BLT-sets of Q(4, 47)

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April 28, 2015

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The BLT-Sets

3.1 Isomorphism Type 0

Stabilizer has order 9962496
Plane intersection type is 48
Plane invariant is

$$\left[\ 48\ \right]$$

$\rightarrow$	1_1
48_0	1

$\downarrow$	1_1
48_0	48

$C_0 = \{0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42,$
$C_1 = \{0\}_1$

$\rightarrow$	1_1
48_0	1

$\downarrow$	1_1
48_0	48

$C_0 = \{0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42,$
$C_1 = \{0\}_1$
Column cell 1:
Order of the group that is induced on the object is 103776
Number of ancestors on 5-sets is 22.
Number of orbits on 5-sets is 22.
With 1 orbits on the object
Orbit lengths: 48
The points by ranks:

i	Rank	i	Rank	i	Rank	i	Rank
0	0	12	376	24	407	36	402
1	1	13	401	25	408	37	414
2	372	14	379	26	409	38	391
3	373	15	385	27	410	39	403
4	374	16	397	28	375	40	392
5	396	17	398	29	387	41	404
6	383	18	389	30	411	42	416
7	386	19	415	31	388	43	381
8	390	20	380	32	400	44	405
9	395	21	393	33	412	45	382
10	384	22	417	34	377	46	394
11	399	23	413	35	378	47	406

The points:

$$P_0 = (0, 1, 0, 0, 0)P_1 = (0, 0, 1, 0, 0)P_2 = (0, 1, 28, 46, 28)P_3 = (0, 1, 7, 23, 14)$$
$$P_4 = (0, 1, 24, 31, 25)P_5 = (0, 1, 2, 15, 3)P_6 = (0, 1, 25, 43, 18)P_7 = (0, 1, 16, 25, 5)$$
$$P_8 = (0, 1, 42, 42, 46)P_9 = (0, 1, 18, 45, 9)P_{10} = (0, 1, 1, 18, 13)P_{11} = (0, 1, 42, 5, 1)$$
$$P_{12} = (0, 1, 3, 28, 15)P_{13} = (0, 1, 4, 36, 26)P_{14} = (0, 1, 21, 41, 27)P_{15} = (0, 1, 27, 10, 2)$$
$$P_{16} = (0, 1, 12, 9, 30)P_{17} = (0, 1, 9, 40, 8)P_{18} = (0, 1, 32, 13, 12)P_{19} = (0, 1, 24, 16, 22)$$
$$P_{20} = (0, 1, 34, 26, 24)P_{21} = (0, 1, 2, 32, 44)P_{22} = (0, 1, 28, 1, 19)P_{23} = (0, 1, 3, 19, 32)$$
$$P_{24} = (0, 1, 8, 30, 6)P_{25} = (0, 1, 36, 33, 16)P_{26} = (0, 1, 34, 21, 23)P_{27} = (0, 1, 21, 6, 20)$$
$$P_{28} = (0, 1, 37, 35, 7)P_{29} = (0, 1, 17, 44, 37)P_{30} = (0, 1, 14, 27, 43)P_{31} = (0, 1, 4, 11, 21)$$
$$P_{32} = (0, 1, 32, 34, 35)P_{33} = (0, 1, 6, 8, 11)P_{34} = (0, 1, 6, 39, 36)P_{35} = (0, 1, 14, 20, 4)$$
$$P_{36} = (0, 1, 17, 3, 10)P_{37} = (0, 1, 37, 12, 40)P_{38} = (0, 1, 9, 7, 39)P_{39} = (0, 1, 16, 22, 42)$$

$$P_{40} = (0,1,12,38,17) P_{41} = (0,1,27,37,45) P_{42} = (0,1,7,24,33) P_{43} = (0,1,36,14,31)$$
$$P_{44} = (0,1,1,29,34) P_{45} = (0,1,8,17,41) P_{46} = (0,1,18,2,38) P_{47} = (0,1,25,4,29)$$

Stabilizer of order 9962496 is generated by:

$$g_1 = \begin{bmatrix} 17 & 0 & 0 & 0 & 0 \\ 0 & 30 & 0 & 0 & 0 \\ 0 & 0 & 30 & 0 & 0 \\ 0 & 0 & 0 & 30 & 0 \\ 0 & 0 & 0 & 0 & 30 \end{bmatrix}$$

with 2304 fixed points

$$g_2 = \begin{bmatrix} 8 & 0 & 0 & 0 & 0 \\ 0 & 7 & 0 & 0 & 0 \\ 0 & 0 & 36 & 0 & 0 \\ 0 & 0 & 0 & 39 & 0 \\ 0 & 0 & 0 & 0 & 39 \end{bmatrix}$$

with 4 fixed points

$$g_3 = \begin{bmatrix} 41 & 0 & 0 & 8 & 36 \\ 0 & 18 & 0 & 0 & 0 \\ 0 & 0 & 18 & 0 & 0 \\ 29 & 0 & 0 & 6 & 40 \\ 43 & 0 & 0 & 13 & 6 \end{bmatrix}$$

with 48 fixed points

$$g_4 = \begin{bmatrix} 31 & 0 & 0 & 28 & 32 \\ 0 & 20 & 0 & 0 & 0 \\ 0 & 0 & 20 & 0 & 0 \\ 31 & 0 & 0 & 2 & 13 \\ 33 & 0 & 0 & 43 & 2 \end{bmatrix}$$

with 48 fixed points

$$g_5 = \begin{bmatrix} 7 & 0 & 0 & 8 & 36 \\ 0 & 14 & 0 & 0 & 0 \\ 0 & 28 & 14 & 22 & 42 \\ 18 & 42 & 0 & 13 & 4 \\ 4 & 22 & 0 & 6 & 13 \end{bmatrix}$$

with 50 fixed points

$$g_6 = \begin{bmatrix} 38 & 0 & 0 & 10 & 45 \\ 0 & 25 & 0 & 0 & 0 \\ 0 & 17 & 25 & 15 & 3 \\ 46 & 3 & 0 & 39 & 6 \\ 5 & 15 & 0 & 9 & 39 \end{bmatrix}$$

with 50 fixed points

$$g_7 = \begin{bmatrix} 11 & 0 & 0 & 40 & 39 \\ 0 & 6 & 27 & 41 & 27 \\ 0 & 0 & 6 & 0 & 0 \\ 43 & 0 & 27 & 15 & 24 \\ 20 & 0 & 41 & 36 & 15 \end{bmatrix}$$

with 50 fixed points

3.2 Isomorphism Type 1

Stabilizer has order 4608
Plane intersection type is $24^2\ 4^{144}\ 3^{12672}$
Plane invariant is

$$\begin{bmatrix} 24 & 0 \\ 0 & 24 \end{bmatrix}$$

$\rightarrow$	2_1
48_0	1

$\downarrow$	2_1
48_0	24

$C_0 = \{0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42,$
$C_1 = \{0, 1\}_2$

$\rightarrow$	2_1	144_2
48_0	1	12

$\downarrow$	2_1	144_2
48_0	24	4

$C_0 = \{0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42,$
$C_1 = \{0, 145\}_2$
$C_2 = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43$
Column cell 1:
Column cell 2:
Order of the group that is induced on the object is 4608
Number of ancestors on 5-sets is 2158.
Number of orbits on 5-sets is 1745.
With 1 orbits on the object
Orbit lengths: 48
The points by ranks:

i	Rank	i	Rank	i	Rank	i	Rank
0	0	12	376	24	411	36	15815
1	1	13	401	25	93668	37	59264
2	372	14	379	26	400	38	46461
3	373	15	11121	27	412	39	12423
4	374	16	64717	28	377	40	416
5	396	17	103849	29	68384	41	103605
6	383	18	49253	30	56717	42	79873
7	386	19	409	31	86610	43	405
8	390	20	30610	32	100592	44	63817
9	395	21	93904	33	70512	45	79450
10	384	22	375	34	66198	46	394
11	399	23	72798	35	44350	47	64241

The points:

$$P_0 = (0, 1, 0, 0, 0)P_1 = (0, 0, 1, 0, 0)P_2 = (0, 1, 28, 46, 28)P_3 = (0, 1, 7, 23, 14)$$

$$P_4 = (0, 1, 24, 31, 25)P_5 = (0, 1, 2, 15, 3)P_6 = (0, 1, 25, 43, 18)P_7 = (0, 1, 16, 25, 5)$$

$$P_8 = (0, 1, 42, 42, 46)P_9 = (0, 1, 18, 45, 9)P_{10} = (0, 1, 1, 18, 13)P_{11} = (0, 1, 42, 5, 1)$$

$$P_{12} = (0, 1, 3, 28, 15)P_{13} = (0, 1, 4, 36, 26)P_{14} = (0, 1, 21, 41, 27)P_{15} = (1, 4, 25, 40, 1)$$

$$P_{16} = (1, 38, 26, 40, 7)P_{17} = (1, 21, 2, 39, 23)P_{18} = (1, 45, 11, 23, 5)P_{19} = (0, 1, 34, 21, 23)$$

$$P_{20} = (1, 2, 36, 22, 33)P_{21} = (1, 43, 22, 42, 39)P_{22} = (0, 1, 37, 35, 7)P_{23} = (1, 26, 45, 26, 11)$$

$$P_{24} = (0, 1, 14, 27, 43)P_{25} = (1, 9, 21, 12, 39)P_{26} = (0, 1, 32, 34, 35)P_{27} = (0, 1, 6, 8, 11)$$

$$P_{28} = (0, 1, 6, 39, 36)P_{29} = (1, 7, 32, 45, 42)P_{30} = (1, 12, 28, 4, 45)P_{31} = (1, 5, 43, 45, 14)$$

$$P_{32} = (1, 11, 10, 4, 31)P_{33} = (1, 6, 14, 26, 13)P_{34} = (1, 34, 1, 42, 7)P_{35} = (1, 27, 16, 18, 36)$$

$$P_{36} = (1, 1, 18, 37, 16)P_{37} = (1, 46, 29, 14, 2)P_{38} = (1, 20, 31, 8, 34)P_{39} = (1, 13, 46, 12, 1)$$

$$P_{40} = (0, 1, 7, 24, 33)P_{41} = (1, 41, 33, 29, 23)P_{42} = (1, 36, 37, 33, 18)P_{43} = (0, 1, 1, 29, 34)$$

$$P_{44} = (1, 42, 4, 24, 38)P_{45} = (1, 35, 19, 10, 18)P_{46} = (0, 1, 18, 2, 38)P_{47} = (1, 40, 15, 25, 38)$$

Stabilizer of order 4608 is generated by:

$$g_1 = \begin{bmatrix} 41 & 0 & 0 & 8 & 36 \\ 0 & 18 & 0 & 0 & 0 \\ 0 & 0 & 18 & 0 & 0 \\ 29 & 0 & 0 & 6 & 40 \\ 43 & 0 & 0 & 13 & 6 \end{bmatrix}$$

with 48 fixed points

$$g_2 = \begin{bmatrix} 35 & 0 & 0 & 21 & 24 \\ 0 & 32 & 0 & 0 & 0 \\ 0 & 0 & 32 & 0 & 0 \\ 12 & 0 & 0 & 22 & 2 \\ 34 & 0 & 0 & 3 & 22 \end{bmatrix}$$

with 2210 fixed points

$$g_3 = \begin{bmatrix} 37 & 0 & 0 & 0 & 0 \\ 0 & 10 & 0 & 0 & 0 \\ 0 & 33 & 10 & 18 & 13 \\ 0 & 13 & 0 & 37 & 0 \\ 0 & 18 & 0 & 0 & 37 \end{bmatrix}$$

with 50 fixed points

$$g_4 = \begin{bmatrix} 32 & 0 & 0 & 21 & 24 \\ 0 & 23 & 33 & 24 & 33 \\ 0 & 43 & 23 & 15 & 3 \\ 35 & 3 & 33 & 3 & 13 \\ 13 & 15 & 24 & 43 & 3 \end{bmatrix}$$

with 2 fixed points

$$g_5 = \begin{bmatrix} 37 & 0 & 0 & 0 & 0 \\ 0 & 30 & 15 & 37 & 45 \\ 0 & 11 & 30 & 18 & 13 \\ 0 & 13 & 45 & 17 & 43 \\ 0 & 18 & 37 & 41 & 17 \end{bmatrix}$$

with 50 fixed points

$$g_6 = \begin{bmatrix} 3 & 0 & 0 & 37 & 2 \\ 0 & 41 & 5 & 3 & 10 \\ 0 & 0 & 41 & 0 & 0 \\ 46 & 0 & 10 & 28 & 5 \\ 5 & 0 & 3 & 31 & 28 \end{bmatrix}$$

with 2 fixed points

$$g_7 = \begin{bmatrix} 0 & 32 & 14 & 25 & 5 \\ 8 & 41 & 33 & 32 & 13 \\ 43 & 31 & 41 & 28 & 43 \\ 13 & 32 & 30 & 4 & 35 \\ 18 & 36 & 41 & 16 & 5 \end{bmatrix}$$

with 2 fixed points

3.3 Isomorphism Type 2

Stabilizer has order 2304
Plane intersection type is $8^{18}\ 6^{32}\ 4^{1656}\ 3^{9024}$
Plane invariant is too big (18 planes)

$\rightarrow$	18_1
48_0	3

$\downarrow$	18_1
48_0	8

$C_0 = \{0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42,$
$C_1 = \{0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17\}_{18}$

$\rightarrow$	18_1	32_2	1656_3
48_0	3	4	138

$\downarrow$	18_1	32_2	1656_3
48_0	8	6	4

$C_0 = \{0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42,$
$C_1 = \{18, 24, 273, 561, 828, 943, 966, 1034, 1055, 1104, 1193, 1197, 1375, 1405, 1548, 1628, 1647, 1653\}_{18}$
$C_2 = \{0, 19, 23, 452, 468, 560, 562, 563, 568, 624, 757, 933, 977, 1027, 1073, 1102, 1106, 1108, 1109, 1128, 1153, 1199, 1200, 1436, 1439, 1546, 1550$
$C_3 = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 20, 21, 22, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47$

i	Rank	i	Rank	i	Rank	i	Rank
0	0	12	86845	24	83701	36	57118
1	1	13	83705	25	95861	37	55026
2	372	14	71421	26	27023	38	71418
3	373	15	95862	27	43354	39	83398
4	374	16	43340	28	75326	40	23400
5	396	17	100681	29	28032	41	14627
6	11556	18	57329	30	14850	42	15956
7	60558	19	60096	31	86825	43	98611
8	48274	20	28027	32	97872	44	52112
9	45877	21	47710	33	60111	45	57198
10	62906	22	97863	34	57115	46	52117
11	63421	23	27009	35	97827	47	48263

The points:

$$P_0 = (0, 1, 0, 0, 0)P_1 = (0, 0, 1, 0, 0)P_2 = (0, 1, 28, 46, 28)P_3 = (0, 1, 7, 23, 14)$$

$$P_4 = (0, 1, 24, 31, 25)P_5 = (0, 1, 2, 15, 3)P_6 = (1, 18, 27, 30, 1)P_7 = (1, 19, 5, 44, 32)$$

$$P_8 = (1, 21, 36, 46, 5)P_9 = (1, 34, 4, 21, 36)P_{10} = (1, 6, 9, 27, 38)P_{11} = (1, 23, 11, 23, 38)$$

$$P_{12} = (1, 11, 20, 1, 14)P_{13} = (1, 17, 42, 16, 17)P_{14} = (1, 30, 38, 33, 11)P_{15} = (1, 29, 39, 20, 28)$$

$$P_{16} = (1, 19, 19, 36, 3)P_{17} = (1, 23, 11, 10, 31)P_{18} = (1, 22, 33, 11, 45)P_{19} = (1, 1, 36, 5, 2)$$

$$P_{20} = (1, 46, 33, 6, 21)P_{21} = (1, 44, 19, 21, 34)P_{22} = (1, 36, 34, 12, 35)P_{23} = (1, 7, 12, 25, 6)$$

$$P_{24} = (1, 28, 2, 16, 17)P_{25} = (1, 26, 20, 20, 28)P_{26} = (1, 8, 34, 25, 6)P_{27} = (1, 44, 5, 36, 3)$$

$$P_{28} = (1, 6, 9, 26, 25)P_{29} = (1, 22, 22, 6, 21)P_{30} = (1, 13, 43, 8, 24)P_{31} = (1, 29, 40, 1, 14)$$

$$P_{32} = (1, 7, 7, 12, 35)P_{33} = (1, 24, 25, 5, 2)P_{34} = (1, 40, 38, 32, 45)P_{35} = (1, 28, 42, 8, 35)$$

$$P_{36} = (1, 41, 13, 32, 45)P_{37} = (1, 18, 27, 2, 15)P_{38} = (1, 41, 45, 33, 11)P_{39} = (1, 39, 35, 33, 17)$$

$$P_{40} = (1, 40, 13, 19, 27)P_{41} = (1, 3, 28, 18, 24)P_{42} = (1, 25, 14, 28, 16)P_{43} = (1, 23, 11, 29, 35)$$

$$P_{44} = (1, 3, 14, 33, 40)P_{45} = (1, 24, 36, 33, 45)P_{46} = (1, 25, 28, 33, 40)P_{47} = (1, 24, 8, 46, 5)$$

Stabilizer of order 2304 is generated by:

$$g_1 = \begin{bmatrix} 27 & 0 & 0 & 10 & 45 \\ 0 & 2 & 0 & 0 & 0 \\ 0 & 0 & 2 & 0 & 0 \\ 46 & 0 & 0 & 11 & 17 \\ 5 & 0 & 0 & 2 & 11 \end{bmatrix}$$

with 2210 fixed points

$$g_2 = \begin{bmatrix} 15 & 0 & 0 & 3 & 37 \\ 0 & 17 & 0 & 0 & 0 \\ 0 & 0 & 17 & 0 & 0 \\ 5 & 0 & 0 & 16 & 19 \\ 22 & 0 & 0 & 5 & 16 \end{bmatrix}$$

with 48 fixed points

$$g_3 = \begin{bmatrix} 2 & 0 & 0 & 46 & 19 \\ 0 & 19 & 0 & 0 & 0 \\ 0 & 38 & 19 & 3 & 10 \\ 33 & 10 & 0 & 13 & 3 \\ 23 & 3 & 0 & 28 & 13 \end{bmatrix}$$

with 48 fixed points

$$g_4 = \begin{bmatrix} 37 & 4 & 0 & 4 & 30 \\ 0 & 19 & 0 & 0 & 0 \\ 6 & 44 & 19 & 33 & 22 \\ 22 & 43 & 0 & 31 & 42 \\ 27 & 22 & 0 & 12 & 45 \end{bmatrix}$$

with 48 fixed points

$$g_5 = \begin{bmatrix} 46 & 0 & 0 & 31 & 22 \\ 0 & 5 & 46 & 42 & 46 \\ 0 & 0 & 5 & 0 & 0 \\ 11 & 0 & 46 & 45 & 37 \\ 39 & 0 & 42 & 32 & 45 \end{bmatrix}$$

with 48 fixed points

$$g_6 = \begin{bmatrix} 2 & 0 & 0 & 46 & 19 \\ 0 & 0 & 42 & 0 & 0 \\ 0 & 3 & 0 & 0 & 0 \\ 33 & 0 & 0 & 13 & 3 \\ 23 & 0 & 0 & 28 & 13 \end{bmatrix}$$

with 48 fixed points

$$g_7 = \begin{bmatrix} 35 & 0 & 41 & 5 & 34 \\ 12 & 10 & 15 & 40 & 42 \\ 0 & 35 & 10 & 6 & 20 \\ 33 & 20 & 36 & 27 & 27 \\ 2 & 6 & 23 & 27 & 40 \end{bmatrix}$$

with 0 fixed points

$$g_8 = \begin{bmatrix} 32 & 17 & 27 & 18 & 45 \\ 46 & 19 & 45 & 31 & 30 \\ 8 & 44 & 30 & 19 & 36 \\ 15 & 37 & 36 & 28 & 30 \\ 35 & 45 & 25 & 13 & 0 \end{bmatrix}$$

with 2 fixed points

3.4 Isomorphism Type 3

Stabilizer has order 2
Plane intersection type is $5^{10}\ 4^{371}\ 3^{15712}$

Plane invariant is too big (10 planes)

$\rightarrow$	2_1	2_{16}	2_7	2_8	2_6
2_0	1	1	1	1	0
2_2	1	1	0	0	1
2_4	1	0	0	1	0
2_{13}	0	1	0	0	1
1_{12}	0	0	2	0	0
2_{14}	0	0	1	1	0
2_{15}	0	0	1	0	1
4_3	1	0	0	0	0
4_{17}	0	1	0	0	0
2_9	0	0	1	0	0
4_{10}	0	0	0	1	0
4_{11}	0	0	0	0	1
17_5	0	0	0	0	0

$\downarrow$	2_1	2_{16}	2_7	2_8	2_6
2_0	1	1	1	1	0
2_2	1	1	0	0	1
2_4	1	0	0	1	0
2_{13}	0	1	0	0	1
1_{12}	0	0	1	0	0
2_{14}	0	0	1	1	0
2_{15}	0	0	1	0	1
4_3	2	0	0	0	0
4_{17}	0	2	0	0	0
2_9	0	0	1	0	0
4_{10}	0	0	0	2	0
4_{11}	0	0	0	0	2
17_5	0	0	0	0	0

$C_0 = \{28, 36\}_2$
$C_1 = \{1, 6\}_2$
$C_2 = \{0, 20\}_2$
$C_3 = \{6, 11, 14, 25\}_4$
$C_4 = \{23, 30\}_2$
$C_5 = \{5, 9, 10, 12, 19, 21, 22, 26, 27, 33, 34, 35, 39, 40, 42, 43, 45\}_{17}$
$C_6 = \{0, 8\}_2$
$C_7 = \{2, 3\}_2$
$C_8 = \{5, 9\}_2$
$C_9 = \{37, 44\}_2$
$C_{10} = \{7, 17, 29, 32\}_4$
$C_{11} = \{3, 4, 13, 47\}_4$
$C_{12} = \{15\}_1$
$C_{13} = \{2, 8\}_2$
$C_{14} = \{41, 46\}_2$
$C_{15} = \{1, 38\}_2$
$C_{16} = \{4, 7\}_2$
$C_{17} = \{16, 18, 24, 31\}_4$

$\rightarrow$	2_1	2_{23}	2_{22}	2_{24}	2_{21}	1_2	1_{26}	2_{25}	2_{30}	2_{29}	2_{31}	2_{28}	2_{33}	2_{34}	2_{32}	2_{35}	2_{37}	2_{36}	2_{39}	2_{40}	2_{38}	2_{42}	2_{41}	2_{43}	2_{45}
2_0	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
2_3	1	1	0	0	1	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2_5	1	0	1	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0
2_6	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
1_8	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0
2_7	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	1	1	1	0	0	0	0	0
2_9	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0
2_4	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0
2_{12}	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
2_{13}	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2_{210}	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
2_{14}	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
2_{211}	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
2_{11}	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
2_{208}	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0
2_{209}	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2_{10}	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	1	1	0	1	0	0	0	0	0	0
2_{207}	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0
2_{17}	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2_{16}	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2_{18}	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2_{15}	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2_{20}	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0
1_{212}	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
2_{19}	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	1	0

$\downarrow$	2_1	2_{23}	2_{22}	2_{24}	2_{21}	1_2	1_{26}	2_{25}	2_{30}	2_{29}	2_{31}	2_{28}	2_{33}	2_{34}	2_{32}	2_{35}	2_{37}	2_{36}	2_{39}	2_{40}	2_{38}	2_{42}	2_{41}	2_{43}	2_{45}
2_0	1	1	1	1	0	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2_3	1	1	0	0	1	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2_5	1	0	1	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0
2_6	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
1_8	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
2_7	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	1	1	1	0	0	0	0	0
2_9	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0
2_4	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0
2_{12}	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
2_{13}	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2_{210}	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
2_{14}	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
2_{211}	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
2_{11}	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
2_{208}	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0
2_{209}	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2_{10}	0	0	0	0	0	0	2	0	1	0	0	0	1	0	0	1	1	0	1	0	0	0	0	0	0
2_{207}	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0
2_{17}	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2_{16}	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2_{18}	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2_{15}	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2_{20}	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0
1_{212}	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
2_{19}	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	1	0

$C_0 = \{28, 36\}_2$
$C_1 = \{36, 249\}_2$
$C_2 = \{22\}_1$
$C_3 = \{0, 20\}_2$
$C_4 = \{37, 44\}_2$

$C_5 = \{23, 30\}_2$
$C_6 = \{41, 46\}_2$
$C_7 = \{2, 8\}_2$
$C_8 = \{15\}_1$
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$C_{11} = \{24, 31\}_2$
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$C_{13} = \{6, 11\}_2$
$C_{14} = \{14, 25\}_2$
$C_{15} = \{9, 42\}_2$
$C_{16} = \{35, 39\}_2$
$C_{17} = \{10, 12\}_2$
$C_{18} = \{5, 45\}_2$
$C_{19} = \{19, 27\}_2$
$C_{20} = \{40, 43\}_2$
$C_{21} = \{42, 380\}_2$
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$C_{28} = \{231, 377\}_2$
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$C_{39} = \{334, 347\}_2$
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$C_{43} = \{45, 301\}_2$
$C_{44} = \{192, 322\}_2$
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$C_{51} = \{143, 170\}_2$
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$C_{53} = \{37, 101\}_2$
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$C_{55} = \{31, 315\}_2$
$C_{56} = \{206, 351\}_2$
$C_{57} = \{172, 338\}_2$
$C_{58} = \{136, 174\}_2$
$C_{59} = \{256, 362\}_2$
$C_{60} = \{16, 51\}_2$
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$C_{68} = \{198, 370\}_2$
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$C_{72} = \{35, 234\}_2$
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$C_{75} = \{116, 123\}_2$
$C_{76} = \{130, 199\}_2$
$C_{77} = \{14, 160\}_2$
$C_{78} = \{34, 326\}_2$
$C_{79} = \{270, 357\}_2$
$C_{80} = \{76, 132\}_2$
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$C_{82} = \{122, 241\}_2$
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$C_{104} = \{40, 208\}_2$
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$C_{119} = \{94, 299\}_2$
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$C_{121} = \{7, 82\}_2$
$C_{122} = \{151, 266\}_2$

$C_{123} = \{97, 150\}_2$
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$C_{129} = \{250, 352\}_2$
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$C_{134} = \{171, 330\}_2$
$C_{135} = \{104, 211\}_2$
$C_{136} = \{0, 358\}_2$
$C_{137} = \{39, 232\}_2$
$C_{138} = \{71, 337\}_2$
$C_{139} = \{137, 220\}_2$
$C_{140} = \{95, 371\}_2$
$C_{141} = \{93, 281\}_2$
$C_{142} = \{100, 152\}_2$
$C_{143} = \{177, 245\}_2$
$C_{144} = \{329, 369\}_2$
$C_{145} = \{236\}_1$
$C_{146} = \{258, 344\}_2$
$C_{147} = \{139, 261\}_2$
$C_{148} = \{225, 230\}_2$
$C_{149} = \{63, 271\}_2$
$C_{150} = \{184, 379\}_2$
$C_{151} = \{187, 224\}_2$
$C_{152} = \{372, 375\}_2$
$C_{153} = \{12, 75\}_2$
$C_{154} = \{60, 108\}_2$
$C_{155} = \{61, 168\}_2$
$C_{156} = \{56, 217\}_2$
$C_{157} = \{107, 316\}_2$
$C_{158} = \{54, 307\}_2$
$C_{159} = \{243, 296\}_2$
$C_{160} = \{191, 214\}_2$
$C_{161} = \{275, 360\}_2$
$C_{162} = \{298, 342\}_2$
$C_{163} = \{117, 278\}_2$
$C_{164} = \{70, 73\}_2$
$C_{165} = \{98, 118\}_2$
$C_{166} = \{205, 310\}_2$
$C_{167} = \{96, 297\}_2$
$C_{168} = \{142, 264\}_2$
$C_{169} = \{148, 166\}_2$
$C_{170} = \{260, 276\}_2$
$C_{171} = \{156, 280\}_2$
$C_{172} = \{77, 244\}_2$
$C_{173} = \{144, 294\}_2$
$C_{174} = \{48, 196\}_2$
$C_{175} = \{277, 340\}_2$
$C_{176} = \{115, 295\}_2$
$C_{177} = \{131, 147\}_2$
$C_{178} = \{291\}_1$
$C_{179} = \{308, 363\}_2$
$C_{180} = \{79, 335\}_2$
$C_{181} = \{353, 364\}_2$

$C_{182} = \{302, 333\}_2$
$C_{183} = \{90, 361\}_2$
$C_{184} = \{128, 193\}_2$
$C_{185} = \{41, 286\}_2$
$C_{186} = \{215, 345\}_2$
$C_{187} = \{85, 242\}_2$
$C_{188} = \{359\}_1$
$C_{189} = \{103, 204\}_2$
$C_{190} = \{47, 272\}_2$
$C_{191} = \{29, 207\}_2$
$C_{192} = \{367, 378\}_2$
$C_{193} = \{158, 202\}_2$
$C_{194} = \{189, 305\}_2$
$C_{195} = \{112, 169\}_2$
$C_{196} = \{67, 218\}_2$
$C_{197} = \{92, 182\}_2$
$C_{198} = \{222, 279\}_2$
$C_{199} = \{17, 157\}_2$
$C_{200} = \{66, 102\}_2$
$C_{201} = \{125, 155\}_2$
$C_{202} = \{180, 355\}_2$
$C_{203} = \{165, 284\}_2$
$C_{204} = \{72, 274\}_2$
$C_{205} = \{227, 332\}_2$
$C_{206} = \{149, 309\}_2$
$C_{207} = \{21, 33\}_2$
$C_{208} = \{17, 29\}_2$
$C_{209} = \{4, 47\}_2$
$C_{210} = \{7, 32\}_2$
$C_{211} = \{16, 18\}_2$
$C_{212} = \{26\}_1$
$C_{213} = \{219, 328\}_2$
$C_{214} = \{183, 210\}_2$
$C_{215} = \{114, 119\}_2$
$C_{216} = \{292, 293\}_2$
$C_{217} = \{163, 320\}_2$
$C_{218} = \{138, 188\}_2$
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Order of the group that is induced on the object is 2
Number of ancestors on 5-sets is 856405.
Number of orbits on 5-sets is 856405.
With 25 orbits on the object
Orbit lengths: $1^2,\ 2^{23}$

The points by ranks:

i	Rank	i	Rank	i	Rank	i	Rank
0	0	12	102547	24	88189	36	58292
1	1	13	19687	25	93958	37	13870
2	372	14	50225	26	10925	38	92826
3	373	15	85469	27	89845	39	101506
4	379	16	56011	28	91980	40	74180
5	2246	17	63388	29	69636	41	13053
6	89873	18	15022	30	30943	42	17393
7	87554	19	84390	31	42992	43	42985
8	40466	20	52619	32	11210	44	81789
9	82779	21	15175	33	57920	45	68839
10	36623	22	32673	34	49770	46	94913
11	38179	23	86008	35	31400	47	18514

The points:

$$P_0 = (0,1,0,0,0)P_1 = (0,0,1,0,0)P_2 = (0,1,28,46,28)P_3 = (0,1,7,23,14)$$

$$P_4 = (0,1,21,41,27)P_5 = (0,1,8,4,45)P_6 = (1,21,25,25,41)P_7 = (1,39,29,36,26)$$

$$P_8 = (1,30,13,10,22)P_9 = (1,43,15,44,43)P_{10} = (1,37,12,43,29)P_{11} = (1,2,28,1,37)$$

$$P_{12} = (1,46,33,30,23)P_{13} = (1,34,28,29,19)P_{14} = (1,36,17,7,40)P_{15} = (1,41,31,30,14)$$

$$P_{16} = (1,22,38,10,15)P_{17} = (1,26,35,2,38)P_{18} = (1,23,45,41,16)P_{19} = (1,35,45,40,17)$$

$$P_{20} = (1,22,26,46,9)P_{21} = (1,11,26,32,16)P_{22} = (1,15,33,43,30)P_{23} = (1,11,44,9,14)$$

$$P_{24} = (1,21,12,21,26)P_{25} = (1,20,45,1,39)P_{26} = (1,40,40,44,1)P_{27} = (1,32,12,25,41)$$

$$P_{28} = (1,19,45,23,20)P_{29} = (1,19,43,13,13)P_{30} = (1,3,42,46,33)P_{31} = (1,36,32,23,3)$$

$$P_{32} = (1,44,13,38,1)P_{33} = (1,8,16,41,45)P_{34} = (1,19,39,2,5)P_{35} = (1,16,32,40,33)$$

$$P_{36} = (1,12,27,45,45)P_{37} = (1,18,9,3,24)P_{38} = (1,26,39,8,20)P_{39} = (1,32,7,17,31)$$

$$P_{40} = (1,17,32,25,44)P_{41} = (1,2,25,39,24)P_{42} = (1,16,24,11,12)P_{43} = (1,9,34,23,3)$$

$$P_{44} = (1,11,31,15,43)P_{45} = (1,20,40,36,13)P_{46} = (1,7,4,33,39)P_{47} = (1,44,5,9,12)$$

Stabilizer of order 2 is generated by:

$$g_1 = \begin{bmatrix} 24 & 38 & 46 & 14 & 12 \\ 23 & 36 & 34 & 24 & 19 \\ 19 & 24 & 36 & 11 & 4 \\ 6 & 4 & 19 & 23 & 36 \\ 7 & 11 & 24 & 15 & 23 \end{bmatrix}$$

with 48 fixed points

3.5 Isomorphism Type 4

Stabilizer has order 3
Plane intersection type is $5^{15}\ 4^{276}\ 3^{16042}$

Plane invariant is too big (15 planes)

$\rightarrow$	3_1	3_6	3_8	3_7	3_9
3_0	2	1	1	0	0
3_2	0	1	1	0	1
3_{10}	0	1	0	2	0
3_4	1	1	0	0	0
3_{16}	1	0	0	0	1
3_{15}	0	0	1	0	1
3_{17}	0	0	0	1	1
3_3	1	0	0	0	0
3_{11}	0	1	0	0	0
6_{12}	0	0	1	0	0
6_{13}	0	0	0	1	0
3_{14}	0	0	0	0	1
6_5	0	0	0	0	0

$\downarrow$	3_1	3_6	3_8	3_7	3_9
3_0	2	1	1	0	0
3_2	0	1	1	0	1
3_{10}	0	1	0	2	0
3_4	1	1	0	0	0
3_{16}	1	0	0	0	1
3_{15}	0	0	1	0	1
3_{17}	0	0	0	1	1
3_3	1	0	0	0	0
3_{11}	0	1	0	0	0
6_{12}	0	0	2	0	0
6_{13}	0	0	0	2	0
3_{14}	0	0	0	0	1
6_5	0	0	0	0	0

$C_0 = \{19, 45, 46\}_3$
$C_1 = \{3, 4, 6\}_3$
$C_2 = \{6, 15, 43\}_3$
$C_3 = \{7, 40, 47\}_3$
$C_4 = \{27, 29, 36\}_3$
$C_5 = \{9, 21, 28, 32, 37, 39\}_6$
$C_6 = \{1, 10, 13\}_3$
$C_7 = \{0, 2, 12\}_3$
$C_8 = \{9, 11, 14\}_3$
$C_9 = \{5, 7, 8\}_3$
$C_{10} = \{0, 1, 12\}_3$
$C_{11} = \{10, 33, 38\}_3$
$C_{12} = \{16, 18, 25, 30, 41, 42\}_6$
$C_{13} = \{2, 4, 8, 17, 26, 35\}_6$
$C_{14} = \{20, 22, 31\}_3$
$C_{15} = \{5, 24, 34\}_3$
$C_{16} = \{13, 23, 44\}_3$
$C_{17} = \{3, 11, 14\}_3$

$\rightarrow$	3_1	3_{17}	3_{19}	3_{18}	3_{20}	3_2	3_{22}	3_{21}	3_{25}	3_{26}	3_{24}	3_{27}	3_{28}	3_{30}	3_{29}	3_{32}	3_{31}	3_{33}	3_{34}	3_{37}	3_{36}	3_{35}	3_{39}	3_{38}	3_{40}
3_0	2	1	1	0	0	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3_3	0	1	0	2	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3_6	0	1	1	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3_5	0	0	0	1	1	0	0	1	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0
3_7	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3_9	0	0	1	0	1	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
3_8	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
3_4	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	1	1	1	0	0	0	0
3_{12}	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	0	2	2	1	0
3_{14}	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0
3_{13}	0	1	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3_{111}	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	1
3_{11}	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3_{15}	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0
3_{10}	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	1	1	0	0	0	0	0	1	0
3_{16}	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0

$\downarrow$	3_1	3_{17}	3_{19}	3_{18}	3_{20}	3_2	3_{22}	3_{21}	3_{25}	3_{26}	3_{24}	3_{27}	3_{28}	3_{30}	3_{29}	3_{32}	3_{31}	3_{33}	3_{34}	3_{37}	3_{36}	3_{35}	3_{39}	3_{38}	3_{40}
3_0	2	1	1	0	0	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3_3	0	1	0	2	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3_6	0	1	1	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3_5	0	0	0	1	1	0	0	1	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0
3_7	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3_9	0	0	1	0	1	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
3_8	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
3_4	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	1	1	1	0	0	0	0
3_{12}	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	0	2	2	1	0
3_{14}	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0
3_{13}	0	1	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3_{111}	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	1
3_{11}	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3_{15}	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0
3_{10}	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	1	1	0	0	0	0	0	1	0
3_{16}	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0

$C_0 = \{19, 45, 46\}_3$
$C_1 = \{253, 279, 283\}_3$
$C_2 = \{133, 182, 264\}_3$
$C_3 = \{0, 1, 12\}_3$
$C_4 = \{7, 40, 47\}_3$
$C_5 = \{3, 11, 14\}_3$
$C_6 = \{6, 15, 43\}_3$
$C_7 = \{13, 23, 44\}_3$
$C_8 = \{27, 29, 36\}_3$
$C_9 = \{5, 24, 34\}_3$
$C_{10} = \{21, 28, 39\}_3$
$C_{11} = \{16, 25, 41\}_3$
$C_{12} = \{4, 8, 35\}_3$
$C_{13} = \{10, 33, 38\}_3$
$C_{14} = \{18, 30, 42\}_3$
$C_{15} = \{2, 17, 26\}_3$
$C_{16} = \{9, 32, 37\}_3$
$C_{17} = \{94, 192, 288\}_3$
$C_{18} = \{176, 285, 290\}_3$
$C_{19} = \{23, 90, 213\}_3$
$C_{20} = \{111, 234, 272\}_3$
$C_{21} = \{28, 112, 242\}_3$
$C_{22} = \{88, 93, 228\}_3$
$C_{23} = \{15, 64, 116\}_3$
$C_{24} = \{70, 123, 142\}_3$
$C_{25} = \{107, 145, 178\}_3$
$C_{26} = \{49, 240, 278\}_3$
$C_{27} = \{150, 260, 265\}_3$
$C_{28} = \{87, 206, 282\}_3$
$C_{29} = \{76, 104, 168\}_3$
$C_{30} = \{51, 177, 268\}_3$
$C_{31} = \{77, 148, 257\}_3$
$C_{32} = \{4, 7, 261\}_3$
$C_{33} = \{92, 281, 286\}_3$
$C_{34} = \{36, 80, 284\}_3$
$C_{35} = \{41, 78, 89\}_3$
$C_{36} = \{35, 115, 130\}_3$
$C_{37} = \{40, 109, 224\}_3$
$C_{38} = \{39, 81, 134\}_3$
$C_{39} = \{79, 256, 275\}_3$
$C_{40} = \{0, 25, 223\}_3$
$C_{41} = \{67, 201, 236\}_3$

$C_{42} = \{19, 30, 119\}_3$
$C_{43} = \{65, 86, 181\}_3$
$C_{44} = \{165, 203, 225\}_3$
$C_{45} = \{16, 59, 252\}_3$
$C_{46} = \{149, 155, 175\}_3$
$C_{47} = \{55, 72, 91\}_3$
$C_{48} = \{45, 131, 169\}_3$
$C_{49} = \{29, 184, 222\}_3$
$C_{50} = \{154, 156, 214\}_3$
$C_{51} = \{22, 62, 273\}_3$
$C_{52} = \{9, 98, 158\}_3$
$C_{53} = \{21, 47, 170\}_3$
$C_{54} = \{34, 229, 271\}_3$
$C_{55} = \{198, 199, 274\}_3$
$C_{56} = \{161, 211, 270\}_3$
$C_{57} = \{68, 126, 172\}_3$
$C_{58} = \{57, 259, 262\}_3$
$C_{59} = \{37, 69, 280\}_3$
$C_{60} = \{6, 132, 205\}_3$
$C_{61} = \{43, 114, 250\}_3$
$C_{62} = \{152, 204, 221\}_3$
$C_{63} = \{13, 108, 151\}_3$
$C_{64} = \{31, 207, 246\}_3$
$C_{65} = \{32, 101, 179\}_3$
$C_{66} = \{163, 194, 244\}_3$
$C_{67} = \{183, 190, 217\}_3$
$C_{68} = \{153, 167, 255\}_3$
$C_{69} = \{74, 136, 147\}_3$
$C_{70} = \{103, 173, 218\}_3$
$C_{71} = \{60, 102, 196\}_3$
$C_{72} = \{44, 146, 276\}_3$
$C_{73} = \{58, 171, 208\}_3$
$C_{74} = \{188, 258, 266\}_3$
$C_{75} = \{26, 140, 233\}_3$
$C_{76} = \{63, 106, 138\}_3$
$C_{77} = \{42, 46, 247\}_3$
$C_{78} = \{2, 14, 117\}_3$
$C_{79} = \{33, 157, 277\}_3$
$C_{80} = \{141, 159, 263\}_3$
$C_{81} = \{66, 200, 226\}_3$
$C_{82} = \{50, 135, 162\}_3$
$C_{83} = \{100, 227, 237\}_3$
$C_{84} = \{8, 20, 52\}_3$
$C_{85} = \{3, 241, 289\}_3$
$C_{86} = \{99, 122, 245\}_3$
$C_{87} = \{209, 230, 239\}_3$
$C_{88} = \{17, 48, 254\}_3$
$C_{89} = \{61, 85, 269\}_3$
$C_{90} = \{12, 186, 248\}_3$
$C_{91} = \{110, 127, 143\}_3$
$C_{92} = \{84, 144, 267\}_3$
$C_{93} = \{105, 191, 202\}_3$
$C_{94} = \{82, 118, 235\}_3$
$C_{95} = \{1, 120, 243\}_3$
$C_{96} = \{83, 187, 220\}_3$
$C_{97} = \{11, 174, 238\}_3$
$C_{98} = \{38, 54, 137\}_3$
$C_{99} = \{18, 195, 197\}_3$
$C_{100} = \{53, 97, 185\}_3$

$C_{101} = \{139, 189, 210\}_3$
$C_{102} = \{10, 27, 73\}_3$
$C_{103} = \{71, 121, 160\}_3$
$C_{104} = \{95, 193, 231\}_3$
$C_{105} = \{125, 128, 166\}_3$
$C_{106} = \{96, 129, 212\}_3$
$C_{107} = \{113, 164, 180\}_3$
$C_{108} = \{124, 216, 232\}_3$
$C_{109} = \{5, 56, 219\}_3$
$C_{110} = \{24, 75, 251\}_3$
$C_{111} = \{20, 22, 31\}_3$
$C_{112} = \{215, 249, 287\}_3$
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Column cell 112:
Order of the group that is induced on the object is 3
Number of ancestors on 5-sets is 570768.
Number of orbits on 5-sets is 570768.
With 16 orbits on the object
Orbit lengths: 3^{16}
The points by ranks:

i	Rank	i	Rank	i	Rank	i	Rank
0	0	12	31157	24	99446	36	47962
1	1	13	100399	25	61978	37	95898
2	372	14	87577	26	57644	38	40665
3	373	15	30768	27	79196	39	58770
4	381	16	26083	28	37146	40	72120
5	2149	17	46338	29	40367	41	67153
6	19153	18	67349	30	87764	42	87059
7	94929	19	21369	31	101949	43	103025
8	60678	20	90991	32	95567	44	13706
9	44155	21	54441	33	88531	45	65015
10	19395	22	17118	34	21525	46	90045
11	28542	23	98561	35	32524	47	73231

The points:

$$P_0 = (0,1,0,0,0)P_1 = (0,0,1,0,0)P_2 = (0,1,28,46,28)P_3 = (0,1,7,23,14)$$
$$P_4 = (0,1,36,14,31)P_5 = (0,1,42,36,38)P_6 = (1,14,37,37,19)P_7 = (1,32,42,33,39)$$
$$P_8 = (1,4,1,16,32)P_9 = (1,11,26,9,36)P_{10} = (1,15,38,12,19)P_{11} = (1,5,5,1,21)$$
$$P_{12} = (1,21,4,43,33)P_{13} = (1,6,2,39,31)P_{14} = (1,14,17,36,26)P_{15} = (1,2,14,39,33)$$
$$P_{16} = (1,46,31,5,6)P_{17} = (1,44,29,44,34)P_{18} = (1,28,24,3,42)P_{19} = (1,41,15,17,8)$$
$$P_{20} = (1,15,46,29,41)P_{21} = (1,13,40,6,15)P_{22} = (1,6,16,35,12)P_{23} = (1,19,38,25,35)$$
$$P_{24} = (1,16,14,7,35)P_{25} = (1,40,29,21,32)P_{26} = (1,37,16,38,45)P_{27} = (1,27,7,26,18)$$
$$P_{28} = (1,14,9,41,29)P_{29} = (1,29,15,40,22)P_{30} = (1,38,41,25,26)P_{31} = (1,10,33,4,23)$$
$$P_{32} = (1,31,15,23,39)P_{33} = (1,12,2,37,26)P_{34} = (1,45,20,46,8)P_{35} = (1,5,23,40,30)$$
$$P_{36} = (1,6,7,25,34)P_{37} = (1,30,44,25,28)P_{38} = (1,40,31,44,22)P_{39} = (1,34,32,43,2)$$
$$P_{40} = (1,5,43,6,11)P_{41} = (1,42,17,2,42)P_{42} = (1,42,2,4,14)P_{43} = (1,14,42,3,23)$$
$$P_{44} = (1,39,39,11,24)P_{45} = (1,18,37,39,7)P_{46} = (1,5,40,10,41)P_{47} = (1,17,28,18,44)$$

Stabilizer of order 3 is generated by:

$$g_1 = \begin{bmatrix} 21 & 0 & 22 & 15 & 3 \\ 0 & 0 & 44 & 0 & 0 \\ 46 & 26 & 43 & 4 & 14 \\ 38 & 0 & 34 & 28 & 29 \\ 34 & 0 & 3 & 11 & 6 \end{bmatrix}$$

with 0 fixed points

3.6 Isomorphism Type 5

Stabilizer has order 8
Plane intersection type is $5^4\ 4^{327}\ 3^{15948}$
Plane invariant is

$$\begin{bmatrix} 5 & 0 & 0 & 0 \\ 0 & 5 & 0 & 0 \\ 0 & 0 & 5 & 0 \\ 0 & 0 & 0 & 5 \end{bmatrix}$$

$\rightarrow$	4_1
20_0	1
28_2	0

$\downarrow$	4_1
20_0	5
28_2	0

$C_0 = \{1,3,4,5,9,10,11,13,14,15,21,22,25,29,30,34,38,39,44,47\}_{20}$
$C_1 = \{0,1,2,3\}_4$

$C_2 = \{0, 2, 6, 7, 8, 12, 16, 17, 18, 19, 20, 23, 24, 26, 27, 28, 31, 32, 33, 35, 36, 37, 40, 41, 42, 43, 45, 46\}_{28}$

$\rightarrow$	4_1	4_2	8_{10}	4_{11}	8_9	8_{13}	8_{15}	8_{16}	16_{14}	8_{17}	24_{18}	16_{12}	8_{20}	8_{21}	8_{22}	4_{23}	8_{19}	8_{26}	8_{25}	8_{27}	8_{28}	16_{29}	8_{30}	8_{24}	4
4_0	1	2	4	2	2	2	2	2	4	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	
8_5	1	0	0	0	2	1	1	1	0	0	0	4	2	2	2	1	1	1	1	1	1	2	1	0	
8_4	1	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	2	2	1	0	0	0	0	2	
4_3	0	0	4	0	0	2	0	0	0	2	0	0	4	0	0	0	0	0	0	2	0	0	0	4	
8_7	0	0	0	0	0	1	1	0	4	1	3	0	0	0	0	0	1	0	1	1	2	2	1	0	
8_6	0	0	0	1	1	0	1	1	0	1	3	0	0	2	1	0	0	1	1	1	1	2	0	0	
8_8	0	0	0	0	0	0	0	1	0	0	3	2	0	0	1	1	0	0	0	0	0	2	2	0	

$\downarrow$	4_1	4_2	8_{10}	4_{11}	8_9	8_{13}	8_{15}	8_{16}	16_{14}	8_{17}	24_{18}	16_{12}	8_{20}	8_{21}	8_{22}	4_{23}	8_{19}	8_{26}	8_{25}	8_{27}	8_{28}	16_{29}	8_{30}	8_{24}	4
4_0	1	2	2	2	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
8_5	2	0	0	0	2	1	1	1	0	0	0	2	2	2	2	2	1	1	1	1	1	1	1	0	
8_4	2	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	2	1	0	0	0	0	2	
4_3	0	0	2	0	0	1	0	0	0	1	0	0	2	0	0	0	0	0	0	1	0	0	0	2	
8_7	0	0	0	0	0	1	1	0	2	1	1	0	0	0	0	0	1	0	1	1	2	1	1	0	
8_6	0	0	0	2	1	0	1	1	0	1	1	0	0	2	1	0	0	1	1	1	1	1	0	0	
8_8	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	2	0	0	0	0	0	1	2	0	

$C_0 = \{1, 3, 21, 39\}_4$
$C_1 = \{11, 205, 225, 278\}_4$
$C_2 = \{66, 68, 277, 323\}_4$
$C_3 = \{0, 2, 28, 31\}_4$
$C_4 = \{11, 15, 22, 25, 29, 30, 34, 38\}_8$
$C_5 = \{4, 5, 9, 10, 13, 14, 44, 47\}_8$
$C_6 = \{16, 20, 23, 26, 33, 37, 40, 46\}_8$
$C_7 = \{7, 12, 18, 19, 27, 32, 42, 43\}_8$
$C_8 = \{6, 8, 17, 24, 35, 36, 41, 45\}_8$
$C_9 = \{49, 72, 80, 142, 161, 244, 262, 265\}_8$
$C_{10} = \{31, 96, 187, 188, 257, 264, 322, 326\}_8$
$C_{11} = \{64, 116, 204, 269\}_4$
$C_{12} = \{10, 13, 43, 47, 57, 63, 85, 99, 105, 111, 127, 181, 203, 233, 239, 306\}_{16}$
$C_{13} = \{37, 84, 100, 177, 198, 273, 327, 328\}_8$
$C_{14} = \{15, 29, 34, 131, 143, 144, 150, 195, 218, 229, 238, 272, 288, 297, 312, 313\}_{16}$
$C_{15} = \{41, 48, 102, 126, 137, 160, 245, 299\}_8$
$C_{16} = \{42, 53, 123, 146, 176, 186, 261, 279\}_8$
$C_{17} = \{9, 94, 98, 235, 236, 276, 282, 318\}_8$
$C_{18} = \{2, 5, 27, 33, 67, 108, 141, 145, 152, 168, 179, 182, 192, 197, 202, 221, 228, 230, 237, 285, 286, 293, 301, 302\}_{24}$
$C_{19} = \{12, 17, 22, 24, 107, 110, 178, 256\}_8$
$C_{20} = \{62, 97, 119, 169, 194, 303, 314, 329\}_8$
$C_{21} = \{28, 60, 101, 133, 196, 242, 292, 295\}_8$
$C_{22} = \{8, 32, 55, 87, 122, 151, 180, 185\}_8$
$C_{23} = \{73, 148, 157, 189\}_4$
$C_{24} = \{90, 106, 136, 159, 163, 166, 167, 240\}_8$
$C_{25} = \{4, 88, 120, 190, 226, 267, 270, 320\}_8$
$C_{26} = \{46, 54, 77, 79, 140, 184, 319, 324\}_8$
$C_{27} = \{25, 38, 39, 121, 125, 155, 165, 170\}_8$
$C_{28} = \{19, 44, 82, 117, 128, 281, 287, 298\}_8$
$C_{29} = \{7, 45, 52, 56, 70, 78, 93, 114, 129, 149, 174, 191, 199, 201, 283, 291\}_{16}$
$C_{30} = \{92, 112, 193, 227, 248, 254, 280, 307\}_8$
$C_{31} = \{71, 74, 220, 223, 224, 241, 253, 294\}_8$
$C_{32} = \{104, 118, 156, 300\}_4$
$C_{33} = \{1, 20, 40, 51, 59, 83, 173, 266\}_8$
$C_{34} = \{162\}_1$
$C_{35} = \{16, 75, 113, 147, 172, 222, 234, 290\}_8$
$C_{36} = \{35, 132, 164, 250, 259, 309, 315, 316\}_8$
$C_{37} = \{18, 76, 81, 130, 139, 249, 258, 289\}_8$
$C_{38} = \{26, 95, 115, 213, 216, 231, 304, 321\}_8$
$C_{39} = \{0, 69, 154, 183, 206, 243, 246, 274\}_8$

$C_{40} = \{23, 61, 89, 124, 252, 305, 325, 330\}_8$
$C_{41} = \{6, 200, 268, 284\}_4$
$C_{42} = \{3, 21, 50, 65, 134, 135, 138, 214, 217, 219, 251, 263, 275, 310, 311, 317\}_{16}$
$C_{43} = \{14, 103, 153, 171, 215, 255, 260, 271\}_8$
$C_{44} = \{207, 208, 209, 210, 211, 212\}_6$
$C_{45} = \{30, 36, 58, 91, 158, 232, 296, 308\}_8$
$C_{46} = \{86, 109, 175, 247\}_4$
Column cell 1:
Column cell 2:
Column cell 9:
Column cell 10:
Column cell 11:
Column cell 12:
Column cell 13:
Column cell 14:
Column cell 15:
Column cell 16:
Column cell 17:
Column cell 18:
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Column cell 28:
Column cell 29:
Column cell 30:
Column cell 31:
Column cell 32:
Column cell 33:
Column cell 34:
Column cell 35:
Column cell 36:
Column cell 37:
Column cell 38:
Column cell 39:
Column cell 40:
Column cell 41:
Column cell 42:
Column cell 43:
Column cell 44:
Column cell 45:
Column cell 46:
Order of the group that is induced on the object is 8
Number of ancestors on 5-sets is 323478.
Number of orbits on 5-sets is 214291.
With 7 orbits on the object
Orbit lengths: $4^2,\ 8^5$
The points by ranks:

i	Rank	i	Rank	i	Rank	i	Rank
0	0	12	29803	24	44353	36	92366
1	1	13	80810	25	54863	37	43371
2	372	14	42456	26	26275	38	67270
3	373	15	73472	27	39662	39	14203
4	605	16	70277	28	14183	40	15275
5	12991	17	41082	29	30096	41	73912
6	54361	18	639	30	62693	42	12561
7	96842	19	43520	31	15724	43	1946
8	13541	20	79538	32	32795	44	71150
9	876	21	28676	33	38868	45	92325
10	83463	22	56661	34	76106	46	78770
11	39465	23	16252	35	17130	47	20663

The points:

$$P_0 = (0,1,0,0,0)P_1 = (0,0,1,0,0)P_2 = (0,1,28,46,28)P_3 = (0,1,7,23,14)$$

$$P_4 = (0,1,42,35,27)P_5 = (1,32,3,41,24)P_6 = (1,32,25,3,15)P_7 = (1,37,21,36,28)$$

$$P_8 = (1,8,37,17,24)P_9 = (0,1,18,24,11)P_{10} = (1,17,3,8,17)P_{11} = (1,23,20,32,37)$$

$$P_{12} = (1,31,26,14,33)P_{13} = (1,35,44,11,18)P_{14} = (1,22,39,27,3)P_{15} = (1,37,27,20,44)$$

$$P_{16} = (1,37,25,30,13)P_{17} = (1,28,1,35,22)P_{18} = (0,1,17,21,35)P_{19} = (1,36,1,19,3)$$

$$P_{20} = (1,9,1,36,18)P_{21} = (1,44,22,21,21)P_{22} = (1,4,25,27,45)P_{23} = (1,26,30,7,16)$$

$$P_{24} = (1,7,8,18,36)P_{25} = (1,7,42,43,15)P_{26} = (1,32,8,12,6)P_{27} = (1,12,27,9,37)$$

$$P_{28} = (1,7,4,36,24)P_{29} = (1,32,21,38,33)P_{30} = (1,29,26,16,38)P_{31} = (1,43,43,43,16)$$

$$P_{32} = (1,46,20,21,30)P_{33} = (1,44,39,26,37)P_{34} = (1,33,5,46,25)P_{35} = (1,30,22,35,12)$$

$$P_{36} = (1,39,39,32,20)P_{37} = (1,24,17,36,3)P_{38} = (1,39,22,12,42)P_{39} = (1,3,25,36,24)$$

$$P_{40} = (1,41,46,26,16)P_{41} = (1,35,10,23,44)P_{42} = (1,10,46,9,1)P_{43} = (0,1,42,17,39)$$

$$P_{44} = (1,45,44,25,11)P_{45} = (1,31,46,25,20)P_{46} = (1,38,22,15,10)P_{47} = (1,16,8,13,19)$$

Stabilizer of order 8 is generated by:

$$g_1 = \begin{bmatrix} 21 & 0 & 0 & 0 & 0 \\ 0 & 26 & 0 & 0 & 0 \\ 0 & 44 & 26 & 25 & 5 \\ 0 & 5 & 0 & 21 & 0 \\ 0 & 25 & 0 & 0 & 21 \end{bmatrix}$$

with 50 fixed points

$$g_2 = \begin{bmatrix} 40 & 12 & 0 & 34 & 19 \\ 0 & 38 & 30 & 9 & 30 \\ 6 & 29 & 38 & 32 & 32 \\ 33 & 32 & 30 & 5 & 32 \\ 17 & 32 & 9 & 35 & 5 \end{bmatrix}$$

with 50 fixed points

$$g_3 = \begin{bmatrix} 16 & 0 & 40 & 5 & 35 \\ 20 & 14 & 14 & 14 & 38 \\ 0 & 0 & 14 & 0 & 0 \\ 41 & 0 & 38 & 32 & 40 \\ 26 & 0 & 14 & 20 & 32 \end{bmatrix}$$

with 48 fixed points

3.7 Isomorphism Type 6

Stabilizer has order 12
Plane intersection type is $6^2\ 5^6\ 4^{267}\ 3^{16128}$
Plane invariant is

$$\begin{bmatrix} 6 & 0 \\ 0 & 6 \end{bmatrix}$$

$\rightarrow$	2_1
12_0	1
36_2	0

$\downarrow$	2_1
12_0	6
36_2	0

$C_0 = \{1, 3, 9, 13, 17, 19, 27, 30, 33, 34, 43, 46\}_{12}$
$C_1 = \{0, 1\}_2$
$C_2 = \{0, 2, 4, 5, 6, 7, 8, 10, 11, 12, 14, 15, 16, 18, 20, 21, 22, 23, 24, 25, 26, 28, 29, 31, 32, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 47\}_{36}$

$\rightarrow$	2_1	6_2	18_3	24_9	12_{11}	6_{10}	6_{12}	36_8	12_{14}	36_{16}	12_{17}	12_{15}	3_{13}	6_{18}	24_{20}	12_{21}	6_{22}	12_{19}	12_{24}	6_{23}	12_{25}
12_0	1	1	3	4	2	1	1	3	1	3	1	1	0	0	0	0	0	0	0	0	0
12_4	0	1	3	2	1	0	0	6	1	3	1	0	1	1	4	2	1	1	1	0	0
6_6	0	1	0	4	0	2	0	0	2	0	0	0	0	2	4	0	0	2	2	2	0
12_5	0	0	0	0	1	0	1	3	1	6	1	2	0	0	2	1	0	2	0	1	2
6_7	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	2	2	0	4	0	4

$\downarrow$	2_1	6_2	18_3	24_9	12_{11}	6_{10}	6_{12}	36_8	12_{14}	36_{16}	12_{17}	12_{15}	3_{13}	6_{18}	24_{20}	12_{21}	6_{22}	12_{19}	12_{24}	6_{23}	12_{25}
12_0	6	2	2	2	2	2	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0
12_4	0	2	2	1	1	0	0	2	1	1	1	0	4	2	2	2	2	1	1	0	0
6_6	0	1	0	1	0	2	0	0	1	0	0	0	0	2	1	0	0	1	1	2	0
12_5	0	0	0	0	1	0	2	1	1	2	1	2	0	0	1	1	0	2	0	2	2
6_7	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	2	0	2	0	2

$C_0 = \{1, 3, 9, 13, 17, 19, 27, 30, 33, 34, 43, 46\}_{12}$
$C_1 = \{50, 161\}_2$
$C_2 = \{12, 87, 100, 139, 151, 200\}_6$
$C_3 = \{2, 18, 39, 49, 89, 108, 110, 111, 126, 138, 162, 166, 169, 172, 180, 224, 237, 265\}_{18}$
$C_4 = \{5, 6, 10, 14, 18, 22, 24, 26, 29, 31, 32, 35\}_{12}$
$C_5 = \{4, 15, 16, 20, 21, 23, 37, 38, 40, 41, 45, 47\}_{12}$
$C_6 = \{0, 2, 11, 12, 36, 44\}_6$
$C_7 = \{7, 8, 25, 28, 39, 42\}_6$
$C_8 = \{13, 27, 30, 36, 58, 63, 68, 76, 86, 88, 90, 96, 103, 105, 106, 107, 112, 116, 121, 124, 130, 136, 142, 144, 145, 146, 170, 197, 199, 219, 226, 232, 25$
$C_9 = \{4, 7, 15, 28, 48, 53, 57, 79, 135, 143, 154, 167, 168, 179, 186, 187, 192, 195, 214, 233, 235, 236, 253, 268\}_{24}$
$C_{10} = \{51, 73, 102, 133, 208, 274\}_6$
$C_{11} = \{25, 52, 54, 59, 61, 147, 176, 184, 188, 207, 218, 248\}_{12}$
$C_{12} = \{1, 95, 101, 115, 148, 256\}_6$
$C_{13} = \{38, 99, 129\}_3$
$C_{14} = \{9, 32, 42, 113, 114, 118, 191, 217, 238, 245, 261, 264\}_{12}$
$C_{15} = \{5, 14, 34, 37, 62, 77, 92, 181, 211, 213, 225, 258\}_{12}$
$C_{16} = \{3, 8, 16, 23, 26, 40, 60, 64, 65, 70, 74, 82, 84, 97, 104, 132, 141, 149, 165, 189, 194, 201, 202, 204, 205, 215, 220, 228, 240, 242, 243, 246, 251, 2$
$C_{17} = \{31, 67, 80, 85, 117, 210, 212, 216, 239, 250, 254, 259\}_{12}$
$C_{18} = \{41, 119, 123, 140, 152, 198\}_6$
$C_{19} = \{17, 19, 109, 120, 128, 131, 153, 163, 164, 203, 241, 247\}_{12}$
$C_{20} = \{10, 29, 35, 43, 69, 71, 75, 78, 81, 83, 122, 125, 127, 137, 155, 159, 160, 177, 178, 182, 193, 227, 266, 270\}_{24}$
$C_{21} = \{6, 20, 24, 33, 44, 46, 55, 156, 171, 174, 175, 229\}_{12}$
$C_{22} = \{66, 94, 185, 196, 221, 255\}_6$
$C_{23} = \{93, 134, 190, 206, 244, 262\}_6$
$C_{24} = \{21, 22, 45, 56, 91, 158, 209, 222, 223, 249, 252, 260\}_{12}$
$C_{25} = \{0, 11, 47, 72, 98, 150, 157, 173, 183, 230, 231, 234\}_{12}$
Column cell 1:
Column cell 2:
Column cell 3:
Column cell 8:
Column cell 9:

Column cell 10:
Column cell 11:
Column cell 12:
Column cell 13:
Column cell 14:
Column cell 15:
Column cell 16:
Column cell 17:
Column cell 18:
Column cell 19:
Column cell 20:
Column cell 21:
Column cell 22:
Column cell 23:
Column cell 24:
Column cell 25:
Order of the group that is induced on the object is 12
Number of ancestors on 5-sets is 142945.
Number of orbits on 5-sets is 142945.
With 5 orbits on the object
Orbit lengths: $6^2,\ 12^3$
The points by ranks:

i	Rank	i	Rank	i	Rank	i	Rank
0	0	12	79945	24	57829	36	67384
1	1	13	58720	25	88063	37	74056
2	372	14	73295	26	56022	38	54702
3	373	15	56636	27	73880	39	12138
4	605	16	62634	28	69136	40	91928
5	17835	17	16899	29	28556	41	18336
6	22907	18	70903	30	66608	42	95734
7	17125	19	70489	31	14143	43	30580
8	63741	20	44787	32	94915	44	17451
9	46431	21	24383	33	43028	45	92001
10	88691	22	59563	34	94944	46	60787
11	67491	23	79258	35	53513	47	77428

The points:

$$P_0 = (0,1,0,0,0)P_1 = (0,0,1,0,0)P_2 = (0,1,28,46,28)P_3 = (0,1,7,23,14)$$

$$P_4 = (0,1,42,35,27)P_5 = (1,40,11,22,12)P_6 = (1,3,28,7,8)P_7 = (1,20,33,35,12)$$

$$P_8 = (1,42,42,29,38)P_9 = (1,32,37,8,34)P_{10} = (1,20,46,17,26)P_{11} = (1,8,8,13,42)$$

$$P_{12} = (1,22,20,46,18)P_{13} = (1,32,9,20,2)P_{14} = (1,18,37,3,44)P_{15} = (1,42,27,27,45)$$

$$P_{16} = (1,25,32,42,38)P_{17} = (1,24,37,12,16)P_{18} = (1,14,37,34,11)P_{19} = (1,1,37,26,13)$$

$$P_{20} = (1,45,38,6,36)P_{21} = (1,23,46,13,27)P_{22} = (1,18,17,11,2)P_{23} = (1,39,35,39,18)$$

$$P_{24} = (1,34,12,40,45)P_{25} = (1,36,3,41,26)P_{26} = (1,6,14,10,15)P_{27} = (1,21,1,23,44)$$

$$P_{28} = (1,5,39,3,13)P_{29} = (1,26,10,1,21)P_{30} = (1,20,35,14,7)P_{31} = (1,16,34,38,24)$$

$$P_{32} = (1,16,37,33,39)P_{33} = (1,46,22,7,3)P_{34} = (1,29,35,33,39)P_{35} = (1,7,4,2,9)$$

$$P_{36} = (1,1,14,3,42)P_{37} = (1,43,41,24,44)P_{38} = (1,45,19,15,15)P_{39} = (1,2,14,18,1)$$

$$P_{40} = (1,42,36,16,20)P_{41} = (1,42,32,25,12)P_{42} = (1,5,19,10,28)P_{43} = (1,40,10,32,33)$$

$$P_{44} = (1,32,37,7,12)P_{45} = (1,20,31,23,20)P_{46} = (1,14,34,13,32)P_{47} = (1,9,27,32,10)$$

Stabilizer of order 12 is generated by:

$$g_1 = \begin{bmatrix} 8 & 0 & 0 & 13 & 35 \\ 0 & 40 & 0 & 0 & 0 \\ 0 & 46 & 40 & 24 & 33 \\ 41 & 33 & 0 & 23 & 25 \\ 30 & 24 & 0 & 14 & 23 \end{bmatrix}$$

with 48 fixed points

$$g_2 = \begin{bmatrix} 24 & 32 & 0 & 8 & 39 \\ 0 & 28 & 32 & 19 & 32 \\ 16 & 16 & 28 & 40 & 20 \\ 43 & 20 & 32 & 16 & 6 \\ 4 & 40 & 19 & 22 & 16 \end{bmatrix}$$

with 48 fixed points

$$g_3 = \begin{bmatrix} 9 & 2 & 33 & 25 & 12 \\ 40 & 34 & 1 & 7 & 15 \\ 1 & 14 & 34 & 13 & 32 \\ 6 & 32 & 15 & 22 & 15 \\ 36 & 13 & 7 & 16 & 22 \end{bmatrix}$$

with 48 fixed points

3.8 Isomorphism Type 7

Stabilizer has order 24
Plane intersection type is $4^{384}\ 3^{15760}$
Plane invariant is too big (384 planes)

$\rightarrow$	24_1	72_3	240_5	48_4
24_0	4	9	20	2
24_2	0	3	20	6

$\downarrow$	24_1	72_3	240_5	48_4
24_0	4	3	2	1
24_2	0	1	2	3

$C_0 = \{0, 2, 3, 4, 6, 7, 8, 9, 13, 14, 19, 24, 26, 30, 31, 32, 35, 37, 39, 40, 41, 42, 45, 46\}_{24}$
$C_1 = \{0, 8, 21, 58, 76, 81, 85, 118, 122, 129, 172, 250, 256, 283, 290, 297, 302, 332, 341, 342, 364, 379, 380, 383\}_{24}$
$C_2 = \{1, 5, 10, 11, 12, 15, 16, 17, 18, 20, 21, 22, 23, 25, 27, 28, 29, 33, 34, 36, 38, 43, 44, 47\}_{24}$
$C_3 = \{3, 6, 11, 30, 37, 53, 60, 65, 67, 68, 71, 78, 79, 80, 87, 92, 94, 99, 101, 108, 113, 121, 130, 131, 135, 141, 143, 150, 154, 156, 159, 164, 168, 175, 17$
$C_4 = \{5, 13, 20, 32, 41, 42, 54, 62, 66, 72, 73, 82, 88, 89, 93, 95, 97, 112, 115, 136, 170, 184, 187, 189, 190, 205, 208, 211, 215, 218, 223, 227, 236, 238,$
$C_5 = \{1, 2, 4, 7, 9, 10, 12, 14, 15, 16, 17, 18, 19, 22, 23, 24, 25, 26, 27, 28, 29, 31, 33, 34, 35, 36, 38, 39, 40, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 55, 56, 5$

$\rightarrow$	24_1	72_3	240_5	48_4
24_0	4	9	20	2
24_2	0	3	20	6

$\downarrow$	24_1	72_3	240_5	48_4
24_0	4	3	2	1
24_2	0	1	2	3

$C_0 = \{0, 2, 3, 4, 6, 7, 8, 9, 13, 14, 19, 24, 26, 30, 31, 32, 35, 37, 39, 40, 41, 42, 45, 46\}_{24}$
$C_1 = \{0, 8, 79, 97, 100, 125, 133, 137, 172, 195, 199, 201, 202, 220, 221, 227, 237, 246, 299, 319, 339, 342, 346, 354\}_{24}$
$C_2 = \{1, 5, 10, 11, 12, 15, 16, 17, 18, 20, 21, 22, 23, 25, 27, 28, 29, 33, 34, 36, 38, 43, 44, 47\}_{24}$
$C_3 = \{1, 28, 32, 34, 38, 41, 47, 49, 51, 58, 61, 75, 78, 84, 99, 102, 104, 111, 115, 132, 146, 147, 150, 151, 157, 160, 162, 167, 181, 183, 185, 196, 206, 21$
$C_4 = \{9, 10, 36, 44, 52, 59, 68, 72, 77, 85, 87, 88, 94, 110, 112, 131, 138, 139, 145, 178, 182, 192, 204, 205, 214, 215, 235, 251, 262, 267, 270, 276, 278,$
$C_5 = \{2, 3, 4, 5, 6, 7, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 29, 30, 31, 33, 35, 37, 39, 40, 42, 43, 45, 46, 48, 50, 53, 54, 55, 56, 57$
Column cell 1:
Column cell 3:
Column cell 4:
Column cell 5:
Order of the group that is induced on the object is 24
Number of ancestors on 5-sets is 129191.

Number of orbits on 5-sets is 71346.
With 2 orbits on the object
Orbit lengths: 24^2
The points by ranks:

i	Rank	i	Rank	i	Rank	i	Rank
0	0	12	85789	24	96481	36	91632
1	1	13	65907	25	10925	37	28949
2	372	14	73306	26	13189	38	15810
3	373	15	29778	27	103160	39	27761
4	605	16	30018	28	104322	40	24056
5	18006	17	45410	29	40019	41	91412
6	62860	18	43520	30	18168	42	93135
7	24913	19	25862	31	105667	43	86657
8	75771	20	73285	32	87987	44	18744
9	97285	21	78716	33	97621	45	53196
10	21821	22	75779	34	92328	46	48245
11	26976	23	22491	35	86623	47	61598

The points:

$$P_0 = (0,1,0,0,0)P_1 = (0,0,1,0,0)P_2 = (0,1,28,46,28)P_3 = (0,1,7,23,14)$$

$$P_4 = (0,1,42,35,27)P_5 = (1,28,36,6,12)P_6 = (1,32,9,6,38)P_7 = (1,18,2,23,27)$$

$$P_8 = (1,8,8,35,25)P_9 = (1,23,26,34,28)P_{10} = (1,8,37,4,8)P_{11} = (1,1,36,33,6)$$

$$P_{12} = (1,2,28,6,14)P_{13} = (1,18,25,43,7)P_{14} = (1,12,32,3,44)P_{15} = (1,44,29,14,33)$$

$$P_{16} = (1,41,45,11,33)P_{17} = (1,19,19,3,36)P_{18} = (1,36,1,19,3)P_{19} = (1,37,27,37,6)$$

$$P_{20} = (1,32,12,3,44)P_{21} = (1,17,27,1,10)P_{22} = (1,3,37,35,25)P_{23} = (1,39,20,14,8)$$

$$P_{24} = (1,37,3,43,28)P_{25} = (1,40,40,44,1)P_{26} = (1,39,11,33,24)P_{27} = (1,17,32,9,23)$$

$$P_{28} = (1,24,14,8,46)P_{29} = (1,27,28,19,22)P_{30} = (1,44,39,41,12)P_{31} = (1,27,24,38,46)$$

$$P_{32} = (1,8,25,23,26)P_{33} = (1,17,8,27,28)P_{34} = (1,4,16,32,20)P_{35} = (1,9,24,8,14)$$

$$P_{36} = (1,43,35,14,20)P_{37} = (1,32,4,14,21)P_{38} = (1,5,13,37,16)P_{39} = (1,19,40,13,21)$$

$$P_{40} = (1,39,39,15,27)P_{41} = (1,12,27,15,41)P_{42} = (1,12,42,10,20)P_{43} = (1,21,17,8,14)$$

$$P_{44} = (1,45,5,36,12)P_{45} = (1,28,36,8,9)P_{46} = (1,8,18,18,5)P_{47} = (1,24,1,33,32)$$

Stabilizer of order 24 is generated by:

$$g_1 = \begin{bmatrix} 36 & 5 & 0 & 37 & 1 \\ 0 & 20 & 43 & 27 & 43 \\ 26 & 19 & 20 & 44 & 23 \\ 24 & 23 & 43 & 13 & 17 \\ 42 & 44 & 27 & 26 & 13 \end{bmatrix}$$

with 50 fixed points

$$g_2 = \begin{bmatrix} 41 & 19 & 12 & 29 & 9 \\ 16 & 6 & 24 & 30 & 18 \\ 21 & 24 & 4 & 32 & 17 \\ 35 & 11 & 32 & 41 & 20 \\ 9 & 46 & 37 & 9 & 16 \end{bmatrix}$$

with 2 fixed points

3.9 Isomorphism Type 8

Stabilizer has order 92
Plane intersection type is $4^{207}\ 3^{16468}$
Plane invariant is too big (207 planes)

$\rightarrow$	23_1	184_3
2_0	23	0
46_2	1	16

$\downarrow$	23_1	184_3
2_0	2	0
46_2	2	4

$C_0 = \{0, 2\}_2$
$C_1 = \{3, 17, 30, 31, 32, 42, 65, 66, 72, 78, 81, 97, 115, 134, 150, 153, 156, 179, 191, 193, 196, 197, 200\}_{23}$
$C_2 = \{1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 4$
$C_3 = \{0, 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 33, 34, 35, 36, 37, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48$

$\rightarrow$	23_1	184_3
2_0	23	0
46_2	1	16

$\downarrow$	23_1	184_3
2_0	2	0
46_2	2	4

$C_0 = \{0, 2\}_2$
$C_1 = \{12, 13, 19, 22, 48, 49, 65, 87, 98, 102, 109, 110, 115, 128, 129, 141, 148, 159, 166, 173, 201, 205, 206\}_{23}$
$C_2 = \{1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 4$
$C_3 = \{0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 20, 21, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46,$
Column cell 1:
Column cell 3:
Order of the group that is induced on the object is 92
Number of ancestors on 5-sets is 18744.
Number of orbits on 5-sets is 18744.
With 2 orbits on the object
Orbit lengths: 2, 46
The points by ranks:

i	Rank	i	Rank	i	Rank	i	Rank
0	0	12	17175	24	876	36	86451
1	1	13	98884	25	24966	37	30931
2	372	14	50522	26	74067	38	28048
3	373	15	74505	27	71692	39	14203
4	605	16	94286	28	82936	40	53382
5	62228	17	83463	29	46784	41	73912
6	47738	18	84390	30	58821	42	96828
7	92366	19	73057	31	23802	43	27765
8	44353	20	13541	32	98031	44	71150
9	54717	21	104635	33	17305	45	68883
10	24833	22	28676	34	51641	46	64928
11	36830	23	23893	35	91632	47	28635

The points:

$$P_0 = (0, 1, 0, 0, 0) P_1 = (0, 0, 1, 0, 0) P_2 = (0, 1, 28, 46, 28) P_3 = (0, 1, 7, 23, 14)$$

$$P_4 = (0, 1, 42, 35, 27) P_5 = (1, 46, 10, 37, 32) P_6 = (1, 46, 10, 21, 34) P_7 = (1, 39, 39, 32, 20)$$

$$P_8 = (1, 7, 8, 18, 36) P_9 = (1, 39, 40, 15, 15) P_{10} = (1, 2, 17, 37, 27) P_{11} = (1, 17, 7, 38, 29)$$

$$P_{12} = (1, 42, 37, 31, 12) P_{13} = (1, 37, 7, 6, 35) P_{14} = (1, 41, 30, 8, 40) P_{15} = (1, 12, 42, 43, 44)$$

$$P_{16} = (1, 30, 13, 43, 39) P_{17} = (1, 17, 3, 8, 17) P_{18} = (1, 35, 45, 40, 17) P_{19} = (1, 18, 8, 17, 44)$$

$$P_{20} = (1, 8, 37, 17, 24) P_{21} = (1, 16, 42, 15, 46) P_{22} = (1, 44, 22, 21, 21) P_{23} = (1, 36, 3, 36, 27)$$

$$P_{24} = (0, 1, 18, 24, 11) P_{25} = (1, 19, 44, 16, 27) P_{26} = (1, 6, 12, 40, 44) P_{27} = (1, 2, 9, 41, 11)$$

$$P_{28} = (1, 13, 39, 33, 43) P_{29} = (1, 15, 23, 23, 34) P_{30} = (1, 5, 11, 19, 2) P_{31} = (1, 16, 36, 3, 27)$$

$$P_{32} = (1, 12, 24, 28, 35) P_{33} = (1, 36, 8, 19, 12) P_{34} = (1, 33, 38, 45, 40) P_{35} = (1, 43, 35, 14, 20)$$

$$P_{36} = (1, 7, 37, 15, 14) P_{37} = (1, 42, 3, 46, 33) P_{38} = (1, 11, 44, 6, 21) P_{39} = (1, 3, 25, 36, 24)$$

$$P_{40} = (1, 5, 5, 18, 9) P_{41} = (1, 35, 10, 23, 44) P_{42} = (1, 44, 39, 31, 28) P_{43} = (1, 4, 2, 13, 21)$$

$$P_{44} = (1, 45, 44, 25, 11) P_{45} = (1, 36, 34, 7, 13) P_{46} = (1, 20, 5, 46, 7) P_{47} = (1, 23, 40, 30, 21)$$

Stabilizer of order 92 is generated by:

$$g_1 = \begin{bmatrix} 2 & 0 & 0 & 0 & 0 \\ 0 & 45 & 0 & 0 & 0 \\ 0 & 40 & 45 & 27 & 43 \\ 0 & 43 & 0 & 2 & 0 \\ 0 & 27 & 0 & 0 & 2 \end{bmatrix}$$

with 50 fixed points

$$g_2 = \begin{bmatrix} 21 & 0 & 0 & 12 & 7 \\ 0 & 42 & 0 & 0 & 0 \\ 22 & 1 & 36 & 36 & 43 \\ 8 & 27 & 0 & 7 & 11 \\ 32 & 35 & 0 & 15 & 32 \end{bmatrix}$$

with 4 fixed points

$$g_3 = \begin{bmatrix} 13 & 0 & 0 & 41 & 20 \\ 0 & 40 & 39 & 7 & 39 \\ 0 & 0 & 40 & 0 & 0 \\ 10 & 0 & 39 & 44 & 2 \\ 44 & 0 & 7 & 3 & 44 \end{bmatrix}$$

with 48 fixed points

3.10 Isomorphism Type 9

Stabilizer has order 103776
Plane intersection type is 3^{17296}
Plane invariant is too big (17296 planes)

$\rightarrow$	17296_1
48_0	1081

$\downarrow$	17296_1
48_0	3

$C_0 = \{0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42,$
$C_1 = \{0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42,$

i	Rank	i	Rank	i	Rank	i	Rank
0	0	12	83455	24	89853	36	54503
1	1	13	14468	25	94734	37	22645
2	372	14	48876	26	65795	38	41456
3	603	15	36802	27	80831	39	98740
4	11101	16	91197	28	100950	40	100680
5	62912	17	69928	29	71983	41	51628
6	27016	18	50269	30	24546	42	55032
7	19778	19	98920	31	62978	43	48193
8	65494	20	29789	32	58064	44	29603
9	25751	21	22335	33	57951	45	72517
10	70075	22	19257	34	13866	46	79807
11	41094	23	12146	35	95975	47	94369

The points:

$$P_0 = (0,1,0,0,0)P_1 = (0,0,1,0,0)P_2 = (0,1,28,46,28)P_3 = (0,1,27,23,7)$$
$$P_4 = (1,25,4,40,1)P_5 = (1,1,7,27,38)P_6 = (1,31,30,25,6)P_7 = (1,10,39,19,19)$$
$$P_8 = (1,30,10,4,7)P_9 = (1,24,18,14,6)P_{10} = (1,16,37,5,13)P_{11} = (1,35,29,35,22)$$
$$P_{12} = (1,32,6,8,17)P_{13} = (1,9,9,24,24)P_{14} = (1,28,9,34,5)P_{15} = (1,46,23,4,29)$$
$$P_{16} = (1,15,15,22,41)P_{17} = (1,31,19,45,13)P_{18} = (1,21,18,34,40)P_{19} = (1,2,36,10,35)$$
$$P_{20} = (1,27,2,14,33)P_{21} = (1,33,15,32,8)P_{22} = (1,31,38,27,19)P_{23} = (1,38,23,18,1)$$
$$P_{24} = (1,2,4,25,41)P_{25} = (1,32,36,9,39)P_{26} = (1,18,4,3,7)P_{27} = (1,34,8,24,18)$$
$$P_{28} = (1,35,45,28,31)P_{29} = (1,18,17,2,11)P_{30} = (1,42,32,32,27)P_{31} = (1,9,1,22,38)$$
$$P_{32} = (1,4,21,19,45)P_{33} = (1,28,18,41,45)P_{34} = (1,28,36,3,24)P_{35} = (1,2,3,35,28)$$
$$P_{36} = (1,3,17,31,15)P_{37} = (1,38,33,37,8)P_{38} = (1,17,27,9,22)P_{39} = (1,18,9,41,35)$$
$$P_{40} = (1,5,13,10,31)P_{41} = (1,40,29,45,40)P_{42} = (1,20,29,2,15)P_{43} = (1,9,42,37,5)$$
$$P_{44} = (1,19,15,7,33)P_{45} = (1,37,34,18,11)P_{46} = (1,43,20,7,18)P_{47} = (1,38,40,8,39)$$

Stabilizer of order 103776 is generated by:

$$g_1 = \begin{bmatrix} 12 & 0 & 0 & 3 & 24 \\ 0 & 24 & 0 & 0 & 0 \\ 0 & 0 & 9 & 0 & 0 \\ 41 & 0 & 0 & 35 & 3 \\ 44 & 0 & 0 & 9 & 46 \end{bmatrix}$$

with 4 fixed points

$$g_2 = \begin{bmatrix} 46 & 44 & 0 & 31 & 36 \\ 0 & 41 & 0 & 0 & 0 \\ 22 & 33 & 41 & 34 & 22 \\ 18 & 22 & 0 & 27 & 35 \\ 39 & 34 & 0 & 22 & 27 \end{bmatrix}$$

with 50 fixed points

$$g_3 = \begin{bmatrix} 26 & 0 & 0 & 33 & 39 \\ 0 & 41 & 26 & 3 & 5 \\ 0 & 0 & 41 & 0 & 0 \\ 43 & 0 & 5 & 37 & 11 \\ 40 & 0 & 3 & 19 & 37 \end{bmatrix}$$

with 50 fixed points

$$g_4 = \begin{bmatrix} 46 & 0 & 0 & 0 & 0 \\ 0 & 43 & 29 & 4 & 29 \\ 0 & 19 & 43 & 14 & 39 \\ 0 & 39 & 29 & 4 & 11 \\ 0 & 14 & 4 & 33 & 4 \end{bmatrix}$$

with 48 fixed points

Chapter 4

The BLT-Sets in Numeric Form

0, 1, 372, 373, 374, 396, 383, 386, 390, 395, 384, 399, 376, 401, 379, 385, 397, 398, 389, 415, 380, 393, 417, 413, 407, 408, 409, 410, 375, 387, 411, 388, 400, 412, 377, 378, 402, 414, 391, 403, 392, 404, 416, 381, 405, 382, 394, 406
0, 1, 372, 373, 374, 396, 383, 386, 390, 395, 384, 399, 376, 401, 379, 11121, 64717, 103849, 49253, 409, 30610, 93904, 375, 72798, 411, 93668, 400, 412, 377, 68384, 56717, 86610, 100592, 70512, 66198, 44350, 15815, 59264, 46461, 12423, 416, 103605, 79873, 405, 63817, 79450, 394, 64241
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37,  0,  0,  0,  0,  0, 10,  0,  0,  0,  0, 33, 10, 18, 13,  0, 13,  0, 37,  0,  0, 18,  0,  0, 37,
32,  0,  0, 21, 24,  0, 23, 33, 24, 33,  0, 43, 23, 15,  3, 35,  3, 33,  3, 13, 13, 15, 24, 43,  3,
37,  0,  0,  0,  0,  0, 30, 15, 37, 45,  0, 11, 30, 18, 13,  0, 13, 45, 17, 43,  0, 18, 37, 41, 17,
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27,  0,  0, 10, 45,  0,  2,  0,  0,  0,  0,  0,  2,  0,  0, 46,  0,  0, 11, 17,  5,  0,  0,  2, 11,
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46,  0,  0, 31, 22,  0,  5, 46, 42, 46,  0,  0,  5,  0,  0, 11,  0, 46, 45, 37, 39,  0, 42, 32, 45,
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32, 17, 27, 18, 45, 46, 19, 45, 31, 30,  8, 44, 30, 19, 36, 15, 37, 36, 28, 30, 35, 45, 25, 13,  0,
24, 38, 46, 14, 12, 23, 36, 34, 24, 19, 19, 24, 36, 11,  4,  6,  4, 19, 23, 36,  7, 11, 24, 15, 23,
21,  0, 22, 15,  3,  0,  0, 44,  0,  0, 46, 26, 43,  4, 14, 38,  0, 34, 28, 29, 34,  0,  3, 11,  6,
21,  0,  0,  0,  0,  0, 26,  0,  0,  0,  0, 44, 26, 25,  5,  0,  5,  0, 21,  0,  0, 25,  0,  0, 21,
40, 12,  0, 34, 19,  0, 38, 30,  9, 30,  6, 29, 38, 32, 32, 33, 32, 30,  5, 32, 17, 32,  9, 35,  5,
16,  0, 40,  5, 35, 20, 14, 14, 14, 38,  0,  0, 14,  0,  0, 41,  0, 38, 32, 40, 26,  0, 14, 20, 32,
 8,  0,  0, 13, 35,  0, 40,  0,  0,  0,  0, 46, 40, 24, 33, 41, 33,  0, 23, 25, 30, 24,  0, 14, 23,
24, 32,  0,  8, 39,  0, 28, 32, 19, 32, 16, 16, 28, 40, 20, 43, 20, 32, 16,  6,  4, 40, 19, 22, 16,
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36,  5,  0, 37,  1,  0, 20, 43, 27, 43, 26, 19, 20, 44, 23, 24, 23, 43, 13, 17, 42, 44, 27, 26, 13,
41, 19, 12, 29,  9, 16,  6, 24, 30, 18, 21, 24,  4, 32, 17, 35, 11, 32, 41, 20,  9, 46, 37,  9, 16,
 2,  0,  0,  0,  0,  0, 45,  0,  0,  0,  0, 40, 45, 27, 43,  0, 43,  0,  2,  0,  0, 27,  0,  0,  2,
21,  0,  0, 12,  7,  0, 42,  0,  0,  0, 22,  1, 36, 36, 43,  8, 27,  0,  7, 11, 32, 35,  0, 15, 32,
13,  0,  0, 41, 20,  0, 40, 39,  7, 39,  0,  0, 40,  0,  0, 10,  0, 39, 44,  2, 44,  0,  7,  3, 44,
12,  0,  0,  3, 24,  0, 24,  0,  0,  0,  0,  0,  9,  0,  0, 41,  0,  0, 35,  3, 44,  0,  0,  9, 46,
46, 44,  0, 31, 36,  0, 41,  0,  0,  0, 22, 33, 41, 34, 22, 18, 22,  0, 27, 35, 39, 34,  0, 22, 27,
26,  0,  0, 33, 39,  0, 41, 26,  3,  5,  0,  0, 41,  0,  0, 43,  0,  5, 37, 11, 40,  0,  3, 19, 37,
46,  0,  0,  0,  0,  0, 43, 29,  4, 29,  0, 19, 43, 14, 39,  0, 39, 29,  4, 11,  0, 14,  4, 33,  4,
};
INT BLT_47_stab_gens_fst[] = { 0, 7, 14, 22, 23, 24, 27, 30, 32, 35};
INT BLT_47_stab_gens_len[] = { 7, 7, 8, 1, 1, 3, 3, 2, 3, 4};
INT BLT_47_make_element_size = 0;
```