

Rank-65633 over GF(32)

January 15, 2021

The equation

The equation of the surface is :

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

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

The point rank of the equation over GF(32) is -2111764411

General information

Number of lines	27
Number of points	1249
Number of singular points	0
Number of Eckardt points	0
Number of double points	135
Number of single points	621
Number of points off lines	493
Number of Hesse planes	0
Number of axes	0
Type of points on lines	33^{27}
Type of lines on points	$2^{135}, 1^{621}, 0^{493}$

Singular Points

The surface has 0 singular points:

The 27 Lines

The lines and their Pluecker coordinates are:

$$\begin{aligned}\ell_0 = a_1 &= \left[\begin{array}{cccc} 1 & 0 & \eta^4 & \eta^2 \\ 0 & 1 & \eta^{20} & \eta \end{array} \right]_{152284} = \left[\begin{array}{cccc} 1 & 0 & 16 & 4 \\ 0 & 1 & 12 & 2 \end{array} \right]_{152284} = \mathbf{Pl}(1, 1, 4, 9, 22, 1)_{763288} \\ \ell_1 = a_2 &= \left[\begin{array}{cccc} 1 & 0 & \eta^8 & \eta^4 \\ 0 & 1 & \eta^7 & \eta^{29} \end{array} \right]_{555233} = \left[\begin{array}{cccc} 1 & 0 & 13 & 16 \\ 0 & 1 & 20 & 9 \end{array} \right]_{555233} = \mathbf{Pl}(1, 1, 16, 11, 24, 1)_{839486}\end{aligned}$$

$$\begin{aligned}
\ell_2 = a_3 &= \begin{bmatrix} 1 & 0 & \eta^{16} & \eta^8 \\ 0 & 1 & \eta^{18} & \eta^4 \end{bmatrix}_{468766} = \begin{bmatrix} 1 & 0 & 27 & 13 \\ 0 & 1 & 3 & 16 \end{bmatrix}_{468766} = \mathbf{Pl}(1, 1, 13, 15, 6, 1)_{247603} \\
\ell_3 = a_4 &= \begin{bmatrix} 1 & 0 & \eta^2 & \eta \\ 0 & 1 & \eta^{25} & \eta^{15} \end{bmatrix}_{72893} = \begin{bmatrix} 1 & 0 & 4 & 2 \\ 0 & 1 & 25 & 31 \end{bmatrix}_{72893} = \mathbf{Pl}(1, 1, 2, 18, 28, 1)_{958061} \\
\ell_4 = a_5 &= \begin{bmatrix} 1 & 0 & \eta & \eta^{16} \\ 0 & 1 & \eta^5 & \eta^8 \end{bmatrix}_{915783} = \begin{bmatrix} 1 & 0 & 2 & 27 \\ 0 & 1 & 5 & 13 \end{bmatrix}_{915783} = \mathbf{Pl}(1, 1, 27, 31, 20, 1)_{719051} \\
\ell_5 = a_6 &= \begin{bmatrix} 1 & 0 & \eta^{17} & \eta^7 \\ 0 & 1 & \eta^6 & \eta^{21} \end{bmatrix}_{697341} = \begin{bmatrix} 1 & 0 & 19 & 20 \\ 0 & 1 & 10 & 24 \end{bmatrix}_{697341} = \mathbf{Pl}(29, 19, 17, 24, 16, 1)_{578711} \\
\ell_6 = b_1 &= \begin{bmatrix} 1 & 0 & \eta^{12} & \eta^{22} \\ 0 & 1 & \eta^7 & \eta^{29} \end{bmatrix}_{725410} = \begin{bmatrix} 1 & 0 & 14 & 21 \\ 0 & 1 & 20 & 9 \end{bmatrix}_{725410} = \mathbf{Pl}(21, 26, 24, 17, 19, 1)_{683297} \\
\ell_7 = b_2 &= \begin{bmatrix} 1 & 0 & \eta^{20} & \eta^6 \\ 0 & 1 & \eta^{15} & \eta^{25} \end{bmatrix}_{351755} = \begin{bmatrix} 1 & 0 & 12 & 10 \\ 0 & 1 & 31 & 25 \end{bmatrix}_{351755} = \mathbf{Pl}(31, 27, 29, 19, 5, 1)_{230087} \\
\ell_8 = b_3 &= \begin{bmatrix} 1 & 0 & \eta^{24} & \eta^{19} \\ 0 & 1 & \eta^3 & \eta^{26} \end{bmatrix}_{235398} = \begin{bmatrix} 1 & 0 & 30 & 6 \\ 0 & 1 & 8 & 23 \end{bmatrix}_{235398} = \mathbf{Pl}(20, 30, 5, 23, 4, 1)_{174648} \\
\ell_9 = b_4 &= \begin{bmatrix} 1 & 0 & \eta^{18} & \eta^{24} \\ 0 & 1 & \eta^{29} & \eta^7 \end{bmatrix}_{1018540} = \begin{bmatrix} 1 & 0 & 3 & 30 \\ 0 & 1 & 9 & 20 \end{bmatrix}_{1018540} = \mathbf{Pl}(9, 4, 25, 10, 12, 1)_{455559} \\
\ell_{10} = b_5 &= \begin{bmatrix} 1 & 0 & \eta^3 & \eta^{14} \\ 0 & 1 & \eta^{12} & \eta^{11} \end{bmatrix}_{989590} = \begin{bmatrix} 1 & 0 & 8 & 29 \\ 0 & 1 & 14 & 7 \end{bmatrix}_{989590} = \mathbf{Pl}(22, 8, 12, 7, 13, 1)_{475970} \\
\ell_{11} = b_6 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{32} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{32} = \mathbf{Pl}(1, 0, 0, 0, 1, 0)_{1090} \\
\ell_{12} = c_{12} &= \begin{bmatrix} 1 & 0 & \eta^{17} & \eta^{26} \\ 0 & 1 & \eta^{28} & \eta^{23} \end{bmatrix}_{798537} = \begin{bmatrix} 1 & 0 & 19 & 23 \\ 0 & 1 & 22 & 15 \end{bmatrix}_{798537} = \mathbf{Pl}(23, 5, 21, 26, 10, 1)_{386598} \\
\ell_{13} = c_{13} &= \begin{bmatrix} 1 & 0 & \eta^{10} & \eta^3 \\ 0 & 1 & \eta^{23} & \eta^{28} \end{bmatrix}_{289280} = \begin{bmatrix} 1 & 0 & 17 & 8 \\ 0 & 1 & 15 & 22 \end{bmatrix}_{289280} = \mathbf{Pl}(15, 13, 20, 30, 3, 1)_{155795} \\
\ell_{14} = c_{14} &= \begin{bmatrix} 1 & 0 & \eta^3 & \eta^{21} \\ 0 & 1 & \eta^{25} & \eta^{15} \end{bmatrix}_{821249} = \begin{bmatrix} 1 & 0 & 8 & 24 \\ 0 & 1 & 25 & 31 \end{bmatrix}_{821249} = \mathbf{Pl}(24, 17, 28, 3, 14, 1)_{523836} \\
\ell_{15} = c_{15} &= \begin{bmatrix} 1 & 0 & \eta^5 & \eta^{17} \\ 0 & 1 & \eta^{27} & \eta^{14} \end{bmatrix}_{648880} = \begin{bmatrix} 1 & 0 & 5 & 19 \\ 0 & 1 & 11 & 29 \end{bmatrix}_{648880} = \mathbf{Pl}(11, 16, 6, 14, 26, 1)_{896288} \\
\ell_{16} = c_{16} &= \begin{bmatrix} 1 & 0 & \eta^4 & \eta^2 \\ 0 & 1 & \eta^{19} & \eta^{30} \end{bmatrix}_{152790} = \begin{bmatrix} 1 & 0 & 16 & 4 \\ 0 & 1 & 6 & 18 \end{bmatrix}_{152790} = \mathbf{Pl}(1, 1, 4, 9, 23, 1)_{795528} \\
\ell_{17} = c_{23} &= \begin{bmatrix} 1 & 0 & \eta^{12} & \eta^{25} \\ 0 & 1 & \eta^{17} & \eta^{13} \end{bmatrix}_{861313} = \begin{bmatrix} 1 & 0 & 14 & 25 \\ 0 & 1 & 19 & 28 \end{bmatrix}_{861313} = \mathbf{Pl}(6, 14, 3, 28, 2, 1)_{107643} \\
\ell_{18} = c_{24} &= \begin{bmatrix} 1 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{2082} = \begin{bmatrix} 1 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{2082} = \mathbf{Pl}(0, 0, 1, 1, 1, 1)_{70562} \\
\ell_{19} = c_{25} &= \begin{bmatrix} 1 & 0 & \eta^{24} & \eta^{13} \\ 0 & 1 & \eta^{14} & \eta^{27} \end{bmatrix}_{979163} = \begin{bmatrix} 1 & 0 & 30 & 28 \\ 0 & 1 & 29 & 11 \end{bmatrix}_{979163} = \mathbf{Pl}(28, 3, 7, 12, 8, 1)_{307832} \\
\ell_{20} = c_{26} &= \begin{bmatrix} 1 & 0 & \eta^8 & \eta^4 \\ 0 & 1 & \eta^9 & \eta^2 \end{bmatrix}_{555079} = \begin{bmatrix} 1 & 0 & 13 & 16 \\ 0 & 1 & 26 & 4 \end{bmatrix}_{555079} = \mathbf{Pl}(1, 1, 16, 11, 25, 1)_{872315} \\
\ell_{21} = c_{34} &= \begin{bmatrix} 1 & 0 & \eta^6 & \eta^{11} \\ 0 & 1 & \eta^{19} & \eta^{30} \end{bmatrix}_{247920} = \begin{bmatrix} 1 & 0 & 10 & 7 \\ 0 & 1 & 6 & 18 \end{bmatrix}_{247920} = \mathbf{Pl}(7, 12, 23, 5, 30, 1)_{1043038} \\
\ell_{22} = c_{35} &= \begin{bmatrix} 1 & 0 & \eta^9 & \eta^{12} \\ 0 & 1 & \eta^{30} & \eta^{19} \end{bmatrix}_{501228} = \begin{bmatrix} 1 & 0 & 26 & 14 \\ 0 & 1 & 18 & 6 \end{bmatrix}_{501228} = \mathbf{Pl}(18, 2, 22, 8, 17, 1)_{616675}
\end{aligned}$$

$$\begin{aligned}
\ell_{23} = c_{36} &= \begin{bmatrix} 1 & 0 & \eta^{16} & \eta^8 \\ 0 & 1 & \eta^{14} & \eta^{27} \end{bmatrix}_{468632} = \begin{bmatrix} 1 & 0 & 27 & 13 \\ 0 & 1 & 29 & 11 \end{bmatrix}_{468632} = \mathbf{Pl}(1, 1, 13, 15, 7, 1)_{280556} \\
\ell_{24} = c_{45} &= \begin{bmatrix} 1 & 0 & \eta^6 & \eta^{28} \\ 0 & 1 & \eta^{24} & \eta^{22} \end{bmatrix}_{755400} = \begin{bmatrix} 1 & 0 & 10 & 22 \\ 0 & 1 & 30 & 21 \end{bmatrix}_{755400} = \mathbf{Pl}(25, 10, 26, 21, 27, 1)_{947793} \\
\ell_{25} = c_{46} &= \begin{bmatrix} 1 & 0 & \eta^2 & \eta \\ 0 & 1 & \eta^{10} & \eta^{16} \end{bmatrix}_{72757} = \begin{bmatrix} 1 & 0 & 4 & 2 \\ 0 & 1 & 17 & 27 \end{bmatrix}_{72757} = \mathbf{Pl}(1, 1, 2, 18, 29, 1)_{990921} \\
\ell_{26} = c_{56} &= \begin{bmatrix} 1 & 0 & \eta & \eta^{16} \\ 0 & 1 & \eta^{28} & \eta^{23} \end{bmatrix}_{915864} = \begin{bmatrix} 1 & 0 & 2 & 27 \\ 0 & 1 & 22 & 15 \end{bmatrix}_{915864} = \mathbf{Pl}(1, 1, 27, 31, 21, 1)_{751725}
\end{aligned}$$

Rank of lines: (152284, 555233, 468766, 72893, 915783, 697341, 725410, 351755, 235398, 1018540, 989590, 32, 798537, 289280, 821249, 648880, 152790, 861313, 2082, 979163, 555079, 247920, 501228, 468632, 755400, 72757, 915864)

Rank of points on Klein quadric: (763288, 839486, 247603, 958061, 719051, 578711, 683297, 230087, 174648, 455559, 475970, 1090, 386598, 155795, 523836, 896288, 795528, 107643, 70562, 307832, 872315, 1043038, 616675, 280556, 947793, 990921, 751725)

Eckardt Points

The surface has 0 Eckardt points:

Double Points

The surface has 135 Double points:

The double points on the surface are:

$$\begin{aligned}
P_{24291} &= (2, 22, 22, 1) = \ell_0 \cap \ell_7 = a_1 \cap b_2 \\
P_{31261} &= (28, 15, 29, 1) = \ell_0 \cap \ell_8 = a_1 \cap b_3 \\
P_{28370} &= (17, 21, 26, 1) = \ell_0 \cap \ell_9 = a_1 \cap b_4 \\
P_{32420} &= (3, 20, 30, 1) = \ell_0 \cap \ell_{10} = a_1 \cap b_5 \\
P_{1117} &= (27, 1, 0, 1) = \ell_0 \cap \ell_{11} = a_1 \cap b_6 \\
P_{9371} &= (26, 3, 8, 1) = \ell_0 \cap \ell_{12} = a_1 \cap c_{12} \\
P_{29931} &= (10, 6, 28, 1) = \ell_0 \cap \ell_{13} = a_1 \cap c_{13} \\
P_{17240} &= (23, 25, 15, 1) = \ell_0 \cap \ell_{14} = a_1 \cap c_{14} \\
P_{17626} &= (25, 5, 16, 1) = \ell_0 \cap \ell_{15} = a_1 \cap c_{15} \\
P_{5162} &= (9, 0, 4, 1) = \ell_0 \cap \ell_{16} = a_1 \cap c_{16} \\
P_{27809} &= (0, 4, 26, 1) = \ell_1 \cap \ell_6 = a_2 \cap b_1 \\
P_{20223} &= (30, 22, 18, 1) = \ell_1 \cap \ell_8 = a_2 \cap b_3 \\
P_{5056} &= (31, 28, 3, 1) = \ell_1 \cap \ell_9 = a_2 \cap b_4 \\
P_{21829} &= (4, 9, 20, 1) = \ell_1 \cap \ell_{10} = a_2 \cap b_5 \\
P_{1108} &= (18, 1, 0, 1) = \ell_1 \cap \ell_{11} = a_2 \cap b_6 \\
P_{15799} &= (22, 12, 14, 1) = \ell_1 \cap \ell_{12} = a_2 \cap c_{12} \\
P_{30619} &= (26, 27, 28, 1) = \ell_1 \cap \ell_{17} = a_2 \cap c_{23} \\
P_{2411} &= (10, 10, 1, 1) = \ell_1 \cap \ell_{18} = a_2 \cap c_{24} \\
P_{22653} &= (28, 2, 21, 1) = \ell_1 \cap \ell_{19} = a_2 \cap c_{25} \\
P_{17452} &= (11, 0, 16, 1) = \ell_1 \cap \ell_{20} = a_2 \cap c_{26} \\
P_{20136} &= (7, 20, 18, 1) = \ell_2 \cap \ell_6 = a_3 \cap b_1 \\
P_{29109} &= (20, 12, 27, 1) = \ell_2 \cap \ell_7 = a_3 \cap b_2 \\
P_{7409} &= (16, 6, 6, 1) = \ell_2 \cap \ell_9 = a_3 \cap b_4 \\
P_{27257} &= (24, 18, 25, 1) = \ell_2 \cap \ell_{10} = a_3 \cap b_5 \\
P_{1094} &= (4, 1, 0, 1) = \ell_2 \cap \ell_{11} = a_3 \cap b_6 \\
P_{6939} &= (26, 23, 5, 1) = \ell_2 \cap \ell_{13} = a_3 \cap c_{13} \\
P_{9970} &= (17, 22, 8, 1) = \ell_2 \cap \ell_{17} = a_3 \cap c_{23} \\
P_{15942} &= (5, 17, 14, 1) = \ell_2 \cap \ell_{21} = a_3 \cap c_{34} \\
P_{26591} &= (30, 29, 24, 1) = \ell_2 \cap \ell_{22} = a_3 \cap c_{35} \\
P_{14384} &= (15, 0, 13, 1) = \ell_2 \cap \ell_{23} = a_3 \cap c_{36} \\
P_{9429} &= (20, 5, 8, 1) = \ell_3 \cap \ell_6 = a_4 \cap b_1 \\
P_{13580} &= (11, 7, 12, 1) = \ell_3 \cap \ell_7 = a_4 \cap b_2 \\
P_{27676} &= (27, 31, 25, 1) = \ell_3 \cap \ell_8 = a_4 \cap b_3 \\
P_{8754} &= (17, 16, 7, 1) = \ell_3 \cap \ell_{10} = a_4 \cap b_5 \\
P_{1105} &= (15, 1, 0, 1) = \ell_3 \cap \ell_{11} = a_4 \cap b_6 \\
P_{19329} &= (0, 27, 17, 1) = \ell_3 \cap \ell_{14} = a_4 \cap c_{14} \\
P_{2708} &= (19, 19, 1, 1) = \ell_3 \cap \ell_{18} = a_4 \cap c_{24} \\
P_{26056} &= (7, 13, 24, 1) = \ell_3 \cap \ell_{21} = a_4 \cap c_{34} \\
P_{17067} &= (10, 20, 15, 1) = \ell_3 \cap \ell_{24} = a_4 \cap c_{45} \\
P_{3123} &= (18, 0, 2, 1) = \ell_3 \cap \ell_{25} = a_4 \cap c_{46} \\
P_{32178} &= (17, 12, 30, 1) = \ell_4 \cap \ell_6 = a_5 \cap b_1 \\
P_{19236} &= (3, 24, 17, 1) = \ell_4 \cap \ell_7 = a_5 \cap b_2 \\
P_{12109} &= (12, 25, 10, 1) = \ell_4 \cap \ell_8 = a_5 \cap b_3 \\
P_{8948} &= (19, 22, 7, 1) = \ell_4 \cap \ell_9 = a_5 \cap b_4 \\
P_{1106} &= (16, 1, 0, 1) = \ell_4 \cap \ell_{11} = a_5 \cap b_6 \\
P_{22190} &= (13, 20, 20, 1) = \ell_4 \cap \ell_{15} = a_5 \cap c_{15} \\
P_{11222} &= (21, 29, 9, 1) = \ell_4 \cap \ell_{19} = a_5 \cap c_{25} \\
P_{3966} &= (29, 26, 2, 1) = \ell_4 \cap \ell_{22} = a_5 \cap c_{35} \\
P_{7496} &= (7, 9, 6, 1) = \ell_4 \cap \ell_{24} = a_5 \cap c_{45} \\
P_{28736} &= (31, 0, 27, 1) = \ell_4 \cap \ell_{26} = a_5 \cap c_{56}
\end{aligned}$$

$$\begin{aligned}
P_{17982} &= (29, 16, 16, 1) = \ell_5 \cap \ell_6 = a_6 \cap b_1 \\
P_{5893} &= (4, 23, 4, 1) = \ell_5 \cap \ell_7 = a_6 \cap b_2 \\
P_{22899} &= (18, 10, 21, 1) = \ell_5 \cap \ell_8 = a_6 \cap b_3 \\
P_{550} &= (3, 16, 1, 0) = \ell_5 \cap \ell_9 = a_6 \cap b_4 \\
P_{30186} &= (9, 14, 28, 1) = \ell_5 \cap \ell_{10} = a_6 \cap b_5 \\
P_{7779} &= (2, 18, 6, 1) = \ell_5 \cap \ell_{16} = a_6 \cap c_{16} \\
P_{24600} &= (23, 31, 22, 1) = \ell_5 \cap \ell_{20} = a_6 \cap c_{26} \\
P_{11092} &= (19, 25, 9, 1) = \ell_5 \cap \ell_{23} = a_6 \cap c_{36} \\
P_{15611} &= (26, 6, 14, 1) = \ell_5 \cap \ell_{25} = a_6 \cap c_{46} \\
P_{25766} &= (5, 4, 24, 1) = \ell_5 \cap \ell_{26} = a_6 \cap c_{56} \\
P_{6083} &= (2, 29, 4, 1) = \ell_6 \cap \ell_{12} = b_1 \cap c_{12} \\
P_{33277} &= (28, 14, 31, 1) = \ell_6 \cap \ell_{13} = b_1 \cap c_{13} \\
P_{28910} &= (13, 6, 27, 1) = \ell_6 \cap \ell_{14} = b_1 \cap c_{14} \\
P_{3658} &= (9, 17, 2, 1) = \ell_6 \cap \ell_{15} = b_1 \cap c_{15} \\
P_{9110} &= (21, 27, 7, 1) = \ell_6 \cap \ell_{16} = b_1 \cap c_{16} \\
P_{18288} &= (15, 26, 16, 1) = \ell_7 \cap \ell_{12} = b_2 \cap c_{12} \\
P_{111} &= (12, 2, 1, 0) = \ell_7 \cap \ell_{17} = b_2 \cap c_{23} \\
P_{3038} &= (29, 29, 1, 1) = \ell_7 \cap \ell_{18} = b_2 \cap c_{24} \\
P_{20472} &= (23, 30, 18, 1) = \ell_7 \cap \ell_{19} = b_2 \cap c_{25} \\
P_{25263} &= (14, 20, 23, 1) = \ell_7 \cap \ell_{20} = b_2 \cap c_{26} \\
P_{4003} &= (2, 28, 2, 1) = \ell_8 \cap \ell_{13} = b_3 \cap c_{13} \\
P_{8512} &= (31, 8, 7, 1) = \ell_8 \cap \ell_{17} = b_3 \cap c_{23} \\
P_{5301} &= (20, 4, 4, 1) = \ell_8 \cap \ell_{21} = b_3 \cap c_{34} \\
P_{189} &= (26, 4, 1, 0) = \ell_8 \cap \ell_{22} = b_3 \cap c_{35} \\
P_{24676} &= (3, 2, 23, 1) = \ell_8 \cap \ell_{23} = b_3 \cap c_{36} \\
P_{12584} &= (7, 8, 11, 1) = \ell_9 \cap \ell_{14} = b_4 \cap c_{14} \\
P_{2906} &= (25, 25, 1, 1) = \ell_9 \cap \ell_{18} = b_4 \cap c_{24} \\
P_{28883} &= (18, 5, 27, 1) = \ell_9 \cap \ell_{21} = b_4 \cap c_{34} \\
P_{14606} &= (13, 7, 13, 1) = \ell_9 \cap \ell_{24} = b_4 \cap c_{45} \\
P_{5271} &= (22, 3, 4, 1) = \ell_9 \cap \ell_{25} = b_4 \cap c_{46} \\
P_{456} &= (5, 13, 1, 0) = \ell_{10} \cap \ell_{15} = b_5 \cap c_{15} \\
P_{14807} &= (22, 13, 13, 1) = \ell_{10} \cap \ell_{19} = b_5 \cap c_{25} \\
P_{18225} &= (16, 24, 16, 1) = \ell_{10} \cap \ell_{22} = b_5 \cap c_{35} \\
P_{25580} &= (11, 30, 23, 1) = \ell_{10} \cap \ell_{24} = b_5 \cap c_{45} \\
P_{12521} &= (8, 6, 11, 1) = \ell_{10} \cap \ell_{26} = b_5 \cap c_{56} \\
P_{1121} &= (31, 1, 0, 1) = \ell_{11} \cap \ell_{16} = b_6 \cap c_{16} \\
P_{1092} &= (2, 1, 0, 1) = \ell_{11} \cap \ell_{20} = b_6 \cap c_{26} \\
P_{1099} &= (9, 1, 0, 1) = \ell_{11} \cap \ell_{23} = b_6 \cap c_{36} \\
P_{1103} &= (13, 1, 0, 1) = \ell_{11} \cap \ell_{25} = b_6 \cap c_{46} \\
P_{1101} &= (11, 1, 0, 1) = \ell_{11} \cap \ell_{26} = b_6 \cap c_{56} \\
P_{15185} &= (16, 25, 13, 1) = \ell_{12} \cap \ell_{21} = c_{12} \cap c_{34} \\
P_{10905} &= (24, 19, 9, 1) = \ell_{12} \cap \ell_{22} = c_{12} \cap c_{35} \\
P_{29880} &= (23, 4, 28, 1) = \ell_{12} \cap \ell_{23} = c_{12} \cap c_{36}
\end{aligned}$$

$$\begin{aligned}
P_{29594} &= (25, 27, 27, 1) = \ell_{12} \cap \ell_{24} = c_{12} \cap c_{45} \\
P_{13053} &= (28, 22, 11, 1) = \ell_{12} \cap \ell_{25} = c_{12} \cap c_{46} \\
P_{6593} &= (0, 13, 5, 1) = \ell_{12} \cap \ell_{26} = c_{12} \cap c_{56} \\
P_{2741} &= (20, 20, 1, 1) = \ell_{13} \cap \ell_{18} = c_{13} \cap c_{24} \\
P_{5548} &= (11, 12, 4, 1) = \ell_{13} \cap \ell_{19} = c_{13} \cap c_{25} \\
P_{14919} &= (6, 17, 13, 1) = \ell_{13} \cap \ell_{20} = c_{13} \cap c_{26} \\
P_{916} &= (17, 27, 1, 0) = \ell_{13} \cap \ell_{24} = c_{13} \cap c_{45} \\
P_{31708} &= (27, 29, 29, 1) = \ell_{13} \cap \ell_{25} = c_{13} \cap c_{46} \\
P_{19242} &= (9, 24, 17, 1) = \ell_{13} \cap \ell_{26} = c_{13} \cap c_{56} \\
P_{3175} &= (6, 2, 2, 1) = \ell_{14} \cap \ell_{17} = c_{14} \cap c_{23} \\
P_{18149} &= (4, 22, 16, 1) = \ell_{14} \cap \ell_{19} = c_{14} \cap c_{25} \\
P_{11460} &= (3, 5, 10, 1) = \ell_{14} \cap \ell_{20} = c_{14} \cap c_{26} \\
P_{14496} &= (31, 3, 13, 1) = \ell_{14} \cap \ell_{22} = c_{14} \cap c_{35} \\
P_{32634} &= (25, 26, 30, 1) = \ell_{14} \cap \ell_{23} = c_{14} \cap c_{36} \\
P_{25145} &= (24, 16, 23, 1) = \ell_{14} \cap \ell_{26} = c_{14} \cap c_{56} \\
P_{29404} &= (27, 21, 27, 1) = \ell_{15} \cap \ell_{17} = c_{15} \cap c_{23} \\
P_{2279} &= (6, 6, 1, 1) = \ell_{15} \cap \ell_{18} = c_{15} \cap c_{24} \\
P_{5037} &= (12, 28, 3, 1) = \ell_{15} \cap \ell_{20} = c_{15} \cap c_{26} \\
P_{16758} &= (21, 10, 15, 1) = \ell_{15} \cap \ell_{21} = c_{15} \cap c_{34} \\
P_{6931} &= (18, 23, 5, 1) = \ell_{15} \cap \ell_{23} = c_{15} \cap c_{36} \\
P_{23369} &= (8, 25, 21, 1) = \ell_{15} \cap \ell_{25} = c_{15} \cap c_{46} \\
P_{33743} &= (14, 29, 31, 1) = \ell_{16} \cap \ell_{17} = c_{16} \cap c_{23} \\
P_{2345} &= (8, 8, 1, 1) = \ell_{16} \cap \ell_{18} = c_{16} \cap c_{24} \\
P_{11870} &= (29, 17, 10, 1) = \ell_{16} \cap \ell_{19} = c_{16} \cap c_{25} \\
P_{13409} &= (0, 2, 12, 1) = \ell_{16} \cap \ell_{21} = c_{16} \cap c_{34} \\
P_{28368} &= (15, 21, 26, 1) = \ell_{16} \cap \ell_{22} = c_{16} \cap c_{35} \\
P_{22989} &= (12, 13, 21, 1) = \ell_{16} \cap \ell_{24} = c_{16} \cap c_{45} \\
P_{26256} &= (15, 19, 24, 1) = \ell_{17} \cap \ell_{24} = c_{23} \cap c_{45} \\
P_{21910} &= (21, 11, 20, 1) = \ell_{17} \cap \ell_{25} = c_{23} \cap c_{46} \\
P_{24078} &= (13, 15, 22, 1) = \ell_{17} \cap \ell_{26} = c_{23} \cap c_{56} \\
P_{2807} &= (22, 22, 1, 1) = \ell_{18} \cap \ell_{22} = c_{24} \cap c_{35} \\
P_{2543} &= (14, 14, 1, 1) = \ell_{18} \cap \ell_{23} = c_{24} \cap c_{36} \\
P_{3071} &= (30, 30, 1, 1) = \ell_{18} \cap \ell_{26} = c_{24} \cap c_{56} \\
P_{3772} &= (27, 20, 2, 1) = \ell_{19} \cap \ell_{21} = c_{25} \cap c_{34} \\
P_{4641} &= (0, 16, 3, 1) = \ell_{19} \cap \ell_{23} = c_{25} \cap c_{36} \\
P_{21357} &= (12, 26, 19, 1) = \ell_{19} \cap \ell_{25} = c_{25} \cap c_{46} \\
P_{33017} &= (24, 6, 31, 1) = \ell_{20} \cap \ell_{21} = c_{26} \cap c_{34} \\
P_{27461} &= (4, 25, 25, 1) = \ell_{20} \cap \ell_{22} = c_{26} \cap c_{35} \\
P_{21446} &= (5, 29, 19, 1) = \ell_{20} \cap \ell_{24} = c_{26} \cap c_{45} \\
P_{20615} &= (6, 3, 19, 1) = \ell_{21} \cap \ell_{26} = c_{34} \cap c_{56} \\
P_{13574} &= (5, 7, 12, 1) = \ell_{22} \cap \ell_{25} = c_{35} \cap c_{46} \\
P_{31121} &= (16, 11, 29, 1) = \ell_{23} \cap \ell_{24} = c_{36} \cap c_{45}
\end{aligned}$$

Single Points

The surface has 621 single points:
The single points on the surface are:

- 0 : $P_0 = (1, 0, 0, 0)$ lies on line b_6
- 1 : $P_4 = (1, 1, 1, 1)$ lies on line c_{24}
- 2 : $P_5 = (1, 1, 0, 0)$ lies on line c_{24}
- 3 : $P_{112} = (13, 2, 1, 0)$ lies on line b_1

- 4 : $P_{190} = (27, 4, 1, 0)$ lies on line c_{25}
- 5 : $P_{345} = (22, 9, 1, 0)$ lies on line a_1
- 6 : $P_{346} = (23, 9, 1, 0)$ lies on line c_{16}
- 7 : $P_{411} = (24, 11, 1, 0)$ lies on line a_2

8 : $P_{412} = (25, 11, 1, 0)$ lies on line c_{26}
 9 : $P_{455} = (4, 13, 1, 0)$ lies on line c_{14}
 10 : $P_{521} = (6, 15, 1, 0)$ lies on line a_3
 11 : $P_{522} = (7, 15, 1, 0)$ lies on line c_{36}
 12 : $P_{549} = (2, 16, 1, 0)$ lies on line c_{12}
 13 : $P_{639} = (28, 18, 1, 0)$ lies on line a_4
 14 : $P_{640} = (29, 18, 1, 0)$ lies on line c_{46}
 15 : $P_{915} = (16, 27, 1, 0)$ lies on line c_{34}
 16 : $P_{1047} = (20, 31, 1, 0)$ lies on line a_5
 17 : $P_{1048} = (21, 31, 1, 0)$ lies on line c_{56}
 18 : $P_{1090} = (0, 1, 0, 1)$ lies on line b_6
 19 : $P_{1091} = (1, 1, 0, 1)$ lies on line b_6
 20 : $P_{1093} = (3, 1, 0, 1)$ lies on line b_6
 21 : $P_{1095} = (5, 1, 0, 1)$ lies on line b_6
 22 : $P_{1096} = (6, 1, 0, 1)$ lies on line b_6
 23 : $P_{1097} = (7, 1, 0, 1)$ lies on line b_6
 24 : $P_{1098} = (8, 1, 0, 1)$ lies on line b_6
 25 : $P_{1100} = (10, 1, 0, 1)$ lies on line b_6
 26 : $P_{1102} = (12, 1, 0, 1)$ lies on line b_6
 27 : $P_{1104} = (14, 1, 0, 1)$ lies on line b_6
 28 : $P_{1107} = (17, 1, 0, 1)$ lies on line b_6
 29 : $P_{1109} = (19, 1, 0, 1)$ lies on line b_6
 30 : $P_{1110} = (20, 1, 0, 1)$ lies on line b_6
 31 : $P_{1111} = (21, 1, 0, 1)$ lies on line b_6
 32 : $P_{1112} = (22, 1, 0, 1)$ lies on line b_6
 33 : $P_{1113} = (23, 1, 0, 1)$ lies on line b_6
 34 : $P_{1114} = (24, 1, 0, 1)$ lies on line b_6
 35 : $P_{1115} = (25, 1, 0, 1)$ lies on line b_6
 36 : $P_{1116} = (26, 1, 0, 1)$ lies on line b_6
 37 : $P_{1118} = (28, 1, 0, 1)$ lies on line b_6
 38 : $P_{1119} = (29, 1, 0, 1)$ lies on line b_6
 39 : $P_{1120} = (30, 1, 0, 1)$ lies on line b_6
 40 : $P_{1280} = (30, 6, 0, 1)$ lies on line c_{23}
 41 : $P_{1312} = (30, 7, 0, 1)$ lies on line c_{34}
 42 : $P_{1372} = (26, 9, 0, 1)$ lies on line b_4
 43 : $P_{1413} = (3, 11, 0, 1)$ lies on line c_{15}
 44 : $P_{1543} = (5, 15, 0, 1)$ lies on line c_{13}
 45 : $P_{1646} = (12, 18, 0, 1)$ lies on line c_{35}
 46 : $P_{1717} = (19, 20, 0, 1)$ lies on line b_3
 47 : $P_{1749} = (19, 21, 0, 1)$ lies on line b_1
 48 : $P_{1772} = (10, 22, 0, 1)$ lies on line b_5
 49 : $P_{1804} = (10, 23, 0, 1)$ lies on line c_{12}
 50 : $P_{1840} = (14, 24, 0, 1)$ lies on line c_{14}
 51 : $P_{1872} = (14, 25, 0, 1)$ lies on line c_{45}
 52 : $P_{1962} = (8, 28, 0, 1)$ lies on line c_{25}
 53 : $P_{1994} = (8, 29, 0, 1)$ lies on line a_6
 54 : $P_{2067} = (17, 31, 0, 1)$ lies on line b_2
 55 : $P_{2082} = (0, 0, 1, 1)$ lies on line c_{24}
 56 : $P_{2147} = (2, 2, 1, 1)$ lies on line c_{24}
 57 : $P_{2176} = (31, 2, 1, 1)$ lies on line c_{45}
 58 : $P_{2180} = (3, 3, 1, 1)$ lies on line c_{24}
 59 : $P_{2213} = (4, 4, 1, 1)$ lies on line c_{24}
 60 : $P_{2227} = (18, 4, 1, 1)$ lies on line c_{23}
 61 : $P_{2246} = (5, 5, 1, 1)$ lies on line c_{24}

62 : $P_{2312} = (7, 7, 1, 1)$ lies on line c_{24}
 63 : $P_{2313} = (8, 7, 1, 1)$ lies on line c_{12}
 64 : $P_{2350} = (13, 8, 1, 1)$ lies on line a_1
 65 : $P_{2378} = (9, 9, 1, 1)$ lies on line c_{24}
 66 : $P_{2428} = (27, 10, 1, 1)$ lies on line c_{26}
 67 : $P_{2444} = (11, 11, 1, 1)$ lies on line c_{24}
 68 : $P_{2477} = (12, 12, 1, 1)$ lies on line c_{24}
 69 : $P_{2508} = (11, 13, 1, 1)$ lies on line a_6
 70 : $P_{2510} = (13, 13, 1, 1)$ lies on line c_{24}
 71 : $P_{2531} = (2, 14, 1, 1)$ lies on line a_3
 72 : $P_{2576} = (15, 15, 1, 1)$ lies on line c_{24}
 73 : $P_{2602} = (9, 16, 1, 1)$ lies on line b_3
 74 : $P_{2609} = (16, 16, 1, 1)$ lies on line c_{24}
 75 : $P_{2642} = (17, 17, 1, 1)$ lies on line c_{24}
 76 : $P_{2675} = (18, 18, 1, 1)$ lies on line c_{24}
 77 : $P_{2705} = (16, 19, 1, 1)$ lies on line c_{46}
 78 : $P_{2763} = (10, 21, 1, 1)$ lies on line c_{14}
 79 : $P_{2774} = (21, 21, 1, 1)$ lies on line c_{24}
 80 : $P_{2840} = (23, 23, 1, 1)$ lies on line c_{24}
 81 : $P_{2847} = (30, 23, 1, 1)$ lies on line b_1
 82 : $P_{2868} = (19, 24, 1, 1)$ lies on line c_{25}
 83 : $P_{2873} = (24, 24, 1, 1)$ lies on line c_{24}
 84 : $P_{2939} = (26, 26, 1, 1)$ lies on line c_{24}
 85 : $P_{2960} = (15, 27, 1, 1)$ lies on line b_5
 86 : $P_{2972} = (27, 27, 1, 1)$ lies on line c_{24}
 87 : $P_{2991} = (14, 28, 1, 1)$ lies on line c_{34}
 88 : $P_{3005} = (28, 28, 1, 1)$ lies on line c_{24}
 89 : $P_{3045} = (4, 30, 1, 1)$ lies on line a_5
 90 : $P_{3104} = (31, 31, 1, 1)$ lies on line c_{24}
 91 : $P_{3434} = (9, 10, 2, 1)$ lies on line c_{45}
 92 : $P_{3489} = (0, 12, 2, 1)$ lies on line b_5
 93 : $P_{3517} = (28, 12, 2, 1)$ lies on line b_4
 94 : $P_{3695} = (14, 18, 2, 1)$ lies on line c_{12}
 95 : $P_{3731} = (18, 19, 2, 1)$ lies on line a_1
 96 : $P_{3733} = (20, 19, 2, 1)$ lies on line c_{16}
 97 : $P_{3848} = (7, 23, 2, 1)$ lies on line a_2
 98 : $P_{3862} = (21, 23, 2, 1)$ lies on line c_{26}
 99 : $P_{3887} = (14, 24, 2, 1)$ lies on line a_6
 100 : $P_{3941} = (4, 26, 2, 1)$ lies on line c_{56}
 101 : $P_{3978} = (9, 27, 2, 1)$ lies on line b_2
 102 : $P_{4104} = (7, 31, 2, 1)$ lies on line c_{36}
 103 : $P_{4105} = (8, 31, 2, 1)$ lies on line a_3
 104 : $P_{4139} = (10, 0, 3, 1)$ lies on line c_{23}
 105 : $P_{4166} = (5, 1, 3, 1)$ lies on line b_5
 106 : $P_{4205} = (12, 2, 3, 1)$ lies on line c_{12}
 107 : $P_{4298} = (9, 5, 3, 1)$ lies on line a_5
 108 : $P_{4306} = (17, 5, 3, 1)$ lies on line c_{56}
 109 : $P_{4372} = (19, 7, 3, 1)$ lies on line c_{13}
 110 : $P_{4398} = (13, 8, 3, 1)$ lies on line a_6
 111 : $P_{4611} = (2, 15, 3, 1)$ lies on line c_{14}
 112 : $P_{4620} = (11, 15, 3, 1)$ lies on line c_{34}
 113 : $P_{4655} = (14, 16, 3, 1)$ lies on line a_3
 114 : $P_{4697} = (24, 17, 3, 1)$ lies on line c_{45}
 115 : $P_{4719} = (14, 18, 3, 1)$ lies on line a_4

116 : $P_{4720} = (15, 18, 3, 1)$ lies on line c_{46}
 117 : $P_{4741} = (4, 19, 3, 1)$ lies on line b_1
 118 : $P_{4921} = (24, 24, 3, 1)$ lies on line b_3
 119 : $P_{4934} = (5, 25, 3, 1)$ lies on line b_2
 120 : $P_{4964} = (3, 26, 3, 1)$ lies on line c_{16}
 121 : $P_{4965} = (4, 26, 3, 1)$ lies on line a_1
 122 : $P_{5096} = (7, 30, 3, 1)$ lies on line c_{35}
 123 : $P_{5228} = (11, 2, 4, 1)$ lies on line c_{35}
 124 : $P_{5265} = (16, 3, 4, 1)$ lies on line a_4
 125 : $P_{5407} = (30, 7, 4, 1)$ lies on line b_5
 126 : $P_{5418} = (9, 8, 4, 1)$ lies on line c_{26}
 127 : $P_{5438} = (29, 8, 4, 1)$ lies on line a_2
 128 : $P_{5471} = (30, 9, 4, 1)$ lies on line c_{14}
 129 : $P_{5612} = (11, 14, 4, 1)$ lies on line c_{23}
 130 : $P_{5739} = (10, 18, 4, 1)$ lies on line a_5
 131 : $P_{5750} = (21, 18, 4, 1)$ lies on line c_{56}
 132 : $P_{5942} = (21, 24, 4, 1)$ lies on line c_{36}
 133 : $P_{5949} = (28, 24, 4, 1)$ lies on line a_3
 134 : $P_{5985} = (0, 26, 4, 1)$ lies on line c_{45}
 135 : $P_{6008} = (23, 26, 4, 1)$ lies on line c_{15}
 136 : $P_{6191} = (14, 0, 5, 1)$ lies on line b_3
 137 : $P_{6226} = (17, 1, 5, 1)$ lies on line c_{45}
 138 : $P_{6278} = (5, 3, 5, 1)$ lies on line a_2
 139 : $P_{6289} = (16, 3, 5, 1)$ lies on line c_{26}
 140 : $P_{6331} = (26, 4, 5, 1)$ lies on line c_{14}
 141 : $P_{6386} = (17, 6, 5, 1)$ lies on line c_{35}
 142 : $P_{6408} = (7, 7, 5, 1)$ lies on line a_6
 143 : $P_{6449} = (16, 8, 5, 1)$ lies on line c_{25}
 144 : $P_{6495} = (30, 9, 5, 1)$ lies on line c_{16}
 145 : $P_{6496} = (31, 9, 5, 1)$ lies on line a_1
 146 : $P_{6524} = (27, 10, 5, 1)$ lies on line b_5
 147 : $P_{6568} = (7, 12, 5, 1)$ lies on line c_{23}
 148 : $P_{6623} = (30, 13, 5, 1)$ lies on line a_5
 149 : $P_{6732} = (11, 17, 5, 1)$ lies on line c_{46}
 150 : $P_{6733} = (12, 17, 5, 1)$ lies on line a_4
 151 : $P_{6806} = (21, 19, 5, 1)$ lies on line b_4
 152 : $P_{6857} = (8, 21, 5, 1)$ lies on line b_2
 153 : $P_{7173} = (4, 31, 5, 1)$ lies on line c_{34}
 154 : $P_{7184} = (15, 31, 5, 1)$ lies on line b_1
 155 : $P_{7230} = (29, 0, 6, 1)$ lies on line c_{15}
 156 : $P_{7274} = (9, 2, 6, 1)$ lies on line c_{46}
 157 : $P_{7278} = (13, 2, 6, 1)$ lies on line a_4
 158 : $P_{7353} = (24, 4, 6, 1)$ lies on line c_{25}
 159 : $P_{7420} = (27, 6, 6, 1)$ lies on line c_{36}
 160 : $P_{7515} = (26, 9, 6, 1)$ lies on line c_{56}
 161 : $P_{7540} = (19, 10, 6, 1)$ lies on line c_{23}
 162 : $P_{7547} = (26, 10, 6, 1)$ lies on line c_{35}
 163 : $P_{7590} = (5, 12, 6, 1)$ lies on line b_3
 164 : $P_{7777} = (0, 18, 6, 1)$ lies on line a_1
 165 : $P_{7831} = (22, 19, 6, 1)$ lies on line c_{14}
 166 : $P_{7837} = (28, 19, 6, 1)$ lies on line b_2
 167 : $P_{7954} = (17, 23, 6, 1)$ lies on line c_{34}
 168 : $P_{7975} = (6, 24, 6, 1)$ lies on line c_{12}
 169 : $P_{8025} = (24, 25, 6, 1)$ lies on line b_1

170 : $P_{8149} = (20, 29, 6, 1)$ lies on line b_5
 171 : $P_{8169} = (8, 30, 6, 1)$ lies on line a_2
 172 : $P_{8191} = (30, 30, 6, 1)$ lies on line c_{26}
 173 : $P_{8205} = (12, 31, 6, 1)$ lies on line c_{13}
 174 : $P_{8228} = (3, 0, 7, 1)$ lies on line c_{25}
 175 : $P_{8290} = (1, 2, 7, 1)$ lies on line a_6
 176 : $P_{8382} = (29, 4, 7, 1)$ lies on line c_{13}
 177 : $P_{8485} = (4, 8, 7, 1)$ lies on line c_{12}
 178 : $P_{8535} = (22, 9, 7, 1)$ lies on line a_3
 179 : $P_{8541} = (28, 9, 7, 1)$ lies on line c_{36}
 180 : $P_{8610} = (1, 12, 7, 1)$ lies on line c_{34}
 181 : $P_{8665} = (24, 13, 7, 1)$ lies on line c_{15}
 182 : $P_{8673} = (0, 14, 7, 1)$ lies on line c_{35}
 183 : $P_{8757} = (20, 16, 7, 1)$ lies on line c_{46}
 184 : $P_{8785} = (16, 17, 7, 1)$ lies on line b_2
 185 : $P_{8823} = (22, 18, 7, 1)$ lies on line c_{45}
 186 : $P_{8904} = (7, 21, 7, 1)$ lies on line c_{26}
 187 : $P_{8913} = (16, 21, 7, 1)$ lies on line a_2
 188 : $P_{8944} = (15, 22, 7, 1)$ lies on line c_{56}
 189 : $P_{9111} = (22, 27, 7, 1)$ lies on line a_1
 190 : $P_{9203} = (18, 30, 7, 1)$ lies on line c_{14}
 191 : $P_{9291} = (10, 1, 8, 1)$ lies on line c_{34}
 192 : $P_{9314} = (1, 2, 8, 1)$ lies on line a_5
 193 : $P_{9331} = (18, 2, 8, 1)$ lies on line c_{56}
 194 : $P_{9367} = (22, 3, 8, 1)$ lies on line c_{16}
 195 : $P_{9439} = (30, 5, 8, 1)$ lies on line c_{46}
 196 : $P_{9553} = (16, 9, 8, 1)$ lies on line a_6
 197 : $P_{9562} = (25, 9, 8, 1)$ lies on line c_{13}
 198 : $P_{9647} = (14, 12, 8, 1)$ lies on line c_{15}
 199 : $P_{9759} = (30, 15, 8, 1)$ lies on line b_2
 200 : $P_{9800} = (7, 17, 8, 1)$ lies on line b_5
 201 : $P_{9822} = (29, 17, 8, 1)$ lies on line b_3
 202 : $P_{9869} = (12, 19, 8, 1)$ lies on line a_2
 203 : $P_{9877} = (20, 19, 8, 1)$ lies on line c_{26}
 204 : $P_{9973} = (20, 22, 8, 1)$ lies on line c_{36}
 205 : $P_{9987} = (2, 23, 8, 1)$ lies on line c_{35}
 206 : $P_{10063} = (14, 25, 8, 1)$ lies on line c_{25}
 207 : $P_{10179} = (2, 29, 8, 1)$ lies on line b_4
 208 : $P_{10252} = (11, 31, 8, 1)$ lies on line c_{14}
 209 : $P_{10259} = (18, 31, 8, 1)$ lies on line c_{45}
 210 : $P_{10316} = (11, 1, 9, 1)$ lies on line c_{15}
 211 : $P_{10404} = (3, 4, 9, 1)$ lies on line c_{45}
 212 : $P_{10522} = (25, 7, 9, 1)$ lies on line b_1
 213 : $P_{10594} = (1, 10, 9, 1)$ lies on line c_{16}
 214 : $P_{10605} = (12, 10, 9, 1)$ lies on line a_1
 215 : $P_{10690} = (1, 13, 9, 1)$ lies on line b_4
 216 : $P_{10707} = (18, 13, 9, 1)$ lies on line b_2
 217 : $P_{10857} = (8, 18, 9, 1)$ lies on line c_{13}
 218 : $P_{10864} = (15, 18, 9, 1)$ lies on line c_{14}
 219 : $P_{10942} = (29, 20, 9, 1)$ lies on line c_{23}
 220 : $P_{10952} = (7, 21, 9, 1)$ lies on line b_3
 221 : $P_{11012} = (3, 23, 9, 1)$ lies on line c_{46}
 222 : $P_{11017} = (8, 23, 9, 1)$ lies on line a_4
 223 : $P_{11054} = (13, 24, 9, 1)$ lies on line c_{26}

224 : $P_{11061} = (20, 24, 9, 1)$ lies on line a_2
 225 : $P_{11096} = (23, 25, 9, 1)$ lies on line a_3
 226 : $P_{11131} = (26, 26, 9, 1)$ lies on line c_{34}
 227 : $P_{11171} = (2, 28, 9, 1)$ lies on line b_5
 228 : $P_{11208} = (7, 29, 9, 1)$ lies on line c_{56}
 229 : $P_{11343} = (14, 1, 10, 1)$ lies on line b_1
 230 : $P_{11426} = (1, 4, 10, 1)$ lies on line c_{46}
 231 : $P_{11434} = (9, 4, 10, 1)$ lies on line a_4
 232 : $P_{11482} = (25, 5, 10, 1)$ lies on line a_2
 233 : $P_{11519} = (30, 6, 10, 1)$ lies on line c_{12}
 234 : $P_{11579} = (26, 8, 10, 1)$ lies on line c_{36}
 235 : $P_{11582} = (29, 8, 10, 1)$ lies on line a_3
 236 : $P_{11655} = (6, 11, 10, 1)$ lies on line b_2
 237 : $P_{11662} = (13, 11, 10, 1)$ lies on line b_5
 238 : $P_{11702} = (21, 12, 10, 1)$ lies on line c_{45}
 239 : $P_{11703} = (22, 12, 10, 1)$ lies on line a_6
 240 : $P_{11860} = (19, 17, 10, 1)$ lies on line a_1
 241 : $P_{11882} = (9, 18, 10, 1)$ lies on line c_{23}
 242 : $P_{11888} = (15, 18, 10, 1)$ lies on line c_{34}
 243 : $P_{12005} = (4, 22, 10, 1)$ lies on line c_{15}
 244 : $P_{12069} = (4, 24, 10, 1)$ lies on line b_4
 245 : $P_{12126} = (29, 25, 10, 1)$ lies on line c_{56}
 246 : $P_{12159} = (30, 26, 10, 1)$ lies on line c_{13}
 247 : $P_{12308} = (19, 31, 10, 1)$ lies on line c_{35}
 248 : $P_{12368} = (15, 1, 11, 1)$ lies on line c_{13}
 249 : $P_{12420} = (3, 3, 11, 1)$ lies on line b_1
 250 : $P_{12537} = (24, 6, 11, 1)$ lies on line a_5
 251 : $P_{12572} = (27, 7, 11, 1)$ lies on line a_3
 252 : $P_{12574} = (29, 7, 11, 1)$ lies on line c_{36}
 253 : $P_{12619} = (10, 9, 11, 1)$ lies on line b_2
 254 : $P_{12640} = (31, 9, 11, 1)$ lies on line c_{34}
 255 : $P_{12770} = (1, 14, 11, 1)$ lies on line a_2
 256 : $P_{12795} = (26, 14, 11, 1)$ lies on line c_{26}
 257 : $P_{12838} = (5, 16, 11, 1)$ lies on line c_{23}
 258 : $P_{12999} = (6, 21, 11, 1)$ lies on line c_{25}
 259 : $P_{13046} = (21, 22, 11, 1)$ lies on line a_4
 260 : $P_{13061} = (4, 23, 11, 1)$ lies on line c_{45}
 261 : $P_{13094} = (5, 24, 11, 1)$ lies on line a_1
 262 : $P_{13099} = (10, 24, 11, 1)$ lies on line c_{16}
 263 : $P_{13186} = (1, 27, 11, 1)$ lies on line c_{15}
 264 : $P_{13194} = (9, 27, 11, 1)$ lies on line c_{35}
 265 : $P_{13238} = (21, 28, 11, 1)$ lies on line a_6
 266 : $P_{13271} = (22, 29, 11, 1)$ lies on line b_3
 267 : $P_{13364} = (19, 0, 12, 1)$ lies on line b_5
 268 : $P_{13403} = (26, 1, 12, 1)$ lies on line b_3
 269 : $P_{13417} = (8, 2, 12, 1)$ lies on line a_1
 270 : $P_{13469} = (28, 3, 12, 1)$ lies on line a_6
 271 : $P_{13646} = (13, 9, 12, 1)$ lies on line c_{25}
 272 : $P_{13651} = (18, 9, 12, 1)$ lies on line c_{12}
 273 : $P_{13688} = (23, 10, 12, 1)$ lies on line c_{13}
 274 : $P_{13766} = (5, 13, 12, 1)$ lies on line b_1
 275 : $P_{13820} = (27, 14, 12, 1)$ lies on line c_{14}
 276 : $P_{13833} = (8, 15, 12, 1)$ lies on line c_{36}
 277 : $P_{13834} = (9, 15, 12, 1)$ lies on line a_3
 278 : $P_{13901} = (12, 17, 12, 1)$ lies on line c_{56}
 279 : $P_{13916} = (27, 17, 12, 1)$ lies on line a_5
 280 : $P_{14095} = (14, 23, 12, 1)$ lies on line b_4
 281 : $P_{14180} = (3, 26, 12, 1)$ lies on line a_2
 282 : $P_{14208} = (31, 26, 12, 1)$ lies on line c_{26}
 283 : $P_{14269} = (28, 28, 12, 1)$ lies on line c_{45}
 284 : $P_{14299} = (26, 29, 12, 1)$ lies on line c_{15}
 285 : $P_{14309} = (4, 30, 12, 1)$ lies on line c_{23}
 286 : $P_{14529} = (0, 5, 13, 1)$ lies on line b_3
 287 : $P_{14536} = (7, 5, 13, 1)$ lies on line b_2
 288 : $P_{14744} = (23, 11, 13, 1)$ lies on line c_{16}
 289 : $P_{14751} = (30, 11, 13, 1)$ lies on line a_1
 290 : $P_{14832} = (15, 14, 13, 1)$ lies on line a_5
 291 : $P_{14842} = (25, 14, 13, 1)$ lies on line c_{56}
 292 : $P_{14857} = (8, 15, 13, 1)$ lies on line b_1
 293 : $P_{14912} = (31, 16, 13, 1)$ lies on line c_{15}
 294 : $P_{14940} = (27, 17, 13, 1)$ lies on line a_2
 295 : $P_{15008} = (31, 19, 13, 1)$ lies on line a_6
 296 : $P_{15064} = (23, 21, 13, 1)$ lies on line a_4
 297 : $P_{15065} = (24, 21, 13, 1)$ lies on line c_{46}
 298 : $P_{15273} = (8, 28, 13, 1)$ lies on line c_{23}
 299 : $P_{15455} = (30, 1, 14, 1)$ lies on line c_{25}
 300 : $P_{15508} = (19, 3, 14, 1)$ lies on line b_2
 301 : $P_{15607} = (22, 6, 14, 1)$ lies on line a_4
 302 : $P_{15633} = (16, 7, 14, 1)$ lies on line c_{15}
 303 : $P_{15692} = (11, 9, 14, 1)$ lies on line b_3
 304 : $P_{15712} = (31, 9, 14, 1)$ lies on line b_1
 305 : $P_{15716} = (3, 10, 14, 1)$ lies on line c_{56}
 306 : $P_{15735} = (22, 10, 14, 1)$ lies on line a_5
 307 : $P_{15785} = (8, 12, 14, 1)$ lies on line c_{26}
 308 : $P_{15893} = (20, 15, 14, 1)$ lies on line c_{35}
 309 : $P_{15900} = (27, 15, 14, 1)$ lies on line c_{45}
 310 : $P_{15906} = (1, 16, 14, 1)$ lies on line a_1
 311 : $P_{15916} = (11, 16, 14, 1)$ lies on line c_{16}
 312 : $P_{15943} = (6, 17, 14, 1)$ lies on line c_{36}
 313 : $P_{15977} = (8, 18, 14, 1)$ lies on line b_4
 314 : $P_{16052} = (19, 20, 14, 1)$ lies on line c_{14}
 315 : $P_{16209} = (16, 25, 14, 1)$ lies on line c_{13}
 316 : $P_{16250} = (25, 26, 14, 1)$ lies on line b_5
 317 : $P_{16253} = (28, 26, 14, 1)$ lies on line c_{23}
 318 : $P_{16480} = (31, 1, 15, 1)$ lies on line b_2
 319 : $P_{16482} = (1, 2, 15, 1)$ lies on line c_{13}
 320 : $P_{16492} = (11, 2, 15, 1)$ lies on line b_4
 321 : $P_{16582} = (5, 5, 15, 1)$ lies on line c_{25}
 322 : $P_{16655} = (14, 7, 15, 1)$ lies on line a_2
 323 : $P_{16658} = (17, 7, 15, 1)$ lies on line c_{26}
 324 : $P_{16783} = (14, 11, 15, 1)$ lies on line c_{35}
 325 : $P_{16787} = (18, 11, 15, 1)$ lies on line b_1
 326 : $P_{16850} = (17, 13, 15, 1)$ lies on line b_3
 327 : $P_{17064} = (7, 20, 15, 1)$ lies on line c_{46}
 328 : $P_{17091} = (2, 21, 15, 1)$ lies on line a_5
 329 : $P_{17111} = (22, 21, 15, 1)$ lies on line c_{56}
 330 : $P_{17146} = (25, 22, 15, 1)$ lies on line a_6
 331 : $P_{17181} = (28, 23, 15, 1)$ lies on line b_5

332 : $P_{17201} = (16, 24, 15, 1)$ lies on line c_{23}
333 : $P_{17245} = (28, 25, 15, 1)$ lies on line c_{16}
334 : $P_{17333} = (20, 28, 15, 1)$ lies on line c_{12}
335 : $P_{17378} = (1, 30, 15, 1)$ lies on line c_{36}
336 : $P_{17380} = (3, 30, 15, 1)$ lies on line a_3
337 : $P_{17537} = (0, 3, 16, 1)$ lies on line c_{23}
338 : $P_{17561} = (24, 3, 16, 1)$ lies on line c_{13}
339 : $P_{17584} = (15, 4, 16, 1)$ lies on line b_4
340 : $P_{17614} = (13, 5, 16, 1)$ lies on line c_{16}
341 : $P_{17688} = (23, 7, 16, 1)$ lies on line a_5
342 : $P_{17693} = (28, 7, 16, 1)$ lies on line c_{56}
343 : $P_{17743} = (14, 9, 16, 1)$ lies on line c_{46}
344 : $P_{17757} = (28, 9, 16, 1)$ lies on line a_4
345 : $P_{17772} = (11, 10, 16, 1)$ lies on line a_3
346 : $P_{17783} = (22, 10, 16, 1)$ lies on line c_{36}
347 : $P_{17812} = (19, 11, 16, 1)$ lies on line c_{34}
348 : $P_{18132} = (19, 21, 16, 1)$ lies on line c_{45}
349 : $P_{18416} = (15, 30, 16, 1)$ lies on line b_3
350 : $P_{18495} = (30, 0, 17, 1)$ lies on line a_6
351 : $P_{18509} = (12, 1, 17, 1)$ lies on line c_{23}
352 : $P_{18638} = (13, 5, 17, 1)$ lies on line a_3
353 : $P_{18642} = (17, 5, 17, 1)$ lies on line c_{36}
354 : $P_{18749} = (28, 8, 17, 1)$ lies on line c_{15}
355 : $P_{18798} = (13, 10, 17, 1)$ lies on line c_{12}
356 : $P_{18835} = (18, 11, 17, 1)$ lies on line c_{26}
357 : $P_{18836} = (19, 11, 17, 1)$ lies on line a_2
358 : $P_{18864} = (15, 12, 17, 1)$ lies on line a_1
359 : $P_{18875} = (26, 12, 17, 1)$ lies on line c_{16}
360 : $P_{18915} = (2, 14, 17, 1)$ lies on line c_{45}
361 : $P_{18980} = (3, 16, 17, 1)$ lies on line c_{34}
362 : $P_{19057} = (16, 18, 17, 1)$ lies on line b_1
363 : $P_{19072} = (31, 18, 17, 1)$ lies on line c_{25}
364 : $P_{19117} = (12, 20, 17, 1)$ lies on line b_4
365 : $P_{19158} = (21, 21, 17, 1)$ lies on line b_5
366 : $P_{19318} = (21, 26, 17, 1)$ lies on line b_3
367 : $P_{19348} = (19, 27, 17, 1)$ lies on line c_{46}
368 : $P_{19371} = (10, 28, 17, 1)$ lies on line c_{35}
369 : $P_{19530} = (9, 1, 18, 1)$ lies on line b_4
370 : $P_{19579} = (26, 2, 18, 1)$ lies on line b_5
371 : $P_{19701} = (20, 6, 18, 1)$ lies on line c_{45}
372 : $P_{19737} = (24, 7, 18, 1)$ lies on line c_{23}
373 : $P_{19746} = (1, 8, 18, 1)$ lies on line a_4
374 : $P_{19762} = (17, 8, 18, 1)$ lies on line c_{46}
375 : $P_{19885} = (12, 12, 18, 1)$ lies on line c_{14}
376 : $P_{20002} = (1, 16, 18, 1)$ lies on line c_{35}
377 : $P_{20032} = (31, 16, 18, 1)$ lies on line c_{13}
378 : $P_{20153} = (24, 20, 18, 1)$ lies on line c_{36}
379 : $P_{20188} = (27, 21, 18, 1)$ lies on line a_6
380 : $P_{20221} = (28, 22, 18, 1)$ lies on line c_{26}
381 : $P_{20231} = (6, 23, 18, 1)$ lies on line c_{16}
382 : $P_{20241} = (16, 23, 18, 1)$ lies on line a_1
383 : $P_{20279} = (22, 24, 18, 1)$ lies on line c_{34}
384 : $P_{20404} = (19, 28, 18, 1)$ lies on line c_{56}
385 : $P_{20411} = (26, 28, 18, 1)$ lies on line a_5
386 : $P_{20492} = (11, 31, 18, 1)$ lies on line c_{12}
387 : $P_{20500} = (19, 31, 18, 1)$ lies on line c_{15}
388 : $P_{20553} = (8, 1, 19, 1)$ lies on line c_{14}
389 : $P_{20623} = (14, 3, 19, 1)$ lies on line a_5
390 : $P_{20693} = (20, 5, 19, 1)$ lies on line c_{23}
391 : $P_{20697} = (24, 5, 19, 1)$ lies on line a_6
392 : $P_{20879} = (14, 11, 19, 1)$ lies on line c_{13}
393 : $P_{21002} = (9, 15, 19, 1)$ lies on line c_{12}
394 : $P_{21024} = (31, 15, 19, 1)$ lies on line b_5
395 : $P_{21067} = (10, 17, 19, 1)$ lies on line b_4
396 : $P_{21093} = (4, 18, 19, 1)$ lies on line b_3
397 : $P_{21111} = (22, 18, 19, 1)$ lies on line c_{15}
398 : $P_{21180} = (27, 20, 19, 1)$ lies on line c_{35}
399 : $P_{21227} = (10, 22, 19, 1)$ lies on line b_1
400 : $P_{21374} = (29, 26, 19, 1)$ lies on line a_4
401 : $P_{21378} = (1, 27, 19, 1)$ lies on line a_3
402 : $P_{21408} = (31, 27, 19, 1)$ lies on line c_{36}
403 : $P_{21436} = (27, 28, 19, 1)$ lies on line b_2
404 : $P_{21447} = (6, 29, 19, 1)$ lies on line a_2
405 : $P_{21479} = (6, 30, 19, 1)$ lies on line a_1
406 : $P_{21490} = (17, 30, 19, 1)$ lies on line c_{16}
407 : $P_{21559} = (22, 0, 20, 1)$ lies on line c_{13}
408 : $P_{21676} = (11, 4, 20, 1)$ lies on line a_1
409 : $P_{21692} = (27, 4, 20, 1)$ lies on line c_{16}
410 : $P_{21736} = (7, 6, 20, 1)$ lies on line c_{25}
411 : $P_{21781} = (20, 7, 20, 1)$ lies on line c_{14}
412 : $P_{21816} = (23, 8, 20, 1)$ lies on line c_{35}
413 : $P_{21818} = (25, 8, 20, 1)$ lies on line c_{34}
414 : $P_{21825} = (0, 9, 20, 1)$ lies on line c_{26}
415 : $P_{21892} = (3, 11, 20, 1)$ lies on line a_4
416 : $P_{21988} = (3, 14, 20, 1)$ lies on line b_4
417 : $P_{21993} = (8, 14, 20, 1)$ lies on line b_3
418 : $P_{22056} = (7, 16, 20, 1)$ lies on line c_{12}
419 : $P_{22139} = (26, 18, 20, 1)$ lies on line b_2
420 : $P_{22155} = (10, 19, 20, 1)$ lies on line c_{36}
421 : $P_{22164} = (19, 19, 20, 1)$ lies on line a_3
422 : $P_{22179} = (2, 20, 20, 1)$ lies on line c_{56}
423 : $P_{22270} = (29, 22, 20, 1)$ lies on line c_{45}
424 : $P_{22317} = (12, 24, 20, 1)$ lies on line b_1
425 : $P_{22386} = (17, 26, 20, 1)$ lies on line a_6
426 : $P_{22566} = (5, 0, 21, 1)$ lies on line c_{12}
427 : $P_{22650} = (25, 2, 21, 1)$ lies on line c_{26}
428 : $P_{22690} = (1, 4, 21, 1)$ lies on line b_5
429 : $P_{22874} = (25, 9, 21, 1)$ lies on line c_{23}
430 : $P_{22897} = (16, 10, 21, 1)$ lies on line c_{14}
431 : $P_{22936} = (23, 11, 21, 1)$ lies on line c_{56}
432 : $P_{22938} = (25, 11, 21, 1)$ lies on line a_5
433 : $P_{22958} = (13, 12, 21, 1)$ lies on line c_{35}
434 : $P_{23006} = (29, 13, 21, 1)$ lies on line a_1
435 : $P_{23095} = (22, 16, 21, 1)$ lies on line b_2
436 : $P_{23178} = (9, 19, 21, 1)$ lies on line c_{34}
437 : $P_{23392} = (31, 25, 21, 1)$ lies on line a_4
438 : $P_{23394} = (1, 26, 21, 1)$ lies on line b_1
439 : $P_{23432} = (7, 27, 21, 1)$ lies on line c_{13}

440 : $P_{23470} = (13, 28, 21, 1)$ lies on line c_{36}
 441 : $P_{23478} = (21, 28, 21, 1)$ lies on line a_3
 442 : $P_{23521} = (0, 30, 21, 1)$ lies on line b_4
 443 : $P_{23591} = (6, 0, 22, 1)$ lies on line c_{35}
 444 : $P_{23771} = (26, 5, 22, 1)$ lies on line c_{45}
 445 : $P_{23802} = (25, 6, 22, 1)$ lies on line b_3
 446 : $P_{23915} = (10, 10, 22, 1)$ lies on line c_{46}
 447 : $P_{23935} = (30, 10, 22, 1)$ lies on line a_4
 448 : $P_{23942} = (5, 11, 22, 1)$ lies on line b_4
 449 : $P_{24005} = (4, 13, 22, 1)$ lies on line c_{36}
 450 : $P_{24032} = (31, 13, 22, 1)$ lies on line a_3
 451 : $P_{24040} = (7, 14, 22, 1)$ lies on line c_{15}
 452 : $P_{24053} = (20, 14, 22, 1)$ lies on line c_{25}
 453 : $P_{24065} = (0, 15, 22, 1)$ lies on line a_5
 454 : $P_{24207} = (14, 19, 22, 1)$ lies on line b_5
 455 : $P_{24210} = (17, 19, 22, 1)$ lies on line c_{13}
 456 : $P_{24260} = (3, 21, 22, 1)$ lies on line c_{12}
 457 : $P_{24305} = (16, 22, 22, 1)$ lies on line c_{16}
 458 : $P_{24477} = (28, 27, 22, 1)$ lies on line c_{34}
 459 : $P_{24503} = (22, 28, 22, 1)$ lies on line b_1
 460 : $P_{24541} = (28, 29, 22, 1)$ lies on line c_{14}
 461 : $P_{24594} = (17, 31, 22, 1)$ lies on line a_2
 462 : $P_{24621} = (12, 0, 23, 1)$ lies on line c_{34}
 463 : $P_{24698} = (25, 2, 23, 1)$ lies on line a_3
 464 : $P_{24707} = (2, 3, 23, 1)$ lies on line c_{15}
 465 : $P_{24765} = (28, 4, 23, 1)$ lies on line c_{35}
 466 : $P_{24770} = (1, 5, 23, 1)$ lies on line c_{12}
 467 : $P_{24865} = (0, 8, 23, 1)$ lies on line c_{13}
 468 : $P_{24944} = (15, 10, 23, 1)$ lies on line c_{25}
 469 : $P_{25026} = (1, 13, 23, 1)$ lies on line c_{23}
 470 : $P_{25109} = (20, 15, 23, 1)$ lies on line a_6
 471 : $P_{25141} = (20, 16, 23, 1)$ lies on line a_5
 472 : $P_{25258} = (9, 20, 23, 1)$ lies on line a_2
 473 : $P_{25379} = (2, 24, 23, 1)$ lies on line a_4
 474 : $P_{25400} = (23, 24, 23, 1)$ lies on line c_{46}
 475 : $P_{25479} = (6, 27, 23, 1)$ lies on line b_4
 476 : $P_{25596} = (27, 30, 23, 1)$ lies on line b_1
 477 : $P_{25608} = (7, 31, 23, 1)$ lies on line c_{16}
 478 : $P_{25621} = (20, 31, 23, 1)$ lies on line a_1
 479 : $P_{25659} = (26, 0, 24, 1)$ lies on line b_1
 480 : $P_{25717} = (20, 2, 24, 1)$ lies on line c_{15}
 481 : $P_{25767} = (6, 4, 24, 1)$ lies on line a_5
 482 : $P_{25797} = (4, 5, 24, 1)$ lies on line c_{13}
 483 : $P_{25861} = (4, 7, 24, 1)$ lies on line c_{16}
 484 : $P_{25881} = (24, 7, 24, 1)$ lies on line a_1
 485 : $P_{25953} = (0, 10, 24, 1)$ lies on line b_2
 486 : $P_{26078} = (29, 13, 24, 1)$ lies on line c_{46}
 487 : $P_{26112} = (31, 14, 24, 1)$ lies on line c_{12}
 488 : $P_{26168} = (23, 16, 24, 1)$ lies on line b_4
 489 : $P_{26178} = (1, 17, 24, 1)$ lies on line c_{14}
 490 : $P_{26230} = (21, 18, 24, 1)$ lies on line a_2
 491 : $P_{26238} = (29, 18, 24, 1)$ lies on line c_{26}
 492 : $P_{26243} = (2, 19, 24, 1)$ lies on line c_{25}
 493 : $P_{26498} = (1, 27, 24, 1)$ lies on line b_3
 494 : $P_{26572} = (11, 29, 24, 1)$ lies on line c_{36}
 495 : $P_{26654} = (29, 31, 24, 1)$ lies on line b_5
 496 : $P_{26677} = (20, 0, 25, 1)$ lies on line b_4
 497 : $P_{26744} = (23, 2, 25, 1)$ lies on line b_1
 498 : $P_{26925} = (12, 8, 25, 1)$ lies on line b_2
 499 : $P_{26943} = (30, 8, 25, 1)$ lies on line c_{45}
 500 : $P_{27119} = (14, 14, 25, 1)$ lies on line a_1
 501 : $P_{27124} = (19, 14, 25, 1)$ lies on line c_{16}
 502 : $P_{27154} = (17, 15, 25, 1)$ lies on line c_{15}
 503 : $P_{27204} = (3, 17, 25, 1)$ lies on line c_{23}
 504 : $P_{27245} = (12, 18, 25, 1)$ lies on line c_{36}
 505 : $P_{27303} = (6, 20, 25, 1)$ lies on line a_6
 506 : $P_{27384} = (23, 22, 25, 1)$ lies on line c_{34}
 507 : $P_{27418} = (25, 23, 25, 1)$ lies on line c_{25}
 508 : $P_{27470} = (13, 25, 25, 1)$ lies on line a_2
 509 : $P_{27537} = (16, 27, 25, 1)$ lies on line c_{56}
 510 : $P_{27539} = (18, 27, 25, 1)$ lies on line a_5
 511 : $P_{27558} = (5, 28, 25, 1)$ lies on line c_{14}
 512 : $P_{27638} = (21, 30, 25, 1)$ lies on line c_{13}
 513 : $P_{27646} = (29, 30, 25, 1)$ lies on line c_{12}
 514 : $P_{27649} = (0, 31, 25, 1)$ lies on line c_{46}
 515 : $P_{27689} = (8, 0, 26, 1)$ lies on line c_{45}
 516 : $P_{27716} = (3, 1, 26, 1)$ lies on line a_6
 517 : $P_{27782} = (5, 3, 26, 1)$ lies on line c_{36}
 518 : $P_{27795} = (18, 3, 26, 1)$ lies on line a_3
 519 : $P_{27819} = (10, 4, 26, 1)$ lies on line c_{26}
 520 : $P_{27864} = (23, 5, 26, 1)$ lies on line b_5
 521 : $P_{28042} = (9, 11, 26, 1)$ lies on line c_{14}
 522 : $P_{28060} = (27, 11, 26, 1)$ lies on line c_{12}
 523 : $P_{28067} = (2, 12, 26, 1)$ lies on line c_{46}
 524 : $P_{28091} = (26, 12, 26, 1)$ lies on line a_4
 525 : $P_{28153} = (24, 14, 26, 1)$ lies on line b_2
 526 : $P_{28305} = (16, 19, 26, 1)$ lies on line b_3
 527 : $P_{28388} = (3, 22, 26, 1)$ lies on line c_{13}
 528 : $P_{28440} = (23, 23, 26, 1)$ lies on line c_{23}
 529 : $P_{28479} = (30, 24, 26, 1)$ lies on line c_{15}
 530 : $P_{28562} = (17, 27, 26, 1)$ lies on line c_{25}
 531 : $P_{28643} = (2, 30, 26, 1)$ lies on line c_{34}
 532 : $P_{28683} = (10, 31, 26, 1)$ lies on line c_{56}
 533 : $P_{28684} = (11, 31, 26, 1)$ lies on line a_5
 534 : $P_{28979} = (18, 8, 27, 1)$ lies on line b_5
 535 : $P_{29091} = (2, 12, 27, 1)$ lies on line c_{36}
 536 : $P_{29139} = (18, 13, 27, 1)$ lies on line c_{13}
 537 : $P_{29204} = (19, 15, 27, 1)$ lies on line c_{26}
 538 : $P_{29209} = (24, 15, 27, 1)$ lies on line a_2
 539 : $P_{29249} = (0, 17, 27, 1)$ lies on line a_6
 540 : $P_{29270} = (21, 17, 27, 1)$ lies on line c_{35}
 541 : $P_{29451} = (10, 23, 27, 1)$ lies on line b_3
 542 : $P_{29608} = (7, 28, 27, 1)$ lies on line a_1
 543 : $P_{29625} = (24, 28, 27, 1)$ lies on line c_{16}
 544 : $P_{29671} = (6, 30, 27, 1)$ lies on line a_4
 545 : $P_{29696} = (31, 30, 27, 1)$ lies on line c_{46}
 546 : $P_{29707} = (10, 31, 27, 1)$ lies on line c_{25}
 547 : $P_{29746} = (17, 0, 28, 1)$ lies on line c_{14}

548 : $P_{29814} = (21, 2, 28, 1)$ lies on line b_2
 549 : $P_{29826} = (1, 3, 28, 1)$ lies on line c_{25}
 550 : $P_{29863} = (6, 4, 28, 1)$ lies on line a_3
 551 : $P_{29939} = (18, 6, 28, 1)$ lies on line c_{16}
 552 : $P_{29996} = (11, 8, 28, 1)$ lies on line b_1
 553 : $P_{30087} = (6, 11, 28, 1)$ lies on line b_3
 554 : $P_{30170} = (25, 13, 28, 1)$ lies on line c_{35}
 555 : $P_{30190} = (13, 14, 28, 1)$ lies on line c_{34}
 556 : $P_{30215} = (6, 15, 28, 1)$ lies on line c_{46}
 557 : $P_{30233} = (24, 15, 28, 1)$ lies on line a_4
 558 : $P_{30242} = (1, 16, 28, 1)$ lies on line c_{45}
 559 : $P_{30337} = (0, 19, 28, 1)$ lies on line c_{15}
 560 : $P_{30492} = (27, 23, 28, 1)$ lies on line c_{56}
 561 : $P_{30493} = (28, 23, 28, 1)$ lies on line a_5
 562 : $P_{30588} = (27, 26, 28, 1)$ lies on line b_4
 563 : $P_{30615} = (22, 27, 28, 1)$ lies on line c_{26}
 564 : $P_{30778} = (25, 0, 29, 1)$ lies on line b_2
 565 : $P_{30861} = (12, 3, 29, 1)$ lies on line b_5
 566 : $P_{31003} = (26, 7, 29, 1)$ lies on line c_{25}
 567 : $P_{31017} = (8, 8, 29, 1)$ lies on line a_5
 568 : $P_{31023} = (14, 8, 29, 1)$ lies on line c_{56}
 569 : $P_{31044} = (3, 9, 29, 1)$ lies on line c_{35}
 570 : $P_{31079} = (6, 10, 29, 1)$ lies on line b_1
 571 : $P_{31097} = (24, 10, 29, 1)$ lies on line b_4
 572 : $P_{31105} = (0, 11, 29, 1)$ lies on line a_3
 573 : $P_{31190} = (21, 13, 29, 1)$ lies on line c_{14}
 574 : $P_{31238} = (5, 15, 29, 1)$ lies on line c_{16}
 575 : $P_{31267} = (2, 16, 29, 1)$ lies on line a_2
 576 : $P_{31280} = (15, 16, 29, 1)$ lies on line c_{26}
 577 : $P_{31414} = (21, 20, 29, 1)$ lies on line c_{12}
 578 : $P_{31454} = (29, 21, 29, 1)$ lies on line c_{34}
 579 : $P_{31575} = (22, 25, 29, 1)$ lies on line c_{23}
 580 : $P_{31685} = (4, 29, 29, 1)$ lies on line a_4
 581 : $P_{31718} = (5, 30, 29, 1)$ lies on line c_{15}
 582 : $P_{31723} = (10, 30, 29, 1)$ lies on line a_6
 583 : $P_{31828} = (19, 1, 30, 1)$ lies on line c_{12}
 584 : $P_{31879} = (6, 3, 30, 1)$ lies on line c_{45}
 585 : $P_{31896} = (23, 3, 30, 1)$ lies on line b_3
 586 : $P_{31945} = (8, 5, 30, 1)$ lies on line c_{35}
 587 : $P_{31982} = (13, 6, 30, 1)$ lies on line b_2
 588 : $P_{32075} = (10, 9, 30, 1)$ lies on line c_{15}
 589 : $P_{32144} = (15, 11, 30, 1)$ lies on line a_6
 590 : $P_{32147} = (18, 11, 30, 1)$ lies on line c_{25}
 591 : $P_{32181} = (20, 12, 30, 1)$ lies on line c_{56}
 592 : $P_{32194} = (1, 13, 30, 1)$ lies on line c_{26}
 593 : $P_{32208} = (15, 13, 30, 1)$ lies on line a_2
 594 : $P_{32230} = (5, 14, 30, 1)$ lies on line a_4
 595 : $P_{32250} = (25, 14, 30, 1)$ lies on line c_{46}
 596 : $P_{32442} = (25, 20, 30, 1)$ lies on line c_{16}
 597 : $P_{32462} = (13, 21, 30, 1)$ lies on line c_{13}
 598 : $P_{32619} = (10, 26, 30, 1)$ lies on line a_3
 599 : $P_{32713} = (8, 29, 30, 1)$ lies on line c_{34}
 600 : $P_{32771} = (2, 31, 30, 1)$ lies on line c_{23}
 601 : $P_{32798} = (29, 31, 30, 1)$ lies on line b_4
 602 : $P_{32851} = (18, 1, 31, 1)$ lies on line c_{35}
 603 : $P_{32930} = (1, 4, 31, 1)$ lies on line b_2
 604 : $P_{32944} = (15, 4, 31, 1)$ lies on line c_{15}
 605 : $P_{33016} = (23, 6, 31, 1)$ lies on line a_2
 606 : $P_{33038} = (13, 7, 31, 1)$ lies on line b_3
 607 : $P_{33290} = (9, 15, 31, 1)$ lies on line c_{25}
 608 : $P_{33311} = (30, 15, 31, 1)$ lies on line b_4
 609 : $P_{33362} = (17, 17, 31, 1)$ lies on line c_{12}
 610 : $P_{33410} = (1, 19, 31, 1)$ lies on line c_{56}
 611 : $P_{33414} = (5, 19, 31, 1)$ lies on line a_5
 612 : $P_{33485} = (12, 21, 31, 1)$ lies on line a_3
 613 : $P_{33503} = (30, 21, 31, 1)$ lies on line c_{36}
 614 : $P_{33566} = (29, 23, 31, 1)$ lies on line c_{14}
 615 : $P_{33592} = (23, 24, 31, 1)$ lies on line c_{45}
 616 : $P_{33607} = (6, 25, 31, 1)$ lies on line b_5
 617 : $P_{33677} = (12, 27, 31, 1)$ lies on line a_6
 618 : $P_{33701} = (4, 28, 31, 1)$ lies on line c_{46}
 619 : $P_{33722} = (25, 28, 31, 1)$ lies on line a_4
 620 : $P_{33750} = (21, 29, 31, 1)$ lies on line a_1

The single points on the surface are:

Points on surface but on no line

The surface has 493 points not on any line:

The points on the surface but not on lines are:

0 : $P_{67} = (0, 1, 1, 0)$
 1 : $P_{68} = (1, 1, 1, 0)$
 2 : $P_{157} = (26, 3, 1, 0)$
 3 : $P_{158} = (27, 3, 1, 0)$
 4 : $P_{197} = (2, 5, 1, 0)$
 5 : $P_{198} = (3, 5, 1, 0)$
 6 : $P_{285} = (26, 7, 1, 0)$
 7 : $P_{286} = (27, 7, 1, 0)$
 8 : $P_{435} = (16, 12, 1, 0)$
 9 : $P_{436} = (17, 12, 1, 0)$
 10 : $P_{583} = (4, 17, 1, 0)$
 11 : $P_{584} = (5, 17, 1, 0)$
 12 : $P_{709} = (2, 21, 1, 0)$
 13 : $P_{710} = (3, 21, 1, 0)$

14 : $P_{787} = (16, 23, 1, 0)$	68 : $P_{4207} = (14, 2, 3, 1)$
15 : $P_{788} = (17, 23, 1, 0)$	69 : $P_{4267} = (10, 4, 3, 1)$
16 : $P_{815} = (12, 24, 1, 0)$	70 : $P_{4278} = (21, 4, 3, 1)$
17 : $P_{816} = (13, 24, 1, 0)$	71 : $P_{4355} = (2, 7, 3, 1)$
18 : $P_{879} = (12, 26, 1, 0)$	72 : $P_{4387} = (2, 8, 3, 1)$
19 : $P_{880} = (13, 26, 1, 0)$	73 : $P_{4421} = (4, 9, 3, 1)$
20 : $P_{935} = (4, 28, 1, 0)$	74 : $P_{4441} = (24, 9, 3, 1)$
21 : $P_{936} = (5, 28, 1, 0)$	75 : $P_{4679} = (6, 17, 3, 1)$
22 : $P_{1059} = (1, 0, 0, 1)$	76 : $P_{4738} = (1, 19, 3, 1)$
23 : $P_{1146} = (24, 2, 0, 1)$	77 : $P_{4902} = (5, 24, 3, 1)$
24 : $P_{1178} = (24, 3, 0, 1)$	78 : $P_{4945} = (16, 25, 3, 1)$
25 : $P_{1193} = (7, 4, 0, 1)$	79 : $P_{5101} = (12, 30, 3, 1)$
26 : $P_{1225} = (7, 5, 0, 1)$	80 : $P_{5201} = (16, 1, 4, 1)$
27 : $P_{1340} = (26, 8, 0, 1)$	81 : $P_{5233} = (16, 2, 4, 1)$
28 : $P_{1381} = (3, 10, 0, 1)$	82 : $P_{5287} = (6, 4, 4, 1)$
29 : $P_{1470} = (28, 12, 0, 1)$	83 : $P_{5384} = (7, 7, 4, 1)$
30 : $P_{1502} = (28, 13, 0, 1)$	84 : $P_{5449} = (8, 9, 4, 1)$
31 : $P_{1511} = (5, 14, 0, 1)$	85 : $P_{5494} = (21, 10, 4, 1)$
32 : $P_{1591} = (21, 16, 0, 1)$	86 : $P_{5500} = (27, 10, 4, 1)$
33 : $P_{1623} = (21, 17, 0, 1)$	87 : $P_{5559} = (22, 12, 4, 1)$
34 : $P_{1678} = (12, 19, 0, 1)$	88 : $P_{5631} = (30, 14, 4, 1)$
35 : $P_{1913} = (23, 26, 0, 1)$	89 : $P_{5643} = (10, 15, 4, 1)$
36 : $P_{1945} = (23, 27, 0, 1)$	90 : $P_{5655} = (22, 15, 4, 1)$
37 : $P_{2035} = (17, 30, 0, 1)$	91 : $P_{5894} = (5, 23, 4, 1)$
38 : $P_{2193} = (16, 3, 1, 1)$	92 : $P_{6020} = (3, 27, 4, 1)$
39 : $P_{2254} = (13, 5, 1, 1)$	93 : $P_{6042} = (25, 27, 4, 1)$
40 : $P_{2284} = (11, 6, 1, 1)$	94 : $P_{6091} = (10, 29, 4, 1)$
41 : $P_{2399} = (30, 9, 1, 1)$	95 : $P_{6335} = (30, 4, 5, 1)$
42 : $P_{2452} = (19, 11, 1, 1)$	96 : $P_{6382} = (13, 6, 5, 1)$
43 : $P_{2467} = (2, 12, 1, 1)$	97 : $P_{6418} = (17, 7, 5, 1)$
44 : $P_{2569} = (8, 15, 1, 1)$	98 : $P_{6434} = (1, 8, 5, 1)$
45 : $P_{2652} = (27, 17, 1, 1)$	99 : $P_{6501} = (4, 10, 5, 1)$
46 : $P_{2671} = (14, 18, 1, 1)$	100 : $P_{6536} = (7, 11, 5, 1)$
47 : $P_{2736} = (15, 20, 1, 1)$	101 : $P_{6545} = (16, 11, 5, 1)$
48 : $P_{2803} = (18, 22, 1, 1)$	102 : $P_{6581} = (20, 12, 5, 1)$
49 : $P_{2890} = (9, 25, 1, 1)$	103 : $P_{6703} = (14, 16, 5, 1)$
50 : $P_{2917} = (4, 26, 1, 1)$	104 : $P_{6717} = (28, 16, 5, 1)$
51 : $P_{3040} = (31, 29, 1, 1)$	105 : $P_{6811} = (26, 19, 5, 1)$
52 : $P_{3083} = (10, 31, 1, 1)$	106 : $P_{6853} = (4, 21, 5, 1)$
53 : $P_{3141} = (4, 1, 2, 1)$	107 : $P_{7253} = (20, 1, 6, 1)$
54 : $P_{3194} = (25, 2, 2, 1)$	108 : $P_{7323} = (26, 3, 6, 1)$
55 : $P_{3368} = (7, 8, 2, 1)$	109 : $P_{7328} = (31, 3, 6, 1)$
56 : $P_{3374} = (13, 8, 2, 1)$	110 : $P_{7332} = (3, 4, 6, 1)$
57 : $P_{3439} = (14, 10, 2, 1)$	111 : $P_{7363} = (2, 5, 6, 1)$
58 : $P_{3465} = (8, 11, 2, 1)$	112 : $P_{7384} = (23, 5, 6, 1)$
59 : $P_{3486} = (29, 11, 2, 1)$	113 : $P_{7589} = (4, 12, 6, 1)$
60 : $P_{3543} = (22, 13, 2, 1)$	114 : $P_{7727} = (14, 16, 6, 1)$
61 : $P_{3547} = (26, 13, 2, 1)$	115 : $P_{7731} = (18, 16, 6, 1)$
62 : $P_{3678} = (29, 17, 2, 1)$	116 : $P_{7939} = (2, 23, 6, 1)$
63 : $P_{3700} = (19, 18, 2, 1)$	117 : $P_{7994} = (25, 24, 6, 1)$
64 : $P_{3753} = (8, 20, 2, 1)$	118 : $P_{8024} = (23, 25, 6, 1)$
65 : $P_{3897} = (24, 24, 2, 1)$	119 : $P_{8117} = (20, 28, 6, 1)$
66 : $P_{3973} = (4, 27, 2, 1)$	120 : $P_{8120} = (23, 28, 6, 1)$
67 : $P_{4004} = (3, 28, 2, 1)$	121 : $P_{8153} = (24, 29, 6, 1)$

122 : $P_{8222} = (29, 31, 6, 1)$
 123 : $P_{8278} = (21, 1, 7, 1)$
 124 : $P_{8313} = (24, 2, 7, 1)$
 125 : $P_{8369} = (16, 4, 7, 1)$
 126 : $P_{8623} = (14, 12, 7, 1)$
 127 : $P_{8651} = (10, 13, 7, 1)$
 128 : $P_{8674} = (1, 14, 7, 1)$
 129 : $P_{8718} = (13, 15, 7, 1)$
 130 : $P_{8729} = (24, 15, 7, 1)$
 131 : $P_{8772} = (3, 17, 7, 1)$
 132 : $P_{8809} = (8, 18, 7, 1)$
 133 : $P_{9062} = (5, 26, 7, 1)$
 134 : $P_{9078} = (21, 26, 7, 1)$
 135 : $P_{9215} = (30, 30, 7, 1)$
 136 : $P_{9262} = (13, 0, 8, 1)$
 137 : $P_{9571} = (2, 10, 8, 1)$
 138 : $P_{9599} = (30, 10, 8, 1)$
 139 : $P_{9650} = (17, 12, 8, 1)$
 140 : $P_{9732} = (3, 15, 8, 1)$
 141 : $P_{9934} = (13, 21, 8, 1)$
 142 : $P_{9935} = (14, 21, 8, 1)$
 143 : $P_{9985} = (0, 23, 8, 1)$
 144 : $P_{10022} = (5, 24, 8, 1)$
 145 : $P_{10040} = (23, 24, 8, 1)$
 146 : $P_{10075} = (26, 25, 8, 1)$
 147 : $P_{10098} = (17, 26, 8, 1)$
 148 : $P_{10107} = (26, 26, 8, 1)$
 149 : $P_{10195} = (18, 29, 8, 1)$
 150 : $P_{10215} = (6, 30, 8, 1)$
 151 : $P_{10217} = (8, 30, 8, 1)$
 152 : $P_{10296} = (23, 0, 9, 1)$
 153 : $P_{10421} = (20, 4, 9, 1)$
 154 : $P_{10441} = (8, 5, 9, 1)$
 155 : $P_{10443} = (10, 5, 9, 1)$
 156 : $P_{10498} = (1, 7, 9, 1)$
 157 : $P_{10536} = (7, 8, 9, 1)$
 158 : $P_{10544} = (15, 8, 9, 1)$
 159 : $P_{10829} = (12, 17, 9, 1)$
 160 : $P_{10845} = (28, 17, 9, 1)$
 161 : $P_{10884} = (3, 19, 9, 1)$
 162 : $P_{10913} = (0, 20, 9, 1)$
 163 : $P_{10972} = (27, 21, 9, 1)$
 164 : $P_{11120} = (15, 26, 9, 1)$
 165 : $P_{11146} = (9, 27, 9, 1)$
 166 : $P_{11149} = (12, 27, 9, 1)$
 167 : $P_{11189} = (20, 28, 9, 1)$
 168 : $P_{11324} = (27, 0, 10, 1)$
 169 : $P_{11396} = (3, 3, 10, 1)$
 170 : $P_{11405} = (12, 3, 10, 1)$
 171 : $P_{11492} = (3, 6, 10, 1)$
 172 : $P_{11538} = (17, 7, 10, 1)$
 173 : $P_{11545} = (24, 7, 10, 1)$
 174 : $P_{11749} = (4, 14, 10, 1)$
 175 : $P_{11764} = (19, 14, 10, 1)$

176 : $P_{11915} = (10, 19, 10, 1)$
 177 : $P_{11925} = (20, 19, 10, 1)$
 178 : $P_{12010} = (9, 22, 10, 1)$
 179 : $P_{12065} = (0, 24, 10, 1)$
 180 : $P_{12141} = (12, 26, 10, 1)$
 181 : $P_{12220} = (27, 28, 10, 1)$
 182 : $P_{12223} = (30, 28, 10, 1)$
 183 : $P_{12294} = (5, 31, 10, 1)$
 184 : $P_{12345} = (24, 0, 11, 1)$
 185 : $P_{12396} = (11, 2, 11, 1)$
 186 : $P_{12411} = (26, 2, 11, 1)$
 187 : $P_{12448} = (31, 3, 11, 1)$
 188 : $P_{12582} = (5, 8, 11, 1)$
 189 : $P_{12662} = (21, 10, 11, 1)$
 190 : $P_{12672} = (31, 10, 11, 1)$
 191 : $P_{12728} = (23, 12, 11, 1)$
 192 : $P_{12731} = (26, 12, 11, 1)$
 193 : $P_{12862} = (29, 16, 11, 1)$
 194 : $P_{12875} = (10, 17, 11, 1)$
 195 : $P_{12879} = (14, 17, 11, 1)$
 196 : $P_{12994} = (1, 21, 11, 1)$
 197 : $P_{13086} = (29, 23, 11, 1)$
 198 : $P_{13219} = (2, 28, 11, 1)$
 199 : $P_{13249} = (0, 29, 11, 1)$
 200 : $P_{13463} = (22, 3, 12, 1)$
 201 : $P_{13670} = (5, 10, 12, 1)$
 202 : $P_{13769} = (8, 13, 12, 1)$
 203 : $P_{13794} = (1, 14, 12, 1)$
 204 : $P_{14094} = (13, 23, 12, 1)$
 205 : $P_{14228} = (19, 27, 12, 1)$
 206 : $P_{14233} = (24, 27, 12, 1)$
 207 : $P_{14267} = (26, 28, 12, 1)$
 208 : $P_{14275} = (2, 29, 12, 1)$
 209 : $P_{14318} = (13, 30, 12, 1)$
 210 : $P_{14364} = (27, 31, 12, 1)$
 211 : $P_{14365} = (28, 31, 12, 1)$
 212 : $P_{14428} = (27, 1, 13, 1)$
 213 : $P_{14471} = (6, 3, 13, 1)$
 214 : $P_{14514} = (17, 4, 13, 1)$
 215 : $P_{14517} = (20, 4, 13, 1)$
 216 : $P_{14605} = (12, 7, 13, 1)$
 217 : $P_{14814} = (29, 13, 13, 1)$
 218 : $P_{14863} = (14, 15, 13, 1)$
 219 : $P_{14908} = (27, 16, 13, 1)$
 220 : $P_{14951} = (6, 18, 13, 1)$
 221 : $P_{14975} = (30, 18, 13, 1)$
 222 : $P_{14985} = (8, 19, 13, 1)$
 223 : $P_{15199} = (30, 25, 13, 1)$
 224 : $P_{15293} = (28, 28, 13, 1)$
 225 : $P_{15333} = (4, 30, 13, 1)$
 226 : $P_{15352} = (23, 30, 13, 1)$
 227 : $P_{15395} = (2, 0, 14, 1)$
 228 : $P_{15515} = (26, 3, 14, 1)$
 229 : $P_{15558} = (5, 5, 14, 1)$

230 : $P_{15579} = (26, 5, 14, 1)$
 231 : $P_{15617} = (0, 7, 14, 1)$
 232 : $P_{15663} = (14, 8, 14, 1)$
 233 : $P_{15678} = (29, 8, 14, 1)$
 234 : $P_{15986} = (17, 18, 14, 1)$
 235 : $P_{16038} = (5, 20, 14, 1)$
 236 : $P_{16072} = (7, 21, 14, 1)$
 237 : $P_{16077} = (12, 21, 14, 1)$
 238 : $P_{16131} = (2, 23, 14, 1)$
 239 : $P_{16148} = (19, 23, 14, 1)$
 240 : $P_{16204} = (11, 25, 14, 1)$
 241 : $P_{16361} = (8, 30, 14, 1)$
 242 : $P_{16369} = (16, 30, 14, 1)$
 243 : $P_{16424} = (7, 0, 15, 1)$
 244 : $P_{16548} = (3, 4, 15, 1)$
 245 : $P_{16560} = (15, 4, 15, 1)$
 246 : $P_{16595} = (18, 5, 15, 1)$
 247 : $P_{16754} = (17, 10, 15, 1)$
 248 : $P_{16815} = (14, 12, 15, 1)$
 249 : $P_{16831} = (30, 12, 15, 1)$
 250 : $P_{16855} = (22, 13, 15, 1)$
 251 : $P_{16883} = (18, 14, 15, 1)$
 252 : $P_{16893} = (28, 14, 15, 1)$
 253 : $P_{17121} = (0, 22, 15, 1)$
 254 : $P_{17157} = (4, 23, 15, 1)$
 255 : $P_{17207} = (22, 24, 15, 1)$
 256 : $P_{17252} = (3, 26, 15, 1)$
 257 : $P_{17273} = (24, 26, 15, 1)$
 258 : $P_{17314} = (1, 28, 15, 1)$
 259 : $P_{17486} = (13, 1, 16, 1)$
 260 : $P_{17510} = (5, 2, 16, 1)$
 261 : $P_{17511} = (6, 2, 16, 1)$
 262 : $P_{17582} = (13, 4, 16, 1)$
 263 : $P_{17803} = (10, 11, 16, 1)$
 264 : $P_{17891} = (2, 14, 16, 1)$
 265 : $P_{17917} = (28, 14, 16, 1)$
 266 : $P_{17973} = (20, 16, 16, 1)$
 267 : $P_{18134} = (21, 21, 16, 1)$
 268 : $P_{18159} = (14, 22, 16, 1)$
 269 : $P_{18226} = (17, 24, 16, 1)$
 270 : $P_{18298} = (25, 26, 16, 1)$
 271 : $P_{18420} = (19, 30, 16, 1)$
 272 : $P_{18447} = (14, 31, 16, 1)$
 273 : $P_{18458} = (25, 31, 16, 1)$
 274 : $P_{18724} = (3, 8, 17, 1)$
 275 : $P_{18786} = (1, 10, 17, 1)$
 276 : $P_{18904} = (23, 13, 17, 1)$
 277 : $P_{18911} = (30, 13, 17, 1)$
 278 : $P_{18929} = (16, 14, 17, 1)$
 279 : $P_{18958} = (13, 15, 17, 1)$
 280 : $P_{18966} = (21, 15, 17, 1)$
 281 : $P_{18996} = (19, 16, 17, 1)$
 282 : $P_{19132} = (27, 20, 17, 1)$
 283 : $P_{19149} = (12, 21, 17, 1)$

284 : $P_{19326} = (29, 26, 17, 1)$
 285 : $P_{19377} = (16, 28, 17, 1)$
 286 : $P_{19517} = (28, 0, 18, 1)$
 287 : $P_{19559} = (6, 2, 18, 1)$
 288 : $P_{19593} = (8, 3, 18, 1)$
 289 : $P_{19604} = (19, 3, 18, 1)$
 290 : $P_{19666} = (17, 5, 18, 1)$
 291 : $P_{19670} = (21, 5, 18, 1)$
 292 : $P_{19681} = (0, 6, 18, 1)$
 293 : $P_{19726} = (13, 7, 18, 1)$
 294 : $P_{19884} = (11, 12, 18, 1)$
 295 : $P_{19922} = (17, 13, 18, 1)$
 296 : $P_{19923} = (18, 13, 18, 1)$
 297 : $P_{20108} = (11, 19, 18, 1)$
 298 : $P_{20121} = (24, 19, 18, 1)$
 299 : $P_{20167} = (6, 21, 18, 1)$
 300 : $P_{20258} = (1, 24, 18, 1)$
 301 : $P_{20475} = (26, 30, 18, 1)$
 302 : $P_{20529} = (16, 0, 19, 1)$
 303 : $P_{20747} = (10, 7, 19, 1)$
 304 : $P_{20753} = (16, 7, 19, 1)$
 305 : $P_{20783} = (14, 8, 19, 1)$
 306 : $P_{20796} = (27, 8, 19, 1)$
 307 : $P_{20891} = (26, 11, 19, 1)$
 308 : $P_{20902} = (5, 12, 19, 1)$
 309 : $P_{20909} = (12, 12, 19, 1)$
 310 : $P_{20980} = (19, 14, 19, 1)$
 311 : $P_{20986} = (25, 14, 19, 1)$
 312 : $P_{21062} = (5, 17, 19, 1)$
 313 : $P_{21184} = (31, 20, 19, 1)$
 314 : $P_{21229} = (12, 22, 19, 1)$
 315 : $P_{21252} = (3, 23, 19, 1)$
 316 : $P_{21277} = (28, 23, 19, 1)$
 317 : $P_{21409} = (0, 28, 19, 1)$
 318 : $P_{21598} = (29, 1, 20, 1)$
 319 : $P_{21700} = (3, 5, 20, 1)$
 320 : $P_{21715} = (18, 5, 20, 1)$
 321 : $P_{21753} = (24, 6, 20, 1)$
 322 : $P_{21767} = (6, 7, 20, 1)$
 323 : $P_{21962} = (9, 13, 20, 1)$
 324 : $P_{21983} = (30, 13, 20, 1)$
 325 : $P_{22054} = (5, 16, 20, 1)$
 326 : $P_{22085} = (4, 17, 20, 1)$
 327 : $P_{22105} = (24, 17, 20, 1)$
 328 : $P_{22135} = (22, 18, 20, 1)$
 329 : $P_{22248} = (7, 22, 20, 1)$
 330 : $P_{22297} = (24, 23, 20, 1)$
 331 : $P_{22302} = (29, 23, 20, 1)$
 332 : $P_{22309} = (4, 24, 20, 1)$
 333 : $P_{22385} = (16, 26, 20, 1)$
 334 : $P_{22621} = (28, 1, 21, 1)$
 335 : $P_{22674} = (17, 3, 21, 1)$
 336 : $P_{22685} = (28, 3, 21, 1)$
 337 : $P_{22696} = (7, 4, 21, 1)$

338 : $P_{22859} = (10, 9, 21, 1)$
 339 : $P_{22950} = (5, 12, 21, 1)$
 340 : $P_{23086} = (13, 16, 21, 1)$
 341 : $P_{23188} = (19, 19, 21, 1)$
 342 : $P_{23423} = (30, 26, 21, 1)$
 343 : $P_{23439} = (14, 27, 21, 1)$
 344 : $P_{23522} = (1, 30, 21, 1)$
 345 : $P_{23560} = (7, 31, 21, 1)$
 346 : $P_{23580} = (27, 31, 21, 1)$
 347 : $P_{23642} = (25, 1, 22, 1)$
 348 : $P_{23657} = (8, 2, 22, 1)$
 349 : $P_{23664} = (15, 2, 22, 1)$
 350 : $P_{23772} = (27, 5, 22, 1)$
 351 : $P_{23805} = (28, 6, 22, 1)$
 352 : $P_{23830} = (21, 7, 22, 1)$
 353 : $P_{23834} = (25, 7, 22, 1)$
 354 : $P_{23943} = (6, 11, 22, 1)$
 355 : $P_{23980} = (11, 12, 22, 1)$
 356 : $P_{23986} = (17, 12, 22, 1)$
 357 : $P_{24270} = (13, 21, 22, 1)$
 358 : $P_{24430} = (13, 26, 22, 1)$
 359 : $P_{24438} = (21, 26, 22, 1)$
 360 : $P_{24461} = (12, 27, 22, 1)$
 361 : $P_{24510} = (29, 28, 22, 1)$
 362 : $P_{24534} = (21, 29, 22, 1)$
 363 : $P_{24665} = (24, 1, 23, 1)$
 364 : $P_{24717} = (12, 3, 23, 1)$
 365 : $P_{24756} = (19, 4, 23, 1)$
 366 : $P_{24777} = (8, 5, 23, 1)$
 367 : $P_{24866} = (1, 8, 23, 1)$
 368 : $P_{24901} = (4, 9, 23, 1)$
 369 : $P_{24925} = (28, 9, 23, 1)$
 370 : $P_{24939} = (10, 10, 23, 1)$
 371 : $P_{25053} = (28, 13, 23, 1)$
 372 : $P_{25119} = (30, 15, 23, 1)$
 373 : $P_{25177} = (24, 17, 23, 1)$
 374 : $P_{25179} = (26, 17, 23, 1)$
 375 : $P_{25475} = (2, 27, 23, 1)$
 376 : $P_{25672} = (7, 1, 24, 1)$
 377 : $P_{25701} = (4, 2, 24, 1)$
 378 : $P_{25819} = (26, 5, 24, 1)$
 379 : $P_{25954} = (1, 10, 24, 1)$
 380 : $P_{26001} = (16, 11, 24, 1)$
 381 : $P_{26008} = (23, 11, 24, 1)$
 382 : $P_{26020} = (3, 12, 24, 1)$
 383 : $P_{26024} = (7, 12, 24, 1)$
 384 : $P_{26095} = (14, 14, 24, 1)$
 385 : $P_{26153} = (8, 16, 24, 1)$
 386 : $P_{26187} = (10, 17, 24, 1)$
 387 : $P_{26520} = (23, 27, 24, 1)$
 388 : $P_{26644} = (19, 31, 24, 1)$
 389 : $P_{26695} = (6, 1, 25, 1)$
 390 : $P_{26747} = (26, 2, 25, 1)$
 391 : $P_{26780} = (27, 3, 25, 1)$

392 : $P_{26781} = (28, 3, 25, 1)$
 393 : $P_{26795} = (10, 4, 25, 1)$
 394 : $P_{26816} = (31, 4, 25, 1)$
 395 : $P_{27157} = (20, 15, 25, 1)$
 396 : $P_{27203} = (2, 17, 25, 1)$
 397 : $P_{27320} = (23, 20, 25, 1)$
 398 : $P_{27335} = (6, 21, 25, 1)$
 399 : $P_{27357} = (28, 21, 25, 1)$
 400 : $P_{27389} = (28, 22, 25, 1)$
 401 : $P_{27415} = (22, 23, 25, 1)$
 402 : $P_{27501} = (12, 26, 25, 1)$
 403 : $P_{27504} = (15, 26, 25, 1)$
 404 : $P_{27580} = (27, 28, 25, 1)$
 405 : $P_{27752} = (7, 2, 26, 1)$
 406 : $P_{27753} = (8, 2, 26, 1)$
 407 : $P_{27866} = (25, 5, 26, 1)$
 408 : $P_{28146} = (17, 14, 26, 1)$
 409 : $P_{28259} = (2, 18, 26, 1)$
 410 : $P_{28280} = (23, 18, 26, 1)$
 411 : $P_{28316} = (27, 19, 26, 1)$
 412 : $P_{28389} = (4, 22, 26, 1)$
 413 : $P_{28420} = (3, 23, 26, 1)$
 414 : $P_{28476} = (27, 24, 26, 1)$
 415 : $P_{28555} = (10, 27, 26, 1)$
 416 : $P_{28642} = (1, 30, 26, 1)$
 417 : $P_{28739} = (2, 1, 27, 1)$
 418 : $P_{28885} = (20, 5, 27, 1)$
 419 : $P_{28916} = (19, 6, 27, 1)$
 420 : $P_{28971} = (10, 8, 27, 1)$
 421 : $P_{29012} = (19, 9, 27, 1)$
 422 : $P_{29013} = (20, 9, 27, 1)$
 423 : $P_{29123} = (2, 13, 27, 1)$
 424 : $P_{29229} = (12, 16, 27, 1)$
 425 : $P_{29246} = (29, 16, 27, 1)$
 426 : $P_{29329} = (16, 19, 27, 1)$
 427 : $P_{29337} = (24, 19, 27, 1)$
 428 : $P_{29403} = (26, 21, 27, 1)$
 429 : $P_{29464} = (23, 23, 27, 1)$
 430 : $P_{29591} = (22, 27, 27, 1)$
 431 : $P_{29727} = (30, 31, 27, 1)$
 432 : $P_{29784} = (23, 1, 28, 1)$
 433 : $P_{29823} = (30, 2, 28, 1)$
 434 : $P_{29844} = (19, 3, 28, 1)$
 435 : $P_{29901} = (12, 5, 28, 1)$
 436 : $P_{29912} = (23, 5, 28, 1)$
 437 : $P_{29993} = (8, 8, 28, 1)$
 438 : $P_{30095} = (14, 11, 28, 1)$
 439 : $P_{30172} = (27, 13, 28, 1)$
 440 : $P_{30262} = (21, 16, 28, 1)$
 441 : $P_{30307} = (2, 18, 28, 1)$
 442 : $P_{30326} = (21, 18, 28, 1)$
 443 : $P_{30338} = (1, 19, 28, 1)$
 444 : $P_{30578} = (17, 26, 28, 1)$
 445 : $P_{30807} = (22, 1, 29, 1)$

446 : $P_{30862} = (13, 3, 29, 1)$
 447 : $P_{30993} = (16, 7, 29, 1)$
 448 : $P_{31066} = (25, 9, 29, 1)$
 449 : $P_{31144} = (7, 12, 29, 1)$
 450 : $P_{31153} = (16, 12, 29, 1)$
 451 : $P_{31186} = (17, 13, 29, 1)$
 452 : $P_{31302} = (5, 17, 29, 1)$
 453 : $P_{31306} = (9, 17, 29, 1)$
 454 : $P_{31400} = (7, 20, 29, 1)$
 455 : $P_{31445} = (20, 21, 29, 1)$
 456 : $P_{31528} = (7, 24, 29, 1)$
 457 : $P_{31543} = (22, 24, 29, 1)$
 458 : $P_{31574} = (21, 25, 29, 1)$
 459 : $P_{31628} = (11, 27, 29, 1)$
 460 : $P_{31636} = (19, 27, 29, 1)$
 461 : $P_{31781} = (4, 0, 30, 1)$
 462 : $P_{31940} = (3, 5, 30, 1)$
 463 : $P_{31984} = (15, 6, 30, 1)$
 464 : $P_{32077} = (12, 9, 30, 1)$
 465 : $P_{32119} = (22, 10, 30, 1)$
 466 : $P_{32127} = (30, 10, 30, 1)$
 467 : $P_{32324} = (3, 17, 30, 1)$
 468 : $P_{32338} = (17, 17, 30, 1)$
 469 : $P_{32395} = (10, 19, 30, 1)$

470 : $P_{32398} = (13, 19, 30, 1)$
 471 : $P_{32449} = (0, 21, 30, 1)$
 472 : $P_{32549} = (4, 24, 30, 1)$
 473 : $P_{32553} = (8, 24, 30, 1)$
 474 : $P_{32694} = (21, 28, 30, 1)$
 475 : $P_{32699} = (26, 28, 30, 1)$
 476 : $P_{32722} = (17, 29, 30, 1)$
 477 : $P_{32822} = (21, 0, 31, 1)$
 478 : $P_{32902} = (5, 3, 31, 1)$
 479 : $P_{32904} = (7, 3, 31, 1)$
 480 : $P_{33050} = (25, 7, 31, 1)$
 481 : $P_{33261} = (12, 14, 31, 1)$
 482 : $P_{33318} = (5, 16, 31, 1)$
 483 : $P_{33344} = (31, 16, 31, 1)$
 484 : $P_{33354} = (9, 17, 31, 1)$
 485 : $P_{33538} = (1, 23, 31, 1)$
 486 : $P_{33585} = (16, 24, 31, 1)$
 487 : $P_{33601} = (0, 25, 31, 1)$
 488 : $P_{33652} = (19, 26, 31, 1)$
 489 : $P_{33663} = (30, 26, 31, 1)$
 490 : $P_{33690} = (25, 27, 31, 1)$
 491 : $P_{33770} = (9, 30, 31, 1)$
 492 : $P_{33784} = (23, 30, 31, 1)$

Line Intersection Graph

		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
		a_1	a_2	a_3	a_4	a_5	a_6	b_1	b_2	b_3	b_4	b_5	b_6	c_{12}	c_{13}	c_{14}	c_{15}	c_{16}	c_{23}	c_{24}	c_{25}	c_{26}	c_{34}	c_{35}	c_{36}	c_{45}	c_{46}	c_{56}
0	a_1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
1	a_2	0	0	0	0	0	0	1	0	1	1	1	1	1	0	0	0	0	1	1	1	1	0	0	0	0	0	0
2	a_3	0	0	0	0	0	0	1	1	0	1	1	1	0	1	0	0	0	1	0	0	0	1	1	1	0	0	0
3	a_4	0	0	0	0	0	0	1	1	1	0	1	1	0	0	1	0	0	0	1	0	0	1	0	0	1	1	0
4	a_5	0	0	0	0	0	0	1	1	1	1	0	1	0	0	0	1	0	0	0	1	0	0	1	0	1	0	1
5	a_6	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	1
6	b_1	0	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
7	b_2	1	0	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1	0	0	0	0	0	0
8	b_3	1	1	0	1	1	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	1	1	0	0	0
9	b_4	1	1	1	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	1	1	0
10	b_5	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	0	1
11	b_6	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	1
12	c_{12}	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
13	c_{13}	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	1	1	1
14	c_{14}	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	0	1
15	c_{15}	1	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	1	1	0	1	1	0	1	0	1	0
16	c_{16}	1	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	1	1	1	0	1	1	0	1	0	0
17	c_{23}	0	1	1	0	0	0	0	1	1	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1	1
18	c_{24}	0	1	0	1	0	0	0	1	0	1	0	0	0	1	0	1	1	0	0	0	0	0	1	1	0	0	1
19	c_{25}	0	1	0	0	1	0	0	1	0	0	1	0	0	1	1	0	1	0	0	0	0	1	0	1	0	1	0
20	c_{26}	0	1	0	0	0	1	0	1	0	0	0	1	0	1	1	1	0	0	0	0	0	1	1	0	1	0	0
21	c_{34}	0	0	1	1	0	0	0	0	1	1	0	0	1	0	0	1	1	0	0	1	1	0	0	0	0	0	1
22	c_{35}	0	0	1	0	1	0	0	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	0	1	0
23	c_{36}	0	0	1	0	0	1	0	0	1	0	0	1	1	0	1	1	0	0	1	1	0	0	0	0	1	0	0
24	c_{45}	0	0	0	1	1	0	0	0	0	1	1	0	1	1	0	0	1	1	0	0	1	0	0	1	0	0	0
25	c_{46}	0	0	0	1	0	1	0	0	0	1	0	1	1	1	0	1	0	1	0	1	0	0	1	0	0	0	0
26	c_{56}	0	0	0	0	1	1	0	0	0	0	1	1	1	1	1	0	0	1	1	0	0	1	0	0	0	0	0

Neighbor sets in the line intersection graph:

Line 0 intersects

Line	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}
in point	P_{24291}	P_{31261}	P_{28370}	P_{32420}	P_{1117}	P_{9371}	P_{29931}	P_{17240}	P_{17626}	P_{5162}

Line 1 intersects

Line	ℓ_6	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}
in point	P_{27809}	P_{20223}	P_{5056}	P_{21829}	P_{1108}	P_{15799}	P_{30619}	P_{2411}	P_{22653}	P_{17452}

Line 2 intersects

Line	ℓ_6	ℓ_7	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{13}	ℓ_{17}	ℓ_{21}	ℓ_{22}	ℓ_{23}
in point	P_{20136}	P_{29109}	P_{7409}	P_{27257}	P_{1094}	P_{6939}	P_{9970}	P_{15942}	P_{26591}	P_{14384}

Line 3 intersects

Line	ℓ_6	ℓ_7	ℓ_8	ℓ_{10}	ℓ_{11}	ℓ_{14}	ℓ_{18}	ℓ_{21}	ℓ_{24}	ℓ_{25}
in point	P_{9429}	P_{13580}	P_{27676}	P_{8754}	P_{1105}	P_{19329}	P_{2708}	P_{26056}	P_{17067}	P_{3123}

Line 4 intersects

Line	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{11}	ℓ_{15}	ℓ_{19}	ℓ_{22}	ℓ_{24}	ℓ_{26}
in point	P_{32178}	P_{19236}	P_{12109}	P_{8948}	P_{1106}	P_{22190}	P_{11222}	P_{3966}	P_{7496}	P_{28736}

Line 5 intersects

Line	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{16}	ℓ_{20}	ℓ_{23}	ℓ_{25}	ℓ_{26}
in point	P_{17982}	P_{5893}	P_{22899}	P_{550}	P_{30186}	P_{7779}	P_{24600}	P_{11092}	P_{15611}	P_{25766}

Line 6 intersects

Line	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}
in point	P_{27809}	P_{20136}	P_{9429}	P_{32178}	P_{17982}	P_{6083}	P_{33277}	P_{28910}	P_{3658}	P_{9110}

Line 7 intersects

Line	ℓ_0	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_{12}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}
in point	P_{24291}	P_{29109}	P_{13580}	P_{19236}	P_{5893}	P_{18288}	P_{111}	P_{3038}	P_{20472}	P_{25263}

Line 8 intersects

Line	ℓ_0	ℓ_1	ℓ_3	ℓ_4	ℓ_5	ℓ_{13}	ℓ_{17}	ℓ_{21}	ℓ_{22}	ℓ_{23}
in point	P_{31261}	P_{20223}	P_{27676}	P_{12109}	P_{22899}	P_{4003}	P_{8512}	P_{5301}	P_{189}	P_{24676}

Line 9 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_4	ℓ_5	ℓ_{14}	ℓ_{18}	ℓ_{21}	ℓ_{24}	ℓ_{25}
in point	P_{28370}	P_{5056}	P_{7409}	P_{8948}	P_{550}	P_{12584}	P_{2906}	P_{28883}	P_{14606}	P_{5271}

Line 10 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_5	ℓ_{15}	ℓ_{19}	ℓ_{22}	ℓ_{24}	ℓ_{26}
in point	P_{32420}	P_{21829}	P_{27257}	P_{8754}	P_{30186}	P_{456}	P_{14807}	P_{18225}	P_{25580}	P_{12521}

Line 11 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_{16}	ℓ_{20}	ℓ_{23}	ℓ_{25}	ℓ_{26}
in point	P_{1117}	P_{1108}	P_{1094}	P_{1105}	P_{1106}	P_{1121}	P_{1092}	P_{1099}	P_{1103}	P_{1101}

Line 12 intersects

Line	ℓ_0	ℓ_1	ℓ_6	ℓ_7	ℓ_{21}	ℓ_{22}	ℓ_{23}	ℓ_{24}	ℓ_{25}	ℓ_{26}
in point	P_{9371}	P_{15799}	P_{6083}	P_{18288}	P_{15185}	P_{10905}	P_{29880}	P_{29594}	P_{13053}	P_{6593}

Line 13 intersects

Line	ℓ_0	ℓ_2	ℓ_6	ℓ_8	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{24}	ℓ_{25}	ℓ_{26}
in point	P_{29931}	P_{6939}	P_{33277}	P_{4003}	P_{2741}	P_{5548}	P_{14919}	P_{916}	P_{31708}	P_{19242}

Line 14 intersects

Line	ℓ_0	ℓ_3	ℓ_6	ℓ_9	ℓ_{17}	ℓ_{19}	ℓ_{20}	ℓ_{22}	ℓ_{23}	ℓ_{26}
in point	P_{17240}	P_{19329}	P_{28910}	P_{12584}	P_{3175}	P_{18149}	P_{11460}	P_{14496}	P_{32634}	P_{25145}

Line 15 intersects

Line	ℓ_0	ℓ_4	ℓ_6	ℓ_{10}	ℓ_{17}	ℓ_{18}	ℓ_{20}	ℓ_{21}	ℓ_{23}	ℓ_{25}
in point	P_{17626}	P_{22190}	P_{3658}	P_{456}	P_{29404}	P_{2279}	P_{5037}	P_{16758}	P_{6931}	P_{23369}

Line 16 intersects

Line	ℓ_0	ℓ_5	ℓ_6	ℓ_{11}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{21}	ℓ_{22}	ℓ_{24}
in point	P_{5162}	P_{7779}	P_{9110}	P_{1121}	P_{33743}	P_{2345}	P_{11870}	P_{13409}	P_{28368}	P_{22989}

Line 17 intersects

Line	ℓ_1	ℓ_2	ℓ_7	ℓ_8	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{24}	ℓ_{25}	ℓ_{26}
in point	P_{30619}	P_{9970}	P_{111}	P_{8512}	P_{3175}	P_{29404}	P_{33743}	P_{26256}	P_{21910}	P_{24078}

Line 18 intersects

Line	ℓ_1	ℓ_3	ℓ_7	ℓ_9	ℓ_{13}	ℓ_{15}	ℓ_{16}	ℓ_{22}	ℓ_{23}	ℓ_{26}
in point	P_{2411}	P_{2708}	P_{3038}	P_{2906}	P_{2741}	P_{2279}	P_{2345}	P_{2807}	P_{2543}	P_{3071}

Line 19 intersects

Line	ℓ_1	ℓ_4	ℓ_7	ℓ_{10}	ℓ_{13}	ℓ_{14}	ℓ_{16}	ℓ_{21}	ℓ_{23}	ℓ_{25}
in point	P_{22653}	P_{11222}	P_{20472}	P_{14807}	P_{5548}	P_{18149}	P_{11870}	P_{3772}	P_{4641}	P_{21357}

Line 20 intersects

Line	ℓ_1	ℓ_5	ℓ_7	ℓ_{11}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{21}	ℓ_{22}	ℓ_{24}
in point	P_{17452}	P_{24600}	P_{25263}	P_{1092}	P_{14919}	P_{11460}	P_{5037}	P_{33017}	P_{27461}	P_{21446}

Line 21 intersects

Line	ℓ_2	ℓ_3	ℓ_8	ℓ_9	ℓ_{12}	ℓ_{15}	ℓ_{16}	ℓ_{19}	ℓ_{20}	ℓ_{26}
in point	P_{15942}	P_{26056}	P_{5301}	P_{28883}	P_{15185}	P_{16758}	P_{13409}	P_{3772}	P_{33017}	P_{20615}

Line 22 intersects

Line	ℓ_2	ℓ_4	ℓ_8	ℓ_{10}	ℓ_{12}	ℓ_{14}	ℓ_{16}	ℓ_{18}	ℓ_{20}	ℓ_{25}
in point	P_{26591}	P_{3966}	P_{189}	P_{18225}	P_{10905}	P_{14496}	P_{28368}	P_{2807}	P_{27461}	P_{13574}

Line 23 intersects

Line	ℓ_2	ℓ_5	ℓ_8	ℓ_{11}	ℓ_{12}	ℓ_{14}	ℓ_{15}	ℓ_{18}	ℓ_{19}	ℓ_{24}
in point	P_{14384}	P_{11092}	P_{24676}	P_{1099}	P_{29880}	P_{32634}	P_{6931}	P_{2543}	P_{4641}	P_{31121}

Line 24 intersects

Line	ℓ_3	ℓ_4	ℓ_9	ℓ_{10}	ℓ_{12}	ℓ_{13}	ℓ_{16}	ℓ_{17}	ℓ_{20}	ℓ_{23}
in point	P_{17067}	P_{7496}	P_{14606}	P_{25580}	P_{29594}	P_{916}	P_{22989}	P_{26256}	P_{21446}	P_{31121}

Line 25 intersects

Line	ℓ_3	ℓ_5	ℓ_9	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{15}	ℓ_{17}	ℓ_{19}	ℓ_{22}
in point	P_{3123}	P_{15611}	P_{5271}	P_{1103}	P_{13053}	P_{31708}	P_{23369}	P_{21910}	P_{21357}	P_{13574}

Line 26 intersects

Line	ℓ_4	ℓ_5	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{17}	ℓ_{18}	ℓ_{21}
in point	P_{28736}	P_{25766}	P_{12521}	P_{1101}	P_{6593}	P_{19242}	P_{25145}	P_{24078}	P_{3071}	P_{20615}

The surface has 1249 points:

Too many to print.