Rank-65851 over GF(64)

January 15, 2021

The equation

The equation of the surface is :

$$X_3^3 + X_0^2X_1 + X_0^2X_2 + X_1^2X_2 + X_0X_1X_2 = 0$$

(0, 0, 0, 1, 1, 1, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0)
The point rank of the equation over GF(64) is -2113400763

General information

Number of lines	15
Number of points	4417
Number of singular points	1
Number of Eckardt points	3
Number of double points	27
Number of single points	906
Number of points off lines	3480
Number of Hesse planes	0
Number of axes	0
Type of points on lines	65^{15}
Type of lines on points	6, 3^3, 2^{27}, 1^{906}, 0^{3480}

Singular Points

The surface has 1 singular points:

$0: \ P_2 = \mathbf{P}(0,0,1,0) = \mathbf{P}(0,0,1,0)$

The 15 Lines

The lines and their Pluecker coordinates are:

$$\ell_0 = \begin{bmatrix} 1 & \epsilon^{21} & 0 & \epsilon^{49} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{8230393} = \begin{bmatrix} 1 & 57 & 0 & 30 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{8230393} = \mathbf{Pl}(0,61,56,0,0,1)_{277637}$$

$$\ell_1 = \begin{bmatrix} 1 & \epsilon^{42} & 0 & \epsilon^{56} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{10889272} = \begin{bmatrix} 1 & 56 & 0 & 40 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{10889272} = \mathbf{Pl}(0,58,57,0,0,1)_{277761}$$

$$\ell_2 = \begin{bmatrix} 1 & \epsilon^{42} & 0 & \epsilon^{35} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{5030584} = \begin{bmatrix} 1 & 56 & 0 & 18 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{5030584} = \mathbf{Pl}(0,40,57,0,0,1)_{277743}$$

$$\ell_3 = \begin{bmatrix} 1 & \epsilon^{21} & 0 & \epsilon^{28} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{16485817} = \begin{bmatrix} 1 & 57 & 0 & 61 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{16485817} = \mathbf{Pl}(0,35,56,0,0,1)_{277611}$$

$$\ell_4 = \begin{bmatrix} 1 & \epsilon^{21} & 0 & \epsilon^{7} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{9561913} = \begin{bmatrix} 1 & 57 & 0 & 35 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{9561913} = \mathbf{Pl}(0,30,56,0,0,1)_{277606}$$

$$\ell_5 = \begin{bmatrix} 1 & \epsilon^{42} & 0 & \epsilon^{14} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{15682744} = \begin{bmatrix} 1 & 56 & 0 & 58 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{15682744} = \mathbf{Pl}(0,18,57,0,0,1)_{277721}$$

$$\ell_6 = \begin{bmatrix} 1 & 0 & \epsilon^{27} & \epsilon^{30} \\ 0 & 1 & \epsilon^{45} & \epsilon^{57} \end{bmatrix}_{14574995} = \begin{bmatrix} 1 & 0 & 46 & 54 \\ 0 & 1 & 37 & 49 \end{bmatrix}_{14574995} = \mathbf{Pl}(25,62,12,8,54,1)_{14486313}$$

$$\ell_7 = \begin{bmatrix} 1 & 0 & \epsilon^{27} & \epsilon^{9} \\ 0 & 1 & \epsilon^{45} & \epsilon^{36} \end{bmatrix}_{12710035} = \begin{bmatrix} 1 & 0 & 46 & 47 \\ 0 & 1 & 37 & 36 \end{bmatrix}_{12710035} = \mathbf{Pl}(47,10,11,37,47,1)_{12647869}$$

$$\ell_8 = \begin{bmatrix} 1 & 0 & \epsilon^{27} & \epsilon^{51} \\ 0 & 1 & \epsilon^{45} & \epsilon^{15} \end{bmatrix}_{6850387} = \begin{bmatrix} 1 & 0 & 46 & 25 \\ 0 & 1 & 37 & 21 \end{bmatrix}_{6850387} = \mathbf{Pl}(54,52,7,45,25,1)_{6866492}$$

$$\ell_9 = \begin{bmatrix} 1 & 0 & \epsilon^{54} & \epsilon^{60} \\ 0 & 1 & \epsilon^{27} & \epsilon^{51} \end{bmatrix}_{3238904} = \begin{bmatrix} 1 & 0 & 10 & 12 \\ 0 & 1 & 46 & 25 \end{bmatrix}_{3238904} = \mathbf{Pl}(7,45,49,33,12,1)_{3625158}$$

$$\ell_{10} = \begin{bmatrix} 1 & 0 & \epsilon^{54} & \epsilon^{18} \\ 0 & 1 & \epsilon^{27} & \epsilon^{9} \end{bmatrix}_{2974008} = \begin{bmatrix} 1 & 0 & 10 & 11 \\ 0 & 1 & 46 & 47 \end{bmatrix}_{2974008} = \mathbf{Pl}(11,37,36,46,11,1)_{3312304}$$

$$\ell_{11} = \begin{bmatrix} 1 & 0 & \epsilon^{54} & \epsilon^{39} \\ 0 & 1 & \epsilon^{27} & \epsilon^{30} \end{bmatrix}_{1909240} = \begin{bmatrix} 1 & 0 & 10 & 7 \\ 0 & 1 & 46 & 54 \end{bmatrix}_{1909240} = \mathbf{Pl}(12,8,21,15,7,1)_{2205395}$$

$$\ell_{12} = \begin{bmatrix} 1 & 0 & \epsilon^{45} & \epsilon^{57} \\ 0 & 1 & \epsilon^{54} & \epsilon^{39} \end{bmatrix}_{13203311} = \begin{bmatrix} 1 & 0 & 37 & 49 \\ 0 & 1 & 10 & 7 \end{bmatrix}_{13203311} = \mathbf{Pl}(21,15,25,62,49,1)_{13228955}$$

$$\ell_{13} = \begin{bmatrix} 1 & 0 & \epsilon^{45} & \epsilon^{36} \\ 0 & 1 & \epsilon^{54} & \epsilon^{18} \end{bmatrix}_{9741615} = \begin{bmatrix} 1 & 0 & 37 & 36 \\ 0 & 1 & 10 & 11 \end{bmatrix}_{9741615} = \mathbf{Pl}(36,46,47,10,36,1)_{9907862}$$

$$\ell_{14} = \begin{bmatrix} 1 & 0 & \epsilon^{45} & \epsilon^{15} \\ 0 & 1 & \epsilon^{54} & \epsilon^{60} \end{bmatrix}_{5747119} = \begin{bmatrix} 1 & 0 & 37 & 21 \\ 0 & 1 & 10 & 12 \end{bmatrix}_{5747119} = \mathbf{Pl}(49,33,54,52,21,1)_{6004017}$$

Rank of lines: (8230393, 10889272, 5030584, 16485817, 9561913, 15682744, 14574995, 12710035, 6850387, 3238904, 2974008, 1909240, 13203311, 9741615, 5747119)
Rank of points on Klein quadric: (277637, 277761, 277743, 277611, 277606, 277721, 14486313, 12647869, 6866492, 3625158, 3312304, 2205395, 13228955, 9907862, 6004017)

Eckardt Points

The surface has 3 Eckardt points:
$0 : P_{718} = \mathbf{P}(\epsilon^{18}, \epsilon^{54}, 1, 0) = \mathbf{P}(11, 10, 1, 0)$,
$1 : P_{2471} = \mathbf{P}(\epsilon^{36}, \epsilon^{45}, 1, 0) = \mathbf{P}(36, 37, 1, 0)$,
$2 : P_{3058} = \mathbf{P}(\epsilon^{9}, \epsilon^{27}, 1, 0) = \mathbf{P}(47, 46, 1, 0)$.

Double Points

The surface has 27 Double points:
The double points on the surface are:

$P_{173307} = (58, 18, 41, 1) = \ell_0 \cap \ell_7$
$P_{70907} = (58, 18, 16, 1) = \ell_0 \cap \ell_{11}$
$P_{75003} = (58, 18, 17, 1) = \ell_0 \cap \ell_{14}$
$P_{22500} = (35, 30, 4, 1) = \ell_1 \cap \ell_8$
$P_{26596} = (35, 30, 5, 1) = \ell_1 \cap \ell_{11}$
$P_{251876} = (35, 30, 60, 1) = \ell_1 \cap \ell_{13}$
$P_{162110} = (61, 35, 38, 1) = \ell_2 \cap \ell_6$
$P_{133438} = (61, 35, 31, 1) = \ell_2 \cap \ell_{10}$
$P_{166206} = (61, 35, 39, 1) = \ell_2 \cap \ell_{14}$
$P_{19027} = (18, 40, 3, 1) = \ell_3 \cap \ell_8$
$P_{248403} = (18, 40, 59, 1) = \ell_3 \cap \ell_{10}$
$P_{14931} = (18, 40, 2, 1) = \ell_3 \cap \ell_{12}$
$P_{179945} = (40, 58, 42, 1) = \ell_4 \cap \ell_6$
$P_{184041} = (40, 58, 43, 1) = \ell_4 \cap \ell_9$
$P_{85737} = (40, 58, 19, 1) = \ell_4 \cap \ell_{13}$
$P_{147359} = (30, 61, 34, 1) = \ell_5 \cap \ell_7$
$P_{114591} = (30, 61, 26, 1) = \ell_5 \cap \ell_9$
$P_{118687} = (30, 61, 27, 1) = \ell_5 \cap \ell_{12}$
$P_{140685} = (12, 21, 33, 1) = \ell_6 \cap \ell_{11}$
$P_{189274} = (25, 12, 45, 1) = \ell_6 \cap \ell_{12}$
$P_{194892} = (11, 36, 46, 1) = \ell_7 \cap \ell_{10}$
$P_{156464} = (47, 11, 37, 1) = \ell_7 \cap \ell_{13}$
$P_{68744} = (7, 49, 15, 1) = \ell_8 \cap \ell_9$
$P_{37431} = (54, 7, 8, 1) = \ell_8 \cap \ell_{14}$
$P_{261618} = (49, 54, 62, 1) = \ell_9 \cap \ell_{14}$
$P_{48165} = (36, 47, 10, 1) = \ell_{10} \cap \ell_{13}$
$P_{218774} = (21, 25, 52, 1) = \ell_{11} \cap \ell_{12}$

Single Points

The surface has 906 single points:
The single points on the surface are:

0 : $P_{4672} = (62, 7, 0, 1)$ lies on line ℓ_9
1 : $P_{4876} = (10, 11, 0, 1)$ lies on line ℓ_{10}
2 : $P_{4982} = (52, 12, 0, 1)$ lies on line ℓ_{11}
3 : $P_{5372} = (58, 18, 0, 1)$ lies on line ℓ_0
4 : $P_{5551} = (45, 21, 0, 1)$ lies on line ℓ_{12}
5 : $P_{5795} = (33, 25, 0, 1)$ lies on line ℓ_6
6 : $P_{6117} = (35, 30, 0, 1)$ lies on line ℓ_1
7 : $P_{6463} = (61, 35, 0, 1)$ lies on line ℓ_2
8 : $P_{6503} = (37, 36, 0, 1)$ lies on line ℓ_{13}
9 : $P_{6740} = (18, 40, 0, 1)$ lies on line ℓ_3
10 : $P_{7216} = (46, 47, 0, 1)$ lies on line ℓ_7
11 : $P_{7306} = (8, 49, 0, 1)$ lies on line ℓ_{14}
12 : $P_{7633} = (15, 54, 0, 1)$ lies on line ℓ_8
13 : $P_{7914} = (40, 58, 0, 1)$ lies on line ℓ_4
14 : $P_{8096} = (30, 61, 0, 1)$ lies on line ℓ_5
15 : $P_{8907} = (10, 10, 1, 1)$ lies on line ℓ_{13}
16 : $P_{9467} = (58, 18, 1, 1)$ lies on line ℓ_0
17 : $P_{9515} = (42, 19, 1, 1)$ lies on line ℓ_6
18 : $P_{10212} = (35, 30, 1, 1)$ lies on line ℓ_1
19 : $P_{10280} = (39, 31, 1, 1)$ lies on line ℓ_{14}
20 : $P_{10459} = (26, 34, 1, 1)$ lies on line ℓ_9
21 : $P_{10558} = (61, 35, 1, 1)$ lies on line ℓ_2
22 : $P_{10662} = (37, 37, 1, 1)$ lies on line ℓ_7
23 : $P_{10835} = (18, 40, 1, 1)$ lies on line ℓ_3
24 : $P_{10897} = (16, 41, 1, 1)$ lies on line ℓ_{11}
25 : $P_{11247} = (46, 46, 1, 1)$ lies on line ℓ_{10}
26 : $P_{12009} = (40, 58, 1, 1)$ lies on line ℓ_4
27 : $P_{12035} = (2, 59, 1, 1)$ lies on line ℓ_{12}
28 : $P_{12101} = (4, 60, 1, 1)$ lies on line ℓ_8
29 : $P_{12191} = (30, 61, 1, 1)$ lies on line ℓ_5
30 : $P_{13176} = (55, 12, 2, 1)$ lies on line ℓ_{14}
31 : $P_{13240} = (55, 13, 2, 1)$ lies on line ℓ_6
32 : $P_{13563} = (58, 18, 2, 1)$ lies on line ℓ_0
33 : $P_{13979} = (26, 25, 2, 1)$ lies on line ℓ_{13}
34 : $P_{14308} = (35, 30, 2, 1)$ lies on line ℓ_1
35 : $P_{14436} = (35, 32, 2, 1)$ lies on line ℓ_{10}
36 : $P_{14554} = (25, 34, 2, 1)$ lies on line ℓ_8
37 : $P_{14654} = (61, 35, 2, 1)$ lies on line ℓ_2
38 : $P_{14878} = (29, 39, 2, 1)$ lies on line ℓ_{11}
39 : $P_{15192} = (23, 44, 2, 1)$ lies on line ℓ_9
40 : $P_{16105} = (40, 58, 2, 1)$ lies on line ℓ_4
41 : $P_{16185} = (56, 59, 2, 1)$ lies on line ℓ_7
42 : $P_{16287} = (30, 61, 2, 1)$ lies on line ℓ_5
43 : $P_{16634} = (57, 2, 3, 1)$ lies on line ℓ_{11}
44 : $P_{16776} = (7, 5, 3, 1)$ lies on line ℓ_{10}
45 : $P_{16894} = (61, 6, 3, 1)$ lies on line ℓ_{12}
46 : $P_{16957} = (60, 7, 3, 1)$ lies on line ℓ_6
47 : $P_{17076} = (51, 9, 3, 1)$ lies on line ℓ_9
48 : $P_{17659} = (58, 18, 3, 1)$ lies on line ℓ_0
49 : $P_{18404} = (35, 30, 3, 1)$ lies on line ℓ_1
50 : $P_{18649} = (24, 34, 3, 1)$ lies on line ℓ_{14}
51 : $P_{18750} = (61, 35, 3, 1)$ lies on line ℓ_2
52 : $P_{19636} = (51, 49, 3, 1)$ lies on line ℓ_7
53 : $P_{20022} = (53, 55, 3, 1)$ lies on line ℓ_{13}
54 : $P_{20201} = (40, 58, 3, 1)$ lies on line ℓ_4
55 : $P_{20383} = (30, 61, 3, 1)$ lies on line ℓ_5
56 : $P_{20995} = (2, 7, 4, 1)$ lies on line ℓ_7
57 : $P_{21491} = (50, 14, 4, 1)$ lies on line ℓ_{12}
58 : $P_{21755} = (58, 18, 4, 1)$ lies on line ℓ_0
59 : $P_{22846} = (61, 35, 4, 1)$ lies on line ℓ_2
60 : $P_{23123} = (18, 40, 4, 1)$ lies on line ℓ_3
61 : $P_{23256} = (23, 42, 4, 1)$ lies on line ℓ_{14}
62 : $P_{23630} = (13, 48, 4, 1)$ lies on line ℓ_9
63 : $P_{23694} = (13, 49, 4, 1)$ lies on line ℓ_6
64 : $P_{24297} = (40, 58, 4, 1)$ lies on line ℓ_4
65 : $P_{24328} = (7, 59, 4, 1)$ lies on line ℓ_{11}

66 : $P_{24442} = (57, 60, 4, 1)$ lies on line ℓ_{10}
67 : $P_{24479} = (30, 61, 4, 1)$ lies on line ℓ_{5}
68 : $P_{24635} = (58, 63, 4, 1)$ lies on line ℓ_{13}
69 : $P_{24953} = (56, 4, 5, 1)$ lies on line ℓ_{14}
70 : $P_{25482} = (9, 13, 5, 1)$ lies on line ℓ_{7}
71 : $P_{25750} = (21, 17, 5, 1)$ lies on line ℓ_{13}
72 : $P_{25851} = (58, 18, 5, 1)$ lies on line ℓ_{0}
73 : $P_{25961} = (40, 20, 5, 1)$ lies on line ℓ_{8}
74 : $P_{26026} = (41, 21, 5, 1)$ lies on line ℓ_{9}
75 : $P_{26270} = (29, 25, 5, 1)$ lies on line ℓ_{10}
76 : $P_{26718} = (29, 32, 5, 1)$ lies on line ℓ_{12}
77 : $P_{26942} = (61, 35, 5, 1)$ lies on line ℓ_{2}
78 : $P_{27219} = (18, 40, 5, 1)$ lies on line ℓ_{3}
79 : $P_{28393} = (40, 58, 5, 1)$ lies on line ℓ_{4}
80 : $P_{28423} = (6, 59, 5, 1)$ lies on line ℓ_{6}
81 : $P_{28575} = (30, 61, 5, 1)$ lies on line ℓ_{5}
82 : $P_{28870} = (5, 2, 6, 1)$ lies on line ℓ_{13}
83 : $P_{29430} = (53, 10, 6, 1)$ lies on line ℓ_{8}
84 : $P_{29807} = (46, 16, 6, 1)$ lies on line ℓ_{11}
85 : $P_{29947} = (58, 18, 6, 1)$ lies on line ℓ_{0}
86 : $P_{29973} = (20, 19, 6, 1)$ lies on line ℓ_{7}
87 : $P_{30225} = (16, 23, 6, 1)$ lies on line ℓ_{10}
88 : $P_{30249} = (40, 23, 6, 1)$ lies on line ℓ_{14}
89 : $P_{30501} = (36, 27, 6, 1)$ lies on line ℓ_{9}
90 : $P_{30692} = (35, 30, 6, 1)$ lies on line ℓ_{1}
91 : $P_{31038} = (61, 35, 6, 1)$ lies on line ℓ_{2}
92 : $P_{31132} = (27, 37, 6, 1)$ lies on line ℓ_{6}
93 : $P_{31315} = (18, 40, 6, 1)$ lies on line ℓ_{3}
94 : $P_{32014} = (13, 51, 6, 1)$ lies on line ℓ_{12}
95 : $P_{32489} = (40, 58, 6, 1)$ lies on line ℓ_{4}
96 : $P_{32671} = (30, 61, 6, 1)$ lies on line ℓ_{5}
97 : $P_{32895} = (62, 0, 7, 1)$ lies on line ℓ_{8}
98 : $P_{34043} = (58, 18, 7, 1)$ lies on line ℓ_{0}
99 : $P_{34464} = (31, 25, 7, 1)$ lies on line ℓ_{7}
100 : $P_{34723} = (34, 29, 7, 1)$ lies on line ℓ_{12}
101 : $P_{34788} = (35, 30, 7, 1)$ lies on line ℓ_{1}
102 : $P_{35134} = (61, 35, 7, 1)$ lies on line ℓ_{2}
103 : $P_{35411} = (18, 40, 7, 1)$ lies on line ℓ_{3}
104 : $P_{35691} = (42, 44, 7, 1)$ lies on line ℓ_{13}
105 : $P_{35857} = (16, 47, 7, 1)$ lies on line ℓ_{6}
106 : $P_{36085} = (52, 50, 7, 1)$ lies on line ℓ_{10}
107 : $P_{36235} = (10, 53, 7, 1)$ lies on line ℓ_{11}
108 : $P_{36488} = (7, 57, 7, 1)$ lies on line ℓ_{14}
109 : $P_{36585} = (40, 58, 7, 1)$ lies on line ℓ_{4}
110 : $P_{36767} = (30, 61, 7, 1)$ lies on line ℓ_{5}
111 : $P_{36801} = (0, 62, 7, 1)$ lies on line ℓ_{9}
112 : $P_{37172} = (51, 3, 8, 1)$ lies on line ℓ_{11}
113 : $P_{37198} = (13, 4, 8, 1)$ lies on line ℓ_{10}
114 : $P_{37498} = (57, 8, 8, 1)$ lies on line ℓ_{9}
115 : $P_{38108} = (27, 18, 8, 1)$ lies on line ℓ_{13}
116 : $P_{38139} = (58, 18, 8, 1)$ lies on line ℓ_{0}
117 : $P_{38872} = (23, 30, 8, 1)$ lies on line ℓ_{7}
118 : $P_{38884} = (35, 30, 8, 1)$ lies on line ℓ_{1}
119 : $P_{39188} = (19, 35, 8, 1)$ lies on line ℓ_{12}
120 : $P_{39230} = (61, 35, 8, 1)$ lies on line ℓ_{2}
121 : $P_{39507} = (18, 40, 8, 1)$ lies on line ℓ_{3}
122 : $P_{39513} = (24, 40, 8, 1)$ lies on line ℓ_{6}
123 : $P_{40681} = (40, 58, 8, 1)$ lies on line ℓ_{4}
124 : $P_{40863} = (30, 61, 8, 1)$ lies on line ℓ_{5}
125 : $P_{41917} = (60, 13, 9, 1)$ lies on line ℓ_{12}
126 : $P_{41918} = (61, 13, 9, 1)$ lies on line ℓ_{8}
127 : $P_{42235} = (58, 18, 9, 1)$ lies on line ℓ_{0}
128 : $P_{42333} = (28, 20, 9, 1)$ lies on line ℓ_{7}
129 : $P_{42980} = (35, 30, 9, 1)$ lies on line ℓ_{1}
130 : $P_{43178} = (41, 33, 9, 1)$ lies on line ℓ_{10}
131 : $P_{43220} = (19, 34, 9, 1)$ lies on line ℓ_{6}
132 : $P_{43326} = (61, 35, 9, 1)$ lies on line ℓ_{2}
133 : $P_{43480} = (23, 38, 9, 1)$ lies on line ℓ_{11}
134 : $P_{43603} = (18, 40, 9, 1)$ lies on line ℓ_{3}
135 : $P_{43674} = (25, 41, 9, 1)$ lies on line ℓ_{14}
136 : $P_{43934} = (29, 45, 9, 1)$ lies on line ℓ_{9}
137 : $P_{44777} = (40, 58, 9, 1)$ lies on line ℓ_{4}
138 : $P_{44917} = (52, 60, 9, 1)$ lies on line ℓ_{13}
139 : $P_{44959} = (30, 61, 9, 1)$ lies on line ℓ_{5}
140 : $P_{45762} = (1, 10, 10, 1)$ lies on line ℓ_{7}
141 : $P_{46331} = (58, 18, 10, 1)$ lies on line ℓ_{0}
142 : $P_{46369} = (32, 19, 10, 1)$ lies on line ℓ_{8}
143 : $P_{47076} = (35, 30, 10, 1)$ lies on line ℓ_{1}
144 : $P_{47085} = (44, 30, 10, 1)$ lies on line ℓ_{12}
145 : $P_{47377} = (16, 35, 10, 1)$ lies on line ℓ_{9}
146 : $P_{47422} = (61, 35, 10, 1)$ lies on line ℓ_{2}
147 : $P_{47699} = (18, 40, 10, 1)$ lies on line ℓ_{3}
148 : $P_{47707} = (26, 40, 10, 1)$ lies on line ℓ_{11}
149 : $P_{48842} = (9, 58, 10, 1)$ lies on line ℓ_{14}
150 : $P_{48873} = (40, 58, 10, 1)$ lies on line ℓ_{4}
151 : $P_{48975} = (14, 60, 10, 1)$ lies on line ℓ_{6}
152 : $P_{49055} = (30, 61, 10, 1)$ lies on line ℓ_{5}
153 : $P_{49227} = (10, 0, 11, 1)$ lies on line ℓ_{7}
154 : $P_{49292} = (11, 1, 11, 1)$ lies on line ℓ_{13}
155 : $P_{49653} = (52, 6, 11, 1)$ lies on line ℓ_{9}
156 : $P_{49857} = (0, 10, 11, 1)$ lies on line ℓ_{10}
157 : $P_{50111} = (62, 13, 11, 1)$ lies on line ℓ_{11}
158 : $P_{50427} = (58, 18, 11, 1)$ lies on line ℓ_{0}
159 : $P_{50535} = (38, 20, 11, 1)$ lies on line ℓ_{14}
160 : $P_{50860} = (43, 25, 11, 1)$ lies on line ℓ_{8}
161 : $P_{51172} = (35, 30, 11, 1)$ lies on line ℓ_{1}
162 : $P_{51518} = (61, 35, 11, 1)$ lies on line ℓ_{2}
163 : $P_{51795} = (18, 40, 11, 1)$ lies on line ℓ_{3}
164 : $P_{52292} = (3, 48, 11, 1)$ lies on line ℓ_{12}
165 : $P_{52678} = (5, 54, 11, 1)$ lies on line ℓ_{6}
166 : $P_{52969} = (40, 58, 11, 1)$ lies on line ℓ_{4}
167 : $P_{53151} = (30, 61, 11, 1)$ lies on line ℓ_{5}
168 : $P_{53365} = (52, 0, 12, 1)$ lies on line ℓ_{6}
169 : $P_{53893} = (4, 9, 12, 1)$ lies on line ℓ_{13}
170 : $P_{54523} = (58, 18, 12, 1)$ lies on line ℓ_{0}
171 : $P_{55146} = (41, 28, 12, 1)$ lies on line ℓ_{14}
172 : $P_{55268} = (35, 30, 12, 1)$ lies on line ℓ_{1}
173 : $P_{55614} = (61, 35, 12, 1)$ lies on line ℓ_{2}

174 : $P_{55891} = (18, 40, 12, 1)$ lies on line ℓ_3
175 : $P_{56347} = (26, 47, 12, 1)$ lies on line ℓ_8
176 : $P_{56639} = (62, 51, 12, 1)$ lies on line ℓ_{10}
177 : $P_{56641} = (0, 52, 12, 1)$ lies on line ℓ_{11}
178 : $P_{56828} = (59, 54, 12, 1)$ lies on line ℓ_7
179 : $P_{56909} = (12, 56, 12, 1)$ lies on line ℓ_{12}
180 : $P_{57065} = (40, 58, 12, 1)$ lies on line ℓ_4
181 : $P_{57247} = (30, 61, 12, 1)$ lies on line ℓ_5
182 : $P_{57355} = (10, 63, 12, 1)$ lies on line ℓ_9
183 : $P_{58112} = (63, 10, 13, 1)$ lies on line ℓ_6
184 : $P_{58533} = (36, 17, 13, 1)$ lies on line ℓ_{11}
185 : $P_{58619} = (58, 18, 13, 1)$ lies on line ℓ_0
186 : $P_{58843} = (26, 22, 13, 1)$ lies on line ℓ_{10}
187 : $P_{58852} = (35, 22, 13, 1)$ lies on line ℓ_{12}
188 : $P_{59119} = (46, 26, 13, 1)$ lies on line ℓ_9
189 : $P_{59364} = (35, 30, 13, 1)$ lies on line ℓ_1
190 : $P_{59710} = (61, 35, 13, 1)$ lies on line ℓ_2
191 : $P_{59794} = (17, 37, 13, 1)$ lies on line ℓ_8
192 : $P_{59948} = (43, 39, 13, 1)$ lies on line ℓ_{13}
193 : $P_{59987} = (18, 40, 13, 1)$ lies on line ℓ_3
194 : $P_{60615} = (6, 50, 13, 1)$ lies on line ℓ_{14}
195 : $P_{61161} = (40, 58, 13, 1)$ lies on line ℓ_4
196 : $P_{61297} = (48, 60, 13, 1)$ lies on line ℓ_7
197 : $P_{61343} = (30, 61, 13, 1)$ lies on line ℓ_5
198 : $P_{61876} = (51, 5, 14, 1)$ lies on line ℓ_{12}
199 : $P_{62715} = (58, 18, 14, 1)$ lies on line ℓ_0
200 : $P_{62819} = (34, 20, 14, 1)$ lies on line ℓ_6
201 : $P_{62820} = (35, 20, 14, 1)$ lies on line ℓ_9
202 : $P_{63064} = (23, 24, 14, 1)$ lies on line ℓ_{10}
203 : $P_{63460} = (35, 30, 14, 1)$ lies on line ℓ_1
204 : $P_{63530} = (41, 31, 14, 1)$ lies on line ℓ_{11}
205 : $P_{63639} = (22, 33, 14, 1)$ lies on line ℓ_{14}
206 : $P_{63726} = (45, 34, 14, 1)$ lies on line ℓ_7
207 : $P_{63806} = (61, 35, 14, 1)$ lies on line ℓ_2
208 : $P_{64083} = (18, 40, 14, 1)$ lies on line ℓ_3
209 : $P_{64892} = (59, 52, 14, 1)$ lies on line ℓ_{13}
210 : $P_{65257} = (40, 58, 14, 1)$ lies on line ℓ_4
211 : $P_{65293} = (12, 59, 14, 1)$ lies on line ℓ_8
212 : $P_{65439} = (30, 61, 14, 1)$ lies on line ℓ_5
213 : $P_{66618} = (57, 15, 15, 1)$ lies on line ℓ_{14}
214 : $P_{66811} = (58, 18, 15, 1)$ lies on line ℓ_0
215 : $P_{67285} = (20, 26, 15, 1)$ lies on line ℓ_{13}
216 : $P_{67556} = (35, 30, 15, 1)$ lies on line ℓ_1
217 : $P_{67562} = (41, 30, 15, 1)$ lies on line ℓ_6
218 : $P_{67902} = (61, 35, 15, 1)$ lies on line ℓ_2
219 : $P_{68179} = (18, 40, 15, 1)$ lies on line ℓ_3
220 : $P_{68199} = (38, 40, 15, 1)$ lies on line ℓ_7
221 : $P_{68381} = (28, 43, 15, 1)$ lies on line ℓ_{12}
222 : $P_{69326} = (13, 58, 15, 1)$ lies on line ℓ_{11}
223 : $P_{69353} = (40, 58, 15, 1)$ lies on line ℓ_4
224 : $P_{69535} = (30, 61, 15, 1)$ lies on line ℓ_5
225 : $P_{69556} = (51, 61, 15, 1)$ lies on line ℓ_{10}
226 : $P_{71045} = (4, 21, 16, 1)$ lies on line ℓ_{10}
227 : $P_{71281} = (48, 24, 16, 1)$ lies on line ℓ_{12}
228 : $P_{71345} = (48, 25, 16, 1)$ lies on line ℓ_9
229 : $P_{71411} = (50, 26, 16, 1)$ lies on line ℓ_6
230 : $P_{71652} = (35, 30, 16, 1)$ lies on line ℓ_1
231 : $P_{71998} = (61, 35, 16, 1)$ lies on line ℓ_2
232 : $P_{72275} = (18, 40, 16, 1)$ lies on line ℓ_3
233 : $P_{72377} = (56, 41, 16, 1)$ lies on line ℓ_{13}
234 : $P_{72574} = (61, 44, 16, 1)$ lies on line ℓ_7
235 : $P_{73117} = (28, 53, 16, 1)$ lies on line ℓ_8
236 : $P_{73449} = (40, 58, 16, 1)$ lies on line ℓ_4
237 : $P_{73558} = (21, 60, 16, 1)$ lies on line ℓ_{14}
238 : $P_{73631} = (30, 61, 16, 1)$ lies on line ℓ_5
239 : $P_{74264} = (23, 7, 17, 1)$ lies on line ℓ_{13}
240 : $P_{74874} = (57, 16, 17, 1)$ lies on line ℓ_6
241 : $P_{75748} = (35, 30, 17, 1)$ lies on line ℓ_1
242 : $P_{76094} = (61, 35, 17, 1)$ lies on line ℓ_2
243 : $P_{76279} = (54, 38, 17, 1)$ lies on line ℓ_7
244 : $P_{76371} = (18, 40, 17, 1)$ lies on line ℓ_3
245 : $P_{76897} = (32, 48, 17, 1)$ lies on line ℓ_{10}
246 : $P_{77280} = (31, 54, 17, 1)$ lies on line ℓ_{12}
247 : $P_{77343} = (30, 55, 17, 1)$ lies on line ℓ_{11}
248 : $P_{77545} = (40, 58, 17, 1)$ lies on line ℓ_4
249 : $P_{77653} = (20, 60, 17, 1)$ lies on line ℓ_9
250 : $P_{77727} = (30, 61, 17, 1)$ lies on line ℓ_5
251 : $P_{77848} = (23, 63, 17, 1)$ lies on line ℓ_8
252 : $P_{77995} = (42, 1, 18, 1)$ lies on line ℓ_{14}
253 : $P_{78821} = (36, 14, 18, 1)$ lies on line ℓ_6
254 : $P_{79099} = (58, 18, 18, 1)$ lies on line ℓ_0
255 : $P_{79176} = (7, 20, 18, 1)$ lies on line ℓ_{13}
256 : $P_{79844} = (35, 30, 18, 1)$ lies on line ℓ_1
257 : $P_{80011} = (10, 33, 18, 1)$ lies on line ℓ_8
258 : $P_{80190} = (61, 35, 18, 1)$ lies on line ℓ_2
259 : $P_{80272} = (15, 37, 18, 1)$ lies on line ℓ_{12}
260 : $P_{80467} = (18, 40, 18, 1)$ lies on line ℓ_3
261 : $P_{81114} = (25, 50, 18, 1)$ lies on line ℓ_9
262 : $P_{81516} = (43, 56, 18, 1)$ lies on line ℓ_7
263 : $P_{81556} = (19, 57, 18, 1)$ lies on line ℓ_{11}
264 : $P_{81641} = (40, 58, 18, 1)$ lies on line ℓ_4
265 : $P_{81823} = (30, 61, 18, 1)$ lies on line ℓ_5
266 : $P_{81902} = (45, 62, 18, 1)$ lies on line ℓ_{10}
267 : $P_{82288} = (47, 4, 19, 1)$ lies on line ℓ_6
268 : $P_{82721} = (32, 11, 19, 1)$ lies on line ℓ_{12}
269 : $P_{83195} = (58, 18, 19, 1)$ lies on line ℓ_0
270 : $P_{83518} = (61, 23, 19, 1)$ lies on line ℓ_9
271 : $P_{83722} = (9, 27, 19, 1)$ lies on line ℓ_{10}
272 : $P_{83832} = (55, 28, 19, 1)$ lies on line ℓ_{11}
273 : $P_{83940} = (35, 30, 19, 1)$ lies on line ℓ_1
274 : $P_{84286} = (61, 35, 19, 1)$ lies on line ℓ_2
275 : $P_{84563} = (18, 40, 19, 1)$ lies on line ℓ_3
276 : $P_{84738} = (1, 43, 19, 1)$ lies on line ℓ_8
277 : $P_{84998} = (5, 47, 19, 1)$ lies on line ℓ_{14}
278 : $P_{85217} = (32, 50, 19, 1)$ lies on line ℓ_7
279 : $P_{85919} = (30, 61, 19, 1)$ lies on line ℓ_5
280 : $P_{86320} = (47, 3, 20, 1)$ lies on line ℓ_{12}
281 : $P_{86354} = (17, 4, 20, 1)$ lies on line ℓ_7

282 : $P_{87291} = (58, 18, 20, 1)$ lies on line ℓ_0
283 : $P_{87985} = (48, 29, 20, 1)$ lies on line ℓ_8
284 : $P_{88036} = (35, 30, 20, 1)$ lies on line ℓ_1
285 : $P_{88312} = (55, 34, 20, 1)$ lies on line ℓ_{10}
286 : $P_{88382} = (61, 35, 20, 1)$ lies on line ℓ_2
287 : $P_{88458} = (9, 37, 20, 1)$ lies on line ℓ_{11}
288 : $P_{88587} = (10, 39, 20, 1)$ lies on line ℓ_{14}
289 : $P_{88659} = (18, 40, 20, 1)$ lies on line ℓ_3
290 : $P_{89028} = (3, 46, 20, 1)$ lies on line ℓ_9
291 : $P_{89311} = (30, 50, 20, 1)$ lies on line ℓ_6
292 : $P_{89320} = (39, 50, 20, 1)$ lies on line ℓ_{13}
293 : $P_{89833} = (40, 58, 20, 1)$ lies on line ℓ_4
294 : $P_{90015} = (30, 61, 20, 1)$ lies on line ℓ_5
295 : $P_{90222} = (45, 0, 21, 1)$ lies on line ℓ_{11}
296 : $P_{90644} = (19, 7, 21, 1)$ lies on line ℓ_{10}
297 : $P_{90790} = (37, 9, 21, 1)$ lies on line ℓ_{14}
298 : $P_{90920} = (39, 11, 21, 1)$ lies on line ℓ_9
299 : $P_{91099} = (26, 14, 21, 1)$ lies on line ℓ_7
300 : $P_{91387} = (58, 18, 21, 1)$ lies on line ℓ_0
301 : $P_{91708} = (59, 23, 21, 1)$ lies on line ℓ_8
302 : $P_{91977} = (8, 28, 21, 1)$ lies on line ℓ_{13}
303 : $P_{92132} = (35, 30, 21, 1)$ lies on line ℓ_1
304 : $P_{92478} = (61, 35, 21, 1)$ lies on line ℓ_2
305 : $P_{92755} = (18, 40, 21, 1)$ lies on line ℓ_3
306 : $P_{93057} = (0, 45, 21, 1)$ lies on line ℓ_{12}
307 : $P_{93782} = (21, 56, 21, 1)$ lies on line ℓ_6
308 : $P_{93929} = (40, 58, 21, 1)$ lies on line ℓ_4
309 : $P_{94111} = (30, 61, 21, 1)$ lies on line ℓ_5
310 : $P_{94635} = (42, 5, 22, 1)$ lies on line ℓ_9
311 : $P_{94879} = (30, 9, 22, 1)$ lies on line ℓ_{10}
312 : $P_{94887} = (38, 9, 22, 1)$ lies on line ℓ_8
313 : $P_{95201} = (32, 14, 22, 1)$ lies on line ℓ_{11}
314 : $P_{95257} = (24, 15, 22, 1)$ lies on line ℓ_{13}
315 : $P_{95304} = (7, 16, 22, 1)$ lies on line ℓ_7
316 : $P_{95483} = (58, 18, 22, 1)$ lies on line ℓ_0
317 : $P_{95990} = (53, 26, 22, 1)$ lies on line ℓ_{14}
318 : $P_{96228} = (35, 30, 22, 1)$ lies on line ℓ_1
319 : $P_{96574} = (61, 35, 22, 1)$ lies on line ℓ_2
320 : $P_{96713} = (8, 38, 22, 1)$ lies on line ℓ_6
321 : $P_{96851} = (18, 40, 22, 1)$ lies on line ℓ_3
322 : $P_{98025} = (40, 58, 22, 1)$ lies on line ℓ_4
323 : $P_{98207} = (30, 61, 22, 1)$ lies on line ℓ_5
324 : $P_{98257} = (16, 62, 22, 1)$ lies on line ℓ_{12}
325 : $P_{98606} = (45, 3, 23, 1)$ lies on line ℓ_8
326 : $P_{99456} = (63, 16, 23, 1)$ lies on line ℓ_{12}
327 : $P_{99579} = (58, 18, 23, 1)$ lies on line ℓ_0
328 : $P_{100045} = (12, 26, 23, 1)$ lies on line ℓ_7
329 : $P_{100324} = (35, 30, 23, 1)$ lies on line ℓ_1
330 : $P_{100431} = (14, 32, 23, 1)$ lies on line ℓ_9
331 : $P_{100536} = (55, 33, 23, 1)$ lies on line ℓ_{13}
332 : $P_{100670} = (61, 35, 23, 1)$ lies on line ℓ_2
333 : $P_{100947} = (18, 40, 23, 1)$ lies on line ℓ_3
334 : $P_{101125} = (4, 43, 23, 1)$ lies on line ℓ_{11}
335 : $P_{101188} = (3, 44, 23, 1)$ lies on line ℓ_6
336 : $P_{101243} = (58, 44, 23, 1)$ lies on line ℓ_{10}
337 : $P_{101723} = (26, 52, 23, 1)$ lies on line ℓ_{14}
338 : $P_{102121} = (40, 58, 23, 1)$ lies on line ℓ_4
339 : $P_{102303} = (30, 61, 23, 1)$ lies on line ℓ_5
340 : $P_{102758} = (37, 4, 24, 1)$ lies on line ℓ_8
341 : $P_{103148} = (43, 10, 24, 1)$ lies on line ℓ_{14}
342 : $P_{103675} = (58, 18, 24, 1)$ lies on line ℓ_0
343 : $P_{103928} = (55, 22, 24, 1)$ lies on line ℓ_9
344 : $P_{104132} = (3, 26, 24, 1)$ lies on line ℓ_{10}
345 : $P_{104325} = (4, 29, 24, 1)$ lies on line ℓ_7
346 : $P_{104382} = (61, 29, 24, 1)$ lies on line ℓ_{11}
347 : $P_{104420} = (35, 30, 24, 1)$ lies on line ℓ_1
348 : $P_{104455} = (6, 31, 24, 1)$ lies on line ℓ_{13}
349 : $P_{104766} = (61, 35, 24, 1)$ lies on line ℓ_2
350 : $P_{105043} = (18, 40, 24, 1)$ lies on line ℓ_3
351 : $P_{105228} = (11, 43, 24, 1)$ lies on line ℓ_6
352 : $P_{105423} = (14, 46, 24, 1)$ lies on line ℓ_{12}
353 : $P_{106217} = (40, 58, 24, 1)$ lies on line ℓ_4
354 : $P_{106399} = (30, 61, 24, 1)$ lies on line ℓ_5
355 : $P_{106594} = (33, 0, 25, 1)$ lies on line ℓ_{12}
356 : $P_{107503} = (46, 14, 25, 1)$ lies on line ℓ_8
357 : $P_{107771} = (58, 18, 25, 1)$ lies on line ℓ_0
358 : $P_{108048} = (15, 23, 25, 1)$ lies on line ℓ_7
359 : $P_{108516} = (35, 30, 25, 1)$ lies on line ℓ_1
360 : $P_{108673} = (0, 33, 25, 1)$ lies on line ℓ_6
361 : $P_{108862} = (61, 35, 25, 1)$ lies on line ℓ_2
362 : $P_{108869} = (4, 36, 25, 1)$ lies on line ℓ_{14}
363 : $P_{109139} = (18, 40, 25, 1)$ lies on line ℓ_3
364 : $P_{109738} = (41, 49, 25, 1)$ lies on line ℓ_{13}
365 : $P_{109844} = (19, 51, 25, 1)$ lies on line ℓ_9
366 : $P_{110170} = (25, 56, 25, 1)$ lies on line ℓ_{11}
367 : $P_{110313} = (40, 58, 25, 1)$ lies on line ℓ_4
368 : $P_{110495} = (30, 61, 25, 1)$ lies on line ℓ_5
369 : $P_{110632} = (39, 63, 25, 1)$ lies on line ℓ_{10}
370 : $P_{111251} = (18, 9, 26, 1)$ lies on line ℓ_7
371 : $P_{111732} = (51, 16, 26, 1)$ lies on line ℓ_8
372 : $P_{111867} = (58, 18, 26, 1)$ lies on line ℓ_0
373 : $P_{111922} = (49, 19, 26, 1)$ lies on line ℓ_{12}
374 : $P_{112612} = (35, 30, 26, 1)$ lies on line ℓ_1
375 : $P_{112890} = (57, 34, 26, 1)$ lies on line ℓ_{13}
376 : $P_{112958} = (61, 35, 26, 1)$ lies on line ℓ_2
377 : $P_{113235} = (18, 40, 26, 1)$ lies on line ℓ_3
378 : $P_{113835} = (42, 49, 26, 1)$ lies on line ℓ_{10}
379 : $P_{114133} = (20, 54, 26, 1)$ lies on line ℓ_{11}
380 : $P_{114197} = (20, 55, 26, 1)$ lies on line ℓ_{14}
381 : $P_{114409} = (40, 58, 26, 1)$ lies on line ℓ_4
382 : $P_{114718} = (29, 63, 26, 1)$ lies on line ℓ_6
383 : $P_{114970} = (25, 3, 27, 1)$ lies on line ℓ_7
384 : $P_{115543} = (22, 12, 27, 1)$ lies on line ℓ_{13}
385 : $P_{115963} = (58, 18, 27, 1)$ lies on line ℓ_0
386 : $P_{116017} = (48, 19, 27, 1)$ lies on line ℓ_{11}
387 : $P_{116047} = (14, 20, 27, 1)$ lies on line ℓ_{10}
388 : $P_{116347} = (58, 24, 27, 1)$ lies on line ℓ_9
389 : $P_{116412} = (59, 25, 27, 1)$ lies on line ℓ_{14}

390 : $P_{116473} = (56, 26, 27, 1)$ lies on line ℓ_8
391 : $P_{116708} = (35, 30, 27, 1)$ lies on line ℓ_1
392 : $P_{117054} = (61, 35, 27, 1)$ lies on line ℓ_2
393 : $P_{117331} = (18, 40, 27, 1)$ lies on line ℓ_3
394 : $P_{118167} = (22, 53, 27, 1)$ lies on line ℓ_6
395 : $P_{118505} = (40, 58, 27, 1)$ lies on line ℓ_4
396 : $P_{119080} = (39, 3, 28, 1)$ lies on line ℓ_6
397 : $P_{119130} = (25, 4, 28, 1)$ lies on line ℓ_{13}
398 : $P_{119989} = (52, 17, 28, 1)$ lies on line ℓ_{14}
399 : $P_{120059} = (58, 18, 28, 1)$ lies on line ℓ_0
400 : $P_{120804} = (35, 30, 28, 1)$ lies on line ℓ_1
401 : $P_{120965} = (4, 33, 28, 1)$ lies on line ℓ_9
402 : $P_{121150} = (61, 35, 28, 1)$ lies on line ℓ_2
403 : $P_{121427} = (18, 40, 28, 1)$ lies on line ℓ_3
404 : $P_{121551} = (14, 42, 28, 1)$ lies on line ℓ_{11}
405 : $P_{121674} = (9, 44, 28, 1)$ lies on line ℓ_8
406 : $P_{121777} = (48, 45, 28, 1)$ lies on line ℓ_{10}
407 : $P_{122258} = (17, 53, 28, 1)$ lies on line ℓ_{12}
408 : $P_{122281} = (40, 53, 28, 1)$ lies on line ℓ_7
409 : $P_{122601} = (40, 58, 28, 1)$ lies on line ℓ_4
410 : $P_{122783} = (30, 61, 28, 1)$ lies on line ℓ_5
411 : $P_{123233} = (32, 4, 29, 1)$ lies on line ℓ_9
412 : $P_{123477} = (20, 8, 29, 1)$ lies on line ℓ_{10}
413 : $P_{123565} = (44, 9, 29, 1)$ lies on line ℓ_6
414 : $P_{123947} = (42, 15, 29, 1)$ lies on line ℓ_{11}
415 : $P_{124155} = (58, 18, 29, 1)$ lies on line ℓ_0
416 : $P_{124735} = (62, 27, 29, 1)$ lies on line ℓ_{12}
417 : $P_{124900} = (35, 30, 29, 1)$ lies on line ℓ_1
418 : $P_{125246} = (61, 35, 29, 1)$ lies on line ℓ_2
419 : $P_{125379} = (2, 38, 29, 1)$ lies on line ℓ_8
420 : $P_{125523} = (18, 40, 29, 1)$ lies on line ℓ_3
421 : $P_{125687} = (54, 42, 29, 1)$ lies on line ℓ_{13}
422 : $P_{126697} = (40, 58, 29, 1)$ lies on line ℓ_4
423 : $P_{126879} = (30, 61, 29, 1)$ lies on line ℓ_5
424 : $P_{127004} = (27, 63, 29, 1)$ lies on line ℓ_{14}
425 : $P_{127012} = (35, 63, 29, 1)$ lies on line ℓ_7
426 : $P_{127144} = (39, 1, 30, 1)$ lies on line ℓ_{11}
427 : $P_{127450} = (25, 6, 30, 1)$ lies on line ℓ_{10}
428 : $P_{127599} = (46, 8, 30, 1)$ lies on line ℓ_{12}
429 : $P_{127726} = (45, 10, 30, 1)$ lies on line ℓ_9
430 : $P_{128251} = (58, 18, 30, 1)$ lies on line ℓ_0
431 : $P_{128562} = (49, 23, 30, 1)$ lies on line ℓ_6
432 : $P_{128996} = (35, 30, 30, 1)$ lies on line ℓ_1
433 : $P_{129215} = (62, 33, 30, 1)$ lies on line ℓ_7
434 : $P_{129342} = (61, 35, 30, 1)$ lies on line ℓ_2
435 : $P_{129619} = (18, 40, 30, 1)$ lies on line ℓ_3
436 : $P_{129868} = (11, 44, 30, 1)$ lies on line ℓ_{14}
437 : $P_{130656} = (31, 56, 30, 1)$ lies on line ℓ_8
438 : $P_{130727} = (38, 57, 30, 1)$ lies on line ℓ_{13}
439 : $P_{130793} = (40, 58, 30, 1)$ lies on line ℓ_4
440 : $P_{130975} = (30, 61, 30, 1)$ lies on line ℓ_5
441 : $P_{131301} = (36, 2, 31, 1)$ lies on line ℓ_{14}
442 : $P_{132347} = (58, 18, 31, 1)$ lies on line ℓ_0
443 : $P_{132618} = (9, 23, 31, 1)$ lies on line ℓ_{13}
444 : $P_{133051} = (58, 29, 31, 1)$ lies on line ℓ_6
445 : $P_{133092} = (35, 30, 31, 1)$ lies on line ℓ_1
446 : $P_{133444} = (3, 36, 31, 1)$ lies on line ℓ_{11}
447 : $P_{133570} = (1, 38, 31, 1)$ lies on line ℓ_{12}
448 : $P_{133715} = (18, 40, 31, 1)$ lies on line ℓ_3
449 : $P_{133942} = (53, 43, 31, 1)$ lies on line ℓ_7
450 : $P_{134154} = (9, 47, 31, 1)$ lies on line ℓ_9
451 : $P_{134357} = (20, 50, 31, 1)$ lies on line ℓ_8
452 : $P_{134889} = (40, 58, 31, 1)$ lies on line ℓ_4
453 : $P_{135071} = (30, 61, 31, 1)$ lies on line ℓ_5
454 : $P_{136216} = (23, 15, 32, 1)$ lies on line ℓ_{12}
455 : $P_{136443} = (58, 18, 32, 1)$ lies on line ℓ_0
456 : $P_{137188} = (35, 30, 32, 1)$ lies on line ℓ_1
457 : $P_{137224} = (7, 31, 32, 1)$ lies on line ℓ_6
458 : $P_{137534} = (61, 35, 32, 1)$ lies on line ℓ_2
459 : $P_{137811} = (18, 40, 32, 1)$ lies on line ℓ_3
460 : $P_{137865} = (8, 41, 32, 1)$ lies on line ℓ_7
461 : $P_{138035} = (50, 43, 32, 1)$ lies on line ℓ_{14}
462 : $P_{138345} = (40, 48, 32, 1)$ lies on line ℓ_{11}
463 : $P_{138346} = (41, 48, 32, 1)$ lies on line ℓ_8
464 : $P_{138775} = (22, 55, 32, 1)$ lies on line ℓ_{10}
465 : $P_{138985} = (40, 58, 32, 1)$ lies on line ℓ_4
466 : $P_{139043} = (34, 59, 32, 1)$ lies on line ℓ_9
467 : $P_{139167} = (30, 61, 32, 1)$ lies on line ℓ_5
468 : $P_{139232} = (31, 62, 32, 1)$ lies on line ℓ_{13}
469 : $P_{139678} = (29, 5, 33, 1)$ lies on line ℓ_{14}
470 : $P_{140401} = (48, 16, 33, 1)$ lies on line ℓ_{13}
471 : $P_{140531} = (50, 18, 33, 1)$ lies on line ℓ_{10}
472 : $P_{140539} = (58, 18, 33, 1)$ lies on line ℓ_0
473 : $P_{141255} = (6, 30, 33, 1)$ lies on line ℓ_9
474 : $P_{141284} = (35, 30, 33, 1)$ lies on line ℓ_1
475 : $P_{141497} = (56, 33, 33, 1)$ lies on line ℓ_{12}
476 : $P_{141572} = (3, 35, 33, 1)$ lies on line ℓ_7
477 : $P_{141630} = (61, 35, 33, 1)$ lies on line ℓ_2
478 : $P_{141907} = (18, 40, 33, 1)$ lies on line ℓ_3
479 : $P_{143075} = (34, 58, 33, 1)$ lies on line ℓ_8
480 : $P_{143081} = (40, 58, 33, 1)$ lies on line ℓ_4
481 : $P_{143263} = (30, 61, 33, 1)$ lies on line ℓ_5
482 : $P_{143649} = (32, 3, 34, 1)$ lies on line ℓ_{13}
483 : $P_{144146} = (17, 11, 34, 1)$ lies on line ℓ_6
484 : $P_{144460} = (11, 16, 34, 1)$ lies on line ℓ_9
485 : $P_{144635} = (58, 18, 34, 1)$ lies on line ℓ_0
486 : $P_{144846} = (13, 22, 34, 1)$ lies on line ℓ_{14}
487 : $P_{145154} = (1, 27, 34, 1)$ lies on line ℓ_{11}
488 : $P_{145280} = (63, 28, 34, 1)$ lies on line ℓ_{10}
489 : $P_{145380} = (35, 30, 34, 1)$ lies on line ℓ_1
490 : $P_{145726} = (61, 35, 34, 1)$ lies on line ℓ_2
491 : $P_{145792} = (63, 36, 34, 1)$ lies on line ℓ_8
492 : $P_{146003} = (18, 40, 34, 1)$ lies on line ℓ_3
493 : $P_{146665} = (40, 50, 34, 1)$ lies on line ℓ_{12}
494 : $P_{147177} = (40, 58, 34, 1)$ lies on line ℓ_4
495 : $P_{147611} = (26, 1, 35, 1)$ lies on line ℓ_6
496 : $P_{148731} = (58, 18, 35, 1)$ lies on line ℓ_0
497 : $P_{149320} = (7, 28, 35, 1)$ lies on line ℓ_{12}

498 : $P_{149476} = (35, 30, 35, 1)$ lies on line ℓ_1
499 : $P_{149822} = (61, 35, 35, 1)$ lies on line ℓ_2
500 : $P_{150099} = (18, 40, 35, 1)$ lies on line ℓ_3
501 : $P_{150416} = (15, 45, 35, 1)$ lies on line ℓ_{13}
502 : $P_{150517} = (52, 46, 35, 1)$ lies on line ℓ_8
503 : $P_{150960} = (47, 53, 35, 1)$ lies on line ℓ_9
504 : $P_{151062} = (21, 55, 35, 1)$ lies on line ℓ_7
505 : $P_{151139} = (34, 56, 35, 1)$ lies on line ℓ_{14}
506 : $P_{151196} = (27, 57, 35, 1)$ lies on line ℓ_{10}
507 : $P_{151273} = (40, 58, 35, 1)$ lies on line ℓ_4
508 : $P_{151455} = (30, 61, 35, 1)$ lies on line ℓ_5
509 : $P_{151526} = (37, 62, 35, 1)$ lies on line ℓ_{11}
510 : $P_{151654} = (37, 0, 36, 1)$ lies on line ℓ_{10}
511 : $P_{151717} = (36, 1, 36, 1)$ lies on line ℓ_7
512 : $P_{152092} = (27, 7, 36, 1)$ lies on line ℓ_{11}
513 : $P_{152402} = (17, 12, 36, 1)$ lies on line ℓ_9
514 : $P_{152827} = (58, 18, 36, 1)$ lies on line ℓ_0
515 : $P_{152905} = (8, 20, 36, 1)$ lies on line ℓ_{12}
516 : $P_{153158} = (5, 24, 36, 1)$ lies on line ℓ_8
517 : $P_{153572} = (35, 30, 36, 1)$ lies on line ℓ_1
518 : $P_{153918} = (61, 35, 36, 1)$ lies on line ℓ_2
519 : $P_{153985} = (0, 37, 36, 1)$ lies on line ℓ_{13}
520 : $P_{154195} = (18, 40, 36, 1)$ lies on line ℓ_3
521 : $P_{154734} = (45, 48, 36, 1)$ lies on line ℓ_{14}
522 : $P_{155180} = (43, 55, 36, 1)$ lies on line ℓ_6
523 : $P_{155369} = (40, 58, 36, 1)$ lies on line ℓ_4
524 : $P_{155551} = (30, 61, 36, 1)$ lies on line ℓ_5
525 : $P_{156879} = (14, 18, 37, 1)$ lies on line ℓ_8
526 : $P_{156923} = (58, 18, 37, 1)$ lies on line ℓ_0
527 : $P_{157635} = (2, 30, 37, 1)$ lies on line ℓ_{14}
528 : $P_{157668} = (35, 30, 37, 1)$ lies on line ℓ_1
529 : $P_{157952} = (63, 34, 37, 1)$ lies on line ℓ_{11}
530 : $P_{158014} = (61, 35, 37, 1)$ lies on line ℓ_2
531 : $P_{158082} = (1, 37, 37, 1)$ lies on line ℓ_{10}
532 : $P_{158291} = (18, 40, 37, 1)$ lies on line ℓ_3
533 : $P_{158390} = (53, 41, 37, 1)$ lies on line ℓ_9
534 : $P_{159464} = (39, 58, 37, 1)$ lies on line ℓ_{12}
535 : $P_{159465} = (40, 58, 37, 1)$ lies on line ℓ_4
536 : $P_{159647} = (30, 61, 37, 1)$ lies on line ℓ_5
537 : $P_{159649} = (32, 61, 37, 1)$ lies on line ℓ_6
538 : $P_{160596} = (19, 12, 38, 1)$ lies on line ℓ_8
539 : $P_{160659} = (18, 13, 38, 1)$ lies on line ℓ_{14}
540 : $P_{161019} = (58, 18, 38, 1)$ lies on line ℓ_0
541 : $P_{161203} = (50, 21, 38, 1)$ lies on line ℓ_7
542 : $P_{161408} = (63, 24, 38, 1)$ lies on line ℓ_{13}
543 : $P_{161764} = (35, 30, 38, 1)$ lies on line ℓ_1
544 : $P_{162361} = (56, 39, 38, 1)$ lies on line ℓ_9
545 : $P_{162387} = (18, 40, 38, 1)$ lies on line ℓ_3
546 : $P_{162488} = (55, 41, 38, 1)$ lies on line ℓ_{12}
547 : $P_{162573} = (12, 43, 38, 1)$ lies on line ℓ_{10}
548 : $P_{162675} = (50, 44, 38, 1)$ lies on line ℓ_{11}
549 : $P_{163561} = (40, 58, 38, 1)$ lies on line ℓ_4
550 : $P_{163743} = (30, 61, 38, 1)$ lies on line ℓ_5
551 : $P_{164061} = (28, 2, 39, 1)$ lies on line ℓ_9
552 : $P_{164313} = (24, 6, 39, 1)$ lies on line ℓ_8
553 : $P_{164377} = (24, 7, 39, 1)$ lies on line ℓ_{12}
554 : $P_{164503} = (22, 9, 39, 1)$ lies on line ℓ_{11}
555 : $P_{164841} = (40, 14, 39, 1)$ lies on line ℓ_{10}
556 : $P_{165115} = (58, 18, 39, 1)$ lies on line ℓ_0
557 : $P_{165860} = (35, 30, 39, 1)$ lies on line ℓ_1
558 : $P_{165946} = (57, 31, 39, 1)$ lies on line ℓ_7
559 : $P_{166483} = (18, 40, 39, 1)$ lies on line ℓ_3
560 : $P_{166583} = (54, 41, 39, 1)$ lies on line ℓ_6
561 : $P_{167377} = (16, 54, 39, 1)$ lies on line ℓ_{13}
562 : $P_{167657} = (40, 58, 39, 1)$ lies on line ℓ_4
563 : $P_{167839} = (30, 61, 39, 1)$ lies on line ℓ_5
564 : $P_{168081} = (16, 1, 40, 1)$ lies on line ℓ_8
565 : $P_{168546} = (33, 8, 40, 1)$ lies on line ℓ_{13}
566 : $P_{169211} = (58, 18, 40, 1)$ lies on line ℓ_0
567 : $P_{169586} = (49, 24, 40, 1)$ lies on line ℓ_7
568 : $P_{169869} = (12, 29, 40, 1)$ lies on line ℓ_{14}
569 : $P_{169956} = (35, 30, 40, 1)$ lies on line ℓ_1
570 : $P_{170302} = (61, 35, 40, 1)$ lies on line ℓ_2
571 : $P_{170579} = (18, 40, 40, 1)$ lies on line ℓ_3
572 : $P_{171007} = (62, 46, 40, 1)$ lies on line ℓ_6
573 : $P_{171366} = (37, 52, 40, 1)$ lies on line ℓ_9
574 : $P_{171602} = (17, 56, 40, 1)$ lies on line ℓ_{10}
575 : $P_{171690} = (41, 57, 40, 1)$ lies on line ℓ_{12}
576 : $P_{171753} = (40, 58, 40, 1)$ lies on line ℓ_4
577 : $P_{171935} = (30, 61, 40, 1)$ lies on line ℓ_5
578 : $P_{172080} = (47, 63, 40, 1)$ lies on line ℓ_{11}
579 : $P_{172828} = (27, 11, 41, 1)$ lies on line ℓ_8
580 : $P_{173186} = (1, 17, 41, 1)$ lies on line ℓ_9
581 : $P_{173575} = (6, 23, 41, 1)$ lies on line ℓ_{12}
582 : $P_{173772} = (11, 26, 41, 1)$ lies on line ℓ_{11}
583 : $P_{174006} = (53, 29, 41, 1)$ lies on line ℓ_{10}
584 : $P_{174052} = (35, 30, 41, 1)$ lies on line ℓ_1
585 : $P_{174398} = (61, 35, 41, 1)$ lies on line ℓ_2
586 : $P_{174454} = (53, 36, 41, 1)$ lies on line ℓ_6
587 : $P_{174543} = (14, 38, 41, 1)$ lies on line ℓ_{13}
588 : $P_{174675} = (18, 40, 41, 1)$ lies on line ℓ_3
589 : $P_{175396} = (35, 51, 41, 1)$ lies on line ℓ_{14}
590 : $P_{175849} = (40, 58, 41, 1)$ lies on line ℓ_4
591 : $P_{176031} = (30, 61, 41, 1)$ lies on line ℓ_5
592 : $P_{176471} = (22, 4, 42, 1)$ lies on line ℓ_{12}
593 : $P_{177000} = (39, 12, 42, 1)$ lies on line ℓ_7
594 : $P_{177403} = (58, 18, 42, 1)$ lies on line ℓ_0
595 : $P_{177465} = (56, 19, 42, 1)$ lies on line ℓ_{10}
596 : $P_{177479} = (6, 20, 42, 1)$ lies on line ℓ_{11}
597 : $P_{177543} = (6, 21, 42, 1)$ lies on line ℓ_8
598 : $P_{178148} = (35, 30, 42, 1)$ lies on line ℓ_1
599 : $P_{178189} = (12, 31, 42, 1)$ lies on line ℓ_9
600 : $P_{178292} = (51, 32, 42, 1)$ lies on line ℓ_{14}
601 : $P_{178494} = (61, 35, 42, 1)$ lies on line ℓ_2
602 : $P_{178771} = (18, 40, 42, 1)$ lies on line ℓ_3
603 : $P_{179615} = (30, 53, 42, 1)$ lies on line ℓ_{13}
604 : $P_{180127} = (30, 61, 42, 1)$ lies on line ℓ_5
605 : $P_{180717} = (44, 6, 43, 1)$ lies on line ℓ_7

606 : $P_{181213} = (28, 14, 43, 1)$ lies on line ℓ_{14}
607 : $P_{181499} = (58, 18, 43, 1)$ lies on line ℓ_{0}
608 : $P_{182066} = (49, 27, 43, 1)$ lies on line ℓ_{13}
609 : $P_{182244} = (35, 30, 43, 1)$ lies on line ℓ_{1}
610 : $P_{182286} = (13, 31, 43, 1)$ lies on line ℓ_{8}
611 : $P_{182590} = (61, 35, 43, 1)$ lies on line ℓ_{2}
612 : $P_{182867} = (18, 40, 43, 1)$ lies on line ℓ_{3}
613 : $P_{183034} = (57, 42, 43, 1)$ lies on line ℓ_{12}
614 : $P_{183396} = (35, 48, 43, 1)$ lies on line ℓ_{6}
615 : $P_{183459} = (34, 49, 43, 1)$ lies on line ℓ_{11}
616 : $P_{183773} = (28, 54, 43, 1)$ lies on line ℓ_{10}
617 : $P_{184223} = (30, 61, 43, 1)$ lies on line ℓ_{5}
618 : $P_{184599} = (22, 3, 44, 1)$ lies on line ℓ_{9}
619 : $P_{184787} = (18, 6, 44, 1)$ lies on line ℓ_{6}
620 : $P_{184788} = (19, 6, 44, 1)$ lies on line ℓ_{14}
621 : $P_{184925} = (28, 8, 44, 1)$ lies on line ℓ_{11}
622 : $P_{185379} = (34, 15, 44, 1)$ lies on line ℓ_{10}
623 : $P_{185595} = (58, 18, 44, 1)$ lies on line ℓ_{0}
624 : $P_{185663} = (62, 19, 44, 1)$ lies on line ℓ_{13}
625 : $P_{186340} = (35, 30, 44, 1)$ lies on line ℓ_{1}
626 : $P_{186615} = (54, 34, 44, 1)$ lies on line ℓ_{12}
627 : $P_{186686} = (61, 35, 44, 1)$ lies on line ℓ_{2}
628 : $P_{186963} = (18, 40, 44, 1)$ lies on line ℓ_{3}
629 : $P_{187069} = (60, 41, 44, 1)$ lies on line ℓ_{8}
630 : $P_{187486} = (29, 48, 44, 1)$ lies on line ℓ_{7}
631 : $P_{188137} = (40, 58, 44, 1)$ lies on line ℓ_{4}
632 : $P_{188319} = (30, 61, 44, 1)$ lies on line ℓ_{5}
633 : $P_{189691} = (58, 18, 45, 1)$ lies on line ℓ_{0}
634 : $P_{190436} = (35, 30, 45, 1)$ lies on line ℓ_{1}
635 : $P_{190776} = (55, 35, 45, 1)$ lies on line ℓ_{8}
636 : $P_{190782} = (61, 35, 45, 1)$ lies on line ℓ_{2}
637 : $P_{190963} = (50, 38, 45, 1)$ lies on line ℓ_{9}
638 : $P_{191059} = (18, 40, 45, 1)$ lies on line ℓ_{3}
639 : $P_{191101} = (60, 40, 45, 1)$ lies on line ℓ_{14}
640 : $P_{191175} = (6, 42, 45, 1)$ lies on line ℓ_{10}
641 : $P_{191417} = (56, 45, 45, 1)$ lies on line ℓ_{11}
642 : $P_{192215} = (22, 58, 45, 1)$ lies on line ℓ_{7}
643 : $P_{192233} = (40, 58, 45, 1)$ lies on line ℓ_{4}
644 : $P_{192402} = (17, 61, 45, 1)$ lies on line ℓ_{13}
645 : $P_{192415} = (30, 61, 45, 1)$ lies on line ℓ_{5}
646 : $P_{193733} = (4, 18, 46, 1)$ lies on line ℓ_{6}
647 : $P_{193787} = (58, 18, 46, 1)$ lies on line ℓ_{0}
648 : $P_{194532} = (35, 30, 46, 1)$ lies on line ℓ_{1}
649 : $P_{194570} = (9, 31, 46, 1)$ lies on line ℓ_{12}
650 : $P_{194870} = (53, 35, 46, 1)$ lies on line ℓ_{11}
651 : $P_{194878} = (61, 35, 46, 1)$ lies on line ℓ_{2}
652 : $P_{195155} = (18, 40, 46, 1)$ lies on line ℓ_{3}
653 : $P_{195200} = (63, 40, 46, 1)$ lies on line ℓ_{9}
654 : $P_{195522} = (1, 46, 46, 1)$ lies on line ℓ_{13}
655 : $P_{196329} = (40, 58, 46, 1)$ lies on line ℓ_{4}
656 : $P_{196397} = (44, 59, 46, 1)$ lies on line ℓ_{14}
657 : $P_{196511} = (30, 61, 46, 1)$ lies on line ℓ_{5}
658 : $P_{196523} = (42, 61, 46, 1)$ lies on line ℓ_{8}
659 : $P_{196719} = (46, 0, 47, 1)$ lies on line ℓ_{13}
660 : $P_{196784} = (47, 1, 47, 1)$ lies on line ℓ_{10}
661 : $P_{197074} = (17, 6, 47, 1)$ lies on line ℓ_{11}
662 : $P_{197532} = (27, 13, 47, 1)$ lies on line ℓ_{9}
663 : $P_{197883} = (58, 18, 47, 1)$ lies on line ℓ_{0}
664 : $P_{198020} = (3, 21, 47, 1)$ lies on line ℓ_{14}
665 : $P_{198224} = (15, 24, 47, 1)$ lies on line ℓ_{6}
666 : $P_{198628} = (35, 30, 47, 1)$ lies on line ℓ_{1}
667 : $P_{198974} = (61, 35, 47, 1)$ lies on line ℓ_{2}
668 : $P_{199251} = (18, 40, 47, 1)$ lies on line ℓ_{3}
669 : $P_{199617} = (0, 46, 47, 1)$ lies on line ℓ_{7}
670 : $P_{199847} = (38, 49, 47, 1)$ lies on line ℓ_{12}
671 : $P_{200226} = (33, 55, 47, 1)$ lies on line ℓ_{8}
672 : $P_{200425} = (40, 58, 47, 1)$ lies on line ℓ_{4}
673 : $P_{200607} = (30, 61, 47, 1)$ lies on line ℓ_{5}
674 : $P_{200907} = (10, 2, 48, 1)$ lies on line ℓ_{12}
675 : $P_{201979} = (58, 18, 48, 1)$ lies on line ℓ_{0}
676 : $P_{202581} = (20, 28, 48, 1)$ lies on line ℓ_{6}
677 : $P_{202724} = (35, 30, 48, 1)$ lies on line ℓ_{1}
678 : $P_{203070} = (61, 35, 48, 1)$ lies on line ℓ_{2}
679 : $P_{203181} = (44, 37, 48, 1)$ lies on line ℓ_{9}
680 : $P_{203248} = (47, 38, 48, 1)$ lies on line ℓ_{14}
681 : $P_{203347} = (18, 40, 48, 1)$ lies on line ℓ_{3}
682 : $P_{203417} = (24, 41, 48, 1)$ lies on line ℓ_{10}
683 : $P_{203484} = (27, 42, 48, 1)$ lies on line ℓ_{7}
684 : $P_{203751} = (38, 46, 48, 1)$ lies on line ℓ_{11}
685 : $P_{204035} = (2, 51, 48, 1)$ lies on line ℓ_{13}
686 : $P_{204091} = (58, 51, 48, 1)$ lies on line ℓ_{8}
687 : $P_{204521} = (40, 58, 48, 1)$ lies on line ℓ_{4}
688 : $P_{204703} = (30, 61, 48, 1)$ lies on line ℓ_{5}
689 : $P_{204873} = (8, 0, 49, 1)$ lies on line ℓ_{9}
690 : $P_{205377} = (0, 8, 49, 1)$ lies on line ℓ_{14}
691 : $P_{205571} = (2, 11, 49, 1)$ lies on line ℓ_{11}
692 : $P_{205693} = (60, 12, 49, 1)$ lies on line ℓ_{10}
693 : $P_{206075} = (58, 18, 49, 1)$ lies on line ℓ_{0}
694 : $P_{206304} = (31, 22, 49, 1)$ lies on line ℓ_{6}
695 : $P_{206766} = (45, 29, 49, 1)$ lies on line ℓ_{13}
696 : $P_{206820} = (35, 30, 49, 1)$ lies on line ℓ_{1}
697 : $P_{206929} = (16, 32, 49, 1)$ lies on line ℓ_{7}
698 : $P_{207166} = (61, 35, 49, 1)$ lies on line ℓ_{2}
699 : $P_{207443} = (18, 40, 49, 1)$ lies on line ℓ_{3}
700 : $P_{207718} = (37, 44, 49, 1)$ lies on line ℓ_{12}
701 : $P_{208562} = (49, 57, 49, 1)$ lies on line ℓ_{8}
702 : $P_{208617} = (40, 58, 49, 1)$ lies on line ℓ_{4}
703 : $P_{208799} = (30, 61, 49, 1)$ lies on line ℓ_{5}
704 : $P_{209138} = (49, 2, 50, 1)$ lies on line ℓ_{10}
705 : $P_{209296} = (15, 5, 50, 1)$ lies on line ℓ_{11}
706 : $P_{209475} = (2, 8, 50, 1)$ lies on line ℓ_{6}
707 : $P_{209862} = (5, 14, 50, 1)$ lies on line ℓ_{9}
708 : $P_{209918} = (61, 14, 50, 1)$ lies on line ℓ_{13}
709 : $P_{210171} = (58, 18, 50, 1)$ lies on line ℓ_{0}
710 : $P_{210705} = (16, 27, 50, 1)$ lies on line ℓ_{14}
711 : $P_{210916} = (35, 30, 50, 1)$ lies on line ℓ_{1}
712 : $P_{211262} = (61, 35, 50, 1)$ lies on line ℓ_{2}
713 : $P_{211501} = (44, 39, 50, 1)$ lies on line ℓ_{8}

714 : $P_{211539} = (18, 40, 50, 1)$ lies on line ℓ_3
715 : $P_{212713} = (40, 58, 50, 1)$ lies on line ℓ_4
716 : $P_{212895} = (30, 61, 50, 1)$ lies on line ℓ_5
717 : $P_{212942} = (13, 62, 50, 1)$ lies on line ℓ_7
718 : $P_{213046} = (53, 63, 50, 1)$ lies on line ℓ_{12}
719 : $P_{213194} = (9, 2, 51, 1)$ lies on line ℓ_6
720 : $P_{214171} = (26, 17, 51, 1)$ lies on line ℓ_{12}
721 : $P_{214267} = (58, 18, 51, 1)$ lies on line ℓ_0
722 : $P_{215012} = (35, 30, 51, 1)$ lies on line ℓ_1
723 : $P_{215123} = (18, 32, 51, 1)$ lies on line ℓ_{13}
724 : $P_{215148} = (43, 32, 51, 1)$ lies on line ℓ_{11}
725 : $P_{215358} = (61, 35, 51, 1)$ lies on line ℓ_2
726 : $P_{215574} = (21, 39, 51, 1)$ lies on line ℓ_{10}
727 : $P_{215635} = (18, 40, 51, 1)$ lies on line ℓ_3
728 : $P_{215842} = (33, 43, 51, 1)$ lies on line ℓ_9
729 : $P_{215976} = (39, 45, 51, 1)$ lies on line ℓ_8
730 : $P_{216391} = (6, 52, 51, 1)$ lies on line ℓ_7
731 : $P_{216512} = (63, 53, 51, 1)$ lies on line ℓ_{14}
732 : $P_{216809} = (40, 58, 51, 1)$ lies on line ℓ_4
733 : $P_{216991} = (30, 61, 51, 1)$ lies on line ℓ_5
734 : $P_{217336} = (55, 2, 52, 1)$ lies on line ℓ_7
735 : $P_{218336} = (31, 18, 52, 1)$ lies on line ℓ_9
736 : $P_{218363} = (58, 18, 52, 1)$ lies on line ℓ_0
737 : $P_{218903} = (22, 27, 52, 1)$ lies on line ℓ_8
738 : $P_{219108} = (35, 30, 52, 1)$ lies on line ℓ_1
739 : $P_{219116} = (43, 30, 52, 1)$ lies on line ℓ_{10}
740 : $P_{219454} = (61, 35, 52, 1)$ lies on line ℓ_2
741 : $P_{219731} = (18, 40, 52, 1)$ lies on line ℓ_3
742 : $P_{219742} = (29, 40, 52, 1)$ lies on line ℓ_{13}
743 : $P_{220537} = (56, 52, 52, 1)$ lies on line ℓ_6
744 : $P_{220905} = (40, 58, 52, 1)$ lies on line ℓ_4
745 : $P_{221087} = (30, 61, 52, 1)$ lies on line ℓ_5
746 : $P_{221105} = (48, 61, 52, 1)$ lies on line ℓ_{14}
747 : $P_{221683} = (50, 6, 53, 1)$ lies on line ℓ_{13}
748 : $P_{221821} = (60, 8, 53, 1)$ lies on line ℓ_7
749 : $P_{222366} = (29, 17, 53, 1)$ lies on line ℓ_8
750 : $P_{222459} = (58, 18, 53, 1)$ lies on line ℓ_0
751 : $P_{222496} = (31, 19, 53, 1)$ lies on line ℓ_{14}
752 : $P_{223204} = (35, 30, 53, 1)$ lies on line ℓ_1
753 : $P_{223550} = (61, 35, 53, 1)$ lies on line ℓ_2
754 : $P_{223827} = (18, 40, 53, 1)$ lies on line ℓ_3
755 : $P_{224827} = (58, 55, 53, 1)$ lies on line ℓ_{12}
756 : $P_{224828} = (59, 55, 53, 1)$ lies on line ℓ_9
757 : $P_{225001} = (40, 58, 53, 1)$ lies on line ℓ_4
758 : $P_{225040} = (15, 59, 53, 1)$ lies on line ℓ_{10}
759 : $P_{225138} = (49, 60, 53, 1)$ lies on line ℓ_{11}
760 : $P_{225183} = (30, 61, 53, 1)$ lies on line ℓ_5
761 : $P_{225268} = (51, 62, 53, 1)$ lies on line ℓ_6
762 : $P_{225360} = (15, 0, 54, 1)$ lies on line ℓ_{14}
763 : $P_{226305} = (0, 15, 54, 1)$ lies on line ℓ_8
764 : $P_{226555} = (58, 18, 54, 1)$ lies on line ℓ_0
765 : $P_{226723} = (34, 21, 54, 1)$ lies on line ℓ_{13}
766 : $P_{226786} = (33, 22, 54, 1)$ lies on line ℓ_7
767 : $P_{227300} = (35, 30, 54, 1)$ lies on line ℓ_1
768 : $P_{227439} = (46, 32, 54, 1)$ lies on line ℓ_6
769 : $P_{227646} = (61, 35, 54, 1)$ lies on line ℓ_2
770 : $P_{227691} = (42, 36, 54, 1)$ lies on line ℓ_{12}
771 : $P_{227923} = (18, 40, 54, 1)$ lies on line ℓ_3
772 : $P_{228605} = (60, 50, 54, 1)$ lies on line ℓ_{11}
773 : $P_{228739} = (2, 53, 54, 1)$ lies on line ℓ_{10}
774 : $P_{229047} = (54, 57, 54, 1)$ lies on line ℓ_9
775 : $P_{229097} = (40, 58, 54, 1)$ lies on line ℓ_4
776 : $P_{229279} = (30, 61, 54, 1)$ lies on line ℓ_5
777 : $P_{229772} = (11, 5, 55, 1)$ lies on line ℓ_8
778 : $P_{230086} = (5, 10, 55, 1)$ lies on line ℓ_{12}
779 : $P_{230503} = (38, 16, 55, 1)$ lies on line ℓ_{10}
780 : $P_{230651} = (58, 18, 55, 1)$ lies on line ℓ_0
781 : $P_{230937} = (24, 23, 55, 1)$ lies on line ℓ_{11}
782 : $P_{231251} = (18, 28, 55, 1)$ lies on line ℓ_9
783 : $P_{231275} = (42, 28, 55, 1)$ lies on line ℓ_7
784 : $P_{231396} = (35, 30, 55, 1)$ lies on line ℓ_1
785 : $P_{231742} = (61, 35, 55, 1)$ lies on line ℓ_2
786 : $P_{232019} = (18, 40, 55, 1)$ lies on line ℓ_3
787 : $P_{232166} = (37, 42, 55, 1)$ lies on line ℓ_6
788 : $P_{232417} = (32, 46, 55, 1)$ lies on line ℓ_{14}
789 : $P_{233193} = (40, 58, 55, 1)$ lies on line ℓ_4
790 : $P_{233230} = (13, 59, 55, 1)$ lies on line ℓ_{13}
791 : $P_{233375} = (30, 61, 55, 1)$ lies on line ℓ_5
792 : $P_{233668} = (3, 2, 56, 1)$ lies on line ℓ_8
793 : $P_{233917} = (60, 5, 56, 1)$ lies on line ℓ_{13}
794 : $P_{234578} = (17, 16, 56, 1)$ lies on line ℓ_{14}
795 : $P_{234747} = (58, 18, 56, 1)$ lies on line ℓ_0
796 : $P_{235299} = (34, 27, 56, 1)$ lies on line ℓ_7
797 : $P_{235492} = (35, 30, 56, 1)$ lies on line ℓ_1
798 : $P_{235682} = (33, 33, 56, 1)$ lies on line ℓ_{11}
799 : $P_{235838} = (61, 35, 56, 1)$ lies on line ℓ_2
800 : $P_{236000} = (31, 38, 56, 1)$ lies on line ℓ_{10}
801 : $P_{236115} = (18, 40, 56, 1)$ lies on line ℓ_3
802 : $P_{236268} = (43, 42, 56, 1)$ lies on line ℓ_9
803 : $P_{236462} = (45, 45, 56, 1)$ lies on line ℓ_6
804 : $P_{236917} = (52, 52, 56, 1)$ lies on line ℓ_{12}
805 : $P_{237289} = (40, 58, 56, 1)$ lies on line ℓ_4
806 : $P_{237471} = (30, 61, 56, 1)$ lies on line ℓ_5
807 : $P_{237884} = (59, 3, 57, 1)$ lies on line ℓ_{10}
808 : $P_{237894} = (5, 4, 57, 1)$ lies on line ℓ_{11}
809 : $P_{238153} = (8, 8, 57, 1)$ lies on line ℓ_8
810 : $P_{238608} = (15, 15, 57, 1)$ lies on line ℓ_9
811 : $P_{238762} = (41, 17, 57, 1)$ lies on line ℓ_7
812 : $P_{238843} = (58, 18, 57, 1)$ lies on line ℓ_0
813 : $P_{239324} = (27, 26, 57, 1)$ lies on line ℓ_{12}
814 : $P_{239588} = (35, 30, 57, 1)$ lies on line ℓ_1
815 : $P_{239934} = (61, 35, 57, 1)$ lies on line ℓ_2
816 : $P_{240167} = (38, 39, 57, 1)$ lies on line ℓ_6
817 : $P_{240211} = (18, 40, 57, 1)$ lies on line ℓ_3
818 : $P_{240404} = (19, 43, 57, 1)$ lies on line ℓ_{13}
819 : $P_{241385} = (40, 58, 57, 1)$ lies on line ℓ_4
820 : $P_{241567} = (30, 61, 57, 1)$ lies on line ℓ_5
821 : $P_{241663} = (62, 62, 57, 1)$ lies on line ℓ_{14}

822 : $P_{241795} = (2, 1, 58, 1)$ lies on line ℓ_9
823 : $P_{242316} = (11, 9, 58, 1)$ lies on line ℓ_{12}
824 : $P_{242377} = (8, 10, 58, 1)$ lies on line ℓ_{11}
825 : $P_{242615} = (54, 13, 58, 1)$ lies on line ℓ_{10}
826 : $P_{242741} = (52, 15, 58, 1)$ lies on line ℓ_7
827 : $P_{242939} = (58, 18, 58, 1)$ lies on line ℓ_0
828 : $P_{243158} = (21, 22, 58, 1)$ lies on line ℓ_8
829 : $P_{243684} = (35, 30, 58, 1)$ lies on line ℓ_1
830 : $P_{244030} = (61, 35, 58, 1)$ lies on line ℓ_2
831 : $P_{244307} = (18, 40, 58, 1)$ lies on line ℓ_3
832 : $P_{244655} = (46, 45, 58, 1)$ lies on line ℓ_{14}
833 : $P_{245316} = (3, 56, 58, 1)$ lies on line ℓ_{13}
834 : $P_{245436} = (59, 57, 58, 1)$ lies on line ℓ_6
835 : $P_{245481} = (40, 58, 58, 1)$ lies on line ℓ_4
836 : $P_{245663} = (30, 61, 58, 1)$ lies on line ℓ_5
837 : $P_{246018} = (1, 3, 59, 1)$ lies on line ℓ_{14}
838 : $P_{246208} = (63, 5, 59, 1)$ lies on line ℓ_7
839 : $P_{247035} = (58, 18, 59, 1)$ lies on line ℓ_0
840 : $P_{247277} = (44, 22, 59, 1)$ lies on line ℓ_{13}
841 : $P_{247647} = (30, 28, 59, 1)$ lies on line ℓ_8
842 : $P_{247780} = (35, 30, 59, 1)$ lies on line ℓ_1
843 : $P_{248126} = (61, 35, 59, 1)$ lies on line ℓ_2
844 : $P_{248167} = (38, 36, 59, 1)$ lies on line ℓ_9
845 : $P_{248357} = (36, 39, 59, 1)$ lies on line ℓ_{12}
846 : $P_{248877} = (44, 47, 59, 1)$ lies on line ℓ_{11}
847 : $P_{249137} = (48, 51, 59, 1)$ lies on line ℓ_6
848 : $P_{249577} = (40, 58, 59, 1)$ lies on line ℓ_4
849 : $P_{249759} = (30, 61, 59, 1)$ lies on line ℓ_5
850 : $P_{250242} = (1, 5, 60, 1)$ lies on line ℓ_6
851 : $P_{250639} = (14, 11, 60, 1)$ lies on line ℓ_{14}
852 : $P_{251053} = (44, 17, 60, 1)$ lies on line ℓ_{10}
853 : $P_{251131} = (58, 18, 60, 1)$ lies on line ℓ_0
854 : $P_{251347} = (18, 22, 60, 1)$ lies on line ℓ_{11}
855 : $P_{251801} = (24, 29, 60, 1)$ lies on line ℓ_9
856 : $P_{252222} = (61, 35, 60, 1)$ lies on line ℓ_2
857 : $P_{252499} = (18, 40, 60, 1)$ lies on line ℓ_3
858 : $P_{252656} = (47, 42, 60, 1)$ lies on line ℓ_8
859 : $P_{252972} = (43, 47, 60, 1)$ lies on line ℓ_{12}
860 : $P_{253199} = (14, 51, 60, 1)$ lies on line ℓ_7
861 : $P_{253673} = (40, 58, 60, 1)$ lies on line ℓ_4
862 : $P_{253855} = (30, 61, 60, 1)$ lies on line ℓ_5
863 : $P_{254085} = (4, 1, 61, 1)$ lies on line ℓ_{12}
864 : $P_{254987} = (10, 15, 61, 1)$ lies on line ℓ_6
865 : $P_{255227} = (58, 18, 61, 1)$ lies on line ℓ_0
866 : $P_{255972} = (35, 30, 61, 1)$ lies on line ℓ_1
867 : $P_{256101} = (36, 32, 61, 1)$ lies on line ℓ_8
868 : $P_{256318} = (61, 35, 61, 1)$ lies on line ℓ_2
869 : $P_{256418} = (33, 37, 61, 1)$ lies on line ℓ_{14}
870 : $P_{256595} = (18, 40, 61, 1)$ lies on line ℓ_3
871 : $P_{257101} = (12, 48, 61, 1)$ lies on line ℓ_{13}
872 : $P_{257335} = (54, 51, 61, 1)$ lies on line ℓ_{11}
873 : $P_{257353} = (8, 52, 61, 1)$ lies on line ℓ_{10}
874 : $P_{257661} = (60, 56, 61, 1)$ lies on line ℓ_9
875 : $P_{257670} = (5, 57, 61, 1)$ lies on line ℓ_7
876 : $P_{257769} = (40, 58, 61, 1)$ lies on line ℓ_4
877 : $P_{257951} = (30, 61, 61, 1)$ lies on line ℓ_5
878 : $P_{259224} = (23, 17, 62, 1)$ lies on line ℓ_6
879 : $P_{259285} = (20, 18, 62, 1)$ lies on line ℓ_{12}
880 : $P_{259323} = (58, 18, 62, 1)$ lies on line ℓ_0
881 : $P_{260068} = (35, 30, 62, 1)$ lies on line ℓ_1
882 : $P_{260381} = (28, 35, 62, 1)$ lies on line ℓ_{13}
883 : $P_{260414} = (61, 35, 62, 1)$ lies on line ℓ_2
884 : $P_{260633} = (24, 39, 62, 1)$ lies on line ℓ_7
885 : $P_{260691} = (18, 40, 62, 1)$ lies on line ℓ_3
886 : $P_{261830} = (5, 58, 62, 1)$ lies on line ℓ_{10}
887 : $P_{261865} = (40, 58, 62, 1)$ lies on line ℓ_4
888 : $P_{262047} = (30, 61, 62, 1)$ lies on line ℓ_5
889 : $P_{262076} = (59, 61, 62, 1)$ lies on line ℓ_{11}
890 : $P_{262138} = (57, 62, 62, 1)$ lies on line ℓ_8
891 : $P_{263092} = (51, 13, 63, 1)$ lies on line ℓ_{13}
892 : $P_{263419} = (58, 18, 63, 1)$ lies on line ℓ_0
893 : $P_{263446} = (21, 19, 63, 1)$ lies on line ℓ_9
894 : $P_{263775} = (30, 24, 63, 1)$ lies on line ℓ_{14}
895 : $P_{263776} = (31, 24, 63, 1)$ lies on line ℓ_{11}
896 : $P_{263965} = (28, 27, 63, 1)$ lies on line ℓ_6
897 : $P_{264164} = (35, 30, 63, 1)$ lies on line ℓ_1
898 : $P_{264226} = (33, 31, 63, 1)$ lies on line ℓ_{10}
899 : $P_{264510} = (61, 35, 63, 1)$ lies on line ℓ_2
900 : $P_{264787} = (18, 40, 63, 1)$ lies on line ℓ_3
901 : $P_{265108} = (19, 45, 63, 1)$ lies on line ℓ_7
902 : $P_{265587} = (50, 52, 63, 1)$ lies on line ℓ_8
903 : $P_{265961} = (40, 58, 63, 1)$ lies on line ℓ_4
904 : $P_{266108} = (59, 60, 63, 1)$ lies on line ℓ_{12}
905 : $P_{266143} = (30, 61, 63, 1)$ lies on line ℓ_5

The single points on the surface are:

Points on surface but on no line

The surface has 3480 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
0	0	1	1	1	1	1	0	1	0	0	0	1	0	0	1
1	1	0	1	1	1	1	0	0	1	0	0	1	0	1	0
2	1	1	0	1	1	1	1	0	0	0	1	0	0	0	1
3	1	1	1	0	1	1	0	0	1	0	1	0	1	0	0
4	1	1	1	1	0	1	1	0	0	1	0	0	0	1	0
5	1	1	1	1	1	0	0	1	0	1	0	0	1	0	0
6	0	0	1	0	1	0	0	1	1	0	0	1	1	0	0
7	1	0	0	0	0	1	1	0	1	0	1	0	0	1	0
8	0	1	0	1	0	0	1	1	0	1	0	0	0	0	1
9	0	0	0	0	1	1	0	0	1	0	1	1	0	0	1
10	0	0	1	1	0	0	0	1	0	1	0	1	0	1	0
11	1	1	0	0	0	0	1	0	0	1	1	0	1	0	0
12	0	0	0	1	0	1	1	0	0	0	0	1	0	1	1
13	0	1	0	0	1	0	0	1	0	0	1	0	1	0	1
14	1	0	1	0	0	0	0	0	1	1	0	0	1	1	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_{11}	ℓ_{14}
in point	P_2	P_2	P_2	P_2	P_2	P_{173307}	P_{70907}	P_{75003}

Line 1 intersects

Line	ℓ_0	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_8	ℓ_{11}	ℓ_{13}
in point	P_2	P_2	P_2	P_2	P_2	P_{22500}	P_{26596}	P_{251876}

Line 2 intersects

Line	ℓ_0	ℓ_1	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_{10}	ℓ_{14}
in point	P_2	P_2	P_2	P_2	P_2	P_{162110}	P_{133438}	P_{166206}

Line 3 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_4	ℓ_5	ℓ_8	ℓ_{10}	ℓ_{12}
in point	P_2	P_2	P_2	P_2	P_2	P_{19027}	P_{248403}	P_{14931}

Line 4 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_5	ℓ_6	ℓ_9	ℓ_{13}
in point	P_2	P_2	P_2	P_2	P_2	P_{179945}	P_{184041}	P_{85737}

Line 5 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_7	ℓ_9	ℓ_{12}
in point	P_2	P_2	P_2	P_2	P_2	P_{147359}	P_{114591}	P_{118687}

Line 6 intersects

Line	ℓ_2	ℓ_4	ℓ_7	ℓ_8	ℓ_{11}	ℓ_{12}
in point	P_{162110}	P_{179945}	P_{718}	P_{718}	P_{140685}	P_{189274}

Line 7 intersects

Line	ℓ_0	ℓ_5	ℓ_6	ℓ_8	ℓ_{10}	ℓ_{13}
in point	P_{173307}	P_{147359}	P_{718}	P_{718}	P_{194892}	P_{156464}

Line 8 intersects

Line	ℓ_1	ℓ_3	ℓ_6	ℓ_7	ℓ_9	ℓ_{14}
in point	P_{22500}	P_{19027}	P_{718}	P_{718}	P_{68744}	P_{37431}

Line 9 intersects

Line	ℓ_4	ℓ_5	ℓ_8	ℓ_{10}	ℓ_{11}	ℓ_{14}
in point	P_{184041}	P_{114591}	P_{68744}	P_{2471}	P_{2471}	P_{261618}

Line 10 intersects

Line	ℓ_2	ℓ_3	ℓ_7	ℓ_9	ℓ_{11}	ℓ_{13}
in point	P_{133438}	P_{248403}	P_{194892}	P_{2471}	P_{2471}	P_{48165}

Line 11 intersects

Line	ℓ_0	ℓ_1	ℓ_6	ℓ_9	ℓ_{10}	ℓ_{12}
in point	P_{70907}	P_{26596}	P_{140685}	P_{2471}	P_{2471}	P_{218774}

Line 12 intersects

Line	ℓ_3	ℓ_5	ℓ_6	ℓ_{11}	ℓ_{13}	ℓ_{14}
in point	P_{14931}	P_{118687}	P_{189274}	P_{218774}	P_{3058}	P_{3058}

Line 13 intersects

Line	ℓ_1	ℓ_4	ℓ_7	ℓ_{10}	ℓ_{12}	ℓ_{14}
in point	P_{251876}	P_{85737}	P_{156464}	P_{48165}	P_{3058}	P_{3058}

Line 14 intersects

Line	ℓ_0	ℓ_2	ℓ_8	ℓ_9	ℓ_{12}	ℓ_{13}
in point	P_{75003}	P_{166206}	P_{37431}	P_{261618}	P_{3058}	P_{3058}

The surface has 4417 points:
Too many to print.