Rank-65873 over GF(32)

January 15, 2021

The equation

The equation of the surface is :

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

(0, 1, 1, 1, 0, 0, 1, 0, 1, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0)
The point rank of the equation over GF(32) is -2112812987

General information

Number of lines	21
Number of points	1217
Number of singular points	1
Number of Eckardt points	0
Number of double points	75
Number of single points	537
Number of points off lines	604
Number of Hesse planes	0
Number of axes	0
Type of points on lines	33^{21}
Type of lines on points	6, 2^{75}, 1^{537}, 0^{604}

Singular Points

The surface has 1 singular points:

$0: \ P_{1059} = \mathbf{P}(1,0,0,1) = \mathbf{P}(1,0,0,1)$

The 21 Lines

The lines and their Pluecker coordinates are:

$$\ell_0 = \left[\begin{array}{cccc} 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 1 \end{array}\right]_{33857} = \left[\begin{array}{cccc} 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 1 \end{array}\right]_{33857} = \mathbf{Pl}(1,1,1,1,1,0)_{5058}$$

$$\ell_1 = \begin{bmatrix} 1 & 0 & \eta & \eta^{16} \\ 0 & 1 & \eta^{19} & \eta^{22} \end{bmatrix}_{916040} = \begin{bmatrix} 1 & 0 & 2 & 27 \\ 0 & 1 & 6 & 21 \end{bmatrix}_{916040} = \mathbf{Pl}(19,29,27,31,24,1)_{850013}$$

$$\ell_2 = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & \eta^{13} & \eta^{22} \end{bmatrix}_{34524} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 28 & 21 \end{bmatrix}_{34524} = \mathbf{Pl}(26,21,21,26,1,0)_{29728}$$

$$\ell_3 = \begin{bmatrix} 1 & 0 & \eta^2 & \eta \\ 0 & 1 & \eta^7 & \eta^{13} \end{bmatrix}_{72792} = \begin{bmatrix} 1 & 0 & 4 & 2 \\ 0 & 1 & 20 & 28 \end{bmatrix}_{72792} = \mathbf{Pl}(8,22,2,18,7,1)_{270736}$$

$$\ell_4 = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & \eta^{26} & \eta^{13} \end{bmatrix}_{34743} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 23 & 28 \end{bmatrix}_{34743} = \mathbf{Pl}(3,28,28,3,1,0)_{7819}$$

$$\ell_5 = \begin{bmatrix} 1 & 0 & \eta^{11} & \eta^{30} \\ 0 & 1 & \eta^{30} & \eta^{12} \end{bmatrix}_{616697} = \begin{bmatrix} 1 & 0 & 7 & 18 \\ 0 & 1 & 18 & 14 \end{bmatrix}_{616697} = \mathbf{Pl}(15,13,14,6,2,1)_{117603}$$

$$\ell_6 = \begin{bmatrix} 1 & 0 & \eta^3 & \eta^5 \\ 0 & 1 & \eta & \eta^9 \end{bmatrix}_{178410} = \begin{bmatrix} 1 & 0 & 8 & 5 \\ 0 & 1 & 2 & 26 \end{bmatrix}_{178410} = \mathbf{Pl}(2,18,9,4,10,1)_{375293}$$

$$\ell_7 = \begin{bmatrix} 1 & 0 & \eta^6 & \eta^{10} \\ 0 & 1 & \eta^2 & \eta^{18} \end{bmatrix}_{585678} = \begin{bmatrix} 1 & 0 & 10 & 17 \\ 0 & 1 & 4 & 3 \end{bmatrix}_{585678} = \mathbf{Pl}(4,9,11,16,14,1)_{507510}$$

$$\ell_8 = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & \eta^{11} & \eta^{21} \end{bmatrix}_{34599} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 7 & 24 \end{bmatrix}_{34599} = \mathbf{Pl}(17,24,24,17,1,0)_{21163}$$

$$\ell_9 = \begin{bmatrix} 1 & 0 & \eta^8 & \eta^4 \\ 0 & 1 & \eta^{28} & \eta^{21} \end{bmatrix}_{555715} = \begin{bmatrix} 1 & 0 & 13 & 16 \\ 0 & 1 & 22 & 24 \end{bmatrix}_{555715} = \mathbf{Pl}(14,6,16,11,28,1)_{970536}$$

$$\ell_{10} = \begin{bmatrix} 1 & 0 & \eta^{12} & \eta^{20} \\ 0 & 1 & \eta^4 & \eta^5 \end{bmatrix}_{420862} = \begin{bmatrix} 1 & 0 & 14 & 12 \\ 0 & 1 & 16 & 5 \end{bmatrix}_{420862} = \mathbf{Pl}(16,11,15,13,30,1)_{1035452}$$

$$\ell_{11} = \begin{bmatrix} 1 & 0 & \eta^4 & \eta^2 \\ 0 & 1 & \eta^{14} & \eta^{26} \end{bmatrix}_{152973} = \begin{bmatrix} 1 & 0 & 16 & 4 \\ 0 & 1 & 29 & 23 \end{bmatrix}_{152973} = \mathbf{Pl}(10,25,4,9,21,1)_{730561}$$

$$\ell_{12} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & \eta^{21} & \eta^{26} \end{bmatrix}_{34584} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 24 & 23 \end{bmatrix}_{34584} = \mathbf{Pl}(5,23,23,5,1,0)_{9588}$$

$$\ell_{13} = \begin{bmatrix} 1 & 0 & \eta^{17} & \eta^{18} \\ 0 & 1 & \eta^{16} & \eta^{20} \end{bmatrix}_{121966} = \begin{bmatrix} 1 & 0 & 19 & 3 \\ 0 & 1 & 27 & 12 \end{bmatrix}_{121966} = \mathbf{Pl}(27,31,18,2,8,1)_{318123}$$

$$\ell_{14} = \begin{bmatrix} 1 & 0 & \eta^{22} & \eta^{29} \\ 0 & 1 & \eta^{29} & \eta^{24} \end{bmatrix}_{327582} = \begin{bmatrix} 1 & 0 & 21 & 9 \\ 0 & 1 & 9 & 30 \end{bmatrix}_{327582} = \mathbf{Pl}(31,27,30,20,4,1)_{198095}$$

$$\ell_{15} = \begin{bmatrix} 1 & 0 & \eta^{26} & \eta^{23} \\ 0 & 1 & \eta^{23} & \eta^{3} \end{bmatrix}_{531942} = \begin{bmatrix} 1 & 0 & 23 & 15 \\ 0 & 1 & 15 & 8 \end{bmatrix}_{531942} = \mathbf{Pl}(9,4,8,22,13,1)_{472392}$$

$$\ell_{16} = \begin{bmatrix} 1 & 0 & \eta^{21} & \eta^{15} \\ 0 & 1 & \eta^{15} & \eta^{6} \end{bmatrix}_{1074263} = \begin{bmatrix} 1 & 0 & 24 & 31 \\ 0 & 1 & 31 & 10 \end{bmatrix}_{1074263} = \mathbf{Pl}(11,16,10,25,27,1)_{932217}$$

$$\ell_{17} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & \eta^{22} & \eta^{11} \end{bmatrix}_{34069} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 21 & 7 \end{bmatrix}_{34069} = \mathbf{Pl}(12,7,7,12,1,0)_{15826}$$

$$\ell_{18} = \begin{bmatrix} 1 & 0 & \eta^{16} & \eta^{8} \\ 0 & 1 & \eta^{25} & \eta^{11} \end{bmatrix}_{468500} = \begin{bmatrix} 1 & 0 & 27 & 13 \\ 0 & 1 & 25 & 7 \end{bmatrix}_{468500} = \mathbf{Pl}(30,20,13,15,23,1)_{804144}$$

$$\ell_{19} = \begin{bmatrix} 1 & 0 & \eta^{13} & \eta^{27} \\ 0 & 1 & \eta^{27} & \eta^{17} \end{bmatrix}_{402279} = \begin{bmatrix} 1 & 0 & 28 & 11 \\ 0 & 1 & 11 & 19 \end{bmatrix}_{402279} = \mathbf{Pl}(18,2,19,29,16,1)_{581180}$$

$$\ell_{20} = \begin{bmatrix} 1 & 0 & \eta^{24} & \eta^{9} \\ 0 & 1 & \eta^{8} & \eta^{10} \end{bmatrix}_{911691} = \begin{bmatrix} 1 & 0 & 30 & 26 \\ 0 & 1 & 13 & 17 \end{bmatrix}_{911691} = \mathbf{Pl}(13,15,31,27,19,1)_{690512}$$

Rank of lines: (33857, 916040, 34524, 72792, 34743, 616697, 178410, 585678, 34599, 555715, 420862, 152973, 34584, 121966, 327582, 531942, 1074263, 34069, 468500, 402279, 911691)
Rank of points on Klein quadric: (5058, 850013, 29728, 270736, 7819, 117603, 375293, 507510, 21163, 970536, 1035452, 730561, 9588, 318123, 198095, 472392, 932217, 15826, 804144, 581180, 690512)

Eckardt Points

The surface has 0 Eckardt points:

Double Points

The surface has 75 Double points:
The double points on the surface are:

$P_{17970} = (17, 16, 16, 1) = \ell_0 \cap \ell_5$
$P_{14797} = (12, 13, 13, 1) = \ell_0 \cap \ell_{14}$
$P_{3172} = (3, 2, 2, 1) = \ell_0 \cap \ell_{15}$
$P_{5286} = (5, 4, 4, 1) = \ell_0 \cap \ell_{16}$
$P_{29595} = (26, 27, 27, 1) = \ell_0 \cap \ell_{19}$
$P_{7007} = (30, 25, 5, 1) = \ell_1 \cap \ell_8$
$P_{23482} = (25, 28, 21, 1) = \ell_1 \cap \ell_9$
$P_{25397} = (20, 24, 23, 1) = \ell_1 \cap \ell_{11}$
$P_{2629} = (4, 17, 1, 1) = \ell_1 \cap \ell_{12}$
$P_{32114} = (17, 10, 30, 1) = \ell_1 \cap \ell_{13}$
$P_{26803} = (18, 4, 25, 1) = \ell_1 \cap \ell_{14}$
$P_{4810} = (9, 21, 3, 1) = \ell_1 \cap \ell_{15}$
$P_{22510} = (13, 30, 20, 1) = \ell_1 \cap \ell_{19}$
$P_{6685} = (28, 15, 5, 1) = \ell_2 \cap \ell_6$
$P_{2204} = (27, 3, 1, 1) = \ell_2 \cap \ell_9$
$P_{13993} = (8, 20, 12, 1) = \ell_2 \cap \ell_{11}$
$P_{32960} = (31, 4, 31, 1) = \ell_2 \cap \ell_{19}$
$P_{27114} = (9, 14, 25, 1) = \ell_2 \cap \ell_{20}$
$P_{20973} = (12, 14, 19, 1) = \ell_3 \cap \ell_6$
$P_{2481} = (16, 12, 1, 1) = \ell_3 \cap \ell_8$
$P_{25886} = (29, 7, 24, 1) = \ell_3 \cap \ell_9$
$P_{31388} = (27, 19, 29, 1) = \ell_3 \cap \ell_{15}$
$P_{7084} = (11, 28, 5, 1) = \ell_3 \cap \ell_{16}$
$P_{18676} = (19, 6, 17, 1) = \ell_3 \cap \ell_{17}$
$P_{30471} = (6, 23, 28, 1) = \ell_3 \cap \ell_{18}$
$P_{7722} = (9, 16, 6, 1) = \ell_3 \cap \ell_{19}$
$P_{19480} = (23, 31, 17, 1) = \ell_4 \cap \ell_7$
$P_{28619} = (10, 29, 26, 1) = \ell_4 \cap \ell_9$
$P_{8172} = (11, 30, 6, 1) = \ell_4 \cap \ell_{13}$
$P_{20019} = (18, 16, 18, 1) = \ell_4 \cap \ell_{15}$
$P_{2243} = (2, 5, 1, 1) = \ell_4 \cap \ell_{18}$
$P_{28862} = (29, 4, 27, 1) = \ell_5 \cap \ell_6$
$P_{13196} = (11, 27, 11, 1) = \ell_5 \cap \ell_8$
$P_{26981} = (4, 10, 25, 1) = \ell_5 \cap \ell_9$
$P_{21335} = (22, 25, 19, 1) = \ell_5 \cap \ell_{10}$
$P_{19216} = (15, 23, 17, 1) = \ell_5 \cap \ell_{11}$
$P_{2362} = (25, 8, 1, 1) = \ell_5 \cap \ell_{13}$
$P_{23680} = (31, 2, 22, 1) = \ell_5 \cap \ell_{18}$
$P_{4972} = (11, 26, 3, 1) = \ell_6 \cap \ell_7$
$P_{22160} = (15, 19, 20, 1) = \ell_6 \cap \ell_{12}$
$P_{28074} = (9, 12, 26, 1) = \ell_6 \cap \ell_{13}$
$P_{2407} = (6, 10, 1, 1) = \ell_6 \cap \ell_{14}$
$P_{16341} = (20, 29, 14, 1) = \ell_6 \cap \ell_{15}$
$P_{31040} = (31, 8, 29, 1) = \ell_7 \cap \ell_8$
$P_{6288} = (15, 3, 5, 1) = \ell_7 \cap \ell_{10}$
$P_{10235} = (26, 30, 8, 1) = \ell_7 \cap \ell_{11}$
$P_{3639} = (22, 16, 2, 1) = \ell_7 \cap \ell_{14}$
$P_{32510} = (29, 22, 30, 1) = \ell_7 \cap \ell_{16}$
$P_{2549} = (20, 14, 1, 1) = \ell_7 \cap \ell_{19}$
$P_{27976} = (7, 9, 26, 1) = \ell_8 \cap \ell_{20}$
$P_{11908} = (3, 19, 10, 1) = \ell_9 \cap \ell_{10}$
$P_{14144} = (31, 24, 12, 1) = \ell_9 \cap \ell_{14}$
$P_{31632} = (15, 27, 29, 1) = \ell_9 \cap \ell_{16}$
$P_{13945} = (24, 18, 12, 1) = \ell_{10} \cap \ell_{12}$
$P_{3070} = (29, 30, 1, 1) = \ell_{10} \cap \ell_{15}$
$P_{23923} = (18, 10, 22, 1) = \ell_{10} \cap \ell_{17}$
$P_{5594} = (25, 13, 4, 1) = \ell_{10} \cap \ell_{19}$
$P_{18656} = (31, 5, 17, 1) = \ell_{10} \cap \ell_{20}$
$P_{21964} = (11, 13, 20, 1) = \ell_{11} \cap \ell_{15}$
$P_{23843} = (2, 8, 22, 1) = \ell_{11} \cap \ell_{16}$
$P_{2926} = (13, 26, 1, 1) = \ell_{11} \cap \ell_{17}$
$P_{8919} = (22, 21, 7, 1) = \ell_{11} \cap \ell_{18}$
$P_{10698} = (9, 13, 9, 1) = \ell_{12} \cap \ell_{16}$
$P_{4847} = (14, 22, 3, 1) = \ell_{12} \cap \ell_{18}$
$P_{14453} = (20, 2, 13, 1) = \ell_{13} \cap \ell_{16}$
$P_{4502} = (21, 11, 3, 1) = \ell_{13} \cap \ell_{17}$
$P_{11943} = (6, 20, 10, 1) = \ell_{13} \cap \ell_{19}$
$P_{13907} = (18, 17, 12, 1) = \ell_{13} \cap \ell_{20}$
$P_{16496} = (15, 2, 15, 1) = \ell_{14} \cap \ell_{17}$
$P_{7665} = (16, 14, 6, 1) = \ell_{14} \cap \ell_{18}$
$P_{9466} = (25, 6, 8, 1) = \ell_{14} \cap \ell_{20}$
$P_{18311} = (6, 27, 16, 1) = \ell_{15} \cap \ell_{20}$
$P_{2711} = (22, 19, 1, 1) = \ell_{16} \cap \ell_{20}$
$P_{27923} = (18, 7, 26, 1) = \ell_{18} \cap \ell_{19}$
$P_{15654} = (5, 8, 14, 1) = \ell_{18} \cap \ell_{20}$

Single Points

The surface has 537 single points:
The single points on the surface are:

0 : $P_{68} = (1, 1, 1, 0)$ lies on line ℓ_0
1 : $P_{119} = (20, 2, 1, 0)$ lies on line ℓ_1
2 : $P_{157} = (26, 3, 1, 0)$ lies on line ℓ_2
3 : $P_{192} = (29, 4, 1, 0)$ lies on line ℓ_3
4 : $P_{198} = (3, 5, 1, 0)$ lies on line ℓ_4
5 : $P_{289} = (30, 7, 1, 0)$ lies on line ℓ_5
6 : $P_{311} = (20, 8, 1, 0)$ lies on line ℓ_6
7 : $P_{384} = (29, 10, 1, 0)$ lies on line ℓ_7
8 : $P_{436} = (17, 12, 1, 0)$ lies on line ℓ_8
9 : $P_{476} = (25, 13, 1, 0)$ lies on line ℓ_9
10 : $P_{505} = (22, 14, 1, 0)$ lies on line ℓ_{10}
11 : $P_{569} = (22, 16, 1, 0)$ lies on line ℓ_{11}
12 : $P_{584} = (5, 17, 1, 0)$ lies on line ℓ_{12}
13 : $P_{649} = (6, 19, 1, 0)$ lies on line ℓ_{13}
14 : $P_{726} = (19, 21, 1, 0)$ lies on line ℓ_{14}
15 : $P_{781} = (10, 23, 1, 0)$ lies on line ℓ_{15}
16 : $P_{817} = (14, 24, 1, 0)$ lies on line ℓ_{16}
17 : $P_{879} = (12, 26, 1, 0)$ lies on line ℓ_{17}
18 : $P_{905} = (6, 27, 1, 0)$ lies on line ℓ_{18}
19 : $P_{939} = (8, 28, 1, 0)$ lies on line ℓ_{19}
20 : $P_{1020} = (25, 30, 1, 0)$ lies on line ℓ_{20}
21 : $P_{1140} = (18, 2, 0, 1)$ lies on line ℓ_6
22 : $P_{1195} = (9, 4, 0, 1)$ lies on line ℓ_7
23 : $P_{1327} = (13, 8, 0, 1)$ lies on line ℓ_3
24 : $P_{1369} = (23, 9, 0, 1)$ lies on line ℓ_{15}
25 : $P_{1405} = (27, 10, 0, 1)$ lies on line ℓ_{11}
26 : $P_{1434} = (24, 11, 0, 1)$ lies on line ℓ_{16}
27 : $P_{1489} = (15, 13, 0, 1)$ lies on line ℓ_{20}
28 : $P_{1508} = (2, 14, 0, 1)$ lies on line ℓ_9
29 : $P_{1545} = (7, 15, 0, 1)$ lies on line ℓ_5
30 : $P_{1581} = (11, 16, 0, 1)$ lies on line ℓ_{10}
31 : $P_{1662} = (28, 18, 0, 1)$ lies on line ℓ_{19}
32 : $P_{1682} = (16, 19, 0, 1)$ lies on line ℓ_1
33 : $P_{1953} = (31, 27, 0, 1)$ lies on line ℓ_{13}
34 : $P_{2022} = (4, 30, 0, 1)$ lies on line ℓ_{18}
35 : $P_{2071} = (21, 31, 0, 1)$ lies on line ℓ_{14}
36 : $P_{2114} = (0, 1, 1, 1)$ lies on line ℓ_0
37 : $P_{3123} = (18, 0, 2, 1)$ lies on line ℓ_3
38 : $P_{3167} = (30, 1, 2, 1)$ lies on line ℓ_5
39 : $P_{3313} = (16, 6, 2, 1)$ lies on line ℓ_2
40 : $P_{3340} = (11, 7, 2, 1)$ lies on line ℓ_{12}
41 : $P_{3432} = (7, 10, 2, 1)$ lies on line ℓ_4
42 : $P_{3491} = (2, 12, 2, 1)$ lies on line ℓ_{10}
43 : $P_{3529} = (8, 13, 2, 1)$ lies on line ℓ_{18}
44 : $P_{3597} = (12, 15, 2, 1)$ lies on line ℓ_{19}
45 : $P_{3603} = (18, 15, 2, 1)$ lies on line ℓ_{11}
46 : $P_{3674} = (25, 17, 2, 1)$ lies on line ℓ_{17}
47 : $P_{3712} = (31, 18, 2, 1)$ lies on line ℓ_6
48 : $P_{3766} = (21, 20, 2, 1)$ lies on line ℓ_9
49 : $P_{3769} = (24, 20, 2, 1)$ lies on line ℓ_{20}
50 : $P_{3870} = (29, 23, 2, 1)$ lies on line ℓ_1
51 : $P_{3879} = (6, 24, 2, 1)$ lies on line ℓ_8
52 : $P_{3892} = (19, 24, 2, 1)$ lies on line ℓ_{13}
53 : $P_{4069} = (4, 30, 2, 1)$ lies on line ℓ_{16}
54 : $P_{4213} = (20, 2, 3, 1)$ lies on line ℓ_{10}
55 : $P_{4227} = (2, 3, 3, 1)$ lies on line ℓ_0
56 : $P_{4272} = (15, 4, 3, 1)$ lies on line ℓ_3
57 : $P_{4294} = (5, 5, 3, 1)$ lies on line ℓ_{14}
58 : $P_{4299} = (10, 5, 3, 1)$ lies on line ℓ_2
59 : $P_{4321} = (0, 6, 3, 1)$ lies on line ℓ_5
60 : $P_{4331} = (10, 6, 3, 1)$ lies on line ℓ_{16}
61 : $P_{4450} = (1, 10, 3, 1)$ lies on line ℓ_{20}
62 : $P_{4613} = (4, 15, 3, 1)$ lies on line ℓ_4
63 : $P_{4741} = (4, 19, 3, 1)$ lies on line ℓ_{19}
64 : $P_{4792} = (23, 20, 3, 1)$ lies on line ℓ_8
65 : $P_{4941} = (12, 25, 3, 1)$ lies on line ℓ_9
66 : $P_{5125} = (4, 31, 3, 1)$ lies on line ℓ_{11}
67 : $P_{5162} = (9, 0, 4, 1)$ lies on line ℓ_{11}
68 : $P_{5204} = (19, 1, 4, 1)$ lies on line ℓ_{14}
69 : $P_{5385} = (8, 7, 4, 1)$ lies on line ℓ_6
70 : $P_{5397} = (20, 7, 4, 1)$ lies on line ℓ_{17}
71 : $P_{5459} = (18, 9, 4, 1)$ lies on line ℓ_7
72 : $P_{5543} = (6, 12, 4, 1)$ lies on line ℓ_2
73 : $P_{5622} = (21, 14, 4, 1)$ lies on line ℓ_{12}
74 : $P_{5777} = (16, 19, 4, 1)$ lies on line ℓ_5
75 : $P_{5806} = (13, 20, 4, 1)$ lies on line ℓ_4
76 : $P_{5840} = (15, 21, 4, 1)$ lies on line ℓ_8
77 : $P_{5943} = (22, 24, 4, 1)$ lies on line ℓ_3
78 : $P_{5989} = (4, 26, 4, 1)$ lies on line ℓ_{20}
79 : $P_{6027} = (10, 27, 4, 1)$ lies on line ℓ_1
80 : $P_{6088} = (7, 29, 4, 1)$ lies on line ℓ_{13}
81 : $P_{6109} = (28, 29, 4, 1)$ lies on line ℓ_{18}
82 : $P_{6154} = (9, 31, 4, 1)$ lies on line ℓ_9
83 : $P_{6171} = (26, 31, 4, 1)$ lies on line ℓ_{15}
84 : $P_{6334} = (29, 4, 5, 1)$ lies on line ℓ_{20}
85 : $P_{6341} = (4, 5, 5, 1)$ lies on line ℓ_0
86 : $P_{6395} = (26, 6, 5, 1)$ lies on line ℓ_{18}
87 : $P_{6449} = (16, 8, 5, 1)$ lies on line ℓ_{15}
88 : $P_{6626} = (1, 14, 5, 1)$ lies on line ℓ_{13}
89 : $P_{6720} = (31, 16, 5, 1)$ lies on line ℓ_{11}
90 : $P_{6735} = (14, 17, 5, 1)$ lies on line ℓ_4
91 : $P_{6738} = (17, 17, 5, 1)$ lies on line ℓ_{19}
92 : $P_{6769} = (16, 18, 5, 1)$ lies on line ℓ_9
93 : $P_{6817} = (0, 20, 5, 1)$ lies on line ℓ_{14}
94 : $P_{6831} = (14, 20, 5, 1)$ lies on line ℓ_5
95 : $P_{7129} = (24, 29, 5, 1)$ lies on line ℓ_{17}
96 : $P_{7185} = (16, 31, 5, 1)$ lies on line ℓ_{12}
97 : $P_{7316} = (19, 3, 6, 1)$ lies on line ℓ_{20}
98 : $P_{7361} = (0, 5, 6, 1)$ lies on line ℓ_{11}
99 : $P_{7391} = (30, 5, 6, 1)$ lies on line ℓ_9
100 : $P_{7400} = (7, 6, 6, 1)$ lies on line ℓ_0
101 : $P_{7520} = (31, 9, 6, 1)$ lies on line ℓ_{12}
102 : $P_{7544} = (23, 10, 6, 1)$ lies on line ℓ_2
103 : $P_{7625} = (8, 13, 6, 1)$ lies on line ℓ_8
104 : $P_{7761} = (16, 17, 6, 1)$ lies on line ℓ_{10}
105 : $P_{7770} = (25, 17, 6, 1)$ lies on line ℓ_{16}
106 : $P_{7855} = (14, 20, 6, 1)$ lies on line ℓ_{15}
107 : $P_{7917} = (12, 22, 6, 1)$ lies on line ℓ_{17}

108 : $P_{7942} = (5, 23, 6, 1)$ lies on line ℓ_6
109 : $P_{8138} = (9, 29, 6, 1)$ lies on line ℓ_5
110 : $P_{8142} = (13, 29, 6, 1)$ lies on line ℓ_7
111 : $P_{8200} = (7, 31, 6, 1)$ lies on line ℓ_1
112 : $P_{8282} = (25, 1, 7, 1)$ lies on line ℓ_8
113 : $P_{8325} = (4, 3, 7, 1)$ lies on line ℓ_{15}
114 : $P_{8455} = (6, 7, 7, 1)$ lies on line ℓ_0
115 : $P_{8488} = (7, 8, 7, 1)$ lies on line ℓ_9
116 : $P_{8526} = (13, 9, 7, 1)$ lies on line ℓ_2
117 : $P_{8536} = (23, 9, 7, 1)$ lies on line ℓ_{16}
118 : $P_{8609} = (0, 12, 7, 1)$ lies on line ℓ_{17}
119 : $P_{8610} = (1, 12, 7, 1)$ lies on line ℓ_{19}
120 : $P_{8654} = (13, 13, 7, 1)$ lies on line ℓ_{13}
121 : $P_{8885} = (20, 20, 7, 1)$ lies on line ℓ_3
122 : $P_{8977} = (16, 23, 7, 1)$ lies on line ℓ_7
123 : $P_{9019} = (26, 24, 7, 1)$ lies on line ℓ_{12}
124 : $P_{9080} = (23, 26, 7, 1)$ lies on line ℓ_5
125 : $P_{9092} = (3, 27, 7, 1)$ lies on line ℓ_{14}
126 : $P_{9097} = (8, 27, 7, 1)$ lies on line ℓ_4
127 : $P_{9163} = (10, 29, 7, 1)$ lies on line ℓ_{20}
128 : $P_{9172} = (19, 29, 7, 1)$ lies on line ℓ_1
129 : $P_{9223} = (6, 31, 7, 1)$ lies on line ℓ_{10}
130 : $P_{9234} = (17, 31, 7, 1)$ lies on line ℓ_6
131 : $P_{9262} = (13, 0, 8, 1)$ lies on line ℓ_{15}
132 : $P_{9346} = (1, 3, 8, 1)$ lies on line ℓ_1
133 : $P_{9508} = (3, 8, 8, 1)$ lies on line ℓ_6
134 : $P_{9514} = (9, 8, 8, 1)$ lies on line ℓ_0
135 : $P_{9557} = (20, 9, 8, 1)$ lies on line ℓ_9
136 : $P_{9559} = (22, 9, 8, 1)$ lies on line ℓ_{19}
137 : $P_{9690} = (25, 13, 8, 1)$ lies on line ℓ_4
138 : $P_{9695} = (30, 13, 8, 1)$ lies on line ℓ_3
139 : $P_{9711} = (14, 14, 8, 1)$ lies on line ℓ_{17}
140 : $P_{9739} = (10, 15, 8, 1)$ lies on line ℓ_{10}
141 : $P_{9758} = (29, 15, 8, 1)$ lies on line ℓ_8
142 : $P_{9837} = (12, 18, 8, 1)$ lies on line ℓ_5
143 : $P_{9928} = (7, 21, 8, 1)$ lies on line ℓ_{16}
144 : $P_{9995} = (10, 23, 8, 1)$ lies on line ℓ_{13}
145 : $P_{10032} = (15, 24, 8, 1)$ lies on line ℓ_2
146 : $P_{10034} = (17, 24, 8, 1)$ lies on line ℓ_{18}
147 : $P_{10157} = (12, 28, 8, 1)$ lies on line ℓ_{12}
148 : $P_{10296} = (23, 0, 9, 1)$ lies on line ℓ_6
149 : $P_{10326} = (21, 1, 9, 1)$ lies on line ℓ_1
150 : $P_{10333} = (28, 1, 9, 1)$ lies on line ℓ_{10}
151 : $P_{10381} = (12, 3, 9, 1)$ lies on line ℓ_8
152 : $P_{10392} = (23, 3, 9, 1)$ lies on line ℓ_{18}
153 : $P_{10413} = (12, 4, 9, 1)$ lies on line ℓ_{13}
154 : $P_{10414} = (13, 4, 9, 1)$ lies on line ℓ_9
155 : $P_{10555} = (26, 8, 9, 1)$ lies on line ℓ_4
156 : $P_{10564} = (3, 9, 9, 1)$ lies on line ℓ_3
157 : $P_{10569} = (8, 9, 9, 1)$ lies on line ℓ_0
158 : $P_{10733} = (12, 14, 9, 1)$ lies on line ℓ_{11}
159 : $P_{10891} = (10, 19, 9, 1)$ lies on line ℓ_{14}
160 : $P_{10915} = (2, 20, 9, 1)$ lies on line ℓ_{17}
161 : $P_{10920} = (7, 20, 9, 1)$ lies on line ℓ_7
162 : $P_{10963} = (18, 21, 9, 1)$ lies on line ℓ_5
163 : $P_{10975} = (30, 21, 9, 1)$ lies on line ℓ_{19}
164 : $P_{11016} = (7, 23, 9, 1)$ lies on line ℓ_{15}
165 : $P_{11041} = (0, 24, 9, 1)$ lies on line ℓ_{20}
166 : $P_{11158} = (21, 27, 9, 1)$ lies on line ℓ_2
167 : $P_{11324} = (27, 0, 10, 1)$ lies on line ℓ_{16}
168 : $P_{11458} = (1, 5, 10, 1)$ lies on line ℓ_3
169 : $P_{11533} = (12, 7, 10, 1)$ lies on line ℓ_1
170 : $P_{11552} = (31, 7, 10, 1)$ lies on line ℓ_4
171 : $P_{11611} = (26, 9, 10, 1)$ lies on line ℓ_{14}
172 : $P_{11622} = (5, 10, 10, 1)$ lies on line ℓ_7
173 : $P_{11628} = (11, 10, 10, 1)$ lies on line ℓ_0
174 : $P_{11674} = (25, 11, 10, 1)$ lies on line ℓ_{15}
175 : $P_{11678} = (29, 11, 10, 1)$ lies on line ℓ_{18}
176 : $P_{12059} = (26, 23, 10, 1)$ lies on line ℓ_8
177 : $P_{12079} = (14, 24, 10, 1)$ lies on line ℓ_6
178 : $P_{12167} = (6, 27, 10, 1)$ lies on line ℓ_{12}
179 : $P_{12180} = (19, 27, 10, 1)$ lies on line ℓ_{11}
180 : $P_{12214} = (21, 28, 10, 1)$ lies on line ℓ_5
181 : $P_{12287} = (30, 30, 10, 1)$ lies on line ℓ_2
182 : $P_{12303} = (14, 31, 10, 1)$ lies on line ℓ_{20}
183 : $P_{12311} = (22, 31, 10, 1)$ lies on line ℓ_{17}
184 : $P_{12345} = (24, 0, 11, 1)$ lies on line ℓ_7
185 : $P_{12376} = (23, 1, 11, 1)$ lies on line ℓ_{20}
186 : $P_{12381} = (28, 1, 11, 1)$ lies on line ℓ_3
187 : $P_{12413} = (28, 2, 11, 1)$ lies on line ℓ_4
188 : $P_{12505} = (24, 5, 11, 1)$ lies on line ℓ_1
189 : $P_{12507} = (26, 5, 11, 1)$ lies on line ℓ_{17}
190 : $P_{12545} = (0, 7, 11, 1)$ lies on line ℓ_{13}
191 : $P_{12591} = (14, 8, 11, 1)$ lies on line ℓ_{19}
192 : $P_{12644} = (3, 10, 11, 1)$ lies on line ℓ_{12}
193 : $P_{12678} = (5, 11, 11, 1)$ lies on line ℓ_{11}
194 : $P_{12683} = (10, 11, 11, 1)$ lies on line ℓ_0
195 : $P_{12859} = (26, 16, 11, 1)$ lies on line ℓ_6
196 : $P_{12860} = (27, 16, 11, 1)$ lies on line ℓ_{18}
197 : $P_{13110} = (21, 24, 11, 1)$ lies on line ℓ_{16}
198 : $P_{13226} = (9, 28, 11, 1)$ lies on line ℓ_{14}
199 : $P_{13236} = (19, 28, 11, 1)$ lies on line ℓ_{15}
200 : $P_{13253} = (4, 29, 11, 1)$ lies on line ℓ_2
201 : $P_{13270} = (21, 29, 11, 1)$ lies on line ℓ_{10}
202 : $P_{13307} = (26, 30, 11, 1)$ lies on line ℓ_9
203 : $P_{13660} = (27, 9, 12, 1)$ lies on line ℓ_{17}
204 : $P_{13724} = (27, 11, 12, 1)$ lies on line ℓ_1
205 : $P_{13742} = (13, 12, 12, 1)$ lies on line ℓ_0
206 : $P_{13786} = (25, 13, 12, 1)$ lies on line ℓ_6
207 : $P_{13820} = (27, 14, 12, 1)$ lies on line ℓ_5
208 : $P_{13954} = (1, 19, 12, 1)$ lies on line ℓ_7
209 : $P_{14049} = (0, 22, 12, 1)$ lies on line ℓ_{15}
210 : $P_{14068} = (19, 22, 12, 1)$ lies on line ℓ_{19}
211 : $P_{14166} = (21, 25, 12, 1)$ lies on line ℓ_4
212 : $P_{14196} = (19, 26, 12, 1)$ lies on line ℓ_8
213 : $P_{14203} = (26, 26, 12, 1)$ lies on line ℓ_{16}
214 : $P_{14218} = (9, 27, 12, 1)$ lies on line ℓ_{18}
215 : $P_{14278} = (5, 29, 12, 1)$ lies on line ℓ_3

216 : $P_{14384} = (15, 0, 13, 1)$ lies on line ℓ_{18}
217 : $P_{14411} = (10, 1, 13, 1)$ lies on line ℓ_{15}
218 : $P_{14494} = (29, 3, 13, 1)$ lies on line ℓ_{12}
219 : $P_{14527} = (30, 4, 13, 1)$ lies on line ℓ_{11}
220 : $P_{14542} = (13, 5, 13, 1)$ lies on line ℓ_{6}
221 : $P_{14662} = (5, 9, 13, 1)$ lies on line ℓ_{5}
222 : $P_{14672} = (15, 9, 13, 1)$ lies on line ℓ_{1}
223 : $P_{14716} = (27, 10, 13, 1)$ lies on line ℓ_{19}
224 : $P_{14860} = (11, 15, 13, 1)$ lies on line ℓ_{20}
225 : $P_{15000} = (23, 19, 13, 1)$ lies on line ℓ_{17}
226 : $P_{15047} = (6, 21, 13, 1)$ lies on line ℓ_{9}
227 : $P_{15075} = (2, 22, 13, 1)$ lies on line ℓ_{8}
228 : $P_{15123} = (18, 23, 13, 1)$ lies on line ℓ_{2}
229 : $P_{15193} = (24, 25, 13, 1)$ lies on line ℓ_{3}
230 : $P_{15197} = (28, 25, 13, 1)$ lies on line ℓ_{7}
231 : $P_{15279} = (14, 28, 13, 1)$ lies on line ℓ_{10}
232 : $P_{15287} = (22, 28, 13, 1)$ lies on line ℓ_{4}
233 : $P_{15395} = (2, 0, 14, 1)$ lies on line ℓ_{5}
234 : $P_{15465} = (8, 2, 14, 1)$ lies on line ℓ_{9}
235 : $P_{15477} = (20, 2, 14, 1)$ lies on line ℓ_{8}
236 : $P_{15647} = (30, 7, 14, 1)$ lies on line ℓ_{7}
237 : $P_{15748} = (3, 11, 14, 1)$ lies on line ℓ_{19}
238 : $P_{15856} = (15, 14, 14, 1)$ lies on line ℓ_{0}
239 : $P_{15858} = (17, 14, 14, 1)$ lies on line ℓ_{10}
240 : $P_{15879} = (6, 15, 14, 1)$ lies on line ℓ_{16}
241 : $P_{15895} = (22, 15, 14, 1)$ lies on line ℓ_{1}
242 : $P_{15938} = (1, 17, 14, 1)$ lies on line ℓ_{11}
243 : $P_{15994} = (25, 18, 14, 1)$ lies on line ℓ_{2}
244 : $P_{15999} = (30, 18, 14, 1)$ lies on line ℓ_{13}
245 : $P_{16020} = (19, 19, 14, 1)$ lies on line ℓ_{4}
246 : $P_{16083} = (18, 21, 14, 1)$ lies on line ℓ_{12}
247 : $P_{16091} = (26, 21, 14, 1)$ lies on line ℓ_{3}
248 : $P_{16157} = (28, 23, 14, 1)$ lies on line ℓ_{14}
249 : $P_{16164} = (3, 24, 14, 1)$ lies on line ℓ_{17}
250 : $P_{16424} = (7, 0, 15, 1)$ lies on line ℓ_{10}
251 : $P_{16472} = (23, 1, 15, 1)$ lies on line ℓ_{11}
252 : $P_{16473} = (24, 1, 15, 1)$ lies on line ℓ_{13}
253 : $P_{16568} = (23, 4, 15, 1)$ lies on line ℓ_{12}
254 : $P_{16669} = (28, 7, 15, 1)$ lies on line ℓ_{5}
255 : $P_{16767} = (30, 10, 15, 1)$ lies on line ℓ_{15}
256 : $P_{16835} = (2, 13, 15, 1)$ lies on line ℓ_{1}
257 : $P_{16836} = (3, 13, 15, 1)$ lies on line ℓ_{7}
258 : $P_{16870} = (5, 14, 15, 1)$ lies on line ℓ_{8}
259 : $P_{16911} = (14, 15, 15, 1)$ lies on line ℓ_{0}
260 : $P_{16914} = (17, 15, 15, 1)$ lies on line ℓ_{9}
261 : $P_{16964} = (3, 17, 15, 1)$ lies on line ℓ_{2}
262 : $P_{16968} = (7, 17, 15, 1)$ lies on line ℓ_{3}
263 : $P_{17028} = (3, 19, 15, 1)$ lies on line ℓ_{18}
264 : $P_{17089} = (0, 21, 15, 1)$ lies on line ℓ_{6}
265 : $P_{17137} = (16, 22, 15, 1)$ lies on line ℓ_{4}
266 : $P_{17149} = (28, 22, 15, 1)$ lies on line ℓ_{20}
267 : $P_{17161} = (8, 23, 15, 1)$ lies on line ℓ_{16}
268 : $P_{17164} = (11, 23, 15, 1)$ lies on line ℓ_{19}
269 : $P_{17452} = (11, 0, 16, 1)$ lies on line ℓ_{9}
270 : $P_{17481} = (8, 1, 16, 1)$ lies on line ℓ_{19}
271 : $P_{17519} = (14, 2, 16, 1)$ lies on line ℓ_{3}
272 : $P_{17553} = (16, 3, 16, 1)$ lies on line ℓ_{13}
273 : $P_{17690} = (25, 7, 16, 1)$ lies on line ℓ_{11}
274 : $P_{17710} = (13, 8, 16, 1)$ lies on line ℓ_{14}
275 : $P_{17802} = (9, 11, 16, 1)$ lies on line ℓ_{10}
276 : $P_{18020} = (3, 18, 16, 1)$ lies on line ℓ_{16}
277 : $P_{18028} = (11, 18, 16, 1)$ lies on line ℓ_{18}
278 : $P_{18123} = (10, 21, 16, 1)$ lies on line ℓ_{7}
279 : $P_{18142} = (29, 21, 16, 1)$ lies on line ℓ_{2}
280 : $P_{18166} = (21, 22, 16, 1)$ lies on line ℓ_{6}
281 : $P_{18168} = (23, 22, 16, 1)$ lies on line ℓ_{1}
282 : $P_{18293} = (20, 26, 16, 1)$ lies on line ℓ_{4}
283 : $P_{18368} = (31, 28, 16, 1)$ lies on line ℓ_{17}
284 : $P_{18396} = (27, 29, 16, 1)$ lies on line ℓ_{12}
285 : $P_{18429} = (28, 30, 16, 1)$ lies on line ℓ_{8}
286 : $P_{18766} = (13, 9, 17, 1)$ lies on line ℓ_{18}
287 : $P_{18798} = (13, 10, 17, 1)$ lies on line ℓ_{16}
288 : $P_{18861} = (12, 12, 17, 1)$ lies on line ℓ_{15}
289 : $P_{18879} = (30, 12, 17, 1)$ lies on line ℓ_{12}
290 : $P_{18899} = (18, 13, 17, 1)$ lies on line ℓ_{9}
291 : $P_{18999} = (22, 16, 17, 1)$ lies on line ℓ_{13}
292 : $P_{19025} = (16, 17, 17, 1)$ lies on line ℓ_{0}
293 : $P_{19054} = (13, 18, 17, 1)$ lies on line ℓ_{8}
294 : $P_{19108} = (3, 20, 17, 1)$ lies on line ℓ_{1}
295 : $P_{19176} = (7, 22, 17, 1)$ lies on line ℓ_{2}
296 : $P_{19393} = (0, 29, 17, 1)$ lies on line ℓ_{19}
297 : $P_{19423} = (30, 29, 17, 1)$ lies on line ℓ_{14}
298 : $P_{19426} = (1, 30, 17, 1)$ lies on line ℓ_{6}
299 : $P_{19517} = (28, 0, 18, 1)$ lies on line ℓ_{13}
300 : $P_{19528} = (7, 1, 18, 1)$ lies on line ℓ_{18}
301 : $P_{19542} = (21, 1, 18, 1)$ lies on line ℓ_{7}
302 : $P_{19569} = (16, 2, 18, 1)$ lies on line ℓ_{11}
303 : $P_{19570} = (17, 2, 18, 1)$ lies on line ℓ_{20}
304 : $P_{19705} = (24, 6, 18, 1)$ lies on line ℓ_{6}
305 : $P_{19708} = (27, 6, 18, 1)$ lies on line ℓ_{8}
306 : $P_{19727} = (14, 7, 18, 1)$ lies on line ℓ_{14}
307 : $P_{19744} = (31, 7, 18, 1)$ lies on line ℓ_{16}
308 : $P_{19826} = (17, 10, 18, 1)$ lies on line ℓ_{3}
309 : $P_{19912} = (7, 13, 18, 1)$ lies on line ℓ_{17}
310 : $P_{20084} = (19, 18, 18, 1)$ lies on line ℓ_{0}
311 : $P_{20091} = (26, 18, 18, 1)$ lies on line ℓ_{1}
312 : $P_{20109} = (12, 19, 18, 1)$ lies on line ℓ_{2}
313 : $P_{20225} = (0, 23, 18, 1)$ lies on line ℓ_{10}
314 : $P_{20338} = (17, 26, 18, 1)$ lies on line ℓ_{12}
315 : $P_{20349} = (28, 26, 18, 1)$ lies on line ℓ_{9}
316 : $P_{20409} = (24, 28, 18, 1)$ lies on line ℓ_{19}
317 : $P_{20457} = (8, 30, 18, 1)$ lies on line ℓ_{5}
318 : $P_{20529} = (16, 0, 19, 1)$ lies on line ℓ_{19}
319 : $P_{20761} = (24, 7, 19, 1)$ lies on line ℓ_{15}
320 : $P_{20843} = (10, 10, 19, 1)$ lies on line ℓ_{8}
321 : $P_{20873} = (8, 11, 19, 1)$ lies on line ℓ_{7}
322 : $P_{20885} = (20, 11, 19, 1)$ lies on line ℓ_{12}
323 : $P_{21039} = (14, 16, 19, 1)$ lies on line ℓ_{1}

324 : $P_{21047} = (22, 16, 19, 1)$ lies on line ℓ_2
325 : $P_{21095} = (6, 18, 19, 1)$ lies on line ℓ_{11}
326 : $P_{21118} = (29, 18, 19, 1)$ lies on line ℓ_{14}
327 : $P_{21139} = (18, 19, 19, 1)$ lies on line ℓ_0
328 : $P_{21147} = (26, 19, 19, 1)$ lies on line ℓ_{13}
329 : $P_{21202} = (17, 21, 19, 1)$ lies on line ℓ_4
330 : $P_{21254} = (5, 23, 19, 1)$ lies on line ℓ_9
331 : $P_{21260} = (11, 23, 19, 1)$ lies on line ℓ_{17}
332 : $P_{21346} = (1, 26, 19, 1)$ lies on line ℓ_{18}
333 : $P_{21417} = (8, 28, 19, 1)$ lies on line ℓ_{20}
334 : $P_{21522} = (17, 31, 19, 1)$ lies on line ℓ_{16}
335 : $P_{21705} = (8, 5, 20, 1)$ lies on line ℓ_{13}
336 : $P_{21907} = (18, 11, 20, 1)$ lies on line ℓ_8
337 : $P_{21927} = (6, 12, 20, 1)$ lies on line ℓ_5
338 : $P_{21934} = (13, 12, 20, 1)$ lies on line ℓ_{20}
339 : $P_{22009} = (24, 14, 20, 1)$ lies on line ℓ_4
340 : $P_{22081} = (0, 17, 20, 1)$ lies on line ℓ_9
341 : $P_{22100} = (19, 17, 20, 1)$ lies on line ℓ_{18}
342 : $P_{22134} = (21, 18, 20, 1)$ lies on line ℓ_3
343 : $P_{22198} = (21, 20, 20, 1)$ lies on line ℓ_0
344 : $P_{22252} = (11, 22, 20, 1)$ lies on line ℓ_{14}
345 : $P_{22268} = (27, 22, 20, 1)$ lies on line ℓ_{10}
346 : $P_{22322} = (17, 24, 20, 1)$ lies on line ℓ_7
347 : $P_{22363} = (26, 25, 20, 1)$ lies on line ℓ_2
348 : $P_{22411} = (10, 27, 20, 1)$ lies on line ℓ_{17}
349 : $P_{22495} = (30, 29, 20, 1)$ lies on line ℓ_{16}
350 : $P_{22599} = (6, 1, 21, 1)$ lies on line ℓ_{17}
351 : $P_{22630} = (5, 2, 21, 1)$ lies on line ℓ_{19}
352 : $P_{22635} = (10, 2, 21, 1)$ lies on line ℓ_{12}
353 : $P_{22681} = (24, 3, 21, 1)$ lies on line ℓ_{14}
354 : $P_{22737} = (16, 5, 21, 1)$ lies on line ℓ_{16}
355 : $P_{22788} = (3, 7, 21, 1)$ lies on line ℓ_8
356 : $P_{22902} = (21, 10, 21, 1)$ lies on line ℓ_{18}
357 : $P_{22937} = (24, 11, 21, 1)$ lies on line ℓ_5
358 : $P_{22940} = (27, 11, 21, 1)$ lies on line ℓ_4
359 : $P_{23149} = (12, 18, 21, 1)$ lies on line ℓ_7
360 : $P_{23157} = (20, 18, 21, 1)$ lies on line ℓ_{20}
361 : $P_{23253} = (20, 21, 21, 1)$ lies on line ℓ_0
362 : $P_{23273} = (8, 22, 21, 1)$ lies on line ℓ_3
363 : $P_{23279} = (14, 22, 21, 1)$ lies on line ℓ_{13}
364 : $P_{23342} = (13, 24, 21, 1)$ lies on line ℓ_{10}
365 : $P_{23393} = (0, 26, 21, 1)$ lies on line ℓ_2
366 : $P_{23394} = (1, 26, 21, 1)$ lies on line ℓ_{15}
367 : $P_{23452} = (27, 27, 21, 1)$ lies on line ℓ_6
368 : $P_{23518} = (29, 29, 21, 1)$ lies on line ℓ_{11}
369 : $P_{23683} = (2, 3, 22, 1)$ lies on line ℓ_6
370 : $P_{23710} = (29, 3, 22, 1)$ lies on line ℓ_{19}
371 : $P_{23743} = (30, 4, 22, 1)$ lies on line ℓ_4
372 : $P_{23781} = (4, 6, 22, 1)$ lies on line ℓ_{13}
373 : $P_{23808} = (31, 6, 22, 1)$ lies on line ℓ_{15}
374 : $P_{23960} = (23, 11, 22, 1)$ lies on line ℓ_9
375 : $P_{23983} = (14, 12, 22, 1)$ lies on line ℓ_7
376 : $P_{24214} = (21, 19, 22, 1)$ lies on line ℓ_8
377 : $P_{24230} = (5, 20, 22, 1)$ lies on line ℓ_{12}
378 : $P_{24283} = (26, 21, 22, 1)$ lies on line ℓ_{20}
379 : $P_{24312} = (23, 22, 22, 1)$ lies on line ℓ_0
380 : $P_{24393} = (8, 25, 22, 1)$ lies on line ℓ_{14}
381 : $P_{24417} = (0, 26, 22, 1)$ lies on line ℓ_1
382 : $P_{24427} = (10, 26, 22, 1)$ lies on line ℓ_3
383 : $P_{24588} = (11, 31, 22, 1)$ lies on line ℓ_2
384 : $P_{24670} = (29, 1, 23, 1)$ lies on line ℓ_4
385 : $P_{24741} = (4, 4, 23, 1)$ lies on line ℓ_{10}
386 : $P_{24769} = (0, 5, 23, 1)$ lies on line ℓ_{12}
387 : $P_{24770} = (1, 5, 23, 1)$ lies on line ℓ_5
388 : $P_{24815} = (14, 6, 23, 1)$ lies on line ℓ_9
389 : $P_{24820} = (19, 6, 23, 1)$ lies on line ℓ_7
390 : $P_{24964} = (3, 11, 23, 1)$ lies on line ℓ_{20}
391 : $P_{24983} = (22, 11, 23, 1)$ lies on line ℓ_6
392 : $P_{25020} = (27, 12, 23, 1)$ lies on line ℓ_{14}
393 : $P_{25133} = (12, 16, 23, 1)$ lies on line ℓ_{16}
394 : $P_{25151} = (30, 16, 23, 1)$ lies on line ℓ_{17}
395 : $P_{25174} = (21, 17, 23, 1)$ lies on line ℓ_{15}
396 : $P_{25283} = (2, 21, 23, 1)$ lies on line ℓ_{13}
397 : $P_{25367} = (22, 23, 23, 1)$ lies on line ℓ_0
398 : $P_{25434} = (25, 25, 23, 1)$ lies on line ℓ_{18}
399 : $P_{25522} = (17, 28, 23, 1)$ lies on line ℓ_2
400 : $P_{25592} = (23, 30, 23, 1)$ lies on line ℓ_3
401 : $P_{25605} = (4, 31, 23, 1)$ lies on line ℓ_8
402 : $P_{25622} = (21, 31, 23, 1)$ lies on line ℓ_{19}
403 : $P_{25687} = (22, 1, 24, 1)$ lies on line ℓ_{12}
404 : $P_{25831} = (6, 6, 24, 1)$ lies on line ℓ_1
405 : $P_{26045} = (28, 12, 24, 1)$ lies on line ℓ_{16}
406 : $P_{26068} = (19, 13, 24, 1)$ lies on line ℓ_2
407 : $P_{26075} = (26, 13, 24, 1)$ lies on line ℓ_5
408 : $P_{26118} = (5, 15, 24, 1)$ lies on line ℓ_{13}
409 : $P_{26138} = (25, 15, 24, 1)$ lies on line ℓ_7
410 : $P_{26161} = (16, 16, 24, 1)$ lies on line ℓ_{20}
411 : $P_{26177} = (0, 17, 24, 1)$ lies on line ℓ_8
412 : $P_{26178} = (1, 17, 24, 1)$ lies on line ℓ_{14}
413 : $P_{26225} = (16, 18, 24, 1)$ lies on line ℓ_{17}
414 : $P_{26237} = (28, 18, 24, 1)$ lies on line ℓ_{15}
415 : $P_{26265} = (24, 19, 24, 1)$ lies on line ℓ_{11}
416 : $P_{26281} = (8, 20, 24, 1)$ lies on line ℓ_{10}
417 : $P_{26303} = (30, 20, 24, 1)$ lies on line ℓ_{18}
418 : $P_{26381} = (12, 23, 24, 1)$ lies on line ℓ_4
419 : $P_{26426} = (25, 24, 24, 1)$ lies on line ℓ_0
420 : $P_{26467} = (2, 26, 24, 1)$ lies on line ℓ_{19}
421 : $P_{26533} = (4, 28, 24, 1)$ lies on line ℓ_6
422 : $P_{26753} = (0, 3, 25, 1)$ lies on line ℓ_3
423 : $P_{26767} = (14, 3, 25, 1)$ lies on line ℓ_{11}
424 : $P_{26821} = (4, 5, 25, 1)$ lies on line ℓ_7
425 : $P_{26839} = (22, 5, 25, 1)$ lies on line ℓ_{15}
426 : $P_{26859} = (10, 6, 25, 1)$ lies on line ℓ_{19}
427 : $P_{26941} = (28, 8, 25, 1)$ lies on line ℓ_{17}
428 : $P_{27161} = (24, 15, 25, 1)$ lies on line ℓ_{18}
429 : $P_{27188} = (19, 16, 25, 1)$ lies on line ℓ_{12}
430 : $P_{27248} = (15, 18, 25, 1)$ lies on line ℓ_4
431 : $P_{27313} = (16, 20, 25, 1)$ lies on line ℓ_6

$432: P_{27315} = (18, 20, 25, 1)$ lies on line ℓ_{16}
$433: P_{27481} = (24, 25, 25, 1)$ lies on line ℓ_{0}
$434: P_{27519} = (30, 26, 25, 1)$ lies on line ℓ_{10}
$435: P_{27556} = (3, 28, 25, 1)$ lies on line ℓ_{13}
$436: P_{27602} = (17, 29, 25, 1)$ lies on line ℓ_{8}
$437: P_{27756} = (11, 2, 26, 1)$ lies on line ℓ_{1}
$438: P_{27780} = (3, 3, 26, 1)$ lies on line ℓ_{5}
$439: P_{27785} = (8, 3, 26, 1)$ lies on line ℓ_{17}
$440: P_{27901} = (28, 6, 26, 1)$ lies on line ℓ_{12}
$441: P_{27938} = (1, 8, 26, 1)$ lies on line ℓ_{10}
$442: P_{28035} = (2, 11, 26, 1)$ lies on line ℓ_{2}
$443: P_{28163} = (2, 15, 26, 1)$ lies on line ℓ_{3}
$444: P_{28402} = (17, 22, 26, 1)$ lies on line ℓ_{11}
$445: P_{28481} = (0, 25, 26, 1)$ lies on line ℓ_{16}
$446: P_{28489} = (8, 25, 26, 1)$ lies on line ℓ_{15}
$447: P_{28540} = (27, 26, 26, 1)$ lies on line ℓ_{0}
$448: P_{28551} = (6, 27, 26, 1)$ lies on line ℓ_{7}
$449: P_{28643} = (2, 30, 26, 1)$ lies on line ℓ_{14}
$450: P_{28736} = (31, 0, 27, 1)$ lies on line ℓ_{1}
$451: P_{28751} = (14, 1, 27, 1)$ lies on line ℓ_{16}
$452: P_{28887} = (22, 5, 27, 1)$ lies on line ℓ_{8}
$453: P_{28904} = (7, 6, 27, 1)$ lies on line ℓ_{11}
$454: P_{28920} = (23, 6, 27, 1)$ lies on line ℓ_{10}
$455: P_{28985} = (24, 8, 27, 1)$ lies on line ℓ_{2}
$456: P_{29074} = (17, 11, 27, 1)$ lies on line ℓ_{14}
$457: P_{29088} = (31, 11, 27, 1)$ lies on line ℓ_{3}
$458: P_{29155} = (2, 14, 27, 1)$ lies on line ℓ_{15}
$459: P_{29236} = (19, 16, 27, 1)$ lies on line ℓ_{9}
$460: P_{29276} = (27, 17, 27, 1)$ lies on line ℓ_{7}
$461: P_{29466} = (25, 23, 27, 1)$ lies on line ℓ_{12}
$462: P_{29471} = (30, 23, 27, 1)$ lies on line ℓ_{20}
$463: P_{29482} = (9, 24, 27, 1)$ lies on line ℓ_{4}
$464: P_{29509} = (4, 25, 27, 1)$ lies on line ℓ_{17}
$465: P_{29621} = (20, 28, 27, 1)$ lies on line ℓ_{18}
$466: P_{29712} = (15, 31, 27, 1)$ lies on line ℓ_{13}
$467: P_{29781} = (20, 1, 28, 1)$ lies on line ℓ_{2}
$468: P_{29795} = (2, 2, 28, 1)$ lies on line ℓ_{7}
$469: P_{29825} = (0, 3, 28, 1)$ lies on line ℓ_{4}
$470: P_{29826} = (1, 3, 28, 1)$ lies on line ℓ_{16}
$471: P_{29871} = (14, 4, 28, 1)$ lies on line ℓ_{8}
$472: P_{29874} = (17, 4, 28, 1)$ lies on line ℓ_{15}
$473: P_{29896} = (7, 5, 28, 1)$ lies on line ℓ_{19}
$474: P_{29980} = (27, 7, 28, 1)$ lies on line ℓ_{20}
$475: P_{30043} = (26, 9, 28, 1)$ lies on line ℓ_{10}
$476: P_{30046} = (29, 9, 28, 1)$ lies on line ℓ_{13}
$477: P_{30205} = (28, 14, 28, 1)$ lies on line ℓ_{1}
$478: P_{30211} = (2, 15, 28, 1)$ lies on line ℓ_{12}
$479: P_{30216} = (7, 15, 28, 1)$ lies on line ℓ_{14}
$480: P_{30286} = (13, 17, 28, 1)$ lies on line ℓ_{5}
$481: P_{30406} = (5, 21, 28, 1)$ lies on line ℓ_{17}
$482: P_{30455} = (22, 22, 28, 1)$ lies on line ℓ_{9}
$483: P_{30539} = (10, 25, 28, 1)$ lies on line ℓ_{11}
$484: P_{30559} = (30, 25, 28, 1)$ lies on line ℓ_{6}
$485: P_{30654} = (29, 28, 28, 1)$ lies on line ℓ_{0}
$486: P_{30831} = (14, 2, 29, 1)$ lies on line ℓ_{2}
$487: P_{30948} = (3, 6, 29, 1)$ lies on line ℓ_{4}
$488: P_{30989} = (12, 7, 29, 1)$ lies on line ℓ_{10}
$489: P_{31069} = (28, 9, 29, 1)$ lies on line ℓ_{11}
$490: P_{31137} = (0, 12, 29, 1)$ lies on line ℓ_{18}
$491: P_{31145} = (8, 12, 29, 1)$ lies on line ℓ_{1}
$492: P_{31242} = (9, 15, 29, 1)$ lies on line ℓ_{17}
$493: P_{31307} = (10, 17, 29, 1)$ lies on line ℓ_{6}
$494: P_{31476} = (19, 22, 29, 1)$ lies on line ℓ_{5}
$495: P_{31555} = (2, 25, 29, 1)$ lies on line ℓ_{20}
$496: P_{31568} = (15, 25, 29, 1)$ lies on line ℓ_{19}
$497: P_{31605} = (20, 26, 29, 1)$ lies on line ℓ_{14}
$498: P_{31612} = (27, 26, 29, 1)$ lies on line ℓ_{13}
$499: P_{31709} = (28, 29, 29, 1)$ lies on line ℓ_{0}
$500: P_{31720} = (7, 30, 29, 1)$ lies on line ℓ_{12}
$501: P_{31781} = (4, 0, 30, 1)$ lies on line ℓ_{14}
$502: P_{31915} = (10, 4, 30, 1)$ lies on line ℓ_{18}
$503: P_{31934} = (29, 4, 30, 1)$ lies on line ℓ_{17}
$504: P_{32006} = (5, 7, 30, 1)$ lies on line ℓ_{2}
$505: P_{32041} = (8, 8, 30, 1)$ lies on line ℓ_{12}
$506: P_{32071} = (6, 9, 30, 1)$ lies on line ℓ_{4}
$507: P_{32084} = (19, 9, 30, 1)$ lies on line ℓ_{6}
$508: P_{32162} = (1, 12, 30, 1)$ lies on line ℓ_{9}
$509: P_{32262} = (5, 15, 30, 1)$ lies on line ℓ_{15}
$510: P_{32468} = (19, 21, 30, 1)$ lies on line ℓ_{10}
$511: P_{32568} = (23, 24, 30, 1)$ lies on line ℓ_{19}
$512: P_{32676} = (3, 28, 30, 1)$ lies on line ℓ_{11}
$513: P_{32682} = (9, 28, 30, 1)$ lies on line ℓ_{8}
$514: P_{32749} = (12, 30, 30, 1)$ lies on line ℓ_{20}
$515: P_{32768} = (31, 30, 30, 1)$ lies on line ℓ_{0}
$516: P_{32789} = (20, 31, 30, 1)$ lies on line ℓ_{5}
$517: P_{32794} = (25, 31, 30, 1)$ lies on line ℓ_{3}
$518: P_{32822} = (21, 0, 31, 1)$ lies on line ℓ_{20}
$519: P_{32840} = (7, 1, 31, 1)$ lies on line ℓ_{6}
$520: P_{32857} = (24, 1, 31, 1)$ lies on line ℓ_{9}
$521: P_{33062} = (5, 8, 31, 1)$ lies on line ℓ_{1}
$522: P_{33190} = (5, 12, 31, 1)$ lies on line ℓ_{4}
$523: P_{33206} = (21, 12, 31, 1)$ lies on line ℓ_{11}
$524: P_{33268} = (19, 14, 31, 1)$ lies on line ℓ_{16}
$525: P_{33337} = (24, 16, 31, 1)$ lies on line ℓ_{8}
$526: P_{33496} = (23, 21, 31, 1)$ lies on line ℓ_{14}
$527: P_{33579} = (10, 24, 31, 1)$ lies on line ℓ_{5}
$528: P_{33584} = (15, 24, 31, 1)$ lies on line ℓ_{15}
$529: P_{33614} = (13, 25, 31, 1)$ lies on line ℓ_{12}
$530: P_{33624} = (23, 25, 31, 1)$ lies on line ℓ_{13}
$531: P_{33669} = (4, 27, 31, 1)$ lies on line ℓ_{3}
$532: P_{33670} = (5, 27, 31, 1)$ lies on line ℓ_{10}
$533: P_{33697} = (0, 28, 31, 1)$ lies on line ℓ_{7}
$534: P_{33778} = (17, 30, 31, 1)$ lies on line ℓ_{17}
$535: P_{33805} = (12, 31, 31, 1)$ lies on line ℓ_{18}
$536: P_{33823} = (30, 31, 31, 1)$ lies on line ℓ_{0}

The single points on the surface are:

Points on surface but on no line

The surface has 604 points not on any line:
The points on the surface but not on lines are:

$0: P_0 = (1,0,0,0)$
$1: P_4 = (1,1,1,1)$
$2: P_{255} = (28,6,1,0)$
$3: P_{329} = (6,9,1,0)$
$4: P_{407} = (20,11,1,0)$
$5: P_{544} = (29,15,1,0)$
$6: P_{636} = (25,18,1,0)$
$7: P_{698} = (23,20,1,0)$
$8: P_{746} = (7,22,1,0)$
$9: P_{856} = (21,25,1,0)$
$10: P_{987} = (24,29,1,0)$
$11: P_{1049} = (22,31,1,0)$
$12: P_{1090} = (0,1,0,1)$
$13: P_{1164} = (10,3,0,1)$
$14: P_{1232} = (14,5,0,1)$
$15: P_{1279} = (29,6,0,1)$
$16: P_{1285} = (3,7,0,1)$
$17: P_{1461} = (19,12,0,1)$
$18: P_{1632} = (30,17,0,1)$
$19: P_{1720} = (22,20,0,1)$
$20: P_{1735} = (5,21,0,1)$
$21: P_{1768} = (6,22,0,1)$
$22: P_{1806} = (12,23,0,1)$
$23: P_{1852} = (26,24,0,1)$
$24: P_{1878} = (20,25,0,1)$
$25: P_{1898} = (8,26,0,1)$
$26: P_{1971} = (17,28,0,1)$
$27: P_{2011} = (25,29,0,1)$
$28: P_{2082} = (0,0,1,1)$
$29: P_{2201} = (24,3,1,1)$
$30: P_{2248} = (7,5,1,1)$
$31: P_{2314} = (9,7,1,1)$
$32: P_{2319} = (14,7,1,1)$
$33: P_{2354} = (17,8,1,1)$
$34: P_{2413} = (12,10,1,1)$
$35: P_{2493} = (28,12,1,1)$
$36: P_{2555} = (26,14,1,1)$
$37: P_{2646} = (21,17,1,1)$
$38: P_{2694} = (5,19,1,1)$
$39: P_{2764} = (11,21,1,1)$
$40: P_{2783} = (30,21,1,1)$
$41: P_{2825} = (8,23,1,1)$
$42: P_{2848} = (31,23,1,1)$
$43: P_{2859} = (10,24,1,1)$
$44: P_{2867} = (18,24,1,1)$
$45: P_{2936} = (23,26,1,1)$
$46: P_{2992} = (15,28,1,1)$
$47: P_{2996} = (19,28,1,1)$
$48: P_{3044} = (3,30,1,1)$
$49: P_{3165} = (28,1,2,1)$
$50: P_{3176} = (7,2,2,1)$
$51: P_{3287} = (22,5,2,1)$
$52: P_{3293} = (28,5,2,1)$
$53: P_{3325} = (28,6,2,1)$
$54: P_{3334} = (5,7,2,1)$
$55: P_{3444} = (19,10,2,1)$
$56: P_{3468} = (11,11,2,1)$
$57: P_{3486} = (29,11,2,1)$
$58: P_{3515} = (26,12,2,1)$
$59: P_{3539} = (18,13,2,1)$
$60: P_{3564} = (11,14,2,1)$
$61: P_{3576} = (23,14,2,1)$
$62: P_{3636} = (19,16,2,1)$
$63: P_{3679} = (30,17,2,1)$
$64: P_{3711} = (30,18,2,1)$
$65: P_{3863} = (22,23,2,1)$
$66: P_{3908} = (3,25,2,1)$
$67: P_{3925} = (20,25,2,1)$
$68: P_{4094} = (29,30,2,1)$
$69: P_{4139} = (10,0,3,1)$
$70: P_{4174} = (13,1,3,1)$
$71: P_{4175} = (14,1,3,1)$
$72: P_{4211} = (18,2,3,1)$
$73: P_{4232} = (7,3,3,1)$
$74: P_{4260} = (3,4,3,1)$
$75: P_{4374} = (21,7,3,1)$
$76: P_{4381} = (28,7,3,1)$
$77: P_{4480} = (31,10,3,1)$
$78: P_{4489} = (8,11,3,1)$
$79: P_{4630} = (21,15,3,1)$
$80: P_{4712} = (7,18,3,1)$
$81: P_{4725} = (20,18,3,1)$
$82: P_{4757} = (20,19,3,1)$
$83: P_{4783} = (14,20,3,1)$
$84: P_{4820} = (19,21,3,1)$
$85: P_{4850} = (17,22,3,1)$
$86: P_{4931} = (2,25,3,1)$
$87: P_{4961} = (0,26,3,1)$
$88: P_{5049} = (24,28,3,1)$
$89: P_{5050} = (25,28,3,1)$

$90: P_{5115} = (26, 30, 3, 1)$
$91: P_{5118} = (29, 30, 3, 1)$
$92: P_{5121} = (0, 31, 3, 1)$
$93: P_{5208} = (23, 1, 4, 1)$
$94: P_{5302} = (21, 4, 4, 1)$
$95: P_{5350} = (5, 6, 4, 1)$
$96: P_{5374} = (29, 6, 4, 1)$
$97: P_{5460} = (19, 9, 4, 1)$
$98: P_{5556} = (19, 12, 4, 1)$
$99: P_{5577} = (8, 13, 4, 1)$
$100: P_{5609} = (8, 14, 4, 1)$
$101: P_{5648} = (15, 15, 4, 1)$
$102: P_{5655} = (22, 15, 4, 1)$
$103: P_{5720} = (23, 17, 4, 1)$
$104: P_{5722} = (25, 17, 4, 1)$
$105: P_{5783} = (22, 19, 4, 1)$
$106: P_{5816} = (23, 20, 4, 1)$
$107: P_{5842} = (17, 21, 4, 1)$
$108: P_{5946} = (25, 24, 4, 1)$
$109: P_{5988} = (3, 26, 4, 1)$
$110: P_{6026} = (9, 27, 4, 1)$
$111: P_{6128} = (15, 30, 4, 1)$
$112: P_{6137} = (24, 30, 4, 1)$
$113: P_{6191} = (14, 0, 5, 1)$
$114: P_{6236} = (27, 1, 5, 1)$
$115: P_{6239} = (30, 1, 5, 1)$
$116: P_{6273} = (0, 3, 5, 1)$
$117: P_{6314} = (9, 4, 5, 1)$
$118: P_{6358} = (21, 5, 5, 1)$
$119: P_{6373} = (4, 6, 5, 1)$
$120: P_{6462} = (29, 8, 5, 1)$
$121: P_{6486} = (21, 9, 5, 1)$
$122: P_{6494} = (29, 9, 5, 1)$
$123: P_{6643} = (18, 14, 5, 1)$
$124: P_{6667} = (10, 15, 5, 1)$
$125: P_{6694} = (5, 16, 5, 1)$
$126: P_{6753} = (0, 18, 5, 1)$
$127: P_{6788} = (3, 19, 5, 1)$
$128: P_{6807} = (22, 19, 5, 1)$
$129: P_{6872} = (23, 21, 5, 1)$
$130: P_{6877} = (28, 21, 5, 1)$
$131: P_{6919} = (6, 23, 5, 1)$
$132: P_{6920} = (7, 23, 5, 1)$
$133: P_{6989} = (12, 25, 5, 1)$
$134: P_{7081} = (8, 28, 5, 1)$
$135: P_{7135} = (30, 29, 5, 1)$
$136: P_{7197} = (28, 31, 5, 1)$
$137: P_{7230} = (29, 0, 6, 1)$
$138: P_{7322} = (25, 3, 6, 1)$
$139: P_{7412} = (19, 6, 6, 1)$
$140: P_{7501} = (12, 9, 6, 1)$
$141: P_{7535} = (14, 10, 6, 1)$
$142: P_{7562} = (9, 11, 6, 1)$
$143: P_{7575} = (22, 11, 6, 1)$
$144: P_{7620} = (3, 13, 6, 1)$
$145: P_{7666} = (17, 14, 6, 1)$
$146: P_{7683} = (2, 15, 6, 1)$
$147: P_{7686} = (5, 15, 6, 1)$
$148: P_{7719} = (6, 16, 6, 1)$
$149: P_{7866} = (25, 20, 6, 1)$
$150: P_{7928} = (23, 22, 6, 1)$
$151: P_{7961} = (24, 23, 6, 1)$
$152: P_{7983} = (14, 24, 6, 1)$
$153: P_{7989} = (20, 24, 6, 1)$
$154: P_{8013} = (12, 25, 6, 1)$
$155: P_{8017} = (16, 25, 6, 1)$
$156: P_{8034} = (1, 26, 6, 1)$
$157: P_{8056} = (23, 26, 6, 1)$
$158: P_{8166} = (5, 30, 6, 1)$
$159: P_{8208} = (15, 31, 6, 1)$
$160: P_{8228} = (3, 0, 7, 1)$
$161: P_{8287} = (30, 1, 7, 1)$
$162: P_{8334} = (13, 3, 7, 1)$
$163: P_{8468} = (19, 7, 7, 1)$
$164: P_{8507} = (26, 8, 7, 1)$
$165: P_{8652} = (11, 13, 7, 1)$
$166: P_{8888} = (23, 20, 7, 1)$
$167: P_{8915} = (18, 21, 7, 1)$
$168: P_{8987} = (26, 23, 7, 1)$
$169: P_{9017} = (24, 24, 7, 1)$
$170: P_{9084} = (27, 26, 7, 1)$
$171: P_{9124} = (3, 28, 7, 1)$
$172: P_{9150} = (29, 28, 7, 1)$
$173: P_{9370} = (25, 3, 8, 1)$
$174: P_{9453} = (12, 6, 8, 1)$
$175: P_{9616} = (15, 11, 8, 1)$
$176: P_{9630} = (29, 11, 8, 1)$
$177: P_{9651} = (18, 12, 8, 1)$
$178: P_{9662} = (29, 12, 8, 1)$
$179: P_{9714} = (17, 14, 8, 1)$
$180: P_{9771} = (10, 16, 8, 1)$
$181: P_{9791} = (30, 16, 8, 1)$
$182: P_{9833} = (8, 18, 8, 1)$
$183: P_{9890} = (1, 20, 8, 1)$
$184: P_{9905} = (16, 20, 8, 1)$
$185: P_{9951} = (30, 21, 8, 1)$
$186: P_{9988} = (3, 23, 8, 1)$
$187: P_{10122} = (9, 27, 8, 1)$
$188: P_{10128} = (15, 27, 8, 1)$
$189: P_{10168} = (23, 28, 8, 1)$
$190: P_{10226} = (17, 30, 8, 1)$
$191: P_{10242} = (1, 31, 8, 1)$
$192: P_{10243} = (2, 31, 8, 1)$
$193: P_{10553} = (24, 8, 9, 1)$
$194: P_{10600} = (7, 10, 9, 1)$
$195: P_{10616} = (23, 10, 9, 1)$
$196: P_{10692} = (3, 13, 9, 1)$
$197: P_{10750} = (29, 14, 9, 1)$

198 : $P_{10902} = (21, 19, 9, 1)$
199 : $P_{11034} = (25, 23, 9, 1)$
200 : $P_{11047} = (6, 24, 9, 1)$
201 : $P_{11145} = (8, 27, 9, 1)$
202 : $P_{11247} = (14, 30, 9, 1)$
203 : $P_{11260} = (27, 30, 9, 1)$
204 : $P_{11372} = (11, 2, 10, 1)$
205 : $P_{11392} = (31, 2, 10, 1)$
206 : $P_{11463} = (6, 5, 10, 1)$
207 : $P_{11595} = (10, 9, 10, 1)$
208 : $P_{11727} = (14, 13, 10, 1)$
209 : $P_{11732} = (19, 13, 10, 1)$
210 : $P_{11799} = (22, 15, 10, 1)$
211 : $P_{11808} = (31, 15, 10, 1)$
212 : $P_{11874} = (1, 18, 10, 1)$
213 : $P_{11877} = (4, 18, 10, 1)$
214 : $P_{11917} = (12, 19, 10, 1)$
215 : $P_{11963} = (26, 20, 10, 1)$
216 : $P_{12057} = (24, 23, 10, 1)$
217 : $P_{12070} = (5, 24, 10, 1)$
218 : $P_{12138} = (9, 26, 10, 1)$
219 : $P_{12151} = (22, 26, 10, 1)$
220 : $P_{12212} = (19, 28, 10, 1)$
221 : $P_{12226} = (1, 29, 10, 1)$
222 : $P_{12238} = (13, 29, 10, 1)$
223 : $P_{12269} = (12, 30, 10, 1)$
224 : $P_{12395} = (10, 2, 11, 1)$
225 : $P_{12565} = (20, 7, 11, 1)$
226 : $P_{12605} = (28, 8, 11, 1)$
227 : $P_{12648} = (7, 10, 11, 1)$
228 : $P_{12790} = (21, 14, 11, 1)$
229 : $P_{12793} = (24, 14, 11, 1)$
230 : $P_{12931} = (2, 19, 11, 1)$
231 : $P_{12959} = (30, 19, 11, 1)$
232 : $P_{13095} = (6, 24, 11, 1)$
233 : $P_{13190} = (5, 27, 11, 1)$
234 : $P_{13303} = (22, 30, 11, 1)$
235 : $P_{13364} = (19, 0, 12, 1)$
236 : $P_{13381} = (4, 1, 12, 1)$
237 : $P_{13385} = (8, 1, 12, 1)$
238 : $P_{13597} = (28, 7, 12, 1)$
239 : $P_{13598} = (29, 7, 12, 1)$
240 : $P_{13657} = (24, 9, 12, 1)$
241 : $P_{13671} = (6, 10, 12, 1)$
242 : $P_{13682} = (17, 10, 12, 1)$
243 : $P_{13697} = (0, 11, 12, 1)$
244 : $P_{13752} = (23, 12, 12, 1)$
245 : $P_{13776} = (15, 13, 12, 1)$
246 : $P_{13818} = (25, 14, 12, 1)$
247 : $P_{13848} = (23, 15, 12, 1)$
248 : $P_{13850} = (25, 15, 12, 1)$
249 : $P_{13889} = (0, 17, 12, 1)$
250 : $P_{13951} = (30, 18, 12, 1)$
251 : $P_{13964} = (11, 19, 12, 1)$
252 : $P_{13988} = (3, 20, 12, 1)$
253 : $P_{14088} = (7, 23, 12, 1)$
254 : $P_{14105} = (24, 23, 12, 1)$
255 : $P_{14127} = (14, 24, 12, 1)$
256 : $P_{14153} = (8, 25, 12, 1)$
257 : $P_{14221} = (12, 27, 12, 1)$
258 : $P_{14286} = (13, 29, 12, 1)$
259 : $P_{14408} = (7, 1, 13, 1)$
260 : $P_{14447} = (14, 2, 13, 1)$
261 : $P_{14475} = (10, 3, 13, 1)$
262 : $P_{14512} = (15, 4, 13, 1)$
263 : $P_{14546} = (17, 5, 13, 1)$
264 : $P_{14643} = (18, 8, 13, 1)$
265 : $P_{14646} = (21, 8, 13, 1)$
266 : $P_{14695} = (6, 10, 13, 1)$
267 : $P_{14808} = (23, 13, 13, 1)$
268 : $P_{14859} = (10, 15, 13, 1)$
269 : $P_{14951} = (6, 18, 13, 1)$
270 : $P_{14963} = (18, 18, 13, 1)$
271 : $P_{14991} = (14, 19, 13, 1)$
272 : $P_{15061} = (20, 21, 13, 1)$
273 : $P_{15080} = (7, 22, 13, 1)$
274 : $P_{15131} = (26, 23, 13, 1)$
275 : $P_{15208} = (7, 26, 13, 1)$
276 : $P_{15221} = (20, 26, 13, 1)$
277 : $P_{15309} = (12, 29, 13, 1)$
278 : $P_{15322} = (25, 29, 13, 1)$
279 : $P_{15500} = (11, 3, 14, 1)$
280 : $P_{15514} = (25, 3, 14, 1)$
281 : $P_{15536} = (15, 4, 14, 1)$
282 : $P_{15539} = (18, 4, 14, 1)$
283 : $P_{15634} = (17, 7, 14, 1)$
284 : $P_{15675} = (26, 8, 14, 1)$
285 : $P_{15682} = (1, 9, 14, 1)$
286 : $P_{15697} = (16, 9, 14, 1)$
287 : $P_{15759} = (14, 11, 14, 1)$
288 : $P_{15957} = (20, 17, 14, 1)$
289 : $P_{16027} = (26, 19, 14, 1)$
290 : $P_{16098} = (1, 22, 14, 1)$
291 : $P_{16124} = (27, 22, 14, 1)$
292 : $P_{16137} = (8, 23, 14, 1)$
293 : $P_{16168} = (7, 24, 14, 1)$
294 : $P_{16265} = (8, 27, 14, 1)$
295 : $P_{16287} = (30, 27, 14, 1)$
296 : $P_{16324} = (3, 29, 14, 1)$
297 : $P_{16403} = (18, 31, 14, 1)$
298 : $P_{16410} = (25, 31, 14, 1)$
299 : $P_{16498} = (17, 2, 15, 1)$
300 : $P_{16559} = (14, 4, 15, 1)$
301 : $P_{16661} = (20, 7, 15, 1)$
302 : $P_{16677} = (4, 8, 15, 1)$
303 : $P_{16692} = (19, 8, 15, 1)$
304 : $P_{16760} = (23, 10, 15, 1)$
305 : $P_{16886} = (21, 14, 15, 1)$

306 : $P_{17050} = (25, 19, 15, 1)$
307 : $P_{17118} = (29, 21, 15, 1)$
308 : $P_{17384} = (7, 30, 15, 1)$
309 : $P_{17405} = (28, 30, 15, 1)$
310 : $P_{17497} = (24, 1, 16, 1)$
311 : $P_{17516} = (11, 2, 16, 1)$
312 : $P_{17542} = (5, 3, 16, 1)$
313 : $P_{17671} = (6, 7, 16, 1)$
314 : $P_{17722} = (25, 8, 16, 1)$
315 : $P_{17801} = (8, 11, 16, 1)$
316 : $P_{17831} = (6, 12, 16, 1)$
317 : $P_{17849} = (24, 12, 16, 1)$
318 : $P_{17981} = (28, 16, 16, 1)$
319 : $P_{18056} = (7, 19, 16, 1)$
320 : $P_{18080} = (31, 19, 16, 1)$
321 : $P_{18098} = (17, 20, 16, 1)$
322 : $P_{18103} = (22, 20, 16, 1)$
323 : $P_{18281} = (8, 26, 16, 1)$
324 : $P_{18315} = (10, 27, 16, 1)$
325 : $P_{18349} = (12, 28, 16, 1)$
326 : $P_{18393} = (24, 29, 16, 1)$
327 : $P_{18411} = (10, 30, 16, 1)$
328 : $P_{18458} = (25, 31, 16, 1)$
329 : $P_{18464} = (31, 31, 16, 1)$
330 : $P_{18495} = (30, 0, 17, 1)$
331 : $P_{18499} = (2, 1, 17, 1)$
332 : $P_{18516} = (19, 1, 17, 1)$
333 : $P_{18625} = (0, 5, 17, 1)$
334 : $P_{18683} = (26, 6, 17, 1)$
335 : $P_{18726} = (5, 8, 17, 1)$
336 : $P_{18746} = (25, 8, 17, 1)$
337 : $P_{18753} = (0, 9, 17, 1)$
338 : $P_{18807} = (22, 10, 17, 1)$
339 : $P_{18839} = (22, 11, 17, 1)$
340 : $P_{18845} = (28, 11, 17, 1)$
341 : $P_{18898} = (17, 13, 17, 1)$
342 : $P_{18988} = (11, 16, 17, 1)$
343 : $P_{19037} = (28, 17, 17, 1)$
344 : $P_{19064} = (23, 18, 17, 1)$
345 : $P_{19121} = (16, 20, 17, 1)$
346 : $P_{19188} = (19, 22, 17, 1)$
347 : $P_{19211} = (10, 23, 17, 1)$
348 : $P_{19253} = (20, 24, 17, 1)$
349 : $P_{19254} = (21, 24, 17, 1)$
350 : $P_{19384} = (23, 28, 17, 1)$
351 : $P_{19385} = (24, 28, 17, 1)$
352 : $P_{19434} = (9, 30, 17, 1)$
353 : $P_{19471} = (14, 31, 17, 1)$
354 : $P_{19769} = (24, 8, 18, 1)$
355 : $P_{19773} = (28, 8, 18, 1)$
356 : $P_{19829} = (20, 10, 18, 1)$
357 : $P_{19924} = (19, 13, 18, 1)$
358 : $P_{19947} = (10, 14, 18, 1)$
359 : $P_{19950} = (13, 14, 18, 1)$
360 : $P_{20027} = (26, 16, 18, 1)$
361 : $P_{20120} = (23, 19, 18, 1)$
362 : $P_{20250} = (25, 23, 18, 1)$
363 : $P_{20407} = (22, 28, 18, 1)$
364 : $P_{20456} = (7, 30, 18, 1)$
365 : $P_{20649} = (8, 4, 19, 1)$
366 : $P_{20655} = (14, 4, 19, 1)$
367 : $P_{20706} = (1, 6, 19, 1)$
368 : $P_{20709} = (4, 6, 19, 1)$
369 : $P_{20751} = (14, 7, 19, 1)$
370 : $P_{20812} = (11, 9, 19, 1)$
371 : $P_{20821} = (20, 9, 19, 1)$
372 : $P_{20838} = (5, 10, 19, 1)$
373 : $P_{20940} = (11, 13, 19, 1)$
374 : $P_{20947} = (18, 13, 19, 1)$
375 : $P_{20966} = (5, 14, 19, 1)$
376 : $P_{20994} = (1, 15, 19, 1)$
377 : $P_{21020} = (27, 15, 19, 1)$
378 : $P_{21077} = (20, 17, 19, 1)$
379 : $P_{21088} = (31, 17, 19, 1)$
380 : $P_{21213} = (28, 21, 19, 1)$
381 : $P_{21330} = (17, 25, 19, 1)$
382 : $P_{21367} = (22, 26, 19, 1)$
383 : $P_{21435} = (26, 28, 19, 1)$
384 : $P_{21524} = (19, 31, 19, 1)$
385 : $P_{21559} = (22, 0, 20, 1)$
386 : $P_{21634} = (1, 3, 20, 1)$
387 : $P_{21657} = (24, 3, 20, 1)$
388 : $P_{21703} = (6, 5, 20, 1)$
389 : $P_{21742} = (13, 6, 20, 1)$
390 : $P_{21755} = (26, 6, 20, 1)$
391 : $P_{21790} = (29, 7, 20, 1)$
392 : $P_{21791} = (30, 7, 20, 1)$
393 : $P_{21915} = (26, 11, 20, 1)$
394 : $P_{21973} = (20, 13, 20, 1)$
395 : $P_{22015} = (30, 14, 20, 1)$
396 : $P_{22028} = (11, 15, 20, 1)$
397 : $P_{22042} = (25, 15, 20, 1)$
398 : $P_{22144} = (31, 18, 20, 1)$
399 : $P_{22162} = (17, 19, 20, 1)$
400 : $P_{22185} = (8, 20, 20, 1)$
401 : $P_{22312} = (7, 24, 20, 1)$
402 : $P_{22361} = (24, 25, 20, 1)$
403 : $P_{22406} = (5, 27, 20, 1)$
404 : $P_{22471} = (6, 29, 20, 1)$
405 : $P_{22509} = (12, 30, 20, 1)$
406 : $P_{22533} = (4, 31, 20, 1)$
407 : $P_{22546} = (17, 31, 20, 1)$
408 : $P_{22566} = (5, 0, 21, 1)$
409 : $P_{22612} = (19, 1, 21, 1)$
410 : $P_{22659} = (2, 3, 21, 1)$
411 : $P_{22748} = (27, 5, 21, 1)$
412 : $P_{22792} = (7, 7, 21, 1)$
413 : $P_{22884} = (3, 10, 21, 1)$

$414: P_{23241} = (8, 21, 21, 1)$
$415: P_{23302} = (5, 23, 21, 1)$
$416: P_{23319} = (22, 23, 21, 1)$
$417: P_{23332} = (3, 24, 21, 1)$
$418: P_{23440} = (15, 27, 21, 1)$
$419: P_{23466} = (9, 28, 21, 1)$
$420: P_{23513} = (24, 29, 21, 1)$
$421: P_{23591} = (6, 0, 22, 1)$
$422: P_{23671} = (22, 2, 22, 1)$
$423: P_{23725} = (12, 4, 22, 1)$
$424: P_{23844} = (3, 8, 22, 1)$
$425: P_{23886} = (13, 9, 22, 1)$
$426: P_{23899} = (26, 9, 22, 1)$
$427: P_{23931} = (26, 10, 22, 1)$
$428: P_{23946} = (9, 11, 22, 1)$
$429: P_{23998} = (29, 12, 22, 1)$
$430: P_{24130} = (1, 17, 22, 1)$
$431: P_{24150} = (21, 17, 22, 1)$
$432: P_{24181} = (20, 18, 22, 1)$
$433: P_{24192} = (31, 18, 22, 1)$
$434: P_{24201} = (8, 19, 22, 1)$
$435: P_{24246} = (21, 20, 22, 1)$
$436: P_{24285} = (28, 21, 22, 1)$
$437: P_{24303} = (14, 22, 22, 1)$
$438: P_{24414} = (29, 25, 22, 1)$
$439: P_{24489} = (8, 28, 22, 1)$
$440: P_{24506} = (25, 28, 22, 1)$
$441: P_{24515} = (2, 29, 22, 1)$
$442: P_{24518} = (5, 29, 22, 1)$
$443: P_{24582} = (5, 31, 22, 1)$
$444: P_{24621} = (12, 0, 23, 1)$
$445: P_{24651} = (10, 1, 23, 1)$
$446: P_{24755} = (18, 4, 23, 1)$
$447: P_{24839} = (6, 7, 23, 1)$
$448: P_{24845} = (12, 7, 23, 1)$
$449: P_{24997} = (4, 12, 23, 1)$
$450: P_{25169} = (16, 17, 23, 1)$
$451: P_{25298} = (17, 21, 23, 1)$
$452: P_{25359} = (14, 23, 23, 1)$
$453: P_{25392} = (15, 24, 23, 1)$
$454: P_{25430} = (21, 25, 23, 1)$
$455: P_{25533} = (28, 28, 23, 1)$
$456: P_{25586} = (17, 30, 23, 1)$
$457: P_{25659} = (26, 0, 24, 1)$
$458: P_{25679} = (14, 1, 24, 1)$
$459: P_{25853} = (28, 6, 24, 1)$
$460: P_{25888} = (31, 7, 24, 1)$
$461: P_{26030} = (13, 12, 24, 1)$
$462: P_{26154} = (9, 16, 24, 1)$
$463: P_{26253} = (12, 19, 24, 1)$
$464: P_{26325} = (20, 21, 24, 1)$
$465: P_{26331} = (26, 21, 24, 1)$
$466: P_{26392} = (23, 23, 24, 1)$
$467: P_{26431} = (30, 24, 24, 1)$
$468: P_{26481} = (16, 26, 24, 1)$
$469: P_{26541} = (12, 28, 24, 1)$
$470: P_{26677} = (20, 0, 25, 1)$
$471: P_{26810} = (25, 4, 25, 1)$
$472: P_{26871} = (22, 6, 25, 1)$
$473: P_{26923} = (10, 8, 25, 1)$
$474: P_{26963} = (18, 9, 25, 1)$
$475: P_{26974} = (29, 9, 25, 1)$
$476: P_{26982} = (5, 10, 25, 1)$
$477: P_{27012} = (3, 11, 25, 1)$
$478: P_{27036} = (27, 11, 25, 1)$
$479: P_{27042} = (1, 12, 25, 1)$
$480: P_{27069} = (28, 12, 25, 1)$
$481: P_{27108} = (3, 14, 25, 1)$
$482: P_{27148} = (11, 15, 25, 1)$
$483: P_{27195} = (26, 16, 25, 1)$
$484: P_{27250} = (17, 18, 25, 1)$
$485: P_{27365} = (4, 22, 25, 1)$
$486: P_{27378} = (17, 22, 25, 1)$
$487: P_{27399} = (6, 23, 25, 1)$
$488: P_{27403} = (10, 23, 25, 1)$
$489: P_{27487} = (30, 25, 25, 1)$
$490: P_{27511} = (22, 26, 25, 1)$
$491: P_{27576} = (23, 28, 25, 1)$
$492: P_{27613} = (28, 29, 25, 1)$
$493: P_{27689} = (8, 0, 26, 1)$
$494: P_{27723} = (10, 1, 26, 1)$
$495: P_{27729} = (16, 1, 26, 1)$
$496: P_{27771} = (26, 2, 26, 1)$
$497: P_{27883} = (10, 6, 26, 1)$
$498: P_{27935} = (30, 7, 26, 1)$
$499: P_{27952} = (15, 8, 26, 1)$
$500: P_{27988} = (19, 9, 26, 1)$
$501: P_{28040} = (7, 11, 26, 1)$
$502: P_{28065} = (0, 12, 26, 1)$
$503: P_{28141} = (12, 14, 26, 1)$
$504: P_{28149} = (20, 14, 26, 1)$
$505: P_{28161} = (0, 15, 26, 1)$
$506: P_{28375} = (22, 21, 26, 1)$
$507: P_{28376} = (23, 21, 26, 1)$
$508: P_{28412} = (27, 22, 26, 1)$
$509: P_{28456} = (7, 24, 26, 1)$
$510: P_{28470} = (21, 24, 26, 1)$
$511: P_{28537} = (24, 26, 26, 1)$
$512: P_{28576} = (31, 27, 26, 1)$
$513: P_{28614} = (5, 29, 26, 1)$
$514: P_{28647} = (6, 30, 26, 1)$
$515: P_{28679} = (6, 31, 26, 1)$
$516: P_{28697} = (24, 31, 26, 1)$
$517: P_{28758} = (21, 1, 27, 1)$
$518: P_{28822} = (21, 3, 27, 1)$
$519: P_{28830} = (29, 3, 27, 1)$
$520: P_{28863} = (30, 4, 27, 1)$
$521: P_{28879} = (14, 5, 27, 1)$

$522: P_{28991} = (30, 8, 27, 1)$
$523: P_{29002} = (9, 9, 27, 1)$
$524: P_{29013} = (20, 9, 27, 1)$
$525: P_{29034} = (9, 10, 27, 1)$
$526: P_{29053} = (28, 10, 27, 1)$
$527: P_{29173} = (20, 14, 27, 1)$
$528: P_{29248} = (31, 16, 27, 1)$
$529: P_{29261} = (12, 17, 27, 1)$
$530: P_{29415} = (6, 22, 27, 1)$
$531: P_{29435} = (26, 22, 27, 1)$
$532: P_{29476} = (3, 24, 27, 1)$
$533: P_{29526} = (21, 25, 27, 1)$
$534: P_{29593} = (24, 27, 27, 1)$
$535: P_{29630} = (29, 28, 27, 1)$
$536: P_{29711} = (14, 31, 27, 1)$
$537: P_{29746} = (17, 0, 28, 1)$
$538: P_{29769} = (8, 1, 28, 1)$
$539: P_{29824} = (31, 2, 28, 1)$
$540: P_{29893} = (4, 5, 28, 1)$
$541: P_{29958} = (5, 7, 28, 1)$
$542: P_{30182} = (5, 14, 28, 1)$
$543: P_{30275} = (2, 17, 28, 1)$
$544: P_{30422} = (21, 21, 28, 1)$
$545: P_{30440} = (7, 22, 28, 1)$
$546: P_{30476} = (11, 23, 28, 1)$
$547: P_{30514} = (17, 24, 28, 1)$
$548: P_{30522} = (25, 24, 28, 1)$
$549: P_{30635} = (10, 28, 28, 1)$
$550: P_{30778} = (25, 0, 29, 1)$
$551: P_{30834} = (17, 2, 29, 1)$
$552: P_{30914} = (1, 5, 29, 1)$
$553: P_{30920} = (7, 5, 29, 1)$
$554: P_{30952} = (7, 6, 29, 1)$
$555: P_{30998} = (21, 7, 29, 1)$
$556: P_{31021} = (12, 8, 29, 1)$
$557: P_{31059} = (18, 9, 29, 1)$
$558: P_{31236} = (3, 15, 29, 1)$
$559: P_{31317} = (20, 17, 29, 1)$
$560: P_{31341} = (12, 18, 29, 1)$
$561: P_{31345} = (16, 18, 29, 1)$
$562: P_{31387} = (26, 19, 29, 1)$
$563: P_{31396} = (3, 20, 29, 1)$
$564: P_{31420} = (27, 20, 29, 1)$
$565: P_{31444} = (19, 21, 29, 1)$
$566: P_{31447} = (22, 21, 29, 1)$
$567: P_{31477} = (20, 22, 29, 1)$
$568: P_{31646} = (29, 27, 29, 1)$
$569: P_{31691} = (10, 29, 29, 1)$
$570: P_{31732} = (19, 30, 29, 1)$
$571: P_{31751} = (6, 31, 29, 1)$
$572: P_{31760} = (15, 31, 29, 1)$
$573: P_{31851} = (10, 2, 30, 1)$
$574: P_{31860} = (19, 2, 30, 1)$
$575: P_{31943} = (6, 5, 30, 1)$
$576: P_{31952} = (15, 5, 30, 1)$
$577: P_{32022} = (21, 7, 30, 1)$
$578: P_{32036} = (3, 8, 30, 1)$
$579: P_{32100} = (3, 10, 30, 1)$
$580: P_{32130} = (1, 11, 30, 1)$
$581: P_{32142} = (13, 11, 30, 1)$
$582: P_{32190} = (29, 12, 30, 1)$
$583: P_{32287} = (30, 15, 30, 1)$
$584: P_{32298} = (9, 16, 30, 1)$
$585: P_{32320} = (31, 16, 30, 1)$
$586: P_{32359} = (6, 18, 30, 1)$
$587: P_{32362} = (9, 18, 30, 1)$
$588: P_{32461} = (12, 21, 30, 1)$
$589: P_{32486} = (5, 22, 30, 1)$
$590: P_{32555} = (10, 24, 30, 1)$
$591: P_{32578} = (1, 25, 30, 1)$
$592: P_{32579} = (2, 25, 30, 1)$
$593: P_{32941} = (12, 4, 31, 1)$
$594: P_{33063} = (6, 8, 31, 1)$
$595: P_{33129} = (8, 10, 31, 1)$
$596: P_{33137} = (16, 10, 31, 1)$
$597: P_{33273} = (24, 14, 31, 1)$
$598: P_{33343} = (30, 16, 31, 1)$
$599: P_{33430} = (21, 19, 31, 1)$
$600: P_{33432} = (23, 19, 31, 1)$
$601: P_{33502} = (29, 21, 31, 1)$
$602: P_{33719} = (22, 28, 31, 1)$
$603: P_{33789} = (28, 30, 31, 1)$

Line Intersection Graph

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

Neighbor sets in the line intersection graph:
Line 0 intersects

Line	ℓ_2	ℓ_4	ℓ_5	ℓ_8	ℓ_{12}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{19}
in point	P_{1059}	P_{1059}	P_{17970}	P_{1059}	P_{1059}	P_{14797}	P_{3172}	P_{5286}	P_{1059}	P_{29595}

Line 1 intersects

Line	ℓ_8	ℓ_9	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{19}
in point	P_{7007}	P_{23482}	P_{25397}	P_{2629}	P_{32114}	P_{26803}	P_{4810}	P_{22510}

Line 2 intersects

Line	ℓ_0	ℓ_4	ℓ_6	ℓ_8	ℓ_9	ℓ_{11}	ℓ_{12}	ℓ_{17}	ℓ_{19}	ℓ_{20}
in point	P_{1059}	P_{1059}	P_{6685}	P_{1059}	P_{2204}	P_{13993}	P_{1059}	P_{1059}	P_{32960}	P_{27114}

Line 3 intersects

Line	ℓ_6	ℓ_8	ℓ_9	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}
in point	P_{20973}	P_{2481}	P_{25886}	P_{31388}	P_{7084}	P_{18676}	P_{30471}	P_{7722}

Line 4 intersects

Line	ℓ_0	ℓ_2	ℓ_7	ℓ_8	ℓ_9	ℓ_{12}	ℓ_{13}	ℓ_{15}	ℓ_{17}	ℓ_{18}
in point	P_{1059}	P_{1059}	P_{19480}	P_{1059}	P_{28619}	P_{1059}	P_{8172}	P_{20019}	P_{1059}	P_{2243}

Line 5 intersects

Line	ℓ_0	ℓ_6	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{13}	ℓ_{18}
in point	P_{17970}	P_{28862}	P_{13196}	P_{26981}	P_{21335}	P_{19216}	P_{2362}	P_{23680}

Line 6 intersects

Line	ℓ_2	ℓ_3	ℓ_5	ℓ_7	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}
in point	P_{6685}	P_{20973}	P_{28862}	P_{4972}	P_{22160}	P_{28074}	P_{2407}	P_{16341}

Line 7 intersects

Line	ℓ_4	ℓ_6	ℓ_8	ℓ_{10}	ℓ_{11}	ℓ_{14}	ℓ_{16}	ℓ_{19}
in point	P_{19480}	P_{4972}	P_{31040}	P_{6288}	P_{10235}	P_{3639}	P_{32510}	P_{2549}

Line 8 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_7	ℓ_{12}	ℓ_{17}	ℓ_{20}
in point	P_{1059}	P_{7007}	P_{1059}	P_{2481}	P_{1059}	P_{13196}	P_{31040}	P_{1059}	P_{1059}	P_{27976}

Line 9 intersects

Line	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_{10}	ℓ_{14}	ℓ_{16}
in point	P_{23482}	P_{2204}	P_{25886}	P_{28619}	P_{26981}	P_{11908}	P_{14144}	P_{31632}

Line 10 intersects

Line	ℓ_5	ℓ_7	ℓ_9	ℓ_{12}	ℓ_{15}	ℓ_{17}	ℓ_{19}	ℓ_{20}
in point	P_{21335}	P_{6288}	P_{11908}	P_{13945}	P_{3070}	P_{23923}	P_{5594}	P_{18656}

Line 11 intersects

Line	ℓ_1	ℓ_2	ℓ_5	ℓ_7	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}
in point	P_{25397}	P_{13993}	P_{19216}	P_{10235}	P_{21964}	P_{23843}	P_{2926}	P_{8919}

Line 12 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_4	ℓ_6	ℓ_8	ℓ_{10}	ℓ_{16}	ℓ_{17}	ℓ_{18}
in point	P_{1059}	P_{2629}	P_{1059}	P_{1059}	P_{22160}	P_{1059}	P_{13945}	P_{10698}	P_{1059}	P_{4847}

Line 13 intersects

Line	ℓ_1	ℓ_4	ℓ_5	ℓ_6	ℓ_{16}	ℓ_{17}	ℓ_{19}	ℓ_{20}
in point	P_{32114}	P_{8172}	P_{2362}	P_{28074}	P_{14453}	P_{4502}	P_{11943}	P_{13907}

Line 14 intersects

Line	ℓ_0	ℓ_1	ℓ_6	ℓ_7	ℓ_9	ℓ_{17}	ℓ_{18}	ℓ_{20}
in point	P_{14797}	P_{26803}	P_{2407}	P_{3639}	P_{14144}	P_{16496}	P_{7665}	P_{9466}

Line 15 intersects

Line	ℓ_0	ℓ_1	ℓ_3	ℓ_4	ℓ_6	ℓ_{10}	ℓ_{11}	ℓ_{20}
in point	P_{3172}	P_{4810}	P_{31388}	P_{20019}	P_{16341}	P_{3070}	P_{21964}	P_{18311}

Line 16 intersects

Line	ℓ_0	ℓ_3	ℓ_7	ℓ_9	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{20}
in point	P_{5286}	P_{7084}	P_{32510}	P_{31632}	P_{23843}	P_{10698}	P_{14453}	P_{2711}

Line 17 intersects

Line	ℓ_0	ℓ_2	ℓ_3	ℓ_4	ℓ_8	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}
in point	P_{1059}	P_{1059}	P_{18676}	P_{1059}	P_{1059}	P_{23923}	P_{2926}	P_{1059}	P_{4502}	P_{16496}

Line 18 intersects

Line	ℓ_3	ℓ_4	ℓ_5	ℓ_{11}	ℓ_{12}	ℓ_{14}	ℓ_{19}	ℓ_{20}
in point	P_{30471}	P_{2243}	P_{23680}	P_{8919}	P_{4847}	P_{7665}	P_{27923}	P_{15654}

Line 19 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_7	ℓ_{10}	ℓ_{13}	ℓ_{18}
in point	P_{29595}	P_{22510}	P_{32960}	P_{7722}	P_{2549}	P_{5594}	P_{11943}	P_{27923}

Line 20 intersects

Line	ℓ_2	ℓ_8	ℓ_{10}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{18}
in point	P_{27114}	P_{27976}	P_{18656}	P_{13907}	P_{9466}	P_{18311}	P_{2711}	P_{15654}

The surface has 1217 points:
Too many to print.