Rank-73795 over GF(8)

January 15, 2021

The equation

The equation of the surface is :

$$X_0^2X_3 + X_0X_3^2 + X_0X_1X_2 = 0$$

(0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 1, 0, 0, 1, 0, 0, 0)
The point rank of the equation over GF(8) is 1227395661

General information

Number of lines	91
Number of points	145
Number of singular points	9
Number of Eckardt points	0
Number of double points	72
Number of single points	0
Number of points off lines	0
Number of Hesse planes	0
Number of axes	0
Type of points on lines	9^{91}
Type of lines on points	11^9, 9^{64}, 2^{72}

Singular Points

The surface has 9 singular points:

0 : $P_1 = \mathbf{P}(0,1,0,0) = \mathbf{P}(0,1,0,0)$
1 : $P_2 = \mathbf{P}(0,0,1,0) = \mathbf{P}(0,0,1,0)$
2 : $P_{146} = \mathbf{P}(0,1,1,1) = \mathbf{P}(0,1,1,1)$
3 : $P_{249} = \mathbf{P}(0,\gamma^6,\gamma,1) = \mathbf{P}(0,6,2,1)$
4 : $P_{297} = \mathbf{P}(0,\gamma^2,\gamma^5,1) = \mathbf{P}(0,4,3,1)$
5 : $P_{353} = \mathbf{P}(0,\gamma^5,\gamma^2,1) = \mathbf{P}(0,3,4,1)$
6 : $P_{449} = \mathbf{P}(0,\gamma^4,\gamma^3,1) = \mathbf{P}(0,7,5,1)$
7 : $P_{473} = \mathbf{P}(0,\gamma,\gamma^6,1) = \mathbf{P}(0,2,6,1)$
8 : $P_{561} = \mathbf{P}(0,\gamma^3,\gamma^4,1) = \mathbf{P}(0,5,7,1)$

The 91 Lines

The lines and their Pluecker coordinates are:

$$\ell_0 = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \end{bmatrix}_0 = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \end{bmatrix}_0 = \mathbf{Pl}(1,0,0,0,0,0)_0$$

$$\ell_1 = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{64} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{64} = \mathbf{Pl}(0,0,1,0,0,0)_2$$

$$\ell_2 = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{4672} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{4672} = \mathbf{Pl}(0,0,0,0,0,1)_{649}$$

$$\ell_3 = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4680} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4680} = \mathbf{Pl}(0,0,0,1,0,0)_{17}$$

$$\ell_4 = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{584} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{584} = \mathbf{Pl}(1,0,0,1,0,0)_{18}$$

$$\ell_5 = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{4673} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{4673} = \mathbf{Pl}(0,0,0,1,0,1)_{769}$$

$$\ell_6 = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \gamma^6 \end{bmatrix}_{4678} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{4678} = \mathbf{Pl}(0,0,0,6,0,1)_{844}$$

$$\ell_7 = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \gamma^2 \end{bmatrix}_{4676} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{4676} = \mathbf{Pl}(0,0,0,4,0,1)_{814}$$

$$\ell_8 = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \gamma^5 \end{bmatrix}_{4675} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{4675} = \mathbf{Pl}(0,0,0,3,0,1)_{799}$$

$$\ell_9 = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \gamma^4 \end{bmatrix}_{4679} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{4679} = \mathbf{Pl}(0,0,0,7,0,1)_{859}$$

$$\ell_{10} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \gamma \end{bmatrix}_{4674} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{4674} = \mathbf{Pl}(0,0,0,2,0,1)_{784}$$

$$\ell_{11} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \gamma^3 \end{bmatrix}_{4677} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{4677} = \mathbf{Pl}(0,0,0,5,0,1)_{829}$$

$$\ell_{12} = \begin{bmatrix} 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4744} = \begin{bmatrix} 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4744} = \mathbf{Pl}(0,1,0,0,0,0)_1$$

$$\ell_{13} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{648} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{648} = \mathbf{Pl}(0,1,1,0,0,0)_{10}$$

$$\ell_{14} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{4681} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{4681} = \mathbf{Pl}(0,1,0,0,0,1)_{657}$$

$$\ell_{15} = \begin{bmatrix} 0 & 1 & 0 & \gamma^6 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{4726} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{4726} = \mathbf{Pl}(0,6,0,0,0,1)_{662}$$

$$\ell_{16} = \begin{bmatrix} 0 & 1 & 0 & \gamma^2 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{4708} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{4708} = \mathbf{Pl}(0,4,0,0,0,1)_{660}$$

$$\ell_{17} = \begin{bmatrix} 0 & 1 & 0 & \gamma^5 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{4699} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{4699} = \mathbf{Pl}(0,3,0,0,0,1)_{659}$$

$$\ell_{18} = \begin{bmatrix} 0 & 1 & 0 & \gamma^4 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{4735} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{4735} = \mathbf{Pl}(0,7,0,0,0,1)_{663}$$

$$\ell_{19} = \begin{bmatrix} 0 & 1 & 0 & \gamma \\ 0 & 0 & 1 & 0 \end{bmatrix}_{4690} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{4690} = \mathbf{Pl}(0,2,0,0,0,1)_{658}$$

$$\ell_{20} = \begin{bmatrix} 0 & 1 & 0 & \gamma^3 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{4717} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{4717} = \mathbf{Pl}(0,5,0,0,0,1)_{661}$$

$$\ell_{21} = \begin{bmatrix} 1 & 0 & 1 & 1 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{666} = \begin{bmatrix} 1 & 0 & 1 & 1 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{666} = \mathbf{Pl}(1,0,1,1,1,1)_{1323}$$

$$\ell_{22} = \begin{bmatrix} 1 & 0 & \gamma & 1 \\ 0 & 1 & \gamma^2 & \gamma \end{bmatrix}_{750} = \begin{bmatrix} 1 & 0 & 2 & 1 \\ 0 & 1 & 4 & 2 \end{bmatrix}_{750} = \mathbf{Pl}(6,0,2,6,1,1)_{1343}$$

$$\ell_{23} = \begin{bmatrix} 1 & 0 & \gamma^5 & 1 \\ 0 & 1 & \gamma^3 & \gamma^5 \end{bmatrix}_{832} = \begin{bmatrix} 1 & 0 & 3 & 1 \\ 0 & 1 & 5 & 3 \end{bmatrix}_{832} = \mathbf{Pl}(4,0,3,4,1,1)_{1356}$$

$$\ell_{24} = \begin{bmatrix} 1 & 0 & \gamma^2 & 1 \\ 0 & 1 & \gamma^4 & \gamma^2 \end{bmatrix}_{915} = \begin{bmatrix} 1 & 0 & 4 & 1 \\ 0 & 1 & 7 & 4 \end{bmatrix}_{915} = \mathbf{Pl}(3,0,4,3,1,1)_{1370}$$

$$\ell_{25} = \begin{bmatrix} 1 & 0 & \gamma^3 & 1 \\ 0 & 1 & \gamma^6 & \gamma^3 \end{bmatrix}_{995} = \begin{bmatrix} 1 & 0 & 5 & 1 \\ 0 & 1 & 6 & 5 \end{bmatrix}_{995} = \mathbf{Pl}(7,0,5,7,1,1)_{1389}$$

$$\ell_{26} = \begin{bmatrix} 1 & 0 & \gamma^6 & 1 \\ 0 & 1 & \gamma^5 & \gamma^6 \end{bmatrix}_{1073} = \begin{bmatrix} 1 & 0 & 6 & 1 \\ 0 & 1 & 3 & 6 \end{bmatrix}_{1073} = \mathbf{Pl}(2,0,6,2,1,1)_{1399}$$

$$\ell_{27} = \begin{bmatrix} 1 & 0 & \gamma^4 & 1 \\ 0 & 1 & \gamma & \gamma^4 \end{bmatrix}_{1153} = \begin{bmatrix} 1 & 0 & 7 & 1 \\ 0 & 1 & 2 & 7 \end{bmatrix}_{1153} = \mathbf{Pl}(5,0,7,5,1,1)_{1417}$$

$$\ell_{28} = \begin{bmatrix} 1 & 0 & 1 & 0 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{82} = \begin{bmatrix} 1 & 0 & 1 & 0 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{82} = \mathbf{Pl}(1,1,1,0,1,1)_{1224}$$

$$\ell_{29} = \begin{bmatrix} 1 & 0 & \gamma^6 & 0 \\ 0 & 1 & \gamma^5 & \gamma^6 \end{bmatrix}_{489} = \begin{bmatrix} 1 & 0 & 6 & 0 \\ 0 & 1 & 3 & 6 \end{bmatrix}_{489} = \mathbf{Pl}(2,6,6,0,1,1)_{1260}$$

$$\ell_{30} = \begin{bmatrix} 1 & 0 & \gamma^2 & 0 \\ 0 & 1 & \gamma^4 & \gamma^2 \end{bmatrix}_{331} = \begin{bmatrix} 1 & 0 & 4 & 0 \\ 0 & 1 & 7 & 4 \end{bmatrix}_{331} = \mathbf{Pl}(3,4,4,0,1,1)_{1247}$$

$$\ell_{31} = \begin{bmatrix} 1 & 0 & \gamma^5 & 0 \\ 0 & 1 & \gamma^3 & \gamma^5 \end{bmatrix}_{248} = \begin{bmatrix} 1 & 0 & 3 & 0 \\ 0 & 1 & 5 & 3 \end{bmatrix}_{248} = \mathbf{Pl}(4,3,3,0,1,1)_{1241}$$

$$\ell_{32} = \begin{bmatrix} 1 & 0 & \gamma^4 & 0 \\ 0 & 1 & \gamma & \gamma^4 \end{bmatrix}_{569} = \begin{bmatrix} 1 & 0 & 7 & 0 \\ 0 & 1 & 2 & 7 \end{bmatrix}_{569} = \mathbf{Pl}(5,7,7,0,1,1)_{1270}$$

$$\ell_{33} = \begin{bmatrix} 1 & 0 & \gamma & 0 \\ 0 & 1 & \gamma^2 & \gamma \end{bmatrix}_{166} = \begin{bmatrix} 1 & 0 & 2 & 0 \\ 0 & 1 & 4 & 2 \end{bmatrix}_{166} = \mathbf{Pl}(6,2,2,0,1,1)_{1236}$$

$$\ell_{34} = \begin{bmatrix} 1 & 0 & \gamma^3 & 0 \\ 0 & 1 & \gamma^6 & \gamma^3 \end{bmatrix}_{411} = \begin{bmatrix} 1 & 0 & 5 & 0 \\ 0 & 1 & 6 & 5 \end{bmatrix}_{411} = \mathbf{Pl}(7,5,5,0,1,1)_{1258}$$

$$\ell_{35} = \begin{bmatrix} 0 & 1 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4689} = \begin{bmatrix} 0 & 1 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4689} = \mathbf{Pl}(0,1,0,1,0,0)_{25}$$

$$\ell_{36} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{4682} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{4682} = \mathbf{Pl}(0,1,0,1,0,1)_{777}$$

$$\ell_{37} = \begin{bmatrix} 0 & 1 & 0 & \gamma^6 \\ 0 & 0 & 1 & \gamma^6 \end{bmatrix}_{4732} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{4732} = \mathbf{Pl}(0,6,0,6,0,1)_{857}$$

$$\ell_{38} = \begin{bmatrix} 0 & 1 & 0 & \gamma^2 \\ 0 & 0 & 1 & \gamma^2 \end{bmatrix}_{4712} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{4712} = \mathbf{Pl}(0,4,0,4,0,1)_{825}$$

$$\ell_{39} = \begin{bmatrix} 0 & 1 & 0 & \gamma^5 \\ 0 & 0 & 1 & \gamma^5 \end{bmatrix}_{4702} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{4702} = \mathbf{Pl}(0,3,0,3,0,1)_{809}$$

$$\ell_{40} = \begin{bmatrix} 0 & 1 & 0 & \gamma^4 \\ 0 & 0 & 1 & \gamma^4 \end{bmatrix}_{4742} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{4742} = \mathbf{Pl}(0,7,0,7,0,1)_{873}$$

$$\ell_{41} = \left[\begin{array}{cccc} 0 & 1 & 0 & \gamma \\ 0 & 0 & 1 & \gamma \end{array}\right]_{4692} = \left[\begin{array}{cccc} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 2 \end{array}\right]_{4692} = \mathbf{Pl}(0,2,0,2,0,1)_{793}$$

$$\ell_{42} = \left[\begin{array}{cccc} 0 & 1 & 0 & \gamma^3 \\ 0 & 0 & 1 & \gamma^3 \end{array}\right]_{4722} = \left[\begin{array}{cccc} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 5 \end{array}\right]_{4722} = \mathbf{Pl}(0,5,0,5,0,1)_{841}$$

$$\ell_{43} = \left[\begin{array}{cccc} 0 & 1 & \gamma^6 & 0 \\ 0 & 0 & 0 & 1 \end{array}\right]_{4734} = \left[\begin{array}{cccc} 0 & 1 & 6 & 0 \\ 0 & 0 & 0 & 1 \end{array}\right]_{4734} = \mathbf{Pl}(0,6,0,1,0,0)_{30}$$

$$\ell_{44} = \left[\begin{array}{cccc} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \gamma \end{array}\right]_{4683} = \left[\begin{array}{cccc} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 2 \end{array}\right]_{4683} = \mathbf{Pl}(0,1,0,2,0,1)_{792}$$

$$\ell_{45} = \left[\begin{array}{cccc} 0 & 1 & 0 & \gamma^6 \\ 0 & 0 & 1 & 1 \end{array}\right]_{4727} = \left[\begin{array}{cccc} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 1 \end{array}\right]_{4727} = \mathbf{Pl}(0,6,0,1,0,1)_{782}$$

$$\ell_{46} = \left[\begin{array}{cccc} 0 & 1 & 0 & \gamma^2 \\ 0 & 0 & 1 & \gamma^3 \end{array}\right]_{4713} = \left[\begin{array}{cccc} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 5 \end{array}\right]_{4713} = \mathbf{Pl}(0,4,0,5,0,1)_{840}$$

$$\ell_{47} = \left[\begin{array}{cccc} 0 & 1 & 0 & \gamma^5 \\ 0 & 0 & 1 & \gamma^6 \end{array}\right]_{4705} = \left[\begin{array}{cccc} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 6 \end{array}\right]_{4705} = \mathbf{Pl}(0,3,0,6,0,1)_{854}$$

$$\ell_{48} = \left[\begin{array}{cccc} 0 & 1 & 0 & \gamma^4 \\ 0 & 0 & 1 & \gamma^5 \end{array}\right]_{4738} = \left[\begin{array}{cccc} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 3 \end{array}\right]_{4738} = \mathbf{Pl}(0,7,0,3,0,1)_{813}$$

$$\ell_{49} = \left[\begin{array}{cccc} 0 & 1 & 0 & \gamma \\ 0 & 0 & 1 & \gamma^2 \end{array}\right]_{4694} = \left[\begin{array}{cccc} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 4 \end{array}\right]_{4694} = \mathbf{Pl}(0,2,0,4,0,1)_{823}$$

$$\ell_{50} = \left[\begin{array}{cccc} 0 & 1 & 0 & \gamma^3 \\ 0 & 0 & 1 & \gamma^4 \end{array}\right]_{4724} = \left[\begin{array}{cccc} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 7 \end{array}\right]_{4724} = \mathbf{Pl}(0,5,0,7,0,1)_{871}$$

$$\ell_{51} = \left[\begin{array}{cccc} 0 & 1 & \gamma^2 & 0 \\ 0 & 0 & 0 & 1 \end{array}\right]_{4716} = \left[\begin{array}{cccc} 0 & 1 & 4 & 0 \\ 0 & 0 & 0 & 1 \end{array}\right]_{4716} = \mathbf{Pl}(0,4,0,1,0,0)_{28}$$

$$\ell_{52} = \left[\begin{array}{cccc} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \gamma^5 \end{array}\right]_{4684} = \left[\begin{array}{cccc} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 3 \end{array}\right]_{4684} = \mathbf{Pl}(0,1,0,3,0,1)_{807}$$

$$\ell_{53} = \left[\begin{array}{cccc} 0 & 1 & 0 & \gamma^6 \\ 0 & 0 & 1 & \gamma^4 \end{array}\right]_{4733} = \left[\begin{array}{cccc} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 7 \end{array}\right]_{4733} = \mathbf{Pl}(0,6,0,7,0,1)_{872}$$

$$\ell_{54} = \left[\begin{array}{cccc} 0 & 1 & 0 & \gamma^2 \\ 0 & 0 & 1 & 1 \end{array}\right]_{4709} = \left[\begin{array}{cccc} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 1 \end{array}\right]_{4709} = \mathbf{Pl}(0,4,0,1,0,1)_{780}$$

$$\ell_{55} = \left[\begin{array}{cccc} 0 & 1 & 0 & \gamma^5 \\ 0 & 0 & 1 & \gamma^3 \end{array}\right]_{4704} = \left[\begin{array}{cccc} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 5 \end{array}\right]_{4704} = \mathbf{Pl}(0,3,0,5,0,1)_{839}$$

$$\ell_{56} = \left[\begin{array}{cccc} 0 & 1 & 0 & \gamma^4 \\ 0 & 0 & 1 & \gamma^2 \end{array}\right]_{4739} = \left[\begin{array}{cccc} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 4 \end{array}\right]_{4739} = \mathbf{Pl}(0,7,0,4,0,1)_{828}$$

$$\ell_{57} = \left[\begin{array}{cccc} 0 & 1 & 0 & \gamma \\ 0 & 0 & 1 & \gamma^6 \end{array}\right]_{4696} = \left[\begin{array}{cccc} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 6 \end{array}\right]_{4696} = \mathbf{Pl}(0,2,0,6,0,1)_{853}$$

$$\ell_{58} = \left[\begin{array}{cccc} 0 & 1 & 0 & \gamma^3 \\ 0 & 0 & 1 & \gamma \end{array}\right]_{4719} = \left[\begin{array}{cccc} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 2 \end{array}\right]_{4719} = \mathbf{Pl}(0,5,0,2,0,1)_{796}$$

$$\ell_{59} = \left[\begin{array}{cccc} 0 & 1 & \gamma^5 & 0 \\ 0 & 0 & 0 & 1 \end{array}\right]_{4707} = \left[\begin{array}{cccc} 0 & 1 & 3 & 0 \\ 0 & 0 & 0 & 1 \end{array}\right]_{4707} = \mathbf{Pl}(0,3,0,1,0,0)_{27}$$

$$\ell_{60} = \left[\begin{array}{cccc} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \gamma^2 \end{array}\right]_{4685} = \left[\begin{array}{cccc} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 4 \end{array}\right]_{4685} = \mathbf{Pl}(0,1,0,4,0,1)_{822}$$

$$\ell_{61} = \left[\begin{array}{cccc} 0 & 1 & 0 & \gamma^6 \\ 0 & 0 & 1 & \gamma \end{array}\right]_{4728} = \left[\begin{array}{cccc} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 2 \end{array}\right]_{4728} = \mathbf{Pl}(0,6,0,2,0,1)_{797}$$

$$\ell_{62} = \begin{bmatrix} 0 & 1 & 0 & \gamma^2 \\ 0 & 0 & 1 & \gamma^4 \end{bmatrix}_{4715} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{4715} = \mathbf{Pl}(0,4,0,7,0,1)_{870}$$

$$\ell_{63} = \begin{bmatrix} 0 & 1 & 0 & \gamma^5 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{4700} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{4700} = \mathbf{Pl}(0,3,0,1,0,1)_{779}$$

$$\ell_{64} = \begin{bmatrix} 0 & 1 & 0 & \gamma^4 \\ 0 & 0 & 1 & \gamma^6 \end{bmatrix}_{4741} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{4741} = \mathbf{Pl}(0,7,0,6,0,1)_{858}$$

$$\ell_{65} = \begin{bmatrix} 0 & 1 & 0 & \gamma \\ 0 & 0 & 1 & \gamma^3 \end{bmatrix}_{4695} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{4695} = \mathbf{Pl}(0,2,0,5,0,1)_{838}$$

$$\ell_{66} = \begin{bmatrix} 0 & 1 & 0 & \gamma^3 \\ 0 & 0 & 1 & \gamma^5 \end{bmatrix}_{4720} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{4720} = \mathbf{Pl}(0,5,0,3,0,1)_{811}$$

$$\ell_{67} = \begin{bmatrix} 0 & 1 & \gamma^4 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4743} = \begin{bmatrix} 0 & 1 & 7 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4743} = \mathbf{Pl}(0,7,0,1,0,0)_{31}$$

$$\ell_{68} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \gamma^3 \end{bmatrix}_{4686} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{4686} = \mathbf{Pl}(0,1,0,5,0,1)_{837}$$

$$\ell_{69} = \begin{bmatrix} 0 & 1 & 0 & \gamma^6 \\ 0 & 0 & 1 & \gamma^2 \end{bmatrix}_{4730} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{4730} = \mathbf{Pl}(0,6,0,4,0,1)_{827}$$

$$\ell_{70} = \begin{bmatrix} 0 & 1 & 0 & \gamma^2 \\ 0 & 0 & 1 & \gamma^5 \end{bmatrix}_{4711} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{4711} = \mathbf{Pl}(0,4,0,3,0,1)_{810}$$

$$\ell_{71} = \begin{bmatrix} 0 & 1 & 0 & \gamma^5 \\ 0 & 0 & 1 & \gamma \end{bmatrix}_{4701} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{4701} = \mathbf{Pl}(0,3,0,2,0,1)_{794}$$

$$\ell_{72} = \begin{bmatrix} 0 & 1 & 0 & \gamma^4 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{4736} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{4736} = \mathbf{Pl}(0,7,0,1,0,1)_{783}$$

$$\ell_{73} = \begin{bmatrix} 0 & 1 & 0 & \gamma \\ 0 & 0 & 1 & \gamma^4 \end{bmatrix}_{4697} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{4697} = \mathbf{Pl}(0,2,0,7,0,1)_{868}$$

$$\ell_{74} = \begin{bmatrix} 0 & 1 & 0 & \gamma^3 \\ 0 & 0 & 1 & \gamma^6 \end{bmatrix}_{4723} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{4723} = \mathbf{Pl}(0,5,0,6,0,1)_{856}$$

$$\ell_{75} = \begin{bmatrix} 0 & 1 & \gamma & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4698} = \begin{bmatrix} 0 & 1 & 2 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4698} = \mathbf{Pl}(0,2,0,1,0,0)_{26}$$

$$\ell_{76} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \gamma^6 \end{bmatrix}_{4687} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{4687} = \mathbf{Pl}(0,1,0,6,0,1)_{852}$$

$$\ell_{77} = \begin{bmatrix} 0 & 1 & 0 & \gamma^6 \\ 0 & 0 & 1 & \gamma^5 \end{bmatrix}_{4729} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{4729} = \mathbf{Pl}(0,6,0,3,0,1)_{812}$$

$$\ell_{78} = \begin{bmatrix} 0 & 1 & 0 & \gamma^2 \\ 0 & 0 & 1 & \gamma \end{bmatrix}_{4710} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{4710} = \mathbf{Pl}(0,4,0,2,0,1)_{795}$$

$$\ell_{79} = \begin{bmatrix} 0 & 1 & 0 & \gamma^5 \\ 0 & 0 & 1 & \gamma^4 \end{bmatrix}_{4706} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{4706} = \mathbf{Pl}(0,3,0,7,0,1)_{869}$$

$$\ell_{80} = \begin{bmatrix} 0 & 1 & 0 & \gamma^4 \\ 0 & 0 & 1 & \gamma^3 \end{bmatrix}_{4740} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{4740} = \mathbf{Pl}(0,7,0,5,0,1)_{843}$$

$$\ell_{81} = \begin{bmatrix} 0 & 1 & 0 & \gamma \\ 0 & 0 & 1 & 1 \end{bmatrix}_{4691} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{4691} = \mathbf{Pl}(0,2,0,1,0,1)_{778}$$

$$\ell_{82} = \begin{bmatrix} 0 & 1 & 0 & \gamma^3 \\ 0 & 0 & 1 & \gamma^2 \end{bmatrix}_{4721} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{4721} = \mathbf{Pl}(0,5,0,4,0,1)_{826}$$

$$\ell_{83} = \begin{bmatrix} 0 & 1 & \gamma^3 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4725} = \begin{bmatrix} 0 & 1 & 5 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4725} = \mathbf{Pl}(0,5,0,1,0,0)_{29}$$

$$\ell_{84} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \gamma^4 \end{bmatrix}_{4688} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{4688} = \mathbf{Pl}(0,1,0,7,0,1)_{867}$$

$$\ell_{85} = \begin{bmatrix} 0 & 1 & 0 & \gamma^6 \\ 0 & 0 & 1 & \gamma^3 \end{bmatrix}_{4731} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{4731} = \mathbf{Pl}(0,6,0,5,0,1)_{842}$$

$$\ell_{86} = \begin{bmatrix} 0 & 1 & 0 & \gamma^2 \\ 0 & 0 & 1 & \gamma^6 \end{bmatrix}_{4714} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{4714} = \mathbf{Pl}(0,4,0,6,0,1)_{855}$$

$$\ell_{87} = \begin{bmatrix} 0 & 1 & 0 & \gamma^5 \\ 0 & 0 & 1 & \gamma^2 \end{bmatrix}_{4703} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{4703} = \mathbf{Pl}(0,3,0,4,0,1)_{824}$$

$$\ell_{88} = \begin{bmatrix} 0 & 1 & 0 & \gamma^4 \\ 0 & 0 & 1 & \gamma \end{bmatrix}_{4737} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{4737} = \mathbf{Pl}(0,7,0,2,0,1)_{798}$$

$$\ell_{89} = \begin{bmatrix} 0 & 1 & 0 & \gamma \\ 0 & 0 & 1 & \gamma^5 \end{bmatrix}_{4693} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{4693} = \mathbf{Pl}(0,2,0,3,0,1)_{808}$$

$$\ell_{90} = \begin{bmatrix} 0 & 1 & 0 & \gamma^3 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{4718} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{4718} = \mathbf{Pl}(0,5,0,1,0,1)_{781}$$

Rank of lines: (0, 64, 4672, 4680, 584, 4673, 4678, 4676, 4675, 4679, 4674, 4677, 4744, 648, 4681, 4726, 4708, 4699, 4735, 4690, 4717, 666, 750, 832, 915, 995, 1073, 1153, 82, 489, 331, 248, 569, 166, 411, 4689, 4682, 4732, 4712, 4702, 4742, 4692, 4722, 4734, 4683, 4727, 4713, 4705, 4738, 4694, ...4737, 4693, 4718)
Rank of points on Klein quadric: (0, 2, 649, 17, 18, 769, 844, 814, 799, 859, 784, 829, 1, 10, 657, 662, 660, 659, 663, 658, 661, 1323, 1343, 1356, 1370, 1389, 1399, 1417, 1224, 1260, 1247, 1241, 1270, 1236, 1258, 25, 777, 857, 825, 809, 873, 793, 841, 30, 792, 782, 840, 854, 813, 823, ...798, 808, 781)

Eckardt Points

The surface has 0 Eckardt points:

Double Points

The surface has 72 Double points:
The double points on the surface are:

$P_0 = (1,0,0,0) = \ell_0 \cap \ell_1$
$P_5 = (1,1,0,0) = \ell_0 \cap \ell_{21}$
$P_6 = (2,1,0,0) = \ell_0 \cap \ell_{22}$
$P_7 = (3,1,0,0) = \ell_0 \cap \ell_{23}$
$P_8 = (4,1,0,0) = \ell_0 \cap \ell_{24}$
$P_9 = (5,1,0,0) = \ell_0 \cap \ell_{25}$
$P_{10} = (6,1,0,0) = \ell_0 \cap \ell_{26}$
$P_{11} = (7,1,0,0) = \ell_0 \cap \ell_{27}$
$P_{12} = (1,0,1,0) = \ell_1 \cap \ell_{28}$
$P_{13} = (2,0,1,0) = \ell_1 \cap \ell_{29}$
$P_{14} = (3,0,1,0) = \ell_1 \cap \ell_{30}$
$P_{15} = (4,0,1,0) = \ell_1 \cap \ell_{31}$
$P_{16} = (5,0,1,0) = \ell_1 \cap \ell_{32}$
$P_{17} = (6,0,1,0) = \ell_1 \cap \ell_{33}$
$P_{18} = (7,0,1,0) = \ell_1 \cap \ell_{34}$

$P_{75} = (1,0,0,1) = \ell_4 \cap \ell_{13}$
$P_{83} = (1,1,0,1) = \ell_4 \cap \ell_{28}$
$P_{91} = (1,2,0,1) = \ell_4 \cap \ell_{29}$
$P_{99} = (1,3,0,1) = \ell_4 \cap \ell_{30}$
$P_{107} = (1,4,0,1) = \ell_4 \cap \ell_{31}$
$P_{115} = (1,5,0,1) = \ell_4 \cap \ell_{32}$
$P_{123} = (1,6,0,1) = \ell_4 \cap \ell_{33}$
$P_{131} = (1,7,0,1) = \ell_4 \cap \ell_{34}$
$P_{139} = (1,0,1,1) = \ell_{13} \cap \ell_{21}$
$P_{202} = (1,0,2,1) = \ell_{13} \cap \ell_{22}$
$P_{266} = (1,0,3,1) = \ell_{13} \cap \ell_{23}$
$P_{330} = (1,0,4,1) = \ell_{13} \cap \ell_{24}$
$P_{394} = (1,0,5,1) = \ell_{13} \cap \ell_{25}$
$P_{458} = (1,0,6,1) = \ell_{13} \cap \ell_{26}$
$P_{522} = (1,0,7,1) = \ell_{13} \cap \ell_{27}$

$P_{156} = (3,2,1,1) = \ell_{21} \cap \ell_{29}$
$P_{163} = (2,3,1,1) = \ell_{21} \cap \ell_{30}$
$P_{174} = (5,4,1,1) = \ell_{21} \cap \ell_{31}$
$P_{181} = (4,5,1,1) = \ell_{21} \cap \ell_{32}$
$P_{192} = (7,6,1,1) = \ell_{21} \cap \ell_{33}$
$P_{199} = (6,7,1,1) = \ell_{21} \cap \ell_{34}$
$P_{212} = (3,1,2,1) = \ell_{22} \cap \ell_{28}$
$P_{222} = (5,2,2,1) = \ell_{22} \cap \ell_{29}$
$P_{232} = (7,3,2,1) = \ell_{22} \cap \ell_{30}$
$P_{237} = (4,4,2,1) = \ell_{22} \cap \ell_{31}$
$P_{247} = (6,5,2,1) = \ell_{22} \cap \ell_{32}$
$P_{259} = (2,7,2,1) = \ell_{22} \cap \ell_{34}$
$P_{275} = (2,1,3,1) = \ell_{23} \cap \ell_{28}$
$P_{288} = (7,2,3,1) = \ell_{23} \cap \ell_{29}$
$P_{293} = (4,3,3,1) = \ell_{23} \cap \ell_{30}$
$P_{308} = (3,5,3,1) = \ell_{23} \cap \ell_{32}$
$P_{319} = (6,6,3,1) = \ell_{23} \cap \ell_{33}$
$P_{326} = (5,7,3,1) = \ell_{23} \cap \ell_{34}$
$P_{342} = (5,1,4,1) = \ell_{24} \cap \ell_{28}$
$P_{349} = (4,2,4,1) = \ell_{24} \cap \ell_{29}$
$P_{367} = (6,4,4,1) = \ell_{24} \cap \ell_{31}$
$P_{371} = (2,5,4,1) = \ell_{24} \cap \ell_{32}$
$P_{380} = (3,6,4,1) = \ell_{24} \cap \ell_{33}$
$P_{392} = (7,7,4,1) = \ell_{24} \cap \ell_{34}$
$P_{405} = (4,1,5,1) = \ell_{25} \cap \ell_{28}$
$P_{415} = (6,2,5,1) = \ell_{25} \cap \ell_{29}$
$P_{420} = (3,3,5,1) = \ell_{25} \cap \ell_{30}$
$P_{427} = (2,4,5,1) = \ell_{25} \cap \ell_{31}$
$P_{440} = (7,5,5,1) = \ell_{25} \cap \ell_{32}$
$P_{446} = (5,6,5,1) = \ell_{25} \cap \ell_{33}$
$P_{472} = (7,1,6,1) = \ell_{26} \cap \ell_{28}$
$P_{487} = (6,3,6,1) = \ell_{26} \cap \ell_{30}$
$P_{492} = (3,4,6,1) = \ell_{26} \cap \ell_{31}$
$P_{502} = (5,5,6,1) = \ell_{26} \cap \ell_{32}$
$P_{507} = (2,6,6,1) = \ell_{26} \cap \ell_{33}$
$P_{517} = (4,7,6,1) = \ell_{26} \cap \ell_{34}$
$P_{535} = (6,1,7,1) = \ell_{27} \cap \ell_{28}$
$P_{539} = (2,2,7,1) = \ell_{27} \cap \ell_{29}$
$P_{550} = (5,3,7,1) = \ell_{27} \cap \ell_{30}$
$P_{560} = (7,4,7,1) = \ell_{27} \cap \ell_{31}$
$P_{573} = (4,6,7,1) = \ell_{27} \cap \ell_{33}$
$P_{580} = (3,7,7,1) = \ell_{27} \cap \ell_{34}$

Single Points

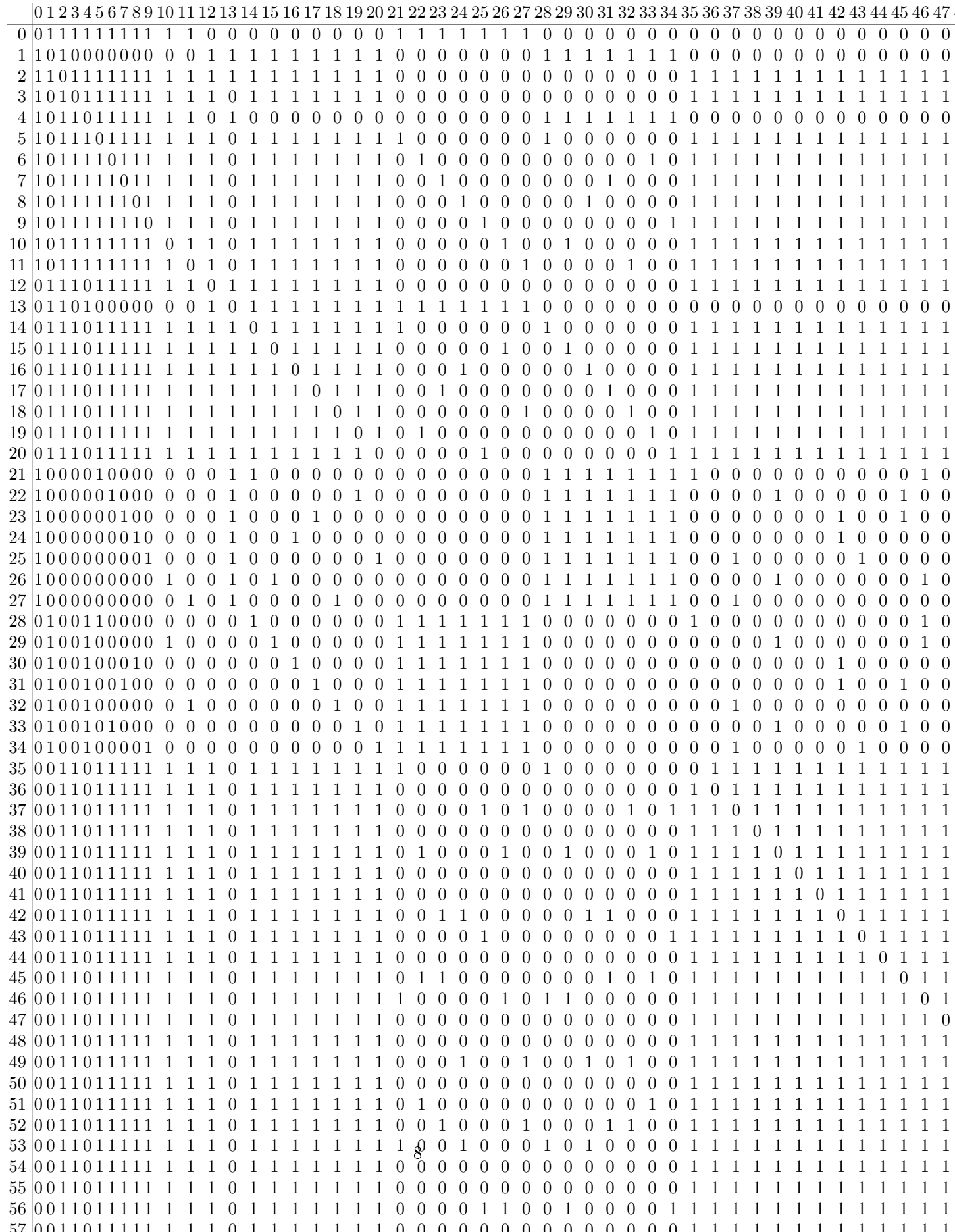
The surface has 0 single points:
The single points on the surface are:

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



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_{21}	ℓ_{22}	ℓ_{23}	ℓ_{24}	ℓ_{25}	ℓ_{26}	ℓ_{27}
in point	P_0	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_5	P_6	P_7	P_8	P_9	P_{10}	P_{11}

Line 1 intersects

Line	ℓ_0	ℓ_2	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{28}	ℓ_{29}	ℓ_{30}	ℓ_{31}	ℓ_{32}	ℓ_{33}	ℓ_{34}
in point	P_0	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_{12}	P_{13}	P_{14}	P_{15}	P_{16}	P_{17}	P_{18}

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_{35}	ℓ_{36}
in point	P_1	P_2	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_{19}	P_{19}

Line 3 intersects

Line	ℓ_0	ℓ_2	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_{35}	ℓ_{36}	ℓ_3
in point	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_3	P_{82}	P_{90}	P_{98}	P_{106}	P_{114}	P_{122}	P_{130}	P_3	P_{82}	P_9

Line 4 intersects

Line	ℓ_0	ℓ_2	ℓ_3	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{13}	ℓ_{28}	ℓ_{29}	ℓ_{30}	ℓ_{31}	ℓ_{32}	ℓ_{33}	ℓ_{34}
in point	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_{75}	P_{83}	P_{91}	P_{99}	P_{107}	P_{115}	P_{123}	P_{131}

Line 5 intersects

Line	ℓ_0	ℓ_2	ℓ_3	ℓ_4	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_2
in point	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_{138}	P_{146}	P_{153}	P_{161}	P_{169}	P_{177}	P_{185}	P_{193}	P_{146}	P_1

Line 6 intersects

Line	ℓ_0	ℓ_2	ℓ_3	ℓ_4	ℓ_5	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_{22}	ℓ_3
in point	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_{201}	P_{209}	P_{217}	P_{225}	P_{233}	P_{241}	P_{249}	P_{257}	P_{249}	P_2

Line 7 intersects

Line	ℓ_0	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	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_{23}	ℓ_3
in point	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_{265}	P_{273}	P_{281}	P_{289}	P_{297}	P_{305}	P_{313}	P_{321}	P_{297}	P_2

Line 8 intersects

Line	ℓ_0	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{24}	ℓ_3
in point	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_{329}	P_{337}	P_{345}	P_{353}	P_{361}	P_{369}	P_{377}	P_{385}	P_{353}	P_3

Line 9 intersects

Line	ℓ_0	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{25}	ℓ_3
in point	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_{393}	P_{401}	P_{409}	P_{417}	P_{425}	P_{433}	P_{441}	P_{449}	P_{449}	P_4

Line 10 intersects

Line	ℓ_0	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{11}	ℓ_{12}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{26}	ℓ_2
in point	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_{457}	P_{465}	P_{473}	P_{481}	P_{489}	P_{497}	P_{505}	P_{513}	P_{473}	P_4

Line 11 intersects

Line	ℓ_0	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{12}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{27}	ℓ_3
in point	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_{521}	P_{529}	P_{537}	P_{545}	P_{553}	P_{561}	P_{569}	P_{577}	P_{561}	P_5

Line 12 intersects

Line	ℓ_1	ℓ_2	ℓ_3	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_{35}	ℓ_{36}
in point	P_2	P_2	P_3	P_{138}	P_{201}	P_{265}	P_{329}	P_{393}	P_{457}	P_{521}	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_3	P_{13}

Line 13 intersects

Line	ℓ_1	ℓ_2	ℓ_4	ℓ_{12}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ_{22}	ℓ_{23}	ℓ_{24}	ℓ_{25}	ℓ_{26}	ℓ_{27}
in point	P_2	P_2	P_{75}	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_{139}	P_{202}	P_{266}	P_{330}	P_{394}	P_{458}	P_{522}

Line 14 intersects

Line	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_{15}	ℓ_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{21}	ℓ
in point	P_2	P_2	P_{82}	P_{146}	P_{209}	P_{273}	P_{337}	P_{401}	P_{465}	P_{529}	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_{146}	P

Line 15 intersects

Line	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_{16}	ℓ_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{26}	ℓ
in point	P_2	P_2	P_{90}	P_{153}	P_{217}	P_{281}	P_{345}	P_{409}	P_{473}	P_{537}	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_{473}	P

Line 16 intersects

Line	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_{17}	ℓ_{18}	ℓ_{19}	ℓ_{20}	ℓ_{24}	ℓ
in point	P_2	P_2	P_{98}	P_{161}	P_{225}	P_{289}	P_{353}	P_{417}	P_{481}	P_{545}	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_{353}	P

Line 17 intersects

Line	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_{18}	ℓ_{19}	ℓ_{20}	ℓ_{23}	
in point	P_2	P_2	P_{106}	P_{169}	P_{233}	P_{297}	P_{361}	P_{425}	P_{489}	P_{553}	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_{297}	P

Line 18 intersects

Line	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_{19}	ℓ_{20}	ℓ_{27}	
in point	P_2	P_2	P_{114}	P_{177}	P_{241}	P_{305}	P_{369}	P_{433}	P_{497}	P_{561}	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_{561}	P

Line 19 intersects

Line	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_{20}	ℓ_{22}	
in point	P_2	P_2	P_{122}	P_{185}	P_{249}	P_{313}	P_{377}	P_{441}	P_{505}	P_{569}	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_{249}	P

Line 20 intersects

Line	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_{25}	
in point	P_2	P_2	P_{130}	P_{193}	P_{257}	P_{321}	P_{385}	P_{449}	P_{513}	P_{577}	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_2	P_{449}	P

Line 21 intersects

Line	ℓ_0	ℓ_5	ℓ_{13}	ℓ_{14}	ℓ_{28}	ℓ_{29}	ℓ_{30}	ℓ_{31}	ℓ_{32}	ℓ_{33}	ℓ_{34}	ℓ_{35}	ℓ_{46}	ℓ_{53}	ℓ_{64}	ℓ_{71}	ℓ_{82}	
in point	P_5	P_{146}	P_{139}	P_{146}	P_{146}	P_{156}	P_{163}	P_{174}	P_{181}	P_{192}	P_{199}	P_{146}	P_{146}	P_{146}	P_{146}	P_{146}	P_{146}	P

Line 22 intersects

Line	ℓ_0	ℓ_6	ℓ_{13}	ℓ_{19}	ℓ_{28}	ℓ_{29}	ℓ_{30}	ℓ_{31}	ℓ_{32}	ℓ_{33}	ℓ_{34}	ℓ_{39}	ℓ_{45}	ℓ_{51}	ℓ_{62}	ℓ_{68}	ℓ_{82}	
in point	P_6	P_{249}	P_{202}	P_{249}	P_{212}	P_{222}	P_{232}	P_{237}	P_{247}	P_{249}	P_{259}	P_{249}	P_{249}	P_{249}	P_{249}	P_{249}	P_{249}	P

Line 23 intersects

Line	ℓ_0	ℓ_7	ℓ_{13}	ℓ_{17}	ℓ_{28}	ℓ_{29}	ℓ_{30}	ℓ_{31}	ℓ_{32}	ℓ_{33}	ℓ_{34}	ℓ_{42}	ℓ_{45}	ℓ_{52}	ℓ_{64}	ℓ_{73}	ℓ_{78}	
in point	P_7	P_{297}	P_{266}	P_{297}	P_{275}	P_{288}	P_{293}	P_{297}	P_{308}	P_{319}	P_{326}	P_{297}	P_{297}	P_{297}	P_{297}	P_{297}	P_{297}	P

Line 24 intersects

Line	ℓ_0	ℓ_8	ℓ_{13}	ℓ_{16}	ℓ_{28}	ℓ_{29}	ℓ_{30}	ℓ_{31}	ℓ_{32}	ℓ_{33}	ℓ_{34}	ℓ_{42}	ℓ_{49}	ℓ_{53}	ℓ_{63}	ℓ_{67}	ℓ_{76}	
in point	P_8	P_{353}	P_{330}	P_{353}	P_{342}	P_{349}	P_{353}	P_{367}	P_{371}	P_{380}	P_{392}	P_{353}	P_{353}	P_{353}	P_{353}	P_{353}	P_{353}	P

Line 25 intersects

Line	ℓ_0	ℓ_9	ℓ_{13}	ℓ_{20}	ℓ_{28}	ℓ_{29}	ℓ_{30}	ℓ_{31}	ℓ_{32}	ℓ_{33}	ℓ_{34}	ℓ_{37}	ℓ_{43}	ℓ_{56}	ℓ_{63}	ℓ_{68}	ℓ_{78}	
in point	P_9	P_{449}	P_{394}	P_{449}	P_{405}	P_{415}	P_{420}	P_{427}	P_{440}	P_{446}	P_{449}	P_{449}	P_{449}	P_{449}	P_{449}	P_{449}	P_{449}	P

Line 26 intersects

Line	ℓ_0	ℓ_{10}	ℓ_{13}	ℓ_{15}	ℓ_{28}	ℓ_{29}	ℓ_{30}	ℓ_{31}	ℓ_{32}	ℓ_{33}	ℓ_{34}	ℓ_{39}	ℓ_{46}	ℓ_{56}	ℓ_{59}	ℓ_{73}	ℓ_{76}	
in point	P_{10}	P_{473}	P_{458}	P_{473}	P_{472}	P_{473}	P_{487}	P_{492}	P_{502}	P_{507}	P_{517}	P_{473}	P_{473}	P_{473}	P_{473}	P_{473}	P_{473}	P

Line 27 intersects

Line	ℓ_0	ℓ_{11}	ℓ_{13}	ℓ_{18}	ℓ_{28}	ℓ_{29}	ℓ_{30}	ℓ_{31}	ℓ_{32}	ℓ_{33}	ℓ_{34}	ℓ_{37}	ℓ_{49}	ℓ_{52}	ℓ_{62}	ℓ_{71}	ℓ_{75}	
in point	P_{11}	P_{561}	P_{522}	P_{561}	P_{535}	P_{539}	P_{550}	P_{560}	P_{561}	P_{573}	P_{580}	P_{561}	P_{561}	P_{561}	P_{561}	P_{561}	P_{561}	P

Line 28 intersects

Line	ℓ_1	ℓ_4	ℓ_5	ℓ_{14}	ℓ_{21}	ℓ_{22}	ℓ_{23}	ℓ_{24}	ℓ_{25}	ℓ_{26}	ℓ_{27}	ℓ_{35}	ℓ_{46}	ℓ_{53}	ℓ_{64}	ℓ_{71}	ℓ_{82}	
in point	P_{12}	P_{83}	P_{146}	P_{146}	P_{146}	P_{212}	P_{275}	P_{342}	P_{405}	P_{472}	P_{535}	P_{146}	P_{146}	P_{146}	P_{146}	P_{146}	P_{146}	P

Line 29 intersects

Line	ℓ_1	ℓ_4	ℓ_{10}	ℓ_{15}	ℓ_{21}	ℓ_{22}	ℓ_{23}	ℓ_{24}	ℓ_{25}	ℓ_{26}	ℓ_{27}	ℓ_{39}	ℓ_{46}	ℓ_{56}	ℓ_{59}	ℓ_{73}	ℓ_{76}	
in point	P_{13}	P_{91}	P_{473}	P_{473}	P_{156}	P_{222}	P_{288}	P_{349}	P_{415}	P_{473}	P_{539}	P_{473}	P_{473}	P_{473}	P_{473}	P_{473}	P_{473}	P

Line 30 intersects

Line	ℓ_1	ℓ_4	ℓ_8	ℓ_{16}	ℓ_{21}	ℓ_{22}	ℓ_{23}	ℓ_{24}	ℓ_{25}	ℓ_{26}	ℓ_{27}	ℓ_{42}	ℓ_{49}	ℓ_{53}	ℓ_{63}	ℓ_{67}	ℓ_{76}	
in point	P_{14}	P_{99}	P_{353}	P_{353}	P_{163}	P_{232}	P_{293}	P_{353}	P_{420}	P_{487}	P_{550}	P_{353}	P_{353}	P_{353}	P_{353}	P_{353}	P_{353}	P

Line 31 intersects

Line	ℓ_1	ℓ_4	ℓ_7	ℓ_{17}	ℓ_{21}	ℓ_{22}	ℓ_{23}	ℓ_{24}	ℓ_{25}	ℓ_{26}	ℓ_{27}	ℓ_{42}	ℓ_{45}	ℓ_{52}	ℓ_{64}	ℓ_{73}	ℓ_{78}	
in point	P_{15}	P_{107}	P_{297}	P_{297}	P_{174}	P_{237}	P_{297}	P_{367}	P_{427}	P_{492}	P_{560}	P_{297}	P_{297}	P_{297}	P_{297}	P_{297}	P_{297}	P

Line 32 intersects

Line	ℓ_1	ℓ_4	ℓ_{11}	ℓ_{18}	ℓ_{21}	ℓ_{22}	ℓ_{23}	ℓ_{24}	ℓ_{25}	ℓ_{26}	ℓ_{27}	ℓ_{37}	ℓ_{49}	ℓ_{52}	ℓ_{62}	ℓ_{71}	ℓ_{75}	
in point	P_{16}	P_{115}	P_{561}	P_{561}	P_{181}	P_{247}	P_{308}	P_{371}	P_{440}	P_{502}	P_{561}	P_{561}	P_{561}	P_{561}	P_{561}	P_{561}	P_{561}	P

Line 33 intersects

Line	ℓ_1	ℓ_4	ℓ_6	ℓ_{19}	ℓ_{21}	ℓ_{22}	ℓ_{23}	ℓ_{24}	ℓ_{25}	ℓ_{26}	ℓ_{27}	ℓ_{39}	ℓ_{45}	ℓ_{51}	ℓ_{62}	ℓ_{68}	ℓ_{82}	
in point	P_{17}	P_{123}	P_{249}	P_{249}	P_{192}	P_{249}	P_{319}	P_{380}	P_{446}	P_{507}	P_{573}	P_{249}	P_{249}	P_{249}	P_{249}	P_{249}	P_{249}	P

Line 34 intersects

Line	ℓ_1	ℓ_4	ℓ_9	ℓ_{20}	ℓ_{21}	ℓ_{22}	ℓ_{23}	ℓ_{24}	ℓ_{25}	ℓ_{26}	ℓ_{27}	ℓ_{37}	ℓ_{43}	ℓ_{56}	ℓ_{63}	ℓ_{68}	ℓ_{78}	
in point	P_{18}	P_{131}	P_{449}	P_{449}	P_{199}	P_{259}	P_{326}	P_{392}	P_{449}	P_{517}	P_{580}	P_{449}	P_{449}	P_{449}	P_{449}	P_{449}	P_{449}	P

Line 35 intersects

Line	ℓ_2	ℓ_3	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_2
in point	P_{19}	P_3	P_{146}	P_{217}	P_{289}	P_{361}	P_{433}	P_{505}	P_{577}	P_3	P_{146}	P_{217}	P_{289}	P_{361}	P_{433}	P_{505}	P_{577}	P_1

Line 36 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{19}	P_{82}	P_{138}	P_{225}	P_{281}	P_{369}	P_{425}	P_{513}	P_{569}	P_{138}	P_{82}	P_{281}	P_{225}	P_{425}	P_{369}	P_{569}	P_{513}	P

Line 37 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{19}	P_{90}	P_{161}	P_{201}	P_{273}	P_{377}	P_{449}	P_{489}	P_{561}	P_{201}	P_{273}	P_{90}	P_{161}	P_{489}	P_{561}	P_{377}	P_{449}	P

Line 38 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{19}	P_{98}	P_{153}	P_{209}	P_{265}	P_{385}	P_{441}	P_{497}	P_{553}	P_{265}	P_{209}	P_{153}	P_{98}	P_{553}	P_{497}	P_{441}	P_{385}	P

Line 39 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{19}	P_{106}	P_{177}	P_{249}	P_{321}	P_{329}	P_{401}	P_{473}	P_{545}	P_{329}	P_{401}	P_{473}	P_{545}	P_{106}	P_{177}	P_{249}	P_{321}

Line 40 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{19}	P_{114}	P_{169}	P_{257}	P_{313}	P_{337}	P_{393}	P_{481}	P_{537}	P_{393}	P_{337}	P_{537}	P_{481}	P_{169}	P_{114}	P_{313}	P_{257}

Line 41 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{19}	P_{122}	P_{193}	P_{233}	P_{305}	P_{345}	P_{417}	P_{457}	P_{529}	P_{457}	P_{529}	P_{345}	P_{417}	P_{233}	P_{305}	P_{122}	P_{193}

Line 42 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{19}	P_{130}	P_{185}	P_{241}	P_{297}	P_{353}	P_{409}	P_{465}	P_{521}	P_{521}	P_{465}	P_{409}	P_{353}	P_{297}	P_{241}	P_{185}	P_{130}

Line 43 intersects

Line	ℓ_2	ℓ_3	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_2
in point	P_{27}	P_3	P_{153}	P_{233}	P_{313}	P_{369}	P_{449}	P_{465}	P_{545}	P_3	P_{465}	P_{153}	P_{545}	P_{233}	P_{369}	P_{313}	P_{449}	P_4

Line 44 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{27}	P_{82}	P_{161}	P_{241}	P_{321}	P_{361}	P_{441}	P_{457}	P_{537}	P_{457}	P_{82}	P_{537}	P_{161}	P_{361}	P_{241}	P_{441}	P_{321}	P

Line 45 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{27}	P_{90}	P_{138}	P_{249}	P_{297}	P_{385}	P_{433}	P_{481}	P_{529}	P_{138}	P_{529}	P_{90}	P_{481}	P_{297}	P_{433}	P_{249}	P_{385}	P

Line 46 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{27}	P_{98}	P_{146}	P_{257}	P_{305}	P_{377}	P_{425}	P_{473}	P_{521}	P_{521}	P_{146}	P_{473}	P_{98}	P_{425}	P_{305}	P_{377}	P_{257}	P

Line 47 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{27}	P_{106}	P_{185}	P_{201}	P_{281}	P_{337}	P_{417}	P_{497}	P_{577}	P_{201}	P_{337}	P_{281}	P_{417}	P_{106}	P_{497}	P_{185}	P_{577}

Line 48 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{27}	P_{114}	P_{193}	P_{209}	P_{289}	P_{329}	P_{409}	P_{489}	P_{569}	P_{329}	P_{209}	P_{409}	P_{289}	P_{489}	P_{114}	P_{569}	P_{193}

Line 49 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{27}	P_{122}	P_{169}	P_{217}	P_{265}	P_{353}	P_{401}	P_{513}	P_{561}	P_{265}	P_{401}	P_{217}	P_{353}	P_{169}	P_{561}	P_{122}	P_{513}

Line 50 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{27}	P_{130}	P_{177}	P_{225}	P_{273}	P_{345}	P_{393}	P_{505}	P_{553}	P_{393}	P_{273}	P_{345}	P_{225}	P_{553}	P_{177}	P_{505}	P_{130}

Line 51 intersects

Line	ℓ_2	ℓ_3	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_{2}
in point	P_{35}	P_3	P_{161}	P_{249}	P_{305}	P_{337}	P_{409}	P_{513}	P_{553}	P_3	P_{337}	P_{409}	P_{161}	P_{553}	P_{305}	P_{249}	P_{513}	P_{2}

Line 52 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{35}	P_{82}	P_{153}	P_{257}	P_{297}	P_{329}	P_{417}	P_{505}	P_{561}	P_{329}	P_{82}	P_{153}	P_{417}	P_{297}	P_{561}	P_{505}	P_{257}	P

Line 53 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{35}	P_{90}	P_{146}	P_{233}	P_{321}	P_{353}	P_{393}	P_{497}	P_{569}	P_{393}	P_{146}	P_{90}	P_{353}	P_{233}	P_{497}	P_{569}	P_{321}	P

Line 54 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{35}	P_{98}	P_{138}	P_{241}	P_{313}	P_{345}	P_{401}	P_{489}	P_{577}	P_{138}	P_{401}	P_{345}	P_{98}	P_{489}	P_{241}	P_{313}	P_{577}	P

Line 55 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{35}	P_{106}	P_{193}	P_{217}	P_{273}	P_{369}	P_{441}	P_{481}	P_{521}	P_{521}	P_{273}	P_{217}	P_{481}	P_{106}	P_{369}	P_{441}	P_{193}

Line 56 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{35}	P_{114}	P_{185}	P_{225}	P_{265}	P_{361}	P_{449}	P_{473}	P_{529}	P_{265}	P_{529}	P_{473}	P_{225}	P_{361}	P_{114}	P_{185}	P_{449}

Line 57 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{35}	P_{122}	P_{177}	P_{201}	P_{289}	P_{385}	P_{425}	P_{465}	P_{537}	P_{201}	P_{465}	P_{537}	P_{289}	P_{425}	P_{177}	P_{122}	P_{385}

Line 58 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{35}	P_{130}	P_{169}	P_{209}	P_{281}	P_{377}	P_{433}	P_{457}	P_{545}	P_{457}	P_{209}	P_{281}	P_{545}	P_{169}	P_{433}	P_{377}	P_{130}

Line 59 intersects

Line	ℓ_2	ℓ_3	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_{2}
in point	P_{43}	P_3	P_{169}	P_{241}	P_{273}	P_{385}	P_{417}	P_{473}	P_{569}	P_3	P_{273}	P_{473}	P_{417}	P_{169}	P_{241}	P_{569}	P_{385}	P_{4}

Line 60 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{43}	P_{82}	P_{177}	P_{233}	P_{265}	P_{377}	P_{409}	P_{481}	P_{577}	P_{265}	P_{82}	P_{409}	P_{481}	P_{233}	P_{177}	P_{377}	P_{577}	P

Line 61 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{43}	P_{90}	P_{185}	P_{257}	P_{289}	P_{369}	P_{401}	P_{457}	P_{553}	P_{457}	P_{401}	P_{90}	P_{289}	P_{553}	P_{369}	P_{185}	P_{257}	P

Line 62 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{43}	P_{98}	P_{193}	P_{249}	P_{281}	P_{361}	P_{393}	P_{465}	P_{561}	P_{393}	P_{465}	P_{281}	P_{98}	P_{361}	P_{561}	P_{249}	P_{193}	P

Line 63 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{43}	P_{106}	P_{138}	P_{209}	P_{305}	P_{353}	P_{449}	P_{505}	P_{537}	P_{138}	P_{209}	P_{537}	P_{353}	P_{106}	P_{305}	P_{505}	P_{449}

Line 64 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{43}	P_{114}	P_{146}	P_{201}	P_{297}	P_{345}	P_{441}	P_{513}	P_{545}	P_{201}	P_{146}	P_{345}	P_{545}	P_{297}	P_{114}	P_{441}	P_{513}

Line 65 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{43}	P_{122}	P_{153}	P_{225}	P_{321}	P_{337}	P_{433}	P_{489}	P_{521}	P_{521}	P_{337}	P_{153}	P_{225}	P_{489}	P_{433}	P_{122}	P_{321}

Line 66 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{43}	P_{130}	P_{161}	P_{217}	P_{313}	P_{329}	P_{425}	P_{497}	P_{529}	P_{329}	P_{529}	P_{217}	P_{161}	P_{425}	P_{497}	P_{313}	P_{130}

Line 67 intersects

Line	ℓ_2	ℓ_3	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_2
in point	P_{51}	P_3	P_{177}	P_{257}	P_{281}	P_{353}	P_{441}	P_{489}	P_{529}	P_3	P_{529}	P_{281}	P_{353}	P_{489}	P_{177}	P_{441}	P_{257}	P_{35}

Line 68 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{51}	P_{82}	P_{169}	P_{249}	P_{289}	P_{345}	P_{449}	P_{497}	P_{521}	P_{521}	P_{82}	P_{345}	P_{289}	P_{169}	P_{497}	P_{249}	P_{449}	P

Line 69 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{51}	P_{90}	P_{193}	P_{241}	P_{265}	P_{337}	P_{425}	P_{505}	P_{545}	P_{265}	P_{337}	P_{90}	P_{545}	P_{425}	P_{241}	P_{505}	P_{193}	P

Line 70 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{51}	P_{98}	P_{185}	P_{233}	P_{273}	P_{329}	P_{433}	P_{513}	P_{537}	P_{329}	P_{273}	P_{537}	P_{98}	P_{233}	P_{433}	P_{185}	P_{513}	P

Line 71 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{51}	P_{106}	P_{146}	P_{225}	P_{313}	P_{385}	P_{409}	P_{457}	P_{561}	P_{457}	P_{146}	P_{409}	P_{225}	P_{106}	P_{561}	P_{313}	P_{385}

Line 72 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{51}	P_{114}	P_{138}	P_{217}	P_{321}	P_{377}	P_{417}	P_{465}	P_{553}	P_{138}	P_{465}	P_{217}	P_{417}	P_{553}	P_{114}	P_{377}	P_{321}

Line 73 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{51}	P_{122}	P_{161}	P_{209}	P_{297}	P_{369}	P_{393}	P_{473}	P_{577}	P_{393}	P_{209}	P_{473}	P_{161}	P_{297}	P_{369}	P_{122}	P_{577}

Line 74 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{51}	P_{130}	P_{153}	P_{201}	P_{305}	P_{361}	P_{401}	P_{481}	P_{569}	P_{201}	P_{401}	P_{153}	P_{481}	P_{361}	P_{305}	P_{569}	P_{130}

Line 75 intersects

Line	ℓ_2	ℓ_3	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_2
in point	P_{59}	P_3	P_{185}	P_{209}	P_{321}	P_{345}	P_{425}	P_{481}	P_{561}	P_3	P_{209}	P_{345}	P_{481}	P_{425}	P_{561}	P_{185}	P_{321}	P_{56}

Line 76 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{59}	P_{82}	P_{193}	P_{201}	P_{313}	P_{353}	P_{433}	P_{473}	P_{553}	P_{201}	P_{82}	P_{473}	P_{353}	P_{553}	P_{433}	P_{313}	P_{193}	P

Line 77 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{59}	P_{90}	P_{169}	P_{225}	P_{305}	P_{329}	P_{441}	P_{465}	P_{577}	P_{329}	P_{465}	P_{90}	P_{225}	P_{169}	P_{305}	P_{441}	P_{577}	P

Line 78 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{59}	P_{98}	P_{177}	P_{217}	P_{297}	P_{337}	P_{449}	P_{457}	P_{569}	P_{457}	P_{337}	P_{217}	P_{98}	P_{297}	P_{177}	P_{569}	P_{449}	P

Line 79 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{59}	P_{106}	P_{153}	P_{241}	P_{289}	P_{377}	P_{393}	P_{513}	P_{529}	P_{393}	P_{529}	P_{153}	P_{289}	P_{106}	P_{241}	P_{377}	P_{513}

Line 80 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{59}	P_{114}	P_{161}	P_{233}	P_{281}	P_{385}	P_{401}	P_{505}	P_{521}	P_{521}	P_{401}	P_{281}	P_{161}	P_{233}	P_{114}	P_{505}	P_{385}

Line 81 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{59}	P_{122}	P_{138}	P_{257}	P_{273}	P_{361}	P_{409}	P_{497}	P_{545}	P_{138}	P_{273}	P_{409}	P_{545}	P_{361}	P_{497}	P_{122}	P_{257}

Line 82 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{59}	P_{130}	P_{146}	P_{249}	P_{265}	P_{369}	P_{417}	P_{489}	P_{537}	P_{265}	P_{146}	P_{537}	P_{417}	P_{489}	P_{369}	P_{249}	P_{130}

Line 83 intersects

Line	ℓ_2	ℓ_3	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_2
in point	P_{67}	P_3	P_{193}	P_{225}	P_{297}	P_{377}	P_{401}	P_{497}	P_{537}	P_3	P_{401}	P_{537}	P_{225}	P_{297}	P_{497}	P_{377}	P_{193}	P_2

Line 84 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{67}	P_{82}	P_{185}	P_{217}	P_{305}	P_{385}	P_{393}	P_{489}	P_{545}	P_{393}	P_{82}	P_{217}	P_{545}	P_{489}	P_{305}	P_{185}	P_{385}	P

Line 85 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{67}	P_{90}	P_{177}	P_{209}	P_{313}	P_{361}	P_{417}	P_{513}	P_{521}	P_{521}	P_{209}	P_{90}	P_{417}	P_{361}	P_{177}	P_{313}	P_{513}	P

Line 86 intersects

Line	ℓ_2	ℓ_3	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
in point	P_{67}	P_{98}	P_{169}	P_{201}	P_{321}	P_{369}	P_{409}	P_{505}	P_{529}	P_{201}	P_{529}	P_{409}	P_{98}	P_{169}	P_{369}	P_{505}	P_{321}	P

Line 87 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{67}	P_{106}	P_{161}	P_{257}	P_{265}	P_{345}	P_{433}	P_{465}	P_{569}	P_{265}	P_{465}	P_{345}	P_{161}	P_{106}	P_{433}	P_{569}	P_{257}

Line 88 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{67}	P_{114}	P_{153}	P_{249}	P_{273}	P_{353}	P_{425}	P_{457}	P_{577}	P_{457}	P_{273}	P_{153}	P_{353}	P_{425}	P_{114}	P_{249}	P_{577}

Line 89 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{67}	P_{122}	P_{146}	P_{241}	P_{281}	P_{329}	P_{449}	P_{481}	P_{553}	P_{329}	P_{146}	P_{281}	P_{481}	P_{553}	P_{241}	P_{122}	P_{449}

Line 90 intersects

Line	ℓ_2	ℓ_3	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}
in point	P_{67}	P_{130}	P_{138}	P_{233}	P_{289}	P_{337}	P_{441}	P_{473}	P_{561}	P_{138}	P_{337}	P_{473}	P_{289}	P_{233}	P_{561}	P_{441}	P_{130}

The surface has 145 points:
The points on the surface are:

0 : $P_0 = (1,0,0,0)$
1 : $P_1 = (0,1,0,0)$
2 : $P_2 = (0,0,1,0)$
3 : $P_3 = (0,0,0,1)$
4 : $P_5 = (1,1,0,0)$
5 : $P_6 = (2,1,0,0)$
6 : $P_7 = (3,1,0,0)$
7 : $P_8 = (4,1,0,0)$
8 : $P_9 = (5,1,0,0)$
9 : $P_{10} = (6,1,0,0)$
10 : $P_{11} = (7,1,0,0)$
11 : $P_{12} = (1,0,1,0)$
12 : $P_{13} = (2,0,1,0)$
13 : $P_{14} = (3,0,1,0)$
14 : $P_{15} = (4,0,1,0)$
15 : $P_{16} = (5,0,1,0)$
16 : $P_{17} = (6,0,1,0)$
17 : $P_{18} = (7,0,1,0)$
18 : $P_{19} = (0,1,1,0)$
19 : $P_{27} = (0,2,1,0)$
20 : $P_{35} = (0,3,1,0)$
21 : $P_{43} = (0,4,1,0)$
22 : $P_{51} = (0,5,1,0)$
23 : $P_{59} = (0,6,1,0)$
24 : $P_{67} = (0,7,1,0)$
25 : $P_{75} = (1,0,0,1)$
26 : $P_{82} = (0,1,0,1)$
27 : $P_{83} = (1,1,0,1)$
28 : $P_{90} = (0,2,0,1)$
29 : $P_{91} = (1,2,0,1)$
30 : $P_{98} = (0,3,0,1)$
31 : $P_{99} = (1,3,0,1)$
32 : $P_{106} = (0,4,0,1)$
33 : $P_{107} = (1,4,0,1)$
34 : $P_{114} = (0,5,0,1)$
35 : $P_{115} = (1,5,0,1)$
36 : $P_{122} = (0,6,0,1)$
37 : $P_{123} = (1,6,0,1)$
38 : $P_{130} = (0,7,0,1)$
39 : $P_{131} = (1,7,0,1)$
40 : $P_{138} = (0,0,1,1)$
41 : $P_{139} = (1,0,1,1)$
42 : $P_{146} = (0,1,1,1)$
43 : $P_{153} = (0,2,1,1)$
44 : $P_{156} = (3,2,1,1)$
45 : $P_{161} = (0,3,1,1)$
46 : $P_{163} = (2,3,1,1)$
47 : $P_{169} = (0,4,1,1)$
48 : $P_{174} = (5,4,1,1)$
49 : $P_{177} = (0,5,1,1)$
50 : $P_{181} = (4,5,1,1)$
51 : $P_{185} = (0,6,1,1)$
52 : $P_{192} = (7,6,1,1)$
53 : $P_{193} = (0,7,1,1)$
54 : $P_{199} = (6,7,1,1)$
55 : $P_{201} = (0,0,2,1)$
56 : $P_{202} = (1,0,2,1)$
57 : $P_{209} = (0,1,2,1)$
58 : $P_{212} = (3,1,2,1)$
59 : $P_{217} = (0,2,2,1)$
60 : $P_{222} = (5,2,2,1)$
61 : $P_{225} = (0,3,2,1)$
62 : $P_{232} = (7,3,2,1)$
63 : $P_{233} = (0,4,2,1)$
64 : $P_{237} = (4,4,2,1)$
65 : $P_{241} = (0,5,2,1)$
66 : $P_{247} = (6,5,2,1)$
67 : $P_{249} = (0,6,2,1)$
68 : $P_{257} = (0,7,2,1)$
69 : $P_{259} = (2,7,2,1)$
70 : $P_{265} = (0,0,3,1)$
71 : $P_{266} = (1,0,3,1)$
72 : $P_{273} = (0,1,3,1)$
73 : $P_{275} = (2,1,3,1)$
74 : $P_{281} = (0,2,3,1)$
75 : $P_{288} = (7,2,3,1)$
76 : $P_{289} = (0,3,3,1)$
77 : $P_{293} = (4,3,3,1)$
78 : $P_{297} = (0,4,3,1)$
79 : $P_{305} = (0,5,3,1)$
80 : $P_{308} = (3,5,3,1)$
81 : $P_{313} = (0,6,3,1)$
82 : $P_{319} = (6,6,3,1)$
83 : $P_{321} = (0,7,3,1)$
84 : $P_{326} = (5,7,3,1)$
85 : $P_{329} = (0,0,4,1)$
86 : $P_{330} = (1,0,4,1)$
87 : $P_{337} = (0,1,4,1)$
88 : $P_{342} = (5,1,4,1)$
89 : $P_{345} = (0,2,4,1)$
90 : $P_{349} = (4,2,4,1)$
91 : $P_{353} = (0,3,4,1)$
92 : $P_{361} = (0,4,4,1)$
93 : $P_{367} = (6,4,4,1)$
94 : $P_{369} = (0,5,4,1)$
95 : $P_{371} = (2,5,4,1)$
96 : $P_{377} = (0,6,4,1)$
97 : $P_{380} = (3,6,4,1)$
98 : $P_{385} = (0,7,4,1)$
99 : $P_{392} = (7,7,4,1)$
100 : $P_{393} = (0,0,5,1)$
101 : $P_{394} = (1,0,5,1)$
102 : $P_{401} = (0,1,5,1)$
103 : $P_{405} = (4,1,5,1)$
104 : $P_{409} = (0,2,5,1)$
105 : $P_{415} = (6,2,5,1)$
106 : $P_{417} = (0,3,5,1)$
107 : $P_{420} = (3,3,5,1)$
108 : $P_{425} = (0,4,5,1)$
109 : $P_{427} = (2,4,5,1)$
110 : $P_{433} = (0,5,5,1)$
111 : $P_{440} = (7,5,5,1)$
112 : $P_{441} = (0,6,5,1)$
113 : $P_{446} = (5,6,5,1)$
114 : $P_{449} = (0,7,5,1)$
115 : $P_{457} = (0,0,6,1)$
116 : $P_{458} = (1,0,6,1)$
117 : $P_{465} = (0,1,6,1)$
118 : $P_{472} = (7,1,6,1)$
119 : $P_{473} = (0,2,6,1)$
120 : $P_{481} = (0,3,6,1)$
121 : $P_{487} = (6,3,6,1)$
122 : $P_{489} = (0,4,6,1)$
123 : $P_{492} = (3,4,6,1)$
124 : $P_{497} = (0,5,6,1)$
125 : $P_{502} = (5,5,6,1)$
126 : $P_{505} = (0,6,6,1)$
127 : $P_{507} = (2,6,6,1)$
128 : $P_{513} = (0,7,6,1)$
129 : $P_{517} = (4,7,6,1)$
130 : $P_{521} = (0,0,7,1)$
131 : $P_{522} = (1,0,7,1)$
132 : $P_{529} = (0,1,7,1)$
133 : $P_{535} = (6,1,7,1)$
134 : $P_{537} = (0,2,7,1)$

$135: P_{539} = (2, 2, 7, 1)$
$136: P_{545} = (0, 3, 7, 1)$
$137: P_{550} = (5, 3, 7, 1)$
$138: P_{553} = (0, 4, 7, 1)$
$139: P_{560} = (7, 4, 7, 1)$
$140: P_{561} = (0, 5, 7, 1)$
$141: P_{569} = (0, 6, 7, 1)$
$142: P_{573} = (4, 6, 7, 1)$
$143: P_{577} = (0, 7, 7, 1)$
$144: P_{580} = (3, 7, 7, 1)$