

The following data contain generators g_i and square ± 2 vectors v_j in the proof of Proposition 6.2 in the article
 Bloch's conjecture for (anti-)autoequivalences on K3 surfaces
 by Zhiyuan Li, Xun Yu, and Ruxuan Zhang.

$n=6$

$L_n = \{\{0, 1, 0\}, \{1, 0, 0\}, \{0, 0, -12\}\}$
 $g_1 = \{\{1, 6, 12\}, \{0, 1, 0\}, \{0, 1, 1\}\}$
 $g_2 = \{\{25, 24, 120\}, \{24, 25, 120\}, \{10, 10, 49\}\}, v_1 = \{5, 5, 2\}$

$n=8$

$L_n = \{\{0, 1, 0\}, \{1, 0, 0\}, \{0, 0, -16\}\}$
 $g_1 = \{\{1, 8, 16\}, \{0, 1, 0\}, \{0, 1, 1\}\}$
 $g_2 = \{\{9, 8, 48\}, \{8, 9, 48\}, \{3, 3, 17\}\}, v_1 = \{3, 3, 1\}$

$n=10$

$L_n = \{\{0, 1, 0\}, \{1, 0, 0\}, \{0, 0, -20\}\}$
 $g_1 = \{\{1, 10, 20\}, \{0, 1, 0\}, \{0, 1, 1\}\}$
 $g_2 = \{\{81, 160, 720\}, \{40, 81, 360\}, \{18, 36, 161\}\}, v_1 = \{13, 7, 3\},$
 $v_2 = \{3, 3, 1\}$

$n=11$

$L_n = \{\{0, 1, 0\}, \{1, 0, 0\}, \{0, 0, -22\}\}$
 $g_1 = \{\{1, 11, 22\}, \{0, 1, 0\}, \{0, 1, 1\}\}$
 $g_2 = \{\{11, 16, 88\}, \{9, 11, 66\}, \{3, 4, 23\}\}, v_1 = \{4, 3, 1\}$

$n=14$

$L_n = \{\{0, 1, 0\}, \{1, 0, 0\}, \{0, 0, -28\}\}$
 $g_1 = \{\{1, 14, 28\}, \{0, 1, 0\}, \{0, 1, 1\}\}$
 $g_2 = \{\{14, 25, 140\}, \{9, 14, 84\}, \{3, 5, 29\}\}, v_1 = \{5, 3, 1\}$
 $g_3 = \{\{169, 504, 2184\}, \{56, 169, 728\}, \{26, 78, 337\}\}, v_1 = \{5, 3, 1\},$
 $v_2 = \{15, 15, 4\}, v_3 = \{3, 5, 1\}$

$n=15$

$L_n = \{\{0, 1, 0\}, \{1, 0, 0\}, \{0, 0, -30\}\}$
 $g_1 = \{\{1, 0, 0\}, \{15, 1, 30\}, \{1, 0, 1\}\}$
 $g_2 = \{\{16, 15, 120\}, \{15, 16, 120\}, \{4, 4, 31\}\}, v_1 = \{4, 4, 1\}$
 $g_3 = \{\{121, 60, 660\}, \{240, 121, 1320\}, \{44, 22, 241\}\}, v_1 = \{8, 17, 3\},$
 $v_2 = \{2, 8, 1\}, v_3 = \{1, 16, 1\}$

$n=16$

$L_n = \{\{0, 1, 0\}, \{1, 0, 0\}, \{0, 0, -32\}\}$
 $g_1 = \{\{1, 16, 32\}, \{0, 1, 0\}, \{0, 1, 1\}\}$
 $g_2 = \{\{49, 144, 672\}, \{16, 49, 224\}, \{7, 21, 97\}\}, v_1 = \{13, 5, 2\},$
 $v_2 = \{5, 3, 1\}$

$n=17$

$L_n = \{\{0, 1, 0\}, \{1, 0, 0\}, \{0, 0, -34\}\}$
 $g_1 = \{\{1, 17, 34\}, \{0, 1, 0\}, \{0, 1, 1\}\}$
 $g_2 = \{\{17, 36, 204\}, \{9, 17, 102\}, \{3, 6, 35\}\}, v_1 = \{6, 3, 1\}$

$n=19$

$L_n = \{\{0, 1, 0\}, \{1, 0, 0\}, \{0, 0, -38\}\}$
 $g_1 = \{\{1, 0, 0\}, \{19, 1, 38\}, \{1, 0, 1\}\}$

g2={{19, 16, 152}, {25, 19, 190}, {5, 4, 39}}, v1={4, 5, 1}
g3={{19, 16, 152}, {196, 171, 1596}, {-14, -12, -113}}, v1={4, 43, -3}, v2={1, 20, -1}

n=21

Ln={{0, 1, 0}, {1, 0, 0}, {0, 0, -42}}
g1={{1, 21, 42}, {0, 1, 0}, {0, 1, 1}}
g2={{64, 189, 1008}, {21, 64, 336}, {8, 24, 127}}, v1={17, 5, 2},
v2={11, 2, 1}
g3={{169, 336, 2184}, {84, 169, 1092}, {26, 52, 337}}, v1={19, 10, 3}, v2={5, 4, 1}

n=23

Ln={{0, 1, 0}, {1, 0, 0}, {0, 0, -46}}
g1={{1, 0, 0}, {23, 1, 46}, {1, 0, 1}}
g2={{23, 16, 184}, {36, 23, 276}, {6, 4, 47}}, v1={4, 6, 1}
g3={{23, 9, 138}, {64, 23, 368}, {8, 3, 47}}, v1={3, 8, 1}
g4={{81, 23, -414}, {92, 25, -460}, {18, 5, -91}}, v1={4, 6, 1},
v2={3, 8, 1}
g5={{92, 9, -276}, {225, 23, -690}, {30, 3, -91}}, v1={3, 8, 1},
v2={1, 24, 1}

n=26

Ln={{0, 1, 0}, {1, 0, 0}, {0, 0, -52}}
g1={{1, 0, 0}, {26, 1, 52}, {1, 0, 1}}
g2={{26, 9, 156}, {81, 26, 468}, {9, 3, 53}}, v1={3, 9, 1}
g3={{49, 26, 364}, {234, 121, 1716}, {-21, -11, -155}}, v1={3, 9, -1}, v2={7, 15, -2}
g4={{26, 9, 156}, {289, 104, 1768}, {-17, -6, -103}}, v1={3, 35, -2}, v2={1, 27, -1}
g5={{234, 25, 780}, {961, 104, 3224}, {-93, -10, -311}}, v1={3, 9, -1}, v2={7, 15, -2}, v3={3, 9, -1}, v4={1, 27, -1}
g6={{1681, 234, 6396}, {2600, 361, 9880}, {-410, -57, -1559}},
v1={21, 31, -5}, v2={5, 5, -1}, v3={7, 15, -2}, v4={3, 9, -1},
v5={1, 27, -1}

n=29

Ln={{0, 1, 0}, {1, 0, 0}, {0, 0, -58}}
g1={{29, 100, 580}, {9, 29, 174}, {3, 10, 59}}, v1={10, 3, 1}
g2={{29, 361, 1102}, {9, 116, 348}, {-3, -38, -115}}, v1={10, 3, -1}
g3={{29, 36, 348}, {25, 29, 290}, {5, 6, 59}}, v1={6, 5, 1}
g4={{441, 464, 4872}, {116, 121, 1276}, {-42, -44, -463}}, v1={10, 3, -1}, v2={6, 5, -1}

n=31

Ln={{0, 1, 0}, {1, 0, 0}, {0, 0, -62}}
g1={{1, 31, 62}, {0, 1, 0}, {0, 1, 1}}
g2={{31, 64, 496}, {16, 31, 248}, {4, 8, 63}}, v1={8, 4, 1}
g3={{124, 1369, 4588}, {25, 279, 930}, {-10, -111, -371}}, v1={25, 5, -2}

n=41

Ln={{0, 1, 0}, {1, 0, 0}, {0, 0, -82}}
g1={{1, 41, 82}, {0, 1, 0}, {0, 1, 1}}

$g2 = \{\{41, 196, 1148\}, \{9, 41, 246\}, \{3, 14, 83\}\}, v1 = \{14, 3, 1\}$
 $g3 = \{\{41, 729, 2214\}, \{9, 164, 492\}, \{-3, -54, -163\}\}, v1 = \{14, 3, -1\}$
 $g4 = \{\{41, 49, 574\}, \{36, 41, 492\}, \{6, 7, 83\}\}, v1 = \{7, 6, 1\}$
 $g5 = \{\{144, 1025, 4920\}, \{41, 289, 1394\}, \{-12, -85, -409\}\}, v1 = \{37, 10, -3\}, v2 = \{14, 3, -1\}$
 $g6 = \{\{164, 2401, 8036\}, \{25, 369, 1230\}, \{-10, -147, -491\}\}, v1 = \{14, 3, -1\}, v2 = \{37, 10, -3\}, v3 = \{14, 3, -1\}$

$n=49$

$Ln = \{\{0, 1, 0\}, \{1, 0, 0\}, \{0, 0, -98\}\}$

$g1 = \{\{1, 0, 0\}, \{49, 1, 98\}, \{1, 0, 1\}\}$

$g2 = \{\{49, 25, 490\}, \{100, 49, 980\}, \{10, 5, 99\}\}, v1 = \{5, 10, 1\}$

This file contains computational data for Proposition 6.8 in the article
 Bloch's conjecture for (anti-)autoequivalences on K3 surfaces
 by Zhiyuan Li, Xun Yu, and Ruxuan Zhang.

By Tables 15.2a and 15.2b in the book by Conway–Sloane, there are exactly 394 lattices $L(n)$ such that

- (1) L is a rank 2 even hyperbolic lattice,
- (2) $|\det(L)| \leq 100$,
- (3) $|\det(L)|$ is not a square number, equivalently, L is not isotropic,
- (4) $1 \leq n \leq 6$,
- (5) $L(n)$ has no elements v with $v^2 = 2, -2$.

For each $L(n)$, let g denote a generator of the intersection between $O^+(L(n))$ and the stable orthogonal group of $L(n)$.

The following data give decomposition $\text{id}_U + g = E_w \cdot s_{r1} \dots s_{rk} \cdot f$ for the isometry $\text{id}_U + g$ in $O(U + L(n))$.

Here E_w is the Echler transformation associated to w in $L(n)$,
 s_{r1}, \dots, s_{rk} are reflections around square ± 2 vectors $r1, \dots, rk$ in $U + L(n)$ and $\text{rts} := (r1, \dots, rk)$,
 f is an element in $W(L(n))$.

Decomposition for g is unclear for the cases No. 198, 303, 304, 358, 383.

No.1

$$L(n) = \{\{4, 2\}, \{2, -4\}\}$$

$$g = \{\{233, -144\}, \{-144, 89\}\}$$

$$w = \{-2, 3\}$$

$$\text{rts} = \{\{17, -1, 3, 0\}, \{7, 3, -2, -5\}, \{1, 1, -1, -2\}\}$$

$$f = \{\{-10, -1, -30, 20\}, \{-1, 0, 0, 0\}, \{-4, 0, 1, 0\}, \{-7, 0, 0, 1\}\}$$

No.2

$$L(n) = \{\{4, 4\}, \{4, -4\}\}$$

$$g = \{\{29, -12\}, \{-12, 5\}\}$$

$$w = \{-1, -2\}$$

$$\text{rts} = \{\{9, 1, 0, 2\}, \{9, 3, 1, 5\}, \{3, 1, 0, 1\}\}$$

$$f = \{\{-2, 1, 12, -4\}, \{1, 0, 0, 0\}, \{-1, 0, 1, 0\}, \{-2, 0, 0, 1\}\}$$

No.3

$$L(n) = \{\{-4, 4\}, \{4, 6\}\}$$

$$g = \{\{1177, 684\}, \{456, 265\}\}$$

$$w = \{0, -2\}$$

$$rts = \{\{13, 2, -3, 3\}, \{1, 2, -3, 5\}\}$$

$$f = \{\{1, 0, 0, 0\}, \{-48, 1, 784, 456\}, \{72, 0, 1, 0\}, \{-124, 0, 0, 1\}\}$$

No.4

$$L(n) = \{\{6, 3\}, \{3, -6\}\}$$

$$g = \{\{34, -21\}, \{-21, 13\}\}$$

$$w = \{3, 2\}$$

$$rts = \{\{16, 1, -1, -3\}, \{1, 2, -3, -5\}, \{4, 1, -1, -2\}\}$$

$$f = \{\{0, 1, 0, 0\}, \{1, 0, 0, 0\}, \{0, 0, 1, 0\}, \{0, 0, 0, 1\}\}$$

No.5

$$L(n) = \{\{4, 4\}, \{4, -8\}\}$$

$$g = \{\{153, -112\}, \{-56, 41\}\}$$

$$w = \{2, -2\}$$

$$rts = \{\{5, 1, 0, 1\}, \{1, 3, 2, 3\}\}$$

$$f = \{\{-1, 0, 0, 0\}, \{8, -1, 56, -40\}, \{6, 0, 1, 0\}, \{8, 0, 0, 1\}\}$$

No.6

$$L(n) = \{\{-4, 4\}, \{4, 8\}\}$$

$$g = \{\{153, 112\}, \{56, 41\}\}$$

$$w=\{-2,-1\}$$

$$rts=\{\{1,1,-1,0\},\{5,-1,0,-1\},\{1,1,1,0\}\}$$

$$f=\{\{44,1,52,32\},\{1,0,0,0\},\{6,0,1,0\},\{-7,0,0,1\}\}$$

No.7

$$L(n)=\{\{4,6\},\{6,-4\}\}$$

$$g=\{\{1543321,-467280\},\{-467280,141481\}\}$$

$$w=\{3,-5\}$$

$$rts=\{\{173,-1,-7,-2\},\{33,1,0,4\},\{7,-5,-6,-19\},\{3,-1,-1,-3\},\{19,1,0,-3\},\{3,1,0,-1\},\{1,-5,-1,-2\},\{1,1,0,1\}\}$$

$$f=\{\{-1,0,0,0\},\{294,-1,1162,-350\},\{49,0,1,0\},\{161,0,0,1\}\}$$

No.8

$$L(n)=\{\{4,6\},\{6,-6\}\}$$

$$g=\{\{55,-24\},\{-16,7\}\}$$

$$w=\{-23,19\}$$

$$rts=\{\{68,1,-4,-11\},\{16,-1,5,11\},\{9,-1,-2,-4\},\{2,-2,-1,-1\},\{2,1,0,-1\}\}$$

$$f=\{\{2,-1,-4,-6\},\{-1,0,0,0\},\{-1,0,1,0\},\{0,0,0,1\}\}$$

No.9

$$L(n)=\{\{-4,6\},\{6,6\}\}$$

$$g=\{\{55,24\},\{16,7\}\}$$

$$w=\{19,0\}$$

$$rts=\{\{306,-1,-5,-7\},\{117,2,-7,9\},\{6,-1,2,-5\}\}$$

$$f=\{\{-80,-1,-40,0\},\{-1,0,0,0\},\{4,0,1,0\},\{-4,0,0,1\}\}$$

No.10

$$L(n) = \{\{4, 7\}, \{7, -4\}\}$$

$$g = \{\{62177, -16512\}, \{-16512, 4385\}\}$$

$$w = \{15, 0\}$$

$$rts = \{\{99, -8, 11, 29\}, \{9, -3, 3, 10\}, \{11, -4, 3, 9\}\}$$

$$f = \{\{730, -1, 4580, -1215\}, \{-1, 0, 0, 0\}, \{151, 0, 1, 0\}, \{568, 0, 0, 1\}\}$$

No.11

$$L(n) = \{\{-4, 6\}, \{6, 8\}\}$$

$$g = \{\{3761, 2112\}, \{1056, 593\}\}$$

$$w = \{-1, 2\}$$

$$rts = \{\{15, 1, 2, -2\}, \{9, 1, 2, -3\}, \{5, 1, 1, -1\}, \{31, 1, -4, 6\}, \{17, 3, -11, 19\}, \{3, 1, -4, 7\}\}$$

$$f = \{\{1, -2, -16, -10\}, \{0, 1, 0, 0\}, \{0, -1, 1, 0\}, \{0, 2, 0, 1\}\}$$

No.12

$$L(n) = \{\{6, 6\}, \{6, -6\}\}$$

$$g = \{\{985, -408\}, \{-408, 169\}\}$$

$$w = \{2, -3\}$$

$$rts = \{\{13, 1, 0, 2\}, \{1, 2, 2, 5\}\}$$

$$f = \{\{-1, 0, 0, 0\}, \{21, -1, 450, -186\}, \{22, 0, 1, 0\}, \{53, 0, 0, 1\}\}$$

No.13

$$L(n) = \{\{8, 4\}, \{4, -8\}\}$$

$$g = \{\{233, -144\}, \{-144, 89\}\}$$

$$w=\{2,0\}$$

$$rts=\{\{5,1,0,-1\},\{1,-5,2,3\}\}$$

$$f=\{\{-1,0,0,0\},\{-16,-1,88,-56\},\{6,0,1,0\},\{10,0,0,1\}\}$$

No.14

$$L(n)=\{\{4,8\},\{8,-4\}\}$$

$$g=\{\{305,-72\},\{-72,17\}\}$$

$$w=\{-1,-3\}$$

$$rts=\{\{19,1,0,3\},\{13,3,1,7\},\{3,1,0,1\}\}$$

$$f=\{\{-40,1,260,-60\},\{1,0,0,0\},\{-7,0,1,0\},\{-29,0,0,1\}\}$$

No.15

$$L(n)=\{\{4,6\},\{6,-12\}\}$$

$$g=\{\{10009,-7920\},\{-2640,2089\}\}$$

$$w=\{3,2\}$$

$$rts=\{\{9,-1,2,2\},\{17,7,-11,-15\},\{27,5,-10,-14\},\{1,-1,-1,-1\}\}$$

$$f=\{\{1,306,1704,-1350\},\{0,1,0,0\},\{0,-147,1,0\},\{0,-186,0,1\}\}$$

No.16

$$L(n)=\{\{-4,6\},\{6,12\}\}$$

$$g=\{\{10009,7920\},\{2640,2089\}\}$$

$$w=\{-1,-3\}$$

$$rts=\{\{9,1,-2,2\},\{23,-7,8,-12\},\{1,1,1,-1\}\}$$

$$f=\{\{502,-1,-2978,-2358\},\{-1,0,0,0\},\{257,0,1,0\},\{-325,0,0,1\}\}$$

No.17

$$L(n) = \{\{-6, 5\}, \{5, 10\}\}$$

$$g = \{\{5311, 3735\}, \{2241, 1576\}\}$$

$$w = \{-13, -9\}$$

$$rts = \{\{123, -2, 0, -7\}, \{12, -8, 15, -22\}, \{4, -1, 2, -3\}\}$$

$$f = \{\{207, 1, 363, 250\}, \{1, 0, 0, 0\}, \{28, 0, 1, 0\}, \{-39, 0, 0, 1\}\}$$

No.18

$$L(n) = \{\{6, 6\}, \{6, -10\}\}$$

$$g = \{\{79, -50\}, \{-30, 19\}\}$$

$$w = \{12, 12\}$$

$$rts = \{\{101, -1, 9, 13\}, \{30, 1, -8, -13\}, \{18, -1, 9, 14\}\}$$

$$f = \{\{-4, 1, 108, -68\}, \{1, 0, 0, 0\}, \{-7, 0, 1, 0\}, \{-11, 0, 0, 1\}\}$$

No.19

$$L(n) = \{\{4, 8\}, \{8, -8\}\}$$

$$g = \{\{89, -40\}, \{-20, 9\}\}$$

$$w = \{3, -1\}$$

$$rts = \{\{3, -1, -1, 0\}, \{1, 5, 0, 1\}\}$$

$$f = \{\{-1, 0, 0, 0\}, \{6, -1, 12, 0\}, \{1, 0, 1, 0\}, \{1, 0, 0, 1\}\}$$

No.20

$$L(n) = \{\{-4, 8\}, \{8, 8\}\}$$

$$g = \{\{89, 40\}, \{20, 9\}\}$$

$$w = \{-3, 3\}$$

$$rts = \{\{21, 1, 2, -3\}, \{3, 1, 1, -2\}\}$$

$$f=\{\{1,0,0,0\},\{6,1,108,48\},\{5,0,1,0\},\{-11,0,0,1\}\}$$

No.21

$$L(n)=\{\{-6,6\},\{6,10\}\}$$

$$g=\{\{79,50\},\{30,19\}\}$$

$$w=\{-13,-25\}$$

$$rts=\{\{138,1,-11,16\},\{21,-1,10,-16\},\{4,-1,-1,2\},\{2,-3,0,1\},\{1,-6,2,1\}\}$$

$$f=\{\{0,-1,0,0\},\{-1,-12,12,-12\},\{0,-2,1,0\},\{0,0,0,1\}\}$$

No.22

$$L(n)=\{\{6,6\},\{6,-12\}\}$$

$$g=\{\{2131,-1560\},\{-780,571\}\}$$

$$w=\{2,0\}$$

$$rts=\{\{10,1,1,-1\},\{11,5,0,-3\},\{5,5,0,-2\},\{2,-1,-1,-1\}\}$$

$$f=\{\{1,6,30,-24\},\{0,1,0,0\},\{0,-2,1,0\},\{0,-3,0,1\}\}$$

No.23

$$L(n)=\{\{-6,6\},\{6,12\}\}$$

$$g=\{\{2131,1560\},\{780,571\}\}$$

$$w=\{3,-2\}$$

$$rts=\{\{17,-2,3,-5\},\{25,4,-7,8\},\{2,1,-1,1\}\}$$

$$f=\{\{501,-1,1380,1014\},\{-1,0,0,0\},\{-97,0,1,0\},\{133,0,0,1\}\}$$

No.24

$$L(n) = \{\{4, 8\}, \{8, -12\}\}$$

$$g = \{\{56641, -36576\}, \{-12192, 7873\}\}$$

$$w = \{-4, -4\}$$

$$rts = \{\{19, -1, -3, -4\}, \{3, -1, 2, 3\}, \{3, 5, 5, 8\}, \{1, -3, -2, -3\}\}$$

$$f = \{\{-1, 0, 0, 0\}, \{-5144, -1, -65064, 42016\}, \{-3970, 0, 1, 0\}, \{-6148, 0, 0, 1\}\}$$

No.25

$$L(n) = \{\{-4, 8\}, \{8, 12\}\}$$

$$g = \{\{56641, 36576\}, \{12192, 7873\}\}$$

$$w = \{1, 2\}$$

$$rts = \{\{5, -1, -1, 2\}, \{3, -5, -5, 8\}, \{5, -25, -13, 21\}, \{3, 1, -11, 17\}\}$$

$$f = \{\{-1, 54, 3196, 2064\}, \{0, -1, 0, 0\}, \{0, -195, 1, 0\}, \{0, 302, 0, 1\}\}$$

No.26

$$L(n) = \{\{4, 10\}, \{10, -4\}\}$$

$$g = \{\{370497401, -71351280\}, \{-71351280, 13741001\}\}$$

$$w = \{-1, 27\}$$

$$rts = \{\{5781, -1, 25, 22\}, \{49, 1, -7, 2\}, \{27, -1, 7, -1\}, \{47, 5, -27, 6\}, \\ \{31, 9, -19, 5\}, \{13, -1, -11, 2\}, \{3, 3, -4, 1\}, \{37, -17, 27, -3\}, \{11, 1, 4, -1\}, \\ \{3, 1, 5, -1\}\}$$

$$f = \{\{-1, 142498, -30122, 5750\}, \{0, -1, 0, 0\}, \{0, -543, 1, 0\}, \{0, -2795, 0, 1\}\}$$

No.27

$$L(n) = \{\{6, 9\}, \{9, -6\}\}$$

$$g = \{\{109, -33\}, \{-33, 10\}\}$$

$$w = \{3, -3\}$$

$$rts = \{\{64, -2, -4, -3\}, \{26, 7, 3, 14\}, \{4, 2, 1, 4\}\}$$

$f=\{\{3,-1,-6,-9\},\{-1,0,0,0\},\{-1,0,1,0\},\{0,0,0,1\}\}$

No.28

$L(n)=\{\{10,5\},\{5,-10\}\}$

$g=\{\{10946,-6765\},\{-6765,4181\}\}$

$w=\{-2,3\}$

$rts=\{\{36,-4,5,4\},\{7,3,-2,-4\},\{4,-1,1,1\},\{6,-1,-1,-1\},\{2,-3,-2,-3\}\}$

$f=\{\{0,-1,0,0\},\{-1,-5,-55,35\},\{0,-3,1,0\},\{0,-5,0,1\}\}$

No.29

$L(n)=\{\{8,8\},\{8,-8\}\}$

$g=\{\{985,-408\},\{-408,169\}\}$

$w=\{3,0\}$

$rts=\{\{7,-1,1,1\},\{1,5,-2,-5\}\}$

$f=\{\{1,0,0,0\},\{-36,1,-408,168\},\{15,0,1,0\},\{36,0,0,1\}\}$

No.30

$L(n)=\{\{4,8\},\{8,-16\}\}$

$g=\{\{985,-816\},\{-204,169\}\}$

$w=\{2,2\}$

$rts=\{\{15,1,-1,-2\},\{5,3,-2,-3\},\{3,-1,-1,-1\}\}$

$f=\{\{-224,-1,1040,-864\},\{-1,0,0,0\},\{76,0,1,0\},\{92,0,0,1\}\}$

No.31

$L(n)=\{\{-4,8\},\{8,16\}\}$

$$g=\{\{985,816\},\{204,169\}\}$$

$$w=\{0,3\}$$

$$rts=\{\{97,1,5,-2\},\{9,1,2,-2\},\{3,1,1,-1\}\}$$

$$f=\{\{-16,1,-192,-160\},\{1,0,0,0\},\{-14,0,1,0\},\{17,0,0,1\}\}$$

No.32

$$L(n)=\{\{4,10\},\{10,-8\}\}$$

$$g=\{\{1977,-736\},\{-368,137\}\}$$

$$w=\{2,3\}$$

$$rts=\{\{5,1,-1,-3\},\{23,-3,3,5\},\{3,1,0,1\}\}$$

$$f=\{\{668,-1,1966,-728\},\{-1,0,0,0\},\{64,0,1,0\},\{171,0,0,1\}\}$$

No.33

$$L(n)=\{\{-4,10\},\{10,8\}\}$$

$$g=\{\{1977,736\},\{368,137\}\}$$

$$w=\{-2,-4\}$$

$$rts=\{\{173,7,-13,23\},\{11,3,-4,10\},\{3,-1,1,-3\}\}$$

$$f=\{\{176,1,484,176\},\{1,0,0,0\},\{16,0,1,0\},\{-42,0,0,1\}\}$$

No.34

$$L(n)=\{\{-4,10\},\{10,12\}\}$$

$$g=\{\{19417,10512\},\{3504,1897\}\}$$

$$w=\{-3,-3\}$$

$$rts=\{\{25,1,-2,2\},\{1,-7,7,-13\}\}$$

$$f=\{\{-1,0,0,0\},\{-162,-1,-3662,-1982\},\{163,0,1,0\},\{-301,0,0,1\}\}$$

No.35

$$L(n) = \{\{-6, 9\}, \{9, 12\}\}$$

$$g = \{\{16375393, 9195648\}, \{4597824, 2581921\}\}$$

$$w = \{3, 3\}$$

$$rts = \{\{127, 5, 10, -8\}, \{13, 4, 5, -8\}, \{4, -1, 1, -2\}, \{37, 83, 24, -28\}, \\ \{67, 64, 27, -28\}, \{8, -7, 1, -4\}, \{5, 5, 2, -2\}\}$$

$$f = \{\{0, 1, 0, 0\}, \{1, 228, -7731, -4341\}, \{0, -351, 1, 0\}, \{0, 625, 0, 1\}\}$$

No.36

$$L(n) = \{\{4, 12\}, \{12, -4\}\}$$

$$g = \{\{1405, -228\}, \{-228, 37\}\}$$

$$w = \{1, -2\}$$

$$rts = \{\{7, 1, 0, 2\}, \{7, -3, -1, -3\}, \{1, 1, 0, -1\}\}$$

$$f = \{\{-162, 1, -1316, 212\}, \{1, 0, 0, 0\}, \{17, 0, 1, 0\}, \{104, 0, 0, 1\}\}$$

No.37

$$L(n) = \{\{-8, 8\}, \{8, 12\}\}$$

$$g = \{\{1177, 684\}, \{456, 265\}\}$$

$$w = \{-2, -3\}$$

$$rts = \{\{77, 5, -8, 8\}, \{5, -5, 5, -9\}, \{5, -1, 1, -2\}\}$$

$$f = \{\{186, 1, 296, 164\}, \{1, 0, 0, 0\}, \{14, 0, 1, 0\}, \{-23, 0, 0, 1\}\}$$

No.38

$$L(n) = \{\{-4, 10\}, \{10, 16\}\}$$

$$g = \{\{14953601, 10490880\}, \{2622720, 1840001\}\}$$

$$w=\{-3,-13\}$$

$$rts=\{\{993,1,-14,10\},\{197,-3,1,8\},\{21,-3,8,2\},\{21,3,9,1\},\{3,1,1,0\}\}$$

$$f=\{\{-3962312,-1,-878770,-616454\},\{-1,0,0,0\},\{48145,0,1,0\},\{-68619,0,0,1\}\}$$

No.39

$$L(n)=\{\{4,12\},\{12,-8\}\}$$

$$g=\{\{150841,-47760\},\{-23880,7561\}\}$$

$$w=\{-1,3\}$$

$$rts=\{\{19,3,-2,-8\},\{7,3,-3,-10\},\{3,7,-3,-10\},\{1,-1,1,3\}\}$$

$$f=\{\{1,0,0,0\},\{3334,1,88368,-27980\},\{-2109,0,1,0\},\{-6661,0,0,1\}\}$$

No.40

$$L(n)=\{\{-4,12\},\{12,8\}\}$$

$$g=\{\{150841,47760\},\{23880,7561\}\}$$

$$w=\{3,3\}$$

$$rts=\{\{25,3,3,-7\},\{1,1,1,-3\},\{9,-9,-4,14\},\{1,3,1,-3\}\}$$

$$f=\{\{1,0,0,0\},\{-2462,1,-37000,-11716\},\{-883,0,1,0\},\{2789,0,0,1\}\}$$

No.41

$$L(n)=\{\{12,6\},\{6,-12\}\}$$

$$g=\{\{75025,-46368\},\{-46368,28657\}\}$$

$$w=\{-1,2\}$$

$$rts=\{\{5,-1,1,1\},\{11,11,-8,-14\},\{17,11,-11,-19\},\{25,1,-16,-26\}\}$$

$$f=\{\{1,-114,-1584,978\},\{0,1,0,0\},\{0,73,1,0\},\{0,118,0,1\}\}$$

No.42

$$L(n) = \{\{6, 12\}, \{12, -6\}\}$$

$$g = \{\{98209, -23184\}, \{-23184, 5473\}\}$$

$$w = \{1, 1\}$$

$$rts = \{\{4, 1, 0, -1\}, \{7, -7, 2, 6\}, \{1, 4, 0, 1\}, \{11, -8, 3, 10\}, \{1, -2, 1, 4\}\}$$

$$f = \{\{0, -1, 0, 0\}, \{-1, -372, 11766, -2778\}, \{0, 207, 1, 0\}, \{0, 877, 0, 1\}\}$$

No.43

$$L(n) = \{\{4, 10\}, \{10, -20\}\}$$

$$g = \{\{90481, -77280\}, \{-15456, 13201\}\}$$

$$w = \{3, -3\}$$

$$rts = \{\{9, -1, -2, -2\}, \{73, 11, 13, 19\}, \{7, -1, 2, 2\}\}$$

$$f = \{\{4642, 1, -17078, 14590\}, \{1, 0, 0, 0\}, \{1087, 0, 1, 0\}, \{1273, 0, 0, 1\}\}$$

No.44

$$L(n) = \{\{-4, 10\}, \{10, 20\}\}$$

$$g = \{\{90481, 77280\}, \{15456, 13201\}\}$$

$$w = \{-2, -1\}$$

$$rts = \{\{31, 1, -4, 0\}, \{31, 11, -9, 6\}, \{1, -9, 5, -6\}\}$$

$$f = \{\{0, -1, 0, 0\}, \{-1, -198, -1758, -1500\}, \{0, 112, 1, 0\}, \{0, -131, 0, 1\}\}$$

No.45

$$L(n) = \{\{6, 9\}, \{9, -18\}\}$$

$$g = \{\{10009, -7920\}, \{-2640, 2089\}\}$$

$$w = \{-2, -3\}$$

$rts = \{\{10, -2, -5, -6\}, \{8, 2, 11, 14\}, \{4, -1, 4, 5\}\}$

$f = \{\{1185, 1, -23907, 18918\}, \{1, 0, 0, 0\}, \{1376, 0, 1, 0\}, \{1739, 0, 0, 1\}\}$

No. 46

$L(n) = \{\{-6, 9\}, \{9, 18\}\}$

$g = \{\{10009, 7920\}, \{2640, 2089\}\}$

$w = \{1, -1\}$

$rts = \{\{8, -2, 1, -2\}, \{16, -19, 13, -18\}, \{1, -16, 11, -14\}\}$

$f = \{\{0, 1, 0, 0\}, \{1, 381, -4551, -3600\}, \{0, -262, 1, 0\}, \{0, 331, 0, 1\}\}$

No. 47

$L(n) = \{\{8, 8\}, \{8, -16\}\}$

$g = \{\{153, -112\}, \{-56, 41\}\}$

$w = \{0, 5\}$

$rts = \{\{161, -3, 11, 11\}, \{43, 3, -8, -12\}, \{3, -1, 3, 4\}\}$

$f = \{\{-8, -1, 8, -16\}, \{-1, 0, 0, 0\}, \{0, 0, 1, 0\}, \{1, 0, 0, 1\}\}$

No. 48

$L(n) = \{\{4, 12\}, \{12, -12\}\}$

$g = \{\{181, -84\}, \{-28, 13\}\}$

$w = \{1, 0\}$

$rts = \{\{25, 1, 12, -2\}, \{5, 1, 6, -1\}, \{7, -1, -7, 1\}\}$

$f = \{\{-98, 1, -28, -84\}, \{1, 0, 0, 0\}, \{7, 0, 1, 0\}, \{0, 0, 0, 1\}\}$

No. 49

$$L(n) = \{\{-4, 12\}, \{12, 12\}\}$$

$$g = \{\{181, 84\}, \{28, 13\}\}$$

$$w = \{-2, -2\}$$

$$rts = \{\{29, -3, 1, -5\}, \{7, -3, 2, -5\}, \{1, 1, -1, 2\}\}$$

$$f = \{\{8, 1, 56, 24\}, \{1, 0, 0, 0\}, \{2, 0, 1, 0\}, \{-4, 0, 0, 1\}\}$$

No.50

$$L(n) = \{\{-8, 8\}, \{8, 16\}\}$$

$$g = \{\{153, 112\}, \{56, 41\}\}$$

$$w = \{-5, 2\}$$

$$rts = \{\{139, -3, -4, 10\}, \{17, 3, 7, -9\}, \{7, -1, -2, 3\}\}$$

$$f = \{\{-4, -1, -8, 8\}, \{-1, 0, 0, 0\}, \{1, 0, 1, 0\}, \{0, 0, 0, 1\}\}$$

No.51

$$L(n) = \{\{10, 10\}, \{10, -10\}\}$$

$$g = \{\{33461, -13860\}, \{-13860, 5741\}\}$$

$$w = \{-2, -15\}$$

$$rts = \{\{309, -1, -7, -13\}, \{71, -1, -5, -11\}, \{6, 1, 0, -1\}\}$$

$$f = \{\{-2835, 1, -6750, 2790\}, \{1, 0, 0, 0\}, \{198, 0, 1, 0\}, \{477, 0, 0, 1\}\}$$

No.52

$$L(n) = \{\{8, 12\}, \{12, -8\}\}$$

$$g = \{\{1543321, -467280\}, \{-467280, 141481\}\}$$

$$w = \{3, 0\}$$

$$rts = \{\{23, 3, 1, -3\}, \{49, -33, 12, 26\}, \{21, -33, 9, 23\}, \{5, -3, 2, 6\}\}$$

$f=\{\{1,2196,-39776,12044\},\{0,1,0,0\},\{0,835,1,0\},\{0,2758,0,1\}\}$

No.53

$L(n)=\{\{-4,12\},\{12,16\}\}$

$g=\{\{1543321,934560\},\{233640,141481\}\}$

$w=\{21,-13\}$

$rts=\{\{4895,-1,-12,-18\},\{1223,-1,6,-18\},\{865,-1,3,-13\}\}$

$f=\{\{-227446,-1,46560,28124\},\{-1,0,0,0\},\{-1959,0,1,0\},\{3227,0,0,1\}\}$

No.54

$L(n)=\{\{4,14\},\{14,-4\}\}$

$g=\{\{17217982601,-2411463600\},\{-2411463600,337737401\}\}$

$w=\{-13,2\}$

$rts=\{\{23,-7,9,0\},\{3,5,1,-1\},\{9,-11,2,5\},\{27,19,0,16\},\{3,3,0,2\},\{1,233,-2,-20\},\{1,9,0,-2\},\{9,-45,4,11\},\{1,-21,1,5\},\{1,7,0,-2\}\}$

$f=\{\{1,0,0,0\},\{-34738,1,-131276,18382\},\{1263,0,1,0\},\{9016,0,0,1\}\}$

No.55

$L(n)=\{\{6,12\},\{12,-12\}\}$

$g=\{\{854569,-384120\},\{-192060,86329\}\}$

$w=\{-4,6\}$

$rts=\{\{218,-1,5,4\},\{23,2,-7,-16\},\{4,-1,-1,-2\}\}$

$f=\{\{10224,1,94824,-42624\},\{1,0,0,0\},\{-2900,0,1,0\},\{-6452,0,0,1\}\}$

No.56

$L(n)=\{\{-6,12\},\{12,12\}\}$

$g=\{\{854569,384120\},\{192060,86329\}\}$

$w=\{-9,3\}$

$rts=\{\{64,2,5,-9\},\{1,4,9,-20\},\{2,4,5,-11\},\{5,-11,12,-27\},\{1,-5,4,-9\},\{4,-17,5,-12\},\{1,4,-1,2\}\}$

$f=\{\{0,1,0,0\},\{1,-447,3894,1752\},\{0,119,1,0\},\{0,-265,0,1\}\}$

No.57

$L(n)=\{\{4,12\},\{12,-20\}\}$

$g=\{\{809,-600\},\{-120,89\}\}$

$w=\{19,-16\}$

$rts=\{\{17,-1,-9,-12\},\{81,1,10,14\},\{117,5,12,19\},\{81,-17,16,12\},\{7,-3,2,1\}\}$

$f=\{\{-14,-1,-28,28\},\{-1,0,0,0\},\{-1,0,1,0\},\{-2,0,0,1\}\}$

No.58

$L(n)=\{\{-4,12\},\{12,20\}\}$

$g=\{\{809,600\},\{120,89\}\}$

$w=\{-2,9\}$

$rts=\{\{183,3,20,-25\},\{57,3,19,-25\},\{43,1,7,-9\}\}$

$f=\{\{-10,1,-44,-36\},\{1,0,0,0\},\{-2,0,1,0\},\{3,0,0,1\}\}$

No.59

$L(n)=\{\{4,14\},\{14,-8\}\}$

$g=\{\{87881,-24160\},\{-12080,3321\}\}$

$w=\{-3,-4\}$

$rts=\{\{101,3,2,13\},\{9,-1,-2,-7\},\{7,1,-1,-4\}\}$

$f=\{\{3962,-1,-37508,10310\},\{-1,0,0,0\},\{-683,0,1,0\},\{-2484,0,0,1\}\}$

No.60

$L(n)=\{\{-4,14\},\{14,8\}\}$

$g=\{\{87881,24160\},\{12080,3321\}\}$

$w=\{-26,-7\}$

$rts=\{\{9,1,-1,3\},\{11,-5,3,-12\},\{15,-17,4,-18\},\{1,13,1,-1\},$
 $\{11,-23,3,-15\},\{3,-9,1,-5\},\{1,-5,1,-4\}\}$

$f=\{\{0,-1,0,0\},\{-1,-8,-106,-28\},\{0,2,1,0\},\{0,-7,0,1\}\}$

No.61

$L(n)=\{\{8,12\},\{12,-12\}\}$

$g=\{\{3409,-1488\},\{-992,433\}\}$

$w=\{-7,29\}$

$rts=\{\{2741,-1,17,22\},\{1091,-1,13,23\},\{963,-1,13,24\}\}$

$f=\{\{594,-1,252,-72\},\{-1,0,0,0\},\{9,0,1,0\},\{15,0,0,1\}\}$

No.62

$L(n)=\{\{4,12\},\{12,-24\}\}$

$g=\{\{3409,-2976\},\{-496,433\}\}$

$w=\{-2,2\}$

$rts=\{\{97,-1,5,1\},\{3,-1,1,1\}\}$

$f=\{\{-1,0,0,0\},\{32,-1,-496,432\},\{-28,0,1,0\},\{-32,0,0,1\}\}$

No.63

$L(n)=\{\{-4,12\},\{12,24\}\}$

[illegible]

[illegible]

[illegible]

$$w=\{2,-2\}$$

$$rts=\{\{10,-1,1,-2\},\{2,2,-2,3\}\}$$

$$f=\{\{-1,0,0,0\},\{9,-1,222,144\},\{-9,0,1,0\},\{14,0,0,1\}\}$$

No.68

$$L(n)=\{\{8,14\},\{14,-8\}\}$$

$$g=\{\{62177,-16512\},\{-16512,4385\}\}$$

$$w=\{14,-28\}$$

$$rts=\{\{405,1,5,23\},\{5,1,0,-1\},\{3,5,1,-1\},\{1,15,-2,1\}\}$$

$$f=\{\{1,0,0,0\},\{7136,1,-3272,904\},\{52,0,1,0\},\{204,0,0,1\}\}$$

No.69

$$L(n)=\{\{-4,14\},\{14,16\}\}$$

$$g=\{\{62177,33024\},\{8256,4385\}\}$$

$$w=\{-9,-16\}$$

$$rts=\{\{97,-1,7,-14\},\{21,1,-7,13\},\{7,-1,-9,17\}\}$$

$$f=\{\{-98,-1,-3612,-1918\},\{-1,0,0,0\},\{119,0,1,0\},\{-224,0,0,1\}\}$$

No.70

$$L(n)=\{\{6,15\},\{15,-6\}\}$$

$$g=\{\{509626,-98145\},\{-98145,18901\}\}$$

$$w=\{2,3\}$$

$$rts=\{\{22,-1,1,3\},\{10,4,1,7\},\{2,-10,1,3\},\{1,2,0,-1\}\}$$

$$f=\{\{1,0,0,0\},\{-89511,1,-535281,103083\},\{6381,0,1,0\},\{33133,0,0,1\}\}$$

No.71

$$L(n) = \{\{4, 16\}, \{16, -4\}\}$$

$$g = \{\{4289, -528\}, \{-528, 65\}\}$$

$$w = \{12, -19\}$$

$$rts = \{\{1769, 1, -4, 18\}, \{579, 1, 0, 17\}, \{513, 1, 0, 16\}\}$$

$$f = \{\{542, -1, 288, -4\}, \{-1, 0, 0, 0\}, \{4, 0, 1, 0\}, \{17, 0, 0, 1\}\}$$

No.72

$$L(n) = \{\{-8, 12\}, \{12, 16\}\}$$

$$g = \{\{3761, 2112\}, \{1056, 593\}\}$$

$$w = \{-1, 1\}$$

$$rts = \{\{9, -7, -4, 8\}, \{1, -7, -5, 9\}\}$$

$$f = \{\{1, 0, 0, 0\}, \{392, 1, 8428, 4732\}, \{287, 0, 1, 0\}, \{-511, 0, 0, 1\}\}$$

No.73

$$L(n) = \{\{4, 14\}, \{14, -20\}\}$$

$$g = \{\{222784849, -145548000\}, \{-29109600, 19017649\}\}$$

$$w = \{-4, 26\}$$

$$rts = \{\{1549, -1, 19, 23\}, \{979, 3, 19, -10\}, \{139, 1, 7, -2\}, \{137, 1, 8, -2\}, \{25, -1, -9, 1\}\}$$

$$f = \{\{92997784, 1, 9688708, -6329908\}, \{1, 0, 0, 0\}, \{-380998, 0, 1, 0\}, \{-583194, 0, 0, 1\}\}$$

No.74

$$L(n) = \{\{-4, 14\}, \{14, 20\}\}$$

$$g = \{\{222784849, 145548000\}, \{29109600, 19017649\}\}$$

$$w = \{-2, 22\}$$

$rts = \{\{4289, 1, 25, -19\}, \{43, 3, 16, -24\}, \{31, -1, 11, -17\}\}$

$f = \{\{-1053320, -1, 9689212, 6330076\}, \{-1, 0, 0, 0\}, \{-381026, 0, 1, 0\}, \{583222, 0, 0, 1\}\}$

No. 75

$L(n) = \{\{12, 12\}, \{12, -12\}\}$

$g = \{\{985, -408\}, \{-408, 169\}\}$

$w = \{2, -3\}$

$rts = \{\{5, -1, -1, -2\}, \{5, 11, 0, 3\}, \{13, -1, 3, 7\}, \{29, -7, 7, 15\}, \{5, -1, 1, 2\}\}$

$f = \{\{-42, 1, -324, 132\}, \{1, 0, 0, 0\}, \{8, 0, 1, 0\}, \{19, 0, 0, 1\}\}$

No. 76

$L(n) = \{\{6, 12\}, \{12, -24\}\}$

$g = \{\{985, -816\}, \{-204, 169\}\}$

$w = \{-3, -2\}$

$rts = \{\{13, -1, -2, -2\}, \{1, -2, -5, -6\}\}$

$f = \{\{-1, 0, 0, 0\}, \{-21, -1, -1086, 900\}, \{-53, 0, 1, 0\}, \{-64, 0, 0, 1\}\}$

No. 77

$L(n) = \{\{4, 16\}, \{16, -8\}\}$

$g = \{\{1121, -272\}, \{-136, 33\}\}$

$w = \{-26, 4\}$

$rts = \{\{17, 1, 1, -1\}, \{45, -5, 4, 4\}, \{13, -1, 1, 1\}\}$

$f = \{\{-16, -1, -32, 16\}, \{-1, 0, 0, 0\}, \{0, 0, 1, 0\}, \{-2, 0, 0, 1\}\}$

No.78

$$L(n) = \{\{-4, 16\}, \{16, 8\}\}$$

$$g = \{\{1121, 272\}, \{136, 33\}\}$$

$$w = \{30, 8\}$$

$$rts = \{\{65, 5, 6, -21\}, \{1, 1, 1, -4\}, \{5, -1, 0, -1\}, \{1, 3, 1, 0\}\}$$

$$f = \{\{1, 0, 0, 0\}, \{-16, 1, -32, -16\}, \{0, 0, 1, 0\}, \{2, 0, 0, 1\}\}$$

No.79

$$L(n) = \{\{-6, 12\}, \{12, 24\}\}$$

$$g = \{\{985, 816\}, \{204, 169\}\}$$

$$w = \{-1, -1\}$$

$$rts = \{\{25, 2, -3, 1\}, \{2, 1, -1, 1\}\}$$

$$f = \{\{1, 0, 0, 0\}, \{-21, 1, 390, 324\}, \{19, 0, 1, 0\}, \{-23, 0, 0, 1\}\}$$

No.80

$$L(n) = \{\{-4, 14\}, \{14, 24\}\}$$

$$g = \{\{18935502762001, 14618243592000\}, \{2436373932000, 1880885238001\}\}$$

$$w = \{26, -4\}$$

$$rts = \{\{275, -1, 3, -7\}, \{13, -1, 0, -1\}, \{99, 29, 26, -5\}, \{21, 17, 8, -3\}, \\ \{5, -13, -1, 3\}, \{73, -73, 6, 18\}, \{135, -87, 19, 23\}, \{47, -25, 7, 7\}, \{5, -7, 3, 1\}, \\ \{1, 3, 1, 0\}, \{1, -53, -9, 12\}, \{67, -49, -5, -14\}, \{25, 19, -9, 4\}, \{7, 13, -4, 3\}, \\ \{1, 3, -1, 1\}\}$$

$$f = \{\{0, -1, 0, 0\}, \{-1, 733688, 4540488, 3505268\}, \{0, -205130, 1, 0\}, \\ \{0, 265712, 0, 1\}\}$$

No.81

$$L(n) = \{\{6, 15\}, \{15, -12\}\}$$

$$g = \{\{8835201001, -3289180320\}, \{-1644590160, 612250201\}\}$$

$$w=\{0,-3\}$$

$$rts=\{\{5,1,1,3\},\{8,-1,-1,-2\},\{7,-5,-2,-1\},\{10,25,17,-4\},\{7,-7,12,-2\},\{1,-11,-27,5\},\{61,-8,-19,2\},\{53,-5,-16,2\},\{4,-1,-1,0\},\{2,-1,-1,0\},\{10,10,-5,2\},\{29,53,-24,8\},\{16,23,-13,4\},\{8,11,-7,2\},\{20,16,-15,4\},\{2,-1,1,0\}\}$$

$$f=\{\{1,12624,-16557,6177\},\{0,1,0,0\},\{0,357,1,0\},\{0,961,0,1\}\}$$

No.82

$$L(n)=\{\{-6,15\},\{15,12\}\}$$

$$g=\{\{8835201001,3289180320\},\{1644590160,612250201\}\}$$

$$w=\{19,22\}$$

$$rts=\{\{5591,1,24,-14\},\{680,-1,1,-12\},\{25,-1,-3,-1\},\{40,5,15,2\},\{5,-1,5,1\},\{1,2,1,0\}\}$$

$$f=\{\{1,0,0,0\},\{-140600097,1,-205483806,-76497795\},\{-4438851,0,1,0\},\{11923380,0,0,1\}\}$$

No.83

$$L(n)=\{\{10,10\},\{10,-20\}\}$$

$$g=\{\{2131,-1560\},\{-780,571\}\}$$

$$w=\{-2,-1\}$$

$$rts=\{\{6,-1,-1,-1\},\{11,-6,-7,-9\},\{6,-1,-3,-4\}\}$$

$$f=\{\{220,1,2320,-1700\},\{1,0,0,0\},\{-98,0,1,0\},\{-134,0,0,1\}\}$$

No.84

$$L(n)=\{\{-10,10\},\{10,20\}\}$$

$$g=\{\{2131,1560\},\{780,571\}\}$$

$$w=\{3,3\}$$

$$rts=\{\{136,19,25,-27\},\{2,3,3,-4\},\{2,-8,-5,7\},\{1,4,-3,4\}\}$$

$f=\{\{-1,0,0,0\},\{130,-1,430,320\},\{-18,0,1,0\},\{25,0,0,1\}\}$

No.85

$L(n)=\{\{4,16\},\{16,-12\}\}$

$g=\{\{12812766721,-4598488440\},\{-1532829480,550130881\}\}$

$w=\{-13,-12\}$

$rts=\{\{151,1,4,13\},\{17,-1,-3,-8\},\{31,1,1,4\},\{1,5,5,14\},\{1,3,1,3\},\{1,5,0,1\},\{5,1,1,3\}\}$

$f=\{\{-138042594,1,1426080324,-511818720\},\{1,0,0,0\},\{-29354817,0,1,0\},\{-81791316,0,0,1\}\}$

No.86

$L(n)=\{\{-4,16\},\{16,12\}\}$

$g=\{\{12812766721,4598488440\},\{1532829480,550130881\}\}$

$w=\{6,10\}$

$rts=\{\{191,-1,-2,9\},\{17,-1,2,-6\},\{5,-11,-1,-2\},\{7,7,2,-2\},\{13,101,22,-1\},\{49,11,7,-13\},\{37,5,4,-7\},\{89,1,4,-1\},\{7,-1,0,1\},\{5,-1,0,1\},\{5,-5,0,2\},\{23,-133,11,13\},\{31,-11,-7,22\},\{1,-7,-5,14\},\{9,1,1,-2\}\}$

$f=\{\{-12240,1,13352,4808\},\{1,0,0,0\},\{274,0,1,0\},\{-766,0,0,1\}\}$

No.87

$L(n)=\{\{4,14\},\{14,-28\}\}$

$g=\{\{442961,-393120\},\{-56160,49841\}\}$

$w=\{9,22\}$

$rts=\{\{233,1,-18,-21\},\{83,1,-22,-25\},\{7,-1,-2,-2\},\{15,11,-1,-4\},\{49,3,-9,-11\},\{5,-9,-3,-1\},\{3,-1,-1,0\}\}$

$f=\{\{0,1,0,0\},\{1,-722,2388,-2114\},\{0,-121,1,0\},\{0,-136,0,1\}\}$

No.88

$$L(n) = \{\{-4, 14\}, \{14, 28\}\}$$

$$g = \{\{442961, 393120\}, \{56160, 49841\}\}$$

$$w = \{18, -24\}$$

$$rts = \{\{2317, 1, -26, 23\}, \{383, 1, -18, 19\}, \{201, 1, -10, 10\}\}$$

$$f = \{\{-61928, 1, 55348, 49140\}, \{1, 0, 0, 0\}, \{2798, 0, 1, 0\}, \{-3154, 0, 0, 1\}\}$$

No.89

$$L(n) = \{\{16, 8\}, \{8, -16\}\}$$

$$g = \{\{233, -144\}, \{-144, 89\}\}$$

$$w = \{2, 0\}$$

$$rts = \{\{9, 1, 0, -1\}, \{13, 3, -1, -3\}, \{9, 1, -1, -2\}\}$$

$$f = \{\{-32, 1, -112, 64\}, \{1, 0, 0, 0\}, \{4, 0, 1, 0\}, \{6, 0, 0, 1\}\}$$

No.90

$$L(n) = \{\{8, 16\}, \{16, -8\}\}$$

$$g = \{\{305, -72\}, \{-72, 17\}\}$$

$$w = \{-3, -3\}$$

$$rts = \{\{3, -1, -1, -4\}, \{5, 3, 1, 5\}, \{3, 27, -1, 3\}, \{1, 3, 0, 1\}\}$$

$$f = \{\{1, 0, 0, 0\}, \{80, 1, 120, -40\}, \{-1, 0, 1, 0\}, \{-7, 0, 0, 1\}\}$$

No.91

$$L(n) = \{\{4, 16\}, \{16, -16\}\}$$

$$g = \{\{305, -144\}, \{-36, 17\}\}$$

$$w=\{-18,18\}$$

$$rts=\{\{2301,1,1,-16\},\{247,-1,8,15\},\{21,1,-7,-15\}\}$$

$$f=\{\{-152,-1,248,-128\},\{-1,0,0,0\},\{6,0,1,0\},\{14,0,0,1\}\}$$

No.92

$$L(n)=\{\{-4,16\},\{16,16\}\}$$

$$g=\{\{305,144\},\{36,17\}\}$$

$$w=\{8,-28\}$$

$$rts=\{\{6241,1,-25,26\},\{1593,1,-16,27\},\{1099,1,-15,27\}\}$$

$$f=\{\{808,1,-472,-192\},\{1,0,0,0\},\{-14,0,1,0\},\{26,0,0,1\}\}$$

No.93

$$L(n)=\{\{10,15\},\{15,-10\}\}$$

$$g=\{\{1543321,-467280\},\{-467280,141481\}\}$$

$$w=\{6,-6\}$$

$$rts=\{\{329,-4,-9,-14\},\{98,2,1,8\},\{14,1,1,4\},\{6,-1,1,3\},\{14,-14,8,25\},\{2,-3,1,3\}\}$$

$$f=\{\{-1,85,3750,-1135\},\{0,-1,0,0\},\{0,63,1,0\},\{0,208,0,1\}\}$$

No.94

$$L(n)=\{\{-6,15\},\{15,18\}\}$$

$$g=\{\{19417,10512\},\{3504,1897\}\}$$

$$w=\{3,3\}$$

$$rts=\{\{116,2,5,-4\},\{10,-1,0,1\},\{1,2,-1,0\}\}$$

$$f=\{\{1713,-1,3519,1914\},\{-1,0,0,0\},\{-104,0,1,0\},\{193,0,0,1\}\}$$

No.95

$$L(n) = \{\{8, 12\}, \{12, -24\}\}$$

$$g = \{\{10009, -7920\}, \{-2640, 2089\}\}$$

$$w = \{4, 0\}$$

$$rts = \{\{13, 1, 0, -1\}, \{3, -1, 1, 1\}, \{7, 3, -7, -9\}, \{5, -1, -4, -5\}\}$$

$$f = \{\{-1, -80, 1576, -1248\}, \{0, -1, 0, 0\}, \{0, 68, 1, 0\}, \{0, 86, 0, 1\}\}$$

No.96

$$L(n) = \{\{4, 16\}, \{16, -20\}\}$$

$$g = \{\{11329, -6600\}, \{-1320, 769\}\}$$

$$w = \{-1, 12\}$$

$$rts = \{\{83, 1, -6, -11\}, \{11, 1, -4, -7\}, \{19, 5, -9, -16\}\}$$

$$f = \{\{98, -1, -1540, 896\}, \{-1, 0, 0, 0\}, \{-49, 0, 1, 0\}, \{-84, 0, 0, 1\}\}$$

No.97

$$L(n) = \{\{-4, 16\}, \{16, 20\}\}$$

$$g = \{\{11329, 6600\}, \{1320, 769\}\}$$

$$w = \{-15, -4\}$$

$$rts = \{\{235, -3, -2, -7\}, \{41, -9, 10, -19\}, \{7, -1, 1, -2\}\}$$

$$f = \{\{-222, 1, 732, 432\}, \{1, 0, 0, 0\}, \{23, 0, 1, 0\}, \{-40, 0, 0, 1\}\}$$

No.98

$$L(n) = \{\{-8, 12\}, \{12, 24\}\}$$

$$g = \{\{10009, 7920\}, \{2640, 2089\}\}$$

$$w = \{2, 1\}$$

$rts=\{\{29,15,8,-5\},\{3,5,2,-2\}\}$

$f=\{\{1,0,0,0\},\{-500,1,-3940,-3120\},\{-170,0,1,0\},\{215,0,0,1\}\}$

No.99

$L(n)=\{\{4,18\},\{18,-4\}\}$

$g=\{\{322766369353,-35430783696\},\{-35430783696,3889316089\}\}$

$w=\{-22,5\}$

$rts=\{\{383,-7,10,17\},\{671,-1,-4,-20\},\{9,1,18,-2\},\{1,-7,2,0\}\}$

$f=\{\{1,0,0,0\},\{24155777718,1,13776665686,-1512295328\},$
 $\{-82015726,0,1,0\},\{-747144599,0,0,1\}\}$

No.100

$L(n)=\{\{-12,10\},\{10,20\}\}$

$g=\{\{251904801961,177153918480\},\{106292351088,74750883481\}\}$

$w=\{15,-29\}$

$rts=\{\{509,1,-20,27\},\{13,-1,-1,2\},\{149,-61,5,28\},\{33,-55,-1,14\},$
 $\{33,23,10,-2\},\{75,29,16,-8\},\{27,-25,-4,-7\},\{1,13,3,1\},\{1,-7,2,1\},$
 $\{1,13,3,-4\},\{7,-65,8,-14\},\{1,55,-8,11\}\}$

$f=\{\{1,0,0,0\},\{-56154,1,209262,147170\},\{7981,0,1,0\},\{-11349,0,0,1\}\}$

No.101

$L(n)=\{\{-4,16\},\{16,24\}\}$

$g=\{\{143809,99288\},\{16548,11425\}\}$

$w=\{-6,-11\}$

$rts=\{\{17,1,-7,10\},\{11,-1,20,-29\},\{1,-5,2,-3\},\{1,7,-1,1\}\}$

$f=\{\{1,0,0,0\},\{-3628,1,11312,7816\},\{416,0,1,0\},\{-603,0,0,1\}\}$

No.102

$$L(n) = \{-8, 16\}, \{16, 12\}$$

$$g = \{143809, 49644\}, \{33096, 11425\}$$

$$w = \{-19, 14\}$$

$$rts = \{41, 1, 6, -17\}, \{75, -3, 19, 5\}, \{13, 1, -9, -2\}, \{7, -1, -4, -1\}, \{1, 3, -1, 0\}, \{1, -5, 4, 1\}$$

$$f = \{-1, 0, 0, 0\}, \{29556, -1, -11048, -3864\}, \{201, 0, 1, 0\}, \{-590, 0, 0, 1\}$$

No.103

$$L(n) = \{-4, 18\}, \{18, 8\}$$

$$g = \{977002954001, 212000424000\}, \{106000212000, 23001046001\}$$

$$w = \{29, -15\}$$

$$rts = \{31, 1, -4, 18\}, \{9, -1, 1, -5\}, \{9, 9, 2, -6\}, \{13, 15, 3, -8\}, \{39, 57, 10, -23\}, \{37, 21, 6, -16\}, \{7, 9, 2, -7\}, \{21, -21, -2, 16\}, \{3, -1, 0, 1\}, \{1, 87, -2, 5\}, \{1, -15, 0, -2\}, \{15, -45, 0, 13\}, \{7, -5, -1, 6\}, \{1, -5, 0, 1\}$$

$$f = \{1, 0, 0, 0\}, \{623552, 1, 1007646, 218638\}, \{11589, 0, 1, 0\}, \{-53405, 0, 0, 1\}$$

No.104

$$L(n) = \{6, 18\}, \{18, -6\}$$

$$g = \{1405, -228\}, \{-228, 37\}$$

$$w = \{-1, 3\}$$

$$rts = \{26, 1, 0, -3\}, \{29, 4, -1, -10\}, \{4, 1, 0, -1\}$$

$$f = \{162, -1, -1272, 204\}, \{-1, 0, 0, 0\}, \{-11, 0, 1, 0\}, \{-67, 0, 0, 1\}$$

No.105

$$L(n) = \{-12, 12\}, \{12, 18\}$$

$$g = \{1177, 684\}, \{456, 265\}$$

$w=\{1,3\}$

$rts=\{\{7,-1,-1,2\},\{7,2,2,-3\},\{5,-1,1,-2\}\}$

$f=\{\{-81,-1,552,318\},\{-1,0,0,0\},\{-17,0,1,0\},\{29,0,0,1\}\}$

No.106

$L(n)=\{\{4,16\},\{16,-28\}\}$

$g=\{\{4859521,-3867360\},\{-552480,439681\}\}$

$w=\{-12,-3\}$

$rts=\{\{63,-1,-4,-4\},\{35,-3,-10,-12\},\{19,-1,-12,-15\},\{23,-9,-18,-22\},\{1,-1,-4,-5\}\}$

$f=\{\{0,-1,0,0\},\{-1,-3902,-489616,389652\},\{0,-20312,1,0\},\{0,-25523,0,1\}\}$

No.107

$L(n)=\{\{-4,16\},\{16,28\}\}$

$g=\{\{4859521,3867360\},\{552480,439681\}\}$

$w=\{-22,16\}$

$rts=\{\{153,1,14,-17\},\{27,-1,-7,9\},\{5,1,-1,1\},\{1,1,-4,5\}\}$

$f=\{\{1,0,0,0\},\{-5944,1,601896,479008\},\{24970,0,1,0\},\{-31376,0,0,1\}\}$

No.108

$L(n)=\{\{-6,15\},\{15,24\}\}$

$g=\{\{251124823660801,176179663349760\},\{44044915837440,30900244473601\}\}$

$w=\{-30,-21\}$

$rts=\{\{5191,1,-27,11\},\{103,5,11,-1\},\{1,-7,-17,-3\},\{11,11,19,3\},\{37,-14,-29,-6\},\{26,-5,-21,-4\},\{5,-5,-4,-1\},\{1,2,-1,0\}\}$

$f=\{\{-1,0,0,0\},\{-3571987128834,-1,-4405319923077,-3090605578842\},$
 $\{160890499922,0,1,0\},\{-229331794903,0,0,1\}\}$

No.109

$L(n)=\{\{4,18\},\{18,-12\}\}$

$g=\{\{570878281,-183723120\},\{-61241040,19708921\}\}$

$w=\{-21,12\}$

$rts=\{\{19,-1,3,9\},\{1,-1,-1,-3\},\{17,21,-8,-27\},\{5,7,-2,-7\},$
 $\{3,-3,-2,-6\},\{19,-7,-5,-14\},\{7,-1,-2,-6\}\}$

$f=\{\{1328734,1,23659964,-7614378\},\{1,0,0,0\},\{-394787,0,1,0\},$
 $\{-1226712,0,0,1\}\}$

No.110

$L(n)=\{\{-4,18\},\{18,12\}\}$

$g=\{\{570878281,183723120\},\{61241040,19708921\}\}$

$w=\{20,-12\}$

$rts=\{\{3383,-1,-8,-15\},\{635,11,-24,18\},\{79,-3,4,3\}\}$

$f=\{\{33697944,1,-20386260,-6560784\},\{1,0,0,0\},\{-340164,0,1,0\},$
 $\{1056978,0,0,1\}\}$

No.111

$L(n)=\{\{12,12\},\{12,-20\}\}$

$g=\{\{7741,-4900\},\{-2940,1861\}\}$

$w=\{-22,29\}$

$rts=\{\{1433,1,-7,-18\},\{7,-1,2,3\},\{31,-9,11,16\},\{45,-179,29,16\},$
 $\{1,-9,1,1\},\{5,-5,2,0\}\}$

$f=\{\{1,10,-12,20\},\{0,1,0,0\},\{0,0,1,0\},\{0,1,0,1\}\}$

No.112

$$L(n) = \{\{8, 16\}, \{16, -16\}\}$$

$$g = \{\{8721, -3920\}, \{-1960, 881\}\}$$

$$w = \{-4, -4\}$$

$$rts = \{\{287, 3, 3, 14\}, \{25, 1, 2, 5\}, \{19, 1, 1, 3\}\}$$

$$f = \{\{-1072, 1, 2864, -1280\}, \{1, 0, 0, 0\}, \{-66, 0, 1, 0\}, \{-146, 0, 0, 1\}\}$$

No.113

$$L(n) = \{\{4, 16\}, \{16, -32\}\}$$

$$g = \{\{8721, -7840\}, \{-980, 881\}\}$$

$$w = \{-2, 14\}$$

$$rts = \{\{1149, 1, -7, -13\}, \{51, -1, 11, 12\}, \{23, -1, 10, 11\}\}$$

$$f = \{\{-120, -1, -744, 672\}, \{-1, 0, 0, 0\}, \{-34, 0, 1, 0\}, \{-38, 0, 0, 1\}\}$$

No.114

$$L(n) = \{\{-4, 16\}, \{16, 32\}\}$$

$$g = \{\{8721, 7840\}, \{980, 881\}\}$$

$$w = \{-29, -15\}$$

$$rts = \{\{23, 1, -10, 11\}, \{1, 1, -9, 10\}, \{1, 1, -1, 1\}, \{37, -131, -3, 19\}, \{7, 31, -6, 3\}, \{3, 27, -4, 1\}\}$$

$$f = \{\{1, 0, 0, 0\}, \{-190, 1, 212, 208\}, \{9, 0, 1, 0\}, \{-11, 0, 0, 1\}\}$$

No.115

$$L(n) = \{\{-8, 16\}, \{16, 16\}\}$$

$$g = \{\{8721, 3920\}, \{1960, 881\}\}$$

$$w = \{1, 3\}$$

$rts = \{\{141, 3, 6, -7\}, \{5, 1, 1, -2\}\}$

$f = \{\{-1, 0, 0, 0\}, \{-76, -1, 2920, 1312\}, \{-67, 0, 1, 0\}, \{149, 0, 0, 1\}\}$

No. 116

$L(n) = \{\{-12, 12\}, \{12, 20\}\}$

$g = \{\{7741, 4900\}, \{2940, 1861\}\}$

$w = \{-13, -7\}$

$rts = \{\{9, -1, 1, -2\}, \{5, -3, 3, -5\}, \{19, -3, 8, -13\}, \{33, 1, 14, -22\}\}$

$f = \{\{1, 200, 2568, 1624\}, \{0, 1, 0, 0\}, \{0, 83, 1, 0\}, \{0, -131, 0, 1\}\}$

No. 117

$L(n) = \{\{-4, 18\}, \{18, 16\}\}$

$g = \{\{15100164490562065, 6408946218109056\}, \{1602236554527264, 680035499816689\}\}$

$w = \{-23, -14\}$

$rts = \{\{145, -1, 4, -11\}, \{49, -1, 4, -10\}, \{7, 1, 1, -2\}, \{9, 5, 2, -3\}, \{17, 17, 5, -7\}, \{15, -21, -2, 9\}, \{9, -7, -2, 6\}, \{3, 15, -2, 3\}, \{59, -43, -11, -10\}, \{15, -3, -3, -1\}, \{29, -5, -4, -2\}, \{97, 1, 7, 0\}, \{7, -1, 9, 1\}, \{1, 7, 19, 2\}, \{7, -5, -7, -1\}, \{1, 1, -1, 0\}\}$

$f = \{\{1, 0, 0, 0\}, \{-225490257218, 1, 358772873712, 152273576474\}, \{7730519595, 0, 1, 0\}, \{-18213933074, 0, 0, 1\}\}$

No. 118

$L(n) = \{\{6, 18\}, \{18, -12\}\}$

$g = \{\{379, -120\}, \{-60, 19\}\}$

$w = \{-1, -2\}$

$rts = \{\{11, 2, 1, 4\}, \{2, -2, -1, -3\}\}$

$f = \{\{-1, 0, 0, 0\}, \{-24, -1, -756, 240\}, \{-12, 0, 1, 0\}, \{-38, 0, 0, 1\}\}$

No.119

$$L(n) = \{\{-6, 18\}, \{18, 12\}\}$$

$$g = \{\{379, 120\}, \{60, 19\}\}$$

$$w = \{0, 1\}$$

$$rts = \{\{7, 2, 1, -2\}, \{1, 2, 1, -3\}\}$$

$$f = \{\{1, 0, 0, 0\}, \{-24, 1, -756, -240\}, \{-12, 0, 1, 0\}, \{38, 0, 0, 1\}\}$$

No.120

$$L(n) = \{\{18, 9\}, \{9, -18\}\}$$

$$g = \{\{75025, -46368\}, \{-46368, 28657\}\}$$

$$w = \{-2, -1\}$$

$$rts = \{\{8, 1, 1, 2\}, \{5, 2, 3, 5\}, \{5, 7, 2, 4\}, \{2, -5, 1, 1\}, \{1, 10, -3, -5\}, \\ \{20, 14, -3, -8\}, \{29, 14, -3, -9\}, \{28, 10, -3, -8\}, \{20, 5, -2, -5\}, \{10, 1, -1, -2\}\}$$

$$f = \{\{-1, 36, -126, 72\}, \{0, -1, 0, 0\}, \{0, -4, 1, 0\}, \{0, -6, 0, 1\}\}$$

No.121

$$L(n) = \{\{6, 15\}, \{15, -30\}\}$$

$$g = \{\{90481, -77280\}, \{-15456, 13201\}\}$$

$$w = \{1, -1\}$$

$$rts = \{\{46, -2, -4, -1\}, \{77, -31, -24, -22\}, \{4, 7, 4, 5\}\}$$

$$f = \{\{0, -1, 0, 0\}, \{-1, -297, -4266, 3645\}, \{0, -181, 1, 0\}, \{0, -212, 0, 1\}\}$$

No.122

$$L(n) = \{\{-6, 15\}, \{15, 30\}\}$$

$g=\{\{90481,77280\},\{15456,13201\}\}$

$w=\{2,2\}$

$rts=\{\{92,1,4,-1\},\{91,2,6,-5\},\{16,-1,0,-1\}\}$

$f=\{\{-13068,1,-15048,-12870\},\{1,0,0,0\},\{-638,0,1,0\},\{748,0,0,1\}\}$

No.123

$L(n)=\{\{-10,15\},\{15,20\}\}$

$g=\{\{71298457361,40037849280\},\{20018924640,11241683441\}\}$

$w=\{-55,-38\}$

$rts=\{\{4159,-1,2,-22\},\{127,-7,16,7\},\{13,-3,6,2\},\{67,-42,25,12\},$
 $\{1,-9,0,1\},\{2,3,1,0\}\}$

$f=\{\{1,0,0,0\},\{660343135,1,1250848700,702417595\},\{34072259,0,1,0\},$
 $\{-60675074,0,0,1\}\}$

No.124

$L(n)=\{\{12,12\},\{12,-24\}\}$

$g=\{\{5757961,-4215120\},\{-2107560,1542841\}\}$

$w=\{-5,5\}$

$rts=\{\{451,-5,16,10\},\{1,-5,11,15\}\}$

$f=\{\{1,0,0,0\},\{11250,1,702000,-513900\},\{-24725,0,1,0\},\{-33775,0,0,1\}\}$

No.125

$L(n)=\{\{6,18\},\{18,-18\}\}$

$g=\{\{6811741,-3161340\},\{-1053780,489061\}\}$

$w=\{-6,-9\}$

$rts=\{\{34,1,4,9\},\{4,2,6,13\},\{5,5,5,11\},\{4,-10,8,17\},\{2,-1,1,2\},$
 $\{20,7,-7,-16\},\{2,-1,-1,-2\},\{38,23,-12,-29\},\{13,-16,-6,-11\},$
 $\{1,-4,-1,-2\}\}$

$f=\{\{-1,0,0,0\},\{-4497,-1,-39594,18378\},\{-884,0,1,0\},\{-1905,0,0,1\}\}$

No.126

$L(n)=\{\{-6,18\},\{18,18\}\}$

$g=\{\{6811741,3161340\},\{1053780,489061\}\}$

$w=\{-3,-1\}$

$rts=\{\{5,-2,0,-1\},\{8,5,-2,3\},\{13,-121,13,7\},\{5,-5,-1,3\},\{16,7,4,-7\},\{10,10,3,-4\},\{1,4,1,-2\},\{5,-2,0,1\}\}$

$f=\{\{1,87399,36990,17118\},\{0,1,0,0\},\{0,828,1,0\},\{0,-1779,0,1\}\}$

No.127

$L(n)=\{\{-12,12\},\{12,24\}\}$

$g=\{\{5757961,4215120\},\{2107560,1542841\}\}$

$w=\{-3,-3\}$

$rts=\{\{53,17,-20,25\},\{97,-17,15,-25\},\{13,-1,2,-3\}\}$

$f=\{\{313638,1,1377960,1008732\},\{1,0,0,0\},\{48533,0,1,0\},\{-66297,0,0,1\}\}$

No.128

$L(n)=\{\{8,16\},\{16,-24\}\}$

$g=\{\{56641,-36576\},\{-12192,7873\}\}$

$w=\{4,-7\}$

$rts=\{\{15,-1,-4,-6\},\{3,-1,-2,-3\},\{11,7,-4,-7\},\{1,-5,2,3\}\}$

$f=\{\{-1,0,0,0\},\{-556,-1,7344,-4744\},\{224,0,1,0\},\{347,0,0,1\}\}$

No.129

$$L(n) = \{\{-8, 16\}, \{16, 24\}\}$$

$$g = \{\{56641, 36576\}, \{12192, 7873\}\}$$

$$w = \{6, 4\}$$

$$rts = \{\{3, 1, 2, -3\}, \{7, -7, -18, 28\}, \{1, 5, -2, 3\}\}$$

$$f = \{\{96, -1, 7408, 4784\}, \{-1, 0, 0, 0\}, \{-226, 0, 1, 0\}, \{350, 0, 0, 1\}\}$$

No. 130

$$L(n) = \{\{8, 20\}, \{20, -8\}\}$$

$$g = \{\{370497401, -71351280\}, \{-71351280, 13741001\}\}$$

$$w = \{-3, 3\}$$

$$rts = \{\{81, -1, 2, 2\}, \{33, 3, 0, 5\}, \{23, 9, -2, 4\}, \{9, 11, 0, 5\}, \{1, 3, 0, -1\}, \\ \{7, -3, -1, -4\}, \{23, -5, -2, -5\}, \{3, 9, 2, -1\}, \{9, 29, 8, -3\}, \{19, 11, 18, -4\}, \\ \{1, -3, 1, 0\}\}$$

$$f = \{\{0, 1, 0, 0\}, \{1, -10900, -13900, 2660\}, \{0, 125, 1, 0\}, \{0, 645, 0, 1\}\}$$

No. 131

$$L(n) = \{\{12, 18\}, \{18, -12\}\}$$

$$g = \{\{1543321, -467280\}, \{-467280, 141481\}\}$$

$$w = \{-6, 4\}$$

$$rts = \{\{17, -1, 1, 2\}, \{17, 17, -8, -28\}, \{7, 1, -3, -10\}\}$$

$$f = \{\{7464, -1, -224208, 67884\}, \{-1, 0, 0, 0\}, \{-3138, 0, 1, 0\}, \{-10364, 0, 0, 1\}\}$$

No. 132

$$L(n) = \{\{-6, 18\}, \{18, 24\}\}$$

$$g = \{\{1543321, 934560\}, \{233640, 141481\}\}$$

$$w = \{28, -3\}$$

$rts = \{\{1412, -1, -5, -8\}, \{13, 1, -2, 0\}, \{1, -8, 13, 2\}, \{1, -11, 6, 1\}\}$
 $f = \{\{1, 0, 0, 0\}, \{-271644, 1, -46758, -28440\}, \{-1304, 0, 1, 0\}, \{2163, 0, 0, 1\}\}$

No. 133

$L(n) = \{\{6, 21\}, \{21, -6\}\}$
 $g = \{\{6624850, -927843\}, \{-927843, 129949\}\}$
 $w = \{29, 20\}$
 $rts = \{\{12772, 1, 21, -27\}, \{4408, 1, 4, -27\}, \{3224, 1, 5, -20\}\}$
 $f = \{\{-1031667, 1, -132159, 18339\}, \{1, 0, 0, 0\}, \{855, 0, 1, 0\}, \{6049, 0, 0, 1\}\}$

No. 134

$L(n) = \{\{20, 10\}, \{10, -20\}\}$
 $g = \{\{2504730781961, -1548008755920\}, \{-1548008755920, 956722026041\}\}$
 $w = \{-127, 64\}$
 $rts = \{\{801, 1, 4, 12\}, \{3, -3, 5, 8\}, \{3, -13, -4, -6\}, \{3, 3, 0, 1\}, \{3, -13, 2, 0\}, \{1, 11, 0, -1\}\}$
 $f = \{\{-1, 0, 0, 0\}, \{13482369190, -1, -20364599640, 12586014730\}, \{-562863691, 0, 1, 0\}, \{-910732582, 0, 0, 1\}\}$

No. 135

$L(n) = \{\{10, 20\}, \{20, -10\}\}$
 $g = \{\{3278735159921, -774004377960\}, \{-774004377960, 182717648081\}\}$
 $w = \{8, 16\}$
 $rts = \{\{4, 1, -4, -17\}, \{27, 3, -2, 2\}, \{2, -12, 9, -2\}, \{6, -16, 14, -3\}, \{9, -11, 7, -1\}, \{1, -21, -1, -1\}, \{6, 9, -7, 2\}, \{33, 12, -9, 4\}, \{74, 4, -23, 6\}, \{6, 1, -4, 1\}, \{1, -4, 17, -4\}, \{3, -33, -3, -11\}, \{6, -21, -5, -20\}, \{116, 19, 0, 21\}, \{4, 1, 0, 1\}\}$
 $f = \{\{-12055, 1, 17560, -4130\}, \{1, 0, 0, 0\}, \{-186, 0, 1, 0\}, \{-785, 0, 0, 1\}\}$

No.136

$$L(n) = \{\{6, 18\}, \{18, -30\}\}$$

$$g = \{\{726481, -538800\}, \{-107760, 79921\}\}$$

$$w = \{3, 8\}$$

$$rts = \{\{11, -1, 6, 8\}, \{19, 2, -14, -19\}, \{5, 8, -8, -11\}, \{1, -4, 3, 4\}\}$$

$$f = \{\{1, 0, 0, 0\}, \{10725, 1, 264954, -196506\}, \{-8753, 0, 1, 0\}, \{-11802, 0, 0, 1\}\}$$

No.137

$$L(n) = \{\{-6, 18\}, \{18, 30\}\}$$

$$g = \{\{726481, 538800\}, \{107760, 79921\}\}$$

$$w = \{-28, 21\}$$

$$rts = \{\{29, -1, -17, 23\}, \{13, 1, 6, -8\}, \{13, 5, 7, -9\}, \{16, 29, 10, -11\}, \\ \{34, 65, 23, -26\}, \{1, 7, 1, -1\}, \{2, 1, 3, -4\}\}$$

$$f = \{\{1047, -1, -47706, -35382\}, \{-1, 0, 0, 0\}, \{1576, 0, 1, 0\}, \{-2125, 0, 0, 1\}\}$$

No.138

$$L(n) = \{\{16, 16\}, \{16, -16\}\}$$

$$g = \{\{1136689, -470832\}, \{-470832, 195025\}\}$$

$$w = \{4, 2\}$$

$$rts = \{\{17, 1, -1, -3\}, \{3, 3, -2, -5\}, \{1, -31, 10, 24\}, \{3, -3, 1, 2\}\}$$

$$f = \{\{-1, 0, 0, 0\}, \{-21952, -1, 385344, -159616\}, \{7054, 0, 1, 0\}, \{17030, 0, 0, 1\}\}$$

No.139

$$L(n) = \{\{8, 16\}, \{16, -32\}\}$$

$$g = \{\{1136689, -941664\}, \{-235416, 195025\}\}$$

$$w=\{0,6\}$$

$$rts=\{\{99,-1,5,5\},\{105,-7,-10,-7\},\{7,-5,-3,0\}\}$$

$$f=\{\{137664,-1,-228768,189504\},\{-1,0,0,0\},\{-8376,0,1,0\},\{-10110,0,0,1\}\}$$

No.140

$$L(n)=\{\{-8,16\},\{16,32\}\}$$

$$g=\{\{1136689,941664\},\{235416,195025\}\}$$

$$w=\{-11,-18\}$$

$$rts=\{\{2447,1,-18,12\},\{145,-1,12,-15\},\{93,-1,7,-9\}\}$$

$$f=\{\{17476,1,38968,32272\},\{1,0,0,0\},\{1427,0,1,0\},\{-1722,0,0,1\}\}$$

No.141

$$L(n)=\{\{6,21\},\{21,-12\}\}$$

$$g=\{\{730977003801241,-200958164040480\},\{-100479082020240,27623429659561\}\}$$

$$w=\{27,14\}$$

$$rts=\{\{127,-1,5,17\},\{64,1,1,-2\},\{53,17,25,-5\},\{77,19,26,-6\},\{25,13,15,-3\},\{5,-17,-10,1\},\{4,16,-13,2\},\{16,20,-25,4\},\{5,7,-5,1\},\{440,1,7,28\}\}$$

$$f=\{\{1,-11832395808,16998187236,-4673094324\},\{0,1,0,0\},\{0,-206322156,1,0\},\{0,-750488300,0,1\}\}$$

No.142

$$L(n)=\{\{-6,21\},\{21,12\}\}$$

$$g=\{\{730977003801241,200958164040480\},\{100479082020240,27623429659561\}\}$$

$$w=\{-12,-4\}$$

$\text{rts}=\{\{200,2,-5,4\},\{101,5,-5,11\},\{64,13,-9,28\},\{58,19,-9,26\},$
 $\{10,40,-5,4\},\{19,28,-5,8\},\{5,-5,0,-2\},\{50,-10,3,-16\},\{47,29,8,-15\},$
 $\{5,4,1,-2\},\{23,-25,-8,-4\},\{1,2,1,0\},\{10,-1,-29,-4\},\{22,-8,-27,-4\},$
 $\{2,1,1,0\},\{1,-5,0,-1\},\{5,-2,1,-4\}\}$

$\text{f}=\{\{-17703,-1,316278,86949\},\{-1,0,0,0\},\{-3839,0,1,0\},\{13964,0,0,1\}\}$

No.143

$\text{L}(n)=\{\{10,15\},\{15,-30\}\}$

$\text{g}=\{\{436,-345\},\{-115,91\}\}$

$\text{w}=\{-1,-2\}$

$\text{rts}=\{\{7,2,3,4\},\{2,-3,-4,-5\}\}$

$\text{f}=\{\{1,0,0,0\},\{25,1,-985,780\},\{34,0,1,0\},\{43,0,0,1\}\}$

No.144

$\text{L}(n)=\{\{-10,15\},\{15,30\}\}$

$\text{g}=\{\{436,345\},\{115,91\}\}$

$\text{w}=\{1,1\}$

$\text{rts}=\{\{17,2,2,-1\},\{4,1,1,-1\},\{2,2,1,-1\}\}$

$\text{f}=\{\{-25,1,-205,-165\},\{1,0,0,0\},\{-7,0,1,0\},\{9,0,0,1\}\}$

No.145

$\text{L}(n)=\{\{8,20\},\{20,-16\}\}$

$\text{g}=\{\{1977,-736\},\{-368,137\}\}$

$\text{w}=\{-5,3\}$

$\text{rts}=\{\{33,1,0,-2\},\{11,3,-2,-6\},\{9,1,-1,-3\}\}$

$\text{f}=\{\{48,-1,-300,108\},\{-1,0,0,0\},\{-5,0,1,0\},\{-13,0,0,1\}\}$

No.146

$$L(n) = \{-8, 20\}, \{20, 16\}$$

$$g = \{1977, 736\}, \{368, 137\}$$

$$w = \{1, -2\}$$

$$rts = \{11, -3, 2, -6\}, \{1, 3, -3, 8\}$$

$$f = \{1, 0, 0, 0\}, \{108, 1, -6480, -2412\}, \{-105, 0, 1, 0\}, \{282, 0, 0, 1\}$$

No.147

$$L(n) = \{12, 18\}, \{18, -18\}$$

$$g = \{211303, -92232\}, \{-61488, 26839\}$$

$$w = \{6, -8\}$$

$$rts = \{209, 1, 1, 6\}, \{8, -2, 1, 1\}, \{2, -8, 1, 1\}, \{56, 4, 15, -5\}, \{10, 2, 2, -1\}, \{5, 7, 6, -2\}, \{7, -1, -1, 0\}$$

$$f = \{-24696, 1, -30312, 13212\}, \{1, 0, 0, 0\}, \{570, 0, 1, 0\}, \{1304, 0, 0, 1\}$$

No.148

$$L(n) = \{6, 18\}, \{18, -36\}$$

$$g = \{211303, -184464\}, \{-30744, 26839\}$$

$$w = \{-30, 7\}$$

$$rts = \{263, 7, -10, -17\}, \{23, -8, 17, 19\}, \{16, -4, 9, 10\}$$

$$f = \{-603, 1, 6786, -5922\}, \{1, 0, 0, 0\}, \{-255, 0, 1, 0\}, \{-292, 0, 0, 1\}$$

No.149

$$L(n) = \{-6, 18\}, \{18, 36\}$$

$$g = \{211303, 184464\}, \{30744, 26839\}$$

$$w = \{16, -16\}$$

$rts = \{\{13, 1, -14, 16\}, \{34, -1, 13, -15\}, \{1, 2, 1, -1\}, \{8, -4, 1, -2\}, \{1, -32, 13, -15\}\}$

$f = \{\{0, -1, 0, 0\}, \{-1, -37263, -405804, -354258\}, \{0, 15245, 1, 0\}, \{0, -17463, 0, 1\}\}$

No. 150

$L(n) = \{\{-12, 18\}, \{18, 18\}\}$

$g = \{\{211303, 92232\}, \{61488, 26839\}\}$

$w = \{-3, -5\}$

$rts = \{\{80, 2, -4, 7\}, \{77, 5, -8, 16\}, \{52, 1, -5, 11\}\}$

$f = \{\{-8604, -1, -42156, -18396\}, \{-1, 0, 0, 0\}, \{792, 0, 1, 0\}, \{-1814, 0, 0, 1\}\}$

No. 151

$L(n) = \{\{-6, 21\}, \{21, 18\}\}$

$g = \{\{2199211, 890955\}, \{296985, 120316\}\}$

$w = \{-3, 13\}$

$rts = \{\{80, -1, -5, 13\}, \{47, -1, -8, 20\}, \{16, -1, -1, 3\}, \{2, -1, -2, 5\}\}$

$f = \{\{-1, 0, 0, 0\}, \{-9501, -1, 1163079, 471192\}, \{-20110, 0, 1, 0\}, \{49639, 0, 0, 1\}\}$

No. 152

$L(n) = \{\{12, 21\}, \{21, -12\}\}$

$g = \{\{4138625473, -1099071744\}, \{-1099071744, 291874369\}\}$

$w = \{30, -6\}$

$rts = \{\{470, 10, 5, -21\}, \{25, -1, 1, 2\}, \{20, 1, 1, -1\}, \{1, 5, -1, -4\}\}$

$f = \{\{1, 0, 0, 0\}, \{-7028235, 1, -135686565, 36033525\}, \{1489803, 0, 1, 0\}, \{5609949, 0, 0, 1\}\}$

No.153

$$L(n) = \{\{-6, 21\}, \{21, 24\}\}$$

$$g = \{\{4138625473, 2198143488\}, \{549535872, 291874369\}\}$$

$$w = \{-27, -17\}$$

$$rts = \{\{1183, -1, 3, -13\}, \{4, 1, 1, 0\}, \{14, -13, -9, -2\}, \{1, 2, -1, 0\}, \\ \{13, -13, -20, -3\}, \{26, -4, -29, -4\}, \{11, -1, -7, -1\}\}$$

$$f = \{\{857331822, 1, 137930457, 73258698\}, \{1, 0, 0, 0\}, \{3028886, 0, 1, 0\}, \\ \{-5702721, 0, 0, 1\}\}$$

No.154

$$L(n) = \{\{-8, 20\}, \{20, 24\}\}$$

$$g = \{\{19417, 10512\}, \{3504, 1897\}\}$$

$$w = \{4, 4\}$$

$$rts = \{\{27, 1, 2, -3\}, \{17, -1, -2, 4\}, \{37, 1, -4, 7\}\}$$

$$f = \{\{656, -1, 3064, 1664\}, \{-1, 0, 0, 0\}, \{-68, 0, 1, 0\}, \{126, 0, 0, 1\}\}$$

No.155

$$L(n) = \{\{10, 20\}, \{20, -20\}\}$$

$$g = \{\{8721, -3920\}, \{-1960, 881\}\}$$

$$w = \{-2, 3\}$$

$$rts = \{\{182, -2, 5, 4\}, \{62, -2, 3, 4\}, \{49, -1, 2, 3\}\}$$

$$f = \{\{-1150, -1, -1880, 860\}, \{-1, 0, 0, 0\}, \{-34, 0, 1, 0\}, \{-77, 0, 0, 1\}\}$$

No.156

$$L(n) = \{\{-10, 20\}, \{20, 20\}\}$$

$g=\{\{8721,3920\},\{1960,881\}\}$

$w=\{0,2\}$

$rts=\{\{4,1,1,-2\},\{29,-4,-5,12\},\{6,1,-1,2\}\}$

$f=\{\{1000,-1,9160,4120\},\{-1,0,0,0\},\{-168,0,1,0\},\{374,0,0,1\}\}$

No.157

$L(n)=\{\{6,24\},\{24,-6\}\}$

$g=\{\{18674305,-2298912\},\{-2298912,283009\}\}$

$w=\{12,1\}$

$rts=\{\{37,2,0,-5\},\{25,-1,1,7\},\{35,13,-1,9\},\{2,2,0,1\}\}$

$f=\{\{-1,0,0,0\},\{160368,-1,1555368,-191472\},\{7740,0,1,0\},\{62872,0,0,1\}\}$

No.158

$L(n)=\{\{-12,18\},\{18,24\}\}$

$g=\{\{16375393,9195648\},\{4597824,2581921\}\}$

$w=\{5,0\}$

$rts=\{\{13,1,-1,1\},\{13,-1,-5,9\},\{5,19,-4,6\},\{1,-5,1,-2\}\}$

$f=\{\{1,0,0,0\},\{459258,1,-4158912,-2335446\},\{-94405,0,1,0\},\{168114,0,0,1\}\}$

No.159

$L(n)=\{\{6,21\},\{21,-30\}\}$

$g=\{\{574,-375\},\{-75,49\}\}$

$w=\{-15,10\}$

$rts=\{\{37,-2,10,15\},\{2,-4,17,26\},\{4,-2,17,26\},\{4,-10,19,29\}\}$

$f=\{\{-1,3,75,-48\},\{0,-1,0,0\},\{0,2,1,0\},\{0,3,0,1\}\}$

No.160

$$L(n) = \{\{-6, 21\}, \{21, 30\}\}$$

$$g = \{\{574, 375\}, \{75, 49\}\}$$

$$w = \{19, -1\}$$

$$rts = \{\{529, -1, -4, -4\}, \{164, 1, -4, 3\}, \{82, 1, -3, 3\}\}$$

$$f = \{\{-36, -1, -54, -18\}, \{-1, 0, 0, 0\}, \{2, 0, 1, 0\}, \{-2, 0, 0, 1\}\}$$

No.161

$$L(n) = \{\{8, 24\}, \{24, -8\}\}$$

$$g = \{\{2026009, -328776\}, \{-328776, 53353\}\}$$

$$w = \{-3, -4\}$$

$$rts = \{\{63, 5, 3, 22\}, \{5, -1, -1, -6\}, \{21, -5, -3, -17\}, \{19, 5, -2, -14\}, \{1, 3, 0, -1\}\}$$

$$f = \{\{47484, 1, 846984, -137448\}, \{1, 0, 0, 0\}, \{-5433, 0, 1, 0\}, \{-33480, 0, 0, 1\}\}$$

No.162

$$L(n) = \{\{-16, 16\}, \{16, 24\}\}$$

$$g = \{\{1697233, 986328\}, \{657552, 382129\}\}$$

$$w = \{2, 3\}$$

$$rts = \{\{7, -1, -1, 2\}, \{33, 13, 7, -9\}, \{47, -1, 8, -14\}\}$$

$$f = \{\{-76628, -1, 575056, 334184\}, \{-1, 0, 0, 0\}, \{-13210, 0, 1, 0\}, \{22731, 0, 0, 1\}\}$$

No.163

$$L(n) = \{\{18, 18\}, \{18, -18\}\}$$

$g = \{\{1311738121, -543339720\}, \{-543339720, 225058681\}\}$

$w = \{-12, 12\}$

$rts = \{\{2158, -4, 22, 19\}, \{220, -2, 5, 6\}, \{4, -2, 1, 0\}, \{2, 5, 0, -1\}\}$

$f = \{\{-1, 0, 0, 0\}, \{16980831, -1, -74951046, 31045734\}, \{-1219592, 0, 1, 0\}, \{-2944355, 0, 0, 1\}\}$

No. 164

$L(n) = \{\{6, 24\}, \{24, -12\}\}$

$g = \{\{1492851361, -362226480\}, \{-181113240, 43945441\}\}$

$w = \{24, -25\}$

$rts = \{\{52, 1, 5, 21\}, \{1, -2, 1, 4\}, \{1, -4, -1, -4\}, \{14, 10, 3, 14\}, \{13, 4, 3, 13\}, \{4, -1, 1, 4\}, \{5, -17, 2, 6\}, \{22, -14, 7, 27\}, \{23, -20, 7, 26\}, \{1, -2, 1, 4\}\}$

$f = \{\{-1, 0, 0, 0\}, \{-806004, -1, 51286500, -12444192\}, \{488854, 0, 1, 0\}, \{2014724, 0, 0, 1\}\}$

No. 165

$L(n) = \{\{-6, 24\}, \{24, 12\}\}$

$g = \{\{1492851361, 362226480\}, \{181113240, 43945441\}\}$

$w = \{11, 26\}$

$rts = \{\{502, -1, -5, 24\}, \{62, -10, -3, 18\}, \{35, -22, 3, 7\}, \{11, 5, 2, -1\}, \{7, -4, -1, -1\}, \{1, 4, 1, 0\}\}$

$f = \{\{1, 0, 0, 0\}, \{474222504, 1, -93232416, -22621848\}, \{-888680, 0, 1, 0\}, \{3662514, 0, 0, 1\}\}$

No. 166

$L(n) = \{\{-8, 20\}, \{20, 32\}\}$

$g = \{\{14953601, 10490880\}, \{2622720, 1840001\}\}$

$w = \{-1, -2\}$

$rts = \{\{95, 7, -10, 11\}, \{1, -7, 2, -3\}, \{5, -1, 7, -10\}\}$

$f = \{\{121180, 1, 6151456, 4315628\}, \{1, 0, 0, 0\}, \{168497, 0, 1, 0\}, \{-240174, 0, 0, 1\}\}$

No. 167

$L(n) = \{\{-6, 21\}, \{21, 36\}\}$

$g = \{\{18935502762001, 14618243592000\}, \{2436373932000, 1880885238001\}\}$

$w = \{-28, 22\}$

$rts = \{\{1339, 1, 20, -23\}, \{425, 1, 17, -21\}, \{19, -1, 0, -1\}, \{58, 13, 11, -2\}, \{2, 1, 1, 0\}, \{17, 29, 17, 1\}, \{16, 5, 17, 2\}, \{25, 1, 16, 2\}, \{10, -11, 1, 2\}, \{5, 1, -1, 1\}\}$

$f = \{\{-1, 8189427009, 42002370018, 32425908315\}, \{0, -1, 0, 0\}, \{0, -1265055169, 1, 0\}, \{0, 1638668524, 0, 1\}\}$

No. 168

$L(n) = \{\{6, 24\}, \{24, -18\}\}$

$g = \{\{110839, -39780\}, \{-13260, 4759\}\}$

$w = \{12, 28\}$

$rts = \{\{37, 1, -10, -28\}, \{58, 7, 6, 19\}, \{11, 4, 1, 4\}, \{7, -2, 1, 2\}, \{13, 25, -2, 4\}, \{5, 7, 0, 2\}, \{19, -16, -4, -5\}, \{43, -16, -8, -3\}, \{2, 4, 0, 1\}, \{4, -1, -1, 0\}, \{4, 2, 0, -1\}, \{1, 5, -1, -3\}\}$

$f = \{\{1, 0, 0, 0\}, \{102, 1, -810, 294\}, \{11, 0, 1, 0\}, \{31, 0, 0, 1\}\}$

No. 169

$L(n) = \{\{-6, 24\}, \{24, 18\}\}$

$g = \{\{110839, 39780\}, \{13260, 4759\}\}$

$w = \{19, 4\}$

$rts = \{\{244, 1, 6, -1\}, \{73, 1, 2, -2\}, \{29, -1, -1, -1\}\}$

$f=\{\{-5955,-1,4428,1554\},\{-1,0,0,0\},\{-62,0,1,0\},\{169,0,0,1\}\}$

No.170

$L(n)=\{\{6,21\},\{21,-42\}\}$

$g=\{\{5608,-4977\},\{-711,631\}\}$

$w=\{5,5\}$

$rts=\{\{58,1,-4,-5\},\{19,2,-6,-7\},\{4,-1,-1,-1\}\}$

$f=\{\{-732,-1,6054,-5376\},\{-1,0,0,0\},\{204,0,1,0\},\{230,0,0,1\}\}$

No.171

$L(n)=\{\{-6,21\},\{21,42\}\}$

$g=\{\{5608,4977\},\{711,631\}\}$

$w=\{21,16\}$

$rts=\{\{205,-1,-10,12\},\{20,-2,-15,17\},\{17,-5,-14,16\},\{22,-16,-18,21\},\{2,-20,-1,2\},\{1,2,-1,1\}\}$

$f=\{\{1,0,0,0\},\{-228,1,-204,-210\},\{-6,0,1,0\},\{8,0,0,1\}\}$

No.172

$L(n)=\{\{10,20\},\{20,-30\}\}$

$g=\{\{14386591,-9290160\},\{-3096720,1999711\}\}$

$w=\{6,-18\}$

$rts=\{\{654,1,8,15\},\{987,-3,-20,-24\},\{23,-2,-3,0\}\}$

$f=\{\{-1540490,1,-1027810,663670\},\{1,0,0,0\},\{25087,0,1,0\},\{38847,0,0,1\}\}$

No.173

$L(n) = \{\{-10, 20\}, \{20, 30\}\}$

$g = \{\{14386591, 9290160\}, \{3096720, 1999711\}\}$

$w = \{7, 6\}$

$rts = \{\{139, -4, -9, 16\}, \{17, -2, -5, 8\}, \{19, 1, 4, -6\}, \{3, 2, 2, -3\},$
 $\{17, -7, -6, 10\}, \{11, -11, -6, 10\}, \{19, 39, -10, 12\}, \{3, 3, -1, 1\}\}$

$f = \{\{1, 0, 0, 0\}, \{-13015, 1, 98500, 63610\}, \{2404, 0, 1, 0\}, \{-3723, 0, 0, 1\}\}$

No. 174

$L(n) = \{\{8, 24\}, \{24, -16\}\}$

$g = \{\{150841, -47760\}, \{-23880, 7561\}\}$

$w = \{-3, -2\}$

$rts = \{\{49, -3, -3, -7\}, \{1, 9, 6, 19\}\}$

$f = \{\{1, 0, 0, 0\}, \{-1332, 1, 74664, -23640\}, \{-891, 0, 1, 0\}, \{-2814, 0, 0, 1\}\}$

No. 175

$L(n) = \{\{-8, 24\}, \{24, 16\}\}$

$g = \{\{150841, 47760\}, \{23880, 7561\}\}$

$w = \{-7, 0\}$

$rts = \{\{29, 21, 8, -22\}, \{175, -21, -1, 23\}, \{7, -1, 0, 1\}\}$

$f = \{\{-16036, -1, -22824, -7208\}, \{-1, 0, 0, 0\}, \{273, 0, 1, 0\}, \{-860, 0, 0, 1\}\}$

No. 176

$L(n) = \{\{24, 12\}, \{12, -24\}\}$

$g = \{\{75025, -46368\}, \{-46368, 28657\}\}$

$w = \{-17, -7\}$

$rts = \{\{539, -1, -9, -12\}, \{13, 1, 0, -1\}, \{373, 13, -8, -26\}, \{19, -31, -14, 7\},$
 $\{1, -11, -1, 0\}\}$

$f=\{\{0,1,0,0\},\{1,-7932,8796,-5412\},\{0,-203,1,0\},\{0,-327,0,1\}\}$

No.177

$L(n)=\{\{12,24\},\{24,-12\}\}$

$g=\{\{98209,-23184\},\{-23184,5473\}\}$

$w=\{2,-3\}$

$rts=\{\{283,-5,-7,-11\},\{23,-1,-1,-3\},\{5,1,0,-1\}\}$

$f=\{\{-6546,1,-28848,6804\},\{1,0,0,0\},\{254,0,1,0\},\{1075,0,0,1\}\}$

No.178

$L(n)=\{\{8,20\},\{20,-40\}\}$

$g=\{\{90481,-77280\},\{-15456,13201\}\}$

$w=\{3,5\}$

$rts=\{\{35,1,-4,-5\},\{7,5,-11,-13\},\{5,-1,-6,-7\}\}$

$f=\{\{2564,1,101884,-87020\},\{1,0,0,0\},\{-3243,0,1,0\},\{-3797,0,0,1\}\}$

No.179

$L(n)=\{\{6,24\},\{24,-24\}\}$

$g=\{\{98209,-46368\},\{-11592,5473\}\}$

$w=\{20,9\}$

$rts=\{\{56,1,-5,-11\},\{11,1,-8,-17\},\{8,4,-7,-15\},\{1,-2,-1,-2\},\{4,8,-1,-3\},\{1,-13,2,4\}\}$

$f=\{\{-1,0,0,0\},\{-732,-1,6144,-2904\},\{108,0,1,0\},\{229,0,0,1\}\}$

No.180

$$L(n) = \{\{-6, 24\}, \{24, 24\}\}$$

$$g = \{\{98209, 46368\}, \{11592, 5473\}\}$$

$$w = \{27, 13\}$$

$$rts = \{\{686, 1, 7, -9\}, \{59, -1, -4, 9\}, \{47, -1, -2, 5\}\}$$

$$f = \{\{1023, 1, -2766, -1296\}, \{1, 0, 0, 0\}, \{-49, 0, 1, 0\}, \{103, 0, 0, 1\}\}$$

No. 181

$$L(n) = \{\{-8, 20\}, \{20, 40\}\}$$

$$g = \{\{90481, 77280\}, \{15456, 13201\}\}$$

$$w = \{-7, 4\}$$

$$rts = \{\{397, -1, -1, 5\}, \{639, -3, -9, 16\}, \{117, -1, -1, 3\}\}$$

$$f = \{\{-23724, 1, 15336, 13140\}, \{1, 0, 0, 0\}, \{487, 0, 1, 0\}, \{-572, 0, 0, 1\}\}$$

No. 182

$$L(n) = \{\{10, 25\}, \{25, -10\}\}$$

$$g = \{\{701, -135\}, \{-135, 26\}\}$$

$$w = \{-1, -1\}$$

$$rts = \{\{6, 1, 0, 1\}, \{1, -6, -1, -5\}\}$$

$$f = \{\{-1, 0, 0, 0\}, \{-25, -1, -565, 110\}, \{-4, 0, 1, 0\}, \{-21, 0, 0, 1\}\}$$

No. 183

$$L(n) = \{\{12, 18\}, \{18, -36\}\}$$

$$g = \{\{10009, -7920\}, \{-2640, 2089\}\}$$

$$w = \{-2, 2\}$$

$$rts = \{\{7, -1, 1, 1\}, \{1, 19, -15, -19\}\}$$

$$f = \{\{-1, 0, 0, 0\}, \{96, -1, -2640, 2088\}, \{-76, 0, 1, 0\}, \{-96, 0, 0, 1\}\}$$

No.184

$$L(n) = \{\{6, 24\}, \{24, -30\}\}$$

$$g = \{\{11329, -6600\}, \{-1320, 769\}\}$$

$$w = \{5, -23\}$$

$$rts = \{\{136, 1, 12, 21\}, \{1028, -1, -14, -21\}, \{1019, -1, -15, -23\}\}$$

$$f = \{\{-36, -1, 18, -54\}, \{-1, 0, 0, 0\}, \{-1, 0, 1, 0\}, \{1, 0, 0, 1\}\}$$

No.185

$$L(n) = \{\{-6, 24\}, \{24, 30\}\}$$

$$g = \{\{11329, 6600\}, \{1320, 769\}\}$$

$$w = \{-8, 13\}$$

$$rts = \{\{53, -2, -15, 26\}, \{13, 1, 3, -5\}, \{4, -2, 1, -2\}\}$$

$$f = \{\{1956, 1, 24114, 14046\}, \{1, 0, 0, 0\}, \{511, 0, 1, 0\}, \{-877, 0, 0, 1\}\}$$

No.186

$$L(n) = \{\{-12, 18\}, \{18, 36\}\}$$

$$g = \{\{10009, 7920\}, \{2640, 2089\}\}$$

$$w = \{4, 2\}$$

$$rts = \{\{17, -1, 0, 1\}, \{1, 7, 4, -5\}\}$$

$$f = \{\{1, 0, 0, 0\}, \{-120, 1, -2364, -1872\}, \{-68, 0, 1, 0\}, \{86, 0, 0, 1\}\}$$

No.187

$$L(n) = \{\{6, 27\}, \{27, -6\}\}$$

$$g = \{\{6805, -747\}, \{-747, 82\}\}$$

$$w=\{26,-7\}$$

$$rts=\{\{2729,4,-22,19\},\{64,-1,-1,-4\},\{47,1,0,4\}\}$$

$$f=\{\{333,1,-438,69\},\{1,0,0,0\},\{1,0,1,0\},\{16,0,0,1\}\}$$

No.188

$$L(n)=\{\{-18,15\},\{15,30\}\}$$

$$g=\{\{5311,3735\},\{2241,1576\}\}$$

$$w=\{-16,-28\}$$

$$rts=\{\{886,-1,10,-17\},\{112,-1,11,-16\},\{40,8,7,-8\},\{10,5,2,-1\},\{31,20,7,-4\},\{4,-4,0,1\},\{10,11,-3,2\},\{4,2,-1,1\}\}$$

$$f=\{\{1,15,-195,-135\},\{0,1,0,0\},\{0,-5,1,0\},\{0,7,0,1\}\}$$

No.189

$$L(n)=\{\{16,16\},\{16,-32\}\}$$

$$g=\{\{29681,-21728\},\{-10864,7953\}\}$$

$$w=\{6,-1\}$$

$$rts=\{\{225,-9,13,6\},\{57,-9,8,8\},\{9,-1,1,1\}\}$$

$$f=\{\{3664,1,-6448,4736\},\{1,0,0,0\},\{170,0,1,0\},\{233,0,0,1\}\}$$

No.190

$$L(n)=\{\{8,24\},\{24,-24\}\}$$

$$g=\{\{35113,-16296\},\{-5432,2521\}\}$$

$$w=\{-2,2\}$$

$$rts=\{\{225,-3,7,4\},\{17,-1,1,1\},\{13,1,0,1\}\}$$

$$f=\{\{-3904,1,8096,-3744\},\{1,0,0,0\},\{-136,0,1,0\},\{-292,0,0,1\}\}$$

No. 191

$$L(n) = \{-8, 24\}, \{24, 24\}$$

$$g = \{35113, 16296\}, \{5432, 2521\}$$

$$w = \{6, 0\}$$

$$rts = \{11, -1, 0, -1\}, \{19, 11, -5, 9\}, \{5, 1, -1, 2\}$$

$$f = \{624, -1, 6096, 2832\}, \{-1, 0, 0, 0\}, \{-102, 0, 1, 0\}, \{220, 0, 0, 1\}$$

No. 192

$$L(n) = \{-16, 16\}, \{16, 32\}$$

$$g = \{29681, 21728\}, \{10864, 7953\}$$

$$w = \{1, -3\}$$

$$rts = \{15, -1, 2, -3\}, \{39, -9, 14, -20\}, \{9, 1, 3, -4\}$$

$$f = \{2776, -1, -35776, -26192\}, \{-1, 0, 0, 0\}, \{945, 0, 1, 0\}, \{-1291, 0, 0, 1\}$$

No. 193

$$L(n) = \{-6, 24\}, \{24, 36\}$$

$$g = \{143809, 99288\}, \{16548, 11425\}$$

$$w = \{-3, 28\}$$

$$rts = \{37, 1, 18, -26\}, \{7, -1, -2, 3\}, \{43, -17, -14, 22\}, \{52, -35, -17, 28\}, \\ \{5, -1, -2, 3\}, \{19, 31, -10, 12\}, \{20, 22, -9, 11\}, \{1, -7, 2, -3\}$$

$$f = \{-1, 0, 0, 0\}, \{-378, -1, -4644, -3204\}, \{114, 0, 1, 0\}, \{-165, 0, 0, 1\}$$

No. 194

$$L(n) = \{-12, 24\}, \{24, 18\}$$

$$g = \{143809, 49644\}, \{33096, 11425\}$$

$$w=\{24,-16\}$$

$$rts=\{\{2492,1,-11,19\},\{146,-1,7,-21\},\{109,-1,6,-18\}\}$$

$$f=\{\{-2136,-1,10584,3648\},\{-1,0,0,0\},\{-130,0,1,0\},\{376,0,0,1\}\}$$

No.195

$$L(n)=\{\{20,20\},\{20,-20\}\}$$

$$g=\{\{33461,-13860\},\{-13860,5741\}\}$$

$$w=\{-2,0\}$$

$$rts=\{\{9,1,0,1\},\{51,9,3,11\},\{9,-1,1,2\}\}$$

$$f=\{\{-2480,-1,-15440,6400\},\{-1,0,0,0\},\{-226,0,1,0\},\{-546,0,0,1\}\}$$

No.196

$$L(n)=\{\{10,20\},\{20,-40\}\}$$

$$g=\{\{33461,-27720\},\{-6930,5741\}\}$$

$$w=\{2,5\}$$

$$rts=\{\{202,-2,9,9\},\{53,-3,12,14\},\{14,-6,7,8\},\{38,-58,21,21\},\{2,-2,1,1\}\}$$

$$f=\{\{0,-1,0,0\},\{-1,-360,1440,-1200\},\{0,42,1,0\},\{0,51,0,1\}\}$$

No.197

$$L(n)=\{\{-10,20\},\{20,40\}\}$$

$$g=\{\{33461,27720\},\{6930,5741\}\}$$

$$w=\{-2,6\}$$

$$rts=\{\{17,-2,-9,11\},\{46,1,3,-3\},\{3,2,1,0\}\}$$

$$f=\{\{-6680,-1,13440,11120\},\{-1,0,0,0\},\{-394,0,1,0\},\{475,0,0,1\}\}$$

No.198

$$L(n) = \{\{-6, 27\}, \{27, 12\}\}$$

$$g = \{\{977006862014770009908001, 212001272002120000848000\}, \{106000636001060000424000, 23001138005230006092001\}\}$$

decomposition for g is unclear

No.199

$$L(n) = \{\{10, 25\}, \{25, -20\}\}$$

$$g = \{\{8835201001, -3289180320\}, \{-1644590160, 612250201\}\}$$

$$w = \{-19, 27\}$$

$$rts = \{\{10669, -1, 24, 19\}, \{2067, 2, -11, 12\}, \{369, 1, -8, 3\}, \{168, -2, -5, -2\}, \{61, -1, -2, -1\}\}$$

$$f = \{\{252998420, -1, -205482415, 76497230\}, \{-1, 0, 0, 0\}, \{-2663294, 0, 1, 0\}, \{-7153979, 0, 0, 1\}\}$$

No.200

$$L(n) = \{\{-10, 25\}, \{25, 20\}\}$$

$$g = \{\{8835201001, 3289180320\}, \{1644590160, 612250201\}\}$$

$$w = \{18, -6\}$$

$$rts = \{\{3628, -2, -7, -20\}, \{164, -4, -9, -4\}, \{22, 2, 3, 0\}, \{86, -1, 9, 2\}, \{41, -1, 10, 2\}\}$$

$$f = \{\{4334557635, 1, -410934120, -152982795\}, \{1, 0, 0, 0\}, \{-5326197, 0, 1, 0\}, \{14306886, 0, 0, 1\}\}$$

No.201

$$L(n) = \{\{6, 24\}, \{24, -42\}\}$$

$$g = \{\{4859521, -3867360\}, \{-552480, 439681\}\}$$

$$w = \{25, -18\}$$

$rts=\{\{457,1,10,14\},\{352,-1,-15,-18\},\{155,2,-5,-8\}\}$

$f=\{\{-94791,1,-138642,110316\},\{1,0,0,0\},\{3835,0,1,0\},\{4818,0,0,1\}\}$

No.202

$L(n)=\{\{-6,24\},\{24,42\}\}$

$g=\{\{4859521,3867360\},\{552480,439681\}\}$

$w=\{-15,25\}$

$rts=\{\{70,-1,-19,24\},\{13,2,-12,15\},\{14,-4,-11,14\},\{4,1,-4,5\},\{8,50,-10,11\},\{1,5,-1,1\}\}$

$f=\{\{-1,0,0,0\},\{328404,-1,1105188,879552\},\{-30566,0,1,0\},\{38408,0,0,1\}\}$

No.203

$L(n)=\{\{16,24\},\{24,-16\}\}$

$g=\{\{1543321,-467280\},\{-467280,141481\}\}$

$w=\{30,-29\}$

$rts=\{\{1449,1,3,19\},\{935,1,-4,-19\},\{823,-15,-29,-9\},\{31,7,11,-4\},\{3,-3,-10,3\},\{1,7,-3,1\}\}$

$f=\{\{1,0,0,0\},\{138872,1,-46536,14176\},\{486,0,1,0\},\{1615,0,0,1\}\}$

No.204

$L(n)=\{\{-8,24\},\{24,32\}\}$

$g=\{\{1543321,934560\},\{233640,141481\}\}$

$w=\{14,9\}$

$rts=\{\{431,1,6,-6\},\{3,1,1,0\},\{431,1,8,-11\},\{107,1,7,-11\},\{431,1,8,-11\}\}$

$f=\{\{-77328,1,-76920,-46608\},\{1,0,0,0\},\{-1614,0,1,0\},\{2667,0,0,1\}\}$

No.205

$$L(n) = \{\{6, 27\}, \{27, -18\}\}$$

$$g = \{\{811, -261\}, \{-87, 28\}\}$$

$$w = \{26, 5\}$$

$$rts = \{\{997, 1, 2, -8\}, \{1030, -1, 7, 7\}, \{800, -1, 6, 7\}\}$$

$$f = \{\{-756, 1, 198, 54\}, \{1, 0, 0, 0\}, \{-6, 0, 1, 0\}, \{-6, 0, 0, 1\}\}$$

No.206

$$L(n) = \{\{-6, 27\}, \{27, 18\}\}$$

$$g = \{\{811, 261\}, \{87, 28\}\}$$

$$w = \{-12, -16\}$$

$$rts = \{\{4862, 1, -16, 13\}, \{1028, 1, -7, 14\}, \{613, 1, -6, 14\}\}$$

$$f = \{\{-513, -1, -441, -108\}, \{-1, 0, 0, 0\}, \{6, 0, 1, 0\}, \{-15, 0, 0, 1\}\}$$

No.207

$$L(n) = \{\{8, 28\}, \{28, -8\}\}$$

$$g = \{\{17217982601, -2411463600\}, \{-2411463600, 337737401\}\}$$

$$w = \{-1, 15\}$$

$$rts = \{\{43, 1, -2, -15\}, \{3, -9, -1, -6\}, \{11, 23, -3, -24\}, \{11, 17, -2, -17\}, \\ \{27, 33, -3, -29\}, \{13, 9, -1, -10\}, \{11, 23, -3, -24\}, \{3, 9, -1, -8\}, \\ \{21, 23, -3, -26\}, \{13, 9, -1, -10\}, \{9, -13, 3, 20\}, \{1, 17, 0, 2\}, \{1, 15, 0, 2\}, \\ \{3, -1, 1, 7\}\}$$

$$f = \{\{-1, -28732, -1947604, 272772\}, \{0, -1, 0, 0\}, \{0, -9367, 1, 0\}, \\ \{0, -66881, 0, 1\}\}$$

No.208

$$L(n) = \{\{18, 18\}, \{18, -30\}\}$$

$$g = \{\{758539, -480150\}, \{-288090, 182359\}\}$$

$$w = \{13, 3\}$$

$$rts = \{\{226, -1, 5, 6\}, \{10, -1, 2, 3\}, \{73, 1, 17, 27\}\}$$

$$f = \{\{8676, -1, 94356, -59724\}, \{-1, 0, 0, 0\}, \{2032, 0, 1, 0\}, \{3210, 0, 0, 1\}\}$$

No.209

$$L(n) = \{\{12, 24\}, \{24, -24\}\}$$

$$g = \{\{854569, -384120\}, \{-192060, 86329\}\}$$

$$w = \{-3, 0\}$$

$$rts = \{\{53, 17, 2, 11\}, \{1, -19, -5, -11\}\}$$

$$f = \{\{-1, 0, 0, 0\}, \{-17370, -1, -296172, 133128\}, \{-4529, 0, 1, 0\}, \{-10076, 0, 0, 1\}\}$$

No.210

$$L(n) = \{\{6, 24\}, \{24, -48\}\}$$

$$g = \{\{854569, -768240\}, \{-96030, 86329\}\}$$

$$w = \{22, 11\}$$

$$rts = \{\{796, -1, 13, 12\}, \{284, 1, -7, -9\}, \{35, -1, -2, -1\}\}$$

$$f = \{\{-104400, -1, 95112, -85536\}, \{-1, 0, 0, 0\}, \{2908, 0, 1, 0\}, \{3236, 0, 0, 1\}\}$$

No.211

$$L(n) = \{\{-6, 24\}, \{24, 48\}\}$$

$$g = \{\{854569, 768240\}, \{96030, 86329\}\}$$

$$w = \{15, -2\}$$

$$rts = \{\{325, 1, -6, 3\}, \{1, 2, -9, 10\}\}$$

$f=\{\{-1,0,0,0\},\{645,-1,94854,85272\},\{-2901,0,1,0\},\{3227,0,0,1\}\}$

No.212

$L(n)=\{\{-12,24\},\{24,24\}\}$

$g=\{\{854569,384120\},\{192060,86329\}\}$

$w=\{2,-1\}$

$rts=\{\{83,-5,1,-7\},\{17,-7,2,-6\},\{7,1,1,-2\}\}$

$f=\{\{-53580,1,-474504,-213288\},\{1,0,0,0\},\{-7256,0,1,0\},\{16143,0,0,1\}\}$

No.213

$L(n)=\{\{-18,18\},\{18,30\}\}$

$g=\{\{758539,480150\},\{288090,182359\}\}$

$w=\{-11,-7\}$

$rts=\{\{49,1,-2,2\},\{16,5,-6,9\},\{16,-1,-5,8\}\}$

$f=\{\{-3888,-1,-57672,-36504\},\{-1,0,0,0\},\{1242,0,1,0\},\{-1962,0,0,1\}\}$

No.214

$L(n)=\{\{-6,27\},\{27,24\}\}$

$g=\{\{15100164490562065,6408946218109056\},$
 $\{1602236554527264,680035499816689\}\}$

$w=\{7,15\}$

$rts=\{\{23,1,6,-14\},\{7,1,-3,7\},\{2,5,-1,2\},\{8,-4,-5,12\},\{28,-1,-11,26\},$
 $\{4,-8,-5,12\},\{8,1,1,-2\},\{5,2,1,-2\},\{4,2,1,-2\},\{5,-5,1,-3\},$
 $\{10,-8,1,-4\},\{2,4,-1,2\},\{5,-5,1,-3\},\{8,-10,1,-4\},\{4,2,1,-2\},$
 $\{5,-5,1,-3\},\{10,-8,1,-4\},\{2,4,-1,2\},\{5,-5,1,-3\},\{8,-10,1,-4\},$
 $\{4,2,1,-2\},\{5,-5,1,-3\},\{10,-8,1,-4\},\{2,4,-1,2\},\{5,-5,1,-3\},$
 $\{8,-10,1,-4\},\{4,2,1,-2\},\{5,-5,1,-3\},\{10,-8,1,-4\},\{2,4,-1,2\},$
 $\{5,-5,1,-3\},\{8,-10,1,-4\},\{4,2,1,-2\},\{5,-5,1,-3\},\{10,-8,1,-4\},$
 $\{2,4,-1,2\},\{5,-5,1,-3\},\{8,-10,1,-4\},\{4,2,1,-2\},\{5,-5,1,-3\},$
 $\{10,-8,1,-4\},\{2,4,-1,2\},\{5,-5,1,-3\},\{8,-10,1,-4\},\{4,2,1,-2\},$
 $\{5,-5,1,-3\},\{10,-8,1,-4\},\{2,4,-1,2\},\{5,-5,1,-3\},\{8,-10,1,-4\},$

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No.215

$$L(n) = \{\{8, 24\}, \{24, -40\}\}$$

$$g = \{\{809, -600\}, \{-120, 89\}\}$$

$$w = \{-28, -21\}$$

$$rts = \{\{39, 1, 17, 23\}, \{5, -1, -3, -4\}, \{3, -3, -1, -1\}, \{51, 35, 7, 15\}, \\ \{41, -33, -13, -13\}, \{3, -3, -1, -1\}\}$$

$$f = \{\{-1, 0, 0, 0\}, \{44, -1, -40, -8\}, \{-2, 0, 1, 0\}, \{-1, 0, 0, 1\}\}$$

No.216

$$L(n) = \{\{-8, 24\}, \{24, 40\}\}$$

$$g = \{\{809, 600\}, \{120, 89\}\}$$

$$w = \{-3, -4\}$$

$$rts = \{\{21, -1, 2, -3\}, \{29, -11, 8, -12\}, \{7, -15, 1, -3\}, \{33, 41, 13, -13\}, \\ \{3, 3, 1, -1\}\}$$

$$f = \{\{-4, -1, -120, -88\}, \{-1, 0, 0, 0\}, \{3, 0, 1, 0\}, \{-4, 0, 0, 1\}\}$$

No.217

$$L(n) = \{\{8, 28\}, \{28, -16\}\}$$

$$g = \{\{87881, -24160\}, \{-12080, 3321\}\}$$

$$w = \{2, -26\}$$

$$rts = \{\{95, -1, -7, -25\}, \{7, 1, 3, 11\}, \{9, 1, 3, 11\}, \{13, -5, 4, 14\}, \{9, 1, 3, 11\}\}$$

$$f = \{\{256, -1, 9664, -2656\}, \{-1, 0, 0, 0\}, \{88, 0, 1, 0\}, \{320, 0, 0, 1\}\}$$

No.218

$$L(n) = \{\{-8, 28\}, \{28, 16\}\}$$

$$g = \{\{87881, 24160\}, \{12080, 3321\}\}$$

$w=\{0,28\}$

$rts=\{\{345,-1,-7,27\},\{471,1,8,-27\},\{169,1,5,-17\},\{223,-1,6,-23\}\}$

$f=\{\{1,2608,8096,2216\},\{0,1,0,0\},\{0,74,1,0\},\{0,-268,0,1\}\}$

No.219

$L(n)=\{\{-10,25\},\{25,30\}\}$

$g=\{\{8820882793801,4775460686640\},\{1591820228880,861781649401\}\}$

$w=\{-6,5\}$

$rts=\{\{8,2,6,-11\},\{41,-4,-3,7\},\{8,2,1,-1\},\{44,-16,-3,10\},\{36,-24,-10,21\},\{1,-14,-7,13\}\}$

$f=\{\{1,0,0,0\},\{104596578480,1,2962396986640,1603786228500\},\{52732166364,0,1,0\},\{-97403012920,0,0,1\}\}$

No.220

$L(n)=\{\{16,24\},\{24,-24\}\}$

$g=\{\{3409,-1488\},\{-992,433\}\}$

$w=\{-1,7\}$

$rts=\{\{71,-1,3,6\},\{47,-13,6,9\},\{107,81,-2,25\},\{3,9,-1,1\},\{7,-1,1,2\}\}$

$f=\{\{68,-1,-776,336\},\{-1,0,0,0\},\{-11,0,1,0\},\{-25,0,0,1\}\}$

No.221

$L(n)=\{\{8,24\},\{24,-48\}\}$

$g=\{\{3409,-2976\},\{-496,433\}\}$

$w=\{-20,5\}$

$rts=\{\{43,1,-1,-2\},\{49,9,-14,-17\},\{15,3,-5,-6\}\}$

$f=\{\{24,1,216,-192\},\{1,0,0,0\},\{-6,0,1,0\},\{-7,0,0,1\}\}$

No.222

$$L(n) = \{-8, 24\}, \{24, 48\}$$

$$g = \{3409, 2976\}, \{496, 433\}$$

$$w = \{20, 3\}$$

$$rts = \{27, 5, 10, 1\}, \{5, 3, 2, 0\}$$

$$f = \{1, 0, 0, 0\}, \{-56, 1, -152, -144\}, \{-4, 0, 1, 0\}, \{5, 0, 0, 1\}$$

No.223

$$L(n) = \{-16, 24\}, \{24, 24\}$$

$$g = \{3409, 1488\}, \{992, 433\}$$

$$w = \{14, 13\}$$

$$rts = \{121, -1, -3, 8\}, \{103, 3, 8, -17\}, \{29, -1, 2, -5\}, \{227, -19, 7, -28\}, \\ \{11, 3, -2, 4\}, \{3, 7, -4, 9\}$$

$$f = \{-1, 0, 0, 0\}, \{-132, -1, -408, -168\}, \{6, 0, 1, 0\}, \{-13, 0, 0, 1\}$$

No.224

$$L(n) = \{-8, 28\}, \{28, 24\}$$

$$g = \{11832207126056839081, 4793520994573980240\}, \\ \{1597840331524660080, 647324805384218521\}$$

$$w = \{-25, 10\}$$

$$rts = \{7163, -1, 12, 15\}, \{899, -1, -3, 13\}, \{35, -15, 13, 3\}, \{21, 39, -29, -3\}, \\ \{21, 23, -11, 0\}, \{193, -59, 20, 17\}, \{53, -17, 5, 5\}, \{19, -21, 2, 4\}, \{1, 11, 1, -2\}$$

$$f = \{0, 1, 0, 0\}, \\ \{1, -85860486571053724, -489906341217036840, -198473227097859476\}, \\ \{0, -6352973186955757, 1, 0\}, \{0, 15681519847192528, 0, 1\}$$

No.225

$L(n) = \{\{10, 30\}, \{30, -10\}\}$

$g = \{\{6074863512559021, -985814636660340\},$
 $\{-985814636660340, 159975692596981\}\}$

$w = \{-27, 18\}$

$rts = \{\{3379, -1, 10, 12\}, \{148, -3, 3, 10\}, \{17, -7, 2, 2\}, \{29, 14, 6, -3\},$
 $\{1, -4, 1, 0\}, \{1, 6, 6, -1\}, \{4, -1, -1, 0\}\}$

$f = \{\{132359546751445, -1, -164202334562670, 26646370646990\}, \{-1, 0, 0, 0\},$
 $\{-842632226217, 0, 1, 0\}, \{-5192533743350, 0, 0, 1\}\}$

No. 226

$L(n) = \{\{-20, 20\}, \{20, 30\}\}$

$g = \{\{5089048875898681, 2957443909981020\},$
 $\{1971629273320680, 1145790329257321\}\}$

$w = \{13, 26\}$

$rts = \{\{66, 1, 10, -17\}, \{39, -1, -2, 4\}, \{76, -16, 0, 9\}, \{217, 17, -17, 20\},$
 $\{54, 21, -17, 27\}, \{6, 4, -2, 3\}, \{6, 31, -8, 13\}, \{329, 16, -24, -1\},$
 $\{54, -4, -2, -3\}, \{11, 1, 1, 0\}, \{24, -1, 11, -19\}, \{32, 2, -10, 17\}, \{33, 2, -10, 17\},$
 $\{14, -1, -4, 7\}, \{6, 4, -2, 3\}, \{31, 136, 27, 5\}, \{13, -3, 10, 4\}, \{14, -19, 11, 5\},$
 $\{1, 9, 1, 0\}\}$

$f = \{\{0, -1, 0, 0\}, \{-1, -11790135, 12916120, 7506030\}, \{0, -237363, 1, 0\},$
 $\{0, 408443, 0, 1\}\}$

No. 227

$L(n) = \{\{12, 24\}, \{24, -36\}\}$

$g = \{\{56641, -36576\}, \{-12192, 7873\}\}$

$w = \{0, 3\}$

$rts = \{\{5, -1, 2, 3\}, \{7, 5, -7, -11\}, \{11, -1, -11, -17\}\}$

$f = \{\{666, 1, 32352, -20892\}, \{1, 0, 0, 0\}, \{-658, 0, 1, 0\}, \{-1019, 0, 0, 1\}\}$

No. 228

$$L(n) = \{\{-12, 24\}, \{24, 36\}\}$$

$$g = \{\{56641, 36576\}, \{12192, 7873\}\}$$

$$w = \{-3, -1\}$$

$$rts = \{\{7, 7, -2, 2\}, \{1, -37, 7, -11\}\}$$

$$f = \{\{-1, 0, 0, 0\}, \{-1788, -1, -16860, -10884\}, \{343, 0, 1, 0\}, \{-531, 0, 0, 1\}\}$$

No.229

$$L(n) = \{\{-10, 25\}, \{25, 40\}\}$$

$$g = \{\{14953601, 10490880\}, \{2622720, 1840001\}\}$$

$$w = \{-10, -5\}$$

$$rts = \{\{1576, -6, -3, -20\}, \{346, -6, 7, -16\}, \{21, -1, 0, -1\}\}$$

$$f = \{\{1075000, 1, 1574375, 1104500\}, \{1, 0, 0, 0\}, \{34500, 0, 1, 0\}, \{-49175, 0, 0, 1\}\}$$

No.230

$$L(n) = \{\{16, 28\}, \{28, -16\}\}$$

$$g = \{\{62177, -16512\}, \{-16512, 4385\}\}$$

$$w = \{-30, 3\}$$

$$rts = \{\{199, 1, 0, 5\}, \{51, 1, 1, 5\}, \{19, -1, 1, 3\}\}$$

$$f = \{\{-392, -1, -1964, 528\}, \{-1, 0, 0, 0\}, \{-16, 0, 1, 0\}, \{-61, 0, 0, 1\}\}$$

No.231

$$L(n) = \{\{-8, 28\}, \{28, 32\}\}$$

$$g = \{\{62177, 33024\}, \{8256, 4385\}\}$$

$$w = \{-9, -23\}$$

$$rts = \{\{3385, -1, 6, -21\}, \{775, -1, 10, -21\}, \{663, -1, 9, -19\}\}$$

$f=\{\{3896,1,3524,1836\},\{1,0,0,0\},\{59,0,1,0\},\{-109,0,0,1\}\}$

No.232

$L(n)=\{\{12,30\},\{30,-12\}\}$

$g=\{\{142359329305393201,-27415901807854560\},$
 $\{-27415901807854560,5279820266120401\}\}$

$w=\{28,20\}$

$rts=\{\{2227,1,-2,-25\},\{1879,-1,7,24\},\{2227,1,-2,-25\},\{5,-1,1,0\},$
 $\{1,5,-5,1\},\{43,-29,28,-4\},\{83,13,-6,6\},\{7,31,0,6\},\{5,-1,1,5\}\}$

$f=\{\{164128212256488,1,-5272568239418988,1015403864519664\},\{1,0,0,0\},$
 $\{31425960668044,0,1,0\},\{163181890380082,0,0,1\}\}$

No.233

$L(n)=\{\{8,32\},\{32,-8\}\}$

$g=\{\{4289,-528\},\{-528,65\}\}$

$w=\{-11,6\}$

$rts=\{\{545,1,3,-5\},\{255,1,1,-5\},\{187,1,1,-4\}\}$

$f=\{\{612,-1,-408,0\},\{-1,0,0,0\},\{-3,0,1,0\},\{-12,0,0,1\}\}$

No.234

$L(n)=\{\{-16,24\},\{24,32\}\}$

$g=\{\{3761,2112\},\{1056,593\}\}$

$w=\{-5,22\}$

$rts=\{\{513,1,12,-20\},\{153,-1,-11,20\},\{63,-1,-10,18\}\}$

$f=\{\{-8,1,64,40\},\{1,0,0,0\},\{1,0,1,0\},\{-2,0,0,1\}\}$

No.235

$$L(n) = \{\{10, 30\}, \{30, -20\}\}$$

$$g = \{\{150841, -47760\}, \{-23880, 7561\}\}$$

$$w = \{-3, 0\}$$

$$rts = \{\{61, 34, 1, 16\}, \{7, 7, 2, 7\}, \{14, -19, 5, 14\}, \{3, -2, 1, 3\}\}$$

$$f = \{\{1, 0, 0, 0\}, \{-28625, 1, 50750, -16050\}, \{-485, 0, 1, 0\}, \{-1530, 0, 0, 1\}\}$$

No. 236

$$L(n) = \{\{-10, 30\}, \{30, 20\}\}$$

$$g = \{\{150841, 47760\}, \{23880, 7561\}\}$$

$$w = \{-8, 8\}$$

$$rts = \{\{44, 1, 3, -9\}, \{1, -11, -6, 19\}, \{1, 24, -7, 22\}, \{1, -11, -6, 19\}\}$$

$$f = \{\{1, 0, 0, 0\}, \{100, 1, 29120, 9220\}, \{278, 0, 1, 0\}, \{-878, 0, 0, 1\}\}$$

No. 237

$$L(n) = \{\{8, 28\}, \{28, -40\}\}$$

$$g = \{\{222784849, -145548000\}, \{-29109600, 19017649\}\}$$

$$w = \{-28, -14\}$$

$$rts = \{\{3301, 1, 5, 17\}, \{21, 17, -1, -5\}, \{1, -15, -2, 0\}\}$$

$$f = \{\{1287184, -1, -9686920, 6328576\}, \{-1, 0, 0, 0\}, \{-190468, 0, 1, 0\}, \{-291542, 0, 0, 1\}\}$$

No. 238

$$L(n) = \{\{-8, 28\}, \{28, 40\}\}$$

$$g = \{\{222784849, 145548000\}, \{29109600, 19017649\}\}$$

$$w = \{-18, -13\}$$

$$rts = \{\{499, -1, 5, -10\}, \{401, 1, -6, 2\}, \{93, 15, -11, 4\}, \{29, -11, 0, -4\},$$

$\{1, 17, -4, 6\}, \{1, 3, -2, 3\}$

$f = \{\{1, 0, 0, 0\}, \{3734380, 1, 9685892, 6327896\}, \{190448, 0, 1, 0\},$
 $\{-291511, 0, 0, 1\}\}$

No. 239

$L(n) = \{\{30, 15\}, \{15, -30\}\}$

$g = \{\{165580141, -102334155\}, \{-102334155, 63245986\}\}$

$w = \{-12, -6\}$

$rts = \{\{443, 2, 11, 20\}, \{14, 1, 3, 5\}, \{16, 1, 3, 5\}, \{26, 26, 3, 9\}, \{19, -4, -2, -1\},$
 $\{2, -8, -2, -3\}\}$

$f = \{\{-1, 0, 0, 0\}, \{-1970700, -1, -25237200, 15597450\}, \{-465026, 0, 1, 0\},$
 $\{-752428, 0, 0, 1\}\}$

No. 240

$L(n) = \{\{10, 25\}, \{25, -50\}\}$

$g = \{\{199691526, -170556925\}, \{-34111385, 29134601\}\}$

$w = \{-1, -3\}$

$rts = \{\{56, -4, -10, -11\}, \{6, -1, 1, 1\}, \{16, -6, 3, 2\}, \{4, 6, 0, -1\}, \{6, -1, -1, -1\}\}$

$f = \{\{-22908645, -1, 133583985, -114094350\}, \{-1, 0, 0, 0\}, \{3401636, 0, 1, 0\},$
 $\{3982705, 0, 0, 1\}\}$

No. 241

$L(n) = \{\{-10, 25\}, \{25, 50\}\}$

$g = \{\{199691526, 170556925\}, \{34111385, 29134601\}\}$

$w = \{5, 4\}$

$rts = \{\{1226, 4, 21, -9\}, \{223, -22, -13, -10\}, \{7, 22, 19, 3\}, \{14, -4, -3, -1\},$
 $\{4, 1, 1, 0\}\}$

$f = \{\{-15385345, 1, -19484440, -16641725\}, \{1, 0, 0, 0\}, \{-496159, 0, 1, 0\},$
 $\{580914, 0, 0, 1\}\}$

No.242

$$L(n) = \{\{24, 24\}, \{24, -24\}\}$$

$$g = \{\{985, -408\}, \{-408, 169\}\}$$

$$w = \{-27, 17\}$$

$$rts = \{\{11, 1, -2, -5\}, \{373, -1, 4, 3\}, \{13, 1, -2, 1\}, \{5, 19, -2, 2\}, \{5, -5, -3, 1\}, \{29, -17, -9, 2\}, \{23, -1, -1, -1\}\}$$

$$f = \{\{-168, 1, 192, -48\}, \{1, 0, 0, 0\}, \{-3, 0, 1, 0\}, \{-5, 0, 0, 1\}\}$$

No.243

$$L(n) = \{\{12, 24\}, \{24, -48\}\}$$

$$g = \{\{985, -816\}, \{-204, 169\}\}$$

$$w = \{-14, 12\}$$

$$rts = \{\{2645, -1, 15, 6\}, \{1103, -1, 10, 7\}, \{1397, -1, 11, 7\}\}$$

$$f = \{\{1176, -1, 264, -48\}, \{-1, 0, 0, 0\}, \{10, 0, 1, 0\}, \{6, 0, 0, 1\}\}$$

No.244

$$L(n) = \{\{8, 32\}, \{32, -16\}\}$$

$$g = \{\{1121, -272\}, \{-136, 33\}\}$$

$$w = \{-5, -16\}$$

$$rts = \{\{65, -1, -4, -16\}, \{71, 1, 4, 17\}, \{67, 1, 5, 21\}\}$$

$$f = \{\{-36, 1, 408, -96\}, \{1, 0, 0, 0\}, \{-3, 0, 1, 0\}, \{-12, 0, 0, 1\}\}$$

No.245

$$L(n) = \{\{-8, 32\}, \{32, 16\}\}$$

$g=\{\{1121,272\},\{136,33\}\}$

$w=\{5,-29\}$

$rts=\{\{35,-1,7,-29\},\{9,3,-1,3\},\{3,-3,0,1\},\{1,101,-5,0\}\}$

$f=\{\{1,0,0,0\},\{-2852,1,536,304\},\{-1,0,1,0\},\{-17,0,0,1\}\}$

No.246

$L(n)=\{\{-12,24\},\{24,48\}\}$

$g=\{\{985,816\},\{204,169\}\}$

$w=\{-1,1\}$

$rts=\{\{5,-5,-4,5\},\{1,7,5,-6\}\}$

$f=\{\{-1,0,0,0\},\{186,-1,-5532,-4584\},\{135,0,1,0\},\{-163,0,0,1\}\}$

No.247

$L(n)=\{\{-8,28\},\{28,48\}\}$

$g=\{\{18935502762001,14618243592000\},\{2436373932000,1880885238001\}\}$

$w=\{-15,-27\}$

$rts=\{\{1369,-1,16,-23\},\{51,3,-4,1\},\{3,1,-1,0\},\{11,3,-2,2\},$
 $\{11,35,-6,2\},\{5,-7,-1,2\},\{3,3,-1,1\}\}$

$f=\{\{-49559043888,-1,-610689594116,-471453510268\},\{-1,0,0,0\},$
 $\{13794864923,0,1,0\},\{-17868952669,0,0,1\}\}$

No.248

$L(n)=\{\{12,30\},\{30,-24\}\}$

$g=\{\{8835201001,-3289180320\},\{-1644590160,612250201\}\}$

$w=\{10,19\}$

$rts=\{\{49,1,-7,-19\},\{5,-1,-3,-8\},\{5,-19,-3,-7\},\{7,7,-2,-6\},$
 $\{11,181,-5,-21\},\{179,5,-7,-22\},\{5,-1,3,8\},\{11,-5,9,24\},\{5,-5,6,16\},$
 $\{11,1,-1,-3\}\}$

$f=\{\{1,141399228,-476516190,177398088\},\{0,1,0,0\},\{0,5146840,1,0\},\{0,13825137,0,1\}\}$

No.249

$L(n)=\{\{-12,30\},\{30,24\}\}$

$g=\{\{8835201001,3289180320\},\{1644590160,612250201\}\}$

$w=\{0,-16\}$

$rts=\{\{301,-1,5,-15\},\{13,-1,1,-3\},\{127,-13,5,-20\},\{307,5,-8,8\},\{5,1,-1,0\}\}$

$f=\{\{-1791231744,1,1759325424,654964032\},\{1,0,0,0\},\{19002432,0,1,0\},\{-51043208,0,0,1\}\}$

No.250

$L(n)=\{\{20,20\},\{20,-40\}\}$

$g=\{\{5757961,-4215120\},\{-2107560,1542841\}\}$

$w=\{-1,-4\}$

$rts=\{\{9,-1,-3,-4\},\{3,-3,-3,-4\},\{1,111,-13,-18\},\{3,-13,2,2\}\}$

$f=\{\{1,0,0,0\},\{-654810,1,-3669180,2686020\},\{77539,0,1,0\},\{105920,0,0,1\}\}$

No.251

$L(n)=\{\{10,30\},\{30,-30\}\}$

$g=\{\{6811741,-3161340\},\{-1053780,489061\}\}$

$w=\{4,2\}$

$rts=\{\{139,4,-3,-10\},\{41,-4,3,4\},\{79,-1,4,8\}\}$

$f=\{\{593360,-1,2096200,-972840\},\{-1,0,0,0\},\{28084,0,1,0\},\{60512,0,0,1\}\}$

No.252

$$L(n) = \{-10, 30\}, \{30, 30\}$$

$$g = \{6811741, 3161340\}, \{1053780, 489061\}$$

$$w = \{-6, 4\}$$

$$rts = \{28, -2, -4, 9\}, \{19, -6, -11, 24\}, \{8, -2, -6, 13\}, \{1, 4, 13, -28\}$$

$$f = \{-1, 0, 0, 0\}, \{7180, -1, -1719580, -798060\}, \{23038, 0, 1, 0\}, \{-49640, 0, 0, 1\}$$

No.253

$$L(n) = \{-20, 20\}, \{20, 40\}$$

$$g = \{5757961, 4215120\}, \{2107560, 1542841\}$$

$$w = \{9, 3\}$$

$$rts = \{91, -29, -4, -10\}, \{1, -29, 5, -7\}$$

$$f = \{1, 0, 0, 0\}, \{75690, 1, -629880, -461100\}, \{-13311, 0, 1, 0\}, \{18183, 0, 0, 1\}$$

No.254

$$L(n) = \{8, 32\}, \{32, -24\}$$

$$g = \{12812766721, -4598488440\}, \{-1532829480, 550130881\}$$

$$w = \{15, 14\}$$

$$rts = \{325, -1, 6, 15\}, \{71, 1, 3, 9\}, \{11, 1, 0, 1\}, \{47, -13, 6, 13\}, \{7, 7, 0, 2\}$$

$$f = \{147081276, 1, -1428008072, 512510592\}, \{1, 0, 0, 0\}, \{14697249, 0, 1, 0\}, \{40950940, 0, 0, 1\}$$

No.255

$$L(n) = \{-8, 32\}, \{32, 24\}$$

$$g = \{12812766721, 4598488440\}, \{1532829480, 550130881\}$$

$w=\{20,27\}$

$rts=\{\{2973,-1,-5,24\},\{11,-1,0,1\},\{35,1,-2,5\},\{5,5,-9,25\}\}$

$f=\{\{1,0,0,0\},\{2942308,1,-512470832,-183925240\},\{-5274418,0,1,0\},\{14696109,0,0,1\}\}$

No.256

$L(n)=\{\{8,28\},\{28,-56\}\}$

$g=\{\{442961,-393120\},\{-56160,49841\}\}$

$w=\{18,5\}$

$rts=\{\{8799,3,17,-24\},\{1371,1,0,-7\},\{1173,1,1,-6\}\}$

$f=\{\{-116636,1,-18548,16240\},\{1,0,0,0\},\{474,0,1,0\},\{527,0,0,1\}\}$

No.257

$L(n)=\{\{-8,28\},\{28,56\}\}$

$g=\{\{442961,393120\},\{56160,49841\}\}$

$w=\{8,-17\}$

$rts=\{\{1023,1,-16,16\},\{207,-1,12,-14\},\{75,-1,4,-5\}\}$

$f=\{\{24388,1,55356,49112\},\{1,0,0,0\},\{1400,0,1,0\},\{-1577,0,0,1\}\}$

No.258

$L(n)=\{\{32,16\},\{16,-32\}\}$

$g=\{\{75025,-46368\},\{-46368,28657\}\}$

$w=\{-29,20\}$

$rts=\{\{303,-1,5,-1\},\{59,3,-2,-5\},\{3,-5,5,8\}\}$

$f=\{\{0,-1,0,0\},\{-1,-304,17888,-11056\},\{0,309,1,0\},\{0,500,0,1\}\}$

No.259

$$L(n) = \{\{16, 32\}, \{32, -16\}\}$$

$$g = \{\{98209, -23184\}, \{-23184, 5473\}\}$$

$$w = \{-12, 24\}$$

$$rts = \{\{199, -1, 5, 20\}, \{1441, 1, -3, -21\}, \{1193, 1, -2, -17\}\}$$

$$f = \{\{10368, -1, -5184, 1152\}, \{-1, 0, 0, 0\}, \{-36, 0, 1, 0\}, \{-144, 0, 0, 1\}\}$$

No.260

$$L(n) = \{\{8, 32\}, \{32, -32\}\}$$

$$g = \{\{98209, -46368\}, \{-11592, 5473\}\}$$

$$w = \{21, 15\}$$

$$rts = \{\{2385, 1, -4, -17\}, \{257, -1, 8, 16\}, \{195, -1, 7, 14\}\}$$

$$f = \{\{2124, 1, -5256, 2496\}, \{1, 0, 0, 0\}, \{69, 0, 1, 0\}, \{147, 0, 0, 1\}\}$$

No.261

$$L(n) = \{\{-8, 32\}, \{32, 32\}\}$$

$$g = \{\{98209, 46368\}, \{11592, 5473\}\}$$

$$w = \{-12, -21\}$$

$$rts = \{\{2635, -1, 5, -19\}, \{325, 1, -9, 18\}, \{255, 1, -8, 16\}\}$$

$$f = \{\{-2384, 1, 5184, 2464\}, \{1, 0, 0, 0\}, \{68, 0, 1, 0\}, \{-145, 0, 0, 1\}\}$$

No.262

$$L(n) = \{\{20, 30\}, \{30, -20\}\}$$

$$g = \{\{1543321, -467280\}, \{-467280, 141481\}\}$$

$$w = \{-30, 7\}$$

$rts = \{\{41, 1, 0, 2\}, \{77, 3, 2, 9\}, \{213, -3, 8, 24\}\}$

$f = \{\{-12510, -1, -51230, 15520\}, \{-1, 0, 0, 0\}, \{-430, 0, 1, 0\}, \{-1421, 0, 0, 1\}\}$

No. 263

$L(n) = \{\{-10, 30\}, \{30, 40\}\}$

$g = \{\{1543321, 934560\}, \{233640, 141481\}\}$

$w = \{28, -5\}$

$rts = \{\{873, 3, -18, 25\}, \{232, -3, 15, -26\}, \{114, -1, 7, -12\}\}$

$f = \{\{-18020, -1, 69770, 42240\}, \{-1, 0, 0, 0\}, \{-1172, 0, 1, 0\}, \{1935, 0, 0, 1\}\}$

No. 264

$L(n) = \{\{10, 35\}, \{35, -10\}\}$

$g = \{\{17217982601, -2411463600\}, \{-2411463600, 337737401\}\}$

$w = \{-25, -22\}$

$rts = \{\{454, -1, -4, -25\}, \{6, -1, -1, -7\}, \{8, 7, -2, -15\}, \{3, 2, 0, -1\}, \{4, -16, -1, -3\}, \{1, 4, 0, 1\}\}$

$f = \{\{1, 0, 0, 0\}, \{-101848780, 1, 819503480, -114775510\}, \{-3153126, 0, 1, 0\}, \{-22513492, 0, 0, 1\}\}$

No. 265

$L(n) = \{\{-12, 30\}, \{30, 36\}\}$

$g = \{\{19417, 10512\}, \{3504, 1897\}\}$

$w = \{2, -2\}$

$rts = \{\{7, -1, 1, -2\}, \{43, 5, -8, 14\}, \{7, -1, -1, 2\}\}$

$f = \{\{1944, 1, -21972, -11892\}, \{1, 0, 0, 0\}, \{-326, 0, 1, 0\}, \{602, 0, 0, 1\}\}$

No.266

$$L(n) = \{\{16, 24\}, \{24, -48\}\}$$

$$g = \{\{10009, -7920\}, \{-2640, 2089\}\}$$

$$w = \{-2, -20\}$$

$$rts = \{\{281, 1, 13, 17\}, \{39, 1, 7, 9\}, \{41, 1, 7, 9\}, \{13, 3, 2, 3\}, \{25, 1, 3, 4\}\}$$

$$f = \{\{128, -1, 736, -576\}, \{-1, 0, 0, 0\}, \{16, 0, 1, 0\}, \{20, 0, 0, 1\}\}$$

No.267

$$L(n) = \{\{8, 32\}, \{32, -40\}\}$$

$$g = \{\{11329, -6600\}, \{-1320, 769\}\}$$

$$w = \{29, 0\}$$

$$rts = \{\{2667, 3, 16, -12\}, \{145, -1, 3, 3\}, \{27, -1, 2, 3\}\}$$

$$f = \{\{108, 1, -216, 144\}, \{1, 0, 0, 0\}, \{3, 0, 1, 0\}, \{6, 0, 0, 1\}\}$$

No.268

$$L(n) = \{\{-8, 32\}, \{32, 40\}\}$$

$$g = \{\{11329, 6600\}, \{1320, 769\}\}$$

$$w = \{-5, -5\}$$

$$rts = \{\{101, 1, -3, 4\}, \{249, 7, -18, 28\}, \{29, 1, -2, 3\}\}$$

$$f = \{\{-272, 1, 1208, 712\}, \{1, 0, 0, 0\}, \{19, 0, 1, 0\}, \{-33, 0, 0, 1\}\}$$

No.269

$$L(n) = \{\{-16, 24\}, \{24, 48\}\}$$

$$g = \{\{10009, 7920\}, \{2640, 2089\}\}$$

$$w = \{-23, 23\}$$

$rts = \{\{9, 1, 19, -24\}, \{41, -1, -1, 2\}, \{203, 5, -10, 9\}, \{305, 7, -15, 14\}, \{33, 1, -2, 2\}\}$

$f = \{\{-40, 1, 2456, 1944\}, \{1, 0, 0, 0\}, \{53, 0, 1, 0\}, \{-67, 0, 0, 1\}\}$

No. 270

$L(n) = \{\{8, 36\}, \{36, -8\}\}$

$g = \{\{322766369353, -35430783696\}, \{-35430783696, 3889316089\}\}$

$w = \{-6, 13\}$

$rts = \{\{757, -1, 3, 12\}, \{7, -5, -3, 0\}, \{43, 15, 8, -3\}, \{5, -17, 2, 1\}, \{3, 1, 0, 1\}\}$

$f = \{\{-3017391804, 1, 35848991932, -3935223736\}, \{1, 0, 0, 0\}, \{-106708736, 0, 1, 0\}, \{-972092279, 0, 0, 1\}\}$

No. 271

$L(n) = \{\{-24, 20\}, \{20, 40\}\}$

$g = \{\{251904801961, 177153918480\}, \{106292351088, 74750883481\}\}$

$w = \{15, 8\}$

$rts = \{\{167, -3, 0, 5\}, \{121, -11, -8, 15\}, \{53, 19, 18, -24\}, \{3, 7, -5, 7\}, \{11, -23, -13, 19\}, \{1, -11, -7, 10\}\}$

$f = \{\{-1, 0, 0, 0\}, \{-459473580, -1, 15684446280, 11030203060\}, \{-299098375, 0, 1, 0\}, \{425304264, 0, 0, 1\}\}$

No. 272

$L(n) = \{\{10, 30\}, \{30, -50\}\}$

$g = \{\{726481, -538800\}, \{-107760, 79921\}\}$

$w = \{6, -8\}$

$rts = \{\{1462, -2, -15, -12\}, \{23, -2, -9, -12\}, \{6, -1, -3, -4\}\}$

$f = \{\{-1075, -1, 53730, -39850\}, \{-1, 0, 0, 0\}, \{1065, 0, 1, 0\}, \{1436, 0, 0, 1\}\}$

No.273

$$L(n) = \{-10, 30\}, \{30, 50\}$$

$$g = \{726481, 538800\}, \{107760, 79921\}$$

$$w = \{7, 16\}$$

$$rts = \{3917, -2, -13, 28\}, \{918, -2, -19, 28\}, \{399, -1, -8, 12\}$$

$$f = \{48800, 1, -53440, -39600\}, \{1, 0, 0, 0\}, \{-1060, 0, 1, 0\}, \{1428, 0, 0, 1\}$$

No.274

$$L(n) = \{-8, 32\}, \{32, 48\}$$

$$g = \{22324046305, 15412873392\}, \{2568812232, 1773548449\}$$

$$w = \{-20, -2\}$$

$$rts = \{71, -1, 6, 1\}, \{155, -5, 14, 3\}, \{17, 1, 2, 0\}, \{31, -7, 0, 3\}, \{17, -17, 4, 2\}, \{13, 1, -1, 1\}, \{1, 3, -1, 0\}$$

$$f = \{-294742256, 1, 886839344, 612287872\}, \{1, 0, 0, 0\}, \{16317526, 0, 1, 0\}, \{-23634348, 0, 0, 1\}$$

No.275

$$L(n) = \{-16, 32\}, \{32, 24\}$$

$$g = \{22324046305, 7706436696\}, \{5137624464, 1773548449\}$$

$$w = \{-5, 7\}$$

$$rts = \{1781, -3, -2, 24\}, \{215, 1, -3, 6\}, \{105, -1, 1, 2\}, \{77, -3, -1, 6\}, \{11, -1, 0, 1\}$$

$$f = \{-1915446876, -1, -5150900560, -1778131448\}, \{-1, 0, 0, 0\}, \{47387363, 0, 1, 0\}, \{-137271961, 0, 0, 1\}$$

No.276

$$L(n) = \{-8, 36\}, \{36, 16\}$$

$g=\{\{977002954001,212000424000\},\{106000212000,23001046001\}\}$

$w=\{30,3\}$

$rts=\{\{203,-39,-19,-12\},\{105,57,-14,13\},\{21,33,-5,4\},\{123,99,-17,29\},$
 $\{51,-5,-4,-2\},\{11,3,-1,1\},\{3,-3,0,-1\}\}$

$f=\{\{0,-1,0,0\},\{-1,-2678008,-33682068,-7308688\},\{0,193680,1,0\},$
 $\{0,-892573,0,1\}\}$

No.277

$L(n)=\{\{10,35\},\{35,-20\}\}$

$g=\{\{87881,-24160\},\{-12080,3321\}\}$

$w=\{21,2\}$

$rts=\{\{27,-3,4,14\},\{23,3,-4,-15\},\{23,7,-5,-19\},\{3,-7,-1,-3\},$
 $\{1,-21,-2,-7\}\}$

$f=\{\{0,-1,0,0\},\{-1,-735,-9210,2535\},\{0,-67,1,0\},\{0,-244,0,1\}\}$

No.278

$L(n)=\{\{-10,35\},\{35,20\}\}$

$g=\{\{87881,24160\},\{12080,3321\}\}$

$w=\{-28,-19\}$

$rts=\{\{1721,-1,1,-15\},\{629,-1,3,-15\},\{419,-1,2,-11\}\}$

$f=\{\{2690,1,2615,680\},\{1,0,0,0\},\{20,0,1,0\},\{-69,0,0,1\}\}$

No.279

$L(n)=\{\{12,36\},\{36,-12\}\}$

$g=\{\{1405,-228\},\{-228,37\}\}$

$w=\{2,7\}$

$rts=\{\{37,1,-1,-7\},\{7,-1,1,6\}\}$

$f=\{\{-1,0,0,0\},\{-6,-1,1404,-228\},\{6,0,1,0\},\{37,0,0,1\}\}$

No.280

$L(n)=\{\{-24,24\},\{24,36\}\}$

$g=\{\{1177,684\},\{456,265\}\}$

$w=\{-14,-14\}$

$rts=\{\{19,-1,4,-7\},\{13,1,-1,0\},\{37,19,-16,-5\},\{7,-11,7,3\},\{11,-41,10,5\}\}$

$f=\{\{0,-1,0,0\},\{-1,72,-48,-72\},\{0,0,1,0\},\{0,-2,0,1\}\}$

No.281

$L(n)=\{\{8,32\},\{32,-56\}\}$

$g=\{\{4859521,-3867360\},\{-552480,439681\}\}$

$w=\{15,24\}$

$rts=\{\{91,1,-19,-24\},\{15,-1,-8,-10\},\{33,-7,-17,-21\},\{5,9,-2,-3\},\{15,23,-13,-17\},\{9,3,-3,-4\},\{1,-5,4,5\}\}$

$f=\{\{0,1,0,0\},\{1,8716,340312,-270832\},\{0,-7059,1,0\},\{0,-8870,0,1\}\}$

No.282

$L(n)=\{\{-8,32\},\{32,56\}\}$

$g=\{\{4859521,3867360\},\{552480,439681\}\}$

$w=\{29,4\}$

$rts=\{\{391,1,15,1\},\{465,3,13,-2\},\{87,-1,-3,-1\}\}$

$f=\{\{-416884,-1,110296,87632\},\{-1,0,0,0\},\{-2291,0,1,0\},\{2874,0,0,1\}\}$

No.283

$$L(n) = \{\{-12, 30\}, \{30, 48\}\}$$

$$g = \{\{251124823660801, 176179663349760\}, \{44044915837440, 30900244473601\}\}$$

$$w = \{9, 7\}$$

$$rts = \{\{95, -1, -3, 5\}, \{149, -29, -6, 18\}, \{43, 7, -5, 5\}, \{167, 23, -22, 26\}, \{7, 7, -2, 2\}, \{1, 25, -5, 7\}\}$$

$$f = \{\{-1, 0, 0, 0\}, \{1954877553060, -1, 21032316311934, 14755476393318\}, \{-384069709467, 0, 1, 0\}, \{547449326611, 0, 0, 1\}\}$$

No. 284

$$L(n) = \{\{8, 36\}, \{36, -24\}\}$$

$$g = \{\{570878281, -183723120\}, \{-61241040, 19708921\}\}$$

$$w = \{-7, 5\}$$

$$rts = \{\{113, -1, 2, 4\}, \{31, 3, -4, -13\}, \{39, 7, -4, -14\}, \{31, 19, -3, -13\}, \{7, -11, 2, 5\}, \{3, -1, 1, 3\}\}$$

$$f = \{\{1, 38492, -1582060, 509148\}, \{0, 1, 0, 0\}, \{0, 13199, 1, 0\}, \{0, 41013, 0, 1\}\}$$

No. 285

$$L(n) = \{\{-8, 36\}, \{36, 24\}\}$$

$$g = \{\{570878281, 183723120\}, \{61241040, 19708921\}\}$$

$$w = \{30, -21\}$$

$$rts = \{\{5169, -1, 2, -24\}, \{5, 1, -1, 0\}, \{31, 29, -15, 0\}, \{31, -27, -14, -3\}\}$$

$$f = \{\{-1, 0, 0, 0\}, \{9848412, -1, 20388564, 6561576\}, \{-170100, 0, 1, 0\}, \{528549, 0, 0, 1\}\}$$

No. 286

$$L(n) = \{\{20, 30\}, \{30, -30\}\}$$

$$g = \{\{811826071, -354355320\}, \{-236236880, 103115431\}\}$$

$$w=\{13,-18\}$$

$$rts=\{\{43,-2,-11,-25\},\{17,2,10,23\},\{7,2,3,7\},\{36,-59,10,15\},\{1,34,1,-1\},\{3,-3,-1,-2\}\}$$

$$f=\{\{1,-647760,-16949880,7398480\},\{0,1,0,0\},\{0,191028,1,0\},\{0,437644,0,1\}\}$$

No.287

$$L(n)=\{\{10,30\},\{30,-60\}\}$$

$$g=\{\{811826071,-708710640\},\{-118118440,103115431\}\}$$

$$w=\{-27,30\}$$

$$rts=\{\{7879,-1,28,22\},\{1469,1,-6,-11\},\{1471,1,-6,-11\},\{21,-1,-2,-2\},\{223,3,8,11\},\{58,3,1,3\},\{3,-2,1,0\},\{23,3,-2,1\},\{1,-6,-1,-1\}\}$$

$$f=\{\{0,1,0,0\},\{1,2387455,-15733180,13734810\},\{0,354631,1,0\},\{0,406229,0,1\}\}$$

No.288

$$L(n)=\{\{-10,30\},\{30,60\}\}$$

$$g=\{\{811826071,708710640\},\{118118440,103115431\}\}$$

$$w=\{-21,-2\}$$

$$rts=\{\{27,-2,-1,2\},\{38,17,15,-16\},\{13,13,10,-11\},\{1,4,1,-1\},\{4,1,7,-8\},\{2,2,-7,8\},\{11,-16,11,-13\},\{4,1,-1,1\}\}$$

$$f=\{\{1,0,0,0\},\{-336430,1,10982270,9587340\},\{247544,0,1,0\},\{-283561,0,0,1\}\}$$

No.289

$$L(n)=\{\{-20,30\},\{30,30\}\}$$

$$g=\{\{811826071,354355320\},\{236236880,103115431\}\}$$

$$w=\{-12,-26\}$$

$rts = \{\{209, 1, -9, 20\}, \{2, -7, -3, 7\}, \{14, 6, -5, 11\}, \{4, -4, 3, -7\}, \{4, 6, -4, 9\}, \{3, 8, -4, 9\}\}$

$f = \{\{-1, 0, 0, 0\}, \{-833665, -1, -38739710, -16909560\}, \{436603, 0, 1, 0\}, \{-1000255, 0, 0, 1\}\}$

No. 290

$L(n) = \{\{-10, 35\}, \{35, 30\}\}$

$g = \{\{2199211, 890955\}, \{296985, 120316\}\}$

$w = \{26, 27\}$

$rts = \{\{76, 1, 9, -22\}, \{9, -9, -8, 20\}, \{13, 22, -12, 29\}, \{2, -2, 2, -5\}, \{22, 13, -12, 29\}, \{2, -3, 2, -5\}\}$

$f = \{\{1, 0, 0, 0\}, \{975, 1, -62365, -25265\}, \{-647, 0, 1, 0\}, \{1597, 0, 0, 1\}\}$

No. 291

$L(n) = \{\{24, 24\}, \{24, -40\}\}$

$g = \{\{74329081, -47049800\}, \{-28229880, 17869321\}\}$

$w = \{29, 17\}$

$rts = \{\{65, -1, 14, 22\}, \{21, 1, 12, 19\}, \{27, 3, 10, 16\}, \{47, -1, -4, -6\}, \{25, -3, -3, -4\}\}$

$f = \{\{-795024, 1, -5075856, 3212976\}, \{1, 0, 0, 0\}, \{81981, 0, 1, 0\}, \{129513, 0, 0, 1\}\}$

No. 292

$L(n) = \{\{16, 32\}, \{32, -32\}\}$

$g = \{\{83739041, -37639840\}, \{-18819920, 8459361\}\}$

$w = \{23, -17\}$

$rts = \{\{23, -1, -5, -11\}, \{15, 1, 4, 9\}, \{25, -1, 5, 11\}, \{31, -7, 3, 3\}, \{23, 7, -2, -6\}, \{9, -1, -1, -2\}\}$

$f = \{\{1, 4034344, 36694256, -16493696\}, \{0, 1, 0, 0\}, \{0, -420845, 1, 0\},$

$\{0, -936273, 0, 1\}$

No.293

$L(n) = \{\{8, 32\}, \{32, -64\}\}$

$g = \{\{83739041, -75279680\}, \{-9409960, 8459361\}\}$

$w = \{27, -13\}$

$rts = \{\{613, -3, -26, -27\}, \{129, 1, -16, -18\}, \{77, 5, -8, -10\}, \{129, -3, 7, 6\}, \{17, -1, 2, 2\}\}$

$f = \{\{-1512516, 1, -2348184, 2110944\}, \{1, 0, 0, 0\}, \{53863, 0, 1, 0\}, \{59915, 0, 0, 1\}\}$

No.294

$L(n) = \{\{-8, 32\}, \{32, 64\}\}$

$g = \{\{83739041, 75279680\}, \{9409960, 8459361\}\}$

$w = \{-28, 19\}$

$rts = \{\{805, 1, 19, -20\}, \{623, 13, -27, 9\}, \{93, 11, -16, 0\}\}$

$f = \{\{-13552048, -1, -9315088, -8374016\}, \{-1, 0, 0, 0\}, \{213670, 0, 1, 0\}, \{-237679, 0, 0, 1\}\}$

No.295

$L(n) = \{\{-16, 32\}, \{32, 32\}\}$

$g = \{\{83739041, 37639840\}, \{18819920, 8459361\}\}$

$w = \{26, -14\}$

$rts = \{\{65, -1, 8, -18\}, \{23, 1, -1, 1\}, \{5, -13, 8, 2\}, \{15, 23, -9, -1\}, \{15, -1, 0, 1\}, \{13, -3, 1, 1\}, \{7, 1, 1, 0\}\}$

$f = \{\{2669536, -1, 4656608, 2093120\}, \{-1, 0, 0, 0\}, \{-53406, 0, 1, 0\}, \{118816, 0, 0, 1\}\}$

No.296

$$L(n) = \{\{-24, 24\}, \{24, 40\}\}$$

$$g = \{\{74329081, 47049800\}, \{28229880, 17869321\}\}$$

$$w = \{-21, 22\}$$

$$\begin{aligned} rts = & \{\{181, -1, -15, 24\}, \{55, -5, -11, 18\}, \{23, -5, -4, 7\}, \{99, -39, -10, 23\}, \\ & \{61, -47, -4, 15\}, \{9, -77, 8, 5\}, \{37, -23, 1, 6\}, \{19, 21, -5, 1\}, \{79, 35, -12, 7\}, \\ & \{15, 5, -2, 1\}, \{9, 7, -2, 2\}, \{13, -31, 1, 4\}, \{43, 93, 15, -5\}, \{31, -15, 6, 4\}, \\ & \{1, -21, -1, 2\}, \{13, 161, 12, -13\}, \{1, 17, 1, -1\}\} \end{aligned}$$

$$f = \{\{0, 1, 0, 0\}, \{1, 12, 24, -24\}, \{0, 1, 1, 0\}, \{0, 0, 0, 1\}\}$$

No.297

$$L(n) = \{\{-8, 36\}, \{36, 32\}\}$$

$$g = \{\{15100164490562065, 6408946218109056\}, \{1602236554527264, 680035499816689\}\}$$

$$w = \{-26, 6\}$$

$$\begin{aligned} rts = & \{\{459, 3, 12, -25\}, \{733, -1, -1, 8\}, \{109, 1, 3, -6\}, \{43, -5, -6, 15\}, \\ & \{3, 3, -3, 7\}, \{9, -5, 5, -12\}, \{41, -3, 3, -8\}, \{3, 3, -3, 7\}\} \end{aligned}$$

$$f = \{\{1, 0, 0, 0\}, \{-7395865826976, 1, 686521123233304, 291379405777208\}, \{7396274056370, 0, 1, 0\}, \{-17426414743954, 0, 0, 1\}\}$$

No.298

$$L(n) = \{\{12, 36\}, \{36, -24\}\}$$

$$g = \{\{150841, -47760\}, \{-23880, 7561\}\}$$

$$w = \{2, -4\}$$

$$rts = \{\{505, -5, -9, -17\}, \{7, -1, -1, -3\}\}$$

$$f = \{\{-1, 0, 0, 0\}, \{336, -1, 39720, -12576\}, \{316, 0, 1, 0\}, \{998, 0, 0, 1\}\}$$

No.299

$$L(n) = \{\{-12, 36\}, \{36, 24\}\}$$

$$g = \{\{150841, 47760\}, \{23880, 7561\}\}$$

$$w = \{12, 9\}$$

$$rts = \{\{1373, 1, 7, -6\}, \{515, 1, 4, -7\}, \{293, 1, 3, -4\}\}$$

$$f = \{\{-13500, 1, -7740, -2520\}, \{1, 0, 0, 0\}, \{-60, 0, 1, 0\}, \{195, 0, 0, 1\}\}$$

No.300

$$L(n) = \{\{36, 18\}, \{18, -36\}\}$$

$$g = \{\{75025, -46368\}, \{-46368, 28657\}\}$$

$$w = \{10, -1\}$$

$$rts = \{\{71, 1, -2, -4\}, \{17, -1, 2, 3\}, \{71, 1, 6, 10\}\}$$

$$f = \{\{1602, -1, 8982, -5544\}, \{-1, 0, 0, 0\}, \{138, 0, 1, 0\}, \{223, 0, 0, 1\}\}$$

No.301

$$L(n) = \{\{12, 30\}, \{30, -60\}\}$$

$$g = \{\{90481, -77280\}, \{-15456, 13201\}\}$$

$$w = \{3, 6\}$$

$$rts = \{\{29, 1, -5, -6\}, \{43, 5, -22, -26\}, \{25, -1, -12, -14\}\}$$

$$f = \{\{2214, 1, 50472, -43110\}, \{1, 0, 0, 0\}, \{-1071, 0, 1, 0\}, \{-1254, 0, 0, 1\}\}$$

No.302

$$L(n) = \{\{-12, 30\}, \{30, 60\}\}$$

$$g = \{\{90481, 77280\}, \{15456, 13201\}\}$$

$$w = \{-4, -5\}$$

$$rts = \{\{215, -1, 2, -4\}, \{55, -1, 4, -5\}, \{23, 1, 2, -2\}\}$$

$$f = \{\{4350, -1, -15090, -12900\}, \{-1, 0, 0, 0\}, \{320, 0, 1, 0\}, \{-375, 0, 0, 1\}\}$$

No.303

$$L(n) = \{\{20, 35\}, \{35, -20\}\}$$

$$g = \{\{1220492779884661084317281, -324119478043729369580160\}, \{-324119478043729369580160, 86074606731608290786721\}\}$$

decomposition for g is unclear

No.304

$$L(n) = \{\{-10, 35\}, \{35, 40\}\}$$

$$g = \{\{1220492779884661084317281, 648238956087458739160320\}, \{162059739021864684790080, 86074606731608290786721\}\}$$

decomposition for g is unclear

No.305

$$L(n) = \{\{10, 40\}, \{40, -10\}\}$$

$$g = \{\{81307919681, -10009462320\}, \{-10009462320, 1232221121\}\}$$

$$w = \{-30, -10\}$$

$$rts = \{\{4698, 2, -5, 28\}, \{279, 4, 9, -4\}, \{7, -3, -2, 0\}, \{8, -8, -1, -2\}, \{4, 1, 0, -1\}, \{32, 72, 2, -15\}, \{4, 59, -1, -12\}, \{1, 6, 0, -1\}\}$$

$$f = \{\{-1, 0, 0, 0\}, \{-697376045, -1, -2501758120, 307980510\}, \{-7469624, 0, 1, 0\}, \{-60676547, 0, 0, 1\}\}$$

No.306

$$L(n) = \{\{-20, 30\}, \{30, 40\}\}$$

$$g = \{\{71298457361, 40037849280\}, \{20018924640, 11241683441\}\}$$

$$w = \{-25, -21\}$$

$$rts = \{\{131, 1, -7, 12\}, \{41, -1, -1, -1\}, \{201, 11, 23, 4\}, \{9, 1, 1, 0\},$$

$\{171, 1, 5, -8\}$

$f = \{\{1137468820, -1, -2227437670, -1250823910\}, \{-1, 0, 0, 0\}, \{30336935, 0, 1, 0\}, \{-54023299, 0, 0, 1\}\}$

No.307

$L(n) = \{\{10, 35\}, \{35, -50\}\}$

$g = \{\{357601, -233625\}, \{-46725, 30526\}\}$

$w = \{28, 4\}$

$rts = \{\{82, -3, 14, 21\}, \{21, -6, 10, 15\}, \{3, -2, 2, 3\}, \{18, -7, 5, 7\}, \{6, -1, 2, 3\}, \{2, -8, 1, 1\}\}$

$f = \{\{1, 0, 0, 0\}, \{-4220, 1, -15370, 10030\}, \{242, 0, 1, 0\}, \{370, 0, 0, 1\}\}$

No.308

$L(n) = \{\{-10, 35\}, \{35, 50\}\}$

$g = \{\{357601, 233625\}, \{46725, 30526\}\}$

$w = \{22, -7\}$

$rts = \{\{2846, -1, -1, -10\}, \{1021, -1, 4, -10\}, \{716, -1, 2, -7\}\}$

$f = \{\{-40665, 1, -15840, -10455\}, \{1, 0, 0, 0\}, \{-247, 0, 1, 0\}, \{382, 0, 0, 1\}\}$

No.309

$L(n) = \{\{24, 24\}, \{24, -48\}\}$

$g = \{\{5757961, -4215120\}, \{-2107560, 1542841\}\}$

$w = \{9, -9\}$

$rts = \{\{13, -1, -3, -4\}, \{19, -29, -16, -21\}, \{25, 23, -20, -28\}\}$

$f = \{\{-10068, -1, 466032, -341160\}, \{-1, 0, 0, 0\}, \{8207, 0, 1, 0\}, \{11211, 0, 0, 1\}\}$

No.310

$$L(n) = \{\{12, 36\}, \{36, -36\}\}$$

$$g = \{\{6811741, -3161340\}, \{-1053780, 489061\}\}$$

$$w = \{-16, -11\}$$

$$rts = \{\{1585, 1, 3, 13\}, \{233, 1, 3, 8\}, \{601, -1, 10, 20\}\}$$

$$f = \{\{-376050, -1, -523140, 242820\}, \{-1, 0, 0, 0\}, \{-5840, 0, 1, 0\}, \{-12585, 0, 0, 1\}\}$$

No.311

$$L(n) = \{\{-12, 36\}, \{36, 36\}\}$$

$$g = \{\{6811741, 3161340\}, \{1053780, 489061\}\}$$

$$w = \{13, -8\}$$

$$rts = \{\{1801, -1, 0, -10\}, \{449, -1, 0, -5\}, \{2257, 1, 13, -23\}\}$$

$$f = \{\{-1216794, 1, -522996, -242820\}, \{1, 0, 0, 0\}, \{-5837, 0, 1, 0\}, \{12582, 0, 0, 1\}\}$$

No.312

$$L(n) = \{\{-24, 24\}, \{24, 48\}\}$$

$$g = \{\{5757961, 4215120\}, \{2107560, 1542841\}\}$$

$$w = \{-5, -8\}$$

$$rts = \{\{133, -1, 3, -5\}, \{173, -5, 12, -18\}, \{265, 1, 20, -27\}\}$$

$$f = \{\{168612, -1, -716232, -524328\}, \{-1, 0, 0, 0\}, \{12613, 0, 1, 0\}, \{-17230, 0, 0, 1\}\}$$

No.313

$$L(n) = \{\{30, 30\}, \{30, -30\}\}$$

$$g = \{\{1311738121, -543339720\}, \{-543339720, 225058681\}\}$$

$w=\{18,5\}$

$rts=\{\{953,2,-7,-22\},\{16,1,2,5\},\{8,17,0,3\},\{29,29,2,10\},\{14,-1,-1,0\},\{1,14,2,5\}\}$

$f=\{\{-1,0,0,0\},\{5995185,-1,90383310,-37437990\},\{882422,0,1,0\},\{2130355,0,0,1\}\}$

No.314

$L(n)=\{\{10,40\},\{40,-20\}\}$

$g=\{\{1492851361,-362226480\},\{-181113240,43945441\}\}$

$w=\{6,-8\}$

$rts=\{\{91,-1,-2,-7\},\{46,-1,1,2\},\{9,1,0,1\},\{1,-4,-1,-4\},\{9,-4,-1,-3\},\{1,-4,-1,-4\}\}$

$f=\{\{1,0,0,0\},\{4273780,1,-186385060,45224600\},\{1065954,0,1,0\},\{4393138,0,0,1\}\}$

No.315

$L(n)=\{\{-10,40\},\{40,20\}\}$

$g=\{\{1492851361,362226480\},\{181113240,43945441\}\}$

$w=\{-14,3\}$

$rts=\{\{1438,-2,5,10\},\{158,2,3,-9\},\{6,1,1,-4\},\{9,9,-4,16\},\{1,6,1,-4\},\{4,9,1,-3\},\{4,1,1,-4\}\}$

$f=\{\{2744980,-1,-119407340,-28973080\},\{-1,0,0,0\},\{682902,0,1,0\},\{-2814458,0,0,1\}\}$

No.316

$L(n)=\{\{-10,35\},\{35,60\}\}$

$g=\{\{18935502762001,14618243592000\},\{2436373932000,1880885238001\}\}$

$w=\{16,26\}$

$rts=\{\{1846,-1,-15,22\},\{94,-11,3,-8\},\{3,7,2,0\},\{201,-129,-20,-21\},$

$\{221, -141, -26, -22\}, \{106, 6, 7, -6\}, \{2, 2, 1, 0\}, \{1, 11, 8, 1\}$

$f = \{\{-1, 0, 0, 0\}, \{-4627116816240, -1, 610686638000, 471451227820\},$
 $\{-11035838524, 0, 1, 0\}, \{14295092936, 0, 0, 1\}\}$

No.317

$L(n) = \{\{24, 36\}, \{36, -24\}\}$

$g = \{\{1543321, -467280\}, \{-467280, 141481\}\}$

$w = \{19, 24\}$

$rts = \{\{973, -1, 9, 27\}, \{11, -1, -1, -3\}, \{1, -11, -1, 0\}\}$

$f = \{\{-14052, 1, -154464, 46764\}, \{1, 0, 0, 0\}, \{1081, 0, 1, 0\}, \{3570, 0, 0, 1\}\}$

No.318

$L(n) = \{\{-12, 36\}, \{36, 48\}\}$

$g = \{\{1543321, 934560\}, \{233640, 141481\}\}$

$w = \{29, -1\}$

$rts = \{\{1631, -1, -4, -6\}, \{407, -1, 2, -6\}, \{55, -1, -1, -1\}\}$

$f = \{\{-74862, 1, -46752, -28380\}, \{1, 0, 0, 0\}, \{-653, 0, 1, 0\}, \{1081, 0, 0, 1\}\}$

No.319

$L(n) = \{\{10, 40\}, \{40, -30\}\}$

$g = \{\{12812766721, -4598488440\}, \{-1532829480, 550130881\}\}$

$w = \{-7, 8\}$

$rts = \{\{154, 1, -2, -7\}, \{163, 3, -7, -21\}, \{151, -1, 3, 7\}, \{37, 2, -6, -17\},$
 $\{41, 1, -2, -6\}, \{12, -2, -4, -11\}, \{3, 3, -1, -3\}\}$

$f = \{\{38712370, 1, 1537647850, -551860190\}, \{1, 0, 0, 0\}, \{-12660541, 0, 1, 0\},$
 $\{-35276061, 0, 0, 1\}\}$

No.320

$$L(n) = \{\{-10, 40\}, \{40, 30\}\}$$

$$g = \{\{12812766721, 4598488440\}, \{1532829480, 550130881\}\}$$

$$w = \{-29, 23\}$$

$$rts = \{\{31, 1, 9, -25\}, \{13, -7, -3, 9\}, \{24, -64, -4, 17\}, \{19, 321, -14, 16\}, \\ \{1, 149, -3, 7\}, \{49, -249, -2, -26\}, \{7, 12, -2, 1\}, \{4, 1, -1, 0\}\}$$

$$f = \{\{-1, -109518965, 284280070, 102027800\}, \{0, -1, 0, 0\}, \{0, -2340679, 1, 0\}, \\ \{0, 6521832, 0, 1\}\}$$

No.321

$$L(n) = \{\{12, 42\}, \{42, -12\}\}$$

$$g = \{\{302274081542463685201, -42334979756614927200\}, \\ \{-42334979756614927200, 5929223246159194801\}\}$$

$$w = \{16, 13\}$$

$$rts = \{\{65, 1, -2, -15\}, \{191, 17, -7, 10\}, \{65, -1, 1, 2\}, \{263, -19, -13, -8\}, \\ \{1, 23, 14, -2\}, \{11, -5, -3, 0\}, \{13, 13, 12, -2\}, \{17, 35, 15, -3\}, \{13, 17, 11, -2\}, \\ \{1, 7, 7, -1\}, \{5, -1, -1, 0\}\}$$

$$f = \{\{-18086093505927354558, -1, 21584930045118182046, -30230761825328931 \\ 48\}, \{-1, 0, 0, 0\}, \{69208574882094692, 0, 1, 0\}, \{494153027298405851, 0, 0, 1\}\}$$

No.322

$$L(n) = \{\{10, 35\}, \{35, -70\}\}$$

$$g = \{\{442961, -393120\}, \{-56160, 49841\}\}$$

$$w = \{11, -18\}$$

$$rts = \{\{204, 1, 13, 15\}, \{203, 78, 5, -19\}, \{4, 21, 5, -1\}, \{7, -3, -2, -2\}, \\ \{16, 6, 3, 4\}, \{3, 12, 7, 8\}, \{7, -3, -2, -2\}\}$$

$$f = \{\{9580, 1, -18510, 16450\}, \{1, 0, 0, 0\}, \{374, 0, 1, 0\}, \{422, 0, 0, 1\}\}$$

No.323

$$L(n) = \{\{-10, 35\}, \{35, 70\}\}$$

$$g = \{\{442961, 393120\}, \{56160, 49841\}\}$$

$$w = \{-14, 24\}$$

$$rts = \{\{1614, 1, 22, -23\}, \{206, -1, -22, 25\}, \{141, -1, -14, 16\}\}$$

$$f = \{\{10780, 1, -54670, -48510\}, \{1, 0, 0, 0\}, \{-1106, 0, 1, 0\}, \{1246, 0, 0, 1\}\}$$

No.324

$$L(n) = \{\{40, 20\}, \{20, -40\}\}$$

$$g = \{\{2504730781961, -1548008755920\}, \{-1548008755920, 956722026041\}\}$$

$$w = \{5, 25\}$$

$$rts = \{\{581, -1, 13, 20\}, \{19, 1, 3, 5\}, \{7, 3, 1, 2\}, \{69, 49, 13, 26\}, \{31, 51, 5, 13\}, \{3, -7, 1, 1\}, \{21, -1, 5, 8\}\}$$

$$f = \{\{-18270278380, -1, -312096493540, 192886240780\}, \{-1, 0, 0, 0\}, \{-4313067463, 0, 1, 0\}, \{-6978689751, 0, 0, 1\}\}$$

No.325

$$L(n) = \{\{20, 40\}, \{40, -20\}\}$$

$$g = \{\{3278735159921, -774004377960\}, \{-774004377960, 182717648081\}\}$$

$$w = \{17, -10\}$$

$$rts = \{\{359, 1, 0, 6\}, \{411, -51, -24, -20\}, \{233, 17, 3, -15\}, \{189, 19, 5, -12\}, \{13, 3, 1, -1\}\}$$

$$f = \{\{-81054981610, 1, -192854007820, 45526655560\}, \{1, 0, 0, 0\}, \{1018006967, 0, 1, 0\}, \{4312346712, 0, 0, 1\}\}$$

No.326

$$L(n) = \{\{10, 40\}, \{40, -40\}\}$$

$$g = \{\{3278735159921, -1548008755920\}, \{-387002188980, 182717648081\}\}$$

$$w=\{2,-28\}$$

$$rts=\{\{3204,-1,-15,-26\},\{1116,-9,21,28\},\{69,4,-3,2\},\{1,-4,-1,-2\}\}$$

$$f=\{\{1,0,0,0\},\{8624350400,1,-192908298200,91078943600\},\{2036587092,0,1,0\},\{4313560682,0,0,1\}\}$$

No. 327

$$L(n)=\{\{-10,40\},\{40,40\}\}$$

$$g=\{\{3278735159921,1548008755920\},\{387002188980,182717648081\}\}$$

$$w=\{12,-19\}$$

$$rts=\{\{26,1,-9,19\},\{21,-1,8,-17\},\{13,2,9,-19\},\{9,-6,7,-15\},\{89,-4,5,-12\},\{2,-27,7,-15\},\{19,16,13,-27\},\{8,-12,-5,11\},\{3,7,-2,4\}\}$$

$$f=\{\{3189814595,-1,196562693810,92804315160\},\{-1,0,0,0\},\{-2075167573,0,1,0\},\{4395275452,0,0,1\}\}$$

No. 328

$$L(n)=\{\{12,36\},\{36,-60\}\}$$

$$g=\{\{726481,-538800\},\{-107760,79921\}\}$$

$$w=\{15,-14\}$$

$$rts=\{\{2183,-1,-12,-10\},\{185,1,7,10\},\{119,1,4,6\}\}$$

$$f=\{\{12150,-1,26676,-19764\},\{-1,0,0,0\},\{441,0,1,0\},\{594,0,0,1\}\}$$

No. 329

$$L(n)=\{\{-12,36\},\{36,60\}\}$$

$$g=\{\{726481,538800\},\{107760,79921\}\}$$

$$w=\{-19,-3\}$$

$$rts=\{\{7,1,-1,0\},\{35,29,-9,2\},\{11,1,-1,1\}\}$$

$$f=\{\{-8220,1,35064,26016\},\{1,0,0,0\},\{579,0,1,0\},\{-781,0,0,1\}\}$$

No.330

$$L(n) = \{\{12, 42\}, \{42, -24\}\}$$

$$g = \{\{730977003801241, -200958164040480\}, \\ \{-100479082020240, 27623429659561\}\}$$

$$w = \{9, -22\}$$

$$rts = \{\{455, -1, -6, -20\}, \{41, 7, -1, -7\}, \{7, 7, 0, -2\}, \{29, -17, 4, 3\}, \\ \{25, -23, 7, 1\}, \{41, 31, 10, -4\}, \{11, -5, 3, 0\}, \{1, 13, 0, -1\}\}$$

$$f = \{\{1, 0, 0, 0\}, \{-14403955379634, 1, -48788405273448, 13412772630630\}, \\ \{296094189121, 0, 1, 0\}, \{1077030357238, 0, 0, 1\}\}$$

No.331

$$L(n) = \{\{-12, 42\}, \{42, 24\}\}$$

$$g = \{\{730977003801241, 200958164040480\}, \\ \{100479082020240, 27623429659561\}\}$$

$$w = \{30, -9\}$$

$$rts = \{\{1475, -1, 1, -13\}, \{5, 1, 1, 0\}, \{85, -25, -19, -5\}, \{29, -11, -5, -2\}, \\ \{35, -7, -3, -2\}, \{55, 7, 4, -2\}, \{5, 11, 3, 0\}, \{1, 143, 2, -5\}\}$$

$$f = \{\{1, 0, 0, 0\}, \{-15651945028116, 1, -25204408224246, -6929125781184\}, \\ \{-152964188388, 0, 1, 0\}, \{556400903895, 0, 0, 1\}\}$$

No.332

$$L(n) = \{\{20, 30\}, \{30, -60\}\}$$

$$g = \{\{121088881, -95816160\}, \{-31938720, 25272721\}\}$$

$$w = \{22, -23\}$$

$$rts = \{\{601, -1, -12, -14\}, \{51, 1, 11, 14\}, \{13, 13, -10, -13\}, \{17, -37, -15, -18\}, \\ \{1, -11, -4, -5\}\}$$

$$f = \{\{0, 1, 0, 0\}, \{1, 1561970, -31814210, 25174200\}, \{0, 549346, 1, 0\}, \\ \{0, 694243, 0, 1\}\}$$

No.333

$$L(n) = \{\{10, 40\}, \{40, -50\}\}$$

$$g = \{\{137058241, -79846800\}, \{-15969360, 9303361\}\}$$

$$w = \{30, 4\}$$

$$rts = \{\{26, 1, -4, -7\}, \{38, -2, 2, 1\}, \{504, 41, -24, 17\}, \{76, 11, -3, 4\}, \\ \{31, 11, -4, 2\}, \{6, 14, -6, 1\}, \{2, -2, 1, 0\}\}$$

$$f = \{\{-1915905, 1, -5274090, 3072540\}, \{1, 0, 0, 0\}, \{67049, 0, 1, 0\}, \\ \{115090, 0, 0, 1\}\}$$

No.334

$$L(n) = \{\{-10, 40\}, \{40, 50\}\}$$

$$g = \{\{137058241, 79846800\}, \{15969360, 9303361\}\}$$

$$w = \{-5, -26\}$$

$$rts = \{\{2161, -1, 12, -24\}, \{4, 1, 1, 0\}, \{13, 23, 20, 2\}, \{11, -16, -15, -2\}, \\ \{23, 13, 13, 1\}, \{22, 18, 14, 1\}, \{2, 3, 1, 0\}\}$$

$$f = \{\{7798460, 1, 8057690, 4694170\}, \{1, 0, 0, 0\}, \{102437, 0, 1, 0\}, \\ \{-175833, 0, 0, 1\}\}$$

No.335

$$L(n) = \{\{-20, 30\}, \{30, 60\}\}$$

$$g = \{\{121088881, 95816160\}, \{31938720, 25272721\}\}$$

$$w = \{-2, -2\}$$

$$rts = \{\{11, 1, -1, 1\}, \{23, 3, -5, 6\}, \{17, -3, 1, -2\}, \{1, -31, 15, -19\}\}$$

$$f = \{\{-1, 0, 0, 0\}, \{-1383520, -1, -38835680, -30730200\}, \{670588, 0, 1, 0\}, \\ \{-847464, 0, 0, 1\}\}$$

No.336

$L(n) = \{\{10, 45\}, \{45, -10\}\}$

$g = \{\{15309056460218076946, -1680509246112374085\},$
 $\{-1680509246112374085, 184473245206710181\}\}$

$w = \{3, -15\}$

$rts = \{\{123, 2, 3, 29\}, \{162, 8, 6, -5\}, \{26, 26, 21, -3\}, \{12, 8, 6, -1\},$
 $\{13, 8, 5, -1\}, \{6, -1, 1, 0\}, \{6, -29, 3, 1\}, \{82, 242, -21, 21\}, \{67, 12, -19, 3\},$
 $\{4, -1, -1, 0\}, \{167, 157, -28, 22\}, \{53, 32, -5, 7\}, \{1, 6, 0, 1\}\}$

$f = \{\{0, 1, 0, 0\}, \{1, -4330346573745, 32132272018470, -3527231110935\},$
 $\{0, -76516385973, 1, 0\}, \{0, -697046847972, 0, 1\}\}$

No. 337

$L(n) = \{\{-30, 25\}, \{25, 50\}\}$

$g = \{\{11948037967993328776, 8402546230561870425\},$
 $\{5041527738337122255, 3545491737431458351\}\}$

$w = \{-9, -29\}$

$rts = \{\{59, -1, 14, -20\}, \{34, 24, 21, -29\}, \{8, -2, 2, -3\}, \{12, 3, -3, 4\},$
 $\{64, 26, -19, 25\}, \{8, 3, -5, 7\}, \{34, 1, -3, 4\}, \{262, 7, -12, 13\}, \{6, 6, -3, 4\},$
 $\{4, -4, -2, 3\}, \{11, -26, -4, 7\}, \{8, -17, -6, 9\}, \{58, 22, 20, -27\}, \{16, -14, 5, -8\},$
 $\{12, -3, 1, -2\}, \{8, 17, -8, 11\}, \{1, -14, 7, -10\}\}$

$f = \{\{0, 1, 0, 0\}, \{1, 1092691944525, -35810633231200, -25184093160475\},$
 $\{0, -546319685905, 1, 0\}, \{0, 776841706162, 0, 1\}\}$

No. 338

$L(n) = \{\{24, 36\}, \{36, -36\}\}$

$g = \{\{50320119025, -21964312944\}, \{-14642875296, 6391493137\}\}$

$w = \{-18, 19\}$

$rts = \{\{433, -1, 6, 12\}, \{131, 1, -1, -4\}, \{47, -1, -2, 0\}, \{163, 17, -3, 10\},$
 $\{19, 1, 0, 1\}\}$

$f = \{\{-1024592358, 1, 2095926468, -914854428\}, \{1, 0, 0, 0\},$
 $\{-19684534, 0, 1, 0\}, \{-45097157, 0, 0, 1\}\}$

No.339

$$L(n) = \{\{12, 36\}, \{36, -72\}\}$$

$$g = \{\{50320119025, -43928625888\}, \{-7321437648, 6391493137\}\}$$

$$w = \{8, 25\}$$

$$rts = \{\{85, 1, -20, -23\}, \{7, -1, 7, 8\}, \{5, -1, 7, 8\}, \{5, 7, 6, 7\}, \{1, 83, -4, -5\}, \\ \{5, 29, 0, -2\}, \{5, 13, 1, -1\}, \{1, -53, 3, 3\}\}$$

$$f = \{\{1, 0, 0, 0\}, \{1544468724, 1, 4126766292, -3602598264\}, \\ \{-77515572, 0, 1, 0\}, \{-88793873, 0, 0, 1\}\}$$

No.340

$$L(n) = \{\{-12, 36\}, \{36, 72\}\}$$

$$g = \{\{50320119025, 43928625888\}, \{7321437648, 6391493137\}\}$$

$$w = \{25, 7\}$$

$$rts = \{\{53, 1, 3, -3\}, \{25, 5, 9, -10\}, \{7, 1, 1, -1\}, \{5, -7, -6, 7\}, \{13, -5, -13, 15\}, \\ \{5, -7, -6, 7\}, \{7, 1, -7, 8\}\}$$

$$f = \{\{33303090, -1, 1801997880, 1573114140\}, \{-1, 0, 0, 0\}, \{-33848027, 0, 1, 0\}, \\ \{38772821, 0, 0, 1\}\}$$

No.341

$$L(n) = \{\{-24, 36\}, \{36, 36\}\}$$

$$g = \{\{50320119025, 21964312944\}, \{14642875296, 6391493137\}\}$$

$$w = \{12, 27\}$$

$$rts = \{\{161, -1, -9, 21\}, \{17, -1, 3, -7\}, \{17, 593, 24, -4\}, \{1, -161, 0, 3\}\}$$

$$f = \{\{1, 0, 0, 0\}, \{-3128113458, 1, -2401024716, -1048027356\}, \\ \{-22549956, 0, 1, 0\}, \{51661827, 0, 0, 1\}\}$$

No.342

$$L(n) = \{\{-12, 42\}, \{42, 36\}\}$$

$g = \{\{11832207126056839081, 4793520994573980240\},$
 $\{1597840331524660080, 647324805384218521\}\}$

$w = \{-22, 14\}$

$rts = \{\{391, 1, 7, -16\}, \{511, 49, -29, 28\}, \{227, -13, 6, 8\}, \{25, 41, 6, -9\},$
 $\{7, 257, 12, -2\}, \{1, 89, 2, -1\}\}$

$f = \{\{-1, 0, 0, 0\},$
 $\{1235398116186319224, -1, -789395604940920468, -319803766532759172\},$
 $\{6824446076273794, 0, 1, 0\}, \{-16845291714896070, 0, 0, 1\}\}$

No. 343

$L(n) = \{\{-10, 40\}, \{40, 60\}\}$

$g = \{\{3465451003966561, 2392601988034440\},$
 $\{398766998005740, 275315019920641\}\}$

$w = \{-15, -27\}$

$rts = \{\{6116, -1, 11, -24\}, \{481, -1, 0, -4\}, \{2443, 2, 23, -28\}, \{6, 1, 1, 0\},$
 $\{11, -6, -7, -1\}, \{19, -19, -12, -2\}, \{37, -107, -24, -6\}, \{8, -8, -7, -1\},$
 $\{7, -17, -16, -2\}, \{4, 1, 1, 0\}, \{29, -1, 0, 1\}\}$

$f = \{\{-41242733434080, 1, 133264844797280, 92008149078480\}, \{1, 0, 0, 0\},$
 $\{1961620329408, 0, 1, 0\}, \{-2841216037580, 0, 0, 1\}\}$

No. 344

$L(n) = \{\{-20, 40\}, \{40, 30\}\}$

$g = \{\{3465451003966561, 1196300994017220\},$
 $\{797533996011480, 275315019920641\}\}$

$w = \{11, 9\}$

$rts = \{\{21, -1, -2, 6\}, \{18, 2, 5, 1\}, \{19, -1, -26, -6\}, \{4, -94, 20, 5\},$
 $\{14, -24, 2, 3\}, \{3, 12, 1, -1\}\}$

$f = \{\{-1, 0, 0, 0\}, \{-59339152737080, -1, 266587860586920, 92028230163400\},$
 $\{-1962048459578, 0, 1, 0\}, \{5683672284884, 0, 0, 1\}\}$

No. 345

$$L(n) = \{\{-10, 45\}, \{45, 20\}\}$$

$$g = \{\{977002954001, 212000424000\}, \{106000212000, 23001046001\}\}$$

$$w = \{-12, 5\}$$

$$rts = \{\{494, 1, 3, -6\}, \{201, 1, 2, -6\}, \{173, 7, 5, -7\}, \{144, -11, 5, 6\}, \{301, 51, 19, -21\}, \{27, 2, 1, -2\}\}$$

$$f = \{\{1, -22115249720, -80712885715, -17513934770\}, \{0, 1, 0, 0\}, \{0, -371294674, 1, 0\}, \{0, 1711109755, 0, 1\}\}$$

No. 346

$$L(n) = \{\{10, 40\}, \{40, -70\}\}$$

$$g = \{\{2111, -1680\}, \{-240, 191\}\}$$

$$w = \{16, -2\}$$

$$rts = \{\{102, -2, -12, 1\}, \{23, -2, -3, 0\}, \{6, -1, -1, 0\}\}$$

$$f = \{\{-55, -1, 90, -100\}, \{-1, 0, 0, 0\}, \{1, 0, 1, 0\}, \{2, 0, 0, 1\}\}$$

No. 347

$$L(n) = \{\{-10, 40\}, \{40, 70\}\}$$

$$g = \{\{2111, 1680\}, \{240, 191\}\}$$

$$w = \{-3, 15\}$$

$$rts = \{\{579, 1, 12, -14\}, \{96, -1, -11, 14\}, \{44, 1, 12, -15\}\}$$

$$f = \{\{20, 1, 480, 380\}, \{1, 0, 0, 0\}, \{8, 0, 1, 0\}, \{-10, 0, 0, 1\}\}$$

No. 348

$$L(n) = \{\{10, 45\}, \{45, -30\}\}$$

$$g = \{\{570878281, -183723120\}, \{-61241040, 19708921\}\}$$

$$w = \{-9, -7\}$$

$$rts = \{\{222, -3, -8, -23\}, \{2, -3, -1, -3\}, \{12, 7, -7, -22\}, \{3, -2, 1, 3\},$$

$\{14, 6, -7, -22\}, \{2, -3, -1, -3\}, \{12, 37, -7, -23\}, \{2, -2, 1, 3\}, \{13, 8, -3, -10\},$
 $\{14, 6, -2, -7\}, \{47, -2, 2, 5\}, \{8, 7, -1, 1\}, \{1, -6, 1, 0\}$

$f = \{\{0, -1, 0, 0\}, \{-1, 864615, 355200, -114195\}, \{0, 2373, 1, 0\}, \{0, 7366, 0, 1\}\}$

No. 349

$L(n) = \{\{-10, 45\}, \{45, 30\}\}$

$g = \{\{570878281, 183723120\}, \{61241040, 19708921\}\}$

$w = \{-25, 18\}$

$rts = \{\{421, -1, -6, 20\}, \{42, -2, 2, -7\}, \{64, -36, -1, -11\}, \{256, -41, -1, -25\},$
 $\{8, -7, 1, -4\}, \{16, -24, 5, -17\}, \{14, -6, 2, -7\}, \{34, 16, -7, 20\}, \{4, 1, -1, 3\}\}$

$f = \{\{-23860, 1, 1052990, 338880\}, \{1, 0, 0, 0\}, \{7028, 0, 1, 0\}, \{-21838, 0, 0, 1\}\}$

No. 350

$L(n) = \{\{24, 42\}, \{42, -24\}\}$

$g = \{\{4138625473, -1099071744\}, \{-1099071744, 291874369\}\}$

$w = \{11, -9\}$

$rts = \{\{733, -1, -4, -5\}, \{301, 1, 0, -5\}, \{43, 1, 1, -1\}, \{1079, -1, -6, -18\},$
 $\{7, -7, -8, 2\}\}$

$f = \{\{-336119898, -1, 275799666, -73242642\}, \{-1, 0, 0, 0\}, \{1514103, 0, 1, 0\},$
 $\{5701457, 0, 0, 1\}\}$

No. 351

$L(n) = \{\{-12, 42\}, \{42, 48\}\}$

$g = \{\{4138625473, 2198143488\}, \{549535872, 291874369\}\}$

$w = \{30, -26\}$

$rts = \{\{173, 1, -15, 28\}, \{85, -1, -2, -1\}, \{95, 1, 4, 0\}, \{97, -1, 4, 1\},$
 $\{295, -1, 3, 2\}\}$

$f = \{\{1125852384, 1, -275819916, -146495724\}, \{1, 0, 0, 0\}, \{-3028434, 0, 1, 0\},$
 $\{5701874, 0, 0, 1\}\}$

No.352

$$L(n) = \{\{30, 30\}, \{30, -50\}\}$$

$$g = \{\{7741, -4900\}, \{-2940, 1861\}\}$$

$$w = \{-5, -15\}$$

$$rts = \{\{607, -2, -18, -27\}, \{94, -1, -9, -14\}, \{107, -2, -16, -25\}\}$$

$$f = \{\{-120, -1, 1320, -840\}, \{-1, 0, 0, 0\}, \{17, 0, 1, 0\}, \{27, 0, 0, 1\}\}$$

No.353

$$L(n) = \{\{20, 40\}, \{40, -40\}\}$$

$$g = \{\{8721, -3920\}, \{-1960, 881\}\}$$

$$w = \{-14, -7\}$$

$$rts = \{\{431, -1, -5, -9\}, \{21, 1, 4, 9\}, \{29, -1, -5, -11\}\}$$

$$f = \{\{20, 1, 440, -200\}, \{1, 0, 0, 0\}, \{-4, 0, 1, 0\}, \{-9, 0, 0, 1\}\}$$

No.354

$$L(n) = \{\{10, 40\}, \{40, -80\}\}$$

$$g = \{\{8721, -7840\}, \{-980, 881\}\}$$

$$w = \{2, 7\}$$

$$rts = \{\{422, -2, 13, 13\}, \{318, 3, -17, -20\}, \{99, 1, -6, -7\}\}$$

$$f = \{\{365, -1, -1570, 1400\}, \{-1, 0, 0, 0\}, \{-29, 0, 1, 0\}, \{-32, 0, 0, 1\}\}$$

No.355

$$L(n) = \{\{-10, 40\}, \{40, 80\}\}$$

$$g = \{\{8721, 7840\}, \{980, 881\}\}$$

$$w=\{16,1\}$$

$$rts=\{\{18,7,-5,5\},\{17,-7,4,-5\},\{19,-6,3,-4\}\}$$

$$f=\{\{-60,-1,540,480\},\{-1,0,0,0\},\{-10,0,1,0\},\{11,0,0,1\}\}$$

No.356

$$L(n)=\{\{-20,40\},\{40,40\}\}$$

$$g=\{\{8721,3920\},\{1960,881\}\}$$

$$w=\{-18,-3\}$$

$$rts=\{\{21,-1,0,1\},\{13,7,3,-6\},\{3,3,1,-2\}\}$$

$$f=\{\{20,-1,-440,-200\},\{-1,0,0,0\},\{4,0,1,0\},\{-9,0,0,1\}\}$$

No.357

$$L(n)=\{\{-30,30\},\{30,50\}\}$$

$$g=\{\{7741,4900\},\{2940,1861\}\}$$

$$w=\{-3,12\}$$

$$rts=\{\{367,2,14,-21\},\{19,1,7,-11\},\{13,-2,-12,19\}\}$$

$$f=\{\{15,1,-1470,-930\},\{1,0,0,0\},\{-19,0,1,0\},\{30,0,0,1\}\}$$

No.358

$$L(n)=\{\{-10,45\},\{45,40\}\}$$

$$g=\{\{3760163107788775346398316252271509290057701564721,1595921895036194708836620280532989366617831315840\},\{398980473759048677209155070133247341654457828960,169338843957337251515920621072283215167581104081\}\}$$

decomposition for g is unclear

No.359

$$L(n) = \{\{12, 48\}, \{48, -12\}\}$$

$$g = \{\{18674305, -2298912\}, \{-2298912, 283009\}\}$$

$$w = \{-11, -10\}$$

$$rts = \{\{911, -1, -3, -11\}, \{319, -1, -3, -22\}, \{263, 25, 5, -19\}, \{19, -5, -1, -5\}, \\ \{7, -7, -1, -7\}, \{7, 7, 1, 9\}, \{1, -7, -1, -8\}, \{7, 7, 1, 9\}\}$$

$$f = \{\{1, 114, -6036, 744\}, \{0, 1, 0, 0\}, \{0, 15, 1, 0\}, \{0, 122, 0, 1\}\}$$

No.360

$$L(n) = \{\{-24, 36\}, \{36, 48\}\}$$

$$g = \{\{16375393, 9195648\}, \{4597824, 2581921\}\}$$

$$w = \{29, -1\}$$

$$rts = \{\{193, -1, 4, -8\}, \{5, -5, 3, 1\}, \{23, 1, -1, 1\}, \{47, -1, -1, -1\}, \\ \{49, -1, -1, -1\}, \{31, -7, -9, -3\}, \{19, -5, -6, -2\}\}$$

$$f = \{\{-1077096, 1, -655188, -368004\}, \{1, 0, 0, 0\}, \{-7435, 0, 1, 0\}, \\ \{13243, 0, 0, 1\}\}$$

No.361

$$L(n) = \{\{12, 42\}, \{42, -60\}\}$$

$$g = \{\{222784849, -145548000\}, \{-29109600, 19017649\}\}$$

$$w = \{14, -7\}$$

$$rts = \{\{1517, -1, -9, -4\}, \{2317, -7, -28, -19\}, \{857, 1, -3, -8\}\}$$

$$f = \{\{-21561870, -1, 9692358, -6332244\}, \{-1, 0, 0, 0\}, \{127048, 0, 1, 0\}, \\ \{194471, 0, 0, 1\}\}$$

No.362

$$L(n) = \{\{-12, 42\}, \{42, 60\}\}$$

$$g = \{\{222784849, 145548000\}, \{29109600, 19017649\}\}$$

$w=\{22,-28\}$

$rts=\{\{77,1,-19,29\},\{19,1,-17,26\},\{1,5,-2,3\},\{79,-71,-15,29\},$
 $\{7,11,3,-4\},\{7,1,2,-3\}\}$

$f=\{\{-1,28326600,-594249624,-388230372\},\{0,-1,0,0\},\{0,7789574,1,0\},$
 $\{0,-11923208,0,1\}\}$

No.363

$L(n)=\{\{36,36\},\{36,-36\}\}$

$g=\{\{1311738121,-543339720\},\{-543339720,225058681\}\}$

$w=\{12,23\}$

$rts=\{\{71,-1,10,24\},\{19,1,-2,-5\},\{73,91,-6,-27\},\{1,19,-2,-5\}\}$

$f=\{\{1,0,0,0\},\{-47917422,1,-636268572,263551068\},\{5176632,0,1,0\},$
 $\{12497495,0,0,1\}\}$

No.364

$L(n)=\{\{12,48\},\{48,-24\}\}$

$g=\{\{1492851361,-362226480\},\{-181113240,43945441\}\}$

$w=\{-30,0\}$

$rts=\{\{715,1,-3,4\},\{5,-1,-1,-4\},\{5,-5,2,8\},\{23,209,3,27\},$
 $\{1,103,3,13\}\}$

$f=\{\{0,1,0,0\},\{1,-17644056,113110296,-27445152\},\{0,-539074,1,0\},$
 $\{0,-2221696,0,1\}\}$

No.365

$L(n)=\{\{-12,48\},\{48,24\}\}$

$g=\{\{1492851361,362226480\},\{181113240,43945441\}\}$

$w=\{-30,3\}$

$rts=\{\{1543,-1,3,7\},\{191,-1,0,-4\},\{677,-11,-7,-15\},\{481,-11,-8,-11\},$

$\{193, -1, 0, -4\}$

$f = \{\{44190348, 1, 45231432, 10974936\}, \{1, 0, 0, 0\}, \{215570, 0, 1, 0\}, \{-888429, 0, 0, 1\}\}$

No. 366

$L(n) = \{\{-12, 42\}, \{42, 72\}\}$

$g = \{\{18935502762001, 14618243592000\}, \{2436373932000, 1880885238001\}\}$

$w = \{-20, -17\}$

$rts = \{\{649, 1, -11, 13\}, \{5, 1, 1, 0\}, \{205, -13, -21, -5\}, \{41, -7, 2, 2\}, \{19, 29, -14, -1\}, \{1, 5, -1, 0\}\}$

$f = \{\{1, 0, 0, 0\}, \{-459359081352, 1, 610639653738, 471414956244\}, \{9195824546, 0, 1, 0\}, \{-11911660933, 0, 0, 1\}\}$

No. 367

$L(n) = \{\{12, 48\}, \{48, -36\}\}$

$g = \{\{12812766721, -4598488440\}, \{-1532829480, 550130881\}\}$

$w = \{30, -12\}$

$rts = \{\{55, -1, -3, -8\}, \{305, 1, 8, 23\}, \{17, 1, 0, 1\}, \{1, 19, 5, 14\}\}$

$f = \{\{-1, 0, 0, 0\}, \{10072800, -1, 388068240, -139277280\}, \{2662700, 0, 1, 0\}, \{7419080, 0, 0, 1\}\}$

No. 368

$L(n) = \{\{-12, 48\}, \{48, 36\}\}$

$g = \{\{12812766721, 4598488440\}, \{1532829480, 550130881\}\}$

$w = \{-16, 0\}$

$rts = \{\{175, 11, 9, -20\}, \{43, 5, 4, -10\}, \{73, 11, 7, -17\}, \{97, 31, 9, -14\}, \{7, 5, 1, -1\}\}$

$f = \{\{110766696, -1, -843909336, -302878176\}, \{-1, 0, 0, 0\}, \{5790418, 0, 1, 0\}, \{-16133840, 0, 0, 1\}\}$

No.369

$$L(n) = \{\{12, 42\}, \{42, -84\}\}$$

$$g = \{\{218292066721, -193730322240\}, \{-27675760320, 24561744481\}\}$$

$$w = \{8, -11\}$$

$$rts = \{\{5, -1, -8, -9\}, \{35, -11, 8, 0\}, \{103, 17, -10, 4\}, \{61, -7, -13, 1\}, \{13, -5, -9, 1\}\}$$

$$f = \{\{-27200039394, 1, -13664296734, 12126819936\}, \{1, 0, 0, 0\}, \{230329902, 0, 1, 0\}, \{259531855, 0, 0, 1\}\}$$

No.370

$$L(n) = \{\{-12, 42\}, \{42, 84\}\}$$

$$g = \{\{218292066721, 193730322240\}, \{27675760320, 24561744481\}\}$$

$$w = \{-9, -12\}$$

$$rts = \{\{65, 1, -9, 10\}, \{53, 5, -18, 20\}, \{11, 29, -5, 4\}, \{5, 5, -2, 2\}, \{1, 5, -1, 1\}, \{25, -41, -9, 12\}, \{5, 1, -1, 1\}, \{1, 23, -16, 18\}\}$$

$$f = \{\{1, 0, 0, 0\}, \{-298218834, 1, 12295658196, 10912177710\}, \{207259677, 0, 1, 0\}, \{-233536716, 0, 0, 1\}\}$$

No.371

$$L(n) = \{\{48, 24\}, \{24, -48\}\}$$

$$g = \{\{75025, -46368\}, \{-46368, 28657\}\}$$

$$w = \{-22, -18\}$$

$$rts = \{\{263, 1, 14, 23\}, \{25, 1, -1, -2\}, \{19, 5, 0, -2\}, \{109, 13, 5, -7\}, \{115, -29, 11, 2\}, \{71, -49, 14, -3\}, \{5, 5, -1, 1\}\}$$

$$f = \{\{864, -1, 2592, -1584\}, \{-1, 0, 0, 0\}, \{30, 0, 1, 0\}, \{48, 0, 0, 1\}\}$$

No.372

$$L(n) = \{\{24, 48\}, \{48, -24\}\}$$

$$g = \{\{98209, -23184\}, \{-23184, 5473\}\}$$

$$w = \{9, -20\}$$

$$rts = \{\{11, 1, 4, 17\}, \{13, 1, 0, -1\}, \{107, 23, 2, -11\}, \{67, 17, 1, -8\}, \{59, 1, 2, -1\}\}$$

$$f = \{\{-14700, 1, -7560, 1680\}, \{1, 0, 0, 0\}, \{35, 0, 1, 0\}, \{140, 0, 0, 1\}\}$$

No.373

$$L(n) = \{\{12, 48\}, \{48, -48\}\}$$

$$g = \{\{98209, -46368\}, \{-11592, 5473\}\}$$

$$w = \{4, -10\}$$

$$rts = \{\{121, 1, 4, 9\}, \{23, -1, -2, -4\}, \{19, -5, -2, -3\}, \{13, -19, -3, -2\}, \{1, -53, -3, -6\}\}$$

$$f = \{\{0, 1, 0, 0\}, \{1, 264, -1608, 768\}, \{0, 14, 1, 0\}, \{0, 30, 0, 1\}\}$$

No.374

$$L(n) = \{\{-12, 48\}, \{48, 48\}\}$$

$$g = \{\{98209, 46368\}, \{11592, 5473\}\}$$

$$w = \{26, -23\}$$

$$rts = \{\{3715, -1, 9, -25\}, \{263, 1, -12, 25\}, \{175, 1, -11, 23\}\}$$

$$f = \{\{600, -1, 4560, 2160\}, \{-1, 0, 0, 0\}, \{-40, 0, 1, 0\}, \{85, 0, 0, 1\}\}$$

No.375

$$L(n) = \{\{24, 36\}, \{36, -72\}\}$$

$$g = \{\{10009, -7920\}, \{-2640, 2089\}\}$$

$$w = \{-21, 28\}$$

$\text{rts}=\{\{35,1,-15,-19\},\{13,-1,19,24\},\{7,-7,8,10\},\{1,-13,1,1\}\}$
 $\text{f}=\{\{1,0,0,0\},\{36,1,216,-180\},\{-3,0,1,0\},\{-4,0,0,1\}\}$

No.376

$\text{L}(n)=\{\{12,48\},\{48,-60\}\}$
 $\text{g}=\{\{11329,-6600\},\{-1320,769\}\}$
 $\text{w}=\{28,16\}$
 $\text{rts}=\{\{509,-1,11,18\},\{481,1,-10,-18\},\{281,1,-9,-16\}\}$
 $\text{f}=\{\{72,1,216,-144\},\{1,0,0,0\},\{-2,0,1,0\},\{-4,0,0,1\}\}$

No.377

$\text{L}(n)=\{\{-12,48\},\{48,60\}\}$
 $\text{g}=\{\{11329,6600\},\{1320,769\}\}$
 $\text{w}=\{15,6\}$
 $\text{rts}=\{\{3835,5,28,-18\},\{143,-5,-11,20\},\{73,-1,-2,4\}\}$
 $\text{f}=\{\{-162,1,-324,-216\},\{1,0,0,0\},\{-3,0,1,0\},\{6,0,0,1\}\}$

No.378

$\text{L}(n)=\{\{-24,36\},\{36,72\}\}$
 $\text{g}=\{\{10009,7920\},\{2640,2089\}\}$
 $\text{w}=\{-26,16\}$
 $\text{rts}=\{\{35,-1,-15,19\},\{11,1,1,-1\},\{203,35,20,-16\},\{7,-29,-5,-2\},\{1,11,-1,0\}\}$
 $\text{f}=\{\{0,-1,0,0\},\{-1,-3216,-3432,-2664\},\{0,50,1,0\},\{0,-62,0,1\}\}$

No.379

$$L(n) = \{\{12, 54\}, \{54, -12\}\}$$

$$g = \{\{322766369353, -35430783696\}, \{-35430783696, 3889316089\}\}$$

$$w = \{-9, -27\}$$

$$rts = \{\{113, 1, 3, 28\}, \{11, 5, 1, 10\}, \{31, 61, 2, 29\}, \{1, 5, 0, 1\}, \{13, -79, 4, 5\}, \{5, -11, 1, 1\}, \{89, 1, 2, 19\}\}$$

$$f = \{\{-4530472506, 1, 53472298878, -5869773414\}, \{1, 0, 0, 0\}, \{-106111053, 0, 1, 0\}, \{-966647523, 0, 0, 1\}\}$$

No.380

$$L(n) = \{\{-36, 30\}, \{30, 60\}\}$$

$$g = \{\{251904801961, 177153918480\}, \{106292351088, 74750883481\}\}$$

$$w = \{25, 14\}$$

$$rts = \{\{163, -1, -1, 3\}, \{19, 1, -1, 1\}, \{29, -1, 0, 1\}, \{167, 43, 23, -26\}, \{17, -1, 2, -3\}\}$$

$$f = \{\{-1014485202, -1, 9684166428, 6810461790\}, \{-1, 0, 0, 0\}, \{-123116383, 0, 1, 0\}, \{175065888, 0, 0, 1\}\}$$

No.381

$$L(n) = \{\{-12, 48\}, \{48, 72\}\}$$

$$g = \{\{143809, 99288\}, \{16548, 11425\}\}$$

$$w = \{-5, -29\}$$

$$rts = \{\{4519, 1, -21, 26\}, \{37, -1, 0, 1\}, \{7, -11, 7, 1\}, \{1, 17, -9, -1\}\}$$

$$f = \{\{1, 0, 0, 0\}, \{-40638, 1, 5484, 4200\}, \{61, 0, 1, 0\}, \{-99, 0, 0, 1\}\}$$

No.382

$$L(n) = \{\{-24, 48\}, \{48, 36\}\}$$

$$g = \{\{143809, 49644\}, \{33096, 11425\}\}$$

$$w=\{9,8\}$$

$$rts=\{\{703,1,4,-5\},\{23,-1,-2,6\},\{7,-1,-1,3\}\}$$

$$f=\{\{324,1,-10920,-3768\},\{1,0,0,0\},\{-67,0,1,0\},\{194,0,0,1\}\}$$

No.383

$$L(n)=\{\{-12,54\},\{54,24\}\}$$

$$g=\{\{977006862014770009908001,212001272002120000848000\},\{106000636001060000424000,23001138005230006092001\}\}$$

decomposition for g is unclear

No.384

$$L(n)=\{\{12,48\},\{48,-84\}\}$$

$$g=\{\{4859521,-3867360\},\{-552480,439681\}\}$$

$$w=\{4,0\}$$

$$rts=\{\{95,23,-4,-10\},\{1,-25,8,10\}\}$$

$$f=\{\{-1,0,0,0\},\{-55104,-1,1269552,-1010352\},\{17556,0,1,0\},\{22060,0,0,1\}\}$$

No.385

$$L(n)=\{\{-12,48\},\{48,84\}\}$$

$$g=\{\{4859521,3867360\},\{552480,439681\}\}$$

$$w=\{-21,-29\}$$

$$rts=\{\{5477,1,-23,24\},\{5561,-1,15,-24\},\{4403,-1,11,-19\}\}$$

$$f=\{\{451308,1,109452,86868\},\{1,0,0,0\},\{1517,0,1,0\},\{-1901,0,0,1\}\}$$

No.386

$$L(n) = \{\{12, 54\}, \{54, -36\}\}$$

$$g = \{\{570878281, -183723120\}, \{-61241040, 19708921\}\}$$

$$w = \{-16, -23\}$$

$$rts = \{\{1001, 1, 7, 24\}, \{37, -5, 2, 3\}, \{37, 37, -6, 4\}, \{5, -1, -1, 0\}\}$$

$$f = \{\{-1, 0, 0, 0\}, \{-12268254, -1, -63360114, 20390904\}, \{-352406, 0, 1, 0\}, \{-1095023, 0, 0, 1\}\}$$

No.387

$$L(n) = \{\{-12, 54\}, \{54, 36\}\}$$

$$g = \{\{570878281, 183723120\}, \{61241040, 19708921\}\}$$

$$w = \{-18, -20\}$$

$$rts = \{\{4577, 1, -10, 17\}, \{17, -1, 0, -1\}, \{373, -91, -22, -23\}, \{161, -41, -10, -10\}, \{17, -1, 0, -1\}\}$$

$$f = \{\{6105384, 1, 20391696, 6562548\}, \{1, 0, 0, 0\}, \{113418, 0, 1, 0\}, \{-352420, 0, 0, 1\}\}$$

No.388

$$L(n) = \{\{36, 36\}, \{36, -60\}\}$$

$$g = \{\{713707828021, -451772174700\}, \{-271063304820, 171581218381\}\}$$

$$w = \{3, 20\}$$

$$rts = \{\{239, -1, 11, 17\}, \{469, -7, -18, -25\}, \{35, 5, 1, -2\}, \{1, 31, -5, -8\}\}$$

$$f = \{\{-1, 0, 0, 0\}, \{5910794466, -1, -89439765804, 56614760148\}, \{-963036627, 0, 1, 0\}, \{-1521401312, 0, 0, 1\}\}$$

No.389

$$L(n) = \{\{24, 48\}, \{48, -48\}\}$$

$$g = \{\{804062262961, -361417739760\}, \{-180708869880, 81226783441\}\}$$

$w=\{-23,17\}$

$rts=\{\{35,-1,5,11\},\{5,473,-1,-11\},\{11,-13,-10,-22\},\{13,-23,-11,-24\},$
 $\{11,-1,-9,-20\},\{5,5,-4,-9\},\{13,-1,-9,-20\}\}$

$f=\{\{320394588,1,28841104776,-12963780768\},\{1,0,0,0\},$
 $\{-220518389,0,1,0\},\{-490597155,0,0,1\}\}$

No.390

$L(n)=\{\{12,48\},\{48,-96\}\}$

$g=\{\{804062262961,-722835479520\},\{-90354434940,81226783441\}\}$

$w=\{-27,0\}$

$rts=\{\{473,-7,-20,-19\},\{7,-1,-1,-1\},\{97,-101,-25,-18\},$
 $\{71,-65,-17,-12\},\{23,-19,-5,-3\},\{1,-7,-1,-1\}\}$

$f=\{\{-1,0,0,0\},\{-4013696538,-1,-33301998252,29937813264\},$
 $\{-509252545,0,1,0\},\{-566478494,0,0,1\}\}$

No.391

$L(n)=\{\{-12,48\},\{48,96\}\}$

$g=\{\{804062262961,722835479520\},\{90354434940,81226783441\}\}$

$w=\{29,1\}$

$rts=\{\{25,1,-2,2\},\{163,-29,-2,-9\},\{19,5,4,0\},\{1,149,11,-12\}\}$

$f=\{\{1,0,0,0\},\{-6287031306,1,-29820568716,-26808079536\},$
 $\{-456014693,0,1,0\},\{507258175,0,0,1\}\}$

No.392

$L(n)=\{\{-24,48\},\{48,48\}\}$

$g=\{\{804062262961,361417739760\},\{180708869880,81226783441\}\}$

$w=\{-13,-15\}$

$rts=\{\{35,1,-5,11\},\{61,-1,1,-3\},\{23,-1,0,-1\},\{13,1,-1,0\},$
 $\{37,1,-5,-1\},\{1,-61,3,-7\}\}$

$f=\{\{-1,0,0,0\},\{-6657476292,-1,-44720804520,-20101542912\},$
 $\{341934189,0,1,0\},\{-760716333,0,0,1\}\}$

No.393

$L(n)=\{\{-36,36\},\{36,60\}\}$

$g=\{\{713707828021,451772174700\},\{271063304820,171581218381\}\}$

$w=\{-24,-21\}$

$rts=\{\{749,-1,5,-10\},\{49,-1,-3,5\},\{121,-55,4,13\},\{1,17,2,-3\}\}$

$f=\{\{-1,0,0,0\},\{2351961246,-1,-24615896868,-15581694396\},$
 $\{265050004,0,1,0\},\{-418724909,0,0,1\}\}$

No.394

$L(n)=\{\{-12,54\},\{54,48\}\}$

$g=\{\{15100164490562065,6408946218109056\},$
 $\{1602236554527264,680035499816689\}\}$

$w=\{15,15\}$

$rts=\{\{1151,-1,-4,13\},\{23,-1,0,1\},\{277,13,-10,10\},\{133,13,-8,4\},$
 $\{53,55,-9,9\},\{5,-5,0,-1\},\{35,-1,2,-5\}\}$

$f=\{\{-94292495247396,-1,794956290358806,337402424578974\},\{-1,0,0,0\},$
 $\{-5709670965051,0,1,0\},\{13452597014411,0,0,1\}\}$