BLT-sets of Q(4, 37)

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There are 7 BLT-sets.

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The BLT-Sets

3.1 Isomorphism Type 0

Stabilizer has order 3846816
Plane intersection type is 38
Plane invariant is

$$[\ 38\ ]$$

$\rightarrow$	1_1
38_0	1

$\downarrow$	1_1
38_0	38

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

$\rightarrow$	1_1
38_0	1

$\downarrow$	1_1
38_0	38

$C_0 = \{0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37\}_{38}$
$C_1 = \{0\}_1$
Column cell 1:
Order of the group that is induced on the object is 50616
Number of ancestors on 5-sets is 15.
Number of orbits on 5-sets is 15.
With 1 orbits on the object
Orbit lengths: 38
The points by ranks:

i	Rank
0	0
1	1
2	184
3	185
4	186
5	203
6	188
7	202
8	219
9	217

i	Rank
10	189
11	191
12	187
13	193
14	196
15	205
16	206
17	212
18	215
19	190

i	Rank
20	192
21	194
22	195
23	197
24	198
25	199
26	200
27	201
28	204
29	207

i	Rank
30	208
31	209
32	210
33	211
34	213
35	214
36	216
37	218

The points:

$$P_0 = (0, 1, 0, 0, 0) P_1 = (0, 0, 1, 0, 0) P_2 = (0, 1, 18, 36, 18) P_3 = (0, 1, 23, 18, 9)$$

$$P_4 = (0, 1, 2, 12, 6) P_5 = (0, 1, 8, 24, 12) P_6 = (0, 1, 17, 22, 11) P_7 = (0, 1, 35, 35, 36)$$

$$P_8 = (0, 1, 18, 1, 19) P_9 = (0, 1, 2, 25, 31) P_{10} = (0, 1, 19, 6, 3) P_{11} = (0, 1, 13, 23, 30)$$

$$P_{12} = (0, 1, 15, 9, 23) P_{13} = (0, 1, 32, 11, 24) P_{14} = (0, 1, 22, 17, 27) P_{15} = (0, 1, 6, 5, 21)$$

$$P_{16} = (0, 1, 5, 8, 4) P_{17} = (0, 1, 13, 14, 7) P_{18} = (0, 1, 17, 15, 26) P_{19} = (0, 1, 20, 21, 29)$$

$$P_{20} = (0, 1, 29, 4, 2) P_{21} = (0, 1, 24, 10, 5) P_{22} = (0, 1, 14, 3, 20) P_{23} = (0, 1, 5, 29, 33)$$

$$P_{24} = (0, 1, 6, 32, 16) P_{25} = (0, 1, 31, 30, 15) P_{26} = (0, 1, 8, 13, 25) P_{27} = (0, 1, 35, 2, 1)$$

$$P_{28} = (0, 1, 31, 7, 22) P_{29} = (0, 1, 22, 20, 10) P_{30} = (0, 1, 14, 34, 17) P_{31} = (0, 1, 24, 27, 32)$$

$$P_{32} = (0, 1, 32, 26, 13) P_{33} = (0, 1, 29, 33, 35) P_{34} = (0, 1, 20, 16, 8) P_{35} = (0, 1, 19, 31, 34)$$

$$P_{36} = (0, 1, 15, 28, 14) P_{37} = (0, 1, 23, 19, 28)$$

Stabilizer of order 3846816 is generated by:

$$g_1 = \begin{bmatrix} 19 & 0 & 0 & 0 & 0 \\ 0 & 18 & 0 & 0 & 0 \\ 0 & 0 & 18 & 0 & 0 \\ 0 & 0 & 0 & 18 & 0 \\ 0 & 0 & 0 & 0 & 18 \end{bmatrix}$$

with 1444 fixed points

$$g_2 = \begin{bmatrix} 30 & 0 & 0 & 0 & 0 \\ 0 & 16 & 0 & 0 & 0 \\ 0 & 0 & 10 & 0 & 0 \\ 0 & 0 & 0 & 7 & 0 \\ 0 & 0 & 0 & 0 & 7 \end{bmatrix}$$

with 4 fixed points

$$g_3 = \begin{bmatrix} 3 & 0 & 0 & 0 & 0 \\ 0 & 3 & 0 & 0 & 0 \\ 0 & 0 & 3 & 0 & 0 \\ 0 & 0 & 0 & 34 & 0 \\ 0 & 0 & 0 & 0 & 34 \end{bmatrix}$$

with 40 fixed points

$$g_4 = \begin{bmatrix} 18 & 0 & 0 & 0 & 0 \\ 0 & 9 & 0 & 0 & 0 \\ 0 & 0 & 36 & 0 & 0 \\ 0 & 0 & 0 & 18 & 0 \\ 0 & 0 & 0 & 0 & 18 \end{bmatrix}$$

with 40 fixed points

$$g_5 = \begin{bmatrix} 13 & 0 & 0 & 5 & 16 \\ 0 & 29 & 0 & 0 & 0 \\ 0 & 0 & 29 & 0 & 0 \\ 29 & 0 & 0 & 21 & 4 \\ 16 & 0 & 0 & 16 & 21 \end{bmatrix}$$

with 38 fixed points

$$g_6 = \begin{bmatrix} 19 & 0 & 0 & 24 & 25 \\ 0 & 31 & 0 & 0 & 0 \\ 0 & 34 & 31 & 1 & 19 \\ 6 & 19 & 0 & 31 & 6 \\ 25 & 1 & 0 & 24 & 31 \end{bmatrix}$$

with 2 fixed points

$$g_7 = \begin{bmatrix} 33 & 0 & 0 & 8 & 33 \\ 0 & 13 & 0 & 0 & 0 \\ 0 & 7 & 13 & 15 & 26 \\ 35 & 26 & 0 & 14 & 5 \\ 4 & 15 & 0 & 20 & 14 \end{bmatrix}$$

with 40 fixed points

$$g_8 = \begin{bmatrix} 33 & 0 & 0 & 36 & 19 \\ 0 & 16 & 29 & 21 & 29 \\ 0 & 0 & 16 & 0 & 0 \\ 28 & 0 & 29 & 31 & 32 \\ 18 & 0 & 21 & 17 & 31 \end{bmatrix}$$

with 38 fixed points

3.2 Isomorphism Type 1

Stabilizer has order 2888
Plane intersection type is $19^2\ 3^{6498}$

Plane invariant is

$$\begin{bmatrix} 19 & 0 \\ 0 & 19 \end{bmatrix}$$

$\rightarrow$	2_1
38_0	1

$\downarrow$	2_1
38_0	19

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

$\rightarrow$	2_1
38_0	1

$\downarrow$	2_1
38_0	19

$C_0 = \{0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37\}_{38}$
$C_1 = \{0, 1\}_2$
Column cell 1:
Order of the group that is induced on the object is 2888
Number of ancestors on 5-sets is 714.
Number of orbits on 5-sets is 714.
With 1 orbits on the object
Orbit lengths: 38
The points by ranks:

i	Rank
0	0
1	1
2	184
3	185
4	186
5	203
6	188
7	202
8	219
9	217

i	Rank
10	189
11	191
12	187
13	193
14	196
15	205
16	206
17	212
18	215
19	37558

i	Rank
20	8639
21	37417
22	19559
23	13531
24	44012
25	36359
26	29138
27	19058
28	42031
29	16130

i	Rank
30	35865
31	29990
32	18571
33	14737
34	19485
35	48331
36	9992
37	44759

The points:

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

Stabilizer of order 2888 is generated by:

$$g_1 = \begin{bmatrix} 15 & 0 & 0 & 17 & 10 \\ 0 & 32 & 0 & 0 & 0 \\ 0 & 0 & 32 & 0 & 0 \\ 32 & 0 & 0 & 5 & 32 \\ 10 & 0 & 0 & 17 & 5 \end{bmatrix}$$

with 38 fixed points

$$g_2 = \begin{bmatrix} 19 & 0 & 0 & 24 & 25 \\ 0 & 6 & 0 & 0 & 0 \\ 0 & 0 & 6 & 0 & 0 \\ 31 & 0 & 0 & 12 & 34 \\ 12 & 0 & 0 & 25 & 12 \end{bmatrix}$$

with 1370 fixed points

$$g_3 = \begin{bmatrix} 22 & 0 & 0 & 19 & 9 \\ 0 & 10 & 0 & 0 & 0 \\ 0 & 18 & 10 & 26 & 13 \\ 23 & 13 & 0 & 21 & 3 \\ 28 & 26 & 0 & 12 & 21 \end{bmatrix}$$

with 40 fixed points

$$g_4 = \begin{bmatrix} 20 & 0 & 0 & 36 & 19 \\ 0 & 23 & 7 & 14 & 7 \\ 0 & 1 & 23 & 18 & 9 \\ 9 & 9 & 7 & 31 & 24 \\ 19 & 18 & 14 & 22 & 31 \end{bmatrix}$$

with 2 fixed points

$$g_5 = \begin{bmatrix} 22 & 0 & 0 & 19 & 9 \\ 0 & 0 & 23 & 0 & 0 \\ 0 & 14 & 0 & 0 & 0 \\ 23 & 0 & 0 & 31 & 8 \\ 28 & 0 & 0 & 32 & 31 \end{bmatrix}$$

with 40 fixed points

$$g_6 = \begin{bmatrix} 0 & 2 & 12 & 14 & 7 \\ 36 & 22 & 21 & 31 & 34 \\ 19 & 16 & 22 & 12 & 30 \\ 16 & 17 & 3 & 17 & 32 \\ 32 & 1 & 19 & 34 & 27 \end{bmatrix}$$

with 0 fixed points

3.3 Isomorphism Type 2

Stabilizer has order 4
Plane intersection type is $5^8\ 4^{190}\ 3^{7596}$
Plane invariant is

$$\begin{bmatrix} 5 & 0 & 0 & 1 & 0 & 0 & 2 & 1 \\ 0 & 5 & 1 & 0 & 1 & 2 & 0 & 0 \\ 0 & 1 & 5 & 0 & 0 & 0 & 1 & 2 \\ 1 & 0 & 0 & 5 & 2 & 1 & 0 & 0 \\ 0 & 1 & 0 & 2 & 5 & 0 & 1 & 0 \\ 0 & 2 & 0 & 1 & 0 & 5 & 0 & 1 \\ 2 & 0 & 1 & 0 & 1 & 0 & 5 & 0 \\ 1 & 0 & 2 & 0 & 0 & 1 & 0 & 5 \end{bmatrix}$$

$\rightarrow$	8_1
16_0	2
8_2	1
14_3	0

$\downarrow$	8_1
16_0	4
8_2	1
14_3	0

$C_0 = \{1, 2, 3, 4, 5, 7, 10, 12, 20, 21, 22, 24, 29, 30, 35, 36\}_{16}$
$C_1 = \{0, 1, 2, 3, 4, 5, 6, 7\}_8$
$C_2 = \{0, 6, 14, 19, 23, 27, 28, 33\}_8$

$C_3 = \{8, 9, 11, 13, 15, 16, 17, 18, 25, 26, 31, 32, 34, 37\}_{14}$

$\rightarrow$	4_1	4_{55}	4_2	4_{12}	4_{11}	4_{14}	2_{13}	4_{10}	4_{18}	4_{57}	4_{17}	4_{56}	4_{19}	4_{16}	4_{20}	4_{58}	4_{22}	4_{59}	4_{23}	4_{21}	4_{24}	4_{15}	2_{26}	4_{27}	4_{25}
4_0	1	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0
4_4	1	1	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	2	1	2	1
4_5	1	1	1	1	0	0	0	1	1	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0
4_{54}	1	1	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	1	1	0	0	1	0	0	1
4_3	1	0	0	0	1	0	0	0	0	0	2	1	0	0	0	1	0	0	0	2	0	1	1	1	0
4_{53}	0	1	0	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1
4_6	0	0	0	0	1	0	1	1	0	0	0	0	2	1	0	0	0	0	0	0	2	0	0	1	0
4_7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0
4_9	0	0	0	1	0	0	0	0	1	1	0	0	0	0	1	1	1	1	1	0	0	0	0	0	1
2_8	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0

$\downarrow$	4_1	4_{55}	4_2	4_{12}	4_{11}	4_{14}	2_{13}	4_{10}	4_{18}	4_{57}	4_{17}	4_{56}	4_{19}	4_{16}	4_{20}	4_{58}	4_{22}	4_{59}	4_{23}	4_{21}	4_{24}	4_{15}	2_{26}	4_{27}	4_{25}
4_0	1	1	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0
4_4	1	1	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	2	2	2	1
4_5	1	1	1	1	0	0	0	1	1	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0
4_{54}	1	1	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	1	1	0	0	1	0	0	1
4_3	1	0	0	0	1	0	0	0	0	0	2	1	0	0	0	1	0	0	0	2	0	1	2	1	0
4_{53}	0	1	0	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1
4_6	0	0	0	0	1	0	2	1	0	0	0	0	2	1	0	0	0	0	0	0	2	0	0	1	0
4_7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0
4_9	0	0	0	1	0	0	0	0	1	1	0	0	0	0	1	1	1	1	1	0	0	0	0	0	1
2_8	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0

$C_0 = \{1, 5, 7, 30\}_4$
$C_1 = \{10, 59, 102, 197\}_4$
$C_2 = \{62, 103, 148, 191\}_4$
$C_3 = \{0, 6, 19, 28\}_4$
$C_4 = \{4, 20, 22, 35\}_4$
$C_5 = \{2, 12, 21, 36\}_4$
$C_6 = \{17, 26, 31, 34\}_4$
$C_7 = \{11, 18, 25, 32\}_4$
$C_8 = \{8, 37\}_2$
$C_9 = \{9, 13, 15, 16\}_4$
$C_{10} = \{13, 47, 67, 89\}_4$
$C_{11} = \{6, 48, 66, 138\}_4$
$C_{12} = \{28, 41, 115, 194\}_4$
$C_{13} = \{63, 185\}_2$
$C_{14} = \{40, 74, 113, 147\}_4$
$C_{15} = \{94, 149, 155, 192\}_4$
$C_{16} = \{26, 61, 98, 195\}_4$
$C_{17} = \{76, 78, 87, 182\}_4$
$C_{18} = \{49, 95, 124, 158\}_4$
$C_{19} = \{20, 52, 119, 189\}_4$
$C_{20} = \{51, 70, 104, 118\}_4$
$C_{21} = \{69, 81, 123, 136\}_4$
$C_{22} = \{45, 73, 105, 177\}_4$
$C_{23} = \{30, 108, 110, 112\}_4$
$C_{24} = \{14, 38, 71, 151\}_4$
$C_{25} = \{86, 100, 133, 153\}_4$
$C_{26} = \{93, 130\}_2$
$C_{27} = \{3, 55, 72, 88\}_4$
$C_{28} = \{97, 107, 126, 184\}_4$
$C_{29} = \{19, 53, 154, 171\}_4$
$C_{30} = \{75, 128, 134, 141\}_4$
$C_{31} = \{91, 135, 144, 196\}_4$
$C_{32} = \{33, 111, 140, 143\}_4$
$C_{33} = \{56, 58, 96, 142\}_4$

$C_{34} = \{32, 85, 167, 186\}_4$
$C_{35} = \{18, 127, 132, 161\}_4$
$C_{36} = \{2, 23, 79, 137\}_4$
$C_{37} = \{173, 183\}_2$
$C_{38} = \{7, 16, 101, 160\}_4$
$C_{39} = \{11, 24, 34, 44\}_4$
$C_{40} = \{17, 29, 169, 181\}_4$
$C_{41} = \{129, 150\}_2$
$C_{42} = \{22, 92, 145, 178\}_4$
$C_{43} = \{57, 77, 139, 168\}_4$
$C_{44} = \{5, 31, 46, 64\}_4$
$C_{45} = \{15, 39, 106, 172\}_4$
$C_{46} = \{36, 37, 159, 166\}_4$
$C_{47} = \{0, 60, 114, 176\}_4$
$C_{48} = \{43, 164, 187, 193\}_4$
$C_{49} = \{35, 122, 156, 165\}_4$
$C_{50} = \{42, 65\}_2$
$C_{51} = \{82, 131\}_2$
$C_{52} = \{1, 4, 68, 121\}_4$
$C_{53} = \{14, 23, 27, 33\}_4$
$C_{54} = \{3, 10, 24, 29\}_4$
$C_{55} = \{9, 12, 27, 125\}_4$
$C_{56} = \{50, 84, 99, 152\}_4$
$C_{57} = \{8, 109, 117, 179\}_4$
$C_{58} = \{25, 116, 162, 170\}_4$
$C_{59} = \{90, 163, 180, 190\}_4$
$C_{60} = \{21, 146, 174, 175\}_4$
$C_{61} = \{54, 80, 120, 188\}_4$
$C_{62} = \{83, 157\}_2$
Column cell 1:
Column cell 2:
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:
Column cell 26:
Column cell 27:
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:
Column cell 47:
Column cell 48:
Column cell 49:
Column cell 50:
Column cell 51:
Column cell 52:
Column cell 55:
Column cell 56:
Column cell 57:
Column cell 58:
Column cell 59:
Column cell 60:
Column cell 61:
Column cell 62:
Order of the group that is induced on the object is 4
Number of ancestors on 5-sets is 125562.
Number of orbits on 5-sets is 125562.
With 10 orbits on the object
Orbit lengths: $2,\ 4^9$
The points by ranks:

i	Rank
0	0
1	1
2	184
3	185
4	188
5	7371
6	32403
7	21678
8	11001
9	37129

i	Rank
10	27018
11	17497
12	50059
13	14893
14	38973
15	15118
16	24505
17	7356
18	23594
19	12873

i	Rank
20	35650
21	39427
22	36907
23	31731
24	44657
25	38816
26	11192
27	6869
28	42680
29	12224

i	Rank
30	27514
31	28003
32	24596
33	41322
34	16159
35	12866
36	42488
37	14245

The points:

$$P_0 = (0,1,0,0,0)P_1 = (0,0,1,0,0)P_2 = (0,1,18,36,18)P_3 = (0,1,23,18,9)$$

$$P_4 = (0,1,17,22,11)P_5 = (1,12,17,17,1)P_6 = (1,23,36,18,30)P_7 = (1,22,25,11,34)$$

$$P_8 = (1,11,35,10,28)P_9 = (1,23,26,10,3)P_{10} = (1,1,5,9,24)P_{11} = (1,14,12,33,33)$$

$$P_{12} = (1,18,7,32,18)P_{13} = (1,26,32,15,16)P_{14} = (1,26,35,31,10)P_{15} = (1,4,6,10,16)$$

$$P_{16} = (1,36,32,21,5)P_{17} = (1,23,33,17,1)P_{18} = (1,17,27,35,8)P_{19} = (1,21,35,20,15)$$

$$P_{20} = (1,23,16,23,29)P_{21} = (1,29,28,26,10)P_{22} = (1,29,28,24,17)P_{23} = (1,2,34,26,13)$$

$$P_{24} = (1,33,8,36,6)P_{25} = (1,16,15,24,10)P_{26} = (1,25,23,27,28)P_{27} = (1,19,10,31,1)$$

$$P_{28} = (1,7,24,20,23)P_{29} = (1,16,24,36,15)P_{30} = (1,22,16,30,24)P_{31} = (1,8,4,31,24)$$

$$P_{32} = (1,3,15,13,5)P_{33} = (1,15,11,14,4)P_{34} = (1,23,4,33,14)P_{35} = (1,19,27,20,15)$$

$$P_{36} = (1,1,15,17,23)P_{37} = (1,30,32,6,31)$$

Stabilizer of order 4 is generated by:

$$g_1 = \begin{bmatrix} 14 & 30 & 19 & 24 & 21 \\ 28 & 33 & 18 & 5 & 13 \\ 15 & 32 & 33 & 33 & 15 \\ 29 & 15 & 13 & 12 & 0 \\ 12 & 33 & 5 & 2 & 12 \end{bmatrix}$$

with 40 fixed points

$$g_2 = \begin{bmatrix} 3 & 25 & 10 & 6 & 5 \\ 28 & 15 & 9 & 23 & 26 \\ 31 & 16 & 35 & 8 & 18 \\ 26 & 4 & 4 & 3 & 16 \\ 12 & 5 & 26 & 22 & 1 \end{bmatrix}$$

with 2 fixed points

3.4 Isomorphism Type 3

Stabilizer has order 4
Plane intersection type is $4^{210}\ 3^{7596}$
Plane invariant is too big (210 planes)

$\rightarrow$	2_1	4_7	4_{11}	4_{10}	4_9	4_{12}	8_{15}	4_{14}	4_{16}	4_{46}	4_{13}	4_{18}	4_{17}	4_8	2_{20}	2_{21}	8_{47}	2_{22}	4_{19}	4_{25}	4_{49}	4_{26}	4_{24}	4_{48}	4_{29}
2_0	2	2	2	2	2	2	4	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0
4_3	0	1	1	1	0	0	0	0	0	0	0	0	0	2	1	1	4	1	1	1	1	1	1	1	1
4_2	0	1	1	0	1	1	2	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1	1	0	0
4_{42}	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	2	1	1	1	0	1	1
4_6	0	1	0	0	0	1	2	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	1	1	1
4_5	1	0	0	0	0	0	0	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0
4_{43}	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0
4_{44}	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	4	0	0	0	1	0	1	0	0
4_{45}	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
4_4	0	0	0	1	0	0	2	0	1	1	0	1	2	0	0	0	0	1	0	0	0	1	0	0	1

$C_0 = \{26, 28\}_2$
$C_1 = \{175, 176\}_2$
$C_2 = \{18, 27, 35, 36\}_4$
$C_3 = \{2, 3, 14, 21\}_4$
$C_4 = \{12, 16, 19, 31\}_4$
$C_5 = \{8, 20, 32, 33\}_4$
$C_6 = \{6, 23, 24, 29\}_4$
$C_7 = \{72, 82, 127, 200\}_4$
$C_8 = \{13, 38, 114, 131\}_4$
$C_9 = \{40, 88, 141, 148\}_4$
$C_{10} = \{41, 90, 157, 159\}_4$
$C_{11} = \{3, 129, 142, 162\}_4$
$C_{12} = \{26, 49, 140, 194\}_4$
$C_{13} = \{47, 73, 83, 182\}_4$
$C_{14} = \{21, 70, 138, 202\}_4$
$C_{15} = \{28, 46, 55, 59, 76, 85, 119, 150\}_8$
$C_{16} = \{1, 25, 125, 144\}_4$
$C_{17} = \{57, 68, 174, 199\}_4$
$C_{18} = \{63, 69, 137, 204\}_4$
$C_{19} = \{0, 11, 35, 52\}_4$
$C_{20} = \{100, 153\}_2$
$C_{21} = \{45, 192\}_2$
$C_{22} = \{91, 209\}_2$
$C_{23} = \{130, 203\}_2$
$C_{24} = \{14, 99, 111, 113\}_4$

$C_{25} = \{135, 169, 190, 197\}_4$
$C_{26} = \{9, 58, 109, 172\}_4$
$C_{27} = \{79, 122, 152, 180\}_4$
$C_{28} = \{31, 117, 118, 166\}_4$
$C_{29} = \{16, 29, 126, 158\}_4$
$C_{30} = \{15, 34, 106, 160\}_4$
$C_{31} = \{5, 8, 97, 112\}_4$
$C_{32} = \{75, 136, 161, 181\}_4$
$C_{33} = \{19, 65, 93, 167\}_4$
$C_{34} = \{39, 92, 110, 154\}_4$
$C_{35} = \{42, 89, 147, 189\}_4$
$C_{36} = \{7, 128\}_2$
$C_{37} = \{98, 121, 165, 206\}_4$
$C_{38} = \{33, 53, 78, 96, 168, 191, 196, 205\}_8$
$C_{39} = \{56, 86, 95, 195\}_4$
$C_{40} = \{124, 134\}_2$
$C_{41} = \{37, 71, 81, 123\}_4$
$C_{42} = \{4, 13, 25, 37\}_4$
$C_{43} = \{7, 11, 15, 34\}_4$
$C_{44} = \{0, 1, 9, 22\}_4$
$C_{45} = \{5, 10, 17, 30\}_4$
$C_{46} = \{48, 60, 133, 198\}_4$
$C_{47} = \{12, 30, 61, 107, 116, 164, 185, 193\}_8$
$C_{48} = \{6, 101, 104, 143\}_4$
$C_{49} = \{4, 10, 36, 171\}_4$
$C_{50} = \{20, 108, 179, 188\}_4$
$C_{51} = \{22, 54, 87, 207\}_4$
$C_{52} = \{50, 66, 184, 187\}_4$
$C_{53} = \{62, 80, 84, 145\}_4$
$C_{54} = \{24, 32, 103, 132\}_4$
$C_{55} = \{94, 105, 149, 177\}_4$
$C_{56} = \{2, 139, 163, 201\}_4$
$C_{57} = \{44, 170\}_2$
$C_{58} = \{43, 64\}_2$
$C_{59} = \{23, 115, 146, 186\}_4$
$C_{60} = \{51, 77, 151, 183\}_4$
$C_{61} = \{18, 74, 155, 178\}_4$
$C_{62} = \{102, 173\}_2$
$C_{63} = \{17, 208\}_2$
$C_{64} = \{67, 156\}_2$
$C_{65} = \{27, 120\}_2$

$\rightarrow$	2_1	4_7	4_{11}	4_{10}	4_9	4_{12}	8_{15}	4_{14}	4_{16}	4_{46}	4_{13}	4_{18}	4_{17}	4_8	2_{20}	2_{21}	8_{47}	2_{22}	4_{19}	4_{25}	4_{49}	4_{26}	4_{24}	4_{48}	4_{29}
2_0	2	2	2	2	2	2	4	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0
4_3	0	1	1	1	0	0	0	0	0	0	0	0	0	2	1	1	4	1	1	1	1	1	1	1	1
4_2	0	1	1	0	1	1	2	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1	1	0	0
4_{42}	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	2	1	1	1	0	1	1
4_6	0	1	0	0	0	1	2	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	1	1	1
4_5	1	0	0	0	0	0	0	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0
4_{43}	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0
4_{44}	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	4	0	0	0	1	0	1	0	0
4_{45}	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
4_4	0	0	0	1	0	0	2	0	1	1	0	1	2	0	0	0	0	1	0	0	0	1	0	0	1

$\downarrow$	2_1	4_7	4_{11}	4_{10}	4_9	4_{12}	8_{15}	4_{14}	4_{16}	4_{46}	4_{13}	4_{18}	4_{17}	4_8	2_{20}	2_{21}	8_{47}	2_{22}	4_{19}	4_{25}	4_{49}	4_{26}	4_{24}	4_{48}	4_{29}
2_0	2	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
4_3	0	1	1	1	0	0	0	0	0	0	0	0	0	2	2	2	2	2	1	1	1	1	1	1	1
4_2	0	1	1	0	1	1	1	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1	1	0	0
4_{42}	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	2	1	1	1	0	1	1
4_6	0	1	0	0	0	1	1	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	1	1	1
4_5	2	0	0	0	0	0	0	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0
4_{43}	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2	0	0	0	1	0	0	0	0	0
4_{44}	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	1	0	1	0	0
4_{45}	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
4_4	0	0	0	1	0	0	1	0	1	1	0	1	2	0	0	0	0	2	0	0	0	1	0	0	1

$C_0 = \{26, 28\}_2$
$C_1 = \{132, 133\}_2$
$C_2 = \{18, 27, 35, 36\}_4$
$C_3 = \{2, 3, 14, 21\}_4$
$C_4 = \{12, 16, 19, 31\}_4$
$C_5 = \{8, 20, 32, 33\}_4$
$C_6 = \{6, 23, 24, 29\}_4$
$C_7 = \{19, 97, 156, 178\}_4$
$C_8 = \{35, 86, 154, 207\}_4$
$C_9 = \{77, 93, 107, 148\}_4$
$C_{10} = \{92, 141, 142, 192\}_4$
$C_{11} = \{49, 74, 114, 155\}_4$
$C_{12} = \{13, 104, 149, 199\}_4$
$C_{13} = \{51, 53, 105, 127\}_4$
$C_{14} = \{31, 66, 151, 202\}_4$
$C_{15} = \{110, 145, 160, 177, 180, 184, 186, 189\}_8$
$C_{16} = \{27, 79, 116, 200\}_4$
$C_{17} = \{5, 41, 181, 185\}_4$
$C_{18} = \{98, 121, 152, 182\}_4$
$C_{19} = \{103, 112, 117, 196\}_4$
$C_{20} = \{144, 170\}_2$
$C_{21} = \{42, 190\}_2$
$C_{22} = \{2, 63\}_2$
$C_{23} = \{65, 82\}_2$
$C_{24} = \{60, 90, 162, 164\}_4$
$C_{25} = \{68, 124, 135, 153\}_4$
$C_{26} = \{22, 101, 113, 165\}_4$
$C_{27} = \{47, 94, 129, 159\}_4$
$C_{28} = \{84, 85, 109, 137\}_4$
$C_{29} = \{1, 75, 198, 205\}_4$
$C_{30} = \{10, 140, 167, 206\}_4$
$C_{31} = \{38, 62, 163, 172\}_4$
$C_{32} = \{9, 80, 128, 139\}_4$
$C_{33} = \{8, 99, 136, 204\}_4$
$C_{34} = \{87, 91, 143, 193\}_4$
$C_{35} = \{20, 146, 175, 191\}_4$
$C_{36} = \{26, 61\}_2$
$C_{37} = \{7, 24, 119, 171\}_4$
$C_{38} = \{6, 34, 69, 95, 108, 120, 123, 173\}_8$
$C_{39} = \{33, 70, 174, 176\}_4$
$C_{40} = \{0, 157\}_2$
$C_{41} = \{52, 54, 158, 194\}_4$
$C_{42} = \{4, 13, 25, 37\}_4$
$C_{43} = \{7, 11, 15, 34\}_4$
$C_{44} = \{0, 1, 9, 22\}_4$
$C_{45} = \{5, 10, 17, 30\}_4$
$C_{46} = \{12, 15, 56, 57\}_4$
$C_{47} = \{28, 36, 43, 100, 122, 138, 166, 208\}_8$

$C_{48} = \{39, 147, 168, 169\}_4$
$C_{49} = \{23, 40, 195, 209\}_4$
$C_{50} = \{29, 44, 71, 203\}_4$
$C_{51} = \{3, 64, 102, 111\}_4$
$C_{52} = \{21, 32, 125, 188\}_4$
$C_{53} = \{17, 25, 179, 183\}_4$
$C_{54} = \{16, 81, 197, 201\}_4$
$C_{55} = \{48, 50, 88, 131\}_4$
$C_{56} = \{67, 73, 115, 150\}_4$
$C_{57} = \{106, 134\}_2$
$C_{58} = \{55, 58\}_2$
$C_{59} = \{11, 78, 126, 161\}_4$
$C_{60} = \{14, 72, 96, 187\}_4$
$C_{61} = \{4, 30, 46, 130\}_4$
$C_{62} = \{45, 89\}_2$
$C_{63} = \{37, 118\}_2$
$C_{64} = \{18, 76\}_2$
$C_{65} = \{59, 83\}_2$
Column cell 1:
Column cell 7:
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:
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Column cell 46:
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Column cell 51:
Column cell 52:
Column cell 53:
Column cell 54:
Column cell 55:
Column cell 56:
Column cell 57:
Column cell 58:
Column cell 59:
Column cell 60:
Column cell 61:
Column cell 62:
Column cell 63:
Column cell 64:
Column cell 65:
Order of the group that is induced on the object is 4
Number of ancestors on 5-sets is 125562.
Number of orbits on 5-sets is 125562.
With 10 orbits on the object
Orbit lengths: 2, 4^9
The points by ranks:

i	Rank	i	Rank	i	Rank	i	Rank
0	0	10	50998	20	48933	30	32677
1	1	11	17296	21	43061	31	12761
2	184	12	44268	22	27664	32	50344
3	185	13	49507	23	46255	33	47806
4	295	14	43060	24	39343	34	12866
5	6849	15	12883	25	40225	35	39747
6	26689	16	30901	26	47523	36	917
7	18223	17	13652	27	7501	37	28764
8	30408	18	46338	28	30079		
9	19166	19	27449	29	18617		

The points:

$$P_0 = (0,1,0,0,0)P_1 = (0,0,1,0,0)P_2 = (0,1,18,36,18)P_3 = (0,1,23,18,9)$$

$$P_4 = (0,1,6,9,24)P_5 = (1,30,31,31,1)P_6 = (1,14,26,6,7)P_7 = (1,24,28,4,26)$$

$$P_8 = (1,17,30,22,2)P_9 = (1,19,27,3,26)P_{10} = (1,3,2,7,36)P_{11} = (1,10,20,4,33)$$

$$P_{12} = (1,17,30,25,21)P_{13} = (1,29,28,34,12)P_{14} = (1,31,1,34,23)P_{15} = (1,8,4,20,15)$$

$$P_{16} = (1,6,26,5,13)P_{17} = (1,21,15,28,31)P_{18} = (1,14,25,16,22)P_{19} = (1,16,8,27,24)$$

$$P_{20} = (1,3,31,23,12)P_{21} = (1,25,19,34,23)P_{22} = (1,3,20,36,24)P_{23} = (1,22,4,1,22)$$

$$P_{24} = (1,8,4,30,10)P_{25} = (1,35,26,8,11)P_{26} = (1,23,36,23,9)P_{27} = (1,8,26,13,1)$$

$$P_{28} = (1,24,7,8,2)P_{29} = (1,34,19,5,26)P_{30} = (1,3,32,35,30)P_{31} = (1,36,8,35,15)$$

$$P_{32} = (1,3,20,11,18)P_{33} = (1,16,6,18,9)P_{34} = (1,19,27,20,15)P_{35} = (1,29,36,16,11)$$

$$P_{36} = (0,1,24,29,3)P_{37} = (1,2,9,28,35)$$

Stabilizer of order 4 is generated by:

$$g_1 = \begin{bmatrix} 22 & 0 & 0 & 17 & 34 \\ 0 & 0 & 31 & 0 & 0 \\ 0 & 8 & 0 & 0 & 0 \\ 17 & 0 & 0 & 21 & 25 \\ 27 & 0 & 0 & 34 & 21 \end{bmatrix}$$

with 38 fixed points

$$g_2 = \begin{bmatrix} 31 & 18 & 17 & 31 & 33 \\ 27 & 32 & 26 & 7 & 36 \\ 9 & 27 & 32 & 28 & 31 \\ 35 & 31 & 36 & 2 & 32 \\ 34 & 28 & 7 & 27 & 2 \end{bmatrix}$$

with 38 fixed points

3.5 Isomorphism Type 4

Stabilizer has order 4
Plane intersection type is $4^{230}\ 3^{7516}$
Plane invariant is too big (230 planes)

$\rightarrow$	2_1	4_{12}	2_{11}	2_{70}	4_{14}	2_{15}	4_{16}	2_{17}	4_{18}	2_{19}	2_{20}	2_{21}	2_{22}	4_{13}	4_{23}	4_{10}	2_{25}	6_{71}	4_{26}	4_{27}	4_{24}	4_{30}	4_{29}	4_{72}	4_{33}
1_0	2	4	2	2	4	2	4	2	4	2	2	2	2	4	4	0	0	0	0	0	0	0	0	0	0
1_3	2	0	2	2	0	2	0	2	0	2	2	2	2	0	0	0	0	0	4	4	0	0	0	0	0
4_{69}	1	2	0	0	1	0	1	0	1	0	0	0	0	0	0	3	1	3	1	1	1	1	1	1	1
4_2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	0	1	0	1
4_{68}	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0	2	0	1	0
4_5	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1
4_4	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1	0
4_8	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
4_7	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1
4_9	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0	1	0	0	0
4_6	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0

$C_0 = \{35\}_1$
$C_1 = \{98, 111\}_2$
$C_2 = \{9, 25, 33, 36\}_4$
$C_3 = \{30\}_1$
$C_4 = \{7, 21, 24, 29\}_4$
$C_5 = \{0, 17, 22, 31\}_4$
$C_6 = \{19, 20, 23, 34\}_4$
$C_7 = \{5, 13, 16, 32\}_4$
$C_8 = \{11, 26, 27, 37\}_4$
$C_9 = \{2, 3, 6, 28\}_4$
$C_{10} = \{72, 154, 170, 218\}_4$
$C_{11} = \{138, 147\}_2$
$C_{12} = \{29, 50, 136, 146\}_4$
$C_{13} = \{173, 195, 212, 217\}_4$
$C_{14} = \{46, 153, 155, 185\}_4$
$C_{15} = \{8, 156\}_2$
$C_{16} = \{45, 51, 189, 193\}_4$
$C_{17} = \{55, 175\}_2$
$C_{18} = \{19, 141, 167, 215\}_4$
$C_{19} = \{83, 229\}_2$
$C_{20} = \{127, 182\}_2$
$C_{21} = \{5, 84\}_2$
$C_{22} = \{30, 161\}_2$
$C_{23} = \{21, 22, 38, 149\}_4$
$C_{24} = \{71, 92, 106, 165\}_4$
$C_{25} = \{12, 32\}_2$
$C_{26} = \{37, 52, 122, 210\}_4$
$C_{27} = \{42, 100, 117, 171\}_4$
$C_{28} = \{77, 160\}_2$
$C_{29} = \{0, 24, 137, 190\}_4$
$C_{30} = \{56, 60, 67, 96\}_4$

$C_{31} = \{74, 140, 176, 205\}_4$
$C_{32} = \{14, 120, 134, 157\}_4$
$C_{33} = \{57, 109, 130, 207\}_4$
$C_{34} = \{47, 110, 119, 203\}_4$
$C_{35} = \{13, 66, 158, 216\}_4$
$C_{36} = \{99, 131, 144, 202\}_4$
$C_{37} = \{49, 62, 192, 200\}_4$
$C_{38} = \{17, 40, 88, 166\}_4$
$C_{39} = \{10, 112, 164, 194\}_4$
$C_{40} = \{87, 89, 115, 180\}_4$
$C_{41} = \{3, 76, 148, 151\}_4$
$C_{42} = \{54, 114, 132, 181\}_4$
$C_{43} = \{23, 142, 177, 225\}_4$
$C_{44} = \{7, 18, 63, 64\}_4$
$C_{45} = \{44, 73, 126, 223\}_4$
$C_{46} = \{16, 53, 82, 135\}_4$
$C_{47} = \{159, 201, 219, 220\}_4$
$C_{48} = \{11, 78, 199, 224\}_4$
$C_{49} = \{48, 65, 206, 214\}_4$
$C_{50} = \{27, 58, 183, 186\}_4$
$C_{51} = \{26, 116, 179, 228\}_4$
$C_{52} = \{59, 81, 93, 191\}_4$
$C_{53} = \{75, 101, 113, 178\}_4$
$C_{54} = \{33, 86, 125, 188\}_4$
$C_{55} = \{118, 139, 150, 187\}_4$
$C_{56} = \{80, 105, 204, 211\}_4$
$C_{57} = \{79, 91, 97, 162\}_4$
$C_{58} = \{2, 4, 9, 28\}_4$
$C_{59} = \{102, 143, 152, 213\}_4$
$C_{60} = \{172, 184, 198, 221\}_4$
$C_{61} = \{68, 90, 107, 174\}_4$
$C_{62} = \{20, 36, 39, 61, 121, 124, 222, 226\}_8$
$C_{63} = \{104, 145, 196, 208\}_4$
$C_{64} = \{41, 123, 197, 209\}_4$
$C_{65} = \{31, 70, 108, 133\}_4$
$C_{66} = \{95, 103\}_2$
$C_{67} = \{15, 69, 85, 129\}_4$
$C_{68} = \{1, 4, 12, 14\}_4$
$C_{69} = \{8, 10, 15, 18\}_4$
$C_{70} = \{6, 43\}_2$
$C_{71} = \{34, 94, 128, 163, 168, 227\}_6$
$C_{72} = \{1, 25, 35, 169\}_4$

$\rightarrow$	2_1	4_{12}	2_{11}	2_{70}	4_{14}	2_{15}	4_{16}	2_{17}	4_{18}	2_{19}	2_{20}	2_{21}	2_{22}	4_{13}	4_{23}	4_{10}	2_{25}	6_{71}	4_{26}	4_{27}	4_{24}	4_{30}	4_{29}	4_{72}	4_{33}
1_0	2	4	2	2	4	2	4	2	4	2	2	2	2	4	4	0	0	0	0	0	0	0	0	0	0
1_3	2	0	2	2	0	2	0	2	0	2	2	2	2	0	0	0	0	0	4	4	0	0	0	0	0
4_{69}	1	2	0	0	1	0	1	0	1	0	0	0	0	0	0	3	1	3	1	1	1	1	1	1	1
4_2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	0	1	0	1
4_{68}	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0	2	0	1	0
4_5	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1
4_4	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1	0
4_8	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
4_7	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1
4_9	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0	1	0	0	0
4_6	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0

$\downarrow$	2_1	4_{12}	2_{11}	2_{70}	4_{14}	2_{15}	4_{16}	2_{17}	4_{18}	2_{19}	2_{20}	2_{21}	2_{22}	4_{13}	4_{23}	4_{10}	2_{25}	6_{71}	4_{26}	4_{27}	4_{24}	4_{30}	4_{29}	4_{72}	4_{33}
1_0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
1_3	1	0	1	1	0	1	0	1	0	1	1	1	1	0	0	0	0	0	1	1	0	0	0	0	0
4_{69}	2	2	0	0	1	0	1	0	1	0	0	0	0	0	0	3	2	2	1	1	1	1	1	1	1
4_2	0	0	2	0	1	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	2	0	1	0	1
4_{68}	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	1	0
4_5	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1
4_4	0	0	0	0	1	0	0	2	1	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1	0
4_8	0	0	0	0	0	0	1	0	1	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
4_7	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	1
4_9	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	2	0	1	0	0	0
4_6	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0

$C_0 = \{35\}_1$
$C_1 = \{44, 90\}_2$
$C_2 = \{9, 25, 33, 36\}_4$
$C_3 = \{30\}_1$
$C_4 = \{7, 21, 24, 29\}_4$
$C_5 = \{0, 17, 22, 31\}_4$
$C_6 = \{19, 20, 23, 34\}_4$
$C_7 = \{5, 13, 16, 32\}_4$
$C_8 = \{11, 26, 27, 37\}_4$
$C_9 = \{2, 3, 6, 28\}_4$
$C_{10} = \{70, 117, 152, 191\}_4$
$C_{11} = \{76, 80\}_2$
$C_{12} = \{1, 158, 202, 214\}_4$
$C_{13} = \{8, 16, 36, 69\}_4$
$C_{14} = \{9, 27, 74, 133\}_4$
$C_{15} = \{151, 226\}_2$
$C_{16} = \{17, 101, 131, 204\}_4$
$C_{17} = \{4, 51\}_2$
$C_{18} = \{41, 71, 119, 218\}_4$
$C_{19} = \{12, 114\}_2$
$C_{20} = \{136, 165\}_2$
$C_{21} = \{24, 228\}_2$
$C_{22} = \{148, 213\}_2$
$C_{23} = \{30, 31, 75, 104\}_4$
$C_{24} = \{145, 176, 184, 192\}_4$
$C_{25} = \{106, 223\}_2$
$C_{26} = \{62, 83, 100, 210\}_4$
$C_{27} = \{142, 170, 181, 207\}_4$
$C_{28} = \{149, 190\}_2$
$C_{29} = \{55, 66, 157, 216\}_4$
$C_{30} = \{91, 98, 195, 199\}_4$
$C_{31} = \{78, 96, 123, 140\}_4$
$C_{32} = \{53, 84, 150, 159\}_4$
$C_{33} = \{50, 81, 88, 121\}_4$
$C_{34} = \{42, 87, 124, 203\}_4$
$C_{35} = \{73, 118, 196, 222\}_4$
$C_{36} = \{37, 77, 89, 162\}_4$
$C_{37} = \{102, 125, 130, 198\}_4$
$C_{38} = \{2, 72, 208, 220\}_4$
$C_{39} = \{43, 110, 129, 146\}_4$
$C_{40} = \{23, 137, 171, 186\}_4$
$C_{41} = \{13, 20, 112, 153\}_4$
$C_{42} = \{68, 161, 172, 201\}_4$
$C_{43} = \{58, 139, 156, 217\}_4$
$C_{44} = \{48, 97, 111, 219\}_4$
$C_{45} = \{26, 82, 115, 205\}_4$
$C_{46} = \{21, 99, 187, 221\}_4$

$C_{47} = \{0, 7, 15, 116\}_4$
$C_{48} = \{34, 126, 189, 224\}_4$
$C_{49} = \{52, 120, 122, 197\}_4$
$C_{50} = \{29, 67, 135, 200\}_4$
$C_{51} = \{33, 38, 86, 108\}_4$
$C_{52} = \{5, 6, 18, 46\}_4$
$C_{53} = \{95, 138, 173, 180\}_4$
$C_{54} = \{28, 93, 132, 166\}_4$
$C_{55} = \{19, 79, 85, 154\}_4$
$C_{56} = \{3, 25, 61, 177\}_4$
$C_{57} = \{147, 182, 185, 188\}_4$
$C_{58} = \{54, 107, 225, 229\}_4$
$C_{59} = \{10, 11, 60, 179\}_4$
$C_{60} = \{35, 127, 134, 141\}_4$
$C_{61} = \{39, 92, 175, 194\}_4$
$C_{62} = \{32, 49, 57, 59, 105, 167, 169, 209\}_8$
$C_{63} = \{64, 128, 155, 178\}_4$
$C_{64} = \{63, 65, 103, 168\}_4$
$C_{65} = \{14, 160, 174, 193\}_4$
$C_{66} = \{22, 45\}_2$
$C_{67} = \{47, 94, 109, 163\}_4$
$C_{68} = \{1, 4, 12, 14\}_4$
$C_{69} = \{8, 10, 15, 18\}_4$
$C_{70} = \{206, 227\}_2$
$C_{71} = \{40, 56, 144, 164, 183, 212\}_6$
$C_{72} = \{113, 143, 211, 215\}_4$
Column cell 1:
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:
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Column cell 59:
Column cell 60:
Column cell 61:
Column cell 62:
Column cell 63:
Column cell 64:
Column cell 65:
Column cell 66:
Column cell 67:
Column cell 70:
Column cell 71:
Column cell 72:
Order of the group that is induced on the object is 4
Number of ancestors on 5-sets is 125571.
Number of orbits on 5-sets is 125571.
With 11 orbits on the object
Orbit lengths: $1^2,\ 4^9$
The points by ranks:

i	Rank	i	Rank	i	Rank	i	Rank
0	0	10	13166	20	10756	30	620
1	1	11	10736	21	46356	31	42023
2	184	12	33349	22	9803	32	10315
3	185	13	20539	23	50784	33	30498
4	295	14	36183	24	51894	34	41968
5	13258	15	9065	25	6756	35	931
6	14908	16	30901	26	16186	36	20556
7	48939	17	1298	27	34872	37	38023
8	14406	18	39058	28	24531		
9	37446	19	35827	29	28160		

The points:

$$P_0 = (0,1,0,0,0)P_1 = (0,0,1,0,0)P_2 = (0,1,18,36,18)P_3 = (0,1,23,18,9)$$

$$P_4 = (0,1,6,9,24)P_5 = (1,19,16,20,31)P_6 = (1,19,1,8,16)P_7 = (1,6,34,23,12)$$

$$P_8 = (1,15,25,32,16)P_9 = (1,8,25,7,3)P_{10} = (1,4,29,1,31)P_{11} = (1,3,15,1,28)$$

$$P_{12} = (1,23,26,31,32)P_{13} = (1,5,7,11,27)P_{14} = (1,23,36,10,17)P_{15} = (1,29,10,10,19)$$

$$P_{16} = (1,6,26,5,13)P_{17} = (0,1,13,19,11)P_{18} = (1,4,6,16,10)P_{19} = (1,20,28,4,17)$$

$$P_{20} = (1,15,3,1,28)P_{21} = (1,24,30,16,22)P_{22} = (1,25,14,20,25)P_{23} = (1,32,30,35,18)$$

$$P_{24} = (1, 21, 5, 32, 36) P_{25} = (1, 5, 30, 34, 1) P_{26} = (1, 28, 2, 25, 14) P_{27} = (1, 14, 30, 11, 29)$$

$$P_{28} = (1, 35, 34, 6, 5) P_{29} = (1, 10, 15, 20, 35) P_{30} = (0, 1, 13, 22, 28) P_{31} = (1, 16, 14, 24, 23)$$

$$P_{32} = (1, 15, 7, 15, 25) P_{33} = (1, 22, 25, 2, 2) P_{34} = (1, 24, 3, 28, 4) P_{35} = (0, 1, 6, 33, 20)$$

$$P_{36} = (1, 8, 9, 11, 27) P_{37} = (1, 13, 28, 14, 3)$$

Stabilizer of order 4 is generated by:

$$g_1 = \begin{bmatrix} 26 & 0 & 0 & 0 & 0 \\ 0 & 3 & 2 & 20 & 33 \\ 0 & 19 & 3 & 23 & 12 \\ 0 & 12 & 33 & 34 & 21 \\ 0 & 23 & 20 & 30 & 34 \end{bmatrix}$$

with 40 fixed points

$$g_2 = \begin{bmatrix} 2 & 15 & 29 & 12 & 25 \\ 33 & 11 & 18 & 31 & 11 \\ 26 & 6 & 10 & 29 & 18 \\ 31 & 35 & 19 & 28 & 8 \\ 6 & 1 & 15 & 34 & 17 \end{bmatrix}$$

with 2 fixed points

3.6 Isomorphism Type 5

Stabilizer has order 72
Plane intersection type is $4^{216}\ 3^{7572}$
Plane invariant is too big (216 planes)

$\rightarrow$	198_1	18_3
36_0	22	1
2_2	0	18

$\downarrow$	198_1	18_3
36_0	4	2
2_2	0	2

$C_0 = \{0, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37\}_{36}$
$C_1 = \{0, 1, 3, 4, 5, 6, 7, 8, 9, 10, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46$
$C_2 = \{1, 3\}_2$
$C_3 = \{2, 11, 13, 28, 55, 64, 70, 85, 89, 92, 94, 106, 113, 138, 146, 171, 205, 206\}_{18}$

$\rightarrow$	198_1	18_3
36_0	22	1
2_2	0	18

$\downarrow$	198_1	18_3
36_0	4	2
2_2	0	2

$C_0 = \{0, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37\}_{36}$
$C_1 = \{0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 43, 44, 47, 48,$
$C_2 = \{1, 3\}_2$
$C_3 = \{12, 21, 28, 42, 45, 46, 52, 68, 75, 86, 91, 96, 113, 149, 170, 185, 213, 215\}_{18}$
Column cell 1:
Column cell 3:
Order of the group that is induced on the object is 72
Number of ancestors on 5-sets is 7053.
Number of orbits on 5-sets is 7053.
With 2 orbits on the object
Orbit lengths: 2, 36
The points by ranks:

i	Rank	i	Rank	i	Rank	i	Rank
0	0	10	32607	20	11297	30	46849
1	1	11	10956	21	21337	31	28003
2	184	12	36511	22	35208	32	24329
3	185	13	42676	23	13493	33	8578
4	318	14	1274	24	13633	34	16117
5	12008	15	49823	25	39935	35	18852
6	47213	16	11085	26	42153	36	18323
7	20130	17	24505	27	48134	37	29159
8	14936	18	36205	28	26414		
9	27554	19	44555	29	16288		

The points:

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

Stabilizer of order 72 is generated by:

$$g_1 = \begin{bmatrix} 11 & 0 & 0 & 30 & 22 \\ 0 & 35 & 0 & 0 & 0 \\ 0 & 16 & 35 & 29 & 33 \\ 11 & 33 & 0 & 14 & 31 \\ 15 & 29 & 0 & 13 & 14 \end{bmatrix}$$

with 40 fixed points

$$g_2 = \begin{bmatrix} 25 & 0 & 0 & 11 & 13 \\ 0 & 18 & 28 & 19 & 28 \\ 0 & 4 & 18 & 35 & 36 \\ 25 & 36 & 28 & 16 & 2 \\ 24 & 35 & 19 & 8 & 16 \end{bmatrix}$$

with 40 fixed points

$$g_3 = \begin{bmatrix} 33 & 0 & 36 & 34 & 18 \\ 0 & 31 & 28 & 14 & 12 \\ 0 & 0 & 31 & 0 & 0 \\ 33 & 0 & 14 & 6 & 22 \\ 8 & 0 & 10 & 32 & 35 \end{bmatrix}$$

with 40 fixed points

$$g_4 = \begin{bmatrix} 31 & 0 & 36 & 14 & 28 \\ 18 & 32 & 33 & 23 & 14 \\ 0 & 3 & 32 & 17 & 27 \\ 14 & 27 & 14 & 33 & 14 \\ 7 & 17 & 23 & 36 & 33 \end{bmatrix}$$

with 40 fixed points

$$g_5 = \begin{bmatrix} 27 & 0 & 27 & 36 & 36 \\ 32 & 10 & 13 & 9 & 28 \\ 0 & 31 & 10 & 3 & 20 \\ 18 & 20 & 28 & 36 & 33 \\ 18 & 3 & 9 & 18 & 36 \end{bmatrix}$$

with 38 fixed points

3.7 Isomorphism Type 6

Stabilizer has order 72
Plane intersection type is $5^{12}\ 4^{270}\ 3^{7236}$
Plane invariant is too big (12 planes)

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

$\downarrow$	12_1
2_0	2
36_2	3

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

$\rightarrow$	12_1	270_2
2_0	12	0
36_3	1	30

$\downarrow$	12_1	270_2
2_0	2	0
36_3	3	4

$C_0 = \{0, 3\}_2$
$C_1 = \{9, 95, 150, 155, 165, 183, 187, 218, 250, 251, 266, 281\}_{12}$
$C_2 = \{0, 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43$
$C_3 = \{1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37\}_{36}$
Column cell 1:
Column cell 2:
Order of the group that is induced on the object is 72
Number of ancestors on 5-sets is 7478.
Number of orbits on 5-sets is 7061.
With 2 orbits on the object
Orbit lengths: 2, 36
The points by ranks:

i	Rank
0	0
1	1
2	184
3	187
4	194
5	10010
6	39909
7	26701
8	39034
9	31172

i	Rank
10	16327
11	28901
12	26133
13	47506
14	36992
15	28402
16	34880
17	8134
18	28303
19	9481

i	Rank
20	28609
21	32998
22	26080
23	19349
24	40551
25	8640
26	14474
27	27620
28	31131
29	26832

i	Rank
30	45341
31	42234
32	51880
33	17927
34	24092
35	49304
36	11176
37	13501

The points:

$$P_0 = (0, 1, 0, 0, 0)P_1 = (0, 0, 1, 0, 0)P_2 = (0, 1, 18, 36, 18)P_3 = (0, 1, 15, 9, 23)$$

$$P_4 = (0, 1, 24, 10, 5)P_5 = (1, 30, 18, 5, 25)P_6 = (1, 12, 35, 29, 11)P_7 = (1, 16, 32, 6, 7)$$

$$P_8 = (1, 20, 16, 16, 10)P_9 = (1, 28, 23, 13, 13)P_{10} = (1, 35, 7, 30, 14)P_{11} = (1, 17, 10, 30, 35)$$

$$P_{12} = (1, 6, 21, 3, 7)P_{13} = (1, 7, 2, 23, 9)P_{14} = (1, 34, 24, 36, 3)P_{15} = (1, 26, 6, 23, 35)$$

$$P_{16} = (1, 7, 23, 11, 29)P_{17} = (1, 7, 6, 25, 19)P_{18} = (1, 24, 28, 22, 35)P_{19} = (1, 6, 26, 10, 25)$$

$$P_{20} = (1, 12, 32, 26, 35)P_{21} = (1, 34, 2, 31, 30)P_{22} = (1, 34, 20, 19, 7)P_{23} = (1, 28, 8, 4, 27)$$

$$P_{24} = (1, 2, 34, 24, 11)P_{25} = (1, 35, 9, 34, 19)P_{26} = (1, 25, 18, 25, 16)P_{27} = (1, 36, 15, 16, 24)$$

$$P_{28} = (1,3,17,33,13) P_{29} = (1,19,33,16,7) P_{30} = (1,3,8,2,6) P_{31} = (1,24,25,35,23)$$
$$P_{32} = (1,31,1,32,36) P_{33} = (1,25,22,36,33) P_{34} = (1,34,15,24,8) P_{35} = (1,12,24,16,12)$$
$$P_{36} = (1,1,20,27,28) P_{37} = (1,32,12,21,31)$$

Stabilizer of order 72 is generated by:

$$g_1 = \begin{bmatrix} 26 & 0 & 0 & 0 & 0 \\ 0 & 10 & 0 & 0 & 0 \\ 0 & 17 & 1 & 22 & 11 \\ 0 & 10 & 0 & 26 & 0 \\ 0 & 20 & 0 & 0 & 26 \end{bmatrix}$$

with 40 fixed points

$$g_2 = \begin{bmatrix} 15 & 30 & 0 & 35 & 25 \\ 0 & 2 & 0 & 0 & 0 \\ 29 & 33 & 32 & 20 & 18 \\ 14 & 7 & 0 & 2 & 13 \\ 11 & 6 & 0 & 18 & 20 \end{bmatrix}$$

with 4 fixed points

$$g_3 = \begin{bmatrix} 4 & 15 & 0 & 35 & 13 \\ 0 & 32 & 0 & 0 & 0 \\ 11 & 33 & 2 & 30 & 32 \\ 12 & 4 & 0 & 35 & 35 \\ 1 & 11 & 0 & 19 & 35 \end{bmatrix}$$

with 4 fixed points

$$g_4 = \begin{bmatrix} 4 & 0 & 0 & 20 & 27 \\ 0 & 26 & 20 & 12 & 6 \\ 0 & 22 & 26 & 15 & 26 \\ 32 & 26 & 6 & 28 & 16 \\ 10 & 15 & 12 & 27 & 28 \end{bmatrix}$$

with 40 fixed points

Chapter 4

The BLT-Sets in Numeric Form

0, 1, 184, 185, 186, 203, 188, 202, 219, 217, 189, 191, 187, 193, 196, 205, 206, 212, 215, 190, 192, 194, 195, 197, 198, 199, 200, 201, 204, 207, 208, 209, 210, 211, 213, 214, 216, 218
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0, 1, 184, 185, 295, 6849, 26689, 18223, 30408, 19166, 50998, 17296, 44268, 49507, 43060, 12883, 30901, 13652, 46338, 27449, 48933, 43061, 27664, 46255, 39343, 40225, 47523, 7501, 30079, 18617, 32677, 12761, 50344, 47806, 12866, 39747, 917, 28764
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0, 1, 184, 187, 194, 10010, 39909, 26701, 39034, 31172, 16327, 28901, 26133, 47506, 36992, 28402, 34880, 8134, 28303, 9481, 28609, 32998, 26080, 19349, 40551, 8640, 14474, 27620, 31131, 26832, 45341, 42234, 51880, 17927, 24092, 49304, 11176, 13501

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0, 1, 184, 185, 188, 7371, 32403, 21678, 11001, 37129, 27018, 17497, 50059, 14893, 38973, 15118, 24505, 7356, 2359
0, 1, 184, 185, 295, 6849, 26689, 18223, 30408, 19166, 50998, 17296, 44268, 49507, 43060, 12883, 30901, 13652, 463
0, 1, 184, 185, 295, 13258, 14908, 48939, 14406, 37446, 13166, 10736, 33349, 20539, 36183, 9065, 30901, 1298, 3905
0, 1, 184, 185, 318, 12008, 47213, 20130, 14936, 27554, 32607, 10956, 36511, 42676, 1274, 49823, 11085, 24505, 362
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"2888",
"4",
"4",
"4",
"72",
"72",
};
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30,  0,  0,  0,  0,  0, 16,  0,  0,  0,  0,  0, 10,  0,  0,  0,  0,  0,  7,  0,  0,  0,  0,  0,  7,
 3,  0,  0,  0,  0,  0,  3,  0,  0,  0,  0,  0,  3,  0,  0,  0,  0,  0, 34,  0,  0,  0,  0,  0, 34,
18,  0,  0,  0,  0,  0,  9,  0,  0,  0,  0,  0, 36,  0,  0,  0,  0,  0, 18,  0,  0,  0,  0,  0, 18,
13,  0,  0,  5, 16,  0, 29,  0,  0,  0,  0,  0, 29,  0,  0, 29,  0,  0, 21,  4, 16,  0,  0, 16, 21,
19,  0,  0, 24, 25,  0, 31,  0,  0,  0,  0, 34, 31,  1, 19,  6, 19,  0, 31,  6, 25,  1,  0, 24, 31,
33,  0,  0,  8, 33,  0, 13,  0,  0,  0,  0,  7, 13, 15, 26, 35, 26,  0, 14,  5,  4, 15,  0, 20, 14,
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33,  0,  0, 36, 19,  0, 16, 29, 21, 29,  0,  0, 16,  0,  0, 28,  0, 29, 31, 32, 18,  0, 21, 17, 31,
15,  0,  0, 17, 10,  0, 32,  0,  0,  0,  0,  0, 32,  0,  0, 32,  0,  0,  5, 32, 10,  0,  0, 17,  5,
19,  0,  0, 24, 25,  0,  6,  0,  0,  0,  0,  0,  6,  0,  0, 31,  0,  0, 12, 34, 12,  0,  0, 25, 12,
22,  0,  0, 19,  9,  0, 10,  0,  0,  0,  0, 18, 10, 26, 13, 23, 13,  0, 21,  3, 28, 26,  0, 12, 21,
20,  0,  0, 36, 19,  0, 23,  7, 14,  7,  0,  1, 23, 18,  9,  9,  9,  7, 31, 24, 19, 18, 14, 22, 31,
22,  0,  0, 19,  9,  0,  0, 23,  0,  0,  0, 14,  0,  0,  0, 23,  0,  0, 31,  8, 28,  0,  0, 32, 31,
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14, 30, 19, 24, 21, 28, 33, 18,  5, 13, 15, 32, 33, 33, 15, 29, 15, 13, 12,  0, 12, 33,  5,  2, 12,
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22,  0,  0, 17, 34,  0,  0, 31,  0,  0,  0,  8,  0,  0,  0, 17,  0,  0, 21, 25, 27,  0,  0, 34, 21,
31, 18, 17, 31, 33, 27, 32, 26,  7, 36,  9, 27, 32, 28, 31, 35, 31, 36,  2, 32, 34, 28,  7, 27,  2,
26,  0,  0,  0,  0,  0,  3,  2, 20, 33,  0, 19,  3, 23, 12,  0, 12, 33, 34, 21,  0, 23, 20, 30, 34,
 2, 15, 29, 12, 25, 33, 11, 18, 31, 11, 26,  6, 10, 29, 18, 31, 35, 19, 28,  8,  6,  1, 15, 34, 17,
11,  0,  0, 30, 22,  0, 35,  0,  0,  0,  0, 16, 35, 29, 33, 11, 33,  0, 14, 31, 15, 29,  0, 13, 14,
25,  0,  0, 11, 13,  0, 18, 28, 19, 28,  0,  4, 18, 35, 36, 25, 36, 28, 16,  2, 24, 35, 19,  8, 16,
33,  0, 36, 34, 18,  0, 31, 28, 14, 12,  0,  0, 31,  0,  0, 33,  0, 14,  6, 22,  8,  0, 10, 32, 35,
31,  0, 36, 14, 28, 18, 32, 33, 23, 14,  0,  3, 32, 17, 27, 14, 27, 14, 33, 14,  7, 17, 23, 36, 33,
27,  0, 27, 36, 36, 32, 10, 13,  9, 28,  0, 31, 10,  3, 20, 18, 20, 28, 36, 33, 18,  3,  9, 18, 36,
26,  0,  0,  0,  0,  0, 10,  0,  0,  0,  0, 17,  1, 22, 11,  0, 10,  0, 26,  0,  0, 20,  0,  0, 26,
15, 30,  0, 35, 25,  0,  2,  0,  0,  0, 29, 33, 32, 20, 18, 14,  7,  0,  2, 13, 11,  6,  0, 18, 20,
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INT BLT_37_stab_gens_fst[] = { 0, 8, 14, 16, 18, 20, 25};
INT BLT_37_stab_gens_len[] = { 8, 6, 2, 2, 2, 5, 4};
INT BLT_37_make_element_size = 0;
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