 29, 16, 1)$  lies on line  $\ell_4$   
251 :  $P_{71785} = (40, 32, 16, 1)$  lies on line  $\ell_2$   
252 :  $P_{72466} = (17, 43, 16, 1)$  lies on line  $\ell_{12}$   
253 :  $P_{72777} = (8, 48, 16, 1)$  lies on line  $\ell_6$   
254 :  $P_{73087} = (62, 52, 16, 1)$  lies on line  $\ell_9$   
255 :  $P_{73268} = (51, 55, 16, 1)$  lies on line  $\ell_5$   
256 :  $P_{73490} = (17, 59, 16, 1)$  lies on line  $\ell_{13}$   
257 :  $P_{73508} = (35, 59, 16, 1)$  lies on line  $\ell_{10}$   
258 :  $P_{73681} = (16, 62, 16, 1)$  lies on line  $\ell_{11}$   
259 :  $P_{73793} = (0, 0, 17, 1)$  lies on line  $\ell_0$   
260 :  $P_{73937} = (16, 2, 17, 1)$  lies on line  $\ell_{13}$   
261 :  $P_{74615} = (54, 12, 17, 1)$  lies on line  $\ell_4$   
262 :  $P_{74833} = (16, 16, 17, 1)$  lies on line  $\ell_1$   
263 :  $P_{74990} = (45, 18, 17, 1)$  lies on line  $\ell_9$   
264 :  $P_{75023} = (14, 19, 17, 1)$  lies on line  $\ell_3$   
265 :  $P_{75187} = (50, 21, 17, 1)$  lies on line  $\ell_{11}$   
266 :  $P_{75244} = (43, 22, 17, 1)$  lies on line  $\ell_7$   
267 :  $P_{76053} = (20, 35, 17, 1)$  lies on line  $\ell_2$   
268 :  $P_{76108} = (11, 36, 17, 1)$  lies on line  $\ell_8$   
269 :  $P_{76197} = (36, 37, 17, 1)$  lies on line  $\ell_5$   
270 :  $P_{76596} = (51, 43, 17, 1)$  lies on line  $\ell_6$   
271 :  $P_{77084} = (27, 51, 17, 1)$  lies on line  $\ell_{15}$   
272 :  $P_{77344} = (31, 55, 17, 1)$  lies on line  $\ell_{14}$   
273 :  $P_{77889} = (0, 0, 18, 1)$  lies on line  $\ell_0$   
274 :  $P_{78304} = (31, 6, 18, 1)$  lies on line  $\ell_6$   
275 :  $P_{78518} = (53, 9, 18, 1)$  lies on line  $\ell_{11}$   
276 :  $P_{78565} = (36, 10, 18, 1)$  lies on line  $\ell_{10}$   
277 :  $P_{79124} = (19, 19, 18, 1)$  lies on line  $\ell_1$   
278 :  $P_{79134} = (29, 19, 18, 1)$  lies on line  $\ell_5$   
279 :  $P_{79266} = (33, 21, 18, 1)$  lies on line  $\ell_{15}$

280 :  $P_{79484} = (59, 24, 18, 1)$  lies on line  $\ell_{14}$   
 281 :  $P_{79513} = (24, 25, 18, 1)$  lies on line  $\ell_9$   
 282 :  $P_{79701} = (20, 28, 18, 1)$  lies on line  $\ell_3$   
 283 :  $P_{79997} = (60, 32, 18, 1)$  lies on line  $\ell_8$   
 284 :  $P_{80370} = (49, 38, 18, 1)$  lies on line  $\ell_2$   
 285 :  $P_{80468} = (19, 40, 18, 1)$  lies on line  $\ell_{13}$   
 286 :  $P_{81229} = (12, 52, 18, 1)$  lies on line  $\ell_7$   
 287 :  $P_{81620} = (19, 58, 18, 1)$  lies on line  $\ell_{12}$   
 288 :  $P_{81944} = (23, 63, 18, 1)$  lies on line  $\ell_4$   
 289 :  $P_{81985} = (0, 0, 19, 1)$  lies on line  $\ell_0$   
 290 :  $P_{82059} = (10, 1, 19, 1)$  lies on line  $\ell_5$   
 291 :  $P_{82131} = (18, 2, 19, 1)$  lies on line  $\ell_{12}$   
 292 :  $P_{82191} = (14, 3, 19, 1)$  lies on line  $\ell_8$   
 293 :  $P_{83091} = (18, 17, 19, 1)$  lies on line  $\ell_{13}$   
 294 :  $P_{83155} = (18, 18, 19, 1)$  lies on line  $\ell_1$   
 295 :  $P_{83646} = (61, 25, 19, 1)$  lies on line  $\ell_3$   
 296 :  $P_{83877} = (36, 29, 19, 1)$  lies on line  $\ell_6$   
 297 :  $P_{84200} = (39, 34, 19, 1)$  lies on line  $\ell_{14}$   
 298 :  $P_{84366} = (13, 37, 19, 1)$  lies on line  $\ell_2$   
 299 :  $P_{84600} = (55, 40, 19, 1)$  lies on line  $\ell_{15}$   
 300 :  $P_{84690} = (17, 42, 19, 1)$  lies on line  $\ell_7$   
 301 :  $P_{84937} = (8, 46, 19, 1)$  lies on line  $\ell_4$   
 302 :  $P_{86028} = (11, 63, 19, 1)$  lies on line  $\ell_9$   
 303 :  $P_{86081} = (0, 0, 20, 1)$  lies on line  $\ell_0$   
 304 :  $P_{86241} = (32, 2, 20, 1)$  lies on line  $\ell_3$   
 305 :  $P_{86678} = (21, 9, 20, 1)$  lies on line  $\ell_{12}$   
 306 :  $P_{87060} = (19, 15, 20, 1)$  lies on line  $\ell_9$   
 307 :  $P_{87204} = (35, 17, 20, 1)$  lies on line  $\ell_7$   
 308 :  $P_{87446} = (21, 21, 20, 1)$  lies on line  $\ell_1$   
 309 :  $P_{87958} = (21, 29, 20, 1)$  lies on line  $\ell_{13}$   
 310 :  $P_{88015} = (14, 30, 20, 1)$  lies on line  $\ell_5$   
 311 :  $P_{88595} = (18, 39, 20, 1)$  lies on line  $\ell_{14}$   
 312 :  $P_{88692} = (51, 40, 20, 1)$  lies on line  $\ell_8$   
 313 :  $P_{88923} = (26, 44, 20, 1)$  lies on line  $\ell_2$   
 314 :  $P_{89276} = (59, 49, 20, 1)$  lies on line  $\ell_{11}$   
 315 :  $P_{89710} = (45, 56, 20, 1)$  lies on line  $\ell_{10}$   
 316 :  $P_{90023} = (38, 61, 20, 1)$  lies on line  $\ell_6$   
 317 :  $P_{90177} = (0, 0, 21, 1)$  lies on line  $\ell_0$   
 318 :  $P_{90531} = (34, 5, 21, 1)$  lies on line  $\ell_{15}$   
 319 :  $P_{90634} = (9, 7, 21, 1)$  lies on line  $\ell_3$   
 320 :  $P_{90882} = (1, 11, 21, 1)$  lies on line  $\ell_8$   
 321 :  $P_{90970} = (25, 12, 21, 1)$  lies on line  $\ell_5$   
 322 :  $P_{91199} = (62, 15, 21, 1)$  lies on line  $\ell_7$   
 323 :  $P_{91231} = (30, 16, 21, 1)$  lies on line  $\ell_{10}$   
 324 :  $P_{91477} = (20, 20, 21, 1)$  lies on line  $\ell_1$   
 325 :  $P_{91866} = (25, 26, 21, 1)$  lies on line  $\ell_{11}$   
 326 :  $P_{92047} = (14, 29, 21, 1)$  lies on line  $\ell_{14}$   
 327 :  $P_{92501} = (20, 36, 21, 1)$  lies on line  $\ell_{13}$   
 328 :  $P_{92638} = (29, 38, 21, 1)$  lies on line  $\ell_6$   
 329 :  $P_{92801} = (0, 41, 21, 1)$  lies on line  $\ell_9$   
 330 :  $P_{92844} = (43, 41, 21, 1)$  lies on line  $\ell_4$   
 331 :  $P_{93223} = (38, 47, 21, 1)$  lies on line  $\ell_2$   
 332 :  $P_{93333} = (20, 49, 21, 1)$  lies on line  $\ell_{12}$   
 333 :  $P_{94273} = (0, 0, 22, 1)$  lies on line  $\ell_0$

334 :  $P_{94687} = (30, 6, 22, 1)$  lies on line  $\ell_{11}$   
 335 :  $P_{94804} = (19, 8, 22, 1)$  lies on line  $\ell_3$   
 336 :  $P_{94891} = (42, 9, 22, 1)$  lies on line  $\ell_{10}$   
 337 :  $P_{95026} = (49, 11, 22, 1)$  lies on line  $\ell_6$   
 338 :  $P_{95192} = (23, 14, 22, 1)$  lies on line  $\ell_{13}$   
 339 :  $P_{95287} = (54, 15, 22, 1)$  lies on line  $\ell_8$   
 340 :  $P_{95768} = (23, 23, 22, 1)$  lies on line  $\ell_1$   
 341 :  $P_{95832} = (23, 24, 22, 1)$  lies on line  $\ell_{12}$   
 342 :  $P_{95947} = (10, 26, 22, 1)$  lies on line  $\ell_4$   
 343 :  $P_{96502} = (53, 34, 22, 1)$  lies on line  $\ell_9$   
 344 :  $P_{96537} = (24, 35, 22, 1)$  lies on line  $\ell_{15}$   
 345 :  $P_{96964} = (3, 42, 22, 1)$  lies on line  $\ell_2$   
 346 :  $P_{97178} = (25, 45, 22, 1)$  lies on line  $\ell_7$   
 347 :  $P_{97515} = (42, 50, 22, 1)$  lies on line  $\ell_{14}$   
 348 :  $P_{98017} = (32, 58, 22, 1)$  lies on line  $\ell_5$   
 349 :  $P_{98369} = (0, 0, 23, 1)$  lies on line  $\ell_0$   
 350 :  $P_{98663} = (38, 4, 23, 1)$  lies on line  $\ell_9$   
 351 :  $P_{98935} = (54, 8, 23, 1)$  lies on line  $\ell_{14}$   
 352 :  $P_{99094} = (21, 11, 23, 1)$  lies on line  $\ell_4$   
 353 :  $P_{99259} = (58, 13, 23, 1)$  lies on line  $\ell_3$   
 354 :  $P_{99403} = (10, 16, 23, 1)$  lies on line  $\ell_6$   
 355 :  $P_{99799} = (22, 22, 23, 1)$  lies on line  $\ell_1$   
 356 :  $P_{100303} = (14, 30, 23, 1)$  lies on line  $\ell_{15}$   
 357 :  $P_{100439} = (22, 32, 23, 1)$  lies on line  $\ell_{12}$   
 358 :  $P_{100506} = (25, 33, 23, 1)$  lies on line  $\ell_{10}$   
 359 :  $P_{100984} = (55, 40, 23, 1)$  lies on line  $\ell_5$   
 360 :  $P_{101056} = (63, 41, 23, 1)$  lies on line  $\ell_2$   
 361 :  $P_{101189} = (4, 44, 23, 1)$  lies on line  $\ell_8$   
 362 :  $P_{101309} = (60, 45, 23, 1)$  lies on line  $\ell_{11}$   
 363 :  $P_{101637} = (4, 51, 23, 1)$  lies on line  $\ell_7$   
 364 :  $P_{101911} = (22, 55, 23, 1)$  lies on line  $\ell_{13}$   
 365 :  $P_{102465} = (0, 0, 24, 1)$  lies on line  $\ell_0$   
 366 :  $P_{102687} = (30, 3, 24, 1)$  lies on line  $\ell_{15}$   
 367 :  $P_{102761} = (40, 4, 24, 1)$  lies on line  $\ell_5$   
 368 :  $P_{103386} = (25, 14, 24, 1)$  lies on line  $\ell_{12}$   
 369 :  $P_{103898} = (25, 22, 24, 1)$  lies on line  $\ell_{13}$   
 370 :  $P_{104090} = (25, 25, 24, 1)$  lies on line  $\ell_1$   
 371 :  $P_{104552} = (39, 32, 24, 1)$  lies on line  $\ell_{11}$   
 372 :  $P_{104710} = (5, 35, 24, 1)$  lies on line  $\ell_9$   
 373 :  $P_{105206} = (53, 42, 24, 1)$  lies on line  $\ell_6$   
 374 :  $P_{105940} = (19, 54, 24, 1)$  lies on line  $\ell_4$   
 375 :  $P_{106082} = (33, 56, 24, 1)$  lies on line  $\ell_{14}$   
 376 :  $P_{106205} = (28, 58, 24, 1)$  lies on line  $\ell_7$   
 377 :  $P_{106432} = (63, 61, 24, 1)$  lies on line  $\ell_{10}$   
 378 :  $P_{106474} = (41, 62, 24, 1)$  lies on line  $\ell_3$   
 379 :  $P_{106561} = (0, 0, 25, 1)$  lies on line  $\ell_0$   
 380 :  $P_{106750} = (61, 2, 25, 1)$  lies on line  $\ell_{14}$   
 381 :  $P_{106903} = (22, 5, 25, 1)$  lies on line  $\ell_9$   
 382 :  $P_{107270} = (5, 11, 25, 1)$  lies on line  $\ell_{11}$   
 383 :  $P_{107917} = (12, 21, 25, 1)$  lies on line  $\ell_{10}$   
 384 :  $P_{108032} = (63, 22, 25, 1)$  lies on line  $\ell_5$   
 385 :  $P_{108121} = (24, 24, 25, 1)$  lies on line  $\ell_1$   
 386 :  $P_{108320} = (31, 27, 25, 1)$  lies on line  $\ell_8$   
 387 :  $P_{108866} = (1, 36, 25, 1)$  lies on line  $\ell_7$

388 :  $P_{109069} = (12, 39, 25, 1)$  lies on line  $\ell_4$   
 389 :  $P_{109593} = (24, 47, 25, 1)$  lies on line  $\ell_{13}$   
 390 :  $P_{109711} = (14, 49, 25, 1)$  lies on line  $\ell_6$   
 391 :  $P_{110041} = (24, 54, 25, 1)$  lies on line  $\ell_{12}$   
 392 :  $P_{110337} = (0, 59, 25, 1)$  lies on line  $\ell_3$   
 393 :  $P_{110354} = (17, 59, 25, 1)$  lies on line  $\ell_2$   
 394 :  $P_{110537} = (8, 62, 25, 1)$  lies on line  $\ell_{15}$   
 395 :  $P_{110657} = (0, 0, 26, 1)$  lies on line  $\ell_0$   
 396 :  $P_{111004} = (27, 5, 26, 1)$  lies on line  $\ell_{13}$   
 397 :  $P_{111079} = (38, 6, 26, 1)$  lies on line  $\ell_7$   
 398 :  $P_{111481} = (56, 12, 26, 1)$  lies on line  $\ell_{10}$   
 399 :  $P_{111588} = (35, 14, 26, 1)$  lies on line  $\ell_9$   
 400 :  $P_{111982} = (45, 20, 26, 1)$  lies on line  $\ell_4$   
 401 :  $P_{112131} = (2, 23, 26, 1)$  lies on line  $\ell_{11}$   
 402 :  $P_{112243} = (50, 24, 26, 1)$  lies on line  $\ell_{15}$   
 403 :  $P_{112412} = (27, 27, 26, 1)$  lies on line  $\ell_1$   
 404 :  $P_{112483} = (34, 28, 26, 1)$  lies on line  $\ell_6$   
 405 :  $P_{112668} = (27, 31, 26, 1)$  lies on line  $\ell_{12}$   
 406 :  $P_{112681} = (40, 31, 26, 1)$  lies on line  $\ell_8$   
 407 :  $P_{112711} = (6, 32, 26, 1)$  lies on line  $\ell_5$   
 408 :  $P_{113562} = (25, 45, 26, 1)$  lies on line  $\ell_{14}$   
 409 :  $P_{114011} = (26, 52, 26, 1)$  lies on line  $\ell_3$   
 410 :  $P_{114677} = (52, 62, 26, 1)$  lies on line  $\ell_2$   
 411 :  $P_{114753} = (0, 0, 27, 1)$  lies on line  $\ell_0$   
 412 :  $P_{115123} = (50, 5, 27, 1)$  lies on line  $\ell_4$   
 413 :  $P_{115226} = (25, 7, 27, 1)$  lies on line  $\ell_6$   
 414 :  $P_{116230} = (5, 23, 27, 1)$  lies on line  $\ell_{14}$   
 415 :  $P_{116348} = (59, 24, 27, 1)$  lies on line  $\ell_7$   
 416 :  $P_{116443} = (26, 26, 27, 1)$  lies on line  $\ell_1$   
 417 :  $P_{117068} = (11, 36, 27, 1)$  lies on line  $\ell_{10}$   
 418 :  $P_{117157} = (36, 37, 27, 1)$  lies on line  $\ell_{15}$   
 419 :  $P_{117275} = (26, 39, 27, 1)$  lies on line  $\ell_{12}$   
 420 :  $P_{117361} = (48, 40, 27, 1)$  lies on line  $\ell_9$   
 421 :  $P_{117940} = (51, 49, 27, 1)$  lies on line  $\ell_3$   
 422 :  $P_{117970} = (17, 50, 27, 1)$  lies on line  $\ell_5$   
 423 :  $P_{118625} = (32, 60, 27, 1)$  lies on line  $\ell_{11}$   
 424 :  $P_{118665} = (8, 61, 27, 1)$  lies on line  $\ell_2$   
 425 :  $P_{118849} = (0, 0, 28, 1)$  lies on line  $\ell_0$   
 426 :  $P_{120049} = (48, 18, 28, 1)$  lies on line  $\ell_{14}$   
 427 :  $P_{120079} = (14, 19, 28, 1)$  lies on line  $\ell_4$   
 428 :  $P_{120360} = (39, 23, 28, 1)$  lies on line  $\ell_8$   
 429 :  $P_{120425} = (40, 24, 28, 1)$  lies on line  $\ell_9$   
 430 :  $P_{120734} = (29, 29, 28, 1)$  lies on line  $\ell_1$   
 431 :  $P_{121098} = (9, 35, 28, 1)$  lies on line  $\ell_7$   
 432 :  $P_{121372} = (27, 39, 28, 1)$  lies on line  $\ell_6$   
 433 :  $P_{121583} = (46, 42, 28, 1)$  lies on line  $\ell_3$   
 434 :  $P_{121694} = (29, 44, 28, 1)$  lies on line  $\ell_{12}$   
 435 :  $P_{121750} = (21, 45, 28, 1)$  lies on line  $\ell_5$   
 436 :  $P_{121869} = (12, 47, 28, 1)$  lies on line  $\ell_{11}$   
 437 :  $P_{121950} = (29, 48, 28, 1)$  lies on line  $\ell_{13}$   
 438 :  $P_{122208} = (31, 52, 28, 1)$  lies on line  $\ell_2$   
 439 :  $P_{122280} = (39, 53, 28, 1)$  lies on line  $\ell_{15}$   
 440 :  $P_{122866} = (49, 62, 28, 1)$  lies on line  $\ell_{10}$   
 441 :  $P_{122945} = (0, 0, 29, 1)$  lies on line  $\ell_0$

442 :  $P_{123090} = (17, 2, 29, 1)$  lies on line  $\ell_4$   
 443 :  $P_{123247} = (46, 4, 29, 1)$  lies on line  $\ell_{11}$   
 444 :  $P_{123506} = (49, 8, 29, 1)$  lies on line  $\ell_{15}$   
 445 :  $P_{123549} = (28, 9, 29, 1)$  lies on line  $\ell_{13}$   
 446 :  $P_{124253} = (28, 20, 29, 1)$  lies on line  $\ell_{12}$   
 447 :  $P_{124355} = (2, 22, 29, 1)$  lies on line  $\ell_{10}$   
 448 :  $P_{124765} = (28, 28, 29, 1)$  lies on line  $\ell_1$   
 449 :  $P_{125549} = (44, 40, 29, 1)$  lies on line  $\ell_{14}$   
 450 :  $P_{125960} = (7, 47, 29, 1)$  lies on line  $\ell_3$   
 451 :  $P_{126294} = (21, 52, 29, 1)$  lies on line  $\ell_8$   
 452 :  $P_{126500} = (35, 55, 29, 1)$  lies on line  $\ell_2$   
 453 :  $P_{126817} = (32, 60, 29, 1)$  lies on line  $\ell_6$   
 454 :  $P_{126869} = (20, 61, 29, 1)$  lies on line  $\ell_7$   
 455 :  $P_{126972} = (59, 62, 29, 1)$  lies on line  $\ell_9$   
 456 :  $P_{126979} = (2, 63, 29, 1)$  lies on line  $\ell_5$   
 457 :  $P_{127041} = (0, 0, 30, 1)$  lies on line  $\ell_0$   
 458 :  $P_{127497} = (8, 7, 30, 1)$  lies on line  $\ell_{14}$   
 459 :  $P_{127676} = (59, 9, 30, 1)$  lies on line  $\ell_5$   
 460 :  $P_{128055} = (54, 15, 30, 1)$  lies on line  $\ell_{10}$   
 461 :  $P_{128141} = (12, 17, 30, 1)$  lies on line  $\ell_6$   
 462 :  $P_{128618} = (41, 24, 30, 1)$  lies on line  $\ell_{11}$   
 463 :  $P_{129056} = (31, 31, 30, 1)$  lies on line  $\ell_1$   
 464 :  $P_{129076} = (51, 31, 30, 1)$  lies on line  $\ell_7$   
 465 :  $P_{129118} = (29, 32, 30, 1)$  lies on line  $\ell_3$   
 466 :  $P_{129312} = (31, 35, 30, 1)$  lies on line  $\ell_{13}$   
 467 :  $P_{129996} = (11, 46, 30, 1)$  lies on line  $\ell_{15}$   
 468 :  $P_{130147} = (34, 48, 30, 1)$  lies on line  $\ell_8$   
 469 :  $P_{130225} = (48, 49, 30, 1)$  lies on line  $\ell_4$   
 470 :  $P_{130247} = (6, 50, 30, 1)$  lies on line  $\ell_2$   
 471 :  $P_{130447} = (14, 53, 30, 1)$  lies on line  $\ell_9$   
 472 :  $P_{130976} = (31, 61, 30, 1)$  lies on line  $\ell_{12}$   
 473 :  $P_{131137} = (0, 0, 31, 1)$  lies on line  $\ell_0$   
 474 :  $P_{131247} = (46, 1, 31, 1)$  lies on line  $\ell_7$   
 475 :  $P_{131487} = (30, 5, 31, 1)$  lies on line  $\ell_{12}$   
 476 :  $P_{131832} = (55, 10, 31, 1)$  lies on line  $\ell_6$   
 477 :  $P_{132369} = (16, 19, 31, 1)$  lies on line  $\ell_8$   
 478 :  $P_{132831} = (30, 26, 31, 1)$  lies on line  $\ell_{13}$   
 479 :  $P_{132909} = (44, 27, 31, 1)$  lies on line  $\ell_5$   
 480 :  $P_{133087} = (30, 30, 31, 1)$  lies on line  $\ell_1$   
 481 :  $P_{133232} = (47, 32, 31, 1)$  lies on line  $\ell_4$   
 482 :  $P_{133557} = (52, 37, 31, 1)$  lies on line  $\ell_3$   
 483 :  $P_{133638} = (5, 39, 31, 1)$  lies on line  $\ell_{10}$   
 484 :  $P_{134331} = (58, 49, 31, 1)$  lies on line  $\ell_2$   
 485 :  $P_{134412} = (11, 51, 31, 1)$  lies on line  $\ell_{11}$   
 486 :  $P_{135061} = (20, 61, 31, 1)$  lies on line  $\ell_{14}$   
 487 :  $P_{135233} = (0, 0, 32, 1)$  lies on line  $\ell_0$   
 488 :  $P_{135689} = (8, 7, 32, 1)$  lies on line  $\ell_7$   
 489 :  $P_{136102} = (37, 13, 32, 1)$  lies on line  $\ell_6$   
 490 :  $P_{136270} = (13, 16, 32, 1)$  lies on line  $\ell_{14}$   
 491 :  $P_{136375} = (54, 17, 32, 1)$  lies on line  $\ell_2$   
 492 :  $P_{136738} = (33, 23, 32, 1)$  lies on line  $\ell_{13}$   
 493 :  $P_{136962} = (1, 27, 32, 1)$  lies on line  $\ell_{11}$   
 494 :  $P_{137287} = (6, 32, 32, 1)$  lies on line  $\ell_{15}$   
 495 :  $P_{137378} = (33, 33, 32, 1)$  lies on line  $\ell_1$

496 :  $P_{137540} = (3, 36, 32, 1)$  lies on line  $\ell_3$   
 497 :  $P_{137623} = (22, 37, 32, 1)$  lies on line  $\ell_4$   
 498 :  $P_{137697} = (32, 38, 32, 1)$  lies on line  $\ell_8$   
 499 :  $P_{137736} = (7, 39, 32, 1)$  lies on line  $\ell_9$   
 500 :  $P_{138251} = (10, 47, 32, 1)$  lies on line  $\ell_{10}$   
 501 :  $P_{138786} = (33, 55, 32, 1)$  lies on line  $\ell_{12}$   
 502 :  $P_{139209} = (8, 62, 32, 1)$  lies on line  $\ell_5$   
 503 :  $P_{139329} = (0, 0, 33, 1)$  lies on line  $\ell_0$   
 504 :  $P_{139413} = (20, 1, 33, 1)$  lies on line  $\ell_9$   
 505 :  $P_{139667} = (18, 5, 33, 1)$  lies on line  $\ell_8$   
 506 :  $P_{139834} = (57, 7, 33, 1)$  lies on line  $\ell_{10}$   
 507 :  $P_{140321} = (32, 15, 33, 1)$  lies on line  $\ell_{12}$   
 508 :  $P_{140491} = (10, 18, 33, 1)$  lies on line  $\ell_2$   
 509 :  $P_{140767} = (30, 22, 33, 1)$  lies on line  $\ell_6$   
 510 :  $P_{140950} = (21, 25, 33, 1)$  lies on line  $\ell_7$   
 511 :  $P_{141201} = (16, 29, 33, 1)$  lies on line  $\ell_{15}$   
 512 :  $P_{141409} = (32, 32, 33, 1)$  lies on line  $\ell_1$   
 513 :  $P_{141483} = (42, 33, 33, 1)$  lies on line  $\ell_3$   
 514 :  $P_{142034} = (17, 42, 33, 1)$  lies on line  $\ell_{14}$   
 515 :  $P_{142176} = (31, 44, 33, 1)$  lies on line  $\ell_5$   
 516 :  $P_{142305} = (32, 46, 33, 1)$  lies on line  $\ell_{13}$   
 517 :  $P_{142436} = (35, 48, 33, 1)$  lies on line  $\ell_{11}$   
 518 :  $P_{142666} = (9, 52, 33, 1)$  lies on line  $\ell_4$   
 519 :  $P_{143425} = (0, 0, 34, 1)$  lies on line  $\ell_0$   
 520 :  $P_{143526} = (37, 1, 34, 1)$  lies on line  $\ell_8$   
 521 :  $P_{143716} = (35, 4, 34, 1)$  lies on line  $\ell_{13}$   
 522 :  $P_{143798} = (53, 5, 34, 1)$  lies on line  $\ell_{14}$   
 523 :  $P_{143913} = (40, 7, 34, 1)$  lies on line  $\ell_4$   
 524 :  $P_{144098} = (33, 10, 34, 1)$  lies on line  $\ell_9$   
 525 :  $P_{144944} = (47, 23, 34, 1)$  lies on line  $\ell_2$   
 526 :  $P_{145127} = (38, 26, 34, 1)$  lies on line  $\ell_5$   
 527 :  $P_{145358} = (13, 30, 34, 1)$  lies on line  $\ell_{10}$   
 528 :  $P_{145700} = (35, 35, 34, 1)$  lies on line  $\ell_1$   
 529 :  $P_{145892} = (35, 38, 34, 1)$  lies on line  $\ell_{12}$   
 530 :  $P_{146277} = (36, 44, 34, 1)$  lies on line  $\ell_{11}$   
 531 :  $P_{146417} = (48, 46, 34, 1)$  lies on line  $\ell_3$   
 532 :  $P_{147243} = (42, 59, 34, 1)$  lies on line  $\ell_{15}$   
 533 :  $P_{147521} = (0, 0, 35, 1)$  lies on line  $\ell_0$   
 534 :  $P_{147965} = (60, 6, 35, 1)$  lies on line  $\ell_{15}$   
 535 :  $P_{147975} = (6, 7, 35, 1)$  lies on line  $\ell_{11}$   
 536 :  $P_{148082} = (49, 8, 35, 1)$  lies on line  $\ell_5$   
 537 :  $P_{148820} = (19, 20, 35, 1)$  lies on line  $\ell_2$   
 538 :  $P_{148984} = (55, 22, 35, 1)$  lies on line  $\ell_4$   
 539 :  $P_{149475} = (34, 30, 35, 1)$  lies on line  $\ell_{12}$   
 540 :  $P_{149578} = (9, 32, 35, 1)$  lies on line  $\ell_6$   
 541 :  $P_{149720} = (23, 34, 35, 1)$  lies on line  $\ell_8$   
 542 :  $P_{149731} = (34, 34, 35, 1)$  lies on line  $\ell_1$   
 543 :  $P_{149936} = (47, 37, 35, 1)$  lies on line  $\ell_7$   
 544 :  $P_{150298} = (25, 43, 35, 1)$  lies on line  $\ell_3$   
 545 :  $P_{150387} = (50, 44, 35, 1)$  lies on line  $\ell_9$   
 546 :  $P_{151039} = (62, 54, 35, 1)$  lies on line  $\ell_{10}$   
 547 :  $P_{151459} = (34, 61, 35, 1)$  lies on line  $\ell_{13}$   
 548 :  $P_{151594} = (41, 63, 35, 1)$  lies on line  $\ell_{14}$   
 549 :  $P_{151617} = (0, 0, 36, 1)$  lies on line  $\ell_0$

550 :  $P_{152235} = (42, 9, 36, 1)$  lies on line  $\ell_8$   
 551 :  $P_{152939} = (42, 20, 36, 1)$  lies on line  $\ell_{11}$   
 552 :  $P_{152998} = (37, 21, 36, 1)$  lies on line  $\ell_{12}$   
 553 :  $P_{153088} = (63, 22, 36, 1)$  lies on line  $\ell_{15}$   
 554 :  $P_{153142} = (53, 23, 36, 1)$  lies on line  $\ell_5$   
 555 :  $P_{153451} = (42, 28, 36, 1)$  lies on line  $\ell_9$   
 556 :  $P_{153477} = (4, 29, 36, 1)$  lies on line  $\ell_2$   
 557 :  $P_{153566} = (29, 30, 36, 1)$  lies on line  $\ell_7$   
 558 :  $P_{154022} = (37, 37, 36, 1)$  lies on line  $\ell_1$   
 559 :  $P_{154437} = (4, 44, 36, 1)$  lies on line  $\ell_{10}$   
 560 :  $P_{154693} = (4, 48, 36, 1)$  lies on line  $\ell_3$   
 561 :  $P_{154790} = (37, 49, 36, 1)$  lies on line  $\ell_{13}$   
 562 :  $P_{155357} = (28, 58, 36, 1)$  lies on line  $\ell_{14}$   
 563 :  $P_{156024} = (55, 4, 37, 1)$  lies on line  $\ell_{10}$   
 564 :  $P_{156067} = (34, 5, 37, 1)$  lies on line  $\ell_5$   
 565 :  $P_{156261} = (36, 8, 37, 1)$  lies on line  $\ell_{13}$   
 566 :  $P_{156821} = (20, 17, 37, 1)$  lies on line  $\ell_4$   
 567 :  $P_{157489} = (48, 27, 37, 1)$  lies on line  $\ell_6$   
 568 :  $P_{157689} = (56, 30, 37, 1)$  lies on line  $\ell_2$   
 569 :  $P_{158053} = (36, 36, 37, 1)$  lies on line  $\ell_1$   
 570 :  $P_{158425} = (24, 42, 37, 1)$  lies on line  $\ell_8$   
 571 :  $P_{158506} = (41, 43, 37, 1)$  lies on line  $\ell_{15}$   
 572 :  $P_{158629} = (36, 45, 37, 1)$  lies on line  $\ell_{12}$   
 573 :  $P_{159150} = (45, 53, 37, 1)$  lies on line  $\ell_3$   
 574 :  $P_{159482} = (57, 58, 37, 1)$  lies on line  $\ell_9$   
 575 :  $P_{159753} = (8, 63, 37, 1)$  lies on line  $\ell_{11}$   
 576 :  $P_{159809} = (0, 0, 38, 1)$  lies on line  $\ell_0$   
 577 :  $P_{160104} = (39, 4, 38, 1)$  lies on line  $\ell_{12}$   
 578 :  $P_{160660} = (19, 13, 38, 1)$  lies on line  $\ell_{15}$   
 579 :  $P_{161566} = (29, 27, 38, 1)$  lies on line  $\ell_2$   
 580 :  $P_{161668} = (3, 29, 38, 1)$  lies on line  $\ell_{10}$   
 581 :  $P_{162038} = (53, 34, 38, 1)$  lies on line  $\ell_4$   
 582 :  $P_{162064} = (15, 35, 38, 1)$  lies on line  $\ell_{11}$   
 583 :  $P_{162344} = (39, 39, 38, 1)$  lies on line  $\ell_1$   
 584 :  $P_{162800} = (47, 46, 38, 1)$  lies on line  $\ell_8$   
 585 :  $P_{162853} = (36, 47, 38, 1)$  lies on line  $\ell_{14}$   
 586 :  $P_{162957} = (12, 49, 38, 1)$  lies on line  $\ell_9$   
 587 :  $P_{163100} = (27, 51, 38, 1)$  lies on line  $\ell_5$   
 588 :  $P_{163293} = (28, 54, 38, 1)$  lies on line  $\ell_6$   
 589 :  $P_{163576} = (55, 58, 38, 1)$  lies on line  $\ell_3$   
 590 :  $P_{163905} = (0, 0, 39, 1)$  lies on line  $\ell_0$   
 591 :  $P_{164462} = (45, 8, 39, 1)$  lies on line  $\ell_{11}$   
 592 :  $P_{164766} = (29, 13, 39, 1)$  lies on line  $\ell_8$   
 593 :  $P_{165305} = (56, 21, 39, 1)$  lies on line  $\ell_{14}$   
 594 :  $P_{165408} = (31, 23, 39, 1)$  lies on line  $\ell_9$   
 595 :  $P_{165474} = (33, 24, 39, 1)$  lies on line  $\ell_2$   
 596 :  $P_{165671} = (38, 27, 39, 1)$  lies on line  $\ell_{13}$   
 597 :  $P_{166029} = (12, 33, 39, 1)$  lies on line  $\ell_5$   
 598 :  $P_{166375} = (38, 38, 39, 1)$  lies on line  $\ell_1$   
 599 :  $P_{166824} = (39, 45, 39, 1)$  lies on line  $\ell_6$   
 600 :  $P_{166982} = (5, 48, 39, 1)$  lies on line  $\ell_{15}$   
 601 :  $P_{167211} = (42, 51, 39, 1)$  lies on line  $\ell_4$   
 602 :  $P_{167345} = (48, 53, 39, 1)$  lies on line  $\ell_{10}$   
 603 :  $P_{167783} = (38, 60, 39, 1)$  lies on line  $\ell_{12}$



604 :  $P_{167803} = (58, 60, 39, 1)$  lies on line  $\ell_7$   
 605 :  $P_{167967} = (30, 63, 39, 1)$  lies on line  $\ell_3$   
 606 :  $P_{168001} = (0, 0, 40, 1)$  lies on line  $\ell_0$   
 607 :  $P_{168375} = (54, 5, 40, 1)$  lies on line  $\ell_{11}$   
 608 :  $P_{168628} = (51, 9, 40, 1)$  lies on line  $\ell_2$   
 609 :  $P_{168782} = (13, 12, 40, 1)$  lies on line  $\ell_3$   
 610 :  $P_{168852} = (19, 13, 40, 1)$  lies on line  $\ell_5$   
 611 :  $P_{168941} = (44, 14, 40, 1)$  lies on line  $\ell_4$   
 612 :  $P_{169194} = (41, 18, 40, 1)$  lies on line  $\ell_{12}$   
 613 :  $P_{169497} = (24, 23, 40, 1)$  lies on line  $\ell_6$   
 614 :  $P_{169653} = (52, 25, 40, 1)$  lies on line  $\ell_8$   
 615 :  $P_{170416} = (47, 37, 40, 1)$  lies on line  $\ell_{14}$   
 616 :  $P_{170647} = (22, 41, 40, 1)$  lies on line  $\ell_{10}$   
 617 :  $P_{170666} = (41, 41, 40, 1)$  lies on line  $\ell_1$   
 618 :  $P_{170902} = (21, 45, 40, 1)$  lies on line  $\ell_{15}$   
 619 :  $P_{171133} = (60, 48, 40, 1)$  lies on line  $\ell_9$   
 620 :  $P_{171427} = (34, 53, 40, 1)$  lies on line  $\ell_7$   
 621 :  $P_{171754} = (41, 58, 40, 1)$  lies on line  $\ell_{13}$   
 622 :  $P_{172097} = (0, 0, 41, 1)$  lies on line  $\ell_0$   
 623 :  $P_{172198} = (37, 1, 41, 1)$  lies on line  $\ell_{10}$   
 624 :  $P_{172329} = (40, 3, 41, 1)$  lies on line  $\ell_{13}$   
 625 :  $P_{172709} = (36, 9, 41, 1)$  lies on line  $\ell_3$   
 626 :  $P_{172752} = (15, 10, 41, 1)$  lies on line  $\ell_2$   
 627 :  $P_{172900} = (35, 12, 41, 1)$  lies on line  $\ell_6$   
 628 :  $P_{173124} = (3, 16, 41, 1)$  lies on line  $\ell_{15}$   
 629 :  $P_{173552} = (47, 22, 41, 1)$  lies on line  $\ell_9$   
 630 :  $P_{174085} = (4, 31, 41, 1)$  lies on line  $\ell_5$   
 631 :  $P_{174697} = (40, 40, 41, 1)$  lies on line  $\ell_1$   
 632 :  $P_{174825} = (40, 42, 41, 1)$  lies on line  $\ell_{12}$   
 633 :  $P_{174912} = (63, 43, 41, 1)$  lies on line  $\ell_7$   
 634 :  $P_{175061} = (20, 46, 41, 1)$  lies on line  $\ell_{11}$   
 635 :  $P_{175815} = (6, 58, 41, 1)$  lies on line  $\ell_8$   
 636 :  $P_{176193} = (0, 0, 42, 1)$  lies on line  $\ell_0$   
 637 :  $P_{176428} = (43, 3, 42, 1)$  lies on line  $\ell_{12}$   
 638 :  $P_{176639} = (62, 6, 42, 1)$  lies on line  $\ell_3$   
 639 :  $P_{176793} = (24, 9, 42, 1)$  lies on line  $\ell_7$   
 640 :  $P_{177195} = (42, 15, 42, 1)$  lies on line  $\ell_2$   
 641 :  $P_{177746} = (17, 24, 42, 1)$  lies on line  $\ell_{10}$   
 642 :  $P_{178075} = (26, 29, 42, 1)$  lies on line  $\ell_9$   
 643 :  $P_{178320} = (15, 33, 42, 1)$  lies on line  $\ell_6$   
 644 :  $P_{178860} = (43, 41, 42, 1)$  lies on line  $\ell_{13}$   
 645 :  $P_{178878} = (61, 41, 42, 1)$  lies on line  $\ell_5$   
 646 :  $P_{178988} = (43, 43, 42, 1)$  lies on line  $\ell_1$   
 647 :  $P_{179027} = (18, 44, 42, 1)$  lies on line  $\ell_4$   
 648 :  $P_{179288} = (23, 48, 42, 1)$  lies on line  $\ell_{14}$   
 649 :  $P_{179412} = (19, 50, 42, 1)$  lies on line  $\ell_{11}$   
 650 :  $P_{179706} = (57, 54, 42, 1)$  lies on line  $\ell_{15}$   
 651 :  $P_{180210} = (49, 62, 42, 1)$  lies on line  $\ell_8$   
 652 :  $P_{180289} = (0, 0, 43, 1)$  lies on line  $\ell_0$   
 653 :  $P_{180504} = (23, 3, 43, 1)$  lies on line  $\ell_3$   
 654 :  $P_{180940} = (11, 10, 43, 1)$  lies on line  $\ell_{14}$   
 655 :  $P_{181040} = (47, 11, 43, 1)$  lies on line  $\ell_{15}$   
 656 :  $P_{181079} = (22, 12, 43, 1)$  lies on line  $\ell_2$   
 657 :  $P_{181355} = (42, 16, 43, 1)$  lies on line  $\ell_{13}$

658 :  $P_{181766} = (5, 23, 43, 1)$  lies on line  $\ell_7$   
 659 :  $P_{181938} = (49, 25, 43, 1)$  lies on line  $\ell_{11}$   
 660 :  $P_{182148} = (3, 29, 43, 1)$  lies on line  $\ell_8$   
 661 :  $P_{183019} = (42, 42, 43, 1)$  lies on line  $\ell_1$   
 662 :  $P_{183395} = (34, 48, 43, 1)$  lies on line  $\ell_{10}$   
 663 :  $P_{184053} = (52, 58, 43, 1)$  lies on line  $\ell_6$   
 664 :  $P_{184074} = (9, 59, 43, 1)$  lies on line  $\ell_9$   
 665 :  $P_{184206} = (13, 61, 43, 1)$  lies on line  $\ell_4$   
 666 :  $P_{184385} = (0, 0, 44, 1)$  lies on line  $\ell_0$   
 667 :  $P_{184706} = (1, 5, 44, 1)$  lies on line  $\ell_2$   
 668 :  $P_{185054} = (29, 10, 44, 1)$  lies on line  $\ell_{11}$   
 669 :  $P_{185106} = (17, 11, 44, 1)$  lies on line  $\ell_9$   
 670 :  $P_{185407} = (62, 15, 44, 1)$  lies on line  $\ell_{14}$   
 671 :  $P_{185931} = (10, 24, 44, 1)$  lies on line  $\ell_3$   
 672 :  $P_{186103} = (54, 26, 44, 1)$  lies on line  $\ell_6$   
 673 :  $P_{186157} = (44, 27, 44, 1)$  lies on line  $\ell_{15}$   
 674 :  $P_{186222} = (45, 28, 44, 1)$  lies on line  $\ell_{13}$   
 675 :  $P_{186735} = (46, 36, 44, 1)$  lies on line  $\ell_5$   
 676 :  $P_{187097} = (24, 42, 44, 1)$  lies on line  $\ell_{10}$   
 677 :  $P_{187186} = (49, 43, 44, 1)$  lies on line  $\ell_4$   
 678 :  $P_{187256} = (55, 44, 44, 1)$  lies on line  $\ell_7$   
 679 :  $P_{187310} = (45, 45, 44, 1)$  lies on line  $\ell_1$   
 680 :  $P_{187502} = (45, 48, 44, 1)$  lies on line  $\ell_{12}$   
 681 :  $P_{187903} = (62, 54, 44, 1)$  lies on line  $\ell_8$   
 682 :  $P_{188481} = (0, 0, 45, 1)$  lies on line  $\ell_0$   
 683 :  $P_{188558} = (13, 1, 45, 1)$  lies on line  $\ell_6$   
 684 :  $P_{188652} = (43, 2, 45, 1)$  lies on line  $\ell_{10}$   
 685 :  $P_{188926} = (61, 6, 45, 1)$  lies on line  $\ell_2$   
 686 :  $P_{189037} = (44, 8, 45, 1)$  lies on line  $\ell_{12}$   
 687 :  $P_{189837} = (12, 21, 45, 1)$  lies on line  $\ell_8$   
 688 :  $P_{190372} = (35, 29, 45, 1)$  lies on line  $\ell_3$   
 689 :  $P_{190656} = (63, 33, 45, 1)$  lies on line  $\ell_{11}$   
 690 :  $P_{190893} = (44, 37, 45, 1)$  lies on line  $\ell_{13}$   
 691 :  $P_{190971} = (58, 38, 45, 1)$  lies on line  $\ell_{15}$   
 692 :  $P_{191341} = (44, 44, 45, 1)$  lies on line  $\ell_1$   
 693 :  $P_{191363} = (2, 45, 45, 1)$  lies on line  $\ell_9$   
 694 :  $P_{191723} = (42, 50, 45, 1)$  lies on line  $\ell_7$   
 695 :  $P_{191907} = (34, 53, 45, 1)$  lies on line  $\ell_{14}$   
 696 :  $P_{191994} = (57, 54, 45, 1)$  lies on line  $\ell_5$   
 697 :  $P_{192239} = (46, 58, 45, 1)$  lies on line  $\ell_4$   
 698 :  $P_{192793} = (24, 3, 46, 1)$  lies on line  $\ell_2$   
 699 :  $P_{193168} = (15, 9, 46, 1)$  lies on line  $\ell_4$   
 700 :  $P_{193584} = (47, 15, 46, 1)$  lies on line  $\ell_{13}$   
 701 :  $P_{193614} = (13, 16, 46, 1)$  lies on line  $\ell_7$   
 702 :  $P_{193724} = (59, 17, 46, 1)$  lies on line  $\ell_8$   
 703 :  $P_{193786} = (57, 18, 46, 1)$  lies on line  $\ell_3$   
 704 :  $P_{194247} = (6, 26, 46, 1)$  lies on line  $\ell_{14}$   
 705 :  $P_{194336} = (31, 27, 46, 1)$  lies on line  $\ell_{10}$   
 706 :  $P_{194736} = (47, 33, 46, 1)$  lies on line  $\ell_{12}$   
 707 :  $P_{195064} = (55, 38, 46, 1)$  lies on line  $\ell_9$   
 708 :  $P_{195426} = (33, 44, 46, 1)$  lies on line  $\ell_6$   
 709 :  $P_{195632} = (47, 47, 46, 1)$  lies on line  $\ell_1$   
 710 :  $P_{196537} = (56, 61, 46, 1)$  lies on line  $\ell_{11}$   
 711 :  $P_{196673} = (0, 0, 47, 1)$  lies on line  $\ell_0$

712 :  $P_{197585} = (16, 14, 47, 1)$  lies on line  $\ell_7$   
 713 :  $P_{197848} = (23, 18, 47, 1)$  lies on line  $\ell_5$   
 714 :  $P_{198107} = (26, 22, 47, 1)$  lies on line  $\ell_{11}$   
 715 :  $P_{198161} = (16, 23, 47, 1)$  lies on line  $\ell_3$   
 716 :  $P_{198225} = (16, 24, 47, 1)$  lies on line  $\ell_4$   
 717 :  $P_{198319} = (46, 25, 47, 1)$  lies on line  $\ell_{12}$   
 718 :  $P_{198747} = (26, 32, 47, 1)$  lies on line  $\ell_{14}$   
 719 :  $P_{199663} = (46, 46, 47, 1)$  lies on line  $\ell_1$   
 720 :  $P_{199882} = (9, 50, 47, 1)$  lies on line  $\ell_8$   
 721 :  $P_{199981} = (44, 51, 47, 1)$  lies on line  $\ell_{10}$   
 722 :  $P_{200175} = (46, 54, 47, 1)$  lies on line  $\ell_{13}$   
 723 :  $P_{200219} = (26, 55, 47, 1)$  lies on line  $\ell_6$   
 724 :  $P_{200599} = (22, 61, 47, 1)$  lies on line  $\ell_{15}$   
 725 :  $P_{200769} = (0, 0, 48, 1)$  lies on line  $\ell_0$   
 726 :  $P_{200958} = (61, 2, 48, 1)$  lies on line  $\ell_7$   
 727 :  $P_{201361} = (16, 9, 48, 1)$  lies on line  $\ell_9$   
 728 :  $P_{201924} = (3, 18, 48, 1)$  lies on line  $\ell_4$   
 729 :  $P_{202144} = (31, 21, 48, 1)$  lies on line  $\ell_3$   
 730 :  $P_{202537} = (40, 27, 48, 1)$  lies on line  $\ell_{14}$   
 731 :  $P_{202610} = (49, 28, 48, 1)$  lies on line  $\ell_{12}$   
 732 :  $P_{202941} = (60, 33, 48, 1)$  lies on line  $\ell_2$   
 733 :  $P_{203059} = (50, 35, 48, 1)$  lies on line  $\ell_{10}$   
 734 :  $P_{203279} = (14, 39, 48, 1)$  lies on line  $\ell_{11}$   
 735 :  $P_{203634} = (49, 44, 48, 1)$  lies on line  $\ell_{13}$   
 736 :  $P_{203954} = (49, 49, 48, 1)$  lies on line  $\ell_1$   
 737 :  $P_{204425} = (8, 57, 48, 1)$  lies on line  $\ell_8$   
 738 :  $P_{204513} = (32, 58, 48, 1)$  lies on line  $\ell_{15}$   
 739 :  $P_{204865} = (0, 0, 49, 1)$  lies on line  $\ell_0$   
 740 :  $P_{205085} = (28, 3, 49, 1)$  lies on line  $\ell_4$   
 741 :  $P_{205367} = (54, 7, 49, 1)$  lies on line  $\ell_{15}$   
 742 :  $P_{205570} = (1, 11, 49, 1)$  lies on line  $\ell_{10}$   
 743 :  $P_{205677} = (44, 12, 49, 1)$  lies on line  $\ell_{11}$   
 744 :  $P_{205943} = (54, 16, 49, 1)$  lies on line  $\ell_3$   
 745 :  $P_{206257} = (48, 21, 49, 1)$  lies on line  $\ell_{13}$   
 746 :  $P_{206587} = (58, 26, 49, 1)$  lies on line  $\ell_8$   
 747 :  $P_{206689} = (32, 28, 49, 1)$  lies on line  $\ell_7$   
 748 :  $P_{207029} = (52, 33, 49, 1)$  lies on line  $\ell_{14}$   
 749 :  $P_{207041} = (0, 34, 49, 1)$  lies on line  $\ell_2$   
 750 :  $P_{207046} = (5, 34, 49, 1)$  lies on line  $\ell_6$   
 751 :  $P_{207217} = (48, 36, 49, 1)$  lies on line  $\ell_{12}$   
 752 :  $P_{207658} = (41, 43, 49, 1)$  lies on line  $\ell_5$   
 753 :  $P_{207876} = (3, 47, 49, 1)$  lies on line  $\ell_9$   
 754 :  $P_{207985} = (48, 48, 49, 1)$  lies on line  $\ell_1$   
 755 :  $P_{208961} = (0, 0, 50, 1)$  lies on line  $\ell_0$   
 756 :  $P_{209844} = (51, 13, 50, 1)$  lies on line  $\ell_{12}$   
 757 :  $P_{209873} = (16, 14, 50, 1)$  lies on line  $\ell_{14}$   
 758 :  $P_{209962} = (41, 15, 50, 1)$  lies on line  $\ell_6$   
 759 :  $P_{210028} = (43, 16, 50, 1)$  lies on line  $\ell_{11}$   
 760 :  $P_{210166} = (53, 18, 50, 1)$  lies on line  $\ell_{10}$   
 761 :  $P_{210833} = (16, 29, 50, 1)$  lies on line  $\ell_5$   
 762 :  $P_{210894} = (13, 30, 50, 1)$  lies on line  $\ell_8$   
 763 :  $P_{210989} = (44, 31, 50, 1)$  lies on line  $\ell_3$   
 764 :  $P_{211085} = (12, 33, 50, 1)$  lies on line  $\ell_{15}$   
 765 :  $P_{211319} = (54, 36, 50, 1)$  lies on line  $\ell_9$

766 :  $P_{211494} = (37, 39, 50, 1)$  lies on line  $\ell_2$   
 767 :  $P_{212094} = (61, 48, 50, 1)$  lies on line  $\ell_4$   
 768 :  $P_{212276} = (51, 51, 50, 1)$  lies on line  $\ell_1$   
 769 :  $P_{212936} = (7, 62, 50, 1)$  lies on line  $\ell_7$   
 770 :  $P_{213044} = (51, 63, 50, 1)$  lies on line  $\ell_{13}$   
 771 :  $P_{213057} = (0, 0, 51, 1)$  lies on line  $\ell_0$   
 772 :  $P_{213222} = (37, 2, 51, 1)$  lies on line  $\ell_9$   
 773 :  $P_{213491} = (50, 6, 51, 1)$  lies on line  $\ell_{13}$   
 774 :  $P_{214024} = (7, 15, 51, 1)$  lies on line  $\ell_5$   
 775 :  $P_{214355} = (18, 20, 51, 1)$  lies on line  $\ell_6$   
 776 :  $P_{214726} = (5, 26, 51, 1)$  lies on line  $\ell_3$   
 777 :  $P_{214875} = (26, 28, 51, 1)$  lies on line  $\ell_{15}$   
 778 :  $P_{215131} = (26, 32, 51, 1)$  lies on line  $\ell_7$   
 779 :  $P_{215203} = (34, 33, 51, 1)$  lies on line  $\ell_4$   
 780 :  $P_{215386} = (25, 36, 51, 1)$  lies on line  $\ell_2$   
 781 :  $P_{216307} = (50, 50, 51, 1)$  lies on line  $\ell_1$   
 782 :  $P_{216397} = (12, 52, 51, 1)$  lies on line  $\ell_{14}$   
 783 :  $P_{216499} = (50, 53, 51, 1)$  lies on line  $\ell_{12}$   
 784 :  $P_{216775} = (6, 58, 51, 1)$  lies on line  $\ell_{10}$   
 785 :  $P_{216842} = (9, 59, 51, 1)$  lies on line  $\ell_{11}$   
 786 :  $P_{217024} = (63, 61, 51, 1)$  lies on line  $\ell_8$   
 787 :  $P_{217153} = (0, 0, 52, 1)$  lies on line  $\ell_0$   
 788 :  $P_{217241} = (24, 1, 52, 1)$  lies on line  $\ell_3$   
 789 :  $P_{217846} = (53, 10, 52, 1)$  lies on line  $\ell_{13}$   
 790 :  $P_{217946} = (25, 12, 52, 1)$  lies on line  $\ell_{15}$   
 791 :  $P_{218180} = (3, 16, 52, 1)$  lies on line  $\ell_5$   
 792 :  $P_{218563} = (2, 22, 52, 1)$  lies on line  $\ell_8$   
 793 :  $P_{218921} = (40, 27, 52, 1)$  lies on line  $\ell_7$   
 794 :  $P_{219261} = (60, 32, 52, 1)$  lies on line  $\ell_{10}$   
 795 :  $P_{219750} = (37, 40, 52, 1)$  lies on line  $\ell_{11}$   
 796 :  $P_{220047} = (14, 45, 52, 1)$  lies on line  $\ell_2$   
 797 :  $P_{220346} = (57, 49, 52, 1)$  lies on line  $\ell_{14}$   
 798 :  $P_{220414} = (61, 50, 52, 1)$  lies on line  $\ell_9$   
 799 :  $P_{220497} = (16, 52, 52, 1)$  lies on line  $\ell_6$   
 800 :  $P_{220598} = (53, 53, 52, 1)$  lies on line  $\ell_1$   
 801 :  $P_{220703} = (30, 55, 52, 1)$  lies on line  $\ell_4$   
 802 :  $P_{221174} = (53, 62, 52, 1)$  lies on line  $\ell_{12}$   
 803 :  $P_{221249} = (0, 0, 53, 1)$  lies on line  $\ell_0$   
 804 :  $P_{221397} = (20, 2, 53, 1)$  lies on line  $\ell_5$   
 805 :  $P_{221448} = (7, 3, 53, 1)$  lies on line  $\ell_{11}$   
 806 :  $P_{221554} = (49, 4, 53, 1)$  lies on line  $\ell_3$   
 807 :  $P_{221622} = (53, 5, 53, 1)$  lies on line  $\ell_7$   
 808 :  $P_{221685} = (52, 6, 53, 1)$  lies on line  $\ell_{12}$   
 809 :  $P_{221776} = (15, 8, 53, 1)$  lies on line  $\ell_{10}$   
 810 :  $P_{221990} = (37, 11, 53, 1)$  lies on line  $\ell_{14}$   
 811 :  $P_{222575} = (46, 20, 53, 1)$  lies on line  $\ell_9$   
 812 :  $P_{223682} = (1, 38, 53, 1)$  lies on line  $\ell_4$   
 813 :  $P_{224243} = (50, 46, 53, 1)$  lies on line  $\ell_2$   
 814 :  $P_{224300} = (43, 47, 53, 1)$  lies on line  $\ell_6$   
 815 :  $P_{224400} = (15, 49, 53, 1)$  lies on line  $\ell_{15}$   
 816 :  $P_{224565} = (52, 51, 53, 1)$  lies on line  $\ell_{13}$   
 817 :  $P_{224629} = (52, 52, 53, 1)$  lies on line  $\ell_1$   
 818 :  $P_{224689} = (48, 53, 53, 1)$  lies on line  $\ell_8$   
 819 :  $P_{225345} = (0, 0, 54, 1)$  lies on line  $\ell_0$

820 :  $P_{225480} = (7, 2, 54, 1)$  lies on line  $\ell_6$   
 821 :  $P_{226092} = (43, 11, 54, 1)$  lies on line  $\ell_3$   
 822 :  $P_{226492} = (59, 17, 54, 1)$  lies on line  $\ell_{10}$   
 823 :  $P_{226721} = (32, 21, 54, 1)$  lies on line  $\ell_4$   
 824 :  $P_{226870} = (53, 23, 54, 1)$  lies on line  $\ell_{15}$   
 825 :  $P_{227000} = (55, 25, 54, 1)$  lies on line  $\ell_{13}$   
 826 :  $P_{227329} = (0, 31, 54, 1)$  lies on line  $\ell_{11}$   
 827 :  $P_{227356} = (27, 31, 54, 1)$  lies on line  $\ell_9$   
 828 :  $P_{227650} = (1, 36, 54, 1)$  lies on line  $\ell_{14}$   
 829 :  $P_{227859} = (18, 39, 54, 1)$  lies on line  $\ell_7$   
 830 :  $P_{228120} = (23, 43, 54, 1)$  lies on line  $\ell_2$   
 831 :  $P_{228408} = (55, 47, 54, 1)$  lies on line  $\ell_{12}$   
 832 :  $P_{228488} = (7, 49, 54, 1)$  lies on line  $\ell_8$   
 833 :  $P_{228718} = (45, 52, 54, 1)$  lies on line  $\ell_5$   
 834 :  $P_{228920} = (55, 55, 54, 1)$  lies on line  $\ell_1$   
 835 :  $P_{229441} = (0, 0, 55, 1)$  lies on line  $\ell_0$   
 836 :  $P_{229760} = (63, 4, 55, 1)$  lies on line  $\ell_4$   
 837 :  $P_{230339} = (2, 14, 55, 1)$  lies on line  $\ell_3$   
 838 :  $P_{230646} = (53, 18, 55, 1)$  lies on line  $\ell_8$   
 839 :  $P_{230967} = (54, 23, 55, 1)$  lies on line  $\ell_{12}$   
 840 :  $P_{231101} = (60, 25, 55, 1)$  lies on line  $\ell_6$   
 841 :  $P_{231390} = (29, 30, 55, 1)$  lies on line  $\ell_{14}$   
 842 :  $P_{231543} = (54, 32, 55, 1)$  lies on line  $\ell_{13}$   
 843 :  $P_{231931} = (58, 38, 55, 1)$  lies on line  $\ell_5$   
 844 :  $P_{232044} = (43, 40, 55, 1)$  lies on line  $\ell_2$   
 845 :  $P_{232164} = (35, 42, 55, 1)$  lies on line  $\ell_{15}$   
 846 :  $P_{232803} = (34, 52, 55, 1)$  lies on line  $\ell_{11}$   
 847 :  $P_{232951} = (54, 54, 55, 1)$  lies on line  $\ell_1$   
 848 :  $P_{233104} = (15, 57, 55, 1)$  lies on line  $\ell_7$   
 849 :  $P_{233537} = (0, 0, 56, 1)$  lies on line  $\ell_0$   
 850 :  $P_{233658} = (57, 1, 56, 1)$  lies on line  $\ell_{13}$   
 851 :  $P_{233949} = (28, 6, 56, 1)$  lies on line  $\ell_8$   
 852 :  $P_{234214} = (37, 10, 56, 1)$  lies on line  $\ell_5$   
 853 :  $P_{235500} = (43, 30, 56, 1)$  lies on line  $\ell_9$   
 854 :  $P_{235780} = (3, 35, 56, 1)$  lies on line  $\ell_6$   
 855 :  $P_{235951} = (46, 37, 56, 1)$  lies on line  $\ell_{10}$   
 856 :  $P_{236491} = (10, 46, 56, 1)$  lies on line  $\ell_{14}$   
 857 :  $P_{236632} = (23, 48, 56, 1)$  lies on line  $\ell_7$   
 858 :  $P_{237108} = (51, 55, 56, 1)$  lies on line  $\ell_{15}$   
 859 :  $P_{237458} = (17, 61, 56, 1)$  lies on line  $\ell_3$   
 860 :  $P_{237633} = (0, 0, 57, 1)$  lies on line  $\ell_0$   
 861 :  $P_{237753} = (56, 1, 57, 1)$  lies on line  $\ell_{12}$   
 862 :  $P_{238310} = (37, 10, 57, 1)$  lies on line  $\ell_{15}$   
 863 :  $P_{238494} = (29, 13, 57, 1)$  lies on line  $\ell_{10}$   
 864 :  $P_{238812} = (27, 18, 57, 1)$  lies on line  $\ell_{11}$   
 865 :  $P_{238935} = (22, 20, 57, 1)$  lies on line  $\ell_{14}$   
 866 :  $P_{239219} = (50, 24, 57, 1)$  lies on line  $\ell_5$   
 867 :  $P_{240047} = (46, 37, 57, 1)$  lies on line  $\ell_8$   
 868 :  $P_{240231} = (38, 40, 57, 1)$  lies on line  $\ell_4$   
 869 :  $P_{240587} = (10, 46, 57, 1)$  lies on line  $\ell_7$   
 870 :  $P_{241350} = (5, 58, 57, 1)$  lies on line  $\ell_2$   
 871 :  $P_{241729} = (0, 0, 58, 1)$  lies on line  $\ell_0$   
 872 :  $P_{242542} = (45, 12, 58, 1)$  lies on line  $\ell_7$   
 873 :  $P_{242653} = (28, 14, 58, 1)$  lies on line  $\ell_{11}$

874 :  $P_{242940} = (59, 18, 58, 1)$  lies on line  $\ell_{13}$   
 875 :  $P_{243050} = (41, 20, 58, 1)$  lies on line  $\ell_{10}$   
 876 :  $P_{243093} = (20, 21, 58, 1)$  lies on line  $\ell_6$   
 877 :  $P_{243464} = (7, 27, 58, 1)$  lies on line  $\ell_4$   
 878 :  $P_{243866} = (25, 33, 58, 1)$  lies on line  $\ell_8$   
 879 :  $P_{244348} = (59, 40, 58, 1)$  lies on line  $\ell_{12}$   
 880 :  $P_{244576} = (31, 44, 58, 1)$  lies on line  $\ell_{15}$   
 881 :  $P_{244684} = (11, 46, 58, 1)$  lies on line  $\ell_5$   
 882 :  $P_{245006} = (13, 51, 58, 1)$  lies on line  $\ell_9$   
 883 :  $P_{245283} = (34, 55, 58, 1)$  lies on line  $\ell_3$   
 884 :  $P_{245555} = (50, 59, 58, 1)$  lies on line  $\ell_{14}$   
 885 :  $P_{245564} = (59, 59, 58, 1)$  lies on line  $\ell_1$   
 886 :  $P_{245793} = (32, 63, 58, 1)$  lies on line  $\ell_2$   
 887 :  $P_{245825} = (0, 0, 59, 1)$  lies on line  $\ell_0$   
 888 :  $P_{245935} = (46, 1, 59, 1)$  lies on line  $\ell_{14}$   
 889 :  $P_{245996} = (43, 2, 59, 1)$  lies on line  $\ell_8$   
 890 :  $P_{246489} = (24, 10, 59, 1)$  lies on line  $\ell_4$   
 891 :  $P_{246768} = (47, 14, 59, 1)$  lies on line  $\ell_6$   
 892 :  $P_{246907} = (58, 16, 59, 1)$  lies on line  $\ell_{12}$   
 893 :  $P_{246922} = (9, 17, 59, 1)$  lies on line  $\ell_{15}$   
 894 :  $P_{247025} = (48, 18, 59, 1)$  lies on line  $\ell_7$   
 895 :  $P_{247199} = (30, 21, 59, 1)$  lies on line  $\ell_9$   
 896 :  $P_{248255} = (62, 37, 59, 1)$  lies on line  $\ell_{11}$   
 897 :  $P_{248635} = (58, 43, 59, 1)$  lies on line  $\ell_{13}$   
 898 :  $P_{249036} = (11, 50, 59, 1)$  lies on line  $\ell_3$   
 899 :  $P_{249595} = (58, 58, 59, 1)$  lies on line  $\ell_1$   
 900 :  $P_{249691} = (26, 60, 59, 1)$  lies on line  $\ell_{10}$   
 901 :  $P_{249921} = (0, 0, 60, 1)$  lies on line  $\ell_0$   
 902 :  $P_{249995} = (10, 1, 60, 1)$  lies on line  $\ell_{15}$   
 903 :  $P_{250204} = (27, 4, 60, 1)$  lies on line  $\ell_{14}$   
 904 :  $P_{251710} = (61, 27, 60, 1)$  lies on line  $\ell_{12}$   
 905 :  $P_{251749} = (36, 28, 60, 1)$  lies on line  $\ell_4$   
 906 :  $P_{252185} = (24, 35, 60, 1)$  lies on line  $\ell_5$   
 907 :  $P_{252295} = (6, 37, 60, 1)$  lies on line  $\ell_9$   
 908 :  $P_{252385} = (32, 38, 60, 1)$  lies on line  $\ell_{10}$   
 909 :  $P_{252478} = (61, 39, 60, 1)$  lies on line  $\ell_{13}$   
 910 :  $P_{252547} = (2, 41, 60, 1)$  lies on line  $\ell_7$   
 911 :  $P_{252910} = (45, 46, 60, 1)$  lies on line  $\ell_6$   
 912 :  $P_{253324} = (11, 53, 60, 1)$  lies on line  $\ell_2$   
 913 :  $P_{253395} = (18, 54, 60, 1)$  lies on line  $\ell_{11}$   
 914 :  $P_{253886} = (61, 61, 60, 1)$  lies on line  $\ell_1$   
 915 :  $P_{254017} = (0, 0, 61, 1)$  lies on line  $\ell_0$   
 916 :  $P_{254230} = (21, 3, 61, 1)$  lies on line  $\ell_9$   
 917 :  $P_{254693} = (36, 10, 61, 1)$  lies on line  $\ell_8$   
 918 :  $P_{254908} = (59, 13, 61, 1)$  lies on line  $\ell_4$   
 919 :  $P_{254932} = (19, 14, 61, 1)$  lies on line  $\ell_{10}$   
 920 :  $P_{255921} = (48, 29, 61, 1)$  lies on line  $\ell_{11}$   
 921 :  $P_{255997} = (60, 30, 61, 1)$  lies on line  $\ell_{13}$   
 922 :  $P_{256317} = (60, 35, 61, 1)$  lies on line  $\ell_{12}$   
 923 :  $P_{256896} = (63, 44, 61, 1)$  lies on line  $\ell_3$   
 924 :  $P_{257168} = (15, 49, 61, 1)$  lies on line  $\ell_5$   
 925 :  $P_{257431} = (22, 53, 61, 1)$  lies on line  $\ell_6$   
 926 :  $P_{257528} = (55, 54, 61, 1)$  lies on line  $\ell_2$   
 927 :  $P_{257568} = (31, 55, 61, 1)$  lies on line  $\ell_7$

928 :  $P_{257885} = (28, 60, 61, 1)$  lies on line  $\ell_{15}$   
 929 :  $P_{257917} = (60, 60, 61, 1)$  lies on line  $\ell_1$   
 930 :  $P_{257992} = (7, 62, 61, 1)$  lies on line  $\ell_{14}$   
 931 :  $P_{258113} = (0, 0, 62, 1)$  lies on line  $\ell_0$   
 932 :  $P_{258232} = (55, 1, 62, 1)$  lies on line  $\ell_{11}$   
 933 :  $P_{258615} = (54, 7, 62, 1)$  lies on line  $\ell_5$   
 934 :  $P_{258657} = (32, 8, 62, 1)$  lies on line  $\ell_9$   
 935 :  $P_{258816} = (63, 10, 62, 1)$  lies on line  $\ell_{12}$   
 936 :  $P_{259028} = (19, 14, 62, 1)$  lies on line  $\ell_8$   
 937 :  $P_{259236} = (35, 17, 62, 1)$  lies on line  $\ell_{14}$   
 938 :  $P_{259513} = (56, 21, 62, 1)$  lies on line  $\ell_7$   
 939 :  $P_{259624} = (39, 23, 62, 1)$  lies on line  $\ell_{10}$   
 940 :  $P_{259707} = (58, 24, 62, 1)$  lies on line  $\ell_6$   
 941 :  $P_{259815} = (38, 26, 62, 1)$  lies on line  $\ell_{15}$   
 942 :  $P_{260390} = (37, 35, 62, 1)$  lies on line  $\ell_3$   
 943 :  $P_{261395} = (18, 51, 62, 1)$  lies on line  $\ell_2$   
 944 :  $P_{261504} = (63, 52, 62, 1)$  lies on line  $\ell_{13}$   
 945 :  $P_{262107} = (26, 62, 62, 1)$  lies on line  $\ell_4$

946 :  $P_{262208} = (63, 63, 62, 1)$  lies on line  $\ell_1$   
 947 :  $P_{262209} = (0, 0, 63, 1)$  lies on line  $\ell_0$   
 948 :  $P_{262402} = (1, 3, 63, 1)$  lies on line  $\ell_6$   
 949 :  $P_{262950} = (37, 11, 63, 1)$  lies on line  $\ell_7$   
 950 :  $P_{263103} = (62, 13, 63, 1)$  lies on line  $\ell_{13}$   
 951 :  $P_{263586} = (33, 21, 63, 1)$  lies on line  $\ell_5$   
 952 :  $P_{264653} = (12, 38, 63, 1)$  lies on line  $\ell_3$   
 953 :  $P_{264753} = (48, 39, 63, 1)$  lies on line  $\ell_{15}$   
 954 :  $P_{264918} = (21, 42, 63, 1)$  lies on line  $\ell_{11}$   
 955 :  $P_{265024} = (63, 43, 63, 1)$  lies on line  $\ell_{14}$   
 956 :  $P_{265122} = (33, 45, 63, 1)$  lies on line  $\ell_8$   
 957 :  $P_{265204} = (51, 46, 63, 1)$  lies on line  $\ell_9$   
 958 :  $P_{265222} = (5, 47, 63, 1)$  lies on line  $\ell_4$   
 959 :  $P_{265327} = (46, 48, 63, 1)$  lies on line  $\ell_2$   
 960 :  $P_{265471} = (62, 50, 63, 1)$  lies on line  $\ell_{12}$   
 961 :  $P_{266239} = (62, 62, 63, 1)$  lies on line  $\ell_1$   
 962 :  $P_{266261} = (20, 63, 63, 1)$  lies on line  $\ell_{10}$

The single points on the surface are:

### Points on surface but on no line

The surface has 3420 points not on any line:  
Too many to print.

### Line Intersection Graph

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	0	1	0	0	0	1	0	1	1	0	1	0	0	0	1	1
1	1	0	1	1	1	0	1	0	0	1	0	1	1	1	0	0
2	0	1	0	0	1	1	0	1	1	1	0	1	1	0	0	0
3	0	1	0	0	0	1	1	0	1	1	0	1	0	1	1	0
4	0	1	1	0	0	0	1	0	1	0	0	1	1	0	1	1
5	1	0	1	1	0	0	1	0	0	0	0	1	0	0	0	1
6	0	1	0	1	1	1	0	1	0	1	1	0	0	1	0	0
7	1	0	1	0	0	0	1	0	0	0	0	1	0	1	1	0
8	1	0	1	1	1	0	0	0	0	0	1	0	0	1	0	0
9	0	1	1	1	0	0	1	0	0	0	1	0	0	1	1	1
10	1	0	0	0	0	0	1	0	1	1	0	1	1	0	0	0
11	0	1	1	1	1	0	0	1	0	0	1	0	1	0	0	1
12	0	1	1	0	1	1	0	0	0	0	1	1	0	1	1	0
13	0	1	0	1	0	0	1	1	1	1	0	0	1	0	0	1
14	1	0	0	1	1	0	0	1	0	1	0	0	1	0	0	0
15	1	0	0	0	1	1	0	0	0	1	0	1	0	1	0	0

Neighbor sets in the line intersection graph:

Line 0 intersects

Line	$\ell_1$	$\ell_5$	$\ell_7$	$\ell_8$	$\ell_{10}$	$\ell_{14}$	$\ell_{15}$
in point	$P_{8258}$	$P_{192577}$	$P_{155713}$	$P_{45121}$	$P_{45121}$	$P_{155713}$	$P_{192577}$

Line 1 intersects

Line	$\ell_0$	$\ell_2$	$\ell_3$	$\ell_4$	$\ell_6$	$\ell_9$	$\ell_{11}$	$\ell_{12}$	$\ell_{13}$
in point	$P_{8258}$	$P_{237242}$	$P_{241273}$	$P_{237242}$	$P_{241273}$	$P_{241273}$	$P_{237242}$	$P_{237242}$	$P_{241273}$

Line 2 intersects

Line	$\ell_1$	$\ell_4$	$\ell_5$	$\ell_7$	$\ell_8$	$\ell_9$	$\ell_{11}$	$\ell_{12}$
in point	$P_{237242}$	$P_{237242}$	$P_{249693}$	$P_{9503}$	$P_{106094}$	$P_{196709}$	$P_{237242}$	$P_{237242}$

Line 3 intersects

Line	$\ell_1$	$\ell_5$	$\ell_6$	$\ell_8$	$\ell_9$	$\ell_{11}$	$\ell_{13}$	$\ell_{14}$
in point	$P_{241273}$	$P_{10451}$	$P_{241273}$	$P_{252567}$	$P_{241273}$	$P_{49264}$	$P_{241273}$	$P_{32400}$

Line 4 intersects

Line	$\ell_1$	$\ell_2$	$\ell_6$	$\ell_8$	$\ell_{11}$	$\ell_{12}$	$\ell_{14}$	$\ell_{15}$
in point	$P_{237242}$	$P_{237242}$	$P_{151628}$	$P_{12068}$	$P_{237242}$	$P_{237242}$	$P_{174132}$	$P_{89717}$

Line 5 intersects

Line	$\ell_0$	$\ell_2$	$\ell_3$	$\ell_6$	$\ell_{12}$	$\ell_{15}$
in point	$P_{192577}$	$P_{249693}$	$P_{10451}$	$P_{204479}$	$P_{184107}$	$P_{192577}$

Line 6 intersects

Line	$\ell_1$	$\ell_3$	$\ell_4$	$\ell_5$	$\ell_7$	$\ell_9$	$\ell_{10}$	$\ell_{13}$
in point	$P_{241273}$	$P_{241273}$	$P_{151628}$	$P_{204479}$	$P_{147251}$	$P_{241273}$	$P_{10281}$	$P_{241273}$

Line 7 intersects

Line	$\ell_0$	$\ell_2$	$\ell_6$	$\ell_{11}$	$\ell_{13}$	$\ell_{14}$
in point	$P_{155713}$	$P_{9503}$	$P_{147251}$	$P_{61026}$	$P_{162024}$	$P_{155713}$

Line 8 intersects

Line	$\ell_0$	$\ell_2$	$\ell_3$	$\ell_4$	$\ell_{10}$	$\ell_{13}$
in point	$P_{45121}$	$P_{106094}$	$P_{252567}$	$P_{12068}$	$P_{45121}$	$P_{118619}$

Line 9 intersects

Line	$\ell_1$	$\ell_2$	$\ell_3$	$\ell_6$	$\ell_{10}$	$\ell_{13}$	$\ell_{14}$	$\ell_{15}$
in point	$P_{241273}$	$P_{196709}$	$P_{241273}$	$P_{241273}$	$P_{233097}$	$P_{241273}$	$P_{12155}$	$P_{132382}$

Line 10 intersects

Line	$\ell_0$	$\ell_6$	$\ell_8$	$\ell_9$	$\ell_{11}$	$\ell_{12}$
in point	$P_{45121}$	$P_{10281}$	$P_{45121}$	$P_{233097}$	$P_{84184}$	$P_{75025}$

Line 11 intersects

Line	$\ell_1$	$\ell_2$	$\ell_3$	$\ell_4$	$\ell_7$	$\ell_{10}$	$\ell_{12}$	$\ell_{15}$
in point	$P_{237242}$	$P_{237242}$	$P_{49264}$	$P_{237242}$	$P_{61026}$	$P_{84184}$	$P_{237242}$	$P_{10942}$

Line 12 intersects

Line	$\ell_1$	$\ell_2$	$\ell_4$	$\ell_5$	$\ell_{10}$	$\ell_{11}$	$\ell_{13}$	$\ell_{14}$
in point	$P_{237242}$	$P_{237242}$	$P_{237242}$	$P_{184107}$	$P_{75025}$	$P_{237242}$	$P_{4163}$	$P_{19075}$

Line 13 intersects

Line	$\ell_1$	$\ell_3$	$\ell_6$	$\ell_7$	$\ell_8$	$\ell_9$	$\ell_{12}$	$\ell_{15}$
in point	$P_{241273}$	$P_{241273}$	$P_{241273}$	$P_{162024}$	$P_{118619}$	$P_{241273}$	$P_{4163}$	$P_{26629}$

Line 14 intersects

Line	$\ell_0$	$\ell_3$	$\ell_4$	$\ell_7$	$\ell_9$	$\ell_{12}$
in point	$P_{155713}$	$P_{32400}$	$P_{174132}$	$P_{155713}$	$P_{12155}$	$P_{19075}$

Line 15 intersects

Line	$\ell_0$	$\ell_4$	$\ell_5$	$\ell_9$	$\ell_{11}$	$\ell_{13}$
in point	$P_{192577}$	$P_{89717}$	$P_{192577}$	$P_{132382}$	$P_{10942}$	$P_{26629}$

The surface has 4417 points:

Too many to print.