

Rank-76291 over GF(64)

January 15, 2021

The equation

The equation of the surface is :

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

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

The point rank of the equation over GF(64) is 1090785349

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:

$$0 : P_0 = \mathbf{P}(1, 0, 0, 0) = \mathbf{P}(1, 0, 0, 0)$$

$$1 : P_{68} = \mathbf{P}(1, 0, 1, 0) = \mathbf{P}(1, 0, 1, 0)$$

The 16 Lines

The lines and their Pluecker coordinates are:

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

$$\begin{aligned}
\ell_1 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{4096} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{4096} = \mathbf{Pl}(0, 0, 1, 0, 0, 0)_2 \\
\ell_2 &= \begin{bmatrix} 1 & 0 & 1 & 0 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{4161} = \begin{bmatrix} 1 & 0 & 1 & 0 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{4161} = \mathbf{Pl}(1, 0, 0, 0, 0, 1)_{270402} \\
\ell_3 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{65} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{65} = \mathbf{Pl}(1, 0, 1, 0, 1, 0)_{4353} \\
\ell_4 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & \epsilon^{21} & \epsilon^{42} \end{bmatrix}_{3641} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 57 & 56 \end{bmatrix}_{3641} = \mathbf{Pl}(57, 0, 56, 0, 1, 0)_{11394} \\
\ell_5 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & \epsilon^{42} & \epsilon^{21} \end{bmatrix}_{3704} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 56 & 57 \end{bmatrix}_{3704} = \mathbf{Pl}(56, 0, 57, 0, 1, 0)_{11520} \\
\ell_6 &= \begin{bmatrix} 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{17047616} = \begin{bmatrix} 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{17047616} = \mathbf{Pl}(0, 1, 0, 0, 0, 0)_1 \\
\ell_7 &= \begin{bmatrix} 1 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{8258} = \begin{bmatrix} 1 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{8258} = \mathbf{Pl}(0, 0, 1, 1, 1, 1)_{544578} \\
\ell_8 &= \begin{bmatrix} 1 & \epsilon^{21} & 0 & 0 \\ 0 & 0 & 1 & \epsilon^{42} \end{bmatrix}_{241329} = \begin{bmatrix} 1 & 57 & 0 & 0 \\ 0 & 0 & 1 & 56 \end{bmatrix}_{241329} = \mathbf{Pl}(0, 0, 57, 56, 57, 1)_{15228170} \\
\ell_9 &= \begin{bmatrix} 1 & \epsilon^{42} & 0 & 0 \\ 0 & 0 & 1 & \epsilon^{21} \end{bmatrix}_{237169} = \begin{bmatrix} 1 & 56 & 0 & 0 \\ 0 & 0 & 1 & 57 \end{bmatrix}_{237169} = \mathbf{Pl}(0, 0, 56, 57, 56, 1)_{14965963} \\
\ell_{10} &= \begin{bmatrix} 1 & 0 & 1 & 0 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{4226} = \begin{bmatrix} 1 & 0 & 1 & 0 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{4226} = \mathbf{Pl}(1, 1, 1, 0, 1, 1)_{536640} \\
\ell_{11} &= \begin{bmatrix} 1 & 0 & 1 & 0 \\ 0 & 1 & \epsilon^{42} & \epsilon^{21} \end{bmatrix}_{7865} = \begin{bmatrix} 1 & 0 & 1 & 0 \\ 0 & 1 & 56 & 57 \end{bmatrix}_{7865} = \mathbf{Pl}(56, 57, 57, 0, 57, 1)_{15216703} \\
\ell_{12} &= \begin{bmatrix} 1 & 0 & 1 & 0 \\ 0 & 1 & \epsilon^{21} & \epsilon^{42} \end{bmatrix}_{7802} = \begin{bmatrix} 1 & 0 & 1 & 0 \\ 0 & 1 & 57 & 56 \end{bmatrix}_{7802} = \mathbf{Pl}(57, 56, 56, 0, 56, 1)_{14954561} \\
\ell_{13} &= \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_{14} &= \begin{bmatrix} 1 & \epsilon^{42} & 0 & \epsilon^{21} \\ 0 & 0 & 1 & \epsilon^{21} \end{bmatrix}_{15416497} = \begin{bmatrix} 1 & 56 & 0 & 57 \\ 0 & 0 & 1 & 57 \end{bmatrix}_{15416497} = \mathbf{Pl}(0, 56, 56, 57, 56, 1)_{14966082} \\
\ell_{15} &= \begin{bmatrix} 1 & \epsilon^{21} & 0 & \epsilon^{42} \\ 0 & 0 & 1 & \epsilon^{42} \end{bmatrix}_{15154353} = \begin{bmatrix} 1 & 57 & 0 & 56 \\ 0 & 0 & 1 & 56 \end{bmatrix}_{15154353} = \mathbf{Pl}(0, 57, 57, 56, 57, 1)_{15228290}
\end{aligned}$$

Rank of lines: (0, 4096, 4161, 65, 3641, 3704, 17047616, 8258, 241329, 237169, 4226, 7865, 7802, 274562, 15416497, 15154353)

Rank of points on Klein quadric: (0, 2, 270402, 4353, 11394, 11520, 1, 544578, 15228170, 14965963, 536640, 15216703, 14954561, 544642, 14966082, 15228290)

Eckardt Points

The surface has 3 Eckardt points:

$$0 : P_{8258} = \mathbf{P}(0, 0, 1, 1) = \mathbf{P}(0, 0, 1, 1),$$

$$1 : P_{233537} = \mathbf{P}(0, 0, \epsilon^{42}, 1) = \mathbf{P}(0, 0, 56, 1),$$

$$2 : P_{237633} = \mathbf{P}(0, 0, \epsilon^{21}, 1) = \mathbf{P}(0, 0, 57, 1).$$

Double Points

The surface has 29 Double points:

The double points on the surface are:

$$\begin{aligned}
P_1 &= (0, 1, 0, 0) = \ell_0 \cap \ell_2 \\
P_5 &= (1, 1, 0, 0) = \ell_0 \cap \ell_7 \\
P_{60} &= (56, 1, 0, 0) = \ell_0 \cap \ell_8 \\
P_{61} &= (57, 1, 0, 0) = \ell_0 \cap \ell_9 \\
P_2 &= (0, 0, 1, 0) = \ell_1 \cap \ell_6 \\
P_{132} &= (1, 1, 1, 0) = \ell_2 \cap \ell_{13} \\
P_{3652} &= (1, 56, 1, 0) = \ell_2 \cap \ell_{14} \\
P_{3716} &= (1, 57, 1, 0) = \ell_2 \cap \ell_{15} \\
P_4 &= (1, 1, 1, 1) = \ell_3 \cap \ell_7 \\
P_{8322} &= (0, 1, 1, 1) = \ell_3 \cap \ell_{10} \\
P_{8378} &= (57, 1, 1, 1) = \ell_3 \cap \ell_{14} \\
P_{8377} &= (56, 1, 1, 1) = \ell_3 \cap \ell_{15} \\
P_{237241} &= (56, 57, 56, 1) = \ell_4 \cap \ell_9 \\
P_{237185} &= (0, 57, 56, 1) = \ell_4 \cap \ell_{12} \\
P_{237242} &= (57, 57, 56, 1) = \ell_4 \cap \ell_{13}
\end{aligned}$$

$$\begin{aligned}
P_{237186} &= (1, 57, 56, 1) = \ell_4 \cap \ell_{15} \\
P_{241274} &= (57, 56, 57, 1) = \ell_5 \cap \ell_8 \\
P_{241217} &= (0, 56, 57, 1) = \ell_5 \cap \ell_{11} \\
P_{241273} &= (56, 56, 57, 1) = \ell_5 \cap \ell_{13} \\
P_{241218} &= (1, 56, 57, 1) = \ell_5 \cap \ell_{14} \\
P_{11897} &= (56, 56, 1, 1) = \ell_7 \cap \ell_{11} \\
P_{11962} &= (57, 57, 1, 1) = \ell_7 \cap \ell_{12} \\
P_{237753} &= (56, 1, 57, 1) = \ell_8 \cap \ell_{10} \\
P_{241282} &= (1, 57, 57, 1) = \ell_8 \cap \ell_{12} \\
P_{233658} &= (57, 1, 56, 1) = \ell_9 \cap \ell_{10} \\
P_{237122} &= (1, 56, 56, 1) = \ell_9 \cap \ell_{11} \\
P_{4227} &= (1, 1, 0, 1) = \ell_{10} \cap \ell_{13} \\
P_{7803} &= (57, 56, 0, 1) = \ell_{11} \cap \ell_{15} \\
P_{7866} &= (56, 57, 0, 1) = \ell_{12} \cap \ell_{14}
\end{aligned}$$

Single Points

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

$$\begin{aligned}
0 : P_3 &= (0, 0, 0, 1) \text{ lies on line } \ell_6 \\
1 : P_6 &= (2, 1, 0, 0) \text{ lies on line } \ell_0 \\
2 : P_7 &= (3, 1, 0, 0) \text{ lies on line } \ell_0 \\
3 : P_8 &= (4, 1, 0, 0) \text{ lies on line } \ell_0 \\
4 : P_9 &= (5, 1, 0, 0) \text{ lies on line } \ell_0 \\
5 : P_{10} &= (6, 1, 0, 0) \text{ lies on line } \ell_0 \\
6 : P_{11} &= (7, 1, 0, 0) \text{ lies on line } \ell_0 \\
7 : P_{12} &= (8, 1, 0, 0) \text{ lies on line } \ell_0 \\
8 : P_{13} &= (9, 1, 0, 0) \text{ lies on line } \ell_0 \\
9 : P_{14} &= (10, 1, 0, 0) \text{ lies on line } \ell_0 \\
10 : P_{15} &= (11, 1, 0, 0) \text{ lies on line } \ell_0 \\
11 : P_{16} &= (12, 1, 0, 0) \text{ lies on line } \ell_0 \\
12 : P_{17} &= (13, 1, 0, 0) \text{ lies on line } \ell_0 \\
13 : P_{18} &= (14, 1, 0, 0) \text{ lies on line } \ell_0 \\
14 : P_{19} &= (15, 1, 0, 0) \text{ lies on line } \ell_0 \\
15 : P_{20} &= (16, 1, 0, 0) \text{ lies on line } \ell_0 \\
16 : P_{21} &= (17, 1, 0, 0) \text{ lies on line } \ell_0 \\
17 : P_{22} &= (18, 1, 0, 0) \text{ lies on line } \ell_0 \\
18 : P_{23} &= (19, 1, 0, 0) \text{ lies on line } \ell_0 \\
19 : P_{24} &= (20, 1, 0, 0) \text{ lies on line } \ell_0 \\
20 : P_{25} &= (21, 1, 0, 0) \text{ lies on line } \ell_0 \\
21 : P_{26} &= (22, 1, 0, 0) \text{ lies on line } \ell_0 \\
22 : P_{27} &= (23, 1, 0, 0) \text{ lies on line } \ell_0 \\
23 : P_{28} &= (24, 1, 0, 0) \text{ lies on line } \ell_0 \\
24 : P_{29} &= (25, 1, 0, 0) \text{ lies on line } \ell_0 \\
25 : P_{30} &= (26, 1, 0, 0) \text{ lies on line } \ell_0 \\
26 : P_{31} &= (27, 1, 0, 0) \text{ lies on line } \ell_0 \\
27 : P_{32} &= (28, 1, 0, 0) \text{ lies on line } \ell_0 \\
28 : P_{33} &= (29, 1, 0, 0) \text{ lies on line } \ell_0 \\
29 : P_{34} &= (30, 1, 0, 0) \text{ lies on line } \ell_0 \\
30 : P_{35} &= (31, 1, 0, 0) \text{ lies on line } \ell_0 \\
31 : P_{36} &= (32, 1, 0, 0) \text{ lies on line } \ell_0
\end{aligned}$$

$$\begin{aligned}
32 : P_{37} &= (33, 1, 0, 0) \text{ lies on line } \ell_0 \\
33 : P_{38} &= (34, 1, 0, 0) \text{ lies on line } \ell_0 \\
34 : P_{39} &= (35, 1, 0, 0) \text{ lies on line } \ell_0 \\
35 : P_{40} &= (36, 1, 0, 0) \text{ lies on line } \ell_0 \\
36 : P_{41} &= (37, 1, 0, 0) \text{ lies on line } \ell_0 \\
37 : P_{42} &= (38, 1, 0, 0) \text{ lies on line } \ell_0 \\
38 : P_{43} &= (39, 1, 0, 0) \text{ lies on line } \ell_0 \\
39 : P_{44} &= (40, 1, 0, 0) \text{ lies on line } \ell_0 \\
40 : P_{45} &= (41, 1, 0, 0) \text{ lies on line } \ell_0 \\
41 : P_{46} &= (42, 1, 0, 0) \text{ lies on line } \ell_0 \\
42 : P_{47} &= (43, 1, 0, 0) \text{ lies on line } \ell_0 \\
43 : P_{48} &= (44, 1, 0, 0) \text{ lies on line } \ell_0 \\
44 : P_{49} &= (45, 1, 0, 0) \text{ lies on line } \ell_0 \\
45 : P_{50} &= (46, 1, 0, 0) \text{ lies on line } \ell_0 \\
46 : P_{51} &= (47, 1, 0, 0) \text{ lies on line } \ell_0 \\
47 : P_{52} &= (48, 1, 0, 0) \text{ lies on line } \ell_0 \\
48 : P_{53} &= (49, 1, 0, 0) \text{ lies on line } \ell_0 \\
49 : P_{54} &= (50, 1, 0, 0) \text{ lies on line } \ell_0 \\
50 : P_{55} &= (51, 1, 0, 0) \text{ lies on line } \ell_0 \\
51 : P_{56} &= (52, 1, 0, 0) \text{ lies on line } \ell_0 \\
52 : P_{57} &= (53, 1, 0, 0) \text{ lies on line } \ell_0 \\
53 : P_{58} &= (54, 1, 0, 0) \text{ lies on line } \ell_0 \\
54 : P_{59} &= (55, 1, 0, 0) \text{ lies on line } \ell_0 \\
55 : P_{62} &= (58, 1, 0, 0) \text{ lies on line } \ell_0 \\
56 : P_{63} &= (59, 1, 0, 0) \text{ lies on line } \ell_0 \\
57 : P_{64} &= (60, 1, 0, 0) \text{ lies on line } \ell_0 \\
58 : P_{65} &= (61, 1, 0, 0) \text{ lies on line } \ell_0 \\
59 : P_{66} &= (62, 1, 0, 0) \text{ lies on line } \ell_0 \\
60 : P_{67} &= (63, 1, 0, 0) \text{ lies on line } \ell_0 \\
61 : P_{69} &= (2, 0, 1, 0) \text{ lies on line } \ell_1 \\
62 : P_{70} &= (3, 0, 1, 0) \text{ lies on line } \ell_1 \\
63 : P_{71} &= (4, 0, 1, 0) \text{ lies on line } \ell_1
\end{aligned}$$

64 : $P_{72} = (5, 0, 1, 0)$ lies on line ℓ_1
 65 : $P_{73} = (6, 0, 1, 0)$ lies on line ℓ_1
 66 : $P_{74} = (7, 0, 1, 0)$ lies on line ℓ_1
 67 : $P_{75} = (8, 0, 1, 0)$ lies on line ℓ_1
 68 : $P_{76} = (9, 0, 1, 0)$ lies on line ℓ_1
 69 : $P_{77} = (10, 0, 1, 0)$ lies on line ℓ_1
 70 : $P_{78} = (11, 0, 1, 0)$ lies on line ℓ_1
 71 : $P_{79} = (12, 0, 1, 0)$ lies on line ℓ_1
 72 : $P_{80} = (13, 0, 1, 0)$ lies on line ℓ_1
 73 : $P_{81} = (14, 0, 1, 0)$ lies on line ℓ_1
 74 : $P_{82} = (15, 0, 1, 0)$ lies on line ℓ_1
 75 : $P_{83} = (16, 0, 1, 0)$ lies on line ℓ_1
 76 : $P_{84} = (17, 0, 1, 0)$ lies on line ℓ_1
 77 : $P_{85} = (18, 0, 1, 0)$ lies on line ℓ_1
 78 : $P_{86} = (19, 0, 1, 0)$ lies on line ℓ_1
 79 : $P_{87} = (20, 0, 1, 0)$ lies on line ℓ_1
 80 : $P_{88} = (21, 0, 1, 0)$ lies on line ℓ_1
 81 : $P_{89} = (22, 0, 1, 0)$ lies on line ℓ_1
 82 : $P_{90} = (23, 0, 1, 0)$ lies on line ℓ_1
 83 : $P_{91} = (24, 0, 1, 0)$ lies on line ℓ_1
 84 : $P_{92} = (25, 0, 1, 0)$ lies on line ℓ_1
 85 : $P_{93} = (26, 0, 1, 0)$ lies on line ℓ_1
 86 : $P_{94} = (27, 0, 1, 0)$ lies on line ℓ_1
 87 : $P_{95} = (28, 0, 1, 0)$ lies on line ℓ_1
 88 : $P_{96} = (29, 0, 1, 0)$ lies on line ℓ_1
 89 : $P_{97} = (30, 0, 1, 0)$ lies on line ℓ_1
 90 : $P_{98} = (31, 0, 1, 0)$ lies on line ℓ_1
 91 : $P_{99} = (32, 0, 1, 0)$ lies on line ℓ_1
 92 : $P_{100} = (33, 0, 1, 0)$ lies on line ℓ_1
 93 : $P_{101} = (34, 0, 1, 0)$ lies on line ℓ_1
 94 : $P_{102} = (35, 0, 1, 0)$ lies on line ℓ_1
 95 : $P_{103} = (36, 0, 1, 0)$ lies on line ℓ_1
 96 : $P_{104} = (37, 0, 1, 0)$ lies on line ℓ_1
 97 : $P_{105} = (38, 0, 1, 0)$ lies on line ℓ_1
 98 : $P_{106} = (39, 0, 1, 0)$ lies on line ℓ_1
 99 : $P_{107} = (40, 0, 1, 0)$ lies on line ℓ_1
 100 : $P_{108} = (41, 0, 1, 0)$ lies on line ℓ_1
 101 : $P_{109} = (42, 0, 1, 0)$ lies on line ℓ_1
 102 : $P_{110} = (43, 0, 1, 0)$ lies on line ℓ_1
 103 : $P_{111} = (44, 0, 1, 0)$ lies on line ℓ_1
 104 : $P_{112} = (45, 0, 1, 0)$ lies on line ℓ_1
 105 : $P_{113} = (46, 0, 1, 0)$ lies on line ℓ_1
 106 : $P_{114} = (47, 0, 1, 0)$ lies on line ℓ_1
 107 : $P_{115} = (48, 0, 1, 0)$ lies on line ℓ_1
 108 : $P_{116} = (49, 0, 1, 0)$ lies on line ℓ_1
 109 : $P_{117} = (50, 0, 1, 0)$ lies on line ℓ_1
 110 : $P_{118} = (51, 0, 1, 0)$ lies on line ℓ_1
 111 : $P_{119} = (52, 0, 1, 0)$ lies on line ℓ_1
 112 : $P_{120} = (53, 0, 1, 0)$ lies on line ℓ_1
 113 : $P_{121} = (54, 0, 1, 0)$ lies on line ℓ_1
 114 : $P_{122} = (55, 0, 1, 0)$ lies on line ℓ_1
 115 : $P_{123} = (56, 0, 1, 0)$ lies on line ℓ_1
 116 : $P_{124} = (57, 0, 1, 0)$ lies on line ℓ_1
 117 : $P_{125} = (58, 0, 1, 0)$ lies on line ℓ_1

118 : $P_{126} = (59, 0, 1, 0)$ lies on line ℓ_1
 119 : $P_{127} = (60, 0, 1, 0)$ lies on line ℓ_1
 120 : $P_{128} = (61, 0, 1, 0)$ lies on line ℓ_1
 121 : $P_{129} = (62, 0, 1, 0)$ lies on line ℓ_1
 122 : $P_{130} = (63, 0, 1, 0)$ lies on line ℓ_1
 123 : $P_{196} = (1, 2, 1, 0)$ lies on line ℓ_2
 124 : $P_{260} = (1, 3, 1, 0)$ lies on line ℓ_2
 125 : $P_{324} = (1, 4, 1, 0)$ lies on line ℓ_2
 126 : $P_{388} = (1, 5, 1, 0)$ lies on line ℓ_2
 127 : $P_{452} = (1, 6, 1, 0)$ lies on line ℓ_2
 128 : $P_{516} = (1, 7, 1, 0)$ lies on line ℓ_2
 129 : $P_{580} = (1, 8, 1, 0)$ lies on line ℓ_2
 130 : $P_{644} = (1, 9, 1, 0)$ lies on line ℓ_2
 131 : $P_{708} = (1, 10, 1, 0)$ lies on line ℓ_2
 132 : $P_{772} = (1, 11, 1, 0)$ lies on line ℓ_2
 133 : $P_{836} = (1, 12, 1, 0)$ lies on line ℓ_2
 134 : $P_{900} = (1, 13, 1, 0)$ lies on line ℓ_2
 135 : $P_{964} = (1, 14, 1, 0)$ lies on line ℓ_2
 136 : $P_{1028} = (1, 15, 1, 0)$ lies on line ℓ_2
 137 : $P_{1092} = (1, 16, 1, 0)$ lies on line ℓ_2
 138 : $P_{1156} = (1, 17, 1, 0)$ lies on line ℓ_2
 139 : $P_{1220} = (1, 18, 1, 0)$ lies on line ℓ_2
 140 : $P_{1284} = (1, 19, 1, 0)$ lies on line ℓ_2
 141 : $P_{1348} = (1, 20, 1, 0)$ lies on line ℓ_2
 142 : $P_{1412} = (1, 21, 1, 0)$ lies on line ℓ_2
 143 : $P_{1476} = (1, 22, 1, 0)$ lies on line ℓ_2
 144 : $P_{1540} = (1, 23, 1, 0)$ lies on line ℓ_2
 145 : $P_{1604} = (1, 24, 1, 0)$ lies on line ℓ_2
 146 : $P_{1668} = (1, 25, 1, 0)$ lies on line ℓ_2
 147 : $P_{1732} = (1, 26, 1, 0)$ lies on line ℓ_2
 148 : $P_{1796} = (1, 27, 1, 0)$ lies on line ℓ_2
 149 : $P_{1860} = (1, 28, 1, 0)$ lies on line ℓ_2
 150 : $P_{1924} = (1, 29, 1, 0)$ lies on line ℓ_2
 151 : $P_{1988} = (1, 30, 1, 0)$ lies on line ℓ_2
 152 : $P_{2052} = (1, 31, 1, 0)$ lies on line ℓ_2
 153 : $P_{2116} = (1, 32, 1, 0)$ lies on line ℓ_2
 154 : $P_{2180} = (1, 33, 1, 0)$ lies on line ℓ_2
 155 : $P_{2244} = (1, 34, 1, 0)$ lies on line ℓ_2
 156 : $P_{2308} = (1, 35, 1, 0)$ lies on line ℓ_2
 157 : $P_{2372} = (1, 36, 1, 0)$ lies on line ℓ_2
 158 : $P_{2436} = (1, 37, 1, 0)$ lies on line ℓ_2
 159 : $P_{2500} = (1, 38, 1, 0)$ lies on line ℓ_2
 160 : $P_{2564} = (1, 39, 1, 0)$ lies on line ℓ_2
 161 : $P_{2628} = (1, 40, 1, 0)$ lies on line ℓ_2
 162 : $P_{2692} = (1, 41, 1, 0)$ lies on line ℓ_2
 163 : $P_{2756} = (1, 42, 1, 0)$ lies on line ℓ_2
 164 : $P_{2820} = (1, 43, 1, 0)$ lies on line ℓ_2
 165 : $P_{2884} = (1, 44, 1, 0)$ lies on line ℓ_2
 166 : $P_{2948} = (1, 45, 1, 0)$ lies on line ℓ_2
 167 : $P_{3012} = (1, 46, 1, 0)$ lies on line ℓ_2
 168 : $P_{3076} = (1, 47, 1, 0)$ lies on line ℓ_2
 169 : $P_{3140} = (1, 48, 1, 0)$ lies on line ℓ_2
 170 : $P_{3204} = (1, 49, 1, 0)$ lies on line ℓ_2
 171 : $P_{3268} = (1, 50, 1, 0)$ lies on line ℓ_2

172 : $P_{3332} = (1, 51, 1, 0)$ lies on line ℓ_2
 173 : $P_{3396} = (1, 52, 1, 0)$ lies on line ℓ_2
 174 : $P_{3460} = (1, 53, 1, 0)$ lies on line ℓ_2
 175 : $P_{3524} = (1, 54, 1, 0)$ lies on line ℓ_2
 176 : $P_{3588} = (1, 55, 1, 0)$ lies on line ℓ_2
 177 : $P_{3780} = (1, 58, 1, 0)$ lies on line ℓ_2
 178 : $P_{3844} = (1, 59, 1, 0)$ lies on line ℓ_2
 179 : $P_{3908} = (1, 60, 1, 0)$ lies on line ℓ_2
 180 : $P_{3972} = (1, 61, 1, 0)$ lies on line ℓ_2
 181 : $P_{4036} = (1, 62, 1, 0)$ lies on line ℓ_2
 182 : $P_{4100} = (1, 63, 1, 0)$ lies on line ℓ_2
 183 : $P_{8323} = (2, 1, 1, 1)$ lies on line ℓ_3
 184 : $P_{8324} = (3, 1, 1, 1)$ lies on line ℓ_3
 185 : $P_{8325} = (4, 1, 1, 1)$ lies on line ℓ_3
 186 : $P_{8326} = (5, 1, 1, 1)$ lies on line ℓ_3
 187 : $P_{8327} = (6, 1, 1, 1)$ lies on line ℓ_3
 188 : $P_{8328} = (7, 1, 1, 1)$ lies on line ℓ_3
 189 : $P_{8329} = (8, 1, 1, 1)$ lies on line ℓ_3
 190 : $P_{8330} = (9, 1, 1, 1)$ lies on line ℓ_3
 191 : $P_{8331} = (10, 1, 1, 1)$ lies on line ℓ_3
 192 : $P_{8332} = (11, 1, 1, 1)$ lies on line ℓ_3
 193 : $P_{8333} = (12, 1, 1, 1)$ lies on line ℓ_3
 194 : $P_{8334} = (13, 1, 1, 1)$ lies on line ℓ_3
 195 : $P_{8335} = (14, 1, 1, 1)$ lies on line ℓ_3
 196 : $P_{8336} = (15, 1, 1, 1)$ lies on line ℓ_3
 197 : $P_{8337} = (16, 1, 1, 1)$ lies on line ℓ_3
 198 : $P_{8338} = (17, 1, 1, 1)$ lies on line ℓ_3
 199 : $P_{8339} = (18, 1, 1, 1)$ lies on line ℓ_3
 200 : $P_{8340} = (19, 1, 1, 1)$ lies on line ℓ_3
 201 : $P_{8341} = (20, 1, 1, 1)$ lies on line ℓ_3
 202 : $P_{8342} = (21, 1, 1, 1)$ lies on line ℓ_3
 203 : $P_{8343} = (22, 1, 1, 1)$ lies on line ℓ_3
 204 : $P_{8344} = (23, 1, 1, 1)$ lies on line ℓ_3
 205 : $P_{8345} = (24, 1, 1, 1)$ lies on line ℓ_3
 206 : $P_{8346} = (25, 1, 1, 1)$ lies on line ℓ_3
 207 : $P_{8347} = (26, 1, 1, 1)$ lies on line ℓ_3
 208 : $P_{8348} = (27, 1, 1, 1)$ lies on line ℓ_3
 209 : $P_{8349} = (28, 1, 1, 1)$ lies on line ℓ_3
 210 : $P_{8350} = (29, 1, 1, 1)$ lies on line ℓ_3
 211 : $P_{8351} = (30, 1, 1, 1)$ lies on line ℓ_3
 212 : $P_{8352} = (31, 1, 1, 1)$ lies on line ℓ_3
 213 : $P_{8353} = (32, 1, 1, 1)$ lies on line ℓ_3
 214 : $P_{8354} = (33, 1, 1, 1)$ lies on line ℓ_3
 215 : $P_{8355} = (34, 1, 1, 1)$ lies on line ℓ_3
 216 : $P_{8356} = (35, 1, 1, 1)$ lies on line ℓ_3
 217 : $P_{8357} = (36, 1, 1, 1)$ lies on line ℓ_3
 218 : $P_{8358} = (37, 1, 1, 1)$ lies on line ℓ_3
 219 : $P_{8359} = (38, 1, 1, 1)$ lies on line ℓ_3
 220 : $P_{8360} = (39, 1, 1, 1)$ lies on line ℓ_3
 221 : $P_{8361} = (40, 1, 1, 1)$ lies on line ℓ_3
 222 : $P_{8362} = (41, 1, 1, 1)$ lies on line ℓ_3
 223 : $P_{8363} = (42, 1, 1, 1)$ lies on line ℓ_3
 224 : $P_{8364} = (43, 1, 1, 1)$ lies on line ℓ_3
 225 : $P_{8365} = (44, 1, 1, 1)$ lies on line ℓ_3

226 : $P_{8366} = (45, 1, 1, 1)$ lies on line ℓ_3
 227 : $P_{8367} = (46, 1, 1, 1)$ lies on line ℓ_3
 228 : $P_{8368} = (47, 1, 1, 1)$ lies on line ℓ_3
 229 : $P_{8369} = (48, 1, 1, 1)$ lies on line ℓ_3
 230 : $P_{8370} = (49, 1, 1, 1)$ lies on line ℓ_3
 231 : $P_{8371} = (50, 1, 1, 1)$ lies on line ℓ_3
 232 : $P_{8372} = (51, 1, 1, 1)$ lies on line ℓ_3
 233 : $P_{8373} = (52, 1, 1, 1)$ lies on line ℓ_3
 234 : $P_{8374} = (53, 1, 1, 1)$ lies on line ℓ_3
 235 : $P_{8375} = (54, 1, 1, 1)$ lies on line ℓ_3
 236 : $P_{8376} = (55, 1, 1, 1)$ lies on line ℓ_3
 237 : $P_{8379} = (58, 1, 1, 1)$ lies on line ℓ_3
 238 : $P_{8380} = (59, 1, 1, 1)$ lies on line ℓ_3
 239 : $P_{8381} = (60, 1, 1, 1)$ lies on line ℓ_3
 240 : $P_{8382} = (61, 1, 1, 1)$ lies on line ℓ_3
 241 : $P_{8383} = (62, 1, 1, 1)$ lies on line ℓ_3
 242 : $P_{8384} = (63, 1, 1, 1)$ lies on line ℓ_3
 243 : $P_{8387} = (2, 2, 1, 1)$ lies on line ℓ_7
 244 : $P_{8452} = (3, 3, 1, 1)$ lies on line ℓ_7
 245 : $P_{8517} = (4, 4, 1, 1)$ lies on line ℓ_7
 246 : $P_{8582} = (5, 5, 1, 1)$ lies on line ℓ_7
 247 : $P_{8647} = (6, 6, 1, 1)$ lies on line ℓ_7
 248 : $P_{8712} = (7, 7, 1, 1)$ lies on line ℓ_7
 249 : $P_{8777} = (8, 8, 1, 1)$ lies on line ℓ_7
 250 : $P_{8842} = (9, 9, 1, 1)$ lies on line ℓ_7
 251 : $P_{8907} = (10, 10, 1, 1)$ lies on line ℓ_7
 252 : $P_{8972} = (11, 11, 1, 1)$ lies on line ℓ_7
 253 : $P_{9037} = (12, 12, 1, 1)$ lies on line ℓ_7
 254 : $P_{9102} = (13, 13, 1, 1)$ lies on line ℓ_7
 255 : $P_{9167} = (14, 14, 1, 1)$ lies on line ℓ_7
 256 : $P_{9232} = (15, 15, 1, 1)$ lies on line ℓ_7
 257 : $P_{9297} = (16, 16, 1, 1)$ lies on line ℓ_7
 258 : $P_{9362} = (17, 17, 1, 1)$ lies on line ℓ_7
 259 : $P_{9427} = (18, 18, 1, 1)$ lies on line ℓ_7
 260 : $P_{9492} = (19, 19, 1, 1)$ lies on line ℓ_7
 261 : $P_{9557} = (20, 20, 1, 1)$ lies on line ℓ_7
 262 : $P_{9622} = (21, 21, 1, 1)$ lies on line ℓ_7
 263 : $P_{9687} = (22, 22, 1, 1)$ lies on line ℓ_7
 264 : $P_{9752} = (23, 23, 1, 1)$ lies on line ℓ_7
 265 : $P_{9817} = (24, 24, 1, 1)$ lies on line ℓ_7
 266 : $P_{9882} = (25, 25, 1, 1)$ lies on line ℓ_7
 267 : $P_{9947} = (26, 26, 1, 1)$ lies on line ℓ_7
 268 : $P_{10012} = (27, 27, 1, 1)$ lies on line ℓ_7
 269 : $P_{10077} = (28, 28, 1, 1)$ lies on line ℓ_7
 270 : $P_{10142} = (29, 29, 1, 1)$ lies on line ℓ_7
 271 : $P_{10207} = (30, 30, 1, 1)$ lies on line ℓ_7
 272 : $P_{10272} = (31, 31, 1, 1)$ lies on line ℓ_7
 273 : $P_{10337} = (32, 32, 1, 1)$ lies on line ℓ_7
 274 : $P_{10402} = (33, 33, 1, 1)$ lies on line ℓ_7
 275 : $P_{10467} = (34, 34, 1, 1)$ lies on line ℓ_7
 276 : $P_{10532} = (35, 35, 1, 1)$ lies on line ℓ_7
 277 : $P_{10597} = (36, 36, 1, 1)$ lies on line ℓ_7
 278 : $P_{10662} = (37, 37, 1, 1)$ lies on line ℓ_7
 279 : $P_{10727} = (38, 38, 1, 1)$ lies on line ℓ_7

280 : $P_{10792} = (39, 39, 1, 1)$ lies on line ℓ_7
 281 : $P_{10857} = (40, 40, 1, 1)$ lies on line ℓ_7
 282 : $P_{10922} = (41, 41, 1, 1)$ lies on line ℓ_7
 283 : $P_{10987} = (42, 42, 1, 1)$ lies on line ℓ_7
 284 : $P_{11052} = (43, 43, 1, 1)$ lies on line ℓ_7
 285 : $P_{11117} = (44, 44, 1, 1)$ lies on line ℓ_7
 286 : $P_{11182} = (45, 45, 1, 1)$ lies on line ℓ_7
 287 : $P_{11247} = (46, 46, 1, 1)$ lies on line ℓ_7
 288 : $P_{11312} = (47, 47, 1, 1)$ lies on line ℓ_7
 289 : $P_{11377} = (48, 48, 1, 1)$ lies on line ℓ_7
 290 : $P_{11442} = (49, 49, 1, 1)$ lies on line ℓ_7
 291 : $P_{11507} = (50, 50, 1, 1)$ lies on line ℓ_7
 292 : $P_{11572} = (51, 51, 1, 1)$ lies on line ℓ_7
 293 : $P_{11637} = (52, 52, 1, 1)$ lies on line ℓ_7
 294 : $P_{11702} = (53, 53, 1, 1)$ lies on line ℓ_7
 295 : $P_{11767} = (54, 54, 1, 1)$ lies on line ℓ_7
 296 : $P_{11832} = (55, 55, 1, 1)$ lies on line ℓ_7
 297 : $P_{12027} = (58, 58, 1, 1)$ lies on line ℓ_7
 298 : $P_{12092} = (59, 59, 1, 1)$ lies on line ℓ_7
 299 : $P_{12157} = (60, 60, 1, 1)$ lies on line ℓ_7
 300 : $P_{12222} = (61, 61, 1, 1)$ lies on line ℓ_7
 301 : $P_{12287} = (62, 62, 1, 1)$ lies on line ℓ_7
 302 : $P_{12352} = (63, 63, 1, 1)$ lies on line ℓ_7
 303 : $P_{12353} = (0, 0, 2, 1)$ lies on line ℓ_6
 304 : $P_{12420} = (3, 1, 2, 1)$ lies on line ℓ_{10}
 305 : $P_{12548} = (3, 3, 2, 1)$ lies on line ℓ_{13}
 306 : $P_{14971} = (58, 40, 2, 1)$ lies on line ℓ_{14}
 307 : $P_{15164} = (59, 43, 2, 1)$ lies on line ℓ_{15}
 308 : $P_{15996} = (59, 56, 2, 1)$ lies on line ℓ_{11}
 309 : $P_{16059} = (58, 57, 2, 1)$ lies on line ℓ_{12}
 310 : $P_{16449} = (0, 0, 3, 1)$ lies on line ℓ_6
 311 : $P_{16515} = (2, 1, 3, 1)$ lies on line ℓ_{10}
 312 : $P_{16579} = (2, 2, 3, 1)$ lies on line ℓ_{13}
 313 : $P_{17532} = (59, 16, 3, 1)$ lies on line ℓ_{14}
 314 : $P_{17659} = (58, 18, 3, 1)$ lies on line ℓ_{15}
 315 : $P_{20091} = (58, 56, 3, 1)$ lies on line ℓ_{11}
 316 : $P_{20156} = (59, 57, 3, 1)$ lies on line ℓ_{12}
 317 : $P_{20545} = (0, 0, 4, 1)$ lies on line ℓ_6
 318 : $P_{20614} = (5, 1, 4, 1)$ lies on line ℓ_{10}
 319 : $P_{20870} = (5, 5, 4, 1)$ lies on line ℓ_{13}
 320 : $P_{22333} = (60, 27, 4, 1)$ lies on line ℓ_{14}
 321 : $P_{22526} = (61, 30, 4, 1)$ lies on line ℓ_{15}
 322 : $P_{24190} = (61, 56, 4, 1)$ lies on line ℓ_{11}
 323 : $P_{24253} = (60, 57, 4, 1)$ lies on line ℓ_{12}
 324 : $P_{24641} = (0, 0, 5, 1)$ lies on line ℓ_6
 325 : $P_{24709} = (4, 1, 5, 1)$ lies on line ℓ_{10}
 326 : $P_{24901} = (4, 4, 5, 1)$ lies on line ℓ_{13}
 327 : $P_{26942} = (61, 35, 5, 1)$ lies on line ℓ_{14}
 328 : $P_{27197} = (60, 39, 5, 1)$ lies on line ℓ_{15}
 329 : $P_{28285} = (60, 56, 5, 1)$ lies on line ℓ_{11}
 330 : $P_{28350} = (61, 57, 5, 1)$ lies on line ℓ_{12}
 331 : $P_{28737} = (0, 0, 6, 1)$ lies on line ℓ_6
 332 : $P_{28808} = (7, 1, 6, 1)$ lies on line ℓ_{10}
 333 : $P_{29192} = (7, 7, 6, 1)$ lies on line ℓ_{13}

334 : $P_{29439} = (62, 10, 6, 1)$ lies on line ℓ_{14}
 335 : $P_{29632} = (63, 13, 6, 1)$ lies on line ℓ_{15}
 336 : $P_{32384} = (63, 56, 6, 1)$ lies on line ℓ_{11}
 337 : $P_{32447} = (62, 57, 6, 1)$ lies on line ℓ_{12}
 338 : $P_{32833} = (0, 0, 7, 1)$ lies on line ℓ_6
 339 : $P_{32903} = (6, 1, 7, 1)$ lies on line ℓ_{10}
 340 : $P_{33223} = (6, 6, 7, 1)$ lies on line ℓ_{13}
 341 : $P_{36096} = (63, 50, 7, 1)$ lies on line ℓ_{14}
 342 : $P_{36223} = (62, 52, 7, 1)$ lies on line ℓ_{15}
 343 : $P_{36479} = (62, 56, 7, 1)$ lies on line ℓ_{11}
 344 : $P_{36544} = (63, 57, 7, 1)$ lies on line ℓ_{12}
 345 : $P_{36929} = (0, 0, 8, 1)$ lies on line ℓ_6
 346 : $P_{37002} = (9, 1, 8, 1)$ lies on line ℓ_{10}
 347 : $P_{37514} = (9, 9, 8, 1)$ lies on line ℓ_{13}
 348 : $P_{38322} = (49, 21, 8, 1)$ lies on line ℓ_{15}
 349 : $P_{38769} = (48, 28, 8, 1)$ lies on line ℓ_{14}
 350 : $P_{40562} = (49, 56, 8, 1)$ lies on line ℓ_{11}
 351 : $P_{40625} = (48, 57, 8, 1)$ lies on line ℓ_{12}
 352 : $P_{41025} = (0, 0, 9, 1)$ lies on line ℓ_6
 353 : $P_{41097} = (8, 1, 9, 1)$ lies on line ℓ_{10}
 354 : $P_{41545} = (8, 8, 9, 1)$ lies on line ℓ_{13}
 355 : $P_{43378} = (49, 36, 9, 1)$ lies on line ℓ_{14}
 356 : $P_{43889} = (48, 44, 9, 1)$ lies on line ℓ_{15}
 357 : $P_{44657} = (48, 56, 9, 1)$ lies on line ℓ_{11}
 358 : $P_{44722} = (49, 57, 9, 1)$ lies on line ℓ_{12}
 359 : $P_{45121} = (0, 0, 10, 1)$ lies on line ℓ_6
 360 : $P_{45196} = (11, 1, 10, 1)$ lies on line ℓ_{10}
 361 : $P_{45556} = (51, 6, 10, 1)$ lies on line ℓ_{15}
 362 : $P_{45836} = (11, 11, 10, 1)$ lies on line ℓ_{13}
 363 : $P_{46003} = (50, 13, 10, 1)$ lies on line ℓ_{14}
 364 : $P_{48756} = (51, 56, 10, 1)$ lies on line ℓ_{11}
 365 : $P_{48819} = (50, 57, 10, 1)$ lies on line ℓ_{12}
 366 : $P_{49217} = (0, 0, 11, 1)$ lies on line ℓ_6
 367 : $P_{49291} = (10, 1, 11, 1)$ lies on line ℓ_{10}
 368 : $P_{49867} = (10, 10, 11, 1)$ lies on line ℓ_{13}
 369 : $P_{52660} = (51, 53, 11, 1)$ lies on line ℓ_{14}
 370 : $P_{52851} = (50, 56, 11, 1)$ lies on line ℓ_{11}
 371 : $P_{52916} = (51, 57, 11, 1)$ lies on line ℓ_{12}
 372 : $P_{53299} = (50, 63, 11, 1)$ lies on line ℓ_{15}
 373 : $P_{53313} = (0, 0, 12, 1)$ lies on line ℓ_6
 374 : $P_{53390} = (13, 1, 12, 1)$ lies on line ℓ_{10}
 375 : $P_{54158} = (13, 13, 12, 1)$ lies on line ℓ_{13}
 376 : $P_{56630} = (53, 51, 12, 1)$ lies on line ℓ_{15}
 377 : $P_{56950} = (53, 56, 12, 1)$ lies on line ℓ_{11}
 378 : $P_{57013} = (52, 57, 12, 1)$ lies on line ℓ_{12}
 379 : $P_{57333} = (52, 62, 12, 1)$ lies on line ℓ_{14}
 380 : $P_{57409} = (0, 0, 13, 1)$ lies on line ℓ_6
 381 : $P_{57485} = (12, 1, 13, 1)$ lies on line ℓ_{10}
 382 : $P_{57846} = (53, 6, 13, 1)$ lies on line ℓ_{14}
 383 : $P_{58101} = (52, 10, 13, 1)$ lies on line ℓ_{15}
 384 : $P_{58189} = (12, 12, 13, 1)$ lies on line ℓ_{13}
 385 : $P_{61045} = (52, 56, 13, 1)$ lies on line ℓ_{11}
 386 : $P_{61110} = (53, 57, 13, 1)$ lies on line ℓ_{12}
 387 : $P_{61505} = (0, 0, 14, 1)$ lies on line ℓ_6

388 : $P_{61584} = (15, 1, 14, 1)$ lies on line ℓ_{10}
 389 : $P_{62480} = (15, 15, 14, 1)$ lies on line ℓ_{13}
 390 : $P_{63608} = (55, 32, 14, 1)$ lies on line ℓ_{15}
 391 : $P_{64567} = (54, 47, 14, 1)$ lies on line ℓ_{14}
 392 : $P_{65144} = (55, 56, 14, 1)$ lies on line ℓ_{11}
 393 : $P_{65207} = (54, 57, 14, 1)$ lies on line ℓ_{12}
 394 : $P_{65601} = (0, 0, 15, 1)$ lies on line ℓ_6
 395 : $P_{65679} = (14, 1, 15, 1)$ lies on line ℓ_{10}
 396 : $P_{66511} = (14, 14, 15, 1)$ lies on line ℓ_{13}
 397 : $P_{67128} = (55, 23, 15, 1)$ lies on line ℓ_{14}
 398 : $P_{67255} = (54, 25, 15, 1)$ lies on line ℓ_{15}
 399 : $P_{69239} = (54, 56, 15, 1)$ lies on line ℓ_{11}
 400 : $P_{69304} = (55, 57, 15, 1)$ lies on line ℓ_{12}
 401 : $P_{69697} = (0, 0, 16, 1)$ lies on line ℓ_6
 402 : $P_{69778} = (17, 1, 16, 1)$ lies on line ℓ_{10}
 403 : $P_{69930} = (41, 3, 16, 1)$ lies on line ℓ_{15}
 404 : $P_{70802} = (17, 17, 16, 1)$ lies on line ℓ_{13}
 405 : $P_{70889} = (40, 18, 16, 1)$ lies on line ℓ_{14}
 406 : $P_{73322} = (41, 56, 16, 1)$ lies on line ℓ_{11}
 407 : $P_{73385} = (40, 57, 16, 1)$ lies on line ℓ_{12}
 408 : $P_{73793} = (0, 0, 17, 1)$ lies on line ℓ_6
 409 : $P_{73873} = (16, 1, 17, 1)$ lies on line ℓ_{10}
 410 : $P_{74833} = (16, 16, 17, 1)$ lies on line ℓ_{13}
 411 : $P_{76522} = (41, 42, 17, 1)$ lies on line ℓ_{14}
 412 : $P_{77417} = (40, 56, 17, 1)$ lies on line ℓ_{11}
 413 : $P_{77482} = (41, 57, 17, 1)$ lies on line ℓ_{12}
 414 : $P_{77545} = (40, 58, 17, 1)$ lies on line ℓ_{15}
 415 : $P_{77889} = (0, 0, 18, 1)$ lies on line ℓ_6
 416 : $P_{77972} = (19, 1, 18, 1)$ lies on line ℓ_{10}
 417 : $P_{78123} = (42, 3, 18, 1)$ lies on line ℓ_{14}
 418 : $P_{78956} = (43, 16, 18, 1)$ lies on line ℓ_{15}
 419 : $P_{79124} = (19, 19, 18, 1)$ lies on line ℓ_{13}
 420 : $P_{81516} = (43, 56, 18, 1)$ lies on line ℓ_{11}
 421 : $P_{81579} = (42, 57, 18, 1)$ lies on line ℓ_{12}
 422 : $P_{81985} = (0, 0, 19, 1)$ lies on line ℓ_6
 423 : $P_{82067} = (18, 1, 19, 1)$ lies on line ℓ_{10}
 424 : $P_{83155} = (18, 18, 19, 1)$ lies on line ℓ_{13}
 425 : $P_{84651} = (42, 41, 19, 1)$ lies on line ℓ_{15}
 426 : $P_{85611} = (42, 56, 19, 1)$ lies on line ℓ_{11}
 427 : $P_{85676} = (43, 57, 19, 1)$ lies on line ℓ_{12}
 428 : $P_{85804} = (43, 59, 19, 1)$ lies on line ℓ_{14}
 429 : $P_{86081} = (0, 0, 20, 1)$ lies on line ℓ_6
 430 : $P_{86166} = (21, 1, 20, 1)$ lies on line ℓ_{10}
 431 : $P_{87446} = (21, 21, 20, 1)$ lies on line ℓ_{13}
 432 : $P_{88494} = (45, 37, 20, 1)$ lies on line ℓ_{15}
 433 : $P_{89197} = (44, 48, 20, 1)$ lies on line ℓ_{14}
 434 : $P_{89710} = (45, 56, 20, 1)$ lies on line ℓ_{11}
 435 : $P_{89773} = (44, 57, 20, 1)$ lies on line ℓ_{12}
 436 : $P_{90177} = (0, 0, 21, 1)$ lies on line ℓ_6
 437 : $P_{90261} = (20, 1, 21, 1)$ lies on line ℓ_{10}
 438 : $P_{90734} = (45, 8, 21, 1)$ lies on line ℓ_{14}
 439 : $P_{91477} = (20, 20, 21, 1)$ lies on line ℓ_{13}
 440 : $P_{92013} = (44, 28, 21, 1)$ lies on line ℓ_{15}
 441 : $P_{93805} = (44, 56, 21, 1)$ lies on line ℓ_{11}

442 : $P_{93870} = (45, 57, 21, 1)$ lies on line ℓ_{12}
 443 : $P_{94273} = (0, 0, 22, 1)$ lies on line ℓ_6
 444 : $P_{94360} = (23, 1, 22, 1)$ lies on line ℓ_{10}
 445 : $P_{95768} = (23, 23, 22, 1)$ lies on line ℓ_{13}
 446 : $P_{96431} = (46, 33, 22, 1)$ lies on line ℓ_{14}
 447 : $P_{97776} = (47, 54, 22, 1)$ lies on line ℓ_{15}
 448 : $P_{97904} = (47, 56, 22, 1)$ lies on line ℓ_{11}
 449 : $P_{97967} = (46, 57, 22, 1)$ lies on line ℓ_{12}
 450 : $P_{98369} = (0, 0, 23, 1)$ lies on line ℓ_6
 451 : $P_{98455} = (22, 1, 23, 1)$ lies on line ℓ_{10}
 452 : $P_{99375} = (46, 15, 23, 1)$ lies on line ℓ_{15}
 453 : $P_{99799} = (22, 22, 23, 1)$ lies on line ℓ_{13}
 454 : $P_{100016} = (47, 25, 23, 1)$ lies on line ℓ_{14}
 455 : $P_{101999} = (46, 56, 23, 1)$ lies on line ℓ_{11}
 456 : $P_{102064} = (47, 57, 23, 1)$ lies on line ℓ_{12}
 457 : $P_{102465} = (0, 0, 24, 1)$ lies on line ℓ_6
 458 : $P_{102554} = (25, 1, 24, 1)$ lies on line ℓ_{10}
 459 : $P_{104090} = (25, 25, 24, 1)$ lies on line ℓ_{13}
 460 : $P_{105442} = (33, 46, 24, 1)$ lies on line ℓ_{15}
 461 : $P_{106017} = (32, 55, 24, 1)$ lies on line ℓ_{14}
 462 : $P_{106082} = (33, 56, 24, 1)$ lies on line ℓ_{11}
 463 : $P_{106145} = (32, 57, 24, 1)$ lies on line ℓ_{12}
 464 : $P_{106561} = (0, 0, 25, 1)$ lies on line ℓ_6
 465 : $P_{106649} = (24, 1, 25, 1)$ lies on line ℓ_{10}
 466 : $P_{107554} = (33, 15, 25, 1)$ lies on line ℓ_{14}
 467 : $P_{108065} = (32, 23, 25, 1)$ lies on line ℓ_{15}
 468 : $P_{108121} = (24, 24, 25, 1)$ lies on line ℓ_{13}
 469 : $P_{110177} = (32, 56, 25, 1)$ lies on line ℓ_{11}
 470 : $P_{110242} = (33, 57, 25, 1)$ lies on line ℓ_{12}
 471 : $P_{110657} = (0, 0, 26, 1)$ lies on line ℓ_6
 472 : $P_{110748} = (27, 1, 26, 1)$ lies on line ℓ_{10}
 473 : $P_{112412} = (27, 27, 26, 1)$ lies on line ℓ_{13}
 474 : $P_{113123} = (34, 38, 26, 1)$ lies on line ℓ_{14}
 475 : $P_{114276} = (35, 56, 26, 1)$ lies on line ℓ_{11}
 476 : $P_{114339} = (34, 57, 26, 1)$ lies on line ℓ_{12}
 477 : $P_{114596} = (35, 61, 26, 1)$ lies on line ℓ_{15}
 478 : $P_{114753} = (0, 0, 27, 1)$ lies on line ℓ_6
 479 : $P_{114843} = (26, 1, 27, 1)$ lies on line ℓ_{10}
 480 : $P_{115043} = (34, 4, 27, 1)$ lies on line ℓ_{15}
 481 : $P_{116443} = (26, 26, 27, 1)$ lies on line ℓ_{13}
 482 : $P_{116708} = (35, 30, 27, 1)$ lies on line ℓ_{14}
 483 : $P_{118371} = (34, 56, 27, 1)$ lies on line ℓ_{11}
 484 : $P_{118436} = (35, 57, 27, 1)$ lies on line ℓ_{12}
 485 : $P_{118849} = (0, 0, 28, 1)$ lies on line ℓ_6
 486 : $P_{118942} = (29, 1, 28, 1)$ lies on line ℓ_{10}
 487 : $P_{119398} = (37, 8, 28, 1)$ lies on line ℓ_{15}
 488 : $P_{120229} = (36, 21, 28, 1)$ lies on line ℓ_{14}
 489 : $P_{120734} = (29, 29, 28, 1)$ lies on line ℓ_{13}
 490 : $P_{122470} = (37, 56, 28, 1)$ lies on line ℓ_{11}
 491 : $P_{122533} = (36, 57, 28, 1)$ lies on line ℓ_{12}
 492 : $P_{122945} = (0, 0, 29, 1)$ lies on line ℓ_6
 493 : $P_{123037} = (28, 1, 29, 1)$ lies on line ℓ_{10}
 494 : $P_{124765} = (28, 28, 29, 1)$ lies on line ℓ_{13}
 495 : $P_{125862} = (37, 45, 29, 1)$ lies on line ℓ_{14}

496 : $P_{126117} = (36, 49, 29, 1)$ lies on line ℓ_{15}
 497 : $P_{126565} = (36, 56, 29, 1)$ lies on line ℓ_{11}
 498 : $P_{126630} = (37, 57, 29, 1)$ lies on line ℓ_{12}
 499 : $P_{127041} = (0, 0, 30, 1)$ lies on line ℓ_6
 500 : $P_{127136} = (31, 1, 30, 1)$ lies on line ℓ_{10}
 501 : $P_{127335} = (38, 4, 30, 1)$ lies on line ℓ_{14}
 502 : $P_{128808} = (39, 27, 30, 1)$ lies on line ℓ_{15}
 503 : $P_{129056} = (31, 31, 30, 1)$ lies on line ℓ_{13}
 504 : $P_{130664} = (39, 56, 30, 1)$ lies on line ℓ_{11}
 505 : $P_{130727} = (38, 57, 30, 1)$ lies on line ℓ_{12}
 506 : $P_{131137} = (0, 0, 31, 1)$ lies on line ℓ_6
 507 : $P_{131231} = (30, 1, 31, 1)$ lies on line ℓ_{10}
 508 : $P_{133087} = (30, 30, 31, 1)$ lies on line ℓ_{13}
 509 : $P_{133351} = (38, 34, 31, 1)$ lies on line ℓ_{15}
 510 : $P_{134759} = (38, 56, 31, 1)$ lies on line ℓ_{11}
 511 : $P_{134824} = (39, 57, 31, 1)$ lies on line ℓ_{12}
 512 : $P_{135016} = (39, 60, 31, 1)$ lies on line ℓ_{14}
 513 : $P_{135233} = (0, 0, 32, 1)$ lies on line ℓ_6
 514 : $P_{135330} = (33, 1, 32, 1)$ lies on line ℓ_{10}
 515 : $P_{136153} = (24, 14, 32, 1)$ lies on line ℓ_{14}
 516 : $P_{137378} = (33, 33, 32, 1)$ lies on line ℓ_{13}
 517 : $P_{138266} = (25, 47, 32, 1)$ lies on line ℓ_{15}
 518 : $P_{138842} = (25, 56, 32, 1)$ lies on line ℓ_{11}
 519 : $P_{138905} = (24, 57, 32, 1)$ lies on line ℓ_{12}
 520 : $P_{139329} = (0, 0, 33, 1)$ lies on line ℓ_6
 521 : $P_{139425} = (32, 1, 33, 1)$ lies on line ℓ_{10}
 522 : $P_{140761} = (24, 22, 33, 1)$ lies on line ℓ_{15}
 523 : $P_{141409} = (32, 32, 33, 1)$ lies on line ℓ_{13}
 524 : $P_{142810} = (25, 54, 33, 1)$ lies on line ℓ_{14}
 525 : $P_{142937} = (24, 56, 33, 1)$ lies on line ℓ_{11}
 526 : $P_{143002} = (25, 57, 33, 1)$ lies on line ℓ_{12}
 527 : $P_{143425} = (0, 0, 34, 1)$ lies on line ℓ_6
 528 : $P_{143524} = (35, 1, 34, 1)$ lies on line ℓ_{10}
 529 : $P_{145435} = (26, 31, 34, 1)$ lies on line ℓ_{14}
 530 : $P_{145700} = (35, 35, 34, 1)$ lies on line ℓ_{13}
 531 : $P_{147036} = (27, 56, 34, 1)$ lies on line ℓ_{11}
 532 : $P_{147099} = (26, 57, 34, 1)$ lies on line ℓ_{12}
 533 : $P_{147292} = (27, 60, 34, 1)$ lies on line ℓ_{15}
 534 : $P_{147521} = (0, 0, 35, 1)$ lies on line ℓ_6
 535 : $P_{147619} = (34, 1, 35, 1)$ lies on line ℓ_{10}
 536 : $P_{147867} = (26, 5, 35, 1)$ lies on line ℓ_{15}
 537 : $P_{149731} = (34, 34, 35, 1)$ lies on line ℓ_{13}
 538 : $P_{150044} = (27, 39, 35, 1)$ lies on line ℓ_{14}
 539 : $P_{151131} = (26, 56, 35, 1)$ lies on line ℓ_{11}
 540 : $P_{151196} = (27, 57, 35, 1)$ lies on line ℓ_{12}
 541 : $P_{151617} = (0, 0, 36, 1)$ lies on line ℓ_6
 542 : $P_{151718} = (37, 1, 36, 1)$ lies on line ℓ_{10}
 543 : $P_{152222} = (29, 9, 36, 1)$ lies on line ℓ_{15}
 544 : $P_{154022} = (37, 37, 36, 1)$ lies on line ℓ_{13}
 545 : $P_{154461} = (28, 44, 36, 1)$ lies on line ℓ_{14}
 546 : $P_{155230} = (29, 56, 36, 1)$ lies on line ℓ_{11}
 547 : $P_{155293} = (28, 57, 36, 1)$ lies on line ℓ_{12}
 548 : $P_{155713} = (0, 0, 37, 1)$ lies on line ℓ_6
 549 : $P_{155813} = (36, 1, 37, 1)$ lies on line ℓ_{10}

550 : $P_{157022} = (29, 20, 37, 1)$ lies on line ℓ_{14}
 551 : $P_{158053} = (36, 36, 37, 1)$ lies on line ℓ_{13}
 552 : $P_{158813} = (28, 48, 37, 1)$ lies on line ℓ_{15}
 553 : $P_{159325} = (28, 56, 37, 1)$ lies on line ℓ_{11}
 554 : $P_{159390} = (29, 57, 37, 1)$ lies on line ℓ_{12}
 555 : $P_{159809} = (0, 0, 38, 1)$ lies on line ℓ_6
 556 : $P_{159912} = (39, 1, 38, 1)$ lies on line ℓ_{10}
 557 : $P_{161504} = (31, 26, 38, 1)$ lies on line ℓ_{15}
 558 : $P_{162344} = (39, 39, 38, 1)$ lies on line ℓ_{13}
 559 : $P_{163424} = (31, 56, 38, 1)$ lies on line ℓ_{11}
 560 : $P_{163487} = (30, 57, 38, 1)$ lies on line ℓ_{12}
 561 : $P_{163743} = (30, 61, 38, 1)$ lies on line ℓ_{14}
 562 : $P_{163905} = (0, 0, 39, 1)$ lies on line ℓ_6
 563 : $P_{164007} = (38, 1, 39, 1)$ lies on line ℓ_{10}
 564 : $P_{164256} = (31, 5, 39, 1)$ lies on line ℓ_{14}
 565 : $P_{166175} = (30, 35, 39, 1)$ lies on line ℓ_{15}
 566 : $P_{166375} = (38, 38, 39, 1)$ lies on line ℓ_{13}
 567 : $P_{167519} = (30, 56, 39, 1)$ lies on line ℓ_{11}
 568 : $P_{167584} = (31, 57, 39, 1)$ lies on line ℓ_{12}
 569 : $P_{168001} = (0, 0, 40, 1)$ lies on line ℓ_6
 570 : $P_{168106} = (41, 1, 40, 1)$ lies on line ℓ_{10}
 571 : $P_{168146} = (17, 2, 40, 1)$ lies on line ℓ_{15}
 572 : $P_{170666} = (41, 41, 40, 1)$ lies on line ℓ_{13}
 573 : $P_{170769} = (16, 43, 40, 1)$ lies on line ℓ_{14}
 574 : $P_{171602} = (17, 56, 40, 1)$ lies on line ℓ_{11}
 575 : $P_{171665} = (16, 57, 40, 1)$ lies on line ℓ_{12}
 576 : $P_{172097} = (0, 0, 41, 1)$ lies on line ℓ_6
 577 : $P_{172201} = (40, 1, 41, 1)$ lies on line ℓ_{10}
 578 : $P_{173330} = (17, 19, 41, 1)$ lies on line ℓ_{14}
 579 : $P_{174697} = (40, 40, 41, 1)$ lies on line ℓ_{13}
 580 : $P_{175697} = (16, 56, 41, 1)$ lies on line ℓ_{11}
 581 : $P_{175762} = (17, 57, 41, 1)$ lies on line ℓ_{12}
 582 : $P_{175889} = (16, 59, 41, 1)$ lies on line ℓ_{15}
 583 : $P_{176193} = (0, 0, 42, 1)$ lies on line ℓ_6
 584 : $P_{176300} = (43, 1, 42, 1)$ lies on line ℓ_{10}
 585 : $P_{177300} = (19, 17, 42, 1)$ lies on line ℓ_{15}
 586 : $P_{178988} = (43, 43, 42, 1)$ lies on line ℓ_{13}
 587 : $P_{179796} = (19, 56, 42, 1)$ lies on line ℓ_{11}
 588 : $P_{179859} = (18, 57, 42, 1)$ lies on line ℓ_{12}
 589 : $P_{179923} = (18, 58, 42, 1)$ lies on line ℓ_{14}
 590 : $P_{180289} = (0, 0, 43, 1)$ lies on line ℓ_6
 591 : $P_{180395} = (42, 1, 43, 1)$ lies on line ℓ_{10}
 592 : $P_{180436} = (19, 2, 43, 1)$ lies on line ℓ_{14}
 593 : $P_{182867} = (18, 40, 43, 1)$ lies on line ℓ_{15}
 594 : $P_{183019} = (42, 42, 43, 1)$ lies on line ℓ_{13}
 595 : $P_{183891} = (18, 56, 43, 1)$ lies on line ℓ_{11}
 596 : $P_{183956} = (19, 57, 43, 1)$ lies on line ℓ_{12}
 597 : $P_{184385} = (0, 0, 44, 1)$ lies on line ℓ_6
 598 : $P_{184494} = (45, 1, 44, 1)$ lies on line ℓ_{10}
 599 : $P_{184981} = (20, 9, 44, 1)$ lies on line ℓ_{14}
 600 : $P_{186710} = (21, 36, 44, 1)$ lies on line ℓ_{15}
 601 : $P_{187310} = (45, 45, 44, 1)$ lies on line ℓ_{13}
 602 : $P_{187990} = (21, 56, 44, 1)$ lies on line ℓ_{11}
 603 : $P_{188053} = (20, 57, 44, 1)$ lies on line ℓ_{12}

604 : $P_{188481} = (0, 0, 45, 1)$ lies on line ℓ_6
 605 : $P_{188589} = (44, 1, 45, 1)$ lies on line ℓ_{10}
 606 : $P_{190357} = (20, 29, 45, 1)$ lies on line ℓ_{15}
 607 : $P_{191341} = (44, 44, 45, 1)$ lies on line ℓ_{13}
 608 : $P_{191638} = (21, 49, 45, 1)$ lies on line ℓ_{14}
 609 : $P_{192085} = (20, 56, 45, 1)$ lies on line ℓ_{11}
 610 : $P_{192150} = (21, 57, 45, 1)$ lies on line ℓ_{12}
 611 : $P_{192577} = (0, 0, 46, 1)$ lies on line ℓ_6
 612 : $P_{192688} = (47, 1, 46, 1)$ lies on line ℓ_{10}
 613 : $P_{194135} = (22, 24, 46, 1)$ lies on line ℓ_{14}
 614 : $P_{195632} = (47, 47, 46, 1)$ lies on line ℓ_{13}
 615 : $P_{196120} = (23, 55, 46, 1)$ lies on line ℓ_{15}
 616 : $P_{196184} = (23, 56, 46, 1)$ lies on line ℓ_{11}
 617 : $P_{196247} = (22, 57, 46, 1)$ lies on line ℓ_{12}
 618 : $P_{196673} = (0, 0, 47, 1)$ lies on line ℓ_6
 619 : $P_{196783} = (46, 1, 47, 1)$ lies on line ℓ_{10}
 620 : $P_{197591} = (22, 14, 47, 1)$ lies on line ℓ_{15}
 621 : $P_{198744} = (23, 32, 47, 1)$ lies on line ℓ_{14}
 622 : $P_{199663} = (46, 46, 47, 1)$ lies on line ℓ_{13}
 623 : $P_{200279} = (22, 56, 47, 1)$ lies on line ℓ_{11}
 624 : $P_{200344} = (23, 57, 47, 1)$ lies on line ℓ_{12}
 625 : $P_{200769} = (0, 0, 48, 1)$ lies on line ℓ_6
 626 : $P_{200882} = (49, 1, 48, 1)$ lies on line ℓ_{10}
 627 : $P_{202058} = (9, 20, 48, 1)$ lies on line ℓ_{15}
 628 : $P_{203145} = (8, 37, 48, 1)$ lies on line ℓ_{14}
 629 : $P_{203954} = (49, 49, 48, 1)$ lies on line ℓ_{13}
 630 : $P_{204362} = (9, 56, 48, 1)$ lies on line ℓ_{11}
 631 : $P_{204425} = (8, 57, 48, 1)$ lies on line ℓ_{12}
 632 : $P_{204865} = (0, 0, 49, 1)$ lies on line ℓ_6
 633 : $P_{204977} = (48, 1, 49, 1)$ lies on line ℓ_{10}
 634 : $P_{206730} = (9, 29, 49, 1)$ lies on line ℓ_{14}
 635 : $P_{207753} = (8, 45, 49, 1)$ lies on line ℓ_{15}
 636 : $P_{207985} = (48, 48, 49, 1)$ lies on line ℓ_{13}
 637 : $P_{208457} = (8, 56, 49, 1)$ lies on line ℓ_{11}
 638 : $P_{208522} = (9, 57, 49, 1)$ lies on line ℓ_{12}
 639 : $P_{208961} = (0, 0, 50, 1)$ lies on line ℓ_6
 640 : $P_{209076} = (51, 1, 50, 1)$ lies on line ℓ_{10}
 641 : $P_{209420} = (11, 7, 50, 1)$ lies on line ℓ_{15}
 642 : $P_{212276} = (51, 51, 50, 1)$ lies on line ℓ_{13}
 643 : $P_{212299} = (10, 52, 50, 1)$ lies on line ℓ_{14}
 644 : $P_{212556} = (11, 56, 50, 1)$ lies on line ℓ_{11}
 645 : $P_{212619} = (10, 57, 50, 1)$ lies on line ℓ_{12}
 646 : $P_{213057} = (0, 0, 51, 1)$ lies on line ℓ_6
 647 : $P_{213171} = (50, 1, 51, 1)$ lies on line ℓ_{10}
 648 : $P_{213836} = (11, 12, 51, 1)$ lies on line ℓ_{14}
 649 : $P_{216307} = (50, 50, 51, 1)$ lies on line ℓ_{13}
 650 : $P_{216651} = (10, 56, 51, 1)$ lies on line ℓ_{11}
 651 : $P_{216716} = (11, 57, 51, 1)$ lies on line ℓ_{12}
 652 : $P_{217035} = (10, 62, 51, 1)$ lies on line ℓ_{15}
 653 : $P_{217153} = (0, 0, 52, 1)$ lies on line ℓ_6
 654 : $P_{217270} = (53, 1, 52, 1)$ lies on line ℓ_{10}
 655 : $P_{217613} = (12, 7, 52, 1)$ lies on line ℓ_{14}
 656 : $P_{220366} = (13, 50, 52, 1)$ lies on line ℓ_{15}
 657 : $P_{220598} = (53, 53, 52, 1)$ lies on line ℓ_{13}

658 : $P_{220750} = (13, 56, 52, 1)$ lies on line ℓ_{11}
 659 : $P_{220813} = (12, 57, 52, 1)$ lies on line ℓ_{12}
 660 : $P_{221249} = (0, 0, 53, 1)$ lies on line ℓ_6
 661 : $P_{221365} = (52, 1, 53, 1)$ lies on line ℓ_{10}
 662 : $P_{221965} = (12, 11, 53, 1)$ lies on line ℓ_{15}
 663 : $P_{224629} = (52, 52, 53, 1)$ lies on line ℓ_{13}
 664 : $P_{224845} = (12, 56, 53, 1)$ lies on line ℓ_{11}
 665 : $P_{224910} = (13, 57, 53, 1)$ lies on line ℓ_{12}
 666 : $P_{225294} = (13, 63, 53, 1)$ lies on line ℓ_{14}
 667 : $P_{225345} = (0, 0, 54, 1)$ lies on line ℓ_6
 668 : $P_{225464} = (55, 1, 54, 1)$ lies on line ℓ_{10}
 669 : $P_{226767} = (14, 22, 54, 1)$ lies on line ℓ_{14}
 670 : $P_{227472} = (15, 33, 54, 1)$ lies on line ℓ_{15}
 671 : $P_{228920} = (55, 55, 54, 1)$ lies on line ℓ_{13}
 672 : $P_{228944} = (15, 56, 54, 1)$ lies on line ℓ_{11}
 673 : $P_{229007} = (14, 57, 54, 1)$ lies on line ℓ_{12}
 674 : $P_{229441} = (0, 0, 55, 1)$ lies on line ℓ_6
 675 : $P_{229559} = (54, 1, 55, 1)$ lies on line ℓ_{10}
 676 : $P_{230991} = (14, 24, 55, 1)$ lies on line ℓ_{15}
 677 : $P_{232400} = (15, 46, 55, 1)$ lies on line ℓ_{14}
 678 : $P_{232951} = (54, 54, 55, 1)$ lies on line ℓ_{13}
 679 : $P_{233039} = (14, 56, 55, 1)$ lies on line ℓ_{11}
 680 : $P_{233104} = (15, 57, 55, 1)$ lies on line ℓ_{12}
 681 : $P_{233684} = (19, 2, 56, 1)$ lies on line ℓ_9
 682 : $P_{233771} = (42, 3, 56, 1)$ lies on line ℓ_9
 683 : $P_{233831} = (38, 4, 56, 1)$ lies on line ℓ_9
 684 : $P_{233888} = (31, 5, 56, 1)$ lies on line ℓ_9
 685 : $P_{233974} = (53, 6, 56, 1)$ lies on line ℓ_9
 686 : $P_{233997} = (12, 7, 56, 1)$ lies on line ℓ_9
 687 : $P_{234094} = (45, 8, 56, 1)$ lies on line ℓ_9
 688 : $P_{234133} = (20, 9, 56, 1)$ lies on line ℓ_9
 689 : $P_{234239} = (62, 10, 56, 1)$ lies on line ℓ_9
 690 : $P_{234248} = (7, 11, 56, 1)$ lies on line ℓ_9
 691 : $P_{234316} = (11, 12, 56, 1)$ lies on line ℓ_9
 692 : $P_{234419} = (50, 13, 56, 1)$ lies on line ℓ_9
 693 : $P_{234457} = (24, 14, 56, 1)$ lies on line ℓ_9
 694 : $P_{234530} = (33, 15, 56, 1)$ lies on line ℓ_9
 695 : $P_{234620} = (59, 16, 56, 1)$ lies on line ℓ_9
 696 : $P_{234627} = (2, 17, 56, 1)$ lies on line ℓ_9
 697 : $P_{234729} = (40, 18, 56, 1)$ lies on line ℓ_9
 698 : $P_{234770} = (17, 19, 56, 1)$ lies on line ℓ_9
 699 : $P_{234846} = (29, 20, 56, 1)$ lies on line ℓ_9
 700 : $P_{234917} = (36, 21, 56, 1)$ lies on line ℓ_9
 701 : $P_{234959} = (14, 22, 56, 1)$ lies on line ℓ_9
 702 : $P_{235064} = (55, 23, 56, 1)$ lies on line ℓ_9
 703 : $P_{235095} = (22, 24, 56, 1)$ lies on line ℓ_9
 704 : $P_{235184} = (47, 25, 56, 1)$ lies on line ℓ_9
 705 : $P_{235206} = (5, 26, 56, 1)$ lies on line ℓ_9
 706 : $P_{235325} = (60, 27, 56, 1)$ lies on line ℓ_9
 707 : $P_{235377} = (48, 28, 56, 1)$ lies on line ℓ_9
 708 : $P_{235402} = (9, 29, 56, 1)$ lies on line ℓ_9
 709 : $P_{235492} = (35, 30, 56, 1)$ lies on line ℓ_9
 710 : $P_{235547} = (26, 31, 56, 1)$ lies on line ℓ_9
 711 : $P_{235608} = (23, 32, 56, 1)$ lies on line ℓ_9

712 : $P_{235695} = (46, 33, 56, 1)$ lies on line ℓ_9
 713 : $P_{235717} = (4, 34, 56, 1)$ lies on line ℓ_9
 714 : $P_{235838} = (61, 35, 56, 1)$ lies on line ℓ_9
 715 : $P_{235890} = (49, 36, 56, 1)$ lies on line ℓ_9
 716 : $P_{235913} = (8, 37, 56, 1)$ lies on line ℓ_9
 717 : $P_{236003} = (34, 38, 56, 1)$ lies on line ℓ_9
 718 : $P_{236060} = (27, 39, 56, 1)$ lies on line ℓ_9
 719 : $P_{236155} = (58, 40, 56, 1)$ lies on line ℓ_9
 720 : $P_{236164} = (3, 41, 56, 1)$ lies on line ℓ_9
 721 : $P_{236266} = (41, 42, 56, 1)$ lies on line ℓ_9
 722 : $P_{236305} = (16, 43, 56, 1)$ lies on line ℓ_9
 723 : $P_{236381} = (28, 44, 56, 1)$ lies on line ℓ_9
 724 : $P_{236454} = (37, 45, 56, 1)$ lies on line ℓ_9
 725 : $P_{236496} = (15, 46, 56, 1)$ lies on line ℓ_9
 726 : $P_{236599} = (54, 47, 56, 1)$ lies on line ℓ_9
 727 : $P_{236653} = (44, 48, 56, 1)$ lies on line ℓ_9
 728 : $P_{236694} = (21, 49, 56, 1)$ lies on line ℓ_9
 729 : $P_{236800} = (63, 50, 56, 1)$ lies on line ℓ_9
 730 : $P_{236807} = (6, 51, 56, 1)$ lies on line ℓ_9
 731 : $P_{236875} = (10, 52, 56, 1)$ lies on line ℓ_9
 732 : $P_{236980} = (51, 53, 56, 1)$ lies on line ℓ_9
 733 : $P_{237018} = (25, 54, 56, 1)$ lies on line ℓ_9
 734 : $P_{237089} = (32, 55, 56, 1)$ lies on line ℓ_9
 735 : $P_{237187} = (2, 57, 56, 1)$ lies on line ℓ_4
 736 : $P_{237188} = (3, 57, 56, 1)$ lies on line ℓ_4
 737 : $P_{237189} = (4, 57, 56, 1)$ lies on line ℓ_4
 738 : $P_{237190} = (5, 57, 56, 1)$ lies on line ℓ_4
 739 : $P_{237191} = (6, 57, 56, 1)$ lies on line ℓ_4
 740 : $P_{237192} = (7, 57, 56, 1)$ lies on line ℓ_4
 741 : $P_{237193} = (8, 57, 56, 1)$ lies on line ℓ_4
 742 : $P_{237194} = (9, 57, 56, 1)$ lies on line ℓ_4
 743 : $P_{237195} = (10, 57, 56, 1)$ lies on line ℓ_4
 744 : $P_{237196} = (11, 57, 56, 1)$ lies on line ℓ_4
 745 : $P_{237197} = (12, 57, 56, 1)$ lies on line ℓ_4
 746 : $P_{237198} = (13, 57, 56, 1)$ lies on line ℓ_4
 747 : $P_{237199} = (14, 57, 56, 1)$ lies on line ℓ_4
 748 : $P_{237200} = (15, 57, 56, 1)$ lies on line ℓ_4
 749 : $P_{237201} = (16, 57, 56, 1)$ lies on line ℓ_4
 750 : $P_{237202} = (17, 57, 56, 1)$ lies on line ℓ_4
 751 : $P_{237203} = (18, 57, 56, 1)$ lies on line ℓ_4
 752 : $P_{237204} = (19, 57, 56, 1)$ lies on line ℓ_4
 753 : $P_{237205} = (20, 57, 56, 1)$ lies on line ℓ_4
 754 : $P_{237206} = (21, 57, 56, 1)$ lies on line ℓ_4
 755 : $P_{237207} = (22, 57, 56, 1)$ lies on line ℓ_4
 756 : $P_{237208} = (23, 57, 56, 1)$ lies on line ℓ_4
 757 : $P_{237209} = (24, 57, 56, 1)$ lies on line ℓ_4
 758 : $P_{237210} = (25, 57, 56, 1)$ lies on line ℓ_4
 759 : $P_{237211} = (26, 57, 56, 1)$ lies on line ℓ_4
 760 : $P_{237212} = (27, 57, 56, 1)$ lies on line ℓ_4
 761 : $P_{237213} = (28, 57, 56, 1)$ lies on line ℓ_4
 762 : $P_{237214} = (29, 57, 56, 1)$ lies on line ℓ_4
 763 : $P_{237215} = (30, 57, 56, 1)$ lies on line ℓ_4
 764 : $P_{237216} = (31, 57, 56, 1)$ lies on line ℓ_4
 765 : $P_{237217} = (32, 57, 56, 1)$ lies on line ℓ_4

766 : $P_{237218} = (33, 57, 56, 1)$ lies on line ℓ_4
 767 : $P_{237219} = (34, 57, 56, 1)$ lies on line ℓ_4
 768 : $P_{237220} = (35, 57, 56, 1)$ lies on line ℓ_4
 769 : $P_{237221} = (36, 57, 56, 1)$ lies on line ℓ_4
 770 : $P_{237222} = (37, 57, 56, 1)$ lies on line ℓ_4
 771 : $P_{237223} = (38, 57, 56, 1)$ lies on line ℓ_4
 772 : $P_{237224} = (39, 57, 56, 1)$ lies on line ℓ_4
 773 : $P_{237225} = (40, 57, 56, 1)$ lies on line ℓ_4
 774 : $P_{237226} = (41, 57, 56, 1)$ lies on line ℓ_4
 775 : $P_{237227} = (42, 57, 56, 1)$ lies on line ℓ_4
 776 : $P_{237228} = (43, 57, 56, 1)$ lies on line ℓ_4
 777 : $P_{237229} = (44, 57, 56, 1)$ lies on line ℓ_4
 778 : $P_{237230} = (45, 57, 56, 1)$ lies on line ℓ_4
 779 : $P_{237231} = (46, 57, 56, 1)$ lies on line ℓ_4
 780 : $P_{237232} = (47, 57, 56, 1)$ lies on line ℓ_4
 781 : $P_{237233} = (48, 57, 56, 1)$ lies on line ℓ_4
 782 : $P_{237234} = (49, 57, 56, 1)$ lies on line ℓ_4
 783 : $P_{237235} = (50, 57, 56, 1)$ lies on line ℓ_4
 784 : $P_{237236} = (51, 57, 56, 1)$ lies on line ℓ_4
 785 : $P_{237237} = (52, 57, 56, 1)$ lies on line ℓ_4
 786 : $P_{237238} = (53, 57, 56, 1)$ lies on line ℓ_4
 787 : $P_{237239} = (54, 57, 56, 1)$ lies on line ℓ_4
 788 : $P_{237240} = (55, 57, 56, 1)$ lies on line ℓ_4
 789 : $P_{237243} = (58, 57, 56, 1)$ lies on line ℓ_4
 790 : $P_{237244} = (59, 57, 56, 1)$ lies on line ℓ_4
 791 : $P_{237245} = (60, 57, 56, 1)$ lies on line ℓ_4
 792 : $P_{237246} = (61, 57, 56, 1)$ lies on line ℓ_4
 793 : $P_{237247} = (62, 57, 56, 1)$ lies on line ℓ_4
 794 : $P_{237248} = (63, 57, 56, 1)$ lies on line ℓ_4
 795 : $P_{237267} = (18, 58, 56, 1)$ lies on line ℓ_9
 796 : $P_{237356} = (43, 59, 56, 1)$ lies on line ℓ_9
 797 : $P_{237416} = (39, 60, 56, 1)$ lies on line ℓ_9
 798 : $P_{237471} = (30, 61, 56, 1)$ lies on line ℓ_9
 799 : $P_{237557} = (52, 62, 56, 1)$ lies on line ℓ_9
 800 : $P_{237582} = (13, 63, 56, 1)$ lies on line ℓ_9
 801 : $P_{237778} = (17, 2, 57, 1)$ lies on line ℓ_8
 802 : $P_{237866} = (41, 3, 57, 1)$ lies on line ℓ_8
 803 : $P_{237923} = (34, 4, 57, 1)$ lies on line ℓ_8
 804 : $P_{237979} = (26, 5, 57, 1)$ lies on line ℓ_8
 805 : $P_{238068} = (51, 6, 57, 1)$ lies on line ℓ_8
 806 : $P_{238092} = (11, 7, 57, 1)$ lies on line ℓ_8
 807 : $P_{238182} = (37, 8, 57, 1)$ lies on line ℓ_8
 808 : $P_{238238} = (29, 9, 57, 1)$ lies on line ℓ_8
 809 : $P_{238325} = (52, 10, 57, 1)$ lies on line ℓ_8
 810 : $P_{238349} = (12, 11, 57, 1)$ lies on line ℓ_8
 811 : $P_{238408} = (7, 12, 57, 1)$ lies on line ℓ_8
 812 : $P_{238528} = (63, 13, 57, 1)$ lies on line ℓ_8
 813 : $P_{238551} = (22, 14, 57, 1)$ lies on line ℓ_8
 814 : $P_{238639} = (46, 15, 57, 1)$ lies on line ℓ_8
 815 : $P_{238700} = (43, 16, 57, 1)$ lies on line ℓ_8
 816 : $P_{238740} = (19, 17, 57, 1)$ lies on line ℓ_8
 817 : $P_{238843} = (58, 18, 57, 1)$ lies on line ℓ_8
 818 : $P_{238851} = (2, 19, 57, 1)$ lies on line ℓ_8
 819 : $P_{238922} = (9, 20, 57, 1)$ lies on line ℓ_8

820 : $P_{239026} = (49, 21, 57, 1)$ lies on line ℓ_8
821 : $P_{239065} = (24, 22, 57, 1)$ lies on line ℓ_8
822 : $P_{239137} = (32, 23, 57, 1)$ lies on line ℓ_8
823 : $P_{239183} = (14, 24, 57, 1)$ lies on line ℓ_8
824 : $P_{239287} = (54, 25, 57, 1)$ lies on line ℓ_8
825 : $P_{239328} = (31, 26, 57, 1)$ lies on line ℓ_8
826 : $P_{239400} = (39, 27, 57, 1)$ lies on line ℓ_8
827 : $P_{239469} = (44, 28, 57, 1)$ lies on line ℓ_8
828 : $P_{239509} = (20, 29, 57, 1)$ lies on line ℓ_8
829 : $P_{239614} = (61, 30, 57, 1)$ lies on line ℓ_8
830 : $P_{239622} = (5, 31, 57, 1)$ lies on line ℓ_8
831 : $P_{239736} = (55, 32, 57, 1)$ lies on line ℓ_8
832 : $P_{239760} = (15, 33, 57, 1)$ lies on line ℓ_8
833 : $P_{239847} = (38, 34, 57, 1)$ lies on line ℓ_8
834 : $P_{239903} = (30, 35, 57, 1)$ lies on line ℓ_8
835 : $P_{239958} = (21, 36, 57, 1)$ lies on line ℓ_8
836 : $P_{240046} = (45, 37, 57, 1)$ lies on line ℓ_8
837 : $P_{240069} = (4, 38, 57, 1)$ lies on line ℓ_8
838 : $P_{240189} = (60, 39, 57, 1)$ lies on line ℓ_8
839 : $P_{240211} = (18, 40, 57, 1)$ lies on line ℓ_8
840 : $P_{240299} = (42, 41, 57, 1)$ lies on line ℓ_8
841 : $P_{240324} = (3, 42, 57, 1)$ lies on line ℓ_8
842 : $P_{240444} = (59, 43, 57, 1)$ lies on line ℓ_8
843 : $P_{240497} = (48, 44, 57, 1)$ lies on line ℓ_8
844 : $P_{240521} = (8, 45, 57, 1)$ lies on line ℓ_8
845 : $P_{240610} = (33, 46, 57, 1)$ lies on line ℓ_8
846 : $P_{240666} = (25, 47, 57, 1)$ lies on line ℓ_8
847 : $P_{240733} = (28, 48, 57, 1)$ lies on line ℓ_8
848 : $P_{240805} = (36, 49, 57, 1)$ lies on line ℓ_8
849 : $P_{240846} = (13, 50, 57, 1)$ lies on line ℓ_8
850 : $P_{240950} = (53, 51, 57, 1)$ lies on line ℓ_8
851 : $P_{241023} = (62, 52, 57, 1)$ lies on line ℓ_8
852 : $P_{241031} = (6, 53, 57, 1)$ lies on line ℓ_8
853 : $P_{241136} = (47, 54, 57, 1)$ lies on line ℓ_8
854 : $P_{241176} = (23, 55, 57, 1)$ lies on line ℓ_8
855 : $P_{241219} = (2, 56, 57, 1)$ lies on line ℓ_5
856 : $P_{241220} = (3, 56, 57, 1)$ lies on line ℓ_5
857 : $P_{241221} = (4, 56, 57, 1)$ lies on line ℓ_5
858 : $P_{241222} = (5, 56, 57, 1)$ lies on line ℓ_5
859 : $P_{241223} = (6, 56, 57, 1)$ lies on line ℓ_5
860 : $P_{241224} = (7, 56, 57, 1)$ lies on line ℓ_5
861 : $P_{241225} = (8, 56, 57, 1)$ lies on line ℓ_5
862 : $P_{241226} = (9, 56, 57, 1)$ lies on line ℓ_5
863 : $P_{241227} = (10, 56, 57, 1)$ lies on line ℓ_5
864 : $P_{241228} = (11, 56, 57, 1)$ lies on line ℓ_5
865 : $P_{241229} = (12, 56, 57, 1)$ lies on line ℓ_5
866 : $P_{241230} = (13, 56, 57, 1)$ lies on line ℓ_5
867 : $P_{241231} = (14, 56, 57, 1)$ lies on line ℓ_5
868 : $P_{241232} = (15, 56, 57, 1)$ lies on line ℓ_5
869 : $P_{241233} = (16, 56, 57, 1)$ lies on line ℓ_5
870 : $P_{241234} = (17, 56, 57, 1)$ lies on line ℓ_5
871 : $P_{241235} = (18, 56, 57, 1)$ lies on line ℓ_5
872 : $P_{241236} = (19, 56, 57, 1)$ lies on line ℓ_5
873 : $P_{241237} = (20, 56, 57, 1)$ lies on line ℓ_5
874 : $P_{241238} = (21, 56, 57, 1)$ lies on line ℓ_5
875 : $P_{241239} = (22, 56, 57, 1)$ lies on line ℓ_5
876 : $P_{241240} = (23, 56, 57, 1)$ lies on line ℓ_5
877 : $P_{241241} = (24, 56, 57, 1)$ lies on line ℓ_5
878 : $P_{241242} = (25, 56, 57, 1)$ lies on line ℓ_5
879 : $P_{241243} = (26, 56, 57, 1)$ lies on line ℓ_5
880 : $P_{241244} = (27, 56, 57, 1)$ lies on line ℓ_5
881 : $P_{241245} = (28, 56, 57, 1)$ lies on line ℓ_5
882 : $P_{241246} = (29, 56, 57, 1)$ lies on line ℓ_5
883 : $P_{241247} = (30, 56, 57, 1)$ lies on line ℓ_5
884 : $P_{241248} = (31, 56, 57, 1)$ lies on line ℓ_5
885 : $P_{241249} = (32, 56, 57, 1)$ lies on line ℓ_5
886 : $P_{241250} = (33, 56, 57, 1)$ lies on line ℓ_5
887 : $P_{241251} = (34, 56, 57, 1)$ lies on line ℓ_5
888 : $P_{241252} = (35, 56, 57, 1)$ lies on line ℓ_5
889 : $P_{241253} = (36, 56, 57, 1)$ lies on line ℓ_5
890 : $P_{241254} = (37, 56, 57, 1)$ lies on line ℓ_5
891 : $P_{241255} = (38, 56, 57, 1)$ lies on line ℓ_5
892 : $P_{241256} = (39, 56, 57, 1)$ lies on line ℓ_5
893 : $P_{241257} = (40, 56, 57, 1)$ lies on line ℓ_5
894 : $P_{241258} = (41, 56, 57, 1)$ lies on line ℓ_5
895 : $P_{241259} = (42, 56, 57, 1)$ lies on line ℓ_5
896 : $P_{241260} = (43, 56, 57, 1)$ lies on line ℓ_5
897 : $P_{241261} = (44, 56, 57, 1)$ lies on line ℓ_5
898 : $P_{241262} = (45, 56, 57, 1)$ lies on line ℓ_5
899 : $P_{241263} = (46, 56, 57, 1)$ lies on line ℓ_5
900 : $P_{241264} = (47, 56, 57, 1)$ lies on line ℓ_5
901 : $P_{241265} = (48, 56, 57, 1)$ lies on line ℓ_5
902 : $P_{241266} = (49, 56, 57, 1)$ lies on line ℓ_5
903 : $P_{241267} = (50, 56, 57, 1)$ lies on line ℓ_5
904 : $P_{241268} = (51, 56, 57, 1)$ lies on line ℓ_5
905 : $P_{241269} = (52, 56, 57, 1)$ lies on line ℓ_5
906 : $P_{241270} = (53, 56, 57, 1)$ lies on line ℓ_5
907 : $P_{241271} = (54, 56, 57, 1)$ lies on line ℓ_5
908 : $P_{241272} = (55, 56, 57, 1)$ lies on line ℓ_5
909 : $P_{241275} = (58, 56, 57, 1)$ lies on line ℓ_5
910 : $P_{241276} = (59, 56, 57, 1)$ lies on line ℓ_5
911 : $P_{241277} = (60, 56, 57, 1)$ lies on line ℓ_5
912 : $P_{241278} = (61, 56, 57, 1)$ lies on line ℓ_5
913 : $P_{241279} = (62, 56, 57, 1)$ lies on line ℓ_5
914 : $P_{241280} = (63, 56, 57, 1)$ lies on line ℓ_5
915 : $P_{241385} = (40, 58, 57, 1)$ lies on line ℓ_8
916 : $P_{241425} = (16, 59, 57, 1)$ lies on line ℓ_8
917 : $P_{241500} = (27, 60, 57, 1)$ lies on line ℓ_8
918 : $P_{241572} = (35, 61, 57, 1)$ lies on line ℓ_8
919 : $P_{241611} = (10, 62, 57, 1)$ lies on line ℓ_8
920 : $P_{241715} = (50, 63, 57, 1)$ lies on line ℓ_8
921 : $P_{241729} = (0, 0, 58, 1)$ lies on line ℓ_6
922 : $P_{241852} = (59, 1, 58, 1)$ lies on line ℓ_{10}
923 : $P_{242819} = (2, 17, 58, 1)$ lies on line ℓ_{14}
924 : $P_{244420} = (3, 42, 58, 1)$ lies on line ℓ_{15}
925 : $P_{245316} = (3, 56, 58, 1)$ lies on line ℓ_{11}
926 : $P_{245379} = (2, 57, 58, 1)$ lies on line ℓ_{12}
927 : $P_{245564} = (59, 59, 58, 1)$ lies on line ℓ_{13}

928 : $P_{245825} = (0, 0, 59, 1)$ lies on line ℓ_6
 929 : $P_{245947} = (58, 1, 59, 1)$ lies on line ℓ_{10}
 930 : $P_{247043} = (2, 19, 59, 1)$ lies on line ℓ_{15}
 931 : $P_{248452} = (3, 41, 59, 1)$ lies on line ℓ_{14}
 932 : $P_{249411} = (2, 56, 59, 1)$ lies on line ℓ_{11}
 933 : $P_{249476} = (3, 57, 59, 1)$ lies on line ℓ_{12}
 934 : $P_{249595} = (58, 58, 59, 1)$ lies on line ℓ_{13}
 935 : $P_{249921} = (0, 0, 60, 1)$ lies on line ℓ_6
 936 : $P_{250046} = (61, 1, 60, 1)$ lies on line ℓ_{10}
 937 : $P_{251910} = (5, 31, 60, 1)$ lies on line ℓ_{15}
 938 : $P_{252101} = (4, 34, 60, 1)$ lies on line ℓ_{14}
 939 : $P_{253510} = (5, 56, 60, 1)$ lies on line ℓ_{11}
 940 : $P_{253573} = (4, 57, 60, 1)$ lies on line ℓ_{12}
 941 : $P_{253886} = (61, 61, 60, 1)$ lies on line ℓ_{13}
 942 : $P_{254017} = (0, 0, 61, 1)$ lies on line ℓ_6
 943 : $P_{254141} = (60, 1, 61, 1)$ lies on line ℓ_{10}
 944 : $P_{255686} = (5, 26, 61, 1)$ lies on line ℓ_{14}
 945 : $P_{256453} = (4, 38, 61, 1)$ lies on line ℓ_{15}
 946 : $P_{257605} = (4, 56, 61, 1)$ lies on line ℓ_{11}
 947 : $P_{257670} = (5, 57, 61, 1)$ lies on line ℓ_{12}
 948 : $P_{257917} = (60, 60, 61, 1)$ lies on line ℓ_{13}
 949 : $P_{258113} = (0, 0, 62, 1)$ lies on line ℓ_6
 950 : $P_{258240} = (63, 1, 62, 1)$ lies on line ℓ_{10}
 951 : $P_{258888} = (7, 12, 62, 1)$ lies on line ℓ_{15}
 952 : $P_{261383} = (6, 51, 62, 1)$ lies on line ℓ_{14}
 953 : $P_{261704} = (7, 56, 62, 1)$ lies on line ℓ_{11}
 954 : $P_{261767} = (6, 57, 62, 1)$ lies on line ℓ_{12}
 955 : $P_{262208} = (63, 63, 62, 1)$ lies on line ℓ_{13}
 956 : $P_{262209} = (0, 0, 63, 1)$ lies on line ℓ_6
 957 : $P_{262335} = (62, 1, 63, 1)$ lies on line ℓ_{10}
 958 : $P_{262920} = (7, 11, 63, 1)$ lies on line ℓ_{14}
 959 : $P_{265607} = (6, 53, 63, 1)$ lies on line ℓ_{15}
 960 : $P_{265799} = (6, 56, 63, 1)$ lies on line ℓ_{11}
 961 : $P_{265864} = (7, 57, 63, 1)$ lies on line ℓ_{12}
 962 : $P_{266239} = (62, 62, 63, 1)$ lies on line ℓ_{13}

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

Neighbor sets in the line intersection graph:

Line 0 intersects

Line	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_7	ℓ_8	ℓ_9
in point	P_0	P_1	P_0	P_0	P_0	P_5	P_{60}	P_{61}

Line 1 intersects

Line	ℓ_0	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_{10}	ℓ_{11}	ℓ_{12}
in point	P_0	P_{68}	P_0	P_0	P_0	P_2	P_{68}	P_{68}	P_{68}

Line 2 intersects

Line	ℓ_0	ℓ_1	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}
in point	P_1	P_{68}	P_{68}	P_{68}	P_{68}	P_{132}	P_{3652}	P_{3716}

Line 3 intersects

Line	ℓ_0	ℓ_1	ℓ_4	ℓ_5	ℓ_7	ℓ_{10}	ℓ_{14}	ℓ_{15}
in point	P_0	P_0	P_0	P_0	P_4	P_{8322}	P_{8378}	P_{8377}

Line 4 intersects

Line	ℓ_0	ℓ_1	ℓ_3	ℓ_5	ℓ_9	ℓ_{12}	ℓ_{13}	ℓ_{15}
in point	P_0	P_0	P_0	P_0	P_{237241}	P_{237185}	P_{237242}	P_{237186}

Line 5 intersects

Line	ℓ_0	ℓ_1	ℓ_3	ℓ_4	ℓ_8	ℓ_{11}	ℓ_{13}	ℓ_{14}
in point	P_0	P_0	P_0	P_0	P_{241274}	P_{241217}	P_{241273}	P_{241218}

Line 6 intersects

Line	ℓ_1	ℓ_7	ℓ_8	ℓ_9	ℓ_{13}	ℓ_{14}	ℓ_{15}
in point	P_2	P_{8258}	P_{237633}	P_{233537}	P_{8258}	P_{233537}	P_{237633}

Line 7 intersects

Line	ℓ_0	ℓ_3	ℓ_6	ℓ_{11}	ℓ_{12}	ℓ_{13}
in point	P_5	P_4	P_{8258}	P_{11897}	P_{11962}	P_{8258}

Line 8 intersects

Line	ℓ_0	ℓ_5	ℓ_6	ℓ_{10}	ℓ_{12}	ℓ_{15}
in point	P_{60}	P_{241274}	P_{237633}	P_{237753}	P_{241282}	P_{237633}

Line 9 intersects

Line	ℓ_0	ℓ_4	ℓ_6	ℓ_{10}	ℓ_{11}	ℓ_{14}
in point	P_{61}	P_{237241}	P_{233537}	P_{233658}	P_{237122}	P_{233537}

Line 10 intersects

Line	ℓ_1	ℓ_2	ℓ_3	ℓ_8	ℓ_9	ℓ_{11}	ℓ_{12}	ℓ_{13}
in point	P_{68}	P_{68}	P_{8322}	P_{237753}	P_{233658}	P_{68}	P_{68}	P_{4227}

Line 11 intersects

Line	ℓ_1	ℓ_2	ℓ_5	ℓ_7	ℓ_9	ℓ_{10}	ℓ_{12}	ℓ_{15}
in point	P_{68}	P_{68}	P_{241217}	P_{11897}	P_{237122}	P_{68}	P_{68}	P_{7803}

Line 12 intersects

Line	ℓ_1	ℓ_2	ℓ_4	ℓ_7	ℓ_8	ℓ_{10}	ℓ_{11}	ℓ_{14}
in point	P_{68}	P_{68}	P_{237185}	P_{11962}	P_{241282}	P_{68}	P_{68}	P_{7866}

Line 13 intersects

Line	ℓ_2	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_{10}
in point	P_{132}	P_{237242}	P_{241273}	P_{8258}	P_{8258}	P_{4227}

Line 14 intersects

Line	ℓ_2	ℓ_3	ℓ_5	ℓ_6	ℓ_9	ℓ_{12}
in point	P_{3652}	P_{8378}	P_{241218}	P_{233537}	P_{233537}	P_{7866}

Line 15 intersects

Line	ℓ_2	ℓ_3	ℓ_4	ℓ_6	ℓ_8	ℓ_{11}
in point	P_{3716}	P_{8377}	P_{237186}	P_{237633}	P_{237633}	P_{7803}

The surface has 4417 points:

Too many to print.