Rank-65831 over GF(8)

January 15, 2021

The equation

The equation of the surface is:

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

(0, 0, 1, 0, 0, 1, 0, 0, 1, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0) The point rank of the equation over GF(8) is 1243943565

General information

Number of lines	82
Number of points	145
Number of singular points	1
Number of Eckardt points	0
Number of double points	0
Number of single points	72
Number of points off lines	0
Number of Hesse planes	0
Number of axes	0
Type of points on lines	982
Type of lines on points	$18, 9^{72}, 1^{72}$

Singular Points

The surface has 1 singular points:

$$0: P_3 = \mathbf{P}(0,0,0,1) = \mathbf{P}(0,0,0,1)$$

The 82 Lines

The lines and their Pluecker coordinates are:

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

$$\begin{split} \ell_1 &= \begin{bmatrix} 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{72} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{72} = \mathbf{PI}(0,0,0,1,0)_{81} \\ \ell_2 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 1 \end{bmatrix}_8 = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 1 \end{bmatrix}_8 = \mathbf{PI}(1,0,0,0,1,0)_{82} \\ \ell_3 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \gamma^6 \end{bmatrix}_{48} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{48} = \mathbf{PI}(2,0,0,0,1,0)_{83} \\ \ell_4 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \gamma^2 \end{bmatrix}_{32} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{32} = \mathbf{PI}(3,0,0,0,1,0)_{84} \\ \ell_5 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \gamma^5 \end{bmatrix}_{24} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{24} = \mathbf{PI}(4,0,0,1,0)_{85} \\ \ell_6 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \gamma^4 \end{bmatrix}_{56} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{56} = \mathbf{PI}(5,0,0,0,1,0)_{86} \\ \ell_7 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \gamma^3 \end{bmatrix}_{40} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{16} = \mathbf{PI}(6,0,0,0,1,0)_{87} \\ \ell_8 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \gamma^3 \end{bmatrix}_{4680} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{49} = \mathbf{PI}(7,0,0,0,1,0)_{10} \\ \ell_{10} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4680} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{584} = \mathbf{PI}(1,0,0,1,0,0)_{17} \\ \ell_{10} &= \begin{bmatrix} 1 & 0 & 0 & \gamma \\ 0 & 1 & 0 & 0 \end{bmatrix}_{3504} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{3504} = \mathbf{PI}(3,0,0,1,0,0)_{20} \\ \ell_{13} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^5 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{1752} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{1752} = \mathbf{PI}(4,0,0,1,0,0)_{21} \\ \ell_{14} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^4 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{1468} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{1762} = \mathbf{PI}(6,0,0,1,0,0)_{22} \\ \ell_{15} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^4 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{1468} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{1762} = \mathbf{PI}(6,0,0,1,0,0)_{22} \\ \ell_{15} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^4 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{1468} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{1468} = \mathbf{PI}(0,0,0,1,1,0)_{20} \\ \ell_{16} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^6 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{1458} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{1468} = \mathbf{PI}(0,0,0,1,1,0)_{20} \\ \ell_{16} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^6 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{1458} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{1468} = \mathbf{PI}(0,0,0,1,1,0)_{20} \\ \ell_{19} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^6 \\ 0 & 1 & 0 & \gamma^6 \end{bmatrix}_{3552} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{3552} = \mathbf{PI}(1,0,0,1,1,0)_{203} \\$$

$$\begin{split} \ell_{22} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^4 \\ 0 & 1 & 0 & \gamma^4 \end{bmatrix}_{4144} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{4144} = \mathbf{PI}(5,0,0,1,1,0)_{206} \\ \ell_{23} &= \begin{bmatrix} 1 & 0 & 0 & \gamma \\ 0 & 1 & 0 & \gamma \\ 0 & 1 & 0 & \gamma \end{bmatrix}_{1184} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{1184} = \mathbf{PI}(6,0,0,1,1,0)_{207} \\ \ell_{24} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^3 \\ 0 & 1 & 0 & \gamma^3 \end{bmatrix}_{2960} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{2960} = \mathbf{PI}(7,0,0,1,1,0)_{208} \\ \ell_{25} &= \begin{bmatrix} 1 & \gamma^6 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{510} = \begin{bmatrix} 1 & 6 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{510} = \mathbf{PI}(0,0,6,1,0)_{276} \\ \ell_{26} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \gamma \end{bmatrix}_{600} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{3512} = \mathbf{PI}(1,0,0,6,1,0)_{282} \\ \ell_{27} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^6 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{3512} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{3512} = \mathbf{PI}(1,0,0,6,1,0)_{277} \\ \ell_{28} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^6 \\ 0 & 1 & 0 & \gamma^3 \end{bmatrix}_{2376} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{2376} = \mathbf{PI}(2,0,0,6,1,0)_{283} \\ \ell_{29} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^6 \\ 0 & 1 & 0 & \gamma^6 \end{bmatrix}_{1800} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{1800} = \mathbf{PI}(2,0,0,6,1,0)_{278} \\ \ell_{30} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^4 \\ 0 & 1 & 0 & \gamma^5 \end{bmatrix}_{4112} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{4112} = \mathbf{PI}(4,0,0,6,1,0)_{280} \\ \ell_{31} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^4 \\ 0 & 1 & 0 & \gamma^5 \end{bmatrix}_{4112} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{4112} = \mathbf{PI}(3,0,0,6,1,0)_{281} \\ \ell_{32} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^3 \\ 0 & 1 & 0 & \gamma^5 \end{bmatrix}_{42976} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{2976} = \mathbf{PI}(5,0,0,6,1,0)_{281} \\ \ell_{33} &= \begin{bmatrix} 1 & \gamma^2 & 0 & 0 \\ 0 & 1 & 0 & \gamma^5 \end{bmatrix}_{608} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{3660} = \mathbf{PI}(4,0,0,4,1,0)_{246} \\ \ell_{34} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^6 \\ 0 & 1 & 0 & \gamma^4 \end{bmatrix}_{3560} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{3560} = \mathbf{PI}(5,0,0,4,1,0)_{247} \\ \ell_{37} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^6 \\ 0 & 1 & 0 & \gamma^3 \end{bmatrix}_{1792} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{1792} = \mathbf{PI}(5,0,0,4,1,0)_{248} \\ \ell_{49} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^4 \\ 0 & 1 & 0 & \gamma^4 \end{bmatrix}_{3234} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{1292} = \mathbf{PI}(7,0,0,4,1,0)_{248} \\ \ell_{49} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^4 \\ 0 & 1 & 0 & \gamma^4 \end{bmatrix}_{32936} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{2936} = \mathbf{PI}(6,0,0,4,1,0)_{249} \\ \ell_{40} &=$$

$$\begin{split} \ell_{43} &= \begin{bmatrix} 1 & 0 & 0 & 0 & \gamma^6 \\ 0 & 1 & 0 & \gamma \end{bmatrix}_{3520} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{3520} = \mathbf{PI}(6,0,0,3,1,0)_{237} \\ \ell_{44} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^4 \\ 0 & 1 & 0 & \gamma^4 \end{bmatrix}_{2392} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{2392} = \mathbf{PI}(5,0,0,3,1,0)_{236} \\ \ell_{45} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^5 \\ 0 & 1 & 0 & \gamma^6 \end{bmatrix}_{1760} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{1760} = \mathbf{PI}(1,0,0,3,1,0)_{232} \\ \ell_{46} &= \begin{bmatrix} 1 & 0 & 0 & \gamma \\ 0 & 1 & 0 & \gamma^6 \end{bmatrix}_{4136} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & \gamma^3 \end{bmatrix}_{1208} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{1208} = \mathbf{PI}(7,0,0,3,1,0)_{238} \\ \ell_{48} &= \begin{bmatrix} 1 & 0 & 0 & \gamma \\ 0 & 1 & 0 & \gamma^5 \end{bmatrix}_{2944} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{2944} = \mathbf{PI}(4,0,0,3,1,0)_{235} \\ \ell_{49} &= \begin{bmatrix} 1 & \gamma^4 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{583} = \begin{bmatrix} 1 & 7 & 0 & 0 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{624} = \mathbf{PI}(7,0,0,7,1,0)_{291} \\ \ell_{50} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^6 \\ 0 & 1 & 0 & \gamma^5 \end{bmatrix}_{3536} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{624} = \mathbf{PI}(7,0,0,7,1,0)_{298} \\ \ell_{51} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^6 \\ 0 & 1 & 0 & \gamma^5 \end{bmatrix}_{3536} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{2360} = \mathbf{PI}(4,0,0,7,1,0)_{295} \\ \ell_{53} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^6 \\ 0 & 1 & 0 & \gamma^5 \end{bmatrix}_{3768} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{1768} = \mathbf{PI}(6,0,0,7,1,0)_{297} \\ \ell_{54} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^4 \\ 0 & 1 & 0 & \gamma^4 \end{bmatrix}_{4096} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{1224} = \mathbf{PI}(5,0,0,7,1,0)_{298} \\ \ell_{55} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^4 \\ 0 & 1 & 0 & \gamma^4 \end{bmatrix}_{2248} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{1224} = \mathbf{PI}(5,0,0,7,1,0)_{298} \\ \ell_{58} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^3 \\ 0 & 1 & 0 & \gamma^6 \end{bmatrix}_{2968} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{2968} = \mathbf{PI}(2,0,0,2,1,0)_{218} \\ \ell_{58} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^6 \\ 0 & 1 & 0 & \gamma^6 \end{bmatrix}_{3528} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{332} = \mathbf{PI}(4,0,0,2,1,0)_{220} \\ \ell_{69} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^4 \\ 0 & 1 & 0 & \gamma^5 \end{bmatrix}_{3528} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{332} = \mathbf{PI}(4,0,0,2,1,0)_{220} \\ \ell_{69} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^4 \\ 0 & 1 & 0 & \gamma^5 \end{bmatrix}_{3528} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{3528} = \mathbf{PI}(4,0,0,2,1,0)_{220} \\ \ell_{60} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^4 \\ 0 & 1 & 0 & \gamma^5 \end{bmatrix}_{3528} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{3528} = \mathbf$$

$$\begin{split} \ell_{64} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^3 \\ 0 & 1 & 0 & \gamma^2 \end{bmatrix}_{2952} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{2952} = \mathbf{PI}(3,0,0,2,1,0)_{219} \\ \ell_{65} &= \begin{bmatrix} 1 & \gamma^3 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{437} = \begin{bmatrix} 1 & 5 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{437} = \mathbf{PI}(0,0,0,5,1,0)_{261} \\ \ell_{66} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \gamma^4 \end{bmatrix}_{640} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{640} = \mathbf{PI}(5,0,0,5,1,0)_{266} \\ \ell_{67} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^6 \\ 0 & 1 & 0 & \gamma^3 \end{bmatrix}_{3544} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{3544} = \mathbf{PI}(7,0,0,5,1,0)_{268} \\ \ell_{68} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^2 \\ 0 & 1 & 0 & \gamma^6 \end{bmatrix}_{2384} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{2384} = \mathbf{PI}(2,0,0,5,1,0)_{263} \\ \ell_{70} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^4 \\ 0 & 1 & 0 & \gamma^2 \end{bmatrix}_{1784} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{1784} = \mathbf{PI}(3,0,0,5,1,0)_{264} \\ \ell_{70} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^4 \\ 0 & 1 & 0 & \gamma^2 \end{bmatrix}_{1404} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{4104} = \mathbf{PI}(4,0,0,5,1,0)_{265} \\ \ell_{71} &= \begin{bmatrix} 1 & 0 & 0 & \gamma^3 \\ 0 & 1 & 0 & \gamma^3 \end{bmatrix}_{2928} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{1192} = \mathbf{PI}(4,0,0,5,1,0)_{262} \\ \ell_{72} &= \begin{bmatrix} 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{656} = \begin{bmatrix} 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4689} = \mathbf{PI}(0,1,0,1,0,0)_{25} \\ \ell_{75} &= \begin{bmatrix} 1 & 1 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4689} = \begin{bmatrix} 1 & 1 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{729} = \mathbf{PI}(0,1,0,1,1,0)_{269} \\ \ell_{77} &= \begin{bmatrix} 1 & \gamma^6 & \gamma & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1678} = \begin{bmatrix} 1 & 4 & 7 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1678} = \mathbf{PI}(0,2,0,6,1,0)_{285} \\ \ell_{79} &= \begin{bmatrix} 1 & \gamma^5 & \gamma^2 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1678} = \begin{bmatrix} 1 & 3 & 4 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1678} = \mathbf{PI}(0,2,0,7,1,0)_{300} \\ \ell_{89} &= \begin{bmatrix} 1 & \gamma^4 & \gamma & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1751} = \begin{bmatrix} 1 & 7 & 2 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1575} = \mathbf{PI}(0,4,0,2,1,0)_{227} \\ \ell_{81} &= \begin{bmatrix} 1 & \gamma^3 & \gamma^4 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{15751} = \begin{bmatrix} 1 & 2 & 4 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{2554} = \mathbf{PI}(0,4,0,2,1,0)_{227} \\ \ell_{81} &= \begin{bmatrix} 1 & \gamma^3 & \gamma^4 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4555} = \begin{bmatrix} 1 & 5 & 7 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4555} = \mathbf{PI}(0,7,0,5,1,0)_{275} \\ \ell_{81} &= \begin{bmatrix} 1 & \gamma^3 & \gamma^4 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4555} = \begin{bmatrix} 1 & 5 & 7 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4555} = \mathbf{PI}(0,7,0,5,1,0)_{275} \\ \ell_{81} &= \begin{bmatrix} 1 & \gamma^3 & \gamma^4 & 0 \\$$

Rank of lines: (0, 72, 8, 48, 32, 24, 56, 16, 40, 4680, 584, 3504, 2336, 1752, 4088, 1168, 2920, 145, 592, 3552, 2368, 1776, 4144, 1184, 2960, 510, 600, 3512, 2376, 1800, 4112, 1200, 2976, 364, 608, 3560, 2344, 1792, 4120, 1216, 2936, 291, 616, 3520, 2392, 1760, 4136, 1208, 2944, 583, ...1751, 2554, 4525)Rank of points on Klein quadric: (0, 81, 82, 83, 84, 85, 86, 87, 88, 17, 18, 19, 20, 21, 22, 23, 24, 201, 202, 203, 204, 205, 206, 207, 208, 276, 282, 277, 283, 278, 280, 279, 281, 246, 250, 251, 247, 253, 249, 248, 252, 231, 234, 237, 236, 232, 233, 238, 235, 291, ...300, 227, 275)

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 72 single points: The single points on the surface are:

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0: P_4 = (1, 1, 1, 1) lies on line \ell_{75}
1: P_{12} = (1, 0, 1, 0) lies on line \ell_{73}
2: P_{19} = (0, 1, 1, 0) lies on line \ell_{74}
3: P_{20} = (1, 1, 1, 0) lies on line \ell_{75}
4: P_{40} = (5, 3, 1, 0) lies on line \ell_{76}
5: P_{41} = (6, 3, 1, 0) lies on line \ell_{77}
6: P_{54} = (3, 5, 1, 0) lies on line \ell_{78}
7: P_{57} = (6, 5, 1, 0) lies on line \ell_{79}
8: P_{62} = (3, 6, 1, 0) lies on line \ell_{80}
9: P_{64} = (5, 6, 1, 0) lies on line \ell_{81}
10: P_{139} = (1, 0, 1, 1) lies on line \ell_{73}
11: P_{146} = (0, 1, 1, 1) lies on line \ell_{74}
12: P_{166} = (5, 3, 1, 1) lies on line \ell_{76}
13: P_{167} = (6, 3, 1, 1) lies on line \ell_{77}
14: P_{180} = (3, 5, 1, 1) lies on line \ell_{78}
15: P_{183} = (6, 5, 1, 1) lies on line \ell_{79}
16: P_{188} = (3, 6, 1, 1) lies on line \ell_{80}
17: P_{190} = (5, 6, 1, 1) lies on line \ell_{81}
18: P_{203} = (2,0,2,1) lies on line \ell_{73}
19: P_{215} = (6, 1, 2, 1) lies on line \ell_{80}
20: P_{216} = (7, 1, 2, 1) lies on line \ell_{81}
21: P_{217} = (0, 2, 2, 1) lies on line \ell_{74}
22: P_{219} = (2, 2, 2, 1) lies on line \ell_{75}
23: P_{250} = (1, 6, 2, 1) lies on line \ell_{77}
24: P_{256} = (7, 6, 2, 1) lies on line \ell_{76}
25: P_{258} = (1,7,2,1) lies on line \ell_{79}
26: P_{263} = (6,7,2,1) lies on line \ell_{78}
27: P_{268} = (3,0,3,1) lies on line \ell_{73}
28: P_{286} = (5, 2, 3, 1) lies on line \ell_{78}
29: P_{288} = (7, 2, 3, 1) lies on line \ell_{79}
30: P_{289} = (0,3,3,1) lies on line \ell_{74}
31: P_{292} = (3,3,3,1) lies on line \ell_{75}
32: P_{307} = (2,5,3,1) lies on line \ell_{76}
33: P_{312} = (7, 5, 3, 1) lies on line \ell_{77}
34: P_{323} = (2,7,3,1) lies on line \ell_{81}
35: P_{326} = (5,7,3,1) lies on line \ell_{80}
36: P_{333} = (4,0,4,1) lies on line \ell_{73}
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37: P_{339} = (2, 1, 4, 1) lies on line \ell_{77}
38: P_{340} = (3, 1, 4, 1) lies on line \ell_{76}
39: P_{346} = (1, 2, 4, 1) lies on line \ell_{80}
40: P_{348} = (3, 2, 4, 1) lies on line \ell_{81}
41: P_{354} = (1, 3, 4, 1) lies on line \ell_{78}
42 : P_{355} = (2, 3, 4, 1) lies on line \ell_{79}
43: P_{361} = (0, 4, 4, 1) lies on line \ell_{74}
44: P_{365} = (4, 4, 4, 1) lies on line \ell_{75}
45: P_{398} = (5,0,5,1) lies on line \ell_{73}
46: P_{413} = (4, 2, 5, 1) lies on line \ell_{77}
47: P_{415} = (6, 2, 5, 1) lies on line \ell_{76}
48: P_{427} = (2, 4, 5, 1) lies on line \ell_{80}
49: P_{431} = (6, 4, 5, 1) lies on line \ell_{81}
50: P_{433} = (0, 5, 5, 1) lies on line \ell_{74}
51: P_{438} = (5, 5, 5, 1) lies on line \ell_{75}
52: P_{443} = (2,6,5,1) lies on line \ell_{78}
53: P_{445} = (4, 6, 5, 1) lies on line \ell_{79}
54: P_{463} = (6,0,6,1) lies on line \ell_{73}
55: P_{485} = (4, 3, 6, 1) lies on line \ell_{81}
56: P_{488} = (7, 3, 6, 1) lies on line \ell_{80}
57: P_{492} = (3,4,6,1) lies on line \ell_{79}
58: P_{496} = (7, 4, 6, 1) lies on line \ell_{78}
59: P_{505} = (0, 6, 6, 1) lies on line \ell_{74}
60: P_{511} = (6, 6, 6, 1) lies on line \ell_{75}
61: P_{516} = (3,7,6,1) lies on line \ell_{77}
62: P_{517} = (4,7,6,1) lies on line \ell_{76}
63: P_{528} = (7,0,7,1) lies on line \ell_{73}
64: P_{533} = (4, 1, 7, 1) lies on line \ell_{78}
65: P_{534} = (5, 1, 7, 1) lies on line \ell_{79}
66: P_{554} = (1, 4, 7, 1) lies on line \ell_{76}
67: P_{558} = (5, 4, 7, 1) lies on line \ell_{77}
68: P_{562} = (1, 5, 7, 1) lies on line \ell_{81}
69: P_{565} = (4, 5, 7, 1) lies on line \ell_{80}
70: P_{577} = (0,7,7,1) lies on line \ell_{74}
71: P_{584} = (7,7,7,1) lies on line \ell_{75}
```

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

	lo	12	2 /	5.6	78	0.1	n .	11 -	19	12	1.4	151	16.	17	1 Q ·	10 '	20.5)1 (22	93 ·	24	25 '	26.5	77	28 6	oo s	30 '	21	29	33	34 '	25 '	36 9	27 9	28 9	30 /	40 z	11	12	13	11	15	16	17
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2	- -	10				_	_	-	1	1	1	_	_	1	_	1	_	_	_	1		_	_	1	_	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
٠	_ _	11	-			_	_	1	_	1	1	_	_	_	_	1	_	_	_	1		_	1	_	_	_	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	- -	11				_	_	_	_	_	_	1	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-	-	1	-	1	1	1	1	1	1	1	1	1	1	1	1
5	_ _	11		-		_	_	_	_	_		1										_	_	_	1	_	_	_	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	i 1	11	11	10	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	7 1	11	11	11	01	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	3 1	11	11	11	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ć) 1	11	11	11	11	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10) 1	11	11	11	11	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	$1 \mid 1$	11	11	11	11	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	$2 \mid 1$	11	11	11	11	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	3 1	11	11	11	11	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14	$_{1}$	11	11	11	11	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.5	5 1	11	11	11	11	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16	3 1	11	11	11	11	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17	-	11											-																				1	1	1	1	1	1	1	1	1	1		1
18	. -	11				_	_	_	_	_	_	1	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	1	-	1	1	1	1	1	1	-	1		1
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20	1	11				_	_	_	_	_		1				-												_	_	-	_	_	1	-	1	1	1	1	1	1	1	1	1	1
21	·	11								_	_	_	_	_	_	_	~	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	1	_	_	1	-	1			1	1		1
21	- -	11				_	_	_	_																								1			1	-	1	-		1	1		1
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27	. 1_	11				_	_	_	_	_		1													1	_	_	_	_	_	1	_	1	_	1	1	1	1	1	1	Ť	1	1	1
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33	1	11	11	11	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34	1 1	11	11	11	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1
35	5 1	11	11	11	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
36	3 1	11	11	11	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1
37	7 1	11	11	11	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1
38	3 1	11	11	11	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1
36) 1	11	11	11	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1
40) 1	11	11	11	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
41	1 1	11	11	11	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1
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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_0	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_5	P_5	P_5	P_5	P_5	P_5							

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}	
in point	P_0	P_3	P_{75}	P_{76}	P_{77}	P_{78}	P_{79}	P_{80}	P_{81}	P_3	P_{75}	P_{76}	P_{77}	P_{78}								

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}
in point	P_0	P_{82}	P_{83}	P_{84}	P_{85}	P_{86}	P_{87}	P_{88}	P_{89}	P_{83}	P_{82}	P_{85}	P_{84}	P_{87}							

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}
ĺ	in point	P_0	P_{90}	P_{91}	P_{92}	P_{93}	P_{94}	P_{95}	P_{96}	P_{97}	P_{92}	P_{93}	P_{90}	P_{91}	P_{96}							

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}
in point	P_0	P_{98}	P_{99}	P_{100}	P_{101}	P_{102}	P_{103}	P_{104}	P_{105}	P_{101}	P_{100}	P_{99}	P_{9}							

${\bf Line~5~intersects}$

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}
in point	P_0	P_{106}	P_{107}	P_{108}	P_{109}	P_{110}	P_{111}	P_{112}	P_{113}	P_{110}	P_{111}	P_{112}							

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}
in point	P_0	P_{114}	P_{115}	P_{116}	P_{117}	P_{118}	P_{119}	P_{120}	P_{121}	P_{119}	P_{118}	P_{121}							

Line 7 intersects

$_{ m Line}$	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}
in point	P_0	P_{122}	P_{123}	P_{124}	P_{125}	P_{126}	P_{127}	P_{128}	P_{129}	P_{128}	P_{129}	P_{126}							

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}
in point	P_0	P_{130}	P_{131}	P_{132}	P_{133}	P_{134}	P_{135}	P_{136}	P_{137}	P_{137}	P_{136}	P_{135}							

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}
in point	P_1	P_3	P_{82}	P_{90}	P_{98}	P_{106}	P_{114}	P_{122}	P_{130}	P_1	P_3	P_{82}	P_{90}	P_{98}						

${\rm Line}\ 10\ {\rm intersects}$

	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}
ĺ	in point	P_1	P_{75}	P_{83}	P_{91}	P_{99}	P_{107}	P_{115}	P_{123}	P_{131}	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_{83}	P_{75}	P_{99}	P_{91}

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_2
in point	P_1	P_{76}	P_{84}	P_{92}	P_{100}	P_{108}	P_{116}	P_{124}	P_{132}	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_{92}	P_{100}	P_{76}	P_8

Line 12 int	tersec	cts																		
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_{18}	ℓ_{19}	ℓ_2
in point	P_1	P_{77}	P_{85}	P_{93}	P_{101}	P_{109}	P_{117}	P_{125}	P_{133}	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_{101}	P_{93}	P_{85}	
Line 13 int	ιersec	cts																		
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_{18}	ℓ_{19}	
in point	P_1	P_{78}	P_{86}	P_{94}	P_{102}	P_{110}	P_{118}	P_{126}	P_{134}	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_{110}	P_{118}	P_{120}	:6
Line 14 int	tersec	cts									_									
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_{18}	ℓ_{19}	
in point	P_1	P_{79}	P_{87}	P_{95}	P_{103}	P_{111}	P_{119}	P_{127}	P_{135}	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_{119}	P_{111}	P_{13}	<i>i</i> 5
Line 15 int	tersec	cts		_	_	_		_	_	_		_	_	_	_	_	_	_	_	
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_{18}	ℓ_{19}	-
in point	P_1	P_{80}	P_{88}	P_{96}	P_{104}	P_{112}	P_{120}	P_{128}	P_{136}	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_{128}	P_{136}	P_{11}	.2
Line 16 int		cts																		_
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_{18}	ℓ_{19}	
in point	P_1	P_{81}	P_{89}	P_{97}	P_{105}	P_{113}	P_{121}	P_{129}	P_{137}	P_1	P_1	P_1	P_1	P_1	P_1	P_1	P_{137}	P_{129}	P_{12}	11
Line 17 int	ersec	cts																		
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_1	.3	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{18}	ℓ_{19}
in point	P_5	P_3	P_{83}	P_{92}	P_{101}	P_{110}	P_{119}	P_{128}	P_{137}	P_3	P_{83}	P_{92}	P_{101}	P_{11}	10 1	P_{119}	P_{128}	P_{137}	P_5	P_{ξ}
Line 18 int																				
Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}				ℓ_{13}	ℓ_{14}				
in point	P_5	P_{75}	P_{82}	P_{93}	P_{100}	P_{111}	P_{118}	P_{129}	P_{136}	P_{82}	P_{75}	$_5 \mid P_1$	100 F	$P_{93} \mid I$	P_{118}	P_{111}	P_{136}	$_{6} \mid P_{129}$	$_9 \mid P_5$	ز
Line 19 int																				
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_1
in point	P_5	P_{76}	P_{85}	P_{90}	P_{99}	P_{112}	P_{121}	P_{126}	P_{135}	P_{90}	P_{99}	P_{76}	$_6 \mid P_{85}$	P_{12}	26 <i>I</i>	P_{135}	P_{112}	P_{121}	P_5	F
Line 20 int																				
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}		$\frac{2}{2}$ ℓ_1		ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}	l l
in point	P_5	P_{77}	P_{84}	P_{91}	P_{98}	P_{113}	P_{120}	P_{127}	P_{134}	P_{98}	P_{91}	P_{84}	$_4 \mid P_{77}$	$r_7 \mid P_{13}$	34 1	P_{127}	P_{120}	P_{113}	P_5	I
Line 21 int			· · ·		 		 			·					-					
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}						
in point	P_5	P_{78}	P_{87}	P_{96}	P_{105}	P_{106}	P_{115}	P_{124}	P_{133}	P_{106}	$6 \mid P_1$	115	P_{124}	P_{133}	P_{78}	$P_8 \mid P_8$	$_{87} \mid P_{96}$	$_{6}$ P_{105}	$_5 \mid P_5$	ز
Line 22 int					 					·										
Line	ℓ_0	ℓ_1	$\frac{\ell_2}{P_{22}}$	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9			ℓ_{11}	ℓ_{12}	ℓ_{13}		ℓ_{14} ℓ_{15}			
		1 1)	10	10	1 D	P	P_{\cdots}	P_{-}	P_{100}	$P_{\cdot \cdot \cdot}$, P.		P_{too}	Page	-1 P_{α}	. P.	<i>D</i> _	P_{0}	_ P_	_

 P_{116} P_{123}

 P_{125}

 ℓ_7

 P_{122}

 ℓ_7

 P_{132}

 ℓ_8

 P_{131}

 ℓ_8

 P_{130}

 P_{114}

 ℓ_9

 P_{122}

 ℓ_9

 P_{130}

 P_{107}

 ℓ_{10}

 P_{131}

 ℓ_{10}

 P_{123}

 $P_{132} | P_{125}$

 ℓ_{11}

 P_{108}

 ℓ_{11}

 P_{116}

 ℓ_{12}

 P_{117}

 ℓ_{12}

 P_{109}

 P_{86}

 ℓ_{13}

 P_{94}

 ℓ_{13}

 P_{102}

 P_{79}

 ℓ_{14}

 P_{103}

 ℓ_{14}

 P_{95}

 P_{104}

 ℓ_{15}

 ℓ_{15}

 P_{88}

 P_{97}

 ℓ_{16}

 ℓ_{16}

 P_{81}

 ℓ_{17} ℓ

 P_{107}

 ℓ_5

 P_{108}

 ℓ_5

 P_{109}

 P_{114}

 ℓ_6

 P_{117}

 ℓ_6

in point P_5 P_{79}

 P_5

Line 23 intersects $\boxed{\text{Line} \mid \ell_0 \mid \ell}$

Line 24 intersects

Line ℓ_0

in point

in point

 P_{86}

 ℓ_2

 P_{89}

 ℓ_2

 P_{88}

 ℓ_1

 P_{80}

 P_{81}

 P_{97}

 ℓ_3

 P_{94}

 ℓ_3

 P_{95}

 P_{104}

 ℓ_4

 P_{103}

 ℓ_4

 P_{102}

Line 25 int	tersec	ets																	ļ
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_1
in point	P_6	P_3	P_{84}	P_{94}	P_{104}	P_{111}	P_{121}	P_{123}	P_{133}	P_3	P_{123}		P_{133}	P_{94}	P_{111}	P_{104}		P_3	P_1
Line 26 int	tersec	$_{ m cts}$																	
Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9					ℓ_{14}				17
in point	P_6	P_{75}	P_{85}	P_{95}	P_{105}	P_{110}	P_{120}	P_{122}	P_{132}	P_{12}	P_{75}	P_{132}	$_2$ P_{85}	$_{5} P_{11}$	P_{9}	P_{12}	P_{105}	$5 \mid P$	110
Line 27 int																			
Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9			ℓ_{12}						217
in point	P_6	P_{76}	P_{82}	P_{96}	P_{102}	P_{113}	P_{119}	P_{125}	P_{131}	P_{82}	P_{131}	P_{76}	P_{125}	P_{10}	$_{02}$ P_1	$ P_9 $	P_{113}	$_3 \mid P_1$	119
Line 28 int																			
Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}						ℓ_{15} ℓ_{16}		
in point	P_6	P_{77}	P_{83}	P_{97}	P_{103}	P_{112}	P_{118}	P_{124}	P_{130}	P_{13}	P_{83}	$_{3} \mid P_{124}$	$_4 \mid P_{77}$	$_7 \mid P_{11}$	$_{18}$ P_{10}	P_1	P_{97}	P_8	83
Line 29 int																			
Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9			ℓ_{12}						17
in point	P_6	P_{78}	P_{88}	P_{90}	P_{100}	P_{107}	P_{117}	P_{127}	P_{137}	P_{90}	P_{107}	$_{7} \mid P_{100}$	$_0 \mid P_{11}$	$_{17} \mid P_7$	$P_{78} \mid P_{12}$	P_{8}	P_{137}	$r \mid P_1$	137
Line 30 int																			
Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9						ℓ_{14} ℓ_1			17
in point	P_6	P_{79}	P_{89}	P_{91}	P_{101}	P_{106}	P_{116}	P_{126}	P_{136}	P_{10}	P_{91}	$_{1} \mid P_{116}$	$_{6} \mid P_{10}$	$1 P_1$	$P_{126} \mid P$	$P_{79} \mid P_1$	$136 \mid P_{89}$	$\frac{9}{} \mid P_1$	101
Line 31 int																			
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_{16}	ℓ_{17}	
in point	P_6	P_{80}	P_{86}	P_{92}	P_{98}	P_{109}	P_{115}	P_{129}	P_{135}	P_{98}	P_{115}	P_{92}	P_{109}	P_{86}	P_{135}	P_{80}	P_{129}	P_{92}	P_1
Line 32 int																			
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_{17}	
in point	P_6	P_{81}	P_{87}	P_{93}	P_{99}	P_{108}	P_{114}	P_{128}	P_{134}	P_{114}	P_{99}	P_{108}	P_{93}	P_{134}	$_4 \mid P_{87}$	7 P_{128}	P_{81}	P_{128}	8 <i>I</i>
Line 33 int																			
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_1
in point	P_7	P_3	P_{85}	P_{96}	P_{103}	P_{107}	P_{116}	P_{129}	P_{134}	P_3	P_{107}	P_{116}	P_{85}	P_{134}	P_{103}	P_{96}	P_{129}	P_3	P_1
Line 34 int	ιersec _	its _																	
Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9			ℓ_{12}						17
in point	P_7	P_{75}	P_{84}	P_{97}	P_{102}	P_{106}	P_{117}	P_{128}	P_{135}	P_{10}	P_{75}	P_{84}	P_{117}	$_7 \mid P_{10}$	$_{02} P_{13}$	P_1	P_{97}	$rac{-}{7}P_1$	128
Line 35 int	tersec	ets																	
Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9			ℓ_{12}						
in point	P_7	P_{76}	P_{83}	P_{94}	P_{105}	P_{109}	P_{114}	P_{127}	P_{136}	P_{11}	$14 \mid P_{83}$	P_{76}	P_{109}	$_{9} \mid P_{94}$	$_{4} \mid P_{12}$	$_{27} \mid P_{13}$	$_{36} \mid P_{105}$	P_8	33

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}	7
in point	P_7	P_{77}	P_{82}	P_{95}	P_{104}	P_{108}	P_{115}	P_{126}	P_{137}	P_{82}	P_{115}	P_{108}	P_{77}	P_{126}	P_{95}	P_{104}	P_{137}	P_{13}	37
Line 37 int	terse	cts																	
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}	$-\ell$
in point	P_7	P_{78}	P_{89}	P_{92}	P_{99}	P_{111}	P_{120}	P_{125}	P_{130}	P_{130}	P_{99}	P_{92}	P_{125}	P_{78}	$\overline{P_{111}}$	P_{120}	P_{89}	P_{92}	P

 ${\rm Line}~36~{\rm intersects}$

Line 38 int	erse	cts																	
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}	Ι,
in point	P_7	P_{79}	P_{88}	P_{93}	P_{98}	P_{110}	P_{121}	P_{124}	P_{131}	P_{98}	P_{131}	P_{124}	P_{93}	P_{110}	P_{79}	P_{88}	P_{121}	P_{110}	
Line 39 int		cts																	
Line	$\frac{\ell_0}{D}$	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}								
in point	P_7	P_{80}	P_{87}	P_{90}	P_{101}	P_{113}	P_{118}	P_{123}	P_{132}	P_{90}	P_{12}	P_{13}	$_{2} \mid P_{10}$	$_1 \mid P_{11}$	$_8 \mid P_8$	$_{7} \mid P_{80}$	P_{11}	P_{10}	01
Line 40 int						1 -													
Line in point	$\frac{\ell_0}{P_7}$	ℓ_1 P_{81}	$\frac{\ell_2}{P_{86}}$	ℓ_3 P_{91}	$\begin{array}{ c c c }\hline \ell_4 \\\hline P_{100} \\\hline \end{array}$	ℓ_5 P_{112}	ℓ_6 P_{119}	ℓ_7	ℓ_8	l _Q									7
Line 41 int			F 86	F91	F 100	F ₁₁₂	F ₁₁₉	P_{122}	P_{133}	P_{12}	22 179	1 F ₁₀	$_0 \mid P_{13}$	P_{86}	P_{11}	$_{9} \mid P_{11}$	$_{2}\mid P_{8}$	P_1	19
			0				0 1	a 1		a I				0 1 0		a I			
Line in point	$\frac{\ell_0}{P_8}$	$\begin{array}{ c c c }\hline \ell_1 \\\hline P_3 \end{array}$	$\frac{\ell_2}{P_{86}}$	$\frac{\ell_3}{P_{95}}$	$\frac{\ell_4}{P_{99}}$	$\frac{\ell_5}{P_{113}}$	$\frac{\ell_6}{P_{117}}$	$\frac{\ell_7}{P_{124}}$	$\frac{\ell_8}{P_{136}}$	$\begin{array}{c c} \ell_9 \\ \hline P_3 \end{array}$	$\frac{\ell_{10}}{P_{99}}$.								ℓ_{18}
			1 86	1 95	1 99	1 113	1 117	1 124	1 136	13	1 99	124	1 117 -	86 1	95 1	136 1	113 -	13 1	136
Line 42 int								0		I 0									
Line in point	$\frac{\ell_0}{P_8}$	ℓ_1 P_{75}	$\frac{\ell_2}{P_{87}}$	l_3 P_{94}	ℓ_4 P_{98}	$\frac{\ell_5}{P_{112}}$	P_{116}	$\frac{\ell_7}{P_{125}}$	$\frac{\ell_8}{P_{137}}$	ℓ_9 ℓ_{98}	ℓ_{10} P_{75}	$\ell_{11} = P_{116}$	ℓ_{12} P_{125}	ℓ_{13} P_{94}	ℓ_{14}	ℓ_{15} P_{112}	$\frac{\ell_{16}}{D}$	ℓ_{17}	+
			P ₈₇	P ₉₄	P ₉₈	P_{112}	P ₁₁₆	P_{125}	P_{137}	P ₉₈	P ₇₅	P ₁₁₆	P_{125}	F94	P_{87}	P_{112}	P_{137}	P_{137}	
Line 43 int																			
Line	$\frac{\ell_0}{P_8}$	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	l _Q				ℓ_{13}					7
in point		P_{76}	P_{88}	P_{97}	P_{101}	P_{111}	P_{115}	P_{122}	P_{134}	P_{12}	P_1	$_{15} \mid P_7$	$_{6} \mid P_{10}$	P_{13}	$_4$ P_1	$_{11} \mid P_8$	$ P_9 $	$r \mid P_{10}$	<u> </u>
Line 44 int									1 .										
Line in point	$\frac{\ell_0}{P_8}$	$\frac{\ell_1}{P_{77}}$	$\frac{\ell_2}{P_{89}}$	$\frac{\ell_3}{P_{96}}$	$\begin{array}{ c c c }\hline \ell_4 \\\hline P_{100} \\\hline \end{array}$	ℓ_5 P_{110}	$\frac{\ell_6}{P_{114}}$	$\begin{array}{ c c c }\hline \ell_7 \\\hline P_{123} \end{array}$	l_8 P_{135}	$P_{1:}$									7
			F 89	F96	F 100	F ₁₁₀	F ₁₁₄	F ₁₂₃	F ₁₃₅	Γ ₁ :	14 F ₁	23 Γ_1	00 17	$_{7} \mid P_{11}$	0 F1	35 <i>F</i> 9	6 1789	P_{11}	10
Line 45 int		cts																	
Line	$\frac{\ell_0}{D}$	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}		7
in point	P_8	P_{78}	P_{82}	P_{91}	P_{103}	P_{109}	P_{121}	P_{128}	P_{132}	P_{82}	P_{91}	P_{132}	P_{109}	P_{78}	P_{103}	P_{128}	P_{12}	$1 \mid P_{12}$	28
Line 46 int	erse	cts																	
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}		
in point	P_8	P_{79}	P_{83}	P_{90}	P_{102}	P_{108}	P_{120}	P_{129}	P_{133}	P_{90}	P_{83}	P_{108}	P_{133}	P_{102}	P_{79}	P_{120}	P_{12}	P_{83}	3
Line 47 int	erse	${ m cts}$																	
Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_{9}				ℓ_{13}	ℓ_{14}				
in point	P_8	P_{80}	P_{84}	P_{93}	P_{105}	P_{107}	P_{119}	P_{126}	P_{130}	P_{13}	P_1	$_{07} P_8$	$_4$ P_{93}	P_{126}	P_{11}	$_{9} \mid P_{80}$	P_{10}	P_{11}	19
Line 48 int	erse	${ m cts}$																	
Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	$\ell_{\mathfrak{S}}$	ℓ_1	$0 \ell_1$	ℓ_{1}	ℓ_{13}	ℓ_{14}		i ℓ ₁₆	ℓ_{17}	7
in point	P_8	P_{81}	P_{85}	P_{92}	P_{104}	P_{106}	P_{118}	P_{127}	P_{131}	P_{10}	P_1	P_9	$_{2}$ P_{85}	P_{118}	P_{12}	P_{10}	P_8	P_{92}	2
Line 49 int	erse	cts																	
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
in point	P_9	P_3	P_{87}	P_{97}	P_{100}	P_{109}	P_{120}	P_{126}	P_{131}	P_3	P_{131}	P_{100}	P_{109}	P_{126}	P_{87}	P_{120}	P_{97}	P_3	P

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}
in point	P_9	P_{75}	P_{86}	P_{96}	P_{101}	P_{108}	P_{121}	P_{127}	P_{130}	P_{130}	P_{75}	P_{108}	P_{101}	P_{86}	P_{127}	P_{96}	P_{121}	P_{101}

Line 51 int	tersec	ts																	
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}	
in point	P_9	P_{76}	P_{89}	P_{95}	P_{98}	P_{107}	P_{118}	P_{128}	P_{133}	P_{98}	P_{107}	P_{76}	P_{133}	P_{118}	P_{95}	P_{128}	P_{89}	P_{128}	, <i>P</i>
Line 52 int	iersec	$\cdot ts$,
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}	
in point		P_{77}	P_{88}	P_{94}	P_{99}	P_{106}	P_{119}	P_{129}	P_{132}	P_{106}	P_{99}	P_{132}	P_{77}	P_{94}	P_{119}	P_{88}	P_{129}	P_{119}	P
Line 53 int																			!
Line in point	$\begin{array}{ c c c } \ell_0 \\ P_9 \end{array}$	$\frac{\ell_1}{P_{78}}$	$\begin{array}{ c c c }\hline \ell_2 \\\hline P_{83} \end{array}$	$\begin{array}{ c c c }\hline \ell_3 \\\hline P_{93} \end{array}$	ℓ_4 P_{104}	ℓ_5 P_{113}	$\frac{\ell_6}{P_{116}}$	ℓ_7 P_{122}	ℓ_8 P_{135}	l_9 P_{122}	$\begin{array}{c c} \ell_{10} \\ \hline 2 & P_{83} \end{array}$			$\begin{array}{ c c c }\hline \ell_{13} \\\hline P_{78} \end{array}$	ℓ_{14} P_{135}	ℓ_{15} P_{104}	ℓ_{16} P_{113}		
			1 83	1 93	1 104	1 113	1 110	1 122	1 135	1 122	1 83	1 110	. 193	1 78	1 135	1 104	<u> 1 113</u>	1 8	3
Line 54 int			T 0	Τ ο	Τ 0	1 0		T 0	T 0		1 0			1 0		1 0			!
Line in point	ℓ_0 P_9	$\frac{\ell_1}{P_{79}}$	$\begin{array}{ c c c }\hline \ell_2 \\\hline P_{82} \end{array}$	$\begin{array}{ c c c }\hline \ell_3 \\\hline P_{92} \end{array}$	ℓ_4 P_{105}	$\begin{array}{ c c c }\hline \ell_5 \\\hline P_{112} \end{array}$	$\frac{\ell_6}{P_{117}}$	P_{123}	$\begin{array}{ c c }\hline \ell_8 \\\hline P_{134} \end{array}$	l_9 P_{82}	ℓ_{10} P_{123}	ℓ_{11}	$\begin{array}{ c c c }\hline \ell_{12} \\\hline P_{117} \end{array}$	ℓ_{13} P_{134}	ℓ_{14} P_{79}	$\begin{array}{ c c c }\hline \ell_{15} \\\hline P_{112} \end{array}$	$\frac{\ell_{16}}{P_{105}}$		7
Line 55 int					100	112	11.	120	101		1 120	1 0-	11.	101	10	112	1 200	_ •.	2
Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9	ℓ_{10}			ℓ_{13}	ℓ_{14}				
in point	P_9	P_{80}	P_{85}	P_{91}	P_{102}	P_{111}	P_{114}	P_{124}	P_{137}	P_{114}	$_4 \mid P_{91}$	P_{124}	$_{4} \mid P_{85}$	P_{102}	P_{111}	P_{80}	P_{137}	$_{7}\mid P_{13}$.37
Line 56 int	tersec	ts																	I
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}			
in point	P_9	P_{81}	P_{84}	P_{90}	P_{103}	P_{110}	P_{115}	P_{125}	P_{136}	P_{90}	P_{115}	P_{84}	P_{125}	P_{110}	P_{103}	P_{136}	P_{81}	P_1	.10
Line 57 int	ersec	ts																	
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}	
in point	P_{10}	P_3	P_{88}	P_{91}	P_{105}	P_{108}	P_{118}	P_{125}	P_{135}	P_3	P_{91}	P_{108}	P_{125}	P_{118}	P_{135}	P_{88}	P_{105}	P_3	<u> </u>
Line 58 int																			
Line in point	ℓ_0 P_{10}	ℓ_1 P_{75}	$\frac{\ell_2}{P_{89}}$	ℓ_3 P_{90}	ℓ_4 P_{104}	$\frac{\ell_5}{4 P_{109}}$	$\frac{\ell_6}{2} P_{119}$	$\frac{\ell_7}{P_{124}}$	$\begin{array}{c c} \ell_8 \\ \hline 4 & P_{134} \end{array}$	$\begin{array}{c c} \ell_9 \\ \hline 4 P_{90} \end{array}$		ℓ_{11} P_{124}							$\frac{\ell_{17}}{P_{119}}$
Line 59 int		-	1 00	1 30	1 104	1 100	1 113	1 124	1 194	1 90	110	1 124	1 100	1 104	: * 11.	9 * 10	14 -0	9 1	119
					<u> </u>	————	<u> </u>			——————————————————————————————————————	<u> </u>					<u> </u>			0
Line in point	ℓ_0 P_{10}	$\begin{array}{ c c c }\hline \ell_1 \\\hline P_{76} \end{array}$	$\frac{\ell_2}{P_{86}}$	ℓ_3 P_{93}	ℓ_4 P_{103}	$\frac{\ell_5}{R_{106}}$	$\frac{\ell_6}{6} P_{120}$	$\frac{\ell_7}{P_{123}}$	$\frac{\ell_8}{R_{137}}$	$\frac{\ell_9}{7}$ P_{10}					$\frac{\ell_{14}}{P_{103}}$	$\frac{\ell_{15}}{R_{120}}$			$\frac{\ell_{17}}{P_{137}}$
Line 60 int			1	1	1			1 .			<u> </u>	20	<u> </u>		1			' '	10.
Line	ℓ_0	ℓ_1	ℓ_2		ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9									217
in point	P_{10}	P_{77}	P_{87}	P_{92}	P_{102}	P_{107}	P_{121}	P_{122}	P_{136}	P_{12}	P_{10}	$07 P_9$	$P_{92} \mid P_{77}$	P_{102}	$_{2} \mid P_{87}$	P_{136}	P_{12}	P	92
Line 61 int	ιersec	ts																	
Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	ℓ_7	ℓ_8	ℓ_9									ℓ_{17}
in point	P_{10}	P_{78}	P_{84}	P_{95}	P_{101}	P_{112}	P_{114}	P_{129}	P_{131}	P_{11}	$_{14} \mid P_{13}$	$_{31} \mid P_8$	$P_{84} \mid P_{10}$	P_{78}	$_{8}\mid P_{95}$	P_{112}	$_{2} \mid P_{12}$	$_{19} \mid P$	101
Line 62 int	iersec	ts																	
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}		$\frac{\ell_{14}}{R}$	ℓ_{15}	ℓ_{16}	3 l	ℓ_{17}

 P_{116} P_{127}

 P_{128}

 ℓ_7

in point P_{10}

in point

Line 63 intersects

Line ℓ_0

 P_{10}

 P_{85}

 ℓ_2

 P_{82}

 P_{79}

 P_{80}

 P_{94}

 ℓ_3

 P_{97}

 P_{100}

 ℓ_4

 P_{99}

 P_{113}

 ℓ_5

 P_{110}

 P_{115}

 ℓ_6

 P_{130}

 ℓ_8

 P_{133}

 P_{130}

 ℓ_9

 P_{82}

 P_{115}

 ℓ_{10}

 P_{99}

 P_{100}

 ℓ_{11}

 P_{116}

 P_{94}

 ℓ_{13}

 P_{110}

 ℓ_{14}

 P_{127}

 P_{85}

 ℓ_{12}

 P_{133}

 P_{128}

 ℓ_{15}

 P_{80}

 P_{97}

 ℓ_{17}

 P_{110}

Line 64 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}	
in p	ooint	P_{10}	P_{81}	P_{83}	P_{96}	P_{98}	P_{111}	P_{117}	P_{126}	P_{132}	P_{98}	P_{83}	P_{132}	P_{117}	P_{126}	P_{111}	P_{96}	P_{81}	P_{83}	1

Line 65 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
Ì	in point	P_{11}	P_3	P_{89}	P_{93}	P_{102}	P_{112}	P_{115}	P_{127}	P_{132}	P_3	P_{115}	P_{132}	P_{93}	P_{102}	P_{127}	P_{112}	P_{89}	P_3	F

${\rm Line}~66~{\rm intersects}$

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}
in point	P_{11}	P_{75}	P_{88}	P_{92}	P_{103}	P_{113}	P_{114}	P_{126}	P_{133}	P_{114}	P_{75}	P_{92}	P_{133}	P_{126}	P_{103}	P_{88}	P_{113}	P_{92}

${\rm Line}~67~{\rm intersects}$

$_{ m Line}$	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}
in point	P_{11}	P_{76}	P_{87}	P_{91}	P_{104}	P_{110}	P_{117}	P_{129}	P_{130}	P_{130}	P_{91}	P_{76}	P_{117}	P_{110}	P_{87}	P_{104}	P_{129}	P_{110}

Line 68 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}
in point	P_{11}	P_{77}	P_{86}	P_{90}	P_{105}	P_{111}	P_{116}	P_{128}	P_{131}	P_{90}	P_{131}	P_{116}	P_{77}	P_{86}	P_{111}	P_{128}	P_{105}	P_{128}

Line 69 intersects

Т:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Line	ℓ_0	ℓ_1	ℓ_2	ℓ_3	ℓ_4	ℓ_5	ℓ_6	₹7	ℓ_8	ℓ_9	ℓ_{10}	ℓ_{11}	ℓ_{12}	ℓ_{13}	ℓ_{14}	ℓ_{15}	ℓ_{16}	ℓ_{17}
in point	P_{11}	P_{78}	P_{85}	P_{97}	P_{98}	P_{108}	P_{119}	P_{123}	P_{136}	P_{98}	P_{123}	P_{108}	P_{85}	P_{78}	P_{119}	P_{136}	P_{97}	P_{119}

Line 70 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}	
in point	P_{11}	P_{79}	P_{84}	P_{96}	P_{99}	P_{109}	P_{118}	P_{122}	P_{137}	P_{122}	P_{99}	P_{84}	P_{109}	P_{118}	P_{79}	P_{96}	P_{137}	P_{137}	

${\rm Line}\ 71\ {\rm intersects}$

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}
in point	P_{11}	P_{80}	P_{83}	P_{95}	P_{100}	P_{106}	P_{121}	P_{125}	P_{134}	P_{106}	P_{83}	P_{100}	P_{125}	P_{134}	P_{95}	P_{80}	P_{121}	P_{83}

Line 72 intersects

$_{ m Line}$	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}
in point	P_{11}	P_{81}	P_{82}	P_{94}	P_{101}	P_{107}	P_{120}	P_{124}	P_{135}	P_{82}	P_{107}	P_{124}	P_{101}	P_{94}	P_{135}	P_{120}	P_{81}	P_{101}

Line 73 intersects

Line	ℓ_1	ℓ_9	ℓ_{17}	ℓ_{25}	ℓ_{33}	ℓ_{41}	ℓ_{49}	ℓ_{57}	ℓ_{65}	ℓ_{74}	ℓ_{75}	ℓ_{76}	ℓ_{77}	ℓ_{78}	ℓ_{79}	ℓ_{80}	ℓ_{81}
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

Line 74 intersects

Line	ℓ_1	ℓ_9	ℓ_{17}	ℓ_{25}	ℓ_{33}	ℓ_{41}	ℓ_{49}	ℓ_{57}	ℓ_{65}	ℓ_{73}	ℓ_{75}	ℓ_{76}	ℓ_{77}	ℓ_{78}	ℓ_{79}	ℓ_{80}	ℓ_{81}
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

Line 75 intersects

Line	ℓ_1	ℓ_9	ℓ_{17}	ℓ_{25}	ℓ_{33}	ℓ_{41}	ℓ_{49}	ℓ_{57}	ℓ_{65}	ℓ_{73}	ℓ_{74}	ℓ_{76}	ℓ_{77}	ℓ_{78}	ℓ_{79}	ℓ_{80}	ℓ_{81}
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

${\rm Line}~76~{\rm intersects}$

Line	ℓ_1	ℓ_9	ℓ_{17}	ℓ_{25}	ℓ_{33}	ℓ_{41}	ℓ_{49}	ℓ_{57}	ℓ_{65}	ℓ_{73}	ℓ_{74}	ℓ_{75}	ℓ_{77}	ℓ_{78}	ℓ_{79}	ℓ_{80}	ℓ_{81}
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

Line 77 intersects

Line	ℓ_1	ℓ_9	ℓ_{17}	ℓ_{25}	ℓ_{33}	ℓ_{41}	ℓ_{49}	ℓ_{57}	ℓ_{65}	ℓ_{73}	ℓ_{74}	ℓ_{75}	ℓ_{76}	ℓ_{78}	ℓ_{79}	ℓ_{80}	ℓ_{81}
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

Line 78 intersects

Line	ℓ_1	ℓ_9	ℓ_{17}	ℓ_{25}	ℓ_{33}	ℓ_{41}	ℓ_{49}	ℓ_{57}	ℓ_{65}	ℓ_{73}	ℓ_{74}	ℓ_{75}	ℓ_{76}	ℓ_{77}	ℓ_{79}	ℓ_{80}	ℓ_{81}
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

Line 79 intersects

Line	ℓ_1	ℓ_9	ℓ_{17}	ℓ_{25}	ℓ_{33}	ℓ_{41}	ℓ_{49}	ℓ_{57}	ℓ_{65}	ℓ_{73}	ℓ_{74}	ℓ_{75}	ℓ_{76}	ℓ_{77}	ℓ_{78}	ℓ_{80}	ℓ_{81}
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

Line 80 intersects

Line	ℓ_1	ℓ_9	ℓ_{17}	ℓ_{25}	ℓ_{33}	ℓ_{41}	ℓ_{49}	ℓ_{57}	ℓ_{65}	ℓ_{73}	ℓ_{74}	ℓ_{75}	ℓ_{76}	ℓ_{77}	ℓ_{78}	ℓ_{79}	ℓ_{81}
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

Line 81 intersects

Line	ℓ_1	ℓ_9	ℓ_{17}	ℓ_{25}	ℓ_{33}	ℓ_{41}	ℓ_{49}	ℓ_{57}	ℓ_{65}	ℓ_{73}	ℓ_{74}	ℓ_{75}	ℓ_{76}	ℓ_{77}	ℓ_{78}	ℓ_{79}	ℓ_{80}
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

The surface has 145 points:

The points on the surface are:

```
0: P_0 = (1, 0, 0, 0)
                                            27: P_{82} = (0, 1, 0, 1)
                                                                                        54: P_{109} = (3, 4, 0, 1)
1: P_1 = (0, 1, 0, 0)
                                            28: P_{83} = (1, 1, 0, 1)
                                                                                        55: P_{110} = (4, 4, 0, 1)
2: P_3 = (0,0,0,1)
                                            29: P_{84} = (2, 1, 0, 1)
                                                                                        56: P_{111} = (5, 4, 0, 1)
3: P_4 = (1,1,1,1)
                                            30: P_{85} = (3, 1, 0, 1)
                                                                                        57: P_{112} = (6, 4, 0, 1)
4: P_5 = (1, 1, 0, 0)
                                            31: P_{86} = (4, 1, 0, 1)
                                                                                        58: P_{113} = (7, 4, 0, 1)
5: P_6 = (2, 1, 0, 0)
                                            32: P_{87} = (5, 1, 0, 1)
                                                                                        59: P_{114} = (0, 5, 0, 1)
6: P_7 = (3, 1, 0, 0)
                                            33: P_{88} = (6, 1, 0, 1)
                                                                                        60: P_{115} = (1, 5, 0, 1)
7: P_8 = (4, 1, 0, 0)
                                            34: P_{89} = (7, 1, 0, 1)
                                                                                        61: P_{116} = (2, 5, 0, 1)
8: P_9 = (5, 1, 0, 0)
                                            35: P_{90} = (0, 2, 0, 1)
                                                                                        62: P_{117} = (3, 5, 0, 1)
                                            36: P_{91} = (1, 2, 0, 1)
                                                                                        63: P_{118} = (4,5,0,1)
9: P_{10} = (6, 1, 0, 0)
10: P_{11} = (7, 1, 0, 0)
                                            37: P_{92} = (2, 2, 0, 1)
                                                                                        64: P_{119} = (5, 5, 0, 1)
                                            38: P_{93} = (3, 2, 0, 1)
11: P_{12} = (1, 0, 1, 0)
                                                                                        65: P_{120} = (6, 5, 0, 1)
12: P_{19} = (0, 1, 1, 0)
                                            39: P_{94} = (4, 2, 0, 1)
                                                                                        66: P_{121} = (7, 5, 0, 1)
13: P_{20} = (1, 1, 1, 0)
                                            40: P_{95} = (5, 2, 0, 1)
                                                                                        67: P_{122} = (0, 6, 0, 1)
14: P_{40} = (5, 3, 1, 0)
                                            41: P_{96} = (6, 2, 0, 1)
                                                                                        68: P_{123} = (1, 6, 0, 1)
15: P_{41} = (6, 3, 1, 0)
                                            42: P_{97} = (7, 2, 0, 1)
                                                                                        69: P_{124} = (2, 6, 0, 1)
16: P_{54} = (3, 5, 1, 0)
                                            43: P_{98} = (0,3,0,1)
                                                                                         70: P_{125} = (3, 6, 0, 1)
                                            44: P_{99} = (1, 3, 0, 1)
17: P_{57} = (6, 5, 1, 0)
                                                                                         71: P_{126} = (4, 6, 0, 1)
18: P_{62} = (3, 6, 1, 0)
                                            45: P_{100} = (2, 3, 0, 1)
                                                                                         72: P_{127} = (5, 6, 0, 1)
19: P_{64} = (5, 6, 1, 0)
                                            46: P_{101} = (3, 3, 0, 1)
                                                                                         73: P_{128} = (6, 6, 0, 1)
20: P_{75} = (1,0,0,1)
                                            47: P_{102} = (4, 3, 0, 1)
                                                                                         74: P_{129} = (7, 6, 0, 1)
21: P_{76} = (2,0,0,1)
                                            48: P_{103} = (5, 3, 0, 1)
                                                                                         75: P_{130} = (0, 7, 0, 1)
22: P_{77} = (3, 0, 0, 1)
                                            49: P_{104} = (6, 3, 0, 1)
                                                                                         76: P_{131} = (1, 7, 0, 1)
23: P_{78} = (4,0,0,1)
                                            50: P_{105} = (7, 3, 0, 1)
                                                                                         77: P_{132} = (2,7,0,1)
24: P_{79} = (5,0,0,1)
                                            51: P_{106} = (0, 4, 0, 1)
                                                                                         78: P_{133} = (3,7,0,1)
25: P_{80} = (6,0,0,1)
                                            52: P_{107} = (1, 4, 0, 1)
                                                                                        79: P_{134} = (4,7,0,1)
26: P_{81} = (7,0,0,1)
                                            53: P_{108} = (2, 4, 0, 1)
                                                                                        80: P_{135} = (5,7,0,1)
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81: P_{136} = (6,7,0,1)
                                            103: P_{289} = (0, 3, 3, 1)
                                                                                        125: P_{443} = (2, 6, 5, 1)
                                                                                        126: P_{445} = (4, 6, 5, 1)
82: P_{137} = (7,7,0,1)
                                            104: P_{292} = (3, 3, 3, 1)
83: P_{139} = (1, 0, 1, 1)
                                            105: P_{307} = (2, 5, 3, 1)
                                                                                        127: P_{463} = (6,0,6,1)
                                            106: P_{312} = (7, 5, 3, 1)
                                                                                        128: P_{485} = (4, 3, 6, 1)
84: P_{146} = (0, 1, 1, 1)
85: P_{166} = (5, 3, 1, 1)
                                            107: P_{323} = (2,7,3,1)
                                                                                        129: P_{488} = (7, 3, 6, 1)
86: P_{167} = (6, 3, 1, 1)
                                            108: P_{326} = (5,7,3,1)
                                                                                        130: P_{492} = (3, 4, 6, 1)
87: P_{180} = (3, 5, 1, 1)
                                            109: P_{333} = (4, 0, 4, 1)
                                                                                        131: P_{496} = (7, 4, 6, 1)
88: P_{183} = (6, 5, 1, 1)
                                            110: P_{339} = (2, 1, 4, 1)
                                                                                        132: P_{505} = (0, 6, 6, 1)
89: P_{188} = (3, 6, 1, 1)
                                            111: P_{340} = (3, 1, 4, 1)
                                                                                        133: P_{511} = (6, 6, 6, 1)
                                                                                        134 : P_{516} = (3, 7, 6, 1)
90: P_{190} = (5, 6, 1, 1)
                                            112: P_{346} = (1, 2, 4, 1)
                                                                                        135: P_{517} = (4, 7, 6, 1)
91: P_{203} = (2,0,2,1)
                                            113: P_{348} = (3, 2, 4, 1)
                                            114: P_{354} = (1, 3, 4, 1)
                                                                                        136 : P_{528} = (7, 0, 7, 1)
92: P_{215} = (6, 1, 2, 1)
93: P_{216} = (7, 1, 2, 1)
                                            115: P_{355} = (2, 3, 4, 1)
                                                                                        137: P_{533} = (4, 1, 7, 1)
94: P_{217} = (0, 2, 2, 1)
                                            116: P_{361} = (0, 4, 4, 1)
                                                                                        138: P_{534} = (5, 1, 7, 1)
95: P_{219} = (2, 2, 2, 1)
                                            117: P_{365} = (4, 4, 4, 1)
                                                                                        139 : P_{554} = (1, 4, 7, 1)
96: P_{250} = (1, 6, 2, 1)
                                            118: P_{398} = (5, 0, 5, 1)
                                                                                        140: P_{558} = (5, 4, 7, 1)
                                                                                        141: P_{562} = (1, 5, 7, 1)
97: P_{256} = (7, 6, 2, 1)
                                            119: P_{413} = (4, 2, 5, 1)
98: P_{258} = (1,7,2,1)
                                            120: P_{415} = (6, 2, 5, 1)
                                                                                        142: P_{565} = (4, 5, 7, 1)
                                            121: P_{427} = (2, 4, 5, 1)
99: P_{263} = (6,7,2,1)
                                                                                        143: P_{577} = (0, 7, 7, 1)
100: P_{268} = (3,0,3,1)
                                            122: P_{431} = (6, 4, 5, 1)
                                                                                        144: P_{584} = (7,7,7,1)
101: P_{286} = (5, 2, 3, 1)
                                            123: P_{433} = (0, 5, 5, 1)
102: P_{288} = (7, 2, 3, 1)
                                            124: P_{438} = (5, 5, 5, 1)
```