Rank-265 over GF(16)

January 15, 2021

The equation

The equation of the surface is :

$$X_0^3 + X_2^3 + X_3^3 + X_0^2X_1 + X_0^2X_2 + X_0^2X_3 + X_0X_1^2 = 0$$

(1, 0, 1, 1, 1, 1, 1, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0)
The point rank of the equation over GF(16) is 35791391

General information

Number of lines	27
Number of points	369
Number of singular points	0
Number of Eckardt points	45
Number of double points	0
Number of single points	324
Number of points off lines	0
Number of Hesse planes	40
Number of axes	240
Type of points on lines	17^{27}
Type of lines on points	3^{45}, 1^{324}

Singular Points

The surface has 0 singular points:

The 27 Lines

The lines and their Pluecker coordinates are:

$$\ell_0 = a_1 = \left[\begin{array}{cccc} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \delta^5 \end{array}\right]_{69899} = \left[\begin{array}{cccc} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 11 \end{array}\right]_{69899} = \mathbf{Pl}(0,0,0,11,0,1)_{5431}$$

$$\ell_1 = a_2 = \left[\begin{array}{cccc} 1 & \delta^5 & 0 & 0 \\ 0 & 0 & 1 & 1 \end{array}\right]_{3260} = \left[\begin{array}{cccc} 1 & 11 & 0 & 0 \\ 0 & 0 & 1 & 1 \end{array}\right]_{3260} = \mathbf{Pl}(0,0,1,1,10,1)_{46146}$$

$$\ell_2 = a_3 = \left[\begin{array}{cccc} 1 & 0 & \delta^{9} & \delta^{6} \\ 0 & 1 & \delta^{10} & \delta^{10} \end{array}\right]_{67055} = \left[\begin{array}{cccc} 1 & 0 & 5 & 15 \\ 0 & 1 & 10 & 10 \end{array}\right]_{67055} = \mathbf{Pl}(9,13,8,3,2,1)_{15464}$$

$$\ell_3 = a_4 = \left[\begin{array}{cccc} 1 & 0 & \delta^{3} & \delta^{12} \\ 0 & 1 & \delta^{5} & \delta^{5} \end{array}\right]_{15475} = \left[\begin{array}{cccc} 1 & 0 & 8 & 3 \\ 0 & 1 & 11 & 11 \end{array}\right]_{15475} = \mathbf{Pl}(14,7,15,5,4,1)_{25129}$$

$$\ell_4 = a_5 = \left[\begin{array}{cccc} 1 & 0 & \delta^{5} & \delta^{10} \\ 0 & 1 & 1 & 1 \end{array}\right]_{46700} = \left[\begin{array}{cccc} 1 & 0 & 11 & 10 \\ 0 & 1 & 1 & 1 \end{array}\right]_{46700} = \mathbf{Pl}(11,10,10,11,10,1)_{48646}$$

$$\ell_5 = a_6 = \left[\begin{array}{cccc} 1 & 0 & \delta^{4} & \delta^{2} \\ 0 & 1 & \delta^{11} & \delta^{6} \end{array}\right]_{20182} = \left[\begin{array}{cccc} 1 & 0 & 9 & 4 \\ 0 & 1 & 13 & 15 \end{array}\right]_{20182} = \mathbf{Pl}(11,10,4,6,4,1)_{22861}$$

$$\ell_6 = b_1 = \left[\begin{array}{cccc} 1 & 0 & \delta^{2} & \delta^{5} \\ 0 & 1 & \delta^{11} & \delta^{6} \end{array}\right]_{49393} = \left[\begin{array}{cccc} 1 & 0 & 4 & 11 \\ 0 & 1 & 13 & 15 \end{array}\right]_{49393} = \mathbf{Pl}(8,3,3,8,9,1)_{43138}$$

$$\ell_7 = b_2 = \left[\begin{array}{cccc} 1 & 0 & \delta^{2} & \delta^{4} \\ 0 & 1 & \delta^{6} & \delta^{11} \end{array}\right]_{40627} = \left[\begin{array}{cccc} 1 & 0 & 4 & 9 \\ 0 & 1 & 15 & 13 \end{array}\right]_{40627} = \mathbf{Pl}(8,3,6,4,5,1)_{27283}$$

$$\ell_8 = b_3 = \left[\begin{array}{cccc} 1 & 0 & \delta^{2} & \delta \\ 0 & 1 & \delta^{13} & \delta^{3} \end{array}\right]_{9962} = \left[\begin{array}{cccc} 1 & 0 & 4 & 2 \\ 0 & 1 & 6 & 8 \end{array}\right]_{9962} = \mathbf{Pl}(10,11,2,12,2,1)_{14235}$$

$$\ell_9 = b_4 = \left[\begin{array}{cccc} 1 & 0 & \delta^{8} & \delta^{4} \\ 0 & 1 & \delta^{7} & \delta^{12} \end{array}\right]_{43189} = \left[\begin{array}{cccc} 1 & 0 & 14 & 9 \\ 0 & 1 & 7 & 3 \end{array}\right]_{43189} = \mathbf{Pl}(10,11,9,13,9,1)_{44415}$$

$$\ell_{10} = b_5 = \left[\begin{array}{cccc} 1 & 0 & \delta^{5} & \delta^{8} \\ 0 & 1 & \delta^{9} & \delta^{14} \end{array}\right]_{64352} = \left[\begin{array}{cccc} 1 & 0 & 11 & 14 \\ 0 & 1 & 5 & 12 \end{array}\right]_{64352} = \mathbf{Pl}(5,15,3,8,5,1)_{26695}$$

$$\ell_{11} = b_6 = \left[\begin{array}{cccc} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 \end{array}\right]_{69889} = \left[\begin{array}{cccc} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 \end{array}\right]_{69889} = \mathbf{Pl}(0,0,0,1,0,1)_{5121}$$

$$\ell_{12} = c_{12} = \left[\begin{array}{cccc} 1 & 0 & \delta^{5} & \delta^{2} \\ 0 & 1 & \delta^{6} & \delta^{11} \end{array}\right]_{20698} = \left[\begin{array}{cccc} 1 & 0 & 11 & 4 \\ 0 & 1 & 15 & 13 \end{array}\right]_{20698} = \mathbf{Pl}(15,5,8,3,15,1)_{68570}$$

$$\ell_{13} = c_{13} = \left[\begin{array}{cccc} 1 & 0 & \delta & \delta^{10} \\ 0 & 1 & \delta^{13} & \delta^{3} \end{array}\right]_{44360} = \left[\begin{array}{cccc} 1 & 0 & 2 & 10 \\ 0 & 1 & 6 & 8 \end{array}\right]_{44360} = \mathbf{Pl}(5,15,15,5,4,1)_{25180}$$

$$\ell_{14} = c_{14} = \left[\begin{array}{cccc} 1 & 0 & \delta^{4} & \delta^{10} \\ 0 & 1 & \delta^{7} & \delta^{12} \end{array}\right]_{46192} = \left[\begin{array}{cccc} 1 & 0 & 9 & 10 \\ 0 & 1 & 7 & 3 \end{array}\right]_{46192} = \mathbf{Pl}(15,5,5,15,14,1)_{63785}$$

$$\ell_{15} = c_{15} = \left[\begin{array}{cccc} 1 & 0 & \delta^{8} & \delta \\ 0 & 1 & \delta^{9} & \delta^{14} \end{array}\right]_{12755} = \left[\begin{array}{cccc} 1 & 0 & 14 & 2 \\ 0 & 1 & 5 & 12 \end{array}\right]_{12755} = \mathbf{Pl}(3,8,7,14,15,1)_{68363}$$

$$\ell_{16} = c_{16} = \left[\begin{array}{cccc} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \delta^{10} \end{array}\right]_{69898} = \left[\begin{array}{cccc} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 10 \end{array}\right]_{69898} = \mathbf{Pl}(0,0,0,10,0,1)_{5400}$$

$$\ell_{17} = c_{23} = \left[\begin{array}{cccc} 1 & 0 & \delta & \delta^{2} \\ 0 & 1 & \delta^{3} & \delta^{13} \end{array}\right]_{18122} = \left[\begin{array}{cccc} 1 & 0 & 2 & 4 \\ 0 & 1 & 8 & 6 \end{array}\right]_{18122} = \mathbf{Pl}(5,15,12,2,3,1)_{20560}$$

$$\ell_{18} = c_{24} = \left[\begin{array}{cccc} 1 & 0 & \delta^{4} & \delta^{8} \\ 0 & 1 & \delta^{12} & \delta^{7} \end{array}\right]_{63724} = \left[\begin{array}{cccc} 1 & 0 & 9 & 14 \\ 0 & 1 & 3 & 7 \end{array}\right]_{63724} = \mathbf{Pl}(15,5,13,9,8,1)_{41030}$$

$$\ell_{19} = c_{25} = \left[\begin{array}{cccc} 1 & 0 & \delta^{8} & \delta^{5} \\ 0 & 1 & \delta^{14} & \delta^{9} \end{array}\right]_{51962} = \left[\begin{array}{cccc} 1 & 0 & 14 & 11 \\ 0 & 1 & 12 & 5 \end{array}\right]_{51962} = \mathbf{Pl}(3,8,8,3,2,1)_{15473}$$

$$\ell_{20} = c_{26} = \left[\begin{array}{cccc} 1 & \delta^{10} & 0 & 0 \\ 0 & 0 & 1 & 1 \end{array}\right]_{2987} = \left[\begin{array}{cccc} 1 & 10 & 0 & 0 \\ 0 & 0 & 1 & 1 \end{array}\right]_{2987} = \mathbf{Pl}(0,0,1,1,11,1)_{50226}$$

$$\ell_{21} = c_{34} = \left[\begin{array}{cccc} 1 & 0 & \delta & \delta^{8} \\ 0 & 1 & \delta^{14} & \delta^{9} \end{array}\right]_{61790} = \left[\begin{array}{cccc} 1 & 0 & 2 & 14 \\ 0 & 1 & 12 & 5 \end{array}\right]_{61790} = \mathbf{Pl}(11,10,14,7,14,1)_{65686}$$

$$\ell_{22} = c_{35} = \left[\begin{array}{cccc} 1 & 0 & \delta^{10} & \delta^{4} \\ 0 & 1 & \delta^{12} & \delta^{7} \end{array}\right]_{42157} = \left[\begin{array}{cccc} 1 & 0 & 10 & 9 \\ 0 & 1 & 3 & 7 \end{array}\right]_{42157} = \mathbf{Pl}(3,8,15,5,3,1)_{21143}$$

$$\ell_{23} = c_{36} = \left[\begin{array}{cccc} 1 & 0 & \delta^6 & \delta^9 \\ 0 & 1 & \delta^{10} & \delta^{10} \end{array}\right]_{26105} = \left[\begin{array}{cccc} 1 & 0 & 15 & 5 \\ 0 & 1 & 10 & 10 \end{array}\right]_{26105} = \mathbf{Pl}(2,12,3,8,9,1)_{43042}$$

$$\ell_{24} = c_{45} = \left[\begin{array}{cccc} 1 & 0 & \delta^{10} & \delta \\ 0 & 1 & \delta^3 & \delta^{13} \end{array}\right]_{11570} = \left[\begin{array}{cccc} 1 & 0 & 10 & 2 \\ 0 & 1 & 8 & 6 \end{array}\right]_{11570} = \mathbf{Pl}(8,3,5,15,8,1)_{39463}$$

$$\ell_{25} = c_{46} = \left[\begin{array}{cccc} 1 & 0 & \delta^{12} & \delta^3 \\ 0 & 1 & \delta^5 & \delta^5 \end{array}\right]_{35950} = \left[\begin{array}{cccc} 1 & 0 & 3 & 8 \\ 0 & 1 & 11 & 11 \end{array}\right]_{35950} = \mathbf{Pl}(4,6,5,15,14,1)_{63969}$$

$$\ell_{26} = c_{56} = \left[\begin{array}{cccc} 1 & 0 & \delta^{10} & \delta^5 \\ 0 & 1 & 1 & 1 \end{array}\right]_{50795} = \left[\begin{array}{cccc} 1 & 0 & 10 & 11 \\ 0 & 1 & 1 & 1 \end{array}\right]_{50795} = \mathbf{Pl}(10,11,11,10,11,1)_{52920}$$

Rank of lines: (69899, 3260, 67055, 15475, 46700, 20182, 49393, 40627, 9962, 43189, 64352, 69889, 20698, 44360, 46192, 12755, 69898, 18122, 63724, 51962, 2987, 61790, 42157, 26105, 11570, 35950, 50795)
Rank of points on Klein quadric: (5431, 46146, 15464, 25129, 48646, 22861, 43138, 27283, 14235, 44415, 26695, 5121, 68570, 25180, 63785, 68363, 5400, 20560, 41030, 15473, 50226, 65686, 21143, 43042, 39463, 63969, 52920)

Eckardt Points

The surface has 45 Eckardt points:
$0 : E_{16} = a_1 \cap b_6 \cap c_{16} = P_1 = \mathbf{P}(0,1,0,0) = \mathbf{P}(0,1,0,0)$,
$1 : E_{26} = a_2 \cap b_6 \cap c_{26} = P_{530} = \mathbf{P}(0,0,1,1) = \mathbf{P}(0,0,1,1)$,
$2 : E_{56} = a_5 \cap b_6 \cap c_{56} = P_{546} = \mathbf{P}(0,1,1,1) = \mathbf{P}(0,1,1,1)$,
$3 : E_{62} = a_6 \cap b_2 \cap c_{26} = P_{581} = \mathbf{P}(\delta^2,\delta^{12},1,1) = \mathbf{P}(4,3,1,1)$,
$4 : E_{24} = a_2 \cap b_4 \cap c_{24} = P_{618} = \mathbf{P}(\delta^4,\delta^9,1,1) = \mathbf{P}(9,5,1,1)$,
$5 : E_{25} = a_2 \cap b_5 \cap c_{25} = P_{639} = \mathbf{P}(\delta^8,\delta^{13},1,1) = \mathbf{P}(14,6,1,1)$,
$6 : E_{21} = a_2 \cap b_1 \cap c_{12} = P_{645} = \mathbf{P}(\delta^2,\delta^7,1,1) = \mathbf{P}(4,7,1,1)$,
$7 : E_{15,26,34} = c_{15} \cap c_{26} \cap c_{34} = P_{671} = \mathbf{P}(\delta^8,\delta^3,1,1) = \mathbf{P}(14,8,1,1)$,
$8 : E_{46} = a_4 \cap b_6 \cap c_{46} = P_{689} = \mathbf{P}(0,\delta^{10},1,1) = \mathbf{P}(0,10,1,1)$,
$9 : E_{36} = a_3 \cap b_6 \cap c_{36} = P_{705} = \mathbf{P}(0,\delta^5,1,1) = \mathbf{P}(0,11,1,1)$,
$10 : E_{14,26,35} = c_{14} \cap c_{26} \cap c_{35} = P_{730} = \mathbf{P}(\delta^4,\delta^{14},1,1) = \mathbf{P}(9,12,1,1)$,
$11 : E_{13,26,45} = c_{13} \cap c_{26} \cap c_{45} = P_{739} = \mathbf{P}(\delta,\delta^{11},1,1) = \mathbf{P}(2,13,1,1)$,
$12 : E_{23} = a_2 \cap b_3 \cap c_{23} = P_{771} = \mathbf{P}(\delta,\delta^6,1,1) = \mathbf{P}(2,15,1,1)$,
$13 : E_{14,25,36} = c_{14} \cap c_{25} \cap c_{36} = P_{933} = \mathbf{P}(\delta^2,\delta^4,\delta,1) = \mathbf{P}(4,9,2,1)$,
$14 : E_{34} = a_3 \cap b_4 \cap c_{34} = P_{997} = \mathbf{P}(\delta^2,\delta^{11},\delta,1) = \mathbf{P}(4,13,2,1)$,
$15 : E_{52} = a_5 \cap b_2 \cap c_{25} = P_{1235} = \mathbf{P}(\delta,\delta^{14},\delta^{12},1) = \mathbf{P}(2,12,3,1)$,
$16 : E_{12,34,56} = c_{12} \cap c_{34} \cap c_{56} = P_{1267} = \mathbf{P}(\delta,\delta^8,\delta^{12},1) = \mathbf{P}(2,14,3,1)$,
$17 : E_{43} = a_4 \cap b_3 \cap c_{34} = P_{1418} = \mathbf{P}(\delta^4,\delta^7,\delta^2,1) = \mathbf{P}(9,7,4,1)$,
$18 : E_{13,25,46} = c_{13} \cap c_{25} \cap c_{46} = P_{1530} = \mathbf{P}(\delta^4,\delta^8,\delta^2,1) = \mathbf{P}(9,14,4,1)$,
$19 : E_{53} = a_5 \cap b_3 \cap c_{35} = P_{1589} = \mathbf{P}(\delta^2,\delta,\delta^9,1) = \mathbf{P}(4,2,5,1)$,
$20 : E_{13,24,56} = c_{13} \cap c_{24} \cap c_{56} = P_{1653} = \mathbf{P}(\delta^2,\delta^{13},\delta^9,1) = \mathbf{P}(4,6,5,1)$,
$21 : E_{15,23,46} = c_{15} \cap c_{23} \cap c_{46} = P_{1989} = \mathbf{P}(\delta^2,\delta^5,\delta^{13},1) = \mathbf{P}(4,11,6,1)$,
$22 : E_{45} = a_4 \cap b_5 \cap c_{45} = P_{2053} = \mathbf{P}(\delta^2,\delta^6,\delta^{13},1) = \mathbf{P}(4,15,6,1)$,
$23 : E_{12,35,46} = c_{12} \cap c_{35} \cap c_{46} = P_{2159} = \mathbf{P}(\delta^8,\delta^9,\delta^7,1) = \mathbf{P}(14,5,7,1)$,
$24 : E_{42} = a_4 \cap b_2 \cap c_{24} = P_{2255} = \mathbf{P}(\delta^8,\delta^5,\delta^7,1) = \mathbf{P}(14,11,7,1)$,
$25 : E_{65} = a_6 \cap b_5 \cap c_{56} = P_{2394} = \mathbf{P}(\delta^4,\delta^2,\delta^3,1) = \mathbf{P}(9,4,8,1)$,
$26 : E_{51} = a_5 \cap b_1 \cap c_{15} = P_{2538} = \mathbf{P}(\delta^4,\delta^{11},\delta^3,1) = \mathbf{P}(9,13,8,1)$,
$27 : E_{31} = a_3 \cap b_1 \cap c_{13} = P_{2623} = \mathbf{P}(\delta^8,\delta,\delta^4,1) = \mathbf{P}(14,2,9,1)$,
$28 : E_{63} = a_6 \cap b_3 \cap c_{36} = P_{2783} = \mathbf{P}(\delta^8,\delta^{14},\delta^4,1) = \mathbf{P}(14,12,9,1)$,
$29 : E_{15} = a_1 \cap b_5 \cap c_{15} = P_{2865} = \mathbf{P}(0,\delta,\delta^{10},1) = \mathbf{P}(0,2,10,1)$,
$30 : E_{13} = a_1 \cap b_3 \cap c_{13} = P_{2881} = \mathbf{P}(0,\delta^{12},\delta^{10},1) = \mathbf{P}(0,3,10,1)$,
$31 : E_{14} = a_1 \cap b_4 \cap c_{14} = P_{2961} = \mathbf{P}(0,\delta^3,\delta^{10},1) = \mathbf{P}(0,8,10,1)$,
$32 : E_{12} = a_1 \cap b_2 \cap c_{12} = P_{2977} = \mathbf{P}(0,\delta^4,\delta^{10},1) = \mathbf{P}(0,9,10,1)$,
$33 : E_{16,23,45} = c_{16} \cap c_{23} \cap c_{45} = P_{3153} = \mathbf{P}(0,\delta^2,\delta^5,1) = \mathbf{P}(0,4,11,1)$,

$34 : E_{61} = a_6 \cap b_1 \cap c_{16} = P_{3169} = \mathbf{P}(0, \delta^9, \delta^5, 1) = \mathbf{P}(0, 5, 11, 1),$
$35 : E_{16,24,35} = c_{16} \cap c_{24} \cap c_{35} = P_{3313} = \mathbf{P}(0, \delta^8, \delta^5, 1) = \mathbf{P}(0, 14, 11, 1),$
$36 : E_{16,25,34} = c_{16} \cap c_{25} \cap c_{34} = P_{3329} = \mathbf{P}(0, \delta^6, \delta^5, 1) = \mathbf{P}(0, 15, 11, 1),$
$37 : E_{35} = a_3 \cap b_5 \cap c_{35} = P_{3475} = \mathbf{P}(\delta, \delta^3, \delta^{14}, 1) = \mathbf{P}(2, 8, 12, 1),$
$38 : E_{15,24,36} = c_{15} \cap c_{24} \cap c_{36} = P_{3507} = \mathbf{P}(\delta, \delta^{10}, \delta^{14}, 1) = \mathbf{P}(2, 10, 12, 1),$
$39 : E_{12,36,45} = c_{12} \cap c_{36} \cap c_{45} = P_{3658} = \mathbf{P}(\delta^4, \delta^{12}, \delta^{11}, 1) = \mathbf{P}(9, 3, 13, 1),$
$40 : E_{32} = a_3 \cap b_2 \cap c_{23} = P_{3770} = \mathbf{P}(\delta^4, \delta^{10}, \delta^{11}, 1) = \mathbf{P}(9, 10, 13, 1),$
$41 : E_{41} = a_4 \cap b_1 \cap c_{14} = P_{3923} = \mathbf{P}(\delta, \delta^2, \delta^8, 1) = \mathbf{P}(2, 4, 14, 1),$
$42 : E_{64} = a_6 \cap b_4 \cap c_{46} = P_{3955} = \mathbf{P}(\delta, \delta^{13}, \delta^8, 1) = \mathbf{P}(2, 6, 14, 1),$
$43 : E_{14,23,56} = c_{14} \cap c_{23} \cap c_{56} = P_{4239} = \mathbf{P}(\delta^8, \delta^7, \delta^6, 1) = \mathbf{P}(14, 7, 15, 1),$
$44 : E_{54} = a_5 \cap b_4 \cap c_{45} = P_{4271} = \mathbf{P}(\delta^8, \delta^4, \delta^6, 1) = \mathbf{P}(14, 9, 15, 1).$

Double Points

The surface has 0 Double points:
The double points on the surface are:

Single Points

The surface has 324 single points:
The single points on the surface are:

$0 : P_{14} = (10, 1, 0, 0)$ lies on line a_2
$1 : P_{15} = (11, 1, 0, 0)$ lies on line c_{26}
$2 : P_{62} = (11, 2, 1, 0)$ lies on line a_3
$3 : P_{73} = (6, 3, 1, 0)$ lies on line c_{34}
$4 : P_{75} = (8, 3, 1, 0)$ lies on line b_5
$5 : P_{79} = (12, 3, 1, 0)$ lies on line c_{14}
$6 : P_{93} = (10, 4, 1, 0)$ lies on line a_4
$7 : P_{105} = (6, 5, 1, 0)$ lies on line c_{25}
$8 : P_{112} = (13, 5, 1, 0)$ lies on line b_3
$9 : P_{114} = (15, 5, 1, 0)$ lies on line c_{45}
$10 : P_{150} = (3, 8, 1, 0)$ lies on line c_{12}
$11 : P_{154} = (7, 8, 1, 0)$ lies on line a_6
$12 : P_{160} = (13, 8, 1, 0)$ lies on line c_{13}
$13 : P_{174} = (11, 9, 1, 0)$ lies on line c_{36}
$14 : P_{180} = (1, 10, 1, 0)$ lies on line a_5
$15 : P_{184} = (5, 10, 1, 0)$ lies on line c_{24}
$16 : P_{194} = (15, 10, 1, 0)$ lies on line c_{23}
$17 : P_{196} = (1, 11, 1, 0)$ lies on line c_{56}
$18 : P_{198} = (3, 11, 1, 0)$ lies on line b_2
$19 : P_{203} = (8, 11, 1, 0)$ lies on line c_{15}
$20 : P_{253} = (10, 14, 1, 0)$ lies on line c_{46}
$21 : P_{264} = (5, 15, 1, 0)$ lies on line c_{35}
$22 : P_{266} = (7, 15, 1, 0)$ lies on line b_1
$23 : P_{271} = (12, 15, 1, 0)$ lies on line b_4
$24 : P_{317} = (11, 2, 0, 1)$ lies on line c_{36}
$25 : P_{328} = (6, 3, 0, 1)$ lies on line c_{15}
$26 : P_{330} = (8, 3, 0, 1)$ lies on line c_{25}
$27 : P_{334} = (12, 3, 0, 1)$ lies on line c_{35}
$28 : P_{348} = (10, 4, 0, 1)$ lies on line c_{46}
$29 : P_{360} = (6, 5, 0, 1)$ lies on line b_5
$30 : P_{367} = (13, 5, 0, 1)$ lies on line c_{23}
$31 : P_{369} = (15, 5, 0, 1)$ lies on line c_{13}
$32 : P_{405} = (3, 8, 0, 1)$ lies on line b_1
$33 : P_{409} = (7, 8, 0, 1)$ lies on line b_2
$34 : P_{415} = (13, 8, 0, 1)$ lies on line c_{45}
$35 : P_{429} = (11, 9, 0, 1)$ lies on line a_3
$36 : P_{435} = (1, 10, 0, 1)$ lies on line c_{56}
$37 : P_{439} = (5, 10, 0, 1)$ lies on line b_4
$38 : P_{449} = (15, 10, 0, 1)$ lies on line b_3
$39 : P_{451} = (1, 11, 0, 1)$ lies on line a_5
$40 : P_{453} = (3, 11, 0, 1)$ lies on line a_6
$41 : P_{458} = (8, 11, 0, 1)$ lies on line c_{34}
$42 : P_{508} = (10, 14, 0, 1)$ lies on line a_4
$43 : P_{519} = (5, 15, 0, 1)$ lies on line c_{14}
$44 : P_{521} = (7, 15, 0, 1)$ lies on line c_{12}
$45 : P_{526} = (12, 15, 0, 1)$ lies on line c_{24}
$46 : P_{555} = (10, 1, 1, 1)$ lies on line a_2
$47 : P_{556} = (11, 1, 1, 1)$ lies on line c_{26}
$48 : P_{561} = (0, 2, 1, 1)$ lies on line b_6
$49 : P_{574} = (13, 2, 1, 1)$ lies on line a_2
$50 : P_{576} = (15, 2, 1, 1)$ lies on line c_{26}
$51 : P_{577} = (0, 3, 1, 1)$ lies on line b_6
$52 : P_{584} = (7, 3, 1, 1)$ lies on line a_2
$53 : P_{593} = (0, 4, 1, 1)$ lies on line b_6
$54 : P_{596} = (3, 4, 1, 1)$ lies on line a_2
$55 : P_{600} = (7, 4, 1, 1)$ lies on line c_{26}

56 : $P_{609} = (0, 5, 1, 1)$ lies on line b_6
57 : $P_{621} = (12, 5, 1, 1)$ lies on line c_{26}
58 : $P_{625} = (0, 6, 1, 1)$ lies on line b_6
59 : $P_{633} = (8, 6, 1, 1)$ lies on line c_{26}
60 : $P_{641} = (0, 7, 1, 1)$ lies on line b_6
61 : $P_{644} = (3, 7, 1, 1)$ lies on line c_{26}
62 : $P_{657} = (0, 8, 1, 1)$ lies on line b_6
63 : $P_{663} = (6, 8, 1, 1)$ lies on line a_2
64 : $P_{673} = (0, 9, 1, 1)$ lies on line b_6
65 : $P_{678} = (5, 9, 1, 1)$ lies on line c_{26}
66 : $P_{685} = (12, 9, 1, 1)$ lies on line a_2
67 : $P_{690} = (1, 10, 1, 1)$ lies on line c_{26}
68 : $P_{700} = (11, 10, 1, 1)$ lies on line a_2
69 : $P_{706} = (1, 11, 1, 1)$ lies on line a_2
70 : $P_{715} = (10, 11, 1, 1)$ lies on line c_{26}
71 : $P_{721} = (0, 12, 1, 1)$ lies on line b_6
72 : $P_{726} = (5, 12, 1, 1)$ lies on line a_2
73 : $P_{737} = (0, 13, 1, 1)$ lies on line b_6
74 : $P_{752} = (15, 13, 1, 1)$ lies on line a_2
75 : $P_{753} = (0, 14, 1, 1)$ lies on line b_6
76 : $P_{759} = (6, 14, 1, 1)$ lies on line c_{26}
77 : $P_{761} = (8, 14, 1, 1)$ lies on line a_2
78 : $P_{769} = (0, 15, 1, 1)$ lies on line b_6
79 : $P_{782} = (13, 15, 1, 1)$ lies on line c_{26}
80 : $P_{797} = (12, 0, 2, 1)$ lies on line b_3
81 : $P_{808} = (7, 1, 2, 1)$ lies on line c_{46}
82 : $P_{823} = (6, 2, 2, 1)$ lies on line c_{24}
83 : $P_{827} = (10, 2, 2, 1)$ lies on line c_{45}
84 : $P_{830} = (13, 2, 2, 1)$ lies on line a_6
85 : $P_{848} = (15, 3, 2, 1)$ lies on line b_5
86 : $P_{855} = (6, 4, 2, 1)$ lies on line c_{35}
87 : $P_{868} = (3, 5, 2, 1)$ lies on line c_{56}
88 : $P_{882} = (1, 6, 2, 1)$ lies on line c_{12}
89 : $P_{884} = (3, 6, 2, 1)$ lies on line a_5
90 : $P_{888} = (7, 6, 2, 1)$ lies on line a_4
91 : $P_{898} = (1, 7, 2, 1)$ lies on line b_2
92 : $P_{923} = (10, 8, 2, 1)$ lies on line c_{23}
93 : $P_{989} = (12, 12, 2, 1)$ lies on line c_{13}
94 : $P_{992} = (15, 12, 2, 1)$ lies on line c_{15}
95 : $P_{1038} = (13, 15, 2, 1)$ lies on line b_1
96 : $P_{1048} = (7, 0, 3, 1)$ lies on line b_5
97 : $P_{1051} = (10, 0, 3, 1)$ lies on line b_1
98 : $P_{1056} = (15, 0, 3, 1)$ lies on line c_{36}
99 : $P_{1078} = (5, 2, 3, 1)$ lies on line c_{23}
100 : $P_{1081} = (8, 2, 3, 1)$ lies on line b_4
101 : $P_{1086} = (13, 2, 3, 1)$ lies on line a_4
102 : $P_{1106} = (1, 4, 3, 1)$ lies on line c_{13}
103 : $P_{1122} = (1, 5, 3, 1)$ lies on line b_3
104 : $P_{1158} = (5, 7, 3, 1)$ lies on line c_{45}
105 : $P_{1160} = (7, 7, 3, 1)$ lies on line c_{15}
106 : $P_{1172} = (3, 8, 3, 1)$ lies on line c_{24}
107 : $P_{1209} = (8, 10, 3, 1)$ lies on line c_{14}
108 : $P_{1211} = (10, 10, 3, 1)$ lies on line a_6
109 : $P_{1220} = (3, 11, 3, 1)$ lies on line c_{35}
110 : $P_{1294} = (13, 15, 3, 1)$ lies on line c_{46}
111 : $P_{1296} = (15, 15, 3, 1)$ lies on line a_3
112 : $P_{1303} = (6, 0, 4, 1)$ lies on line a_6
113 : $P_{1325} = (12, 1, 4, 1)$ lies on line a_3
114 : $P_{1352} = (7, 3, 4, 1)$ lies on line c_{14}
115 : $P_{1368} = (7, 4, 4, 1)$ lies on line b_4
116 : $P_{1372} = (11, 4, 4, 1)$ lies on line c_{12}
117 : $P_{1374} = (13, 4, 4, 1)$ lies on line c_{15}
118 : $P_{1380} = (3, 5, 4, 1)$ lies on line c_{45}
119 : $P_{1396} = (3, 6, 4, 1)$ lies on line c_{23}
120 : $P_{1399} = (6, 6, 4, 1)$ lies on line b_1
121 : $P_{1430} = (5, 8, 4, 1)$ lies on line a_5
122 : $P_{1454} = (13, 9, 4, 1)$ lies on line b_5
123 : $P_{1490} = (1, 12, 4, 1)$ lies on line c_{24}
124 : $P_{1506} = (1, 13, 4, 1)$ lies on line c_{35}
125 : $P_{1510} = (5, 13, 4, 1)$ lies on line c_{56}
126 : $P_{1517} = (12, 13, 4, 1)$ lies on line c_{36}
127 : $P_{1548} = (11, 15, 4, 1)$ lies on line b_2
128 : $P_{1556} = (3, 0, 5, 1)$ lies on line c_{46}
129 : $P_{1564} = (11, 0, 5, 1)$ lies on line c_{14}
130 : $P_{1565} = (12, 0, 5, 1)$ lies on line c_{45}
131 : $P_{1604} = (3, 3, 5, 1)$ lies on line a_4
132 : $P_{1608} = (7, 3, 5, 1)$ lies on line a_3
133 : $P_{1624} = (7, 4, 5, 1)$ lies on line c_{36}
134 : $P_{1625} = (8, 4, 5, 1)$ lies on line b_2
135 : $P_{1632} = (15, 4, 5, 1)$ lies on line c_{34}
136 : $P_{1682} = (1, 8, 5, 1)$ lies on line a_6
137 : $P_{1698} = (1, 9, 5, 1)$ lies on line b_1
138 : $P_{1718} = (5, 10, 5, 1)$ lies on line b_5
139 : $P_{1740} = (11, 11, 5, 1)$ lies on line b_4
140 : $P_{1744} = (15, 11, 5, 1)$ lies on line c_{25}
141 : $P_{1753} = (8, 12, 5, 1)$ lies on line c_{12}
142 : $P_{1757} = (12, 12, 5, 1)$ lies on line c_{23}
143 : $P_{1798} = (5, 15, 5, 1)$ lies on line c_{15}
144 : $P_{1822} = (13, 0, 6, 1)$ lies on line b_2
145 : $P_{1830} = (5, 1, 6, 1)$ lies on line c_{34}
146 : $P_{1833} = (8, 1, 6, 1)$ lies on line b_1
147 : $P_{1836} = (11, 1, 6, 1)$ lies on line c_{24}
148 : $P_{1848} = (7, 2, 6, 1)$ lies on line c_{56}
149 : $P_{1863} = (6, 3, 6, 1)$ lies on line b_4
150 : $P_{1878} = (5, 4, 6, 1)$ lies on line c_{25}
151 : $P_{1892} = (3, 5, 6, 1)$ lies on line a_3
152 : $P_{1895} = (6, 5, 6, 1)$ lies on line c_{14}
153 : $P_{1896} = (7, 5, 6, 1)$ lies on line a_5
154 : $P_{1908} = (3, 6, 6, 1)$ lies on line c_{36}
155 : $P_{1931} = (10, 7, 6, 1)$ lies on line c_{13}
156 : $P_{1961} = (8, 9, 6, 1)$ lies on line a_6
157 : $P_{1980} = (11, 10, 6, 1)$ lies on line c_{35}
158 : $P_{2027} = (10, 13, 6, 1)$ lies on line b_3
159 : $P_{2030} = (13, 13, 6, 1)$ lies on line c_{12}
160 : $P_{2077} = (12, 0, 7, 1)$ lies on line c_{15}
161 : $P_{2084} = (3, 1, 7, 1)$ lies on line c_{25}
162 : $P_{2092} = (11, 1, 7, 1)$ lies on line c_{23}
163 : $P_{2096} = (15, 1, 7, 1)$ lies on line a_6

164 : $P_{2100} = (3, 2, 7, 1)$ lies on line c_{34}
165 : $P_{2171} = (10, 6, 7, 1)$ lies on line c_{14}
166 : $P_{2185} = (8, 7, 7, 1)$ lies on line a_3
167 : $P_{2200} = (7, 8, 7, 1)$ lies on line b_3
168 : $P_{2215} = (6, 9, 7, 1)$ lies on line c_{56}
169 : $P_{2236} = (11, 10, 7, 1)$ lies on line c_{45}
170 : $P_{2267} = (10, 12, 7, 1)$ lies on line b_4
171 : $P_{2269} = (12, 12, 7, 1)$ lies on line b_5
172 : $P_{2304} = (15, 14, 7, 1)$ lies on line b_1
173 : $P_{2311} = (6, 15, 7, 1)$ lies on line a_5
174 : $P_{2312} = (7, 15, 7, 1)$ lies on line c_{13}
175 : $P_{2313} = (8, 15, 7, 1)$ lies on line c_{36}
176 : $P_{2326} = (5, 0, 8, 1)$ lies on line a_3
177 : $P_{2327} = (6, 0, 8, 1)$ lies on line c_{12}
178 : $P_{2331} = (10, 0, 8, 1)$ lies on line c_{25}
179 : $P_{2377} = (8, 3, 8, 1)$ lies on line c_{23}
180 : $P_{2406} = (5, 5, 8, 1)$ lies on line c_{36}
181 : $P_{2413} = (12, 5, 8, 1)$ lies on line a_4
182 : $P_{2423} = (6, 6, 8, 1)$ lies on line b_2
183 : $P_{2432} = (15, 6, 8, 1)$ lies on line c_{35}
184 : $P_{2468} = (3, 9, 8, 1)$ lies on line b_3
185 : $P_{2477} = (12, 9, 8, 1)$ lies on line c_{46}
186 : $P_{2480} = (15, 9, 8, 1)$ lies on line c_{24}
187 : $P_{2484} = (3, 10, 8, 1)$ lies on line c_{13}
188 : $P_{2491} = (10, 10, 8, 1)$ lies on line c_{34}
189 : $P_{2505} = (8, 11, 8, 1)$ lies on line c_{45}
190 : $P_{2546} = (1, 14, 8, 1)$ lies on line c_{14}
191 : $P_{2562} = (1, 15, 8, 1)$ lies on line b_4
192 : $P_{2590} = (13, 0, 9, 1)$ lies on line b_4
193 : $P_{2599} = (6, 1, 9, 1)$ lies on line a_4
194 : $P_{2635} = (10, 3, 9, 1)$ lies on line c_{24}
195 : $P_{2669} = (12, 5, 9, 1)$ lies on line c_{25}
196 : $P_{2674} = (1, 6, 9, 1)$ lies on line c_{15}
197 : $P_{2690} = (1, 7, 9, 1)$ lies on line b_5
198 : $P_{2695} = (6, 7, 9, 1)$ lies on line c_{46}
199 : $P_{2697} = (8, 7, 9, 1)$ lies on line a_5
200 : $P_{2710} = (5, 8, 9, 1)$ lies on line c_{12}
201 : $P_{2728} = (7, 9, 9, 1)$ lies on line c_{23}
202 : $P_{2731} = (10, 9, 9, 1)$ lies on line c_{35}
203 : $P_{2733} = (12, 9, 9, 1)$ lies on line c_{34}
204 : $P_{2790} = (5, 13, 9, 1)$ lies on line b_2
205 : $P_{2798} = (13, 13, 9, 1)$ lies on line c_{14}
206 : $P_{2808} = (7, 14, 9, 1)$ lies on line c_{45}
207 : $P_{2825} = (8, 15, 9, 1)$ lies on line c_{56}
208 : $P_{2833} = (0, 0, 10, 1)$ lies on line a_1
209 : $P_{2844} = (11, 0, 10, 1)$ lies on line a_5
210 : $P_{2849} = (0, 1, 10, 1)$ lies on line a_1
211 : $P_{2854} = (5, 1, 10, 1)$ lies on line c_{35}
212 : $P_{2864} = (15, 1, 10, 1)$ lies on line c_{45}
213 : $P_{2897} = (0, 4, 10, 1)$ lies on line a_1
214 : $P_{2902} = (5, 4, 10, 1)$ lies on line c_{24}
215 : $P_{2907} = (10, 4, 10, 1)$ lies on line a_3
216 : $P_{2913} = (0, 5, 10, 1)$ lies on line a_1
217 : $P_{2929} = (0, 6, 10, 1)$ lies on line a_1
218 : $P_{2945} = (0, 7, 10, 1)$ lies on line a_1
219 : $P_{2993} = (0, 10, 10, 1)$ lies on line a_1
220 : $P_{2999} = (6, 10, 10, 1)$ lies on line c_{25}
221 : $P_{3000} = (7, 10, 10, 1)$ lies on line b_1
222 : $P_{3009} = (0, 11, 10, 1)$ lies on line a_1
223 : $P_{3020} = (11, 11, 10, 1)$ lies on line c_{56}
224 : $P_{3025} = (0, 12, 10, 1)$ lies on line a_1
225 : $P_{3026} = (1, 12, 10, 1)$ lies on line c_{46}
226 : $P_{3031} = (6, 12, 10, 1)$ lies on line c_{34}
227 : $P_{3041} = (0, 13, 10, 1)$ lies on line a_1
228 : $P_{3042} = (1, 13, 10, 1)$ lies on line a_4
229 : $P_{3048} = (7, 13, 10, 1)$ lies on line a_6
230 : $P_{3057} = (0, 14, 10, 1)$ lies on line a_1
231 : $P_{3067} = (10, 14, 10, 1)$ lies on line c_{36}
232 : $P_{3072} = (15, 14, 10, 1)$ lies on line c_{23}
233 : $P_{3073} = (0, 15, 10, 1)$ lies on line a_1
234 : $P_{3089} = (0, 0, 11, 1)$ lies on line c_{16}
235 : $P_{3099} = (10, 0, 11, 1)$ lies on line c_{56}
236 : $P_{3105} = (0, 1, 11, 1)$ lies on line c_{16}
237 : $P_{3108} = (3, 1, 11, 1)$ lies on line c_{12}
238 : $P_{3113} = (8, 1, 11, 1)$ lies on line b_5
239 : $P_{3121} = (0, 2, 11, 1)$ lies on line c_{16}
240 : $P_{3124} = (3, 2, 11, 1)$ lies on line b_2
241 : $P_{3132} = (11, 2, 11, 1)$ lies on line c_{46}
242 : $P_{3137} = (0, 3, 11, 1)$ lies on line c_{16}
243 : $P_{3185} = (0, 6, 11, 1)$ lies on line c_{16}
244 : $P_{3186} = (1, 6, 11, 1)$ lies on line a_3
245 : $P_{3198} = (13, 6, 11, 1)$ lies on line b_3
246 : $P_{3201} = (0, 7, 11, 1)$ lies on line c_{16}
247 : $P_{3202} = (1, 7, 11, 1)$ lies on line c_{36}
248 : $P_{3213} = (12, 7, 11, 1)$ lies on line b_4
249 : $P_{3217} = (0, 8, 11, 1)$ lies on line c_{16}
250 : $P_{3233} = (0, 9, 11, 1)$ lies on line c_{16}
251 : $P_{3241} = (8, 9, 11, 1)$ lies on line c_{15}
252 : $P_{3244} = (11, 9, 11, 1)$ lies on line a_4
253 : $P_{3249} = (0, 10, 11, 1)$ lies on line c_{16}
254 : $P_{3259} = (10, 10, 11, 1)$ lies on line a_5
255 : $P_{3265} = (0, 11, 11, 1)$ lies on line c_{16}
256 : $P_{3277} = (12, 11, 11, 1)$ lies on line c_{14}
257 : $P_{3278} = (13, 11, 11, 1)$ lies on line c_{13}
258 : $P_{3281} = (0, 12, 11, 1)$ lies on line c_{16}
259 : $P_{3297} = (0, 13, 11, 1)$ lies on line c_{16}
260 : $P_{3351} = (6, 0, 12, 1)$ lies on line c_{23}
261 : $P_{3364} = (3, 1, 12, 1)$ lies on line b_4
262 : $P_{3366} = (5, 1, 12, 1)$ lies on line c_{13}
263 : $P_{3371} = (10, 1, 12, 1)$ lies on line b_2
264 : $P_{3380} = (3, 2, 12, 1)$ lies on line c_{14}
265 : $P_{3405} = (12, 3, 12, 1)$ lies on line b_1
266 : $P_{3406} = (13, 3, 12, 1)$ lies on line c_{56}
267 : $P_{3408} = (15, 3, 12, 1)$ lies on line c_{46}
268 : $P_{3414} = (5, 4, 12, 1)$ lies on line b_3
269 : $P_{3447} = (6, 6, 12, 1)$ lies on line c_{45}
270 : $P_{3452} = (11, 6, 12, 1)$ lies on line c_{34}
271 : $P_{3531} = (10, 11, 12, 1)$ lies on line c_{12}

272 : $P_{3552} = (15, 12, 12, 1)$ lies on line a_4
273 : $P_{3564} = (11, 13, 12, 1)$ lies on line c_{25}
274 : $P_{3582} = (13, 14, 12, 1)$ lies on line a_5
275 : $P_{3597} = (12, 15, 12, 1)$ lies on line a_6
276 : $P_{3608} = (7, 0, 13, 1)$ lies on line c_{24}
277 : $P_{3625} = (8, 1, 13, 1)$ lies on line b_3
278 : $P_{3627} = (10, 1, 13, 1)$ lies on line c_{15}
279 : $P_{3632} = (15, 1, 13, 1)$ lies on line c_{14}
280 : $P_{3677} = (12, 4, 13, 1)$ lies on line a_5
281 : $P_{3694} = (13, 5, 13, 1)$ lies on line c_{34}
282 : $P_{3720} = (7, 7, 13, 1)$ lies on line c_{35}
283 : $P_{3724} = (11, 7, 13, 1)$ lies on line a_6
284 : $P_{3734} = (5, 8, 13, 1)$ lies on line a_4
285 : $P_{3741} = (12, 8, 13, 1)$ lies on line c_{56}
286 : $P_{3742} = (13, 8, 13, 1)$ lies on line c_{25}
287 : $P_{3753} = (8, 9, 13, 1)$ lies on line c_{13}
288 : $P_{3787} = (10, 11, 13, 1)$ lies on line b_5
289 : $P_{3804} = (11, 12, 13, 1)$ lies on line b_1
290 : $P_{3814} = (5, 13, 13, 1)$ lies on line c_{46}
291 : $P_{3840} = (15, 14, 13, 1)$ lies on line b_4
292 : $P_{3864} = (7, 0, 14, 1)$ lies on line c_{34}
293 : $P_{3886} = (13, 1, 14, 1)$ lies on line c_{36}
294 : $P_{3901} = (12, 2, 14, 1)$ lies on line c_{12}
295 : $P_{3920} = (15, 3, 14, 1)$ lies on line a_5
296 : $P_{3948} = (11, 5, 14, 1)$ lies on line c_{15}
297 : $P_{3976} = (7, 7, 14, 1)$ lies on line c_{25}
298 : $P_{3977} = (8, 7, 14, 1)$ lies on line c_{24}
299 : $P_{3991} = (6, 8, 14, 1)$ lies on line c_{13}
300 : $P_{4050} = (1, 12, 14, 1)$ lies on line c_{45}
301 : $P_{4062} = (13, 12, 14, 1)$ lies on line a_3
302 : $P_{4064} = (15, 12, 14, 1)$ lies on line c_{56}
303 : $P_{4066} = (1, 13, 14, 1)$ lies on line c_{23}
304 : $P_{4087} = (6, 14, 14, 1)$ lies on line b_3
305 : $P_{4092} = (11, 14, 14, 1)$ lies on line b_5
306 : $P_{4093} = (12, 14, 14, 1)$ lies on line b_2
307 : $P_{4105} = (8, 15, 14, 1)$ lies on line c_{35}
308 : $P_{4121} = (8, 0, 15, 1)$ lies on line a_4
309 : $P_{4124} = (11, 0, 15, 1)$ lies on line c_{13}
310 : $P_{4126} = (13, 0, 15, 1)$ lies on line c_{35}
311 : $P_{4146} = (1, 2, 15, 1)$ lies on line c_{25}
312 : $P_{4162} = (1, 3, 15, 1)$ lies on line c_{34}
313 : $P_{4208} = (15, 5, 15, 1)$ lies on line b_2
314 : $P_{4247} = (6, 8, 15, 1)$ lies on line c_{36}
315 : $P_{4249} = (8, 8, 15, 1)$ lies on line c_{46}
316 : $P_{4288} = (15, 10, 15, 1)$ lies on line c_{12}
317 : $P_{4294} = (5, 11, 15, 1)$ lies on line b_1
318 : $P_{4300} = (11, 11, 15, 1)$ lies on line b_3
319 : $P_{4324} = (3, 13, 15, 1)$ lies on line b_5
320 : $P_{4334} = (13, 13, 15, 1)$ lies on line c_{24}
321 : $P_{4340} = (3, 14, 15, 1)$ lies on line c_{15}
322 : $P_{4342} = (5, 14, 15, 1)$ lies on line a_6
323 : $P_{4343} = (6, 14, 15, 1)$ lies on line a_3

The single points on the surface are:

Points on surface but on no line

The surface has 0 points not on any line:
The points on the surface but not on lines are:

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_{2977}	P_{2881}	P_{2961}	P_{2865}	P_1	P_{2977}	P_{2881}	P_{2961}	P_{2865}	P_1

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_{645}	P_{771}	P_{618}	P_{639}	P_{530}	P_{645}	P_{771}	P_{618}	P_{639}	P_{530}

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_{2623}	P_{3770}	P_{997}	P_{3475}	P_{705}	P_{2623}	P_{3770}	P_{997}	P_{3475}	P_{705}

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_{3923}	P_{2255}	P_{1418}	P_{2053}	P_{689}	P_{3923}	P_{2255}	P_{1418}	P_{2053}	P_{689}

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_{2538}	P_{1235}	P_{1589}	P_{4271}	P_{546}	P_{2538}	P_{1235}	P_{1589}	P_{4271}	P_{546}

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_{3169}	P_{581}	P_{2783}	P_{3955}	P_{2394}	P_{3169}	P_{581}	P_{2783}	P_{3955}	P_{2394}

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_{645}	P_{2623}	P_{3923}	P_{2538}	P_{3169}	P_{645}	P_{2623}	P_{3923}	P_{2538}	P_{3169}

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_{2977}	P_{3770}	P_{2255}	P_{1235}	P_{581}	P_{2977}	P_{3770}	P_{2255}	P_{1235}	P_{581}

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_{2881}	P_{771}	P_{1418}	P_{1589}	P_{2783}	P_{2881}	P_{771}	P_{1418}	P_{1589}	P_{2783}

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_{2961}	P_{618}	P_{997}	P_{4271}	P_{3955}	P_{2961}	P_{618}	P_{997}	P_{4271}	P_{3955}

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_{2865}	P_{639}	P_{3475}	P_{2053}	P_{2394}	P_{2865}	P_{639}	P_{3475}	P_{2053}	P_{2394}

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_1	P_{530}	P_{705}	P_{689}	P_{546}	P_1	P_{530}	P_{705}	P_{689}	P_{546}

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_{2977}	P_{645}	P_{645}	P_{2977}	P_{1267}	P_{2159}	P_{3658}	P_{3658}	P_{2159}	P_{1267}

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_{2881}	P_{2623}	P_{2623}	P_{2881}	P_{1653}	P_{1530}	P_{739}	P_{739}	P_{1530}	P_{1653}

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_{2961}	P_{3923}	P_{3923}	P_{2961}	P_{4239}	P_{933}	P_{730}	P_{730}	P_{933}	P_{4239}

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_{2865}	P_{2538}	P_{2538}	P_{2865}	P_{1989}	P_{3507}	P_{671}	P_{671}	P_{3507}	P_{1989}

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_1	P_{3169}	P_{3169}	P_1	P_{3153}	P_{3313}	P_{3329}	P_{3329}	P_{3313}	P_{3153}

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_{771}	P_{3770}	P_{3770}	P_{771}	P_{4239}	P_{1989}	P_{3153}	P_{3153}	P_{1989}	P_{4239}

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_{618}	P_{2255}	P_{2255}	P_{618}	P_{1653}	P_{3507}	P_{3313}	P_{3313}	P_{3507}	P_{1653}

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_{639}	P_{1235}	P_{1235}	P_{639}	P_{1530}	P_{933}	P_{3329}	P_{3329}	P_{933}	P_{1530}

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_{530}	P_{581}	P_{581}	P_{530}	P_{739}	P_{730}	P_{671}	P_{671}	P_{730}	P_{739}

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_{997}	P_{1418}	P_{1418}	P_{997}	P_{1267}	P_{671}	P_{3329}	P_{3329}	P_{671}	P_{1267}

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_{3475}	P_{1589}	P_{1589}	P_{3475}	P_{2159}	P_{730}	P_{3313}	P_{3313}	P_{730}	P_{2159}

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_{705}	P_{2783}	P_{2783}	P_{705}	P_{3658}	P_{933}	P_{3507}	P_{3507}	P_{933}	P_{3658}

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_{2053}	P_{4271}	P_{4271}	P_{2053}	P_{3658}	P_{739}	P_{3153}	P_{3153}	P_{739}	P_{3658}

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_{689}	P_{3955}	P_{3955}	P_{689}	P_{2159}	P_{1530}	P_{1989}	P_{1989}	P_{1530}	P_{2159}

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_{546}	P_{2394}	P_{2394}	P_{546}	P_{1267}	P_{1653}	P_{4239}	P_{4239}	P_{1653}	P_{1267}

The surface has 369 points:
The points on the surface are:

$0: P_1 = (0,1,0,0)$
$1: P_{14} = (10,1,0,0)$
$2: P_{15} = (11,1,0,0)$
$3: P_{62} = (11,2,1,0)$
$4: P_{73} = (6,3,1,0)$
$5: P_{75} = (8,3,1,0)$
$6: P_{79} = (12,3,1,0)$
$7: P_{93} = (10,4,1,0)$
$8: P_{105} = (6,5,1,0)$
$9: P_{112} = (13,5,1,0)$
$10: P_{114} = (15,5,1,0)$
$11: P_{150} = (3,8,1,0)$
$12: P_{154} = (7,8,1,0)$
$13: P_{160} = (13,8,1,0)$
$14: P_{174} = (11,9,1,0)$
$15: P_{180} = (1,10,1,0)$
$16: P_{184} = (5,10,1,0)$
$17: P_{194} = (15,10,1,0)$
$18: P_{196} = (1,11,1,0)$
$19: P_{198} = (3,11,1,0)$
$20: P_{203} = (8,11,1,0)$
$21: P_{253} = (10,14,1,0)$
$22: P_{264} = (5,15,1,0)$
$23: P_{266} = (7,15,1,0)$
$24: P_{271} = (12,15,1,0)$
$25: P_{317} = (11,2,0,1)$
$26: P_{328} = (6,3,0,1)$

27 : $P_{330} = (8, 3, 0, 1)$
28 : $P_{334} = (12, 3, 0, 1)$
29 : $P_{348} = (10, 4, 0, 1)$
30 : $P_{360} = (6, 5, 0, 1)$
31 : $P_{367} = (13, 5, 0, 1)$
32 : $P_{369} = (15, 5, 0, 1)$
33 : $P_{405} = (3, 8, 0, 1)$
34 : $P_{409} = (7, 8, 0, 1)$
35 : $P_{415} = (13, 8, 0, 1)$
36 : $P_{429} = (11, 9, 0, 1)$
37 : $P_{435} = (1, 10, 0, 1)$
38 : $P_{439} = (5, 10, 0, 1)$
39 : $P_{449} = (15, 10, 0, 1)$
40 : $P_{451} = (1, 11, 0, 1)$
41 : $P_{453} = (3, 11, 0, 1)$
42 : $P_{458} = (8, 11, 0, 1)$
43 : $P_{508} = (10, 14, 0, 1)$
44 : $P_{519} = (5, 15, 0, 1)$
45 : $P_{521} = (7, 15, 0, 1)$
46 : $P_{526} = (12, 15, 0, 1)$
47 : $P_{530} = (0, 0, 1, 1)$
48 : $P_{546} = (0, 1, 1, 1)$
49 : $P_{555} = (10, 1, 1, 1)$
50 : $P_{556} = (11, 1, 1, 1)$
51 : $P_{561} = (0, 2, 1, 1)$
52 : $P_{574} = (13, 2, 1, 1)$
53 : $P_{576} = (15, 2, 1, 1)$
54 : $P_{577} = (0, 3, 1, 1)$
55 : $P_{581} = (4, 3, 1, 1)$
56 : $P_{584} = (7, 3, 1, 1)$
57 : $P_{593} = (0, 4, 1, 1)$
58 : $P_{596} = (3, 4, 1, 1)$
59 : $P_{600} = (7, 4, 1, 1)$
60 : $P_{609} = (0, 5, 1, 1)$
61 : $P_{618} = (9, 5, 1, 1)$
62 : $P_{621} = (12, 5, 1, 1)$
63 : $P_{625} = (0, 6, 1, 1)$
64 : $P_{633} = (8, 6, 1, 1)$
65 : $P_{639} = (14, 6, 1, 1)$
66 : $P_{641} = (0, 7, 1, 1)$
67 : $P_{644} = (3, 7, 1, 1)$
68 : $P_{645} = (4, 7, 1, 1)$
69 : $P_{657} = (0, 8, 1, 1)$
70 : $P_{663} = (6, 8, 1, 1)$
71 : $P_{671} = (14, 8, 1, 1)$
72 : $P_{673} = (0, 9, 1, 1)$
73 : $P_{678} = (5, 9, 1, 1)$
74 : $P_{685} = (12, 9, 1, 1)$
75 : $P_{689} = (0, 10, 1, 1)$
76 : $P_{690} = (1, 10, 1, 1)$
77 : $P_{700} = (11, 10, 1, 1)$
78 : $P_{705} = (0, 11, 1, 1)$
79 : $P_{706} = (1, 11, 1, 1)$
80 : $P_{715} = (10, 11, 1, 1)$
81 : $P_{721} = (0, 12, 1, 1)$
82 : $P_{726} = (5, 12, 1, 1)$
83 : $P_{730} = (9, 12, 1, 1)$
84 : $P_{737} = (0, 13, 1, 1)$
85 : $P_{739} = (2, 13, 1, 1)$
86 : $P_{752} = (15, 13, 1, 1)$
87 : $P_{753} = (0, 14, 1, 1)$
88 : $P_{759} = (6, 14, 1, 1)$
89 : $P_{761} = (8, 14, 1, 1)$
90 : $P_{769} = (0, 15, 1, 1)$
91 : $P_{771} = (2, 15, 1, 1)$
92 : $P_{782} = (13, 15, 1, 1)$
93 : $P_{797} = (12, 0, 2, 1)$
94 : $P_{808} = (7, 1, 2, 1)$
95 : $P_{823} = (6, 2, 2, 1)$
96 : $P_{827} = (10, 2, 2, 1)$
97 : $P_{830} = (13, 2, 2, 1)$
98 : $P_{848} = (15, 3, 2, 1)$
99 : $P_{855} = (6, 4, 2, 1)$
100 : $P_{868} = (3, 5, 2, 1)$
101 : $P_{882} = (1, 6, 2, 1)$
102 : $P_{884} = (3, 6, 2, 1)$
103 : $P_{888} = (7, 6, 2, 1)$
104 : $P_{898} = (1, 7, 2, 1)$
105 : $P_{923} = (10, 8, 2, 1)$
106 : $P_{933} = (4, 9, 2, 1)$
107 : $P_{989} = (12, 12, 2, 1)$
108 : $P_{992} = (15, 12, 2, 1)$
109 : $P_{997} = (4, 13, 2, 1)$
110 : $P_{1038} = (13, 15, 2, 1)$
111 : $P_{1048} = (7, 0, 3, 1)$
112 : $P_{1051} = (10, 0, 3, 1)$
113 : $P_{1056} = (15, 0, 3, 1)$
114 : $P_{1078} = (5, 2, 3, 1)$
115 : $P_{1081} = (8, 2, 3, 1)$
116 : $P_{1086} = (13, 2, 3, 1)$
117 : $P_{1106} = (1, 4, 3, 1)$
118 : $P_{1122} = (1, 5, 3, 1)$
119 : $P_{1158} = (5, 7, 3, 1)$
120 : $P_{1160} = (7, 7, 3, 1)$
121 : $P_{1172} = (3, 8, 3, 1)$
122 : $P_{1209} = (8, 10, 3, 1)$
123 : $P_{1211} = (10, 10, 3, 1)$
124 : $P_{1220} = (3, 11, 3, 1)$
125 : $P_{1235} = (2, 12, 3, 1)$
126 : $P_{1267} = (2, 14, 3, 1)$
127 : $P_{1294} = (13, 15, 3, 1)$
128 : $P_{1296} = (15, 15, 3, 1)$
129 : $P_{1303} = (6, 0, 4, 1)$
130 : $P_{1325} = (12, 1, 4, 1)$
131 : $P_{1352} = (7, 3, 4, 1)$
132 : $P_{1368} = (7, 4, 4, 1)$
133 : $P_{1372} = (11, 4, 4, 1)$
134 : $P_{1374} = (13, 4, 4, 1)$
135 : $P_{1380} = (3, 5, 4, 1)$
136 : $P_{1396} = (3, 6, 4, 1)$
137 : $P_{1399} = (6, 6, 4, 1)$
138 : $P_{1418} = (9, 7, 4, 1)$
139 : $P_{1430} = (5, 8, 4, 1)$
140 : $P_{1454} = (13, 9, 4, 1)$
141 : $P_{1490} = (1, 12, 4, 1)$
142 : $P_{1506} = (1, 13, 4, 1)$
143 : $P_{1510} = (5, 13, 4, 1)$
144 : $P_{1517} = (12, 13, 4, 1)$
145 : $P_{1530} = (9, 14, 4, 1)$
146 : $P_{1548} = (11, 15, 4, 1)$
147 : $P_{1556} = (3, 0, 5, 1)$
148 : $P_{1564} = (11, 0, 5, 1)$
149 : $P_{1565} = (12, 0, 5, 1)$
150 : $P_{1589} = (4, 2, 5, 1)$
151 : $P_{1604} = (3, 3, 5, 1)$
152 : $P_{1608} = (7, 3, 5, 1)$
153 : $P_{1624} = (7, 4, 5, 1)$
154 : $P_{1625} = (8, 4, 5, 1)$
155 : $P_{1632} = (15, 4, 5, 1)$
156 : $P_{1653} = (4, 6, 5, 1)$
157 : $P_{1682} = (1, 8, 5, 1)$
158 : $P_{1698} = (1, 9, 5, 1)$
159 : $P_{1718} = (5, 10, 5, 1)$
160 : $P_{1740} = (11, 11, 5, 1)$
161 : $P_{1744} = (15, 11, 5, 1)$
162 : $P_{1753} = (8, 12, 5, 1)$
163 : $P_{1757} = (12, 12, 5, 1)$
164 : $P_{1798} = (5, 15, 5, 1)$
165 : $P_{1822} = (13, 0, 6, 1)$
166 : $P_{1830} = (5, 1, 6, 1)$
167 : $P_{1833} = (8, 1, 6, 1)$
168 : $P_{1836} = (11, 1, 6, 1)$
169 : $P_{1848} = (7, 2, 6, 1)$
170 : $P_{1863} = (6, 3, 6, 1)$
171 : $P_{1878} = (5, 4, 6, 1)$
172 : $P_{1892} = (3, 5, 6, 1)$
173 : $P_{1895} = (6, 5, 6, 1)$
174 : $P_{1896} = (7, 5, 6, 1)$
175 : $P_{1908} = (3, 6, 6, 1)$
176 : $P_{1931} = (10, 7, 6, 1)$
177 : $P_{1961} = (8, 9, 6, 1)$
178 : $P_{1980} = (11, 10, 6, 1)$
179 : $P_{1989} = (4, 11, 6, 1)$
180 : $P_{2027} = (10, 13, 6, 1)$
181 : $P_{2030} = (13, 13, 6, 1)$
182 : $P_{2053} = (4, 15, 6, 1)$
183 : $P_{2077} = (12, 0, 7, 1)$
184 : $P_{2084} = (3, 1, 7, 1)$
185 : $P_{2092} = (11, 1, 7, 1)$
186 : $P_{2096} = (15, 1, 7, 1)$
187 : $P_{2100} = (3, 2, 7, 1)$
188 : $P_{2159} = (14, 5, 7, 1)$

189 : $P_{2171} = (10, 6, 7, 1)$
190 : $P_{2185} = (8, 7, 7, 1)$
191 : $P_{2200} = (7, 8, 7, 1)$
192 : $P_{2215} = (6, 9, 7, 1)$
193 : $P_{2236} = (11, 10, 7, 1)$
194 : $P_{2255} = (14, 11, 7, 1)$
195 : $P_{2267} = (10, 12, 7, 1)$
196 : $P_{2269} = (12, 12, 7, 1)$
197 : $P_{2304} = (15, 14, 7, 1)$
198 : $P_{2311} = (6, 15, 7, 1)$
199 : $P_{2312} = (7, 15, 7, 1)$
200 : $P_{2313} = (8, 15, 7, 1)$
201 : $P_{2326} = (5, 0, 8, 1)$
202 : $P_{2327} = (6, 0, 8, 1)$
203 : $P_{2331} = (10, 0, 8, 1)$
204 : $P_{2377} = (8, 3, 8, 1)$
205 : $P_{2394} = (9, 4, 8, 1)$
206 : $P_{2406} = (5, 5, 8, 1)$
207 : $P_{2413} = (12, 5, 8, 1)$
208 : $P_{2423} = (6, 6, 8, 1)$
209 : $P_{2432} = (15, 6, 8, 1)$
210 : $P_{2468} = (3, 9, 8, 1)$
211 : $P_{2477} = (12, 9, 8, 1)$
212 : $P_{2480} = (15, 9, 8, 1)$
213 : $P_{2484} = (3, 10, 8, 1)$
214 : $P_{2491} = (10, 10, 8, 1)$
215 : $P_{2505} = (8, 11, 8, 1)$
216 : $P_{2538} = (9, 13, 8, 1)$
217 : $P_{2546} = (1, 14, 8, 1)$
218 : $P_{2562} = (1, 15, 8, 1)$
219 : $P_{2590} = (13, 0, 9, 1)$
220 : $P_{2599} = (6, 1, 9, 1)$
221 : $P_{2623} = (14, 2, 9, 1)$
222 : $P_{2635} = (10, 3, 9, 1)$
223 : $P_{2669} = (12, 5, 9, 1)$
224 : $P_{2674} = (1, 6, 9, 1)$
225 : $P_{2690} = (1, 7, 9, 1)$
226 : $P_{2695} = (6, 7, 9, 1)$
227 : $P_{2697} = (8, 7, 9, 1)$
228 : $P_{2710} = (5, 8, 9, 1)$
229 : $P_{2728} = (7, 9, 9, 1)$
230 : $P_{2731} = (10, 9, 9, 1)$
231 : $P_{2733} = (12, 9, 9, 1)$
232 : $P_{2783} = (14, 12, 9, 1)$
233 : $P_{2790} = (5, 13, 9, 1)$
234 : $P_{2798} = (13, 13, 9, 1)$
235 : $P_{2808} = (7, 14, 9, 1)$
236 : $P_{2825} = (8, 15, 9, 1)$
237 : $P_{2833} = (0, 0, 10, 1)$
238 : $P_{2844} = (11, 0, 10, 1)$
239 : $P_{2849} = (0, 1, 10, 1)$
240 : $P_{2854} = (5, 1, 10, 1)$
241 : $P_{2864} = (15, 1, 10, 1)$
242 : $P_{2865} = (0, 2, 10, 1)$
243 : $P_{2881} = (0, 3, 10, 1)$
244 : $P_{2897} = (0, 4, 10, 1)$
245 : $P_{2902} = (5, 4, 10, 1)$
246 : $P_{2907} = (10, 4, 10, 1)$
247 : $P_{2913} = (0, 5, 10, 1)$
248 : $P_{2929} = (0, 6, 10, 1)$
249 : $P_{2945} = (0, 7, 10, 1)$
250 : $P_{2961} = (0, 8, 10, 1)$
251 : $P_{2977} = (0, 9, 10, 1)$
252 : $P_{2993} = (0, 10, 10, 1)$
253 : $P_{2999} = (6, 10, 10, 1)$
254 : $P_{3000} = (7, 10, 10, 1)$
255 : $P_{3009} = (0, 11, 10, 1)$
256 : $P_{3020} = (11, 11, 10, 1)$
257 : $P_{3025} = (0, 12, 10, 1)$
258 : $P_{3026} = (1, 12, 10, 1)$
259 : $P_{3031} = (6, 12, 10, 1)$
260 : $P_{3041} = (0, 13, 10, 1)$
261 : $P_{3042} = (1, 13, 10, 1)$
262 : $P_{3048} = (7, 13, 10, 1)$
263 : $P_{3057} = (0, 14, 10, 1)$
264 : $P_{3067} = (10, 14, 10, 1)$
265 : $P_{3072} = (15, 14, 10, 1)$
266 : $P_{3073} = (0, 15, 10, 1)$
267 : $P_{3089} = (0, 0, 11, 1)$
268 : $P_{3099} = (10, 0, 11, 1)$
269 : $P_{3105} = (0, 1, 11, 1)$
270 : $P_{3108} = (3, 1, 11, 1)$
271 : $P_{3113} = (8, 1, 11, 1)$
272 : $P_{3121} = (0, 2, 11, 1)$
273 : $P_{3124} = (3, 2, 11, 1)$
274 : $P_{3132} = (11, 2, 11, 1)$
275 : $P_{3137} = (0, 3, 11, 1)$
276 : $P_{3153} = (0, 4, 11, 1)$
277 : $P_{3169} = (0, 5, 11, 1)$
278 : $P_{3185} = (0, 6, 11, 1)$
279 : $P_{3186} = (1, 6, 11, 1)$
280 : $P_{3198} = (13, 6, 11, 1)$
281 : $P_{3201} = (0, 7, 11, 1)$
282 : $P_{3202} = (1, 7, 11, 1)$
283 : $P_{3213} = (12, 7, 11, 1)$
284 : $P_{3217} = (0, 8, 11, 1)$
285 : $P_{3233} = (0, 9, 11, 1)$
286 : $P_{3241} = (8, 9, 11, 1)$
287 : $P_{3244} = (11, 9, 11, 1)$
288 : $P_{3249} = (0, 10, 11, 1)$
289 : $P_{3259} = (10, 10, 11, 1)$
290 : $P_{3265} = (0, 11, 11, 1)$
291 : $P_{3277} = (12, 11, 11, 1)$
292 : $P_{3278} = (13, 11, 11, 1)$
293 : $P_{3281} = (0, 12, 11, 1)$
294 : $P_{3297} = (0, 13, 11, 1)$
295 : $P_{3313} = (0, 14, 11, 1)$
296 : $P_{3329} = (0, 15, 11, 1)$
297 : $P_{3351} = (6, 0, 12, 1)$
298 : $P_{3364} = (3, 1, 12, 1)$
299 : $P_{3366} = (5, 1, 12, 1)$
300 : $P_{3371} = (10, 1, 12, 1)$
301 : $P_{3380} = (3, 2, 12, 1)$
302 : $P_{3405} = (12, 3, 12, 1)$
303 : $P_{3406} = (13, 3, 12, 1)$
304 : $P_{3408} = (15, 3, 12, 1)$
305 : $P_{3414} = (5, 4, 12, 1)$
306 : $P_{3447} = (6, 6, 12, 1)$
307 : $P_{3452} = (11, 6, 12, 1)$
308 : $P_{3475} = (2, 8, 12, 1)$
309 : $P_{3507} = (2, 10, 12, 1)$
310 : $P_{3531} = (10, 11, 12, 1)$
311 : $P_{3552} = (15, 12, 12, 1)$
312 : $P_{3564} = (11, 13, 12, 1)$
313 : $P_{3582} = (13, 14, 12, 1)$
314 : $P_{3597} = (12, 15, 12, 1)$
315 : $P_{3608} = (7, 0, 13, 1)$
316 : $P_{3625} = (8, 1, 13, 1)$
317 : $P_{3627} = (10, 1, 13, 1)$
318 : $P_{3632} = (15, 1, 13, 1)$
319 : $P_{3658} = (9, 3, 13, 1)$
320 : $P_{3677} = (12, 4, 13, 1)$
321 : $P_{3694} = (13, 5, 13, 1)$
322 : $P_{3720} = (7, 7, 13, 1)$
323 : $P_{3724} = (11, 7, 13, 1)$
324 : $P_{3734} = (5, 8, 13, 1)$
325 : $P_{3741} = (12, 8, 13, 1)$
326 : $P_{3742} = (13, 8, 13, 1)$
327 : $P_{3753} = (8, 9, 13, 1)$
328 : $P_{3770} = (9, 10, 13, 1)$
329 : $P_{3787} = (10, 11, 13, 1)$
330 : $P_{3804} = (11, 12, 13, 1)$
331 : $P_{3814} = (5, 13, 13, 1)$
332 : $P_{3840} = (15, 14, 13, 1)$
333 : $P_{3864} = (7, 0, 14, 1)$
334 : $P_{3886} = (13, 1, 14, 1)$
335 : $P_{3901} = (12, 2, 14, 1)$
336 : $P_{3920} = (15, 3, 14, 1)$
337 : $P_{3923} = (2, 4, 14, 1)$
338 : $P_{3948} = (11, 5, 14, 1)$
339 : $P_{3955} = (2, 6, 14, 1)$
340 : $P_{3976} = (7, 7, 14, 1)$
341 : $P_{3977} = (8, 7, 14, 1)$
342 : $P_{3991} = (6, 8, 14, 1)$
343 : $P_{4050} = (1, 12, 14, 1)$
344 : $P_{4062} = (13, 12, 14, 1)$
345 : $P_{4064} = (15, 12, 14, 1)$
346 : $P_{4066} = (1, 13, 14, 1)$
347 : $P_{4087} = (6, 14, 14, 1)$
348 : $P_{4092} = (11, 14, 14, 1)$
349 : $P_{4093} = (12, 14, 14, 1)$
350 : $P_{4105} = (8, 15, 14, 1)$

351 : $P_{4121} = (8, 0, 15, 1)$
352 : $P_{4124} = (11, 0, 15, 1)$
353 : $P_{4126} = (13, 0, 15, 1)$
354 : $P_{4146} = (1, 2, 15, 1)$
355 : $P_{4162} = (1, 3, 15, 1)$
356 : $P_{4208} = (15, 5, 15, 1)$
357 : $P_{4239} = (14, 7, 15, 1)$
358 : $P_{4247} = (6, 8, 15, 1)$
359 : $P_{4249} = (8, 8, 15, 1)$
360 : $P_{4271} = (14, 9, 15, 1)$
361 : $P_{4288} = (15, 10, 15, 1)$
362 : $P_{4294} = (5, 11, 15, 1)$
363 : $P_{4300} = (11, 11, 15, 1)$
364 : $P_{4324} = (3, 13, 15, 1)$
365 : $P_{4334} = (13, 13, 15, 1)$
366 : $P_{4340} = (3, 14, 15, 1)$
367 : $P_{4342} = (5, 14, 15, 1)$
368 : $P_{4343} = (6, 14, 15, 1)$