Rank-65687 over GF(64)

January 15, 2021

The equation

The equation of the surface is :

$$X_2^3 + X_0^2X_1 + X_0X_1^2 + X_0X_1X_2 = 0$$

(0, 0, 1, 0, 1, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0)
The point rank of the equation over GF(64) is 1107566661

General information

Number of lines	64
Number of points	4097
Number of singular points	65
Number of Eckardt points	0
Number of double points	0
Number of single points	4096
Number of points off lines	0
Number of Hesse planes	0
Number of axes	0
Type of points on lines	65^{64}
Type of lines on points	64, 1^{4096}

Singular Points

The surface has 65 singular points:

0 : $P_3 = \mathbf{P}(0,0,0,1) = \mathbf{P}(0,0,0,1)$
1 : $P_4 = \mathbf{P}(1,1,1,1) = \mathbf{P}(1,1,1,1)$
2 : $P_{132} = \mathbf{P}(1,1,1,0) = \mathbf{P}(1,1,1,0)$
3 : $P_{12483} = \mathbf{P}(\epsilon,\epsilon,\epsilon,1) = \mathbf{P}(2,2,2,1)$
4 : $P_{16644} = \mathbf{P}(\epsilon^{58},\epsilon^{58},\epsilon^{58},1) = \mathbf{P}(3,3,3,1)$
5 : $P_{20805} = \mathbf{P}(\epsilon^{2},\epsilon^{2},\epsilon^{2},1) = \mathbf{P}(4,4,4,1)$
6 : $P_{24966} = \mathbf{P}(\epsilon^{53},\epsilon^{53},\epsilon^{53},1) = \mathbf{P}(5,5,5,1)$
7 : $P_{29127} = \mathbf{P}(\epsilon^{59},\epsilon^{59},\epsilon^{59},1) = \mathbf{P}(6,6,6,1)$
8 : $P_{33288} = \mathbf{P}(\epsilon^{39},\epsilon^{39},\epsilon^{39},1) = \mathbf{P}(7,7,7,1)$
9 : $P_{37449} = \mathbf{P}(\epsilon^{3},\epsilon^{3},\epsilon^{3},1) = \mathbf{P}(8,8,8,1)$
10 : $P_{41610} = \mathbf{P}(\epsilon^{34},\epsilon^{34},\epsilon^{34},1) = \mathbf{P}(9,9,9,1)$
11 : $P_{45771} = \mathbf{P}(\epsilon^{54},\epsilon^{54},\epsilon^{54},1) = \mathbf{P}(10,10,10,1)$
12 : $P_{49932} = \mathbf{P}(\epsilon^{18},\epsilon^{18},\epsilon^{18},1) = \mathbf{P}(11,11,11,1)$
13 : $P_{54093} = \mathbf{P}(\epsilon^{60},\epsilon^{60},\epsilon^{60},1) = \mathbf{P}(12,12,12,1)$
14 : $P_{58254} = \mathbf{P}(\epsilon^{31},\epsilon^{31},\epsilon^{31},1) = \mathbf{P}(13,13,13,1)$
15 : $P_{62415} = \mathbf{P}(\epsilon^{40},\epsilon^{40},\epsilon^{40},1) = \mathbf{P}(14,14,14,1)$

$16:\ P_{66576} = \mathbf{P}(\epsilon^{48}, \epsilon^{48}, \epsilon^{48}, 1) = \mathbf{P}(15, 15, 15, 1)$
$17:\ P_{70737} = \mathbf{P}(\epsilon^{4}, \epsilon^{4}, \epsilon^{4}, 1) = \mathbf{P}(16, 16, 16, 1)$
$18:\ P_{74898} = \mathbf{P}(\epsilon^{43}, \epsilon^{43}, \epsilon^{43}, 1) = \mathbf{P}(17, 17, 17, 1)$
$19:\ P_{79059} = \mathbf{P}(\epsilon^{35}, \epsilon^{35}, \epsilon^{35}, 1) = \mathbf{P}(18, 18, 18, 1)$
$20:\ P_{83220} = \mathbf{P}(\epsilon^{22}, \epsilon^{22}, \epsilon^{22}, 1) = \mathbf{P}(19, 19, 19, 1)$
$21:\ P_{87381} = \mathbf{P}(\epsilon^{55}, \epsilon^{55}, \epsilon^{55}, 1) = \mathbf{P}(20, 20, 20, 1)$
$22:\ P_{91542} = \mathbf{P}(\epsilon^{15}, \epsilon^{15}, \epsilon^{15}, 1) = \mathbf{P}(21, 21, 21, 1)$
$23:\ P_{95703} = \mathbf{P}(\epsilon^{19}, \epsilon^{19}, \epsilon^{19}, 1) = \mathbf{P}(22, 22, 22, 1)$
$24:\ P_{99864} = \mathbf{P}(\epsilon^{26}, \epsilon^{26}, \epsilon^{26}, 1) = \mathbf{P}(23, 23, 23, 1)$
$25:\ P_{104025} = \mathbf{P}(\epsilon^{61}, \epsilon^{61}, \epsilon^{61}, 1) = \mathbf{P}(24, 24, 24, 1)$
$26:\ P_{108186} = \mathbf{P}(\epsilon^{51}, \epsilon^{51}, \epsilon^{51}, 1) = \mathbf{P}(25, 25, 25, 1)$
$27:\ P_{112347} = \mathbf{P}(\epsilon^{32}, \epsilon^{32}, \epsilon^{32}, 1) = \mathbf{P}(26, 26, 26, 1)$
$28:\ P_{116508} = \mathbf{P}(\epsilon^{29}, \epsilon^{29}, \epsilon^{29}, 1) = \mathbf{P}(27, 27, 27, 1)$
$29:\ P_{120669} = \mathbf{P}(\epsilon^{41}, \epsilon^{41}, \epsilon^{41}, 1) = \mathbf{P}(28, 28, 28, 1)$
$30:\ P_{124830} = \mathbf{P}(\epsilon^{13}, \epsilon^{13}, \epsilon^{13}, 1) = \mathbf{P}(29, 29, 29, 1)$
$31:\ P_{128991} = \mathbf{P}(\epsilon^{49}, \epsilon^{49}, \epsilon^{49}, 1) = \mathbf{P}(30, 30, 30, 1)$
$32:\ P_{133152} = \mathbf{P}(\epsilon^{11}, \epsilon^{11}, \epsilon^{11}, 1) = \mathbf{P}(31, 31, 31, 1)$
$33:\ P_{137313} = \mathbf{P}(\epsilon^{5}, \epsilon^{5}, \epsilon^{5}, 1) = \mathbf{P}(32, 32, 32, 1)$
$34:\ P_{141474} = \mathbf{P}(\epsilon^{6}, \epsilon^{6}, \epsilon^{6}, 1) = \mathbf{P}(33, 33, 33, 1)$
$35:\ P_{145635} = \mathbf{P}(\epsilon^{44}, \epsilon^{44}, \epsilon^{44}, 1) = \mathbf{P}(34, 34, 34, 1)$
$36:\ P_{149796} = \mathbf{P}(\epsilon^{7}, \epsilon^{7}, \epsilon^{7}, 1) = \mathbf{P}(35, 35, 35, 1)$
$37:\ P_{153957} = \mathbf{P}(\epsilon^{36}, \epsilon^{36}, \epsilon^{36}, 1) = \mathbf{P}(36, 36, 36, 1)$
$38:\ P_{158118} = \mathbf{P}(\epsilon^{45}, \epsilon^{45}, \epsilon^{45}, 1) = \mathbf{P}(37, 37, 37, 1)$
$39:\ P_{162279} = \mathbf{P}(\epsilon^{23}, \epsilon^{23}, \epsilon^{23}, 1) = \mathbf{P}(38, 38, 38, 1)$
$40:\ P_{166440} = \mathbf{P}(\epsilon^{8}, \epsilon^{8}, \epsilon^{8}, 1) = \mathbf{P}(39, 39, 39, 1)$
$41:\ P_{170601} = \mathbf{P}(\epsilon^{56}, \epsilon^{56}, \epsilon^{56}, 1) = \mathbf{P}(40, 40, 40, 1)$
$42:\ P_{174762} = \mathbf{P}(\epsilon^{37}, \epsilon^{37}, \epsilon^{37}, 1) = \mathbf{P}(41, 41, 41, 1)$
$43:\ P_{178923} = \mathbf{P}(\epsilon^{16}, \epsilon^{16}, \epsilon^{16}, 1) = \mathbf{P}(42, 42, 42, 1)$
$44:\ P_{183084} = \mathbf{P}(\epsilon^{46}, \epsilon^{46}, \epsilon^{46}, 1) = \mathbf{P}(43, 43, 43, 1)$
$45:\ P_{187245} = \mathbf{P}(\epsilon^{20}, \epsilon^{20}, \epsilon^{20}, 1) = \mathbf{P}(44, 44, 44, 1)$
$46:\ P_{191406} = \mathbf{P}(\epsilon^{24}, \epsilon^{24}, \epsilon^{24}, 1) = \mathbf{P}(45, 45, 45, 1)$
$47:\ P_{195567} = \mathbf{P}(\epsilon^{27}, \epsilon^{27}, \epsilon^{27}, 1) = \mathbf{P}(46, 46, 46, 1)$
$48:\ P_{199728} = \mathbf{P}(\epsilon^{9}, \epsilon^{9}, \epsilon^{9}, 1) = \mathbf{P}(47, 47, 47, 1)$
$49:\ P_{203889} = \mathbf{P}(\epsilon^{62}, \epsilon^{62}, \epsilon^{62}, 1) = \mathbf{P}(48, 48, 48, 1)$
$50:\ P_{208050} = \mathbf{P}(\epsilon^{57}, \epsilon^{57}, \epsilon^{57}, 1) = \mathbf{P}(49, 49, 49, 1)$
$51:\ P_{212211} = \mathbf{P}(\epsilon^{52}, \epsilon^{52}, \epsilon^{52}, 1) = \mathbf{P}(50, 50, 50, 1)$
$52:\ P_{216372} = \mathbf{P}(\epsilon^{38}, \epsilon^{38}, \epsilon^{38}, 1) = \mathbf{P}(51, 51, 51, 1)$
$53:\ P_{220533} = \mathbf{P}(\epsilon^{33}, \epsilon^{33}, \epsilon^{33}, 1) = \mathbf{P}(52, 52, 52, 1)$
$54:\ P_{224694} = \mathbf{P}(\epsilon^{17}, \epsilon^{17}, \epsilon^{17}, 1) = \mathbf{P}(53, 53, 53, 1)$
$55:\ P_{228855} = \mathbf{P}(\epsilon^{30}, \epsilon^{30}, \epsilon^{30}, 1) = \mathbf{P}(54, 54, 54, 1)$
$56:\ P_{233016} = \mathbf{P}(\epsilon^{47}, \epsilon^{47}, \epsilon^{47}, 1) = \mathbf{P}(55, 55, 55, 1)$
$57:\ P_{237177} = \mathbf{P}(\epsilon^{42}, \epsilon^{42}, \epsilon^{42}, 1) = \mathbf{P}(56, 56, 56, 1)$
$58:\ P_{241338} = \mathbf{P}(\epsilon^{21}, \epsilon^{21}, \epsilon^{21}, 1) = \mathbf{P}(57, 57, 57, 1)$
$59:\ P_{245499} = \mathbf{P}(\epsilon^{14}, \epsilon^{14}, \epsilon^{14}, 1) = \mathbf{P}(58, 58, 58, 1)$
$60:\ P_{249660} = \mathbf{P}(\epsilon^{25}, \epsilon^{25}, \epsilon^{25}, 1) = \mathbf{P}(59, 59, 59, 1)$
$61:\ P_{253821} = \mathbf{P}(\epsilon^{50}, \epsilon^{50}, \epsilon^{50}, 1) = \mathbf{P}(60, 60, 60, 1)$
$62:\ P_{257982} = \mathbf{P}(\epsilon^{28}, \epsilon^{28}, \epsilon^{28}, 1) = \mathbf{P}(61, 61, 61, 1)$
$63:\ P_{262143} = \mathbf{P}(\epsilon^{12}, \epsilon^{12}, \epsilon^{12}, 1) = \mathbf{P}(62, 62, 62, 1)$
$64:\ P_{266304} = \mathbf{P}(\epsilon^{10}, \epsilon^{10}, \epsilon^{10}, 1) = \mathbf{P}(63, 63, 63, 1)$

The 64 Lines

The lines and their Pluecker coordinates are:

$$\ell_0 = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4160} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4160} = \mathbf{Pl}(0,0,0,0,1,0)_{4225}$$

$$\ell_1 = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{17043520} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{17043520} = \mathbf{Pl}(0,0,0,1,0,0)_{129}$$

$$\ell_2 = \begin{bmatrix} 1 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8321} = \begin{bmatrix} 1 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8321} = \mathbf{Pl}(0,0,0,1,1,0)_{12353}$$

$$\ell_3 = \begin{bmatrix} 1 & 1 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{274625} = \begin{bmatrix} 1 & 1 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{274625} = \mathbf{Pl}(0,1,0,1,1,0)_{12417}$$

$$\ell_4 = \begin{bmatrix} 1 & \epsilon^{51} & \epsilon^{50} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{16086425} = \begin{bmatrix} 1 & 25 & 60 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{16086425} = \mathbf{Pl}(0,60,0,25,1,0)_{15524}$$

$$\ell_5 = \begin{bmatrix} 1 & \epsilon^{15} & \epsilon^{14} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{15537173} = \begin{bmatrix} 1 & 21 & 58 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{15537173} = \mathbf{Pl}(0,58,0,21,1,0)_{15014}$$

$$\ell_6 = \begin{bmatrix} 1 & \epsilon^{30} & \epsilon^{28} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{16473398} = \begin{bmatrix} 1 & 54 & 61 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{16473398} = \mathbf{Pl}(0,61,0,54,1,0)_{19208}$$

$$\ell_7 = \begin{bmatrix} 1 & \epsilon^{39} & \epsilon^{37} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{10951751} = \begin{bmatrix} 1 & 7 & 41 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{10951751} = \mathbf{Pl}(0,41,0,7,1,0)_{13219}$$

$$\ell_8 = \begin{bmatrix} 1 & \epsilon^{30} & \epsilon^{27} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{12478838} = \begin{bmatrix} 1 & 54 & 46 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{12478838} = \mathbf{Pl}(0,46,0,54,1,0)_{19193}$$

$$\ell_9 = \begin{bmatrix} 1 & \epsilon^{42} & \epsilon^{39} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{2101304} = \begin{bmatrix} 1 & 56 & 7 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{2101304} = \mathbf{Pl}(0,7,0,56,1,0)_{19408}$$

$$\ell_{10} = \begin{bmatrix} 1 & \epsilon^{9} & \epsilon^{18} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3129071} = \begin{bmatrix} 1 & 47 & 11 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3129071} = \mathbf{Pl}(0, 11, 0, 47, 1, 0)_{18269}$$

$$\ell_{11} = \begin{bmatrix} 1 & \epsilon^{27} & \epsilon^{36} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9782510} = \begin{bmatrix} 1 & 46 & 36 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9782510} = \mathbf{Pl}(0, 36, 0, 46, 1, 0)_{18167}$$

$$\ell_{12} = \begin{bmatrix} 1 & \epsilon^{48} & \epsilon^{30} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{14446991} = \begin{bmatrix} 1 & 15 & 54 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{14446991} = \mathbf{Pl}(0, 54, 0, 15, 1, 0)_{14248}$$

$$\ell_{13} = \begin{bmatrix} 1 & \epsilon^{6} & \epsilon^{51} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{6799073} = \begin{bmatrix} 1 & 33 & 25 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{6799073} = \mathbf{Pl}(0, 25, 0, 33, 1, 0)_{16505}$$

$$\ell_{14} = \begin{bmatrix} 1 & \epsilon^{42} & \epsilon^{57} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13286072} = \begin{bmatrix} 1 & 56 & 49 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13286072} = \mathbf{Pl}(0, 49, 0, 56, 1, 0)_{19450}$$

$$\ell_{15} = \begin{bmatrix} 1 & \epsilon^{39} & \epsilon^{54} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{2696327} = \begin{bmatrix} 1 & 7 & 10 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{2696327} = \mathbf{Pl}(0, 10, 0, 7, 1, 0)_{13188}$$

$$\ell_{16} = \begin{bmatrix} 1 & \epsilon^{60} & \epsilon^{56} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{10706252} = \begin{bmatrix} 1 & 12 & 40 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{10706252} = \mathbf{Pl}(0, 40, 0, 12, 1, 0)_{13853}$$

$$\ell_{17} = \begin{bmatrix} 1 & \epsilon^{15} & \epsilon^{11} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8346965} = \begin{bmatrix} 1 & 21 & 31 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8346965} = \mathbf{Pl}(0, 31, 0, 21, 1, 0)_{14987}$$

$$\ell_{18} = \begin{bmatrix} 1 & \epsilon^{33} & \epsilon^{61} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{6611828} = \begin{bmatrix} 1 & 52 & 24 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{6611828} = \mathbf{Pl}(0, 24, 0, 52, 1, 0)_{18917}$$

$$\ell_{19} = \begin{bmatrix} 1 & \epsilon^{9} & \epsilon^{37} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{11118191} = \begin{bmatrix} 1 & 47 & 41 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{11118191} = \mathbf{Pl}(0, 41, 0, 47, 1, 0)_{18299}$$

$$\ell_{20} = \begin{bmatrix} 1 & \epsilon^{3} & \epsilon^{47} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{14684168} = \begin{bmatrix} 1 & 8 & 55 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{14684168} = \mathbf{Pl}(0, 55, 0, 8, 1, 0)_{13360}$$

$$\ell_{21} = \begin{bmatrix} 1 & \epsilon^{54} & \epsilon^{35} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4839242} = \begin{bmatrix} 1 & 10 & 18 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4839242} = \mathbf{Pl}(0, 18, 0, 10, 1, 0)_{13577}$$

$$\ell_{22} = \begin{bmatrix} 1 & \epsilon^{24} & \epsilon^{61} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{6582701} = \begin{bmatrix} 1 & 45 & 24 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{6582701} = \mathbf{Pl}(0, 24, 0, 45, 1, 0)_{18028}$$

$$\ell_{23} = \begin{bmatrix} 1 & \epsilon^{54} & \epsilon^{28} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{16290314} = \begin{bmatrix} 1 & 10 & 61 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{16290314} = \mathbf{Pl}(0, 61, 0, 10, 1, 0)_{13620}$$

$$\ell_{24} = \begin{bmatrix} 1 & \epsilon^{39} & \epsilon^{7} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9353927} = \begin{bmatrix} 1 & 7 & 35 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9353927} = \mathbf{Pl}(0, 35, 0, 7, 1, 0)_{13213}$$

$$\ell_{25} = \begin{bmatrix} 1 & \epsilon^{57} & \epsilon^{25} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{15919985} = \begin{bmatrix} 1 & 49 & 59 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{15919985} = \mathbf{Pl}(0, 59, 0, 49, 1, 0)_{18571}$$

$$\ell_{26} = \begin{bmatrix} 1 & \epsilon^{33} & \epsilon^{55} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5546612} = \begin{bmatrix} 1 & 52 & 20 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5546612} = \mathbf{Pl}(0, 20, 0, 52, 1, 0)_{18913}$$

$$\ell_{27} = \begin{bmatrix} 1 & \epsilon^{27} & \epsilon^{49} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8184686} = \begin{bmatrix} 1 & 46 & 30 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8184686} = \mathbf{Pl}(0, 30, 0, 46, 1, 0)_{18161}$$

$$\ell_{28} = \begin{bmatrix} 1 & \epsilon^{12} & \epsilon^{62} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13044734} = \begin{bmatrix} 1 & 62 & 48 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13044734} = \mathbf{Pl}(0, 48, 0, 62, 1, 0)_{20211}$$

$$\ell_{29} = \begin{bmatrix} 1 & \epsilon^{27} & \epsilon^{14} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{15641198} = \begin{bmatrix} 1 & 46 & 58 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{15641198} = \mathbf{Pl}(0, 58, 0, 46, 1, 0)_{18189}$$

$$\ell_{30} = \begin{bmatrix} 1 & \epsilon^{48} & \epsilon^{62} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{12849167} = \begin{bmatrix} 1 & 15 & 48 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{12849167} = \mathbf{Pl}(0, 48, 0, 15, 1, 0)_{14242}$$

$$\ell_{31} = \begin{bmatrix} 1 & \epsilon^{36} & \epsilon^{50} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{16132196} = \begin{bmatrix} 1 & 36 & 60 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{16132196} = \mathbf{Pl}(0, 60, 0, 36, 1, 0)_{16921}$$

$$\ell_{32} = \begin{bmatrix} 1 & \epsilon^{21} & \epsilon^{15} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5833721} = \begin{bmatrix} 1 & 57 & 21 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5833721} = \mathbf{Pl}(0, 21, 0, 57, 1, 0)_{19549}$$

$$\ell_{33} = \begin{bmatrix} 1 & \epsilon^{60} & \epsilon^{54} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{2717132} = \begin{bmatrix} 1 & 12 & 10 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{2717132} = \mathbf{Pl}(0, 10, 0, 12, 1, 0)_{13823}$$

$$\ell_{34} = \begin{bmatrix} 1 & \epsilon^{3} & \epsilon^{59} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1635272} = \begin{bmatrix} 1 & 8 & 6 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1635272} = \mathbf{Pl}(0, 6, 0, 8, 1, 0)_{13311}$$

$$\ell_{35} = \begin{bmatrix} 1 & \epsilon^{18} & \epsilon^{11} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8305355} = \begin{bmatrix} 1 & 11 & 31 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8305355} = \mathbf{Pl}(0, 31, 0, 11, 1, 0)_{13717}$$

$$\ell_{36} = \begin{bmatrix} 1 & \epsilon^{33} & \epsilon^{60} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3416180} = \begin{bmatrix} 1 & 52 & 12 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3416180} = \mathbf{Pl}(0, 12, 0, 52, 1, 0)_{18905}$$

$$\ell_{37} = \begin{bmatrix} 1 & \epsilon^{12} & \epsilon^{39} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{2126270} = \begin{bmatrix} 1 & 62 & 7 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{2126270} = \mathbf{Pl}(0, 7, 0, 62, 1, 0)_{20170}$$

$$\ell_{38} = \begin{bmatrix} 1 & \epsilon^{54} & \epsilon^{9} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{12562058} = \begin{bmatrix} 1 & 10 & 47 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{12562058} = \mathbf{Pl}(0, 47, 0, 10, 1, 0)_{13606}$$

$$\ell_{39} = \begin{bmatrix} 1 & \epsilon^{18} & \epsilon^{36} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9636875} = \begin{bmatrix} 1 & 11 & 36 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9636875} = \mathbf{Pl}(0, 36, 0, 11, 1, 0)_{13722}$$

$$\ell_{40} = \begin{bmatrix} 1 & \epsilon^{30} & \epsilon^{22} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5288630} = \begin{bmatrix} 1 & 54 & 19 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5288630} = \mathbf{Pl}(0, 19, 0, 54, 1, 0)_{19166}$$

$$\ell_{41} = \begin{bmatrix} 1 & \epsilon^{57} & \epsilon^{49} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8197169} = \begin{bmatrix} 1 & 49 & 30 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8197169} = \mathbf{Pl}(0, 30, 0, 49, 1, 0)_{18542}$$

$$\ell_{42} = \begin{bmatrix} 1 & \epsilon^{24} & \epsilon^{31} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3653357} = \begin{bmatrix} 1 & 45 & 13 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3653357} = \mathbf{Pl}(0, 13, 0, 45, 1, 0)_{18017}$$

$$\ell_{43} = \begin{bmatrix} 1 & \epsilon^{18} & \epsilon^{25} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{15761867} = \begin{bmatrix} 1 & 11 & 59 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{15761867} = \mathbf{Pl}(0, 59, 0, 11, 1, 0)_{13745}$$

$$\ell_{44} = \begin{bmatrix} 1 & \epsilon^{60} & \epsilon^{44} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9108428} = \begin{bmatrix} 1 & 12 & 34 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9108428} = \mathbf{Pl}(0, 34, 0, 12, 1, 0)_{13847}$$

$$\ell_{45} = \begin{bmatrix} 1 & \epsilon^{51} & \epsilon^{35} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4901657} = \begin{bmatrix} 1 & 25 & 18 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4901657} = \mathbf{Pl}(0, 18, 0, 25, 1, 0)_{15482}$$

$$\ell_{46} = \begin{bmatrix} 1 & \epsilon^{21} & \epsilon^{60} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3436985} = \begin{bmatrix} 1 & 57 & 12 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3436985} = \mathbf{Pl}(0, 12, 0, 57, 1, 0)_{19540}$$

$$\ell_{47} = \begin{bmatrix} 1 & \epsilon^{51} & \epsilon^{27} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{12358169} = \begin{bmatrix} 1 & 25 & 46 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{12358169} = \mathbf{Pl}(0, 46, 0, 25, 1, 0)_{15510}$$

$$\ell_{48} = \begin{bmatrix} 1 & \epsilon^{36} & \epsilon^{9} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{12670244} = \begin{bmatrix} 1 & 36 & 47 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{12670244} = \mathbf{Pl}(0, 47, 0, 36, 1, 0)_{16908}$$

$$\ell_{49} = \begin{bmatrix} 1 & \epsilon^{45} & \epsilon^{18} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3087461} = \begin{bmatrix} 1 & 37 & 11 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3087461} = \mathbf{Pl}(0, 11, 0, 37, 1, 0)_{16999}$$

$$\ell_{50} = \begin{bmatrix} 1 & \epsilon^{24} & \epsilon^{15} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5783789} = \begin{bmatrix} 1 & 45 & 21 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5783789} = \mathbf{Pl}(0, 21, 0, 45, 1, 0)_{18025}$$

$$\ell_{51} = \begin{bmatrix} 1 & \epsilon^{3} & \epsilon^{57} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13086344} = \begin{bmatrix} 1 & 8 & 49 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13086344} = \mathbf{Pl}(0, 49, 0, 8, 1, 0)_{13354}$$

$$\ell_{52} = \begin{bmatrix} 1 & \epsilon^{48} & \epsilon^{59} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1664399} = \begin{bmatrix} 1 & 15 & 6 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1664399} = \mathbf{Pl}(0,6,0,15,1,0)_{14200}$$

$$\ell_{53} = \begin{bmatrix} 1 & \epsilon^{45} & \epsilon^{56} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{10810277} = \begin{bmatrix} 1 & 37 & 40 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{10810277} = \mathbf{Pl}(0,40,0,37,1,0)_{17028}$$

$$\ell_{54} = \begin{bmatrix} 1 & \epsilon^{6} & \epsilon^{31} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3603425} = \begin{bmatrix} 1 & 33 & 13 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3603425} = \mathbf{Pl}(0,13,0,33,1,0)_{16493}$$

$$\ell_{55} = \begin{bmatrix} 1 & \epsilon^{45} & \epsilon^{7} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9478757} = \begin{bmatrix} 1 & 37 & 35 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9478757} = \mathbf{Pl}(0,35,0,37,1,0)_{17023}$$

$$\ell_{56} = \begin{bmatrix} 1 & \epsilon^{15} & \epsilon^{45} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9944789} = \begin{bmatrix} 1 & 21 & 37 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9944789} = \mathbf{Pl}(0,37,0,21,1,0)_{14993}$$

$$\ell_{57} = \begin{bmatrix} 1 & \epsilon^{21} & \epsilon^{51} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{6898937} = \begin{bmatrix} 1 & 57 & 25 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{6898937} = \mathbf{Pl}(0,25,0,57,1,0)_{19553}$$

$$\ell_{58} = \begin{bmatrix} 1 & \epsilon^{36} & \epsilon^{22} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5213732} = \begin{bmatrix} 1 & 36 & 19 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5213732} = \mathbf{Pl}(0,19,0,36,1,0)_{16880}$$

$$\ell_{59} = \begin{bmatrix} 1 & \epsilon^{6} & \epsilon^{55} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5467553} = \begin{bmatrix} 1 & 33 & 20 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5467553} = \mathbf{Pl}(0,20,0,33,1,0)_{16500}$$

$$\ell_{60} = \begin{bmatrix} 1 & \epsilon^{9} & \epsilon^{44} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9254063} = \begin{bmatrix} 1 & 47 & 34 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9254063} = \mathbf{Pl}(0,34,0,47,1,0)_{18292}$$

$$\ell_{61} = \begin{bmatrix} 1 & \epsilon^{12} & \epsilon^{47} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{14908862} = \begin{bmatrix} 1 & 62 & 55 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{14908862} = \mathbf{Pl}(0,55,0,62,1,0)_{20218}$$

$$\ell_{62} = \begin{bmatrix} 1 & \epsilon^{57} & \epsilon^{45} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{10061297} = \begin{bmatrix} 1 & 49 & 37 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{10061297} = \mathbf{Pl}(0,37,0,49,1,0)_{18549}$$

$$\ell_{63} = \begin{bmatrix} 1 & \epsilon^{42} & \epsilon^{30} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{14617592} = \begin{bmatrix} 1 & 56 & 54 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{14617592} = \mathbf{Pl}(0,54,0,56,1,0)_{19455}$$

Rank of lines: (4160, 17043520, 8321, 274625, 16086425, 15537173, 16473398, 10951751, 12478838, 2101304, 3129071, 9782510, 14446991, 6799073, 13286072, 2696327, 10706252, 8346965, 6611828, 11118191, 14684168, 4839242, 6582701, 16290314, 9353927, 15919985, 5546612, 8184686, 13044734, 15641198, 12849167, 16132196, 5833721, 2717132, 1635272, 8305355, 3416180, 2126270, 12562058, 9636875, 5288630, 8197169, 3653357, 15761867, 9108428, 4901657, 3436985, 12358169, 12670244, 3087461, ...14908862, 10061297, 14617592)
Rank of points on Klein quadric: (4225, 129, 12353, 12417, 15524, 15014, 19208, 13219, 19193, 19408, 18269, 18167, 14248, 16505, 19450, 13188, 13853, 14987, 18917, 18299, 13360, 13577, 18028, 13620, 13213, 18571, 18913, 18161, 20211, 18189, 14242, 16921, 19549, 13823, 13311, 13717, 18905, 20170, 13606, 13722, 19166, 18542, 18017, 13745, 13847, 15482, 19540, 15510, 16908, 16999, ...20218, 18549, 19455)

Eckardt Points

The surface has 0 Eckardt points:

Double Points

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

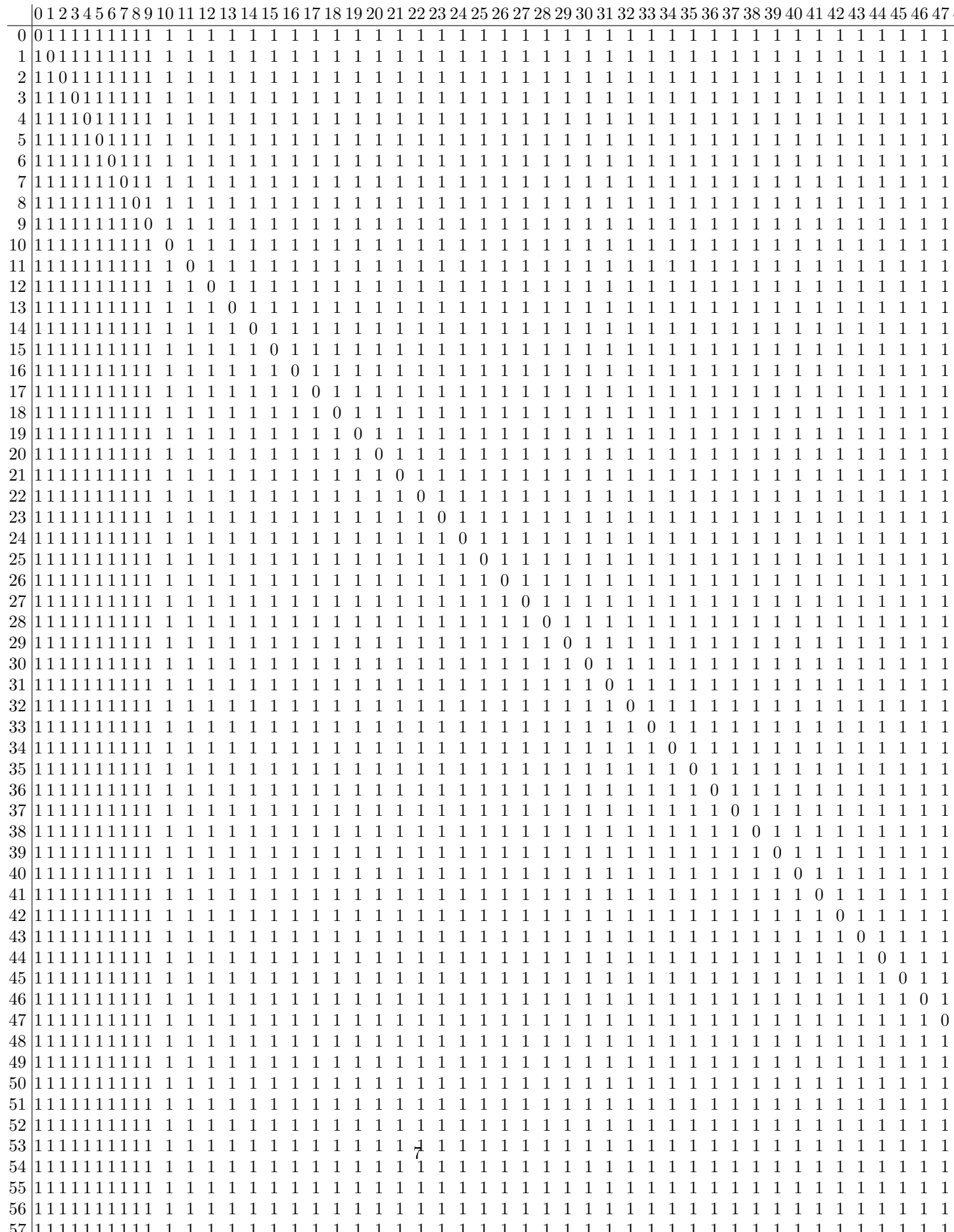
Single Points

The surface has 4096 single points:
Too many to print.

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



Neighbor sets in the line intersection graph:
Line 0 intersects

Line	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ_{22}
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 1 intersects

Line	ℓ_0	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ_{22}
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 2 intersects

Line	ℓ_0	ℓ_1	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ_{22}
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 3 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ_{22}
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 4 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ_{22}
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 5 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ_{22}
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 6 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ_{22}
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 7 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ_{22}
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 8 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ_{22}
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 9 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ_{22}
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 10 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ_{22}
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 11 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ_{22}
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 12 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ_{22}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 13 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ_{22}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 14 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ_{22}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 15 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ_{22}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 16 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ_{22}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 17 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ_{22}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 18 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ_{22}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 19 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{20}	ℓ_{21}	ℓ_{22}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 20 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{21}	ℓ_{22}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 21 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{22}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 22 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 23 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 24 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 25 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 26 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 27 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 28 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 29 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 30 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 31 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 32 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 33 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 34 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 35 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 36 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 37 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 38 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 39 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 40 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 41 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 42 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 43 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 44 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 45 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 46 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 47 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 48 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 49 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 50 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3

Line 51 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P

Line 52 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P

Line 53 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P

Line 54 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P

Line 55 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P

Line 56 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P

Line 57 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P

Line 58 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P

Line 59 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P

Line 60 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P

Line 61 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P

Line 62 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P

Line 63 intersects

Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P_3	P

The surface has 4097 points:
Too many to print.