

第6章：多次元超立体魔方陣の研究-II：摂田 寛二

第4-2節：六次元超立体二方陣の構成と展開：Part 2-2

0. 前節では、六次元超立体二方陣の新しい構成法を提案した。新しい基本図を仮定し、それに基づいて「逆関数」を解く要領で新しい定義式を与えた。

我々の方から敢えて注文を付けて六次元二方陣を解くという方法を試してみた。

そのやり方で、先ず二次元の**正方連結型完全八方陣**の標準解 **368640** 個を得た。以前には「大基本解」**10** 個から変換法によって基本解 **90** 個を得、さらにそれを何回も変換して最終的に全数個を得るしかなかったのだが、今度は直に得られた。一度で…。

次に**多重四方陣型**の正方連結完全八方陣を作ろうと基本図を選び、適した定義条件式を与えた。そして六次元二方陣を解き、一度に3つのタイプの正方連結型魔方陣を得た。

目的方陣である**多重型正方連結完全八方陣**は無論作れたが、その他に三次元の**正方連結完全立体四方陣**と、二次元の**多重型正方連結対称汎八方陣**も、同時に作れたのだ。

この節では、後者のその2つを新たに目的方陣としたい。そして六次元二方陣を解き、それぞれが同じ3タイプを同時に作るかどうかを追跡・検証してみたい。

1. 先ず下図左端の基本図を出発点として、三次元の**正方連結完全立体四方陣**を定義し、それが意味する究極の六次元二方陣を解いて、一度に3タイプの魔方陣を構成したい。

[六次元二方陣・三次元四方陣・二次元八方陣の相関基本図]

1---2	3---4	33---34	35---36			
17---18	19---20	49---50	51---52			
5---6	7---8	37---38	39---40			
21---22	23---24	53---54	55---56			
9---10	11---12	41---42	43---44			
25---26	27---28	57---58	59---60			
13---14	15---16	45---46	47---48			
29---30	31---32	61---62	63---64			
1-----2-----3-----4	/立体四方陣	/正方形八方陣	/正方形八方陣2			
17	18	19	20	1 2 3 4 25 26 27 28	1 2 3 4 18 17 20 19	
5 33	6 34	7 35	8 36	5 6 7 8 29 30 31 32	5 6 7 8 22 21 24 23	
21 49---22---50---23---51---24---52				9 10 11 12 17 18 19 20	9 10 11 12 26 25 28 27	
9 37 10 38	11 39	12 40		13 14 15 16 21 22 23 24	13 14 15 16 30 29 32 31	
25 53	26 54	27 55	28 56	51 52 49 50 43 44 41 42	53 54 55 56 38 37 40 39	
13---41---14---42---15---43---16 44				55 56 53 54 47 48 45 46	49 50 51 52 34 33 36 35	
29 57	30 58	31 59	32 60	59 60 57 58 35 36 33 34	61 62 63 64 46 45 48 47	
45	46	47	48	63 64 61 62 39 40 37 38	57 58 59 60 42 41 44 43	
61-----62-----63-----64	[正方連結型完全八方陣用]	[三連立型対称汎八方陣用]				

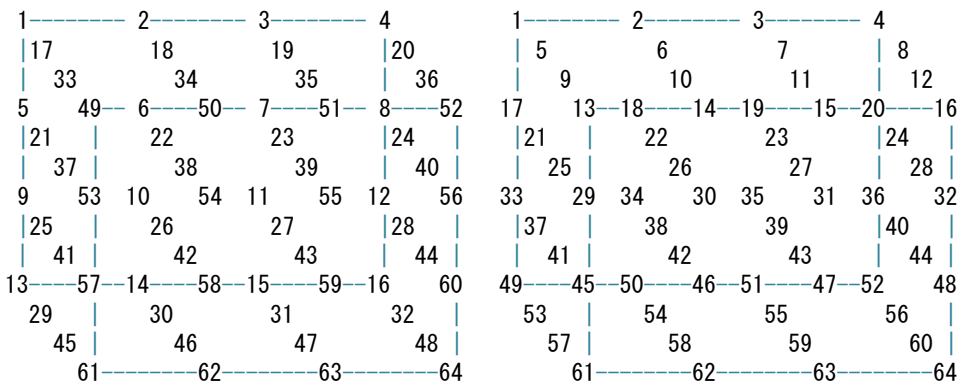
** 正方連結条件式: C=130; **

n1+n2+n5+n6=C ... c1a;	n1+n2+n17+n18=C ... c1b;	n1+n5+n17+n21=C ... c1c;
n2+n3+n6+n7=C ... c2a;	n2+n3+n18+n19=C ... c2b;	n2+n6+n18+n22=C ... c2c;
n3+n4+n7+n8=C ... c3a;	n3+n4+n19+n20=C ... c3b;	n3+n7+n19+n23=C ... c3c;
n4+n1+n8+n5=C ... c4a;	n4+n1+n20+n17=C ... c4b;	n4+n8+n20+n24=C ... c4c;
n5+n6+n9+n10=C ... c5a;	n5+n6+n21+n22=C ... c5b;	n5+n9+n21+n25=C ... c5c;
n6+n7+n10+n11=C ... c6a;	n6+n7+n22+n23=C ... c6b;	n6+n10+n22+n26=C ... c6c;
n7+n8+n11+n12=C ... c7a;	n7+n8+n23+n24=C ... c7b;	n7+n11+n23+n27=C ... c7c;
n8+n5+n12+n9=C ... c8a;	n8+n5+n24+n21=C ... c8b;	n8+n12+n24+n28=C ... c8c;
n9+n10+n13+n14=C ... c9a;	n9+n10+n25+n26=C ... c9b;	n9+n13+n25+n29=C ... c9c;
n10+n11+n14+n15=C ... c10a;	n10+n11+n26+n27=C ... c10b;	n10+n14+n26+n30=C ... c10c;
n11+n12+n15+n16=C ... c11a;	n11+n12+n27+n28=C ... c11b;	n11+n15+n27+n31=C ... c11c;
n12+n9+n16+n13=C ... c12a;	n12+n9+n28+n25=C ... c12b;	n12+n16+n28+n32=C ... c12c;
n13+n14+n1+n2=C ... c13a;	n13+n14+n29+n30=C ... c13b;	n13+n1+n29+n17=C ... c13c;
n14+n15+n2+n3=C ... c14a;	n14+n15+n30+n31=C ... c14b;	n14+n2+n30+n18=C ... c14c;
n15+n16+n3+n4=C ... c15a;	n15+n16+n31+n32=C ... c15b;	n15+n3+n31+n19=C ... c15c;
n16+n13+n4+n1=C ... c16a;	n16+n13+n32+n29=C ... c16b;	n16+n4+n32+n20=C ... c16c;

$n17+n18+n21+n22=C \dots c17a;$ $n17+n18+n33+n34=C \dots c17b;$ $n17+n21+n33+n37=C \dots c17c;$
 $n18+n19+n22+n23=C \dots c18a;$ $n18+n19+n34+n35=C \dots c18b;$ $n18+n22+n34+n38=C \dots c18c;$
 $n19+n20+n23+n24=C \dots c19a;$ $n19+n20+n35+n36=C \dots c19b;$ $n19+n23+n35+n39=C \dots c19c;$
 $n20+n17+n24+n21=C \dots c20a;$ $n20+n17+n36+n33=C \dots c20b;$ $n20+n24+n36+n40=C \dots c20c;$
 $n21+n22+n25+n26=C \dots c21a;$ $n21+n22+n37+n38=C \dots c21b;$ $n21+n25+n37+n41=C \dots c21c;$
 $n22+n23+n26+n27=C \dots c22a;$ $n22+n23+n38+n39=C \dots c22b;$ $n22+n26+n38+n42=C \dots c22c;$
 $n23+n24+n27+n28=C \dots c23a;$ $n23+n24+n39+n40=C \dots c23b;$ $n23+n27+n39+n43=C \dots c23c;$
 $n24+n21+n28+n25=C \dots c24a;$ $n24+n21+n40+n37=C \dots c24b;$ $n24+n28+n40+n44=C \dots c24c;$
 $n25+n26+n29+n30=C \dots c25a;$ $n25+n26+n41+n42=C \dots c25b;$ $n25+n29+n41+n45=C \dots c25c;$
 $n26+n27+n30+n31=C \dots c26a;$ $n26+n27+n42+n43=C \dots c26b;$ $n26+n30+n42+n46=C \dots c26c;$
 $n27+n28+n31+n32=C \dots c27a;$ $n27+n28+n43+n44=C \dots c27b;$ $n27+n31+n43+n47=C \dots c27c;$
 $n28+n25+n32+n29=C \dots c28a;$ $n28+n25+n44+n41=C \dots c28b;$ $n28+n32+n44+n48=C \dots c28c;$
 $n29+n30+n17+n18=C \dots c29a;$ $n29+n30+n45+n46=C \dots c29b;$ $n29+n17+n45+n33=C \dots c29c;$
 $n30+n31+n18+n19=C \dots c30a;$ $n30+n31+n46+n47=C \dots c30b;$ $n30+n18+n46+n34=C \dots c30c;$
 $n31+n32+n19+n20=C \dots c31a;$ $n31+n32+n47+n48=C \dots c31b;$ $n31+n19+n47+n35=C \dots c31c;$
 $n32+n29+n20+n17=C \dots c32a;$ $n32+n29+n48+n45=C \dots c32b;$ $n32+n20+n48+n36=C \dots c32c;$
 $n33+n34+n37+n38=C \dots c33a;$ $n33+n34+n49+n50=C \dots c33b;$ $n33+n37+n49+n53=C \dots c33c;$
 $n34+n35+n38+n39=C \dots c34a;$ $n34+n35+n50+n51=C \dots c34b;$ $n34+n38+n50+n54=C \dots c34c;$
 $n35+n36+n39+n40=C \dots c35a;$ $n35+n36+n51+n52=C \dots c35b;$ $n35+n39+n51+n55=C \dots c35c;$
 $n36+n33+n40+n37=C \dots c36a;$ $n36+n33+n52+n49=C \dots c36b;$ $n36+n40+n52+n56=C \dots c36c;$
 $n37+n38+n41+n42=C \dots c37a;$ $n37+n38+n53+n54=C \dots c37b;$ $n37+n41+n53+n57=C \dots c37c;$
 $n38+n39+n42+n43=C \dots c38a;$ $n38+n39+n54+n55=C \dots c38b;$ $n38+n42+n54+n58=C \dots c38c;$
 $n39+n40+n43+n44=C \dots c39a;$ $n39+n40+n55+n56=C \dots c39b;$ $n39+n43+n55+n59=C \dots c39c;$
 $n40+n37+n44+n41=C \dots c40a;$ $n40+n37+n56+n53=C \dots c40b;$ $n40+n44+n56+n60=C \dots c40c;$
 $n41+n42+n45+n46=C \dots c41a;$ $n41+n42+n57+n58=C \dots c41b;$ $n41+n45+n57+n61=C \dots c41c;$
 $n42+n43+n46+n47=C \dots c42a;$ $n42+n43+n58+n59=C \dots c42b;$ $n42+n46+n58+n62=C \dots c42c;$
 $n43+n44+n47+n48=C \dots c43a;$ $n43+n44+n59+n60=C \dots c43b;$ $n43+n47+n59+n63=C \dots c43c;$
 $n44+n41+n48+n45=C \dots c44a;$ $n44+n41+n60+n57=C \dots c44b;$ $n44+n48+n60+n64=C \dots c44c;$
 $n45+n46+n33+n34=C \dots c45a;$ $n45+n46+n61+n62=C \dots c45b;$ $n45+n33+n61+n49=C \dots c45c;$
 $n46+n47+n34+n35=C \dots c46a;$ $n46+n47+n62+n63=C \dots c46b;$ $n46+n34+n62+n50=C \dots c46c;$
 $n47+n48+n35+n36=C \dots c47a;$ $n47+n48+n63+n64=C \dots c47b;$ $n47+n35+n63+n51=C \dots c47c;$
 $n48+n45+n36+n33=C \dots c48a;$ $n48+n45+n64+n61=C \dots c48b;$ $n48+n36+n64+n52=C \dots c48c;$
 $n49+n50+n53+n54=C \dots c49a;$ $n49+n50+n1+n2=C \dots c49b;$ $n49+n53+n1+n5=C \dots c49c;$
 $n50+n51+n54+n55=C \dots c50a;$ $n50+n51+n2+n3=C \dots c50b;$ $n50+n54+n2+n6=C \dots c50c;$
 $n51+n52+n55+n56=C \dots c51a;$ $n51+n52+n3+n4=C \dots c51b;$ $n51+n55+n3+n7=C \dots c51c;$
 $n52+n49+n56+n53=C \dots c52a;$ $n52+n49+n4+n1=C \dots c52b;$ $n52+n56+n4+n8=C \dots c52c;$
 $n53+n54+n57+n58=C \dots c53a;$ $n53+n54+n5+n6=C \dots c53b;$ $n53+n57+n5+n9=C \dots c53c;$
 $n54+n55+n58+n59=C \dots c54a;$ $n54+n55+n6+n7=C \dots c54b;$ $n54+n58+n6+n10=C \dots c54c;$
 $n55+n56+n59+n60=C \dots c55a;$ $n55+n56+n7+n8=C \dots c55b;$ $n55+n59+n7+n11=C \dots c55c;$
 $n56+n53+n60+n57=C \dots c56a;$ $n56+n53+n8+n5=C \dots c56b;$ $n56+n60+n8+n12=C \dots c56c;$
 $n57+n58+n61+n62=C \dots c57a;$ $n57+n58+n9+n10=C \dots c57b;$ $n57+n61+n9+n13=C \dots c57c;$
 $n58+n59+n62+n63=C \dots c58a;$ $n58+n59+n10+n11=C \dots c58b;$ $n58+n62+n10+n14=C \dots c58c;$
 $n59+n60+n63+n64=C \dots c59a;$ $n59+n60+n11+n12=C \dots c59b;$ $n59+n63+n11+n15=C \dots c59c;$
 $n60+n57+n64+n61=C \dots c60a;$ $n60+n57+n12+n9=C \dots c60b;$ $n60+n64+n12+n16=C \dots c60c;$
 $n61+n62+n49+n50=C \dots c61a;$ $n61+n62+n13+n14=C \dots c61b;$ $n61+n49+n13+n1=C \dots c61c;$
 $n62+n63+n50+n51=C \dots c62a;$ $n62+n63+n14+n15=C \dots c62b;$ $n62+n50+n14+n2=C \dots c62c;$
 $n63+n64+n51+n52=C \dots c63a;$ $n63+n64+n15+n16=C \dots c63b;$ $n63+n51+n15+n3=C \dots c63c;$
 $n64+n61+n52+n49=C \dots c64a;$ $n64+n61+n16+n13=C \dots c64b;$ $n64+n52+n16+n4=C \dots c64c;$

1/基本図

2/基本図



** 完全型補数の条件式: CC=65; **

$n1+n43=CC;$ $n2+n44=CC;$ $n3+n41=CC;$ $n4+n42=CC;$ $n5+n47=CC;$ $n6+n48=CC;$ $n7+n45=CC;$ $n8+n46=CC;$
 $n9+n35=CC;$ $n10+n36=CC;$ $n11+n33=CC;$ $n12+n34=CC;$ $n13+n39=CC;$ $n14+n40=CC;$ $n15+n37=CC;$ $n16+n38=CC;$

n17+n59=CC; n18+n60=CC; n19+n57=CC; n20+n58=CC; n21+n63=CC; n22+n64=CC; n23+n61=CC; n24+n62=CC;
 n25+n51=CC; n26+n52=CC; n27+n49=CC; n28+n50=CC; n29+n55=CC; n30+n56=CC; n31+n53=CC; n32+n54=CC;
 n33+n11=CC;

** 基本条件式: C=130; **

n1+n2+n3+n4=C ... b1; n1+n5+n9+n13=C ... b2; n1+n17+n33+n49=C ... b3;
 n1+n22+n43+n64=C ... p1; n1+n24+n43+n62=C ... p2;
 n1+n30+n43+n56=C ... p3; n1+n32+n43+n54=C ... p4;

定義式は、上の通り。使う基本図が、我々が立方体四方陣を作る時に常に用意する図と同じなので、定義の仕方もいつもと同じにした。慣れていただけにやりやすい。

なぜ立体基本図がいつもの図と同じなのか。六次元二方陣の小立方体8個をただ素直に並べただけの形をしているからだ。この形が、「根源方陣」に一番近いと思う。

さらに第1基本図と対称的な第2基本図も併記している。これは内部を見やすくするためだ。表現している概念は全く同じで、だから与える定義式も全く同じで変わらない。

2. 早速にもこれを解いて得た結果をリストにして示そう。

なお、これは「原始解」のリストである。3タイプを公平に扱うためにそうした。

** 六次元二方陣を解いて三次元の正方連結完全立体四方陣を得た結果のリスト (抜粋) **

1/6dEC02

1---	63	6---	60	49---	15	54---	12
48---	18	43---	21	32---	34	27---	37
62--	4	57--	7	14--	52	9--	55
19---	45	24---	42	35---	29	40---	26

11---	53	16---	50	59---	5	64---	2
38---	28	33---	31	22---	44	17---	47
56--	10	51--	13	8--	58	3--	61
25---	39	30---	36	41---	23	46---	20

1-----63-----6-----60	/MC4	/CC8	/CSP
48 18 43 21	1 63 6 60 38 28 33 31	1 63 6 60 18 48 21 43	
62 49 4 15 57 54 7 12	62 4 57 7 25 39 30 36	62 4 57 7 45 19 42 24	
19 32--45-34--24-27--42-37	11 53 16 50 48 18 43 21	11 53 16 50 28 38 31 33	
11 14 53 52 16 9 50 55	56 10 51 13 19 45 24 42	56 10 51 13 39 25 36 30	
38 35 28 29 33 40 31 26	27 37 32 34 64 2 59 5	35 29 40 26 52 14 55 9	
56-59- 10- 5--51-64--13 2	40 26 35 29 3 61 8 58	32 34 27 37 15 49 12 54	
25 22 39 44 30 17 36 47	17 47 22 44 54 12 49 15	41 23 46 20 58 8 61 3	
8 58 3 61	46 20 41 23 9 55 14 52	22 44 17 47 5 59 2 64	
41-----23-----46-----20			

121/6dEC02

1---	62	7---	60	49---	14	55---	12
48---	19	42---	21	32---	35	26---	37
63--	4	57--	6	15--	52	9--	54
18---	45	24---	43	34---	29	40---	27

10---	53	16---	51	58---	5	64---	3
39---	28	33---	30	23---	44	17---	46
56--	11	50--	13	8--	59	2--	61
25---	38	31---	36	41---	22	47---	20

1-----62-----7-----60	/MC4	/CC8	/CSP
48 19 42 21	1 62 7 60 39 28 33 30	1 62 7 60 19 48 21 42	
63 49 4 14 57 55 6 12	63 4 57 6 25 38 31 36	63 4 57 6 45 18 43 24	
18 32--45-35--24-26--43-37	10 53 16 51 48 19 42 21	10 53 16 51 28 39 30 33	
10 15 53 52 16 9 51 54	56 11 50 13 18 45 24 43	56 11 50 13 38 25 36 31	
39 34 28 29 33 40 30 27	26 37 32 35 64 3 58 5	34 29 40 27 52 15 54 9	
56-58- 11- 5--50-64--13 3	40 27 34 29 2 61 8 59	32 35 26 37 14 49 12 55	
25 23 38 44 31 17 36 46	17 46 23 44 55 12 49 14	41 22 47 20 59 8 61 2	
8 59 2 61	47 20 41 22 9 54 15 52	23 44 17 46 5 58 3 64	
41-----22-----47-----20			

241/6dEC02

1---60 7---62 49---12 55---14
 | 48---21 | 42---19 | 32---37 | 26---35
 63---6 | 57---4 | 15---54 | 9---52 |
 18---43 24---45 34---27 40---29

10---51 16---53 58---3 64---5
 | 39---30 | 33---28 | 23---46 | 17---44
 56---13 | 50---11 | 8---61 | 2---59 |
 25---36 31---38 41---20 47---22

1-----60-----7-----62	/MC4	/CC8	/CSP
48 21 42 19		1 60 7 62 39 30 33 28	1 60 7 62 21 48 19 42
63 49 6 12 57 55 4 14		63 6 57 4 25 36 31 38	63 6 57 4 43 18 45 24
18 32---43-37---24-26---45-35		10 51 16 53 48 21 42 19	10 51 16 53 30 39 28 33
10 15 51 54 16 9 53 52		56 13 50 11 18 43 24 45	56 13 50 11 36 25 38 31
39 34 30 27 33 40 28 29		26 35 32 37 64 5 58 3	34 27 40 29 54 15 52 9
56-58- 13-3---50-64---11 5		40 29 34 27 2 59 8 61	32 37 26 35 12 49 14 55
25 23 36 46 31 17 38 44		17 44 23 46 55 14 49 12	41 20 47 22 61 8 59 2
8 61 2 59		47 22 41 20 9 52 15 54	23 46 17 44 3 58 5 64
41-----20-----47-----22			

361/6dEC02

1---56 11---62 49---8 59---14
 | 48---25 | 38---19 | 32---41 | 22---35
 63---10 | 53---4 | 15---58 | 5---52 |
 18---39 28---45 34---23 44---29

6---51 16---57 54---3 64---9
 | 43---30 | 33---24 | 27---46 | 17---40
 60---13 | 50---7 | 12---61 | 2---55 |
 21---36 31---42 37---20 47---26

1-----56-----11-----62	/MC4	/CC8	/CSP
48 25 38 19		1 56 11 62 43 30 33 24	1 56 11 62 25 48 19 38
63 49 10 8 53 59 4 14		63 10 53 4 21 36 31 42	63 10 53 4 39 18 45 28
18 32---39-41---28-22---45-35		6 51 16 57 48 25 38 19	6 51 16 57 30 43 24 33
6 15 51 58 16 5 57 52		60 13 50 7 18 39 28 45	60 13 50 7 36 21 42 31
43 34 30 23 33 44 24 29		22 35 32 41 64 9 54 3	34 23 44 29 58 15 52 5
60-54- 13-3---50-64---7 9		44 29 34 23 2 55 12 61	32 41 22 35 8 49 14 59
21 27 36 46 31 17 42 40		17 40 27 46 59 14 49 8	37 20 47 26 61 12 55 2
12 61 2 55		47 26 37 20 5 52 15 58	27 46 17 40 3 54 9 64
37-----20-----47-----26			

481/6dEC02

1---48 19---62 41---8 59---22
 | 56---25 | 38---11 | 32---49 | 14---35
 63---18 | 45---4 | 23---58 | 5---44 |
 10---39 28---53 34---15 52---29

6---43 24---57 46---3 64---17
 | 51---30 | 33---16 | 27---54 | 9---40
 60---21 | 42---7 | 20---61 | 2---47 |
 13---36 31---50 37---12 55---26

1-----48-----19-----62	/MC4	/CC8	/CSP
56 25 38 11		1 48 19 62 51 30 33 16	1 48 19 62 25 56 11 38
63 41 18 8 45 59 4 22		63 18 45 4 13 36 31 50	63 18 45 4 39 10 53 28
10 32---39-49---28-14---53-35		6 43 24 57 56 25 38 11	6 43 24 57 30 51 16 33
6 23 43 58 24 5 57 44		60 21 42 7 10 39 28 53	60 21 42 7 36 13 50 31
51 34 30 15 33 52 16 29		14 35 32 49 64 17 46 3	34 15 52 29 58 23 44 5
60-46- 21-3---42-64---7 17		52 29 34 15 2 47 20 61	32 49 14 35 8 41 22 59
13 27 36 54 31 9 50 40		9 40 27 54 59 22 41 8	37 12 55 26 61 20 47 2
20 61 2 47		55 26 37 12 5 44 23 58	27 54 9 40 3 46 17 64
37-----12-----55-----26			

601/6dEC02

1---32 35---62 25--- 8 59---38
| 56---41 | 22---11 | 48---49 | 14---19
63---34 | 29--- 4 | 39---58 | 5---28 |
10---23 44---53 18---15 52---45

6---27 40---57 30--- 3 64---33
| 51---46 | 17---16 | 43---54 | 9---24
60---37 | 26--- 7 | 36---61 | 2---31 |
13---20 47---50 21---12 55---42

1-----32-----35-----62 /MC4 /CC8 /CSP
|56 41 22 |11 1 32 35 62 51 46 17 16 1 32 35 62 41 56 11 22
63 25 34 8 29 59 4 38 63 34 29 4 13 20 47 50 63 34 29 4 23 10 53 44
|10 48---23---49---44---14---53---19 6 27 40 57 56 41 22 11 6 27 40 57 46 51 16 17
6 39 | 27 58 40 5 57 28 | 60 37 26 7 10 23 44 53 60 37 26 7 20 13 50 47
|51 18 46 15 17 52 |16 45 14 19 48 49 64 33 30 3 18 15 52 45 58 39 28 5
60---30---|37--- 3---26---64--- 7 33 | 52 45 18 15 2 31 36 61 48 49 14 19 8 25 38 59
13 43 20 54 47 9 50 24 9 24 43 54 59 38 25 8 21 12 55 42 61 36 31 2
36 | 61 2 31 | 55 42 21 12 5 28 39 58 43 54 9 24 3 30 33 64
21-----12-----55-----42

721/6dEC02

2-----64----- 5-----59 /MC4
|47 17 44 |22
61 50 3 16 58 53 8 11
|20 31---46---33---23---28---41---38
12 13 | 54 51 15 10 49 56 |
|37 36 27 30 34 39 |32 25
55---60---| 9--- 6---52---63---14 1 |
26 21 40 43 29 18 35 48
7 | 57 4 62 |
42-----24-----45-----19

/CC8 /CSP
2 64 5 59 37 27 34 32 2 64 5 59 17 47 22 44
61 3 58 8 26 40 29 35 61 3 58 8 46 20 41 23
12 54 15 49 47 17 44 22 12 54 15 49 27 37 32 34
55 9 52 14 20 46 23 41 55 9 52 14 40 26 35 29
36 30 39 25 51 13 56 10 36 30 39 25 51 13 56 10
39 25 36 30 4 62 7 57 31 33 28 38 16 50 11 53
18 48 21 43 53 11 50 16 42 24 45 19 57 7 62 4
45 19 42 24 10 56 13 51 21 43 18 48 6 60 1 63

1441/6dEC02

3-----64----- 5-----58 /MC4
|46 17 44 |23
61 51 2 16 59 53 8 10
|20 30---47---33---22---28---41---39
12 13 | 55 50 14 11 49 56 |
|37 36 26 31 35 38 |32 25
54---60---| 9--- 7---52---62---15 1 |
27 21 40 42 29 19 34 48
6 | 57 4 63 |
43-----24-----45-----18

/CC8 /CSP
3 64 5 58 37 26 35 32 3 64 5 58 17 46 23 44
61 2 59 8 27 40 29 34 61 2 59 8 47 20 41 22
12 55 14 49 46 17 44 23 12 55 14 49 26 37 32 35
54 9 52 15 20 47 22 41 54 9 52 15 40 27 34 29
28 39 30 33 62 1 60 7 36 31 38 25 50 13 56 11
38 25 36 31 4 63 6 57 30 33 28 39 16 51 10 53
19 48 21 42 53 10 51 16 43 24 45 18 57 6 63 4
45 18 43 24 11 56 13 50 21 42 19 48 7 60 1 62

2161/6dEC02

4-----63----- 6-----57 /MC4
|45 18 43 |24
62 52 1 15 60 54 7 9
|19 29---48---34---21---27---42---40
11 14 | 56 49 13 12 50 55 |
|38 35 25 32 36 37 |31 26
53---59---|10--- 8---51---61---16 2 |
28 22 39 41 30 20 33 47
5 | 58 3 64 |
44-----23-----46-----17

/CC8 /CSP
4 63 6 57 38 25 36 31 4 63 6 57 18 45 24 43
62 1 60 7 28 39 30 33 62 1 60 7 48 19 42 21
11 56 13 50 45 18 43 24 11 56 13 50 25 38 31 36
53 10 51 16 19 48 21 42 53 10 51 16 39 28 33 30
27 40 29 34 61 2 59 8 35 32 37 26 49 14 55 12
37 26 35 32 3 64 5 58 29 34 27 40 15 52 9 54
20 47 22 41 54 9 52 15 44 23 46 17 58 5 64 3
46 17 44 23 12 55 14 49 22 41 20 47 8 59 2 61

2881/6dEC02

5-----64----- 3-----58 /MC4
|44 17 46 |23
59 53 2 16 61 51 8 10
|22 28---47---33---20---30---41---39
14 11 | 55 50 12 13 49 56 |
|35 38 26 31 37 36 |32 25
52---62---| 9--- 7---54---60---15 1 |
29 19 40 42 27 21 34 48
4 | 57 6 63 |
45-----24-----43-----18

/CC8 /CSP
5 64 3 58 35 26 37 32 5 64 3 58 17 44 23 46
59 2 61 8 29 40 27 34 59 2 61 8 47 22 41 20
14 55 12 49 44 17 46 23 14 55 12 49 26 35 32 37
52 9 54 15 22 47 20 41 52 9 54 15 40 29 34 27
30 39 28 33 60 1 62 7 38 31 36 25 50 11 56 13
36 25 38 31 6 63 4 57 28 33 30 39 16 53 10 51
21 48 19 42 51 10 53 16 45 24 43 18 57 4 63 6
43 18 45 24 13 56 11 50 19 42 21 48 7 62 1 60

3601/6dEC02

6-----63-----4-----57 /MC4	/CC8	/CSP
43 18 45 24	6 63 4 57 36 25 38 31	6 63 4 57 18 43 24 45
60 54 1 15 62 52 7 9	60 1 62 7 30 39 28 33	60 1 62 7 48 21 42 19
21 27--48-34--19-29--42-40	13 56 11 50 43 18 45 24	13 56 11 50 25 36 31 38
13 12 56 49 11 14 50 55	51 10 53 16 21 48 19 42	51 10 53 16 39 30 33 28
36 37 25 32 38 35 31 26	29 40 27 34 59 2 61 8	37 32 35 26 49 12 55 14
51--61- -10-8--53--59--16 2	35 26 37 32 5 64 3 58	27 34 29 40 15 54 9 52
30 20 39 41 28 22 33 47	22 47 20 41 52 9 54 15	46 23 44 17 58 3 64 5
3 58 5 64	44 17 46 23 14 55 12 49	20 41 22 47 8 61 2 59
46-----23-----44-----17		

4321/6dEC02

7-----62-----4-----57 /MC4	/CC8	/CSP
42 19 45 24	7 62 4 57 36 25 39 30	7 62 4 57 19 42 24 45
60 55 1 14 63 52 6 9	60 1 63 6 31 38 28 33	60 1 63 6 48 21 43 18
21 26--48-35--18-29--43-40	13 56 10 51 42 19 45 24	13 56 10 51 25 36 30 39
13 12 56 49 10 15 51 54	50 11 53 16 21 48 18 43	50 11 53 16 38 31 33 28
36 37 25 32 39 34 30 27	29 40 26 35 58 3 61 8	37 32 34 27 49 12 54 15
50--61- -11-8--53--58--16 3	34 27 37 32 5 64 2 59	26 35 29 40 14 55 9 52
31 20 38 41 28 23 33 46	23 46 20 41 52 9 55 14	47 22 44 17 59 2 64 5
2 59 5 64	44 17 47 22 15 54 12 49	20 41 23 46 8 61 3 58
47-----22-----44-----17		

5041/6dEC02

8-----61-----3-----58 /MC4	/CC8	/CSP
41 20 46 23	8 61 3 58 35 26 40 29	8 61 3 58 20 41 23 46
59 56 2 13 64 51 5 10	59 2 64 5 32 37 27 34	59 2 64 5 47 22 44 17
22 25--47-36--17-30--44-39	14 55 9 52 41 20 46 23	14 55 9 52 26 35 29 40
14 11 55 50 9 16 52 53	49 12 54 15 22 47 17 44	49 12 54 15 37 32 34 27
35 38 26 31 40 33 29 28	30 39 25 36 57 4 62 7	38 31 33 28 50 11 53 16
49--62- -12-7--54--57--15 4	33 28 38 31 6 63 1 60	25 36 30 39 13 56 10 51
32 19 37 42 27 24 34 45	24 45 19 42 51 10 56 13	48 21 43 18 60 1 63 6
1 60 6 63	43 18 48 21 16 53 11 50	19 42 24 45 7 62 4 57
48-----21-----43-----18		

5761/6dEC02

9-----64-----3-----54 /MC4	/CC8	/CSP
40 17 46 27	9 64 3 54 35 22 41 32	9 64 3 54 17 40 27 46
55 57 2 16 61 51 12 6	55 2 61 12 29 44 23 34	55 2 61 12 47 26 37 20
26 24--47-33--20-30--37-43	14 59 8 49 40 17 46 27	14 59 8 49 22 35 32 41
14 7 59 50 8 13 49 60	52 5 58 15 26 47 20 37	52 5 58 15 44 29 34 23
35 42 22 31 41 36 32 21	30 43 24 33 56 1 62 11	42 31 36 21 50 7 60 13
52--62- -5-11--58--56--15 1	36 21 42 31 10 63 4 53	24 33 30 43 16 57 6 51
29 19 44 38 23 25 34 48	25 48 19 38 51 6 57 16	45 28 39 18 53 4 63 10
4 53 10 63	39 18 45 28 13 60 7 50	19 38 25 48 11 62 1 56
45-----28-----39-----18		

6481/6dEC02

10-----63-----4-----53 /MC4	/CC8	/CSP
39 18 45 28	10 63 4 53 36 21 42 31	10 63 4 53 18 39 28 45
56 58 1 15 62 52 11 5	56 1 62 11 30 43 24 33	56 1 62 11 48 25 38 19
25 23--48-34--19-29--38-44	13 60 7 50 39 18 45 28	13 60 7 50 21 36 31 42
13 8 60 49 7 14 50 59	51 6 57 16 25 48 19 38	51 6 57 16 43 30 33 24
36 41 21 32 42 35 31 22	29 44 23 34 55 2 61 12	41 32 35 22 49 8 59 14
51--61- -6-12--57--55--16 2	35 22 41 32 9 64 3 54	23 34 29 44 15 58 5 52
30 20 43 37 24 26 33 47	26 47 20 37 52 5 58 15	46 27 40 17 54 3 64 9
3 54 9 64	40 17 46 27 14 59 8 49	20 37 26 47 12 61 2 55
46-----27-----40-----17		

この後は、立方体四方陣の解のみをリスト・アップする。最初の十数例については、チェックサム・エラーを調べて、正解であることを検証してある。

全部を調べても、エラーのある解は1個も発見されなかったことを報告する。

**** 六次元二方阵を解いて三次元の正方連結完全立体四方陣を得た結果のリスト2 (抜粋) ****
【チェックサム・エラーを調べた結果を付けたリスト (原始解)】

1#										CS	Rw, CI, &PI	Pantriagonals	Composite Fours
1	63	6	60							0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
48		18		43					21	0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
62	49	4	15	57	54	7	12			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
19	32	45	34	24	27	42	37			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
11	14	53	52	16	9	50	55			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
38	35	28	29	33	40	31	26			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
56	59	10	5	51	64	13	2			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
25	22	39	44	30	17	36	47			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	8		58		3		61			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	41	23	46	20						0	0 0 0	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

121#										CS	Rw, CI, &PI	Pantriagonals	Composite Fours
1	62	7	60							0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
48		19		42					21	0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
63	49	4	14	57	55	6	12			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
18	32	45	35	24	26	43	37			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
10	15	53	52	16	9	51	54			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
39	34	28	29	33	40	30	27			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
56	58	11	5	50	64	13	3			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
25	23	38	44	31	17	36	46			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	8		59		2		61			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	41	22	47	20						0	0 0 0	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

241#										CS	Rw, CI, &PI	Pantriagonals	Composite Fours
1	60	7	62							0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
48		21		42					19	0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
63	49	6	12	57	55	4	14			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
18	32	43	37	24	26	45	35			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
10	15	51	54	16	9	53	52			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
39	34	30	27	33	40	28	29			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
56	58	13	3	50	64	11	5			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
25	23	36	46	31	17	38	44			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	8		61		2		59			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	41	20	47	22						0	0 0 0	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

361#										CS	Rw, CI, &PI	Pantriagonals	Composite Fours
1	56	11	62							0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
48		25		38					19	0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
63	49	10	8	53	59	4	14			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
18	32	39	41	28	22	45	35			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
6	15	51	58	16	5	57	52			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
43	34	30	23	33	44	24	29			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
60	54	13	3	50	64	7	9			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
21	27	36	46	31	17	42	40			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	12		61		2		55			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	37	20	47	26						0	0 0 0	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

481#										CS	Rw, CI, &PI	Pantriagonals	Composite Fours
1	48	19	62							0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
56		25		38					11	0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
63	41	18	8	45	59	4	22			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
10	32	39	49	28	14	53	35			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
6	23	43	58	24	5	57	44			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
51	34	30	15	33	52	16	29			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
60	46	21	3	42	64	7	17			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
13	27	36	54	31	9	50	40			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	20		61		2		47			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	37	12	55	26						0	0 0 0	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

601#										CS	Rw, CI, &PI	Pantriagonals	Composite Fours
1	32	35	62							0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
56		41		22					11	0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
63	25	34	8	29	59	4	38			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
10	48	23	49	44	14	53	19			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
6	39	27	58	40	5	57	28			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

4321#										CS	Rw, CI, &PI	Pantriagonals	Composite Fours
7	62	4	57							0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
42	19	45	24							0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
60	55	1	14	63	52	6	9			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
21	26	48	35	18	29	43	40			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
13	12	56	49	10	15	51	54			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
36	37	25	32	39	34	30	27			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
50	61	11	8	53	58	16	3			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
31	20	38	41	28	23	33	46			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
2	59	5	64							0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
47	22	44	17							0	0 0 0	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

5041#										CS	Rw, CI, &PI	Pantriagonals	Composite Fours
8	61	3	58							0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
41	20	46	23							0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
59	56	2	13	64	51	5	10			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
22	25	47	36	17	30	44	39			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
14	11	55	50	9	16	52	53			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
35	38	26	31	40	33	29	28			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
49	62	12	7	54	57	15	4			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
32	19	37	42	27	24	34	45			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1	60	6	63							0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
48	21	43	18							0	0 0 0	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

5761#										CS	Rw, CI, &PI	Pantriagonals	Composite Fours
9	64	3	54							0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
40	17	46	27							0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
55	57	2	16	61	51	12	6			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
26	24	47	33	20	30	37	43			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
14	7	59	50	8	13	49	60			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
35	42	22	31	41	36	32	21			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
52	62	5	11	58	56	15	1			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
29	19	44	38	23	25	34	48			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
4	53	10	63							0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
45	28	39	18							0	0 0 0	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

6481#										CS	Rw, CI, &PI	Pantriagonals	Composite Fours
10	63	4	53							0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
39	18	45	28							0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
56	58	1	15	62	52	11	5			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
25	23	48	34	19	29	38	44			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
13	8	60	49	7	14	50	59			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
36	41	21	32	42	35	31	22			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
51	61	6	12	57	55	16	2			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
30	20	43	37	24	26	33	47			0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3	54	9	64							0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
46	27	40	17							0	0 0 0	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

7201/					7921/					8641/							
11	62	4	53		12	61	3	54		13	60	6	51				
38	19	45	28		37	20	46	27		36	21	43	30				
56	59	1	14	63	52	10	5		55	60	2	13	64	51	9	6	
25	22	48	35	18	29	39	44		26	21	47	36	17	30	40	43	
13	8	60	49	6	15	51	58		14	7	59	50	5	16	52	57	
36	41	21	32	43	34	30	23		35	42	22	31	44	33	29	24	
50	61	7	12	57	54	16	3		49	62	8	11	58	53	15	4	
31	20	42	37	24	27	33	46		32	19	41	38	23	28	34	45	
2	55	9	64						1	56	10	63					
47	26	40	17						48	25	39	18					
47	26	40	17		48	25	39	18		47	26	40	17				

9361/					10081/					10801/							
14	59	5	52		15	58	5	52		16	57	6	51				
35	22	44	29		34	23	44	29		33	24	43	30				
55	62	2	11	64	53	9	4		54	63	3	10	64	53	9	4	
26	19	47	38	17	28	40	45		27	18	46	39	17	28	40	45	
12	7	61	50	3	16	54	57		12	6	61	51	2	16	55	57	
37	42	20	31	46	33	27	24		37	43	20	30	47	33	26	24	
49	60	8	13	58	51	15	6		49	60	8	13	59	50	14	7	
32	21	41	36	23	30	34	43		32	21	41	36	22	31	35	42	
32	21	41	36	23	30	34	43		31	22	42	35	21	32	36	41	

1 56 10 63 48-----25-----39-----18	1 56 11 62 48-----25-----38-----19	2 55 12 61 47-----26-----37-----20
11521/ 17-----64-----3-----46 40 9 54 27 47 57 2 24 61 43 20 6 26 16--55-33--12-30--37-51 22 7 59 42 8 21 41 60 35 50 14 31 49 36 32 13 44-62- 5-19--58-48--23 1 29 11 52 38 15 25 34 56 4 45 18 63 53-----28-----39-----10	12241/ 18-----63-----4-----45 39 10 53 28 48 58 1 23 62 44 19 5 25 15--56-34--11-29--38-52 21 8 60 41 7 22 42 59 36 49 13 32 50 35 31 14 43-61- 6-20--57-47--24 2 30 12 51 37 16 26 33 55 3 46 17 64 54-----27-----40-----9	12961/ 19-----62-----4-----45 38 11 53 28 48 59 1 22 63 44 18 5 25 14--56-35--10-29--39-52 21 8 60 41 6 23 43 58 36 49 13 32 51 34 30 15 42-61- 7-20--57-46--24 3 31 12 50 37 16 27 33 54 2 47 17 64 55-----26-----40-----9
13681/ 20-----61-----3-----46 37 12 54 27 47 60 2 21 64 43 17 6 26 13--55-36--9-30--40-51 22 7 59 42 5 24 44 57 35 50 14 31 52 33 29 16 41-62- 8-19--58-45--23 4 32 11 49 38 15 28 34 53 1 48 18 63 56-----25-----39-----10	14401/ 21-----60-----6-----43 36 13 51 30 48 61 1 20 63 46 18 3 25 12--56-37--10-27--39-54 19 8 62 41 4 23 45 58 38 49 11 32 53 34 28 15 42-59- 7-22--57-44--24 5 31 14 50 35 16 29 33 52 2 47 17 64 55-----26-----40-----9	15121/ 22-----59-----5-----44 35 14 52 29 47 62 2 19 64 45 17 4 26 11--55-38--9-28--40-53 20 7 61 42 3 24 46 57 37 50 12 31 54 33 27 16 41-60- 8-21--58-43--23 6 32 13 49 36 15 30 34 51 1 48 18 63 56-----25-----39-----10
15841/ 23-----58-----5-----44 34 15 52 29 46 63 3 18 64 45 17 4 27 10--54-39--9-28--40-53 20 6 61 43 2 24 47 57 37 51 12 30 55 33 26 16 41-60- 8-21--59-42--22 7 32 13 49 36 14 31 35 50 1 48 19 62 56-----25-----38-----11	16561/ 24-----57-----6-----43 33 16 51 30 45 64 4 17 63 46 18 3 28 9--53-40--10-27--39-54 19 5 62 44 1 23 48 58 38 52 11 29 56 34 25 15 42-59- 7-22--60-41--21 8 31 14 50 35 13 32 36 49 2 47 20 61 55-----26-----37-----12	17281/ 25-----56-----10-----39 36 13 51 30 48 61 1 20 63 46 18 3 21 8--60-41--6-23--43-58 19 12 62 37 4 27 45 54 42 49 7 32 57 34 24 15 38-55- 11-26--53-40--28 9 31 14 50 35 16 29 33 52 2 47 17 64 59-----22-----44-----5
18001/ 26-----55-----9-----40 35 14 52 29 47 62 2 19 64 45 17 4 22 7--59-42--5-24--44-57 20 11 61 38 3 28 46 53 41 50 8 31 58 33 23 16 37-56- 12-25--54-39--27 10 32 13 49 36 15 30 34 51 1 48 18 63 60-----21-----43-----6	18721/ 27-----54-----9-----40 34 15 52 29 46 63 3 18 64 45 17 4 23 6--58-43--5-24--44-57 20 10 61 39 2 28 47 53 41 51 8 30 59 33 22 16 37-56- 12-25--55-38--26 11 32 13 49 36 14 31 35 50 1 48 19 62 60-----21-----42-----7	19441/ 28-----53-----10-----39 33 16 51 30 45 64 4 17 63 46 18 3 24 5--57-44--6-23--43-58 19 9 62 40 1 27 48 54 42 52 7 29 60 34 21 15 38-55- 11-26--56-37--25 12 31 14 50 35 13 32 36 49 2 47 20 61 59-----22-----41-----8
20161/ 29-----52-----9-----40 34 15 54 27 44 63 5 18 64 43 17 6 23 4--58-45--3-24--46-57 22 10 59 39 2 30 47 51 41 53 8 28 61 33 20 16 35-56- 14-25--55-36--26 13 32 11 49 38 12 31 37 50 1 48 21 60 62-----19-----42-----7	20881/ 30-----51-----10-----39 33 16 53 28 43 64 6 17 63 44 18 5 24 3--57-46--4-23--45-58 21 9 60 40 1 29 48 52 42 54 7 27 62 34 19 15 36-55- 13-26--56-35--25 14 31 12 50 37 11 32 38 49 2 47 22 59 61-----20-----41-----8	21601/ 31-----50-----11-----38 33 16 53 28 42 64 7 17 62 44 19 5 24 2--57-47--4-22--45-59 21 9 60 40 1 29 48 52 43 55 6 26 63 35 18 14 36-54- 13-27--56-34--25 15 30 12 51 37 10 32 39 49 3 46 23 58 61-----20-----41-----8
22321/ 32-----49-----12-----37 34 15 54 27 41 63 8 18 61 43 20 6 23 1--58-48--3-21--46-60 22 10 59 39 2 30 47 51 44 56 5 25 64 36 17 13 35-53- 14-28--55-33--26 16 29 11 52 38 9 31 40 50 4 45 24 57 62-----19-----42-----7	23041/ 33-----64-----3-----30 24 9 54 43 31 57 2 40 61 27 36 6 42 16--55-17--12-46--21-51 38 7 59 26 8 37 25 60 19 50 14 47 49 20 48 13 28-62- 5-35--58-32--39 1 45 11 52 22 15 41 18 56 4 29 34 63 53-----44-----23-----10	23761/ 34-----63-----4-----29 23 10 53 44 32 58 1 39 62 28 35 5 41 15--56-18--11-45--22-52 37 8 60 25 7 38 26 59 20 49 13 48 50 19 47 14 27-61- 6-36--57-31--40 2 46 12 51 21 16 42 17 55 3 30 33 64 54-----43-----24-----9

<p style="text-align: center;">24481/</p> <p>35-----62-----4-----29 22 11 53 44 32 59 1 38 63 28 34 5 41 14--56-19--10-45--23-52 37 8 60 25 6 39 27 58 20 49 13 48 51 18 46 15 26-61- 7-36--57-30--40 3 47 12 50 21 16 43 17 54 2 31 33 64 55-----42-----24-----9</p>	<p style="text-align: center;">25201/</p> <p>36-----61-----3-----30 21 12 54 43 31 60 2 37 64 27 33 6 42 13--55-20--9-46--24-51 38 7 59 26 5 40 28 57 19 50 14 47 52 17 45 16 25-62- 8-35--58-29--39 4 48 11 49 22 15 44 18 53 1 32 34 63 56-----41-----23-----10</p>	<p style="text-align: center;">25921/</p> <p>37-----60-----6-----27 20 13 51 46 32 61 1 36 63 30 34 3 41 12--56-21--10-43--23-54 35 8 62 25 4 39 29 58 22 49 11 48 53 18 44 15 26-59- 7-38--57-28--40 5 47 14 50 19 16 45 17 52 2 31 33 64 55-----42-----24-----9</p>
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<p style="text-align: center;">26641/</p> <p>38-----59-----5-----28 19 14 52 45 31 62 2 35 64 29 33 4 42 11--55-22--9-44--24-53 36 7 61 26 3 40 30 57 21 50 12 47 54 17 43 16 25-60- 8-37--58-27--39 6 48 13 49 20 15 46 18 51 1 32 34 63 56-----41-----23-----10</p>	<p style="text-align: center;">27361/</p> <p>39-----58-----5-----28 18 15 52 45 30 63 3 34 64 29 33 4 43 10--54-23--9-44--24-53 36 6 61 27 2 40 31 57 21 51 12 46 55 17 42 16 25-60- 8-37--59-26--38 7 48 13 49 20 14 47 19 50 1 32 35 62 56-----41-----22-----11</p>	<p style="text-align: center;">28081/</p> <p>40-----57-----6-----27 17 16 51 46 29 64 4 33 63 30 34 3 44 9--53-24--10-43--23-54 35 5 62 28 1 39 32 58 22 52 11 45 56 18 41 15 26-59- 7-38--60-25--37 8 47 14 50 19 13 48 20 49 2 31 36 61 55-----42-----21-----12</p>
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<p style="text-align: center;">28801/</p> <p>41-----56-----10-----23 20 13 51 46 32 61 1 36 63 30 34 3 37 8--60-25--6-39--27-58 35 12 62 21 4 43 29 54 26 49 7 48 57 18 40 15 22-55- 11-42--53-24--44 9 47 14 50 19 16 45 17 52 2 31 33 64 59-----38-----28-----5</p>	<p style="text-align: center;">29521/</p> <p>42-----55-----9-----24 19 14 52 45 31 62 2 35 64 29 33 4 38 7--59-26--5-40--28-57 36 11 61 22 3 44 30 53 25 50 8 47 58 17 39 16 21-56- 12-41--54-23--43 10 48 13 49 20 15 46 18 51 1 32 34 63 60-----37-----27-----6</p>	<p style="text-align: center;">30241/</p> <p>43-----54-----9-----24 18 15 52 45 30 63 3 34 64 29 33 4 39 6--58-27--5-40--28-57 36 10 61 23 2 44 31 53 25 51 8 46 59 17 38 16 21-56- 12-41--55-22--42 11 48 13 49 20 14 47 19 50 1 32 35 62 60-----37-----26-----7</p>
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<p style="text-align: center;">30961/</p> <p>44-----53-----10-----23 17 16 51 46 29 64 4 33 63 30 34 3 40 5--57-28--6-39--27-58 35 9 62 24 1 43 32 54 26 52 7 45 60 18 37 15 22-55- 11-42--56-21--41 12 47 14 50 19 13 48 20 49 2 31 36 61 59-----38-----25-----8</p>	<p style="text-align: center;">31681/</p> <p>45-----52-----9-----24 18 15 54 43 28 63 5 34 64 27 33 6 39 4--58-29--3-40--30-57 38 10 59 23 2 46 31 51 25 53 8 44 61 17 36 16 19-56- 14-41--55-20--42 13 48 11 49 22 12 47 21 50 1 32 37 60 62-----35-----26-----7</p>	<p style="text-align: center;">32401/</p> <p>46-----51-----10-----23 17 16 53 44 27 64 6 33 63 28 34 5 40 3--57-30--4-39--29-58 37 9 60 24 1 45 32 52 26 54 7 43 62 18 35 15 20-55- 13-42--56-19--41 14 47 12 50 21 11 48 22 49 2 31 38 59 61-----36-----25-----8</p>
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<p style="text-align: center;">33121/</p> <p>47-----50-----11-----22 17 16 53 44 26 64 7 33 62 28 35 5 40 2--57-31--4-38--29-59 37 9 60 24 1 45 32 52 27 55 6 42 63 19 34 14 20-54- 13-43--56-18--41 15 46 12 51 21 10 48 23 49 3 30 39 58 61-----36-----25-----8</p>	<p style="text-align: center;">33841/</p> <p>48-----49-----12-----21 18 15 54 43 25 63 8 34 61 27 36 6 39 1--58-32--3-37--30-60 38 10 59 23 2 46 31 51 28 56 5 41 64 20 33 13 19-53- 14-44--55-17--42 16 45 11 52 22 9 47 24 50 4 29 40 57 62-----35-----26-----7</p>	<p style="text-align: center;">34561/</p> <p>49-----48-----18-----15 12 21 43 54 32 61 1 36 63 30 34 3 37 8--60-25--6-39--27-58 35 20 62 13 4 51 29 46 26 41 7 56 57 10 40 23 14-47- 19-50--45-16--52 17 55 22 42 11 24 53 9 44 2 31 33 64 59-----38-----28-----5</p>
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<p style="text-align: center;">35281/</p> <p>50-----47-----17-----16 11 22 44 53 31 62 2 35 64 29 33 4 38 7--59-26--5-40--28-57 36 19 61 14 3 52 30 45 25 42 8 55 58 9 39 24 13-48- 20-49--46-15--51 18 56 21 41 12 23 54 10 43 1 32 34 63 60-----37-----27-----6</p>	<p style="text-align: center;">36001/</p> <p>51-----46-----17-----16 10 23 44 53 30 63 3 34 64 29 33 4 39 6--58-27--5-40--28-57 36 18 61 15 2 52 31 45 25 43 8 54 59 9 38 24 13-48- 20-49--47-14--50 19 56 21 41 12 22 55 11 42 1 32 35 62 60-----37-----26-----7</p>	<p style="text-align: center;">36721/</p> <p>52-----45-----18-----15 9 24 43 54 29 64 4 33 63 30 34 3 40 5--57-28--6-39--27-58 35 17 62 16 1 51 32 46 26 44 7 53 60 10 37 23 14-47- 19-50--48-13--49 20 55 22 42 11 21 56 12 41 2 31 36 61 59-----38-----25-----8</p>
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37441/ 53-----44-----17-----16 10 23 46 51 28 63 5 34 64 27 33 6 39 4--58-29--3-40--30-57 38 18 59 15 2 54 31 43 25 45 8 52 61 9 36 24 11-48- 22-49--47-12--50 21 56 19 41 14 20 55 13 42 1 32 37 60 62-----35-----26-----7	38161/ 54-----43-----18-----15 9 24 45 52 27 64 6 33 63 28 34 5 40 3--57-30--4-39--29-58 37 17 60 16 1 53 32 44 26 46 7 51 62 10 35 23 12-47- 21-50--48-11--49 22 55 20 42 13 19 56 14 41 2 31 38 59 61-----36-----25-----8	38881/ 55-----42-----19-----14 9 24 45 52 26 64 7 33 62 28 35 5 40 2--57-31--4-38--29-59 37 17 60 16 1 53 32 44 27 47 6 50 63 11 34 22 12-46- 21-51--48-10--49 23 54 20 43 13 18 56 15 41 3 30 39 58 61-----36-----25-----8
39601/ 56-----41-----20-----13 10 23 46 51 25 63 8 34 61 27 36 6 39 1--58-32--3-37--30-60 38 18 59 15 2 54 31 43 28 48 5 49 64 12 33 21 11-45- 22-52--47-9--50 24 53 19 44 14 17 55 16 42 4 29 40 57 62-----35-----26-----7	40321/ 57-----40-----17-----16 6 27 46 51 24 63 9 34 64 23 33 10 43 4--54-29--3-44--30-53 42 18 55 15 2 58 31 39 21 45 12 52 61 5 36 28 7-48- 26-49--47-8--50 25 60 19 37 14 20 59 13 38 1 32 41 56 62-----35-----22-----11	41041/ 58-----39-----18-----15 5 28 45 52 23 64 10 33 63 24 34 9 44 3--53-30--4-43--29-54 41 17 56 16 1 57 32 40 22 46 11 51 62 6 35 27 8-47- 25-50--48-7--49 26 59 20 38 13 19 60 14 37 2 31 42 55 61-----36-----21-----12
41761/ 59-----38-----19-----14 5 28 45 52 22 64 11 33 62 24 35 9 44 2--53-31--4-42--29-55 41 17 56 16 1 57 32 40 23 47 10 50 63 7 34 26 8-46- 25-51--48-6--49 27 58 20 39 13 18 60 15 37 3 30 43 54 61-----36-----21-----12	42481/ 60-----37-----20-----13 6 27 46 51 21 63 12 34 61 23 36 10 43 1--54-32--3-41--30-56 42 18 55 15 2 58 31 39 24 48 9 49 64 8 33 25 7-45- 26-52--47-5--50 28 57 19 40 14 17 59 16 38 4 29 44 53 62-----35-----22-----11	43201/ 61-----36-----21-----12 3 30 43 54 20 64 13 33 60 24 37 9 46 2--51-31--6-42--27-55 41 17 56 16 1 57 32 40 23 47 10 50 63 7 34 26 8-44- 25-53--48-4--49 29 58 22 39 11 18 62 15 35 5 28 45 52 59-----38-----19-----14
43921/ 62-----35-----22-----11 4 29 44 53 19 63 14 34 59 23 38 10 45 1--52-32--5-41--28-56 42 18 55 15 2 58 31 39 24 48 9 49 64 8 33 25 7-43- 26-54--47-3--50 30 57 21 40 12 17 61 16 36 6 27 46 51 60-----37-----20-----13	44641/ 63-----34-----23-----10 4 29 44 53 18 62 15 35 58 22 39 11 45 1--52-32--5-41--28-56 43 19 54 14 3 59 30 38 24 48 9 49 64 8 33 25 6-42- 27-55--46-2--51 31 57 21 40 12 17 61 16 36 7 26 47 50 60-----37-----20-----13	45361/ 64-----33-----24-----9 3 30 43 54 17 61 16 36 57 21 40 12 46 2--51-31--6-42--27-55 44 20 53 13 4 60 29 37 23 47 10 50 63 7 34 26 5-41- 28-56--45-1--52 32 58 22 39 11 18 62 15 35 8 25 48 49 59-----38-----19-----14

[Count = 46080] OK!

** Calculated and Listed by Kanji Setsuda
on Nov. 17, 2013 with Apple OSX 10.9 and Xcode 5.0.2 **

満足すべき結果が得られた。

前の第4節で示した多重型正方連結完全八方陣のリストと比較・対照してみてほしい。
今度の立方体四方陣の解と全く同じものがそこに見られることがおわかりになるろう。

3. では、今度得た他の2タイプの二次元正方形の方は、同じように正解だったか？

** 多重型正方連結完全八方陣の解のチェック・サムを調べた結果 **

1#	Rw1+Rw2	C11+C12	Pd1/Pd2	Composite	Fours										
1	63	6	60	38	28	33	31	130+130 130+130\260/260 130	130	130	130	130	130	130	130
62	4	57	7	25	39	30	36	130+130 130+130\260/260 130	130	130	130	130	130	130	130
11	53	16	50	48	18	43	21	130+130 130+130\260/260 130	130	130	130	130	130	130	130
56	10	51	13	19	45	24	42	130+130 130+130\260/260 130	130	130	130	130	130	130	130
27	37	32	34	64	2	59	5	130+130 130+130\260/260 130	130	130	130	130	130	130	130
40	26	35	29	3	61	8	58	130+130 130+130\260/260 130	130	130	130	130	130	130	130
17	47	22	44	54	12	49	15	130+130 130+130\260/260 130	130	130	130	130	130	130	130
46	20	41	23	9	55	14	52	130+130 130+130\260/260 130	130	130	130	130	130	130	130

121#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours

1 62 7 60 39 28 33 30|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 63 4 57 6 25 38 31 36|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 10 53 16 51 48 19 42 21|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 56 11 50 13 18 45 24 43|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 26 37 32 35 64 3 58 5|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 40 27 34 29 2 61 8 59|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 17 46 23 44 55 12 49 14|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 47 20 41 22 9 54 15 52|130+130|130+130\260/260|130 130 130 130 130 130 130 130

241#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours

1 60 7 62 39 30 33 28|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 63 6 57 4 25 36 31 38|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 10 51 16 53 48 21 42 19|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 56 13 50 11 18 43 24 45|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 26 35 32 37 64 5 58 3|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 40 29 34 27 2 59 8 61|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 17 44 23 46 55 14 49 12|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 47 22 41 20 9 52 15 54|130+130|130+130\260/260|130 130 130 130 130 130 130 130

361#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours

1 56 11 62 43 30 33 24|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 63 10 53 4 21 36 31 42|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 6 51 16 57 48 25 38 19|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 60 13 50 7 18 39 28 45|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 22 35 32 41 64 9 54 3|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 44 29 34 23 2 55 12 61|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 17 40 27 46 59 14 49 8|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 47 26 37 20 5 52 15 58|130+130|130+130\260/260|130 130 130 130 130 130 130 130

481#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours

1 48 19 62 51 30 33 16|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 63 18 45 4 13 36 31 50|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 6 43 24 57 56 25 38 11|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 60 21 42 7 10 39 28 53|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 14 35 32 49 64 17 46 3|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 52 29 34 15 2 47 20 61|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 9 40 27 54 59 22 41 8|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 55 26 37 12 5 44 23 58|130+130|130+130\260/260|130 130 130 130 130 130 130 130

601#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours

1 32 35 62 51 46 17 16|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 63 34 29 4 13 20 47 50|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 6 27 40 57 56 41 22 11|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 60 37 26 7 10 23 44 53|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 14 19 48 49 64 33 30 3|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 52 45 18 15 2 31 36 61|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 9 24 43 54 59 38 25 8|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 55 42 21 12 5 28 39 58|130+130|130+130\260/260|130 130 130 130 130 130 130 130

721#|R\C\p|Composite Fours

2 64 5 59 37 27 34 32|0\0\0\0|0 0 0 0 0 0 0 0
 61 3 58 8 26 40 29 35|0\0\0\0|0 0 0 0 0 0 0 0
 12 54 15 49 47 17 44 22|0\0\0\0|0 0 0 0 0 0 0 0
 55 9 52 14 20 46 23 41|0\0\0\0|0 0 0 0 0 0 0 0
 28 38 31 33 63 1 60 6|0\0\0\0|0 0 0 0 0 0 0 0
 39 25 36 30 4 62 7 57|0\0\0\0|0 0 0 0 0 0 0 0
 18 48 21 43 53 11 50 16|0\0\0\0|0 0 0 0 0 0 0 0
 45 19 42 24 10 56 13 51|0\0\0\0|0 0 0 0 0 0 0 0

1441#|R\C\p|Composite Fours

3 64 5 58 37 26 35 32|0\0\0\0|0 0 0 0 0 0 0 0
 61 2 59 8 27 40 29 34|0\0\0\0|0 0 0 0 0 0 0 0
 12 55 14 49 46 17 44 23|0\0\0\0|0 0 0 0 0 0 0 0
 54 9 52 15 20 47 22 41|0\0\0\0|0 0 0 0 0 0 0 0
 28 39 30 33 62 1 60 7|0\0\0\0|0 0 0 0 0 0 0 0
 38 25 36 31 4 63 6 57|0\0\0\0|0 0 0 0 0 0 0 0
 19 48 21 42 53 10 51 16|0\0\0\0|0 0 0 0 0 0 0 0
 45 18 43 24 11 56 13 50|0\0\0\0|0 0 0 0 0 0 0 0

2161#|R\C\p|Composite Fours

4 63 6 57 38 25 36 31|0\0\0\0|0 0 0 0 0 0 0 0
 62 1 60 7 28 39 30 33|0\0\0\0|0 0 0 0 0 0 0 0
 11 56 13 50 45 18 43 24|0\0\0\0|0 0 0 0 0 0 0 0
 53 10 51 16 19 48 21 42|0\0\0\0|0 0 0 0 0 0 0 0
 27 40 29 34 61 2 59 8|0\0\0\0|0 0 0 0 0 0 0 0
 37 26 35 32 3 64 5 58|0\0\0\0|0 0 0 0 0 0 0 0
 20 47 22 41 54 9 52 15|0\0\0\0|0 0 0 0 0 0 0 0
 46 17 44 23 12 55 14 49|0\0\0\0|0 0 0 0 0 0 0 0

2881#|R\C\p|Composite Fours

5 64 3 58 35 26 37 32|0\0\0\0|0 0 0 0 0 0 0 0
 59 2 61 8 29 40 27 34|0\0\0\0|0 0 0 0 0 0 0 0
 14 55 12 49 44 17 46 23|0\0\0\0|0 0 0 0 0 0 0 0
 52 9 54 15 22 47 20 41|0\0\0\0|0 0 0 0 0 0 0 0
 30 39 28 33 60 1 62 7|0\0\0\0|0 0 0 0 0 0 0 0
 36 25 38 31 6 63 4 57|0\0\0\0|0 0 0 0 0 0 0 0
 21 48 19 42 51 10 53 16|0\0\0\0|0 0 0 0 0 0 0 0
 43 18 45 24 13 56 11 50|0\0\0\0|0 0 0 0 0 0 0 0

3601# R C\p Composite Fours	4321# R C\p Composite Fours
6 63 4 57 36 25 38 31 0 0\0/0 0 0 0 0 0 0 0 0	7 62 4 57 36 25 39 30 0 0\0/0 0 0 0 0 0 0 0 0
60 1 62 7 30 39 28 33 0 0\0/0 0 0 0 0 0 0 0 0	60 1 63 6 31 38 28 33 0 0\0/0 0 0 0 0 0 0 0 0
13 56 11 50 43 18 45 24 0 0\0/0 0 0 0 0 0 0 0 0	13 56 10 51 42 19 45 24 0 0\0/0 0 0 0 0 0 0 0 0
51 10 53 16 21 48 19 42 0 0\0/0 0 0 0 0 0 0 0 0	50 11 53 16 21 48 18 43 0 0\0/0 0 0 0 0 0 0 0 0
29 40 27 34 59 2 61 8 0 0\0/0 0 0 0 0 0 0 0 0	29 40 26 35 58 3 61 8 0 0\0/0 0 0 0 0 0 0 0 0
35 26 37 32 5 64 3 58 0 0\0/0 0 0 0 0 0 0 0 0	34 27 37 32 5 64 2 59 0 0\0/0 0 0 0 0 0 0 0 0
22 47 20 41 52 9 54 15 0 0\0/0 0 0 0 0 0 0 0 0	23 46 20 41 52 9 55 14 0 0\0/0 0 0 0 0 0 0 0 0
44 17 46 23 14 55 12 49 0 0\0/0 0 0 0 0 0 0 0 0	44 17 47 22 15 54 12 49 0 0\0/0 0 0 0 0 0 0 0 0

**** 多重型正方連結対称汎八方陣の解のチェック・サムを調べた結果 ****

1# Rw1+Rw2 C11+C12\Pd1/Pd2 Composite Fours
1 63 6 60 18 48 21 43 130+130 130+130\260/260 130 130 130 130 130 130 130 130
62 4 57 7 45 19 42 24 130+130 130+130\260/260 130 130 130 130 130 130 130 130
11 53 16 50 28 38 31 33 130+130 130+130\260/260 130 130 130 130 130 130 130 130
56 10 51 13 39 25 36 30 130+130 130+130\260/260 130 130 130 130 130 130 130 130
35 29 40 26 52 14 55 9 130+130 130+130\260/260 130 130 130 130 130 130 130 130
32 34 27 37 15 49 12 54 130+130 130+130\260/260 130 130 130 130 130 130 130 130
41 23 46 20 58 8 61 3 130+130 130+130\260/260 130 130 130 130 130 130 130 130
22 44 17 47 5 59 2 64 130+130 130+130\260/260 130 130 130 130 130 130 130 130

121# Rw1+Rw2 C11+C12\Pd1/Pd2 Composite Fours
1 62 7 60 19 48 21 42 130+130 130+130\260/260 130 130 130 130 130 130 130 130
63 4 57 6 45 18 43 24 130+130 130+130\260/260 130 130 130 130 130 130 130 130
10 53 16 51 28 39 30 33 130+130 130+130\260/260 130 130 130 130 130 130 130 130
56 11 50 13 38 25 36 31 130+130 130+130\260/260 130 130 130 130 130 130 130 130
34 29 40 27 52 15 54 9 130+130 130+130\260/260 130 130 130 130 130 130 130 130
32 35 26 37 14 49 12 55 130+130 130+130\260/260 130 130 130 130 130 130 130 130
41 22 47 20 59 8 61 2 130+130 130+130\260/260 130 130 130 130 130 130 130 130
23 44 17 46 5 58 3 64 130+130 130+130\260/260 130 130 130 130 130 130 130 130

241# Rw1+Rw2 C11+C12\Pd1/Pd2 Composite Fours
1 60 7 62 21 48 19 42 130+130 130+130\260/260 130 130 130 130 130 130 130 130
63 6 57 4 43 18 45 24 130+130 130+130\260/260 130 130 130 130 130 130 130 130
10 51 16 53 30 39 28 33 130+130 130+130\260/260 130 130 130 130 130 130 130 130
56 13 50 11 36 25 38 31 130+130 130+130\260/260 130 130 130 130 130 130 130 130
34 27 40 29 54 15 52 9 130+130 130+130\260/260 130 130 130 130 130 130 130 130
32 37 26 35 12 49 14 55 130+130 130+130\260/260 130 130 130 130 130 130 130 130
41 20 47 22 61 8 59 2 130+130 130+130\260/260 130 130 130 130 130 130 130 130
23 46 17 44 3 58 5 64 130+130 130+130\260/260 130 130 130 130 130 130 130 130

361# Rw1+Rw2 C11+C12\Pd1/Pd2 Composite Fours
1 56 11 62 25 48 19 38 130+130 130+130\260/260 130 130 130 130 130 130 130 130
63 10 53 4 39 18 45 28 130+130 130+130\260/260 130 130 130 130 130 130 130 130
6 51 16 57 30 43 24 33 130+130 130+130\260/260 130 130 130 130 130 130 130 130
60 13 50 7 36 21 42 31 130+130 130+130\260/260 130 130 130 130 130 130 130 130
34 23 44 29 58 15 52 5 130+130 130+130\260/260 130 130 130 130 130 130 130 130
32 41 22 35 8 49 14 59 130+130 130+130\260/260 130 130 130 130 130 130 130 130
37 20 47 26 61 12 55 2 130+130 130+130\260/260 130 130 130 130 130 130 130 130
27 46 17 40 3 54 9 64 130+130 130+130\260/260 130 130 130 130 130 130 130 130

481# Rw1+Rw2 C11+C12\Pd1/Pd2 Composite Fours
1 48 19 62 25 56 11 38 130+130 130+130\260/260 130 130 130 130 130 130 130 130
63 18 45 4 39 10 53 28 130+130 130+130\260/260 130 130 130 130 130 130 130 130
6 43 24 57 30 51 16 33 130+130 130+130\260/260 130 130 130 130 130 130 130 130
60 21 42 7 36 13 50 31 130+130 130+130\260/260 130 130 130 130 130 130 130 130
34 15 52 29 58 23 44 5 130+130 130+130\260/260 130 130 130 130 130 130 130 130
32 49 14 35 8 41 22 59 130+130 130+130\260/260 130 130 130 130 130 130 130 130
37 12 55 26 61 20 47 2 130+130 130+130\260/260 130 130 130 130 130 130 130 130
27 54 9 40 3 46 17 64 130+130 130+130\260/260 130 130 130 130 130 130 130 130

601# Rw1+Rw2 C11+C12\Pd1/Pd2 Composite Fours
1 32 35 62 41 56 11 22 130+130 130+130\260/260 130 130 130 130 130 130 130 130
63 34 29 4 23 10 53 44 130+130 130+130\260/260 130 130 130 130 130 130 130 130
6 27 40 57 46 51 16 17 130+130 130+130\260/260 130 130 130 130 130 130 130 130
60 37 26 7 20 13 50 47 130+130 130+130\260/260 130 130 130 130 130 130 130 130
18 15 52 45 58 39 28 5 130+130 130+130\260/260 130 130 130 130 130 130 130 130

48 49 14 19 8 25 38 59 |130+130|130+130\260/260|130 130 130 130 130 130 130 130
 21 12 55 42 61 36 31 2|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 43 54 9 24 3 30 33 64|130+130|130+130\260/260|130 130 130 130 130 130 130 130

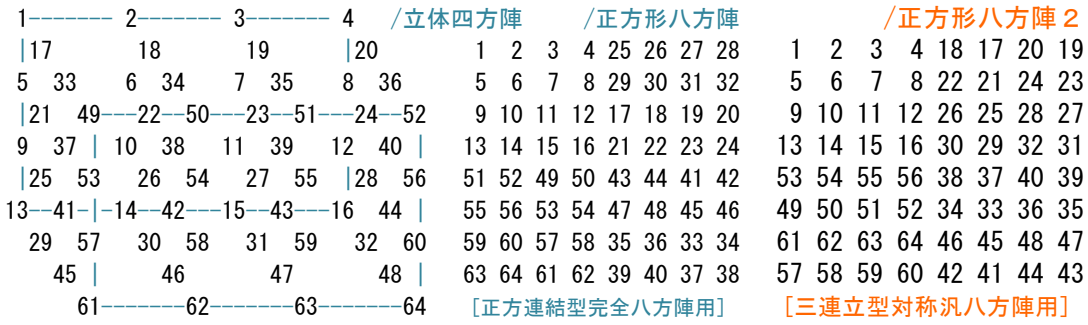
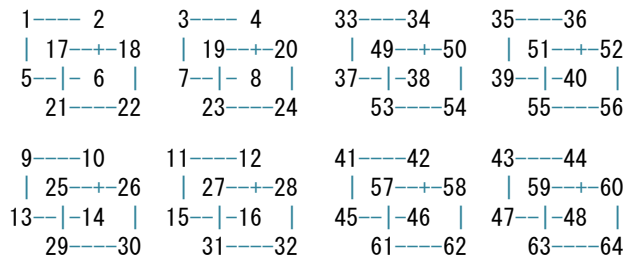
721#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours

2 64 5 59 17 47 22 44|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 61 3 58 8 46 20 41 23|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 12 54 15 49 27 37 32 34|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 55 9 52 14 40 26 35 29|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 36 30 39 25 51 13 56 10|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 31 33 28 38 16 50 11 53|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 42 24 45 19 57 7 62 4|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 21 43 18 48 6 60 1 63|130+130|130+130\260/260|130 130 130 130 130 130 130 130

チェック・サムを詳しく調べたら、以上のように2タイプとも正解であった。
 我々は、今度も3タイプの魔方陣を同時に作り得たことになる。それが実証された。

4. 残るもう一つの目的方陣は、二次元の多重四方陣型**正方連結対称汎八方陣**である。
 出発点の基本図とそれに与える定義条件式は、次のようにする。

[六次元二方陣・三次元四方陣・二次元八方陣の相関基本図]



- ** 正方連結条件式: S=130; **
- n1+n2+n5+n6=S ... c1; n2+n3+n6+n7=S ... c2; n3+n4+n7+n8=S ... c3;
 - n4+n18+n8+n22=S ... c4; n18+n17+n22+n21=S ... c5; n17+n20+n21+n24=S ... c6;
 - n20+n19+n24+n23=S ... c7; n19+n1+n23+n5=S ... c8; n5+n6+n9+n10=S ... c9;
 - n6+n7+n10+n11=S ... c10; n7+n8+n11+n12=S ... c11; n8+n22+n12+n26=S ... c12;
 - n22+n21+n26+n25=S ... c13; n21+n24+n25+n28=S ... c14; n24+n23+n28+n27=S ... c15;
 - n23+n5+n27+n9=S ... c16; n9+n10+n13+n14=S ... c17; n10+n11+n14+n15=S ... c18;
 - n11+n12+n15+n16=S ... c19; n12+n26+n16+n30=S ... c20; n26+n25+n30+n29=S ... c21;
 - n25+n28+n29+n32=S ... c22; n28+n27+n32+n31=S ... c23; n27+n9+n31+n13=S ... c24;
 - n13+n14+n53+n54=S ... c25; n14+n15+n54+n55=S ... c26; n15+n16+n55+n56=S ... c27;
 - n16+n30+n56+n38=S ... c28; n30+n29+n38+n37=S ... c29; n29+n32+n37+n40=S ... c30;
 - n32+n31+n40+n39=S ... c31; n31+n13+n39+n53=S ... c32; n53+n54+n49+n50=S ... c33;
 - n54+n55+n50+n51=S ... c34; n55+n56+n51+n52=S ... c35; n56+n38+n52+n34=S ... c36;
 - n38+n37+n34+n33=S ... c37; n37+n40+n33+n36=S ... c38; n40+n39+n36+n35=S ... c39;
 - n39+n53+n35+n49=S ... c40; n49+n50+n61+n62=S ... c41; n50+n51+n62+n63=S ... c42;
 - n51+n52+n63+n64=S ... c43; n52+n34+n64+n46=S ... c44; n34+n33+n46+n45=S ... c45;
 - n33+n36+n45+n48=S ... c46; n36+n35+n48+n47=S ... c47; n35+n49+n47+n61=S ... c48;
 - n61+n62+n57+n58=S ... c49; n62+n63+n58+n59=S ... c50; n63+n64+n59+n60=S ... c51;
 - n64+n46+n60+n42=S ... c52; n46+n45+n42+n41=S ... c53; n45+n48+n41+n44=S ... c54;
 - n48+n47+n44+n43=S ... c55; n47+n61+n43+n57=S ... c56; n57+n58+n1+n2=S ... c57;
 - n58+n59+n2+n3=S ... c58; n59+n60+n3+n4=S ... c59; n60+n42+n4+n18=S ... c60;

n42+n41+n18+n17=S ... c61; n41+n44+n17+n20=S ... c62; n44+n43+n20+n19=S ... c63;
n43+n57+n19+n1=S ... c64;

* 基本図 *

1	2	3	4	18	17	20	19	1
5	6	7	8	22	21	24	23	5
9	10	11	12	26	25	28	27	9
13	14	15	16	30	29	32	31	13
53	54	55	56	38	37	40	39	53
49	50	51	52	34	33	36	35	49
61	62	63	64	46	45	48	47	61
57	58	59	60	42	41	44	43	57
1	2	3	4	18	17	20	19	1

** 対称型補数の条件式: CC=65; **

n1+n43=n2+n44=n3+n41=n4+n42=
n5+n47=n6+n48=n7+n45=n8+n46=
n9+n35=n10+n36=n11+n33=n12+n34=
n13+n39=n14+n40=n15+n37=n16+n38=
n17+n59=n18+n60=n19+n57=n20+n58=
n21+n63=n22+n64=n23+n61=n24+n62=
n25+n51=n26+n52=n27+n49=n28+n50=
n29+n55=n30+n56=n31+n53=n32+n54=CC;
n33+n11=n34+n12=n35+n9=n36+n10=
n37+n15=n38+n16=n39+n13=n40+n14=
n41+n3=n42+n4=n43+n1=n44+n2=
n45+n7=n46+n8=n47+n5=n48+n6=
n49+n27=n50+n28=n51+n25=n52+n26=
n53+n31=n54+n32=n55+n29=n56+n30=
n57+n19=n58+n20=n59+n17=n60+n18=
n61+n23=n62+n24=n63+n21=n64+n22=CC;

** 基本条件式: SSM=130; LSM=260; **

n1+n2+n3+n4=SSM ... rw1; n18+n17+n20+n19=SSM ... rw2;
n1+n5+n9+n13=SSM ... cl1; n53+n49+n61+n57=SSM ... cl2;
n1+n6+n11+n16+n38+n33+n48+n43=LSM ... pd;

これを解けば、六次元二方陣を解いたと同じことになる。それを基本図通りに展開して出力すれば、今度もまた3タイプの魔方陣が同時に得られるはずである。

組んだプログラムは、例によって、文末に付録として掲載する（英語版で申し訳ないが、簡単なプログラムなので、興味のある読者は是非眼を通してほしい）。

5. 六次元二方陣を解いて多重型正方連結対称汎八方陣を取り出した実験の結果

1/6dECO2

1	63	6	60	49	15	54	12
48	18	43	21	32	34	27	37
62	4	57	7	14	52	9	55
19	45	24	42	35	29	40	26
11	53	16	50	59	5	64	2
38	28	33	31	22	44	17	47
56	10	51	13	8	58	3	61
25	39	30	36	41	23	46	20

1	63	6	60	/MC4	/C8M	/CSP			
48	18	43	21	1 63 6 60 38 28 33 31	1 63 6 60 18 48 21 43				
62	49	4	15	57 54 7 12	62 4 57 7 25 39 30 36	62 4 57 7 45 19 42 24			
19	32	45	34	24	27	42	37	11 53 16 50 48 18 43 21	11 53 16 50 28 38 31 33
11	14	53	52	16	9	50	55	56 10 51 13 19 45 24 42	56 10 51 13 39 25 36 30
38	35	28	29	33	40	31	26	27 37 32 34 64 2 59 5	35 29 40 26 52 14 55 9
56	59	10	5	51	64	13	2	40 26 35 29 3 61 8 58	32 34 27 37 15 49 12 54
25	22	39	44	30	17	36	47	17 47 22 44 54 12 49 15	41 23 46 20 58 8 61 3
8	58	3	61	46	20	41	23	9 55 14 52	22 44 17 47 5 59 2 64
41	23	46	20						

121/6dECO2

1	62	7	60	49	14	55	12
48	19	42	21	32	35	26	37
63	4	57	6	15	52	9	54
18	45	24	43	34	29	40	27
10	53	16	51	58	5	64	3
39	28	33	30	23	44	17	46
56	11	50	13	8	59	2	61
25	38	31	36	41	22	47	20

1-----62-----7-----60 /MC4	/C8M	/CSP
48 19 42 21	1 62 7 60 39 28 33 30	1 62 7 60 19 48 21 42
63 49 4 14 57 55 6 12	63 4 57 6 25 38 31 36	63 4 57 6 45 18 43 24
18 32---45---35---24---26---43---37	10 53 16 51 48 19 42 21	10 53 16 51 28 39 30 33
10 15 53 52 16 9 51 54	56 11 50 13 18 45 24 43	56 11 50 13 38 25 36 31
39 34 28 29 33 40 30 27	26 37 32 35 64 3 58 5	34 29 40 27 52 15 54 9
56-58- -11- 5-50-64- -13 3	40 27 34 29 2 61 8 59	32 35 26 37 14 49 12 55
25 23 38 44 31 17 36 46	17 46 23 44 55 12 49 14	41 22 47 20 59 8 61 2
8 59 2 61	47 20 41 22 9 54 15 52	23 44 17 46 5 58 3 64
41-----22-----47-----20		

241/6dEC02

1---60 7---62 49---12 55---14
48--+21 42--+19 32--+37 26--+35
63- -6 57- -4 15- -54 9- -52
18---43 24---45 34---27 40---29
10---51 16---53 58---3 64---5
39--+30 33--+28 23--+46 17--+44
56- -13 50- -11 8- -61 2- -59
25---36 31---38 41---20 47---22

1-----60-----7-----62 /MC4	/C8M	/CSP
48 21 42 19	1 60 7 62 39 30 33 28	1 60 7 62 21 48 19 42
63 49 6 12 57 55 4 14	63 6 57 4 25 36 31 38	63 6 57 4 43 18 45 24
18 32---43---37---24---26---45---35	10 51 16 53 48 21 42 19	10 51 16 53 30 39 28 33
10 15 51 54 16 9 53 52	56 13 50 11 18 43 24 45	56 13 50 11 36 25 38 31
39 34 30 27 33 40 28 29	26 35 32 37 64 5 58 3	34 27 40 29 54 15 52 9
56-58- -13- 3-50-64- -11 5	40 29 34 27 2 59 8 61	32 37 26 35 12 49 14 55
25 23 36 46 31 17 38 44	17 44 23 46 55 14 49 12	41 20 47 22 61 8 59 2
8 61 2 59	47 22 41 20 9 52 15 54	23 46 17 44 3 58 5 64
41-----20-----47-----22		

361/6dEC02

1---56 11---62 49---8 59---14
48--+25 38--+19 32--+41 22--+35
63- -10 53- -4 15- -58 5- -52
18---39 28---45 34---23 44---29
6---51 16---57 54---3 64---9
43--+30 33--+24 27--+46 17--+40
60- -13 50- -7 12- -61 2- -55
21---36 31---42 37---20 47---26

1-----56-----11-----62 /MC4	/C8M	/CSP
48 25 38 19	1 56 11 62 43 30 33 24	1 56 11 62 25 48 19 38
63 49 10 8 53 59 4 14	63 10 53 4 21 36 31 42	63 10 53 4 39 18 45 28
18 32---39---41---28---22---45---35	6 51 16 57 48 25 38 19	6 51 16 57 30 43 24 33
6 15 51 58 16 5 57 52	60 13 50 7 18 39 28 45	60 13 50 7 36 21 42 31
43 34 30 23 33 44 24 29	22 35 32 41 64 9 54 3	34 23 44 29 58 15 52 5
60-54- -13- 3-50-64- -7 9	44 29 34 23 2 55 12 61	32 41 22 35 8 49 14 59
21 27 36 46 31 17 42 40	17 40 27 46 59 14 49 8	37 20 47 26 61 12 55 2
12 61 2 55	47 26 37 20 5 52 15 58	27 46 17 40 3 54 9 64
37-----20-----47-----26		

481/6dEC02

1---48 19---62 41---8 59---22
56--+25 38--+11 32--+49 14--+35
63- -18 45- -4 23- -58 5- -44
10---39 28---53 34---15 52---29
6---43 24---57 46---3 64---17
51--+30 33--+16 27--+54 9--+40
60- -21 42- -7 20- -61 2- -47
13---36 31---50 37---12 55---26

1-----48-----19-----62 /MC4	/C8M	/CSP
56 25 38 11	1 48 19 62 51 30 33 16	1 48 19 62 25 56 11 38
63 41 18 8 45 59 4 22	63 18 45 4 13 36 31 50	63 18 45 4 39 10 53 28
10 32---39---49---28---14---53---35	6 43 24 57 56 25 38 11	6 43 24 57 30 51 16 33
6 23 43 58 24 5 57 44	60 21 42 7 10 39 28 53	60 21 42 7 36 13 50 31
51 34 30 15 33 52 16 29	14 35 32 49 64 17 46 3	34 15 52 29 58 23 44 5
60-46- 21- 3-42-64- 7 17	52 29 34 15 2 47 20 61	32 49 14 35 8 41 22 59
13 27 36 54 31 9 50 40	9 40 27 54 59 22 41 8	37 12 55 26 61 20 47 2
20 61 2 47	55 26 37 12 5 44 23 58	27 54 9 40 3 46 17 64
37-----12-----55-----26		

601/6dEC02

1---32 35---62 25--- 8 59---38
56---41 22---11 48---49 14---19
63- 34 29- - 4 39- -58 5- -28
10---23 44---53 18---15 52---45
6---27 40---57 30--- 3 64---33
51---46 17---16 43---54 9---24
60- -37 26- - 7 36- -61 2- -31
13---20 47---50 21---12 55---42

1-----32-----35-----62 /MC4	/C8M	/CSP
56 41 22 11	1 32 35 62 51 46 17 16	1 32 35 62 41 56 11 22
63 25 34 8 29 59 4 38	63 34 29 4 13 20 47 50	63 34 29 4 23 10 53 44
10 48---23---49---44---14---53---19	6 27 40 57 56 41 22 11	6 27 40 57 46 51 16 17
6 39 27 58 40 5 57 28	60 37 26 7 10 23 44 53	60 37 26 7 20 13 50 47
51 18 46 15 17 52 16 45	14 19 48 49 64 33 30 3	18 15 52 45 58 39 28 5
60-30- 37- 3-26-64- 7 33	52 45 18 15 2 31 36 61	48 49 14 19 8 25 38 59
13 43 20 54 47 9 50 24	9 24 43 54 59 38 25 8	21 12 55 42 61 36 31 2
36 61 2 31	55 42 21 12 5 28 39 58	43 54 9 24 3 30 33 64
21-----12-----55-----42		

721/6dEC02

2-----64----- 5-----59 /MC4	/C8M	/CSP
47 17 44 22	2 64 5 59 37 27 34 32	2 64 5 59 17 47 22 44
61 50 3 16 58 53 8 11	61 3 58 8 26 40 29 35	61 3 58 8 46 20 41 23
20 31---46---33---23---28---41---38	12 54 15 49 47 17 44 22	12 54 15 49 27 37 32 34
12 13 54 51 15 10 49 56	55 9 52 14 20 46 23 41	55 9 52 14 40 26 35 29
37 36 27 30 34 39 32 25	28 38 31 33 63 1 60 6	36 30 39 25 51 13 56 10
55-60- 9- 6-52-63-14 1	39 25 36 30 4 62 7 57	31 33 28 38 16 50 11 53
26 21 40 43 29 18 35 48	18 48 21 43 53 11 50 16	42 24 45 19 57 7 62 4
7 57 4 62	45 19 42 24 10 56 13 51	21 43 18 48 6 60 1 63
42-----24-----45-----19		

1441/6dEC02

3-----64----- 5-----58 /MC4	/C8M	/CSP
46 17 44 23	3 64 5 58 37 26 35 32	3 64 5 58 17 46 23 44
61 51 2 16 59 53 8 10	61 2 59 8 27 40 29 34	61 2 59 8 47 20 41 22
20 30---47---33---22---28---41---39	12 55 14 49 46 17 44 23	12 55 14 49 26 37 32 35
12 13 55 50 14 11 49 56	54 9 52 15 20 47 22 41	54 9 52 15 40 27 34 29
37 36 26 31 35 38 32 25	28 39 30 33 62 1 60 7	36 31 38 25 50 13 56 11
54-60- 9- 7-52-62-15 1	38 25 36 31 4 63 6 57	30 33 28 39 16 51 10 53
27 21 40 42 29 19 34 48	19 48 21 42 53 10 51 16	43 24 45 18 57 6 63 4
6 57 4 63	45 18 43 24 11 56 13 50	21 42 19 48 7 60 1 62
43-----24-----45-----18		

2161/6dEC02

4-----63----- 6-----57 /MC4	/C8M	/CSP
45 18 43 24	4 63 6 57 38 25 36 31	4 63 6 57 18 45 24 43
62 52 1 15 60 54 7 9	62 1 60 7 28 39 30 33	62 1 60 7 48 19 42 21
19 29---48---34---21---27---42---40	11 56 13 50 45 18 43 24	11 56 13 50 25 38 31 36
11 14 56 49 13 12 50 55	53 10 51 16 19 48 21 42	53 10 51 16 39 28 33 30
38 35 25 32 36 37 31 26	27 40 29 34 61 2 59 8	35 32 37 26 49 14 55 12
53-59- 10- 8-51-61-16 2	37 26 35 32 3 64 5 58	29 34 27 40 15 52 9 54
28 22 39 41 30 20 33 47	20 47 22 41 54 9 52 15	44 23 46 17 58 5 64 3
5 58 3 64	46 17 44 23 12 55 14 49	22 41 20 47 8 59 2 61
44-----23-----46-----17		

2881/6dEC02

5-----64-----3-----58 /MC4
 |44 17 46 |23
 59 53 2 16 61 51 8 10
 |22 28--47-33--20-30--41-39
 14 11 | 55 50 12 13 49 56 |
 |35 38 26 31 37 36 |32 25
 52--62-|- 9-- 7--54-60--15 1 |
 29 19 40 42 27 21 34 48
 4 | 57 6 63 |
 45-----24-----43-----18

/C8M
 5 64 3 58 35 26 37 32
 59 2 61 8 29 40 27 34
 14 55 12 49 44 17 46 23
 52 9 54 15 22 47 20 41
 30 39 28 33 60 1 62 7
 36 25 38 31 6 63 4 57
 21 48 19 42 51 10 53 16
 43 18 45 24 13 56 11 50

/CSP
 5 64 3 58 17 44 23 46
 59 2 61 8 47 22 41 20
 14 55 12 49 26 35 32 37
 52 9 54 15 40 29 34 27
 38 31 36 25 50 11 56 13
 28 33 30 39 16 53 10 51
 45 24 43 18 57 4 63 6
 19 42 21 48 7 62 1 60

3601/6dEC02

6-----63-----4-----57 /MC4
 |43 18 45 |24
 60 54 1 15 62 52 7 9
 |21 27--48-34--19-29--42-40
 13 12 | 56 49 11 14 50 55 |
 |36 37 25 32 38 35 |31 26
 51--61-|-10-- 8--53-59--16 2 |
 30 20 39 41 28 22 33 47
 3 | 58 5 64 |
 46-----23-----44-----17

/C8M
 6 63 4 57 36 25 38 31
 60 1 62 7 30 39 28 33
 13 56 11 50 43 18 45 24
 51 10 53 16 21 48 19 42
 29 40 27 34 59 2 61 8
 35 26 37 32 5 64 3 58
 22 47 20 41 52 9 54 15
 44 17 46 23 14 55 12 49

/CSP
 6 63 4 57 18 43 24 45
 60 1 62 7 48 21 42 19
 13 56 11 50 25 36 31 38
 51 10 53 16 39 30 33 28
 37 32 35 26 49 12 55 14
 27 34 29 40 15 54 9 52
 46 23 44 17 58 3 64 5
 20 41 22 47 8 61 2 59

4321/6dEC02

7-----62-----4-----57 /MC4
 |42 19 45 |24
 60 55 1 14 63 52 6 9
 |21 26--48-35--18-29--43-40
 13 12 | 56 49 10 15 51 54 |
 |36 37 25 32 39 34 |30 27
 50--61-|-11-- 8--53-58--16 3 |
 31 20 38 41 28 23 33 46
 2 | 59 5 64 |
 47-----22-----44-----17

/C8M
 7 62 4 57 36 25 39 30
 60 1 63 6 31 38 28 33
 13 56 10 51 42 19 45 24
 50 11 53 16 21 48 18 43
 29 40 26 35 58 3 61 8
 34 27 37 32 5 64 2 59
 23 46 20 41 52 9 55 14
 44 17 47 22 15 54 12 49

/CSP
 7 62 4 57 19 42 24 45
 60 1 63 6 48 21 43 18
 13 56 10 51 25 36 30 39
 50 11 53 16 38 31 33 28
 37 32 34 27 49 12 54 15
 26 35 29 40 14 55 9 52
 47 22 44 17 59 2 64 5
 20 41 23 46 8 61 3 58

5041/6dEC02

8-----61-----3-----58 /MC4
 |41 20 46 |23
 59 56 2 13 64 51 5 10
 |22 25--47-36--17-30--44-39
 14 11 | 55 50 9 16 52 53 |
 |35 38 26 31 40 33 |29 28
 49--62-|-12-- 7--54-57--15 4 |
 32 19 37 42 27 24 34 45
 1 | 60 6 63 |
 48-----21-----43-----18

/C8M
 8 61 3 58 35 26 40 29
 59 2 64 5 32 37 27 34
 14 55 9 52 41 20 46 23
 49 12 54 15 22 47 17 44
 30 39 25 36 57 4 62 7
 33 28 38 31 6 63 1 60
 24 45 19 42 51 10 56 13
 43 18 48 21 16 53 11 50

/CSP
 8 61 3 58 20 41 23 46
 59 2 64 5 47 22 44 17
 14 55 9 52 26 35 29 40
 49 12 54 15 37 32 34 27
 38 31 33 28 50 11 53 16
 25 36 30 39 13 56 10 51
 48 21 43 18 60 1 63 6
 19 42 24 45 7 62 4 57

5761/6dEC02

9-----64-----3-----54 /MC4
 |40 17 46 |27
 55 57 2 16 61 51 12 6
 |26 24--47-33--20-30--37-43
 14 7 | 59 50 8 13 49 60 |
 |35 42 22 31 41 36 |32 21
 52--62-|- 5--11--58-56--15 1 |
 29 19 44 38 23 25 34 48
 4 | 53 10 63 |
 45-----28-----39-----18

/C8M
 9 64 3 54 35 22 41 32
 55 2 61 12 29 44 23 34
 14 59 8 49 40 17 46 27
 52 5 58 15 26 47 20 37
 30 43 24 33 56 1 62 11
 36 21 42 31 10 63 4 53
 25 48 19 38 51 6 57 16
 39 18 45 28 13 60 7 50

/CSP
 9 64 3 54 17 40 27 46
 55 2 61 12 47 26 37 20
 14 59 8 49 22 35 32 41
 52 5 58 15 44 29 34 23
 42 31 36 21 50 7 60 13
 24 33 30 43 16 57 6 51
 45 28 39 18 53 4 63 10
 19 38 25 48 11 62 1 56

6481/6dEC02

10-----63-----4-----53 /MC4
 |39 18 45 |28
 56 58 1 15 62 52 11 5
 |25 23--48-34--19-29--38-44
 13 8 | 60 49 7 14 50 59 |
 |36 41 21 32 42 35 |31 22
 51--61-|- 6--12--57-55--16 2 |
 30 20 43 37 24 26 33 47
 3 | 54 9 64 |
 46-----27-----40-----17

/C8M
 10 63 4 53 36 21 42 31
 56 1 62 11 30 43 24 33
 13 60 7 50 39 18 45 28
 51 6 57 16 25 48 19 38
 29 44 23 34 55 2 61 12
 35 22 41 32 9 64 3 54
 26 47 20 37 52 5 58 15
 40 17 46 27 14 59 8 49

/CSP
 10 63 4 53 18 39 28 45
 56 1 62 11 48 25 38 19
 13 60 7 50 21 36 31 42
 51 6 57 16 43 30 33 24
 41 32 35 22 49 8 59 14
 23 34 29 44 15 58 5 52
 46 27 40 17 54 3 64 9
 20 37 26 47 12 61 2 55

早速に計算して得られた結果を上に表示した。多重四方陣型正方連結対称汎八方陣を含む3タイプの魔方陣の「原始解」のリストである（「標準解」で出力すると、様々な不都合が生じる。解の総数が、立方体と正方形で違ってしまふ。正規化条件も各個に違う）。

例によって、最初の十数例の解にチェックサム・エラーを付けたのが、次のリスト。

**** 六次元二方陣を解いて多重型正方連結対称汎八方陣を取り出した結果 ****

【チェックサム・エラーを調べた結果を付けたリスト（原始解）】

1#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours
 1 63 6 60 18 48 21 43|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 62 4 57 7 45 19 42 24|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 11 53 16 50 28 38 31 33|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 56 10 51 13 39 25 36 30|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 35 29 40 26 52 14 55 9|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 32 34 27 37 15 49 12 54|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 41 23 46 20 58 8 61 3|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 22 44 17 47 5 59 2 64|130+130|130+130\260/260|130 130 130 130 130 130 130 130

121#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours
 1 62 7 60 19 48 21 42|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 63 4 57 6 45 18 43 24|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 10 53 16 51 28 39 30 33|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 56 11 50 13 38 25 36 31|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 34 29 40 27 52 15 54 9|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 32 35 26 37 14 49 12 55|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 41 22 47 20 59 8 61 2|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 23 44 17 46 5 58 3 64|130+130|130+130\260/260|130 130 130 130 130 130 130 130

241#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours
 1 60 7 62 21 48 19 42|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 63 6 57 4 43 18 45 24|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 10 51 16 53 30 39 28 33|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 56 13 50 11 36 25 38 31|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 34 27 40 29 54 15 52 9|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 32 37 26 35 12 49 14 55|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 41 20 47 22 61 8 59 2|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 23 46 17 44 3 58 5 64|130+130|130+130\260/260|130 130 130 130 130 130 130 130

361#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours
 1 56 11 62 25 48 19 38|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 63 10 53 4 39 18 45 28|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 6 51 16 57 30 43 24 33|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 60 13 50 7 36 21 42 31|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 34 23 44 29 58 15 52 5|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 32 41 22 35 8 49 14 59|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 37 20 47 26 61 12 55 2|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 27 46 17 40 3 54 9 64|130+130|130+130\260/260|130 130 130 130 130 130 130 130

481#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours
 1 48 19 62 25 56 11 38|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 63 18 45 4 39 10 53 28|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 6 43 24 57 30 51 16 33|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 60 21 42 7 36 13 50 31|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 34 15 52 29 58 23 44 5|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 32 49 14 35 8 41 22 59|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 37 12 55 26 61 20 47 2|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 27 54 9 40 3 46 17 64|130+130|130+130\260/260|130 130 130 130 130 130 130 130

601#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours
 1 32 35 62 41 56 11 22|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 63 34 29 4 23 10 53 44|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 6 27 40 57 46 51 16 17|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 60 37 26 7 20 13 50 47|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 18 15 52 45 58 39 28 5|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 48 49 14 19 8 25 38 59|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 21 12 55 42 61 36 31 2|130+130|130+130\260/260|130 130 130 130 130 130 130 130
 43 54 9 24 3 30 33 64|130+130|130+130\260/260|130 130 130 130 130 130 130 130

721#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours

2	64	5	59	17	47	22	44	130+130	130+130	260/260	130	130	130	130	130	130	130	130
61	3	58	8	46	20	41	23	130+130	130+130	260/260	130	130	130	130	130	130	130	130
12	54	15	49	27	37	32	34	130+130	130+130	260/260	130	130	130	130	130	130	130	130
55	9	52	14	40	26	35	29	130+130	130+130	260/260	130	130	130	130	130	130	130	130
36	30	39	25	51	13	56	10	130+130	130+130	260/260	130	130	130	130	130	130	130	130
31	33	28	38	16	50	11	53	130+130	130+130	260/260	130	130	130	130	130	130	130	130
42	24	45	19	57	7	62	4	130+130	130+130	260/260	130	130	130	130	130	130	130	130
21	43	18	48	6	60	1	63	130+130	130+130	260/260	130	130	130	130	130	130	130	130

1441#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours

3	64	5	58	17	46	23	44	130+130	130+130	260/260	130	130	130	130	130	130	130	130
61	2	59	8	47	20	41	22	130+130	130+130	260/260	130	130	130	130	130	130	130	130
12	55	14	49	26	37	32	35	130+130	130+130	260/260	130	130	130	130	130	130	130	130
54	9	52	15	40	27	34	29	130+130	130+130	260/260	130	130	130	130	130	130	130	130
36	31	38	25	50	13	56	11	130+130	130+130	260/260	130	130	130	130	130	130	130	130
30	33	28	39	16	51	10	53	130+130	130+130	260/260	130	130	130	130	130	130	130	130
43	24	45	18	57	6	63	4	130+130	130+130	260/260	130	130	130	130	130	130	130	130
21	42	19	48	7	60	1	62	130+130	130+130	260/260	130	130	130	130	130	130	130	130

2161#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours

4	63	6	57	18	45	24	43	130+130	130+130	260/260	130	130	130	130	130	130	130	130
62	1	60	7	48	19	42	21	130+130	130+130	260/260	130	130	130	130	130	130	130	130
11	56	13	50	25	38	31	36	130+130	130+130	260/260	130	130	130	130	130	130	130	130
53	10	51	16	39	28	33	30	130+130	130+130	260/260	130	130	130	130	130	130	130	130
35	32	37	26	49	14	55	12	130+130	130+130	260/260	130	130	130	130	130	130	130	130
29	34	27	40	15	52	9	54	130+130	130+130	260/260	130	130	130	130	130	130	130	130
44	23	46	17	58	5	64	3	130+130	130+130	260/260	130	130	130	130	130	130	130	130
22	41	20	47	8	59	2	61	130+130	130+130	260/260	130	130	130	130	130	130	130	130

2881#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours

5	64	3	58	17	44	23	46	130+130	130+130	260/260	130	130	130	130	130	130	130	130
59	2	61	8	47	22	41	20	130+130	130+130	260/260	130	130	130	130	130	130	130	130
14	55	12	49	26	35	32	37	130+130	130+130	260/260	130	130	130	130	130	130	130	130
52	9	54	15	40	29	34	27	130+130	130+130	260/260	130	130	130	130	130	130	130	130
38	31	36	25	50	11	56	13	130+130	130+130	260/260	130	130	130	130	130	130	130	130
28	33	30	39	16	53	10	51	130+130	130+130	260/260	130	130	130	130	130	130	130	130
45	24	43	18	57	4	63	6	130+130	130+130	260/260	130	130	130	130	130	130	130	130
19	42	21	48	7	62	1	60	130+130	130+130	260/260	130	130	130	130	130	130	130	130

3601#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours

6	63	4	57	18	43	24	45	130+130	130+130	260/260	130	130	130	130	130	130	130	130
60	1	62	7	48	21	42	19	130+130	130+130	260/260	130	130	130	130	130	130	130	130
13	56	11	50	25	36	31	38	130+130	130+130	260/260	130	130	130	130	130	130	130	130
51	10	53	16	39	30	33	28	130+130	130+130	260/260	130	130	130	130	130	130	130	130
37	32	35	26	49	12	55	14	130+130	130+130	260/260	130	130	130	130	130	130	130	130
27	34	29	40	15	54	9	52	130+130	130+130	260/260	130	130	130	130	130	130	130	130
46	23	44	17	58	3	64	5	130+130	130+130	260/260	130	130	130	130	130	130	130	130
20	41	22	47	8	61	2	59	130+130	130+130	260/260	130	130	130	130	130	130	130	130

4321#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours

7	62	4	57	19	42	24	45	130+130	130+130	260/260	130	130	130	130	130	130	130	130
60	1	63	6	48	21	43	18	130+130	130+130	260/260	130	130	130	130	130	130	130	130
13	56	10	51	25	36	30	39	130+130	130+130	260/260	130	130	130	130	130	130	130	130
50	11	53	16	38	31	33	28	130+130	130+130	260/260	130	130	130	130	130	130	130	130
37	32	34	27	49	12	54	15	130+130	130+130	260/260	130	130	130	130	130	130	130	130
26	35	29	40	14	55	9	52	130+130	130+130	260/260	130	130	130	130	130	130	130	130
47	22	44	17	59	2	64	5	130+130	130+130	260/260	130	130	130	130	130	130	130	130
20	41	23	46	8	61	3	58	130+130	130+130	260/260	130	130	130	130	130	130	130	130

5041#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours

8	61	3	58	20	41	23	46	130+130	130+130	260/260	130	130	130	130	130	130	130	130
59	2	64	5	47	22	44	17	130+130	130+130	260/260	130	130	130	130	130	130	130	130
14	55	9	52	26	35	29	40	130+130	130+130	260/260	130	130	130	130	130	130	130	130
49	12	54	15	37	32	34	27	130+130	130+130	260/260	130	130	130	130	130	130	130	130
38	31	33	28	50	11	53	16	130+130	130+130	260/260	130	130	130	130	130	130	130	130
25	36	30	39	13	56	10	51	130+130	130+130	260/260	130	130	130	130	130	130	130	130
48	21	43	18	60	1	63	6	130+130	130+130	260/260	130	130	130	130	130	130	130	130
19	42	24	45	7	62	4	57	130+130	130+130	260/260	130	130	130	130	130	130	130	130

5761#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours

9 64 3 54 17 40 27 46|130+130|130+130\260/260|130 130 130 130 130 130 130 130
55 2 61 12 47 26 37 20|130+130|130+130\260/260|130 130 130 130 130 130 130 130
14 59 8 49 22 35 32 41|130+130|130+130\260/260|130 130 130 130 130 130 130 130
52 5 58 15 44 29 34 23|130+130|130+130\260/260|130 130 130 130 130 130 130 130
42 31 36 21 50 7 60 13|130+130|130+130\260/260|130 130 130 130 130 130 130 130
24 33 30 43 16 57 6 51|130+130|130+130\260/260|130 130 130 130 130 130 130 130
45 28 39 18 53 4 63 10|130+130|130+130\260/260|130 130 130 130 130 130 130 130
19 38 25 48 11 62 1 56|130+130|130+130\260/260|130 130 130 130 130 130 130 130

6481#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours

10 63 4 53 18 39 28 45|130+130|130+130\260/260|130 130 130 130 130 130 130 130
56 1 62 11 48 25 38 19|130+130|130+130\260/260|130 130 130 130 130 130 130 130
13 60 7 50 21 36 31 42|130+130|130+130\260/260|130 130 130 130 130 130 130 130
51 6 57 16 43 30 33 24|130+130|130+130\260/260|130 130 130 130 130 130 130 130
41 32 35 22 49 8 59 14|130+130|130+130\260/260|130 130 130 130 130 130 130 130
23 34 29 44 15 58 5 52|130+130|130+130\260/260|130 130 130 130 130 130 130 130
46 27 40 17 54 3 64 9|130+130|130+130\260/260|130 130 130 130 130 130 130 130
20 37 26 47 12 61 2 55|130+130|130+130\260/260|130 130 130 130 130 130 130 130

7201#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours

11 62 4 53 19 38 28 45|130+130|130+130\260/260|130 130 130 130 130 130 130 130
56 1 63 10 48 25 39 18|130+130|130+130\260/260|130 130 130 130 130 130 130 130
13 60 6 51 21 36 30 43|130+130|130+130\260/260|130 130 130 130 130 130 130 130
50 7 57 16 42 31 33 24|130+130|130+130\260/260|130 130 130 130 130 130 130 130
41 32 34 23 49 8 58 15|130+130|130+130\260/260|130 130 130 130 130 130 130 130
22 35 29 44 14 59 5 52|130+130|130+130\260/260|130 130 130 130 130 130 130 130
47 26 40 17 55 2 64 9|130+130|130+130\260/260|130 130 130 130 130 130 130 130
20 37 27 46 12 61 3 54|130+130|130+130\260/260|130 130 130 130 130 130 130 130

7201#

7921#

8641#

11 62 4 53 19 38 28 45 12 61 3 54 20 37 27 46 13 60 6 51 21 36 30 43
56 1 63 10 48 25 39 18 55 2 64 9 47 26 40 17 56 1 63 10 48 25 39 18
13 60 6 51 21 36 30 43 14 59 5 52 22 35 29 44 11 62 4 53 19 38 28 45
50 7 57 16 42 31 33 24 49 8 58 15 41 32 34 23 50 7 57 16 42 31 33 24
41 32 34 23 49 8 58 15 42 31 33 24 50 7 57 16 41 32 34 23 49 8 58 15
22 35 29 44 14 59 5 52 21 36 30 43 13 60 6 51 20 37 27 46 12 61 3 54
47 26 40 17 55 2 64 9 48 25 39 18 56 1 63 10 47 26 40 17 55 2 64 9
20 37 27 46 12 61 3 54 19 38 28 45 11 62 4 53 22 35 29 44 14 59 5 52

9361#

10081#

10801#

14 59 5 52 22 35 29 44 15 58 5 52 23 34 29 44 16 57 6 51 24 33 30 43
55 2 64 9 47 26 40 17 54 3 64 9 46 27 40 17 53 4 63 10 45 28 39 18
12 61 3 54 20 37 27 46 12 61 2 55 20 37 26 47 11 62 1 56 19 38 25 48
49 8 58 15 41 32 34 23 49 8 59 14 41 32 35 22 50 7 60 13 42 31 36 21
42 31 33 24 50 7 57 16 43 30 33 24 51 6 57 16 44 29 34 23 52 5 58 15
19 38 28 45 11 62 4 53 18 39 28 45 10 63 4 53 17 40 27 46 9 64 3 54
48 25 39 18 56 1 63 10 48 25 38 19 56 1 62 11 47 26 37 20 55 2 61 12
21 36 30 43 13 60 6 51 21 36 31 42 13 60 7 50 22 35 32 41 14 59 8 49

11521#

12241#

12961#

17 64 3 46 9 40 27 54 18 63 4 45 10 39 28 53 19 62 4 45 11 38 28 53
47 2 61 20 55 26 37 12 48 1 62 19 56 25 38 11 48 1 63 18 56 25 39 10
22 59 8 41 14 35 32 49 21 60 7 42 13 36 31 50 21 60 6 43 13 36 30 51
44 5 58 23 52 29 34 15 43 6 57 24 51 30 33 16 42 7 57 24 50 31 33 16
50 31 36 13 42 7 60 21 49 32 35 14 41 8 59 22 49 32 34 15 41 8 58 23
16 33 30 51 24 57 6 43 15 34 29 52 23 58 5 44 14 35 29 52 22 59 5 44
53 28 39 10 45 4 63 18 54 27 40 9 46 3 64 17 55 26 40 9 47 2 64 17
11 38 25 56 19 62 1 48 12 37 26 55 20 61 2 47 12 37 27 54 20 61 3 46

13681#

14401#

15121#

20 61 3 46 12 37 27 54 21 60 6 43 13 36 30 51 22 59 5 44 14 35 29 52
47 2 64 17 55 26 40 9 48 1 63 18 56 25 39 10 47 2 64 17 55 26 40 9
22 59 5 44 14 35 29 52 19 62 4 45 11 38 28 53 20 61 3 46 12 37 27 54
41 8 58 23 49 32 34 15 42 7 57 24 50 31 33 16 41 8 58 23 49 32 34 15
50 31 33 16 42 7 57 24 49 32 34 15 41 8 58 23 50 31 33 16 42 7 57 24
13 36 30 51 21 60 6 43 12 37 27 54 20 61 3 46 11 38 28 53 19 62 4 45
56 25 39 10 48 1 63 18 55 26 40 9 47 2 64 17 56 25 39 10 48 1 63 18
11 38 28 53 19 62 4 45 14 35 29 52 22 59 5 44 13 36 30 51 21 60 6 43

23 58 5 44 15 34 29 52	24 57 6 43 16 33 30 51	25 56 10 39 13 36 30 51
46 3 64 17 54 27 40 9	45 4 63 18 53 28 39 10	48 1 63 18 60 21 43 6
20 61 2 47 12 37 26 55	19 62 1 48 11 38 25 56	19 62 4 45 7 42 24 57
41 8 59 22 49 32 35 14	42 7 60 21 50 31 36 13	38 11 53 28 50 31 33 16
51 30 33 16 43 6 57 24	52 29 34 15 44 5 58 23	49 32 34 15 37 12 54 27
10 39 28 53 18 63 4 45	9 40 27 54 17 64 3 46	8 41 23 58 20 61 3 46
56 25 38 11 48 1 62 19	55 26 37 12 47 2 61 20	59 22 44 5 47 2 64 17
13 36 31 50 21 60 7 42	14 35 32 49 22 59 8 41	14 35 29 52 26 55 9 40
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20 61 3 46 8 41 23 58	20 61 2 47 8 41 22 59	19 62 1 48 7 42 21 60
37 12 54 27 49 32 34 15	37 12 55 26 49 32 35 14	38 11 56 25 50 31 36 13
50 31 33 16 38 11 53 28	51 30 33 16 39 10 53 28	52 29 34 15 40 9 54 27
7 42 24 57 19 62 4 45	6 43 24 57 18 63 4 45	5 44 23 58 17 64 3 46
60 21 43 6 48 1 63 18	60 21 42 7 48 1 62 19	59 22 41 8 47 2 61 20
13 36 30 51 25 56 10 39	13 36 31 50 25 56 11 38	14 35 32 49 26 55 12 37
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29 52 9 40 15 34 27 54	30 51 10 39 16 33 28 53	31 50 11 38 16 33 28 53
44 5 64 17 58 23 46 3	43 6 63 18 57 24 45 4	42 7 62 19 57 24 45 4
22 59 2 47 8 41 20 61	21 60 1 48 7 42 19 62	21 60 1 48 6 43 18 63
35 14 55 26 49 32 37 12	36 13 56 25 50 31 38 11	36 13 56 25 51 30 39 10
53 28 33 16 39 10 51 30	54 27 34 15 40 9 52 29	55 26 35 14 40 9 52 29
4 45 24 57 18 63 6 43	3 46 23 58 17 64 5 44	2 47 22 59 17 64 5 44
62 19 42 7 48 1 60 21	61 20 41 8 47 2 59 22	61 20 41 8 46 3 58 23
11 38 31 50 25 56 13 36	12 37 32 49 26 55 14 35	12 37 32 49 27 54 15 34
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41 8 61 20 58 23 46 3	31 2 61 36 55 42 21 12	32 1 62 35 56 41 22 11
22 59 2 47 5 44 17 64	38 59 8 25 14 19 48 49	37 60 7 26 13 20 47 50
35 14 55 26 52 29 40 9	28 5 58 39 52 45 18 15	27 6 57 40 51 46 17 16
56 25 36 13 39 10 51 30	50 47 20 13 26 7 60 37	49 48 19 14 25 8 59 38
1 48 21 60 18 63 6 43	16 17 46 51 40 57 6 27	15 18 45 52 39 58 5 28
62 19 42 7 45 4 57 24	53 44 23 10 29 4 63 34	54 43 24 9 30 3 64 33
11 38 31 50 28 53 16 33	11 22 41 56 35 62 1 32	12 21 42 55 36 61 2 31
22321#	23041#	23761#
35 62 4 29 11 22 44 53	36 61 3 30 12 21 43 54	37 60 6 27 13 20 46 51
32 1 63 34 56 41 23 10	31 2 64 33 55 42 24 9	32 1 63 34 56 41 23 10
37 60 6 27 13 20 46 51	38 59 5 28 14 19 45 52	35 62 4 29 11 22 44 53
26 7 57 40 50 47 17 16	25 8 58 39 49 48 18 15	26 7 57 40 50 47 17 16
49 48 18 15 25 8 58 39	50 47 17 16 26 7 57 40	49 48 18 15 25 8 58 39
14 19 45 52 38 59 5 28	13 20 46 51 37 60 6 27	12 21 43 54 36 61 3 30
55 42 24 9 31 2 64 33	56 41 23 10 32 1 63 34	55 42 24 9 31 2 64 33
12 21 43 54 36 61 3 30	11 22 44 53 35 62 4 29	14 19 45 52 38 59 5 28
24481#	25201#	25921#
38 59 5 28 14 19 45 52	39 58 5 28 15 18 45 52	40 57 6 27 16 17 46 51
31 2 64 33 55 42 24 9	30 3 64 33 54 43 24 9	29 4 63 34 53 44 23 10
36 61 3 30 12 21 43 54	36 61 2 31 12 21 42 55	35 62 1 32 11 22 41 56
25 8 58 39 49 48 18 15	25 8 59 38 49 48 19 14	26 7 60 37 50 47 20 13
50 47 17 16 26 7 57 40	51 46 17 16 27 6 57 40	52 45 18 15 28 5 58 39
11 22 44 53 35 62 4 29	10 23 44 53 34 63 4 29	9 24 43 54 33 64 3 30
56 41 23 10 32 1 63 34	56 41 22 11 32 1 62 35	55 42 21 12 31 2 61 36
13 20 46 51 37 60 6 27	13 20 47 50 37 60 7 26	14 19 48 49 38 59 8 25
26641#	27361#	28081#
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32 1 63 34 60 37 27 6	31 2 64 33 59 38 28 5	30 3 64 33 58 39 28 5
35 62 4 29 7 26 40 57	36 61 3 30 8 25 39 58	36 61 2 31 8 25 38 59
22 11 53 44 50 47 17 16	21 12 54 43 49 48 18 15	21 12 55 42 49 48 19 14
49 48 18 15 21 12 54 43	50 47 17 16 22 11 53 44	51 46 17 16 23 10 53 44
8 25 39 58 36 61 3 30	7 26 40 57 35 62 4 29	6 27 40 57 34 63 4 29
59 38 28 5 31 2 64 33	60 37 27 6 32 1 63 34	60 37 26 7 32 1 62 35
14 19 45 52 42 55 9 24	13 20 46 51 41 56 10 23	13 20 47 50 41 56 11 22
28801#	29521#	30241#

30961#	31681#	32401#
44 53 10 23 16 17 46 51	45 52 9 24 15 18 43 54	46 51 10 23 16 17 44 53
29 4 63 34 57 40 27 6	28 5 64 33 58 39 30 3	27 6 63 34 57 40 29 4
35 62 1 32 7 26 37 60	38 59 2 31 8 25 36 61	37 60 1 32 7 26 35 62
22 11 56 41 50 47 20 13	19 14 55 42 49 48 21 12	20 13 56 41 50 47 22 11
52 45 18 15 24 9 54 43	53 44 17 16 23 10 51 46	54 43 18 15 24 9 52 45
5 28 39 58 33 64 3 30	4 29 40 57 34 63 6 27	3 30 39 58 33 64 5 28
59 38 25 8 31 2 61 36	62 35 26 7 32 1 60 37	61 36 25 8 31 2 59 38
14 19 48 49 42 55 12 21	11 22 47 50 41 56 13 20	12 21 48 49 42 55 14 19
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47 50 11 22 16 17 44 53	48 49 12 21 15 18 43 54	49 48 18 15 21 12 54 43
26 7 62 35 57 40 29 4	25 8 61 36 58 39 30 3	32 1 63 34 60 37 27 6
37 60 1 32 6 27 34 63	38 59 2 31 5 28 33 64	35 62 4 29 7 26 40 57
20 13 56 41 51 46 23 10	19 14 55 42 52 45 24 9	14 19 45 52 42 55 9 24
55 42 19 14 24 9 52 45	56 41 20 13 23 10 51 46	41 56 10 23 13 20 46 51
2 31 38 59 33 64 5 28	1 32 37 60 34 63 6 27	8 25 39 58 36 61 3 30
61 36 25 8 30 3 58 39	62 35 26 7 29 4 57 40	59 38 28 5 31 2 64 33
12 21 48 49 43 54 15 18	11 22 47 50 44 53 16 17	22 11 53 44 50 47 17 16
35281#	36001#	36721#
50 47 17 16 22 11 53 44	51 46 17 16 23 10 53 44	52 45 18 15 24 9 54 43
31 2 64 33 59 38 28 5	30 3 64 33 58 39 28 5	29 4 63 34 57 40 27 6
36 61 3 30 8 25 39 58	36 61 2 31 8 25 38 59	35 62 1 32 7 26 37 60
13 20 46 51 41 56 10 23	13 20 47 50 41 56 11 22	14 19 48 49 42 55 12 21
42 55 9 24 14 19 45 52	43 54 9 24 15 18 45 52	44 53 10 23 16 17 46 51
7 26 40 57 35 62 4 29	6 27 40 57 34 63 4 29	5 28 39 58 33 64 3 30
60 37 27 6 32 1 63 34	60 37 26 7 32 1 62 35	59 38 25 8 31 2 61 36
21 12 54 43 49 48 18 15	21 12 55 42 49 48 19 14	22 11 56 41 50 47 20 13
37441#	38161#	38881#
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28 5 64 33 58 39 30 3	27 6 63 34 57 40 29 4	26 7 62 35 57 40 29 4
38 59 2 31 8 25 36 61	37 60 1 32 7 26 35 62	37 60 1 32 6 27 34 63
11 22 47 50 41 56 13 20	12 21 48 49 42 55 14 19	12 21 48 49 43 54 15 18
45 52 9 24 15 18 43 54	46 51 10 23 16 17 44 53	47 50 11 22 16 17 44 53
4 29 40 57 34 63 6 27	3 30 39 58 33 64 5 28	2 31 38 59 33 64 5 28
62 35 26 7 32 1 60 37	61 36 25 8 31 2 59 38	61 36 25 8 30 3 58 39
19 14 55 42 49 48 21 12	20 13 56 41 50 47 22 11	20 13 56 41 51 46 23 10
39601#	40321#	41041#
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25 8 61 36 58 39 30 3	24 9 64 33 54 43 30 3	23 10 63 34 53 44 29 4
38 59 2 31 5 28 33 64	42 55 2 31 12 21 36 61	41 56 1 32 11 22 35 62
11 22 47 50 44 53 16 17	7 26 47 50 37 60 13 20	8 25 48 49 38 59 14 19
48 49 12 21 15 18 43 54	45 52 5 28 15 18 39 58	46 51 6 27 16 17 40 57
1 32 37 60 34 63 6 27	4 29 44 53 34 63 10 23	3 30 43 54 33 64 9 24
62 35 26 7 29 4 57 40	62 35 22 11 32 1 56 41	61 36 21 12 31 2 55 42
19 14 55 42 52 45 24 9	19 14 59 38 49 48 25 8	20 13 60 37 50 47 26 7
41761#	42481#	43201#
59 38 19 14 28 5 52 45	60 37 20 13 27 6 51 46	61 36 21 12 30 3 54 43
22 11 62 35 53 44 29 4	21 12 61 36 54 43 30 3	20 13 60 37 51 46 27 6
41 56 1 32 10 23 34 63	42 55 2 31 9 24 33 64	41 56 1 32 10 23 34 63
8 25 48 49 39 58 15 18	7 26 47 50 40 57 16 17	8 25 48 49 39 58 15 18
47 50 7 26 16 17 40 57	48 49 8 25 15 18 39 58	47 50 7 26 16 17 40 57
2 31 42 55 33 64 9 24	1 32 41 56 34 63 10 23	2 31 42 55 33 64 9 24
61 36 21 12 30 3 54 43	62 35 22 11 29 4 53 44	59 38 19 14 28 5 52 45
20 13 60 37 51 46 27 6	19 14 59 38 52 45 28 5	22 11 62 35 53 44 29 4
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19 14 59 38 52 45 28 5	18 15 58 39 52 45 28 5	17 16 57 40 51 46 27 6
42 55 2 31 9 24 33 64	43 54 3 30 9 24 33 64	44 53 4 29 10 23 34 63
7 26 47 50 40 57 16 17	6 27 46 51 40 57 16 17	5 28 45 52 39 58 15 18
48 49 8 25 15 18 39 58	48 49 8 25 14 19 38 59	47 50 7 26 13 20 37 60
1 32 41 56 34 63 10 23	1 32 41 56 35 62 11 22	2 31 42 55 36 61 12 21
60 37 20 13 27 6 51 46	60 37 20 13 26 7 50 47	59 38 19 14 25 8 49 48
21 12 61 36 54 43 30 3	21 12 61 36 55 42 31 2	22 11 62 35 56 41 32 1

[Count = 46080] OK!

御覧の通り、3タイプの正方連結型魔方陣がめでたく取り出された。前のリストと比較・対照してみれば、立方体四方陣の解が全く同じものと確かめられる。

多重型正方連結完全八方陣の解も、全く同じものと確かめられる。
例によって、チェックサム・モニター付きの検証リストを付記しておく。

**** 六次元二方陣を解いて三次元正方連結完全立体四方陣を取り出した結果 ****
【チェックサム・エラーを調べた結果を付けたリスト (原始解)】

1#										CS	Rw, Cl, &PI	Pantriagonals	Composite Fours
1	63	6	60							0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
48		18		43		21				0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
62	49	4	15	57	54	7	12			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
19	32	45	34	24	27	42	37			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
11	14	53	52	16	9	50	55			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
38	35	28	29	33	40	31	26			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
56	59	10	5	51	64	13	2			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
25	22	39	44	30	17	36	47			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	8		58		3	61				0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	41	23	46	20						0 0 0	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0	

121#										CS	Rw, Cl, &PI	Pantriagonals	Composite Fours
1	62	7	60							0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
48		19		42		21				0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
63	49	4	14	57	55	6	12			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
18	32	45	35	24	26	43	37			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
10	15	53	52	16	9	51	54			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
39	34	28	29	33	40	30	27			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
56	58	11	5	50	64	13	3			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
25	23	38	44	31	17	36	46			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	8		59		2	61				0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	41	22	47	20						0 0 0	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0	

241#										CS	Rw, Cl, &PI	Pantriagonals	Composite Fours
1	60	7	62							0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
48		21		42		19				0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
63	49	6	12	57	55	4	14			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
18	32	43	37	24	26	45	35			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
10	15	51	54	16	9	53	52			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
39	34	30	27	33	40	28	29			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
56	58	13	3	50	64	11	5			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
25	23	36	46	31	17	38	44			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	8		61		2	59				0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	41	20	47	22						0 0 0	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0	

361#										CS	Rw, Cl, &PI	Pantriagonals	Composite Fours
1	56	11	62							0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
48		25		38		19				0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
63	49	10	8	53	59	4	14			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
18	32	39	41	28	22	45	35			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
6	15	51	58	16	5	57	52			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
43	34	30	23	33	44	24	29			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
60	54	13	3	50	64	7	9			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
21	27	36	46	31	17	42	40			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	12		61		2	55				0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	37	20	47	26						0 0 0	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0	

481#										CS	Rw, Cl, &PI	Pantriagonals	Composite Fours
1	48	19	62							0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
56		25		38		11				0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
63	41	18	8	45	59	4	22			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
10	32	39	49	28	14	53	35			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
6	23	43	58	24	5	57	44			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
51	34	30	15	33	52	16	29			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
60	46	21	3	42	64	7	17			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
13	27	36	54	31	9	50	40			0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	20		61		2	47				0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	37	12	55	26						0 0 0	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0	


```

60 21 42 7 10 39 28 53|130+130|130+130\260/260|130 130 130 130 130 130 130 130
14 35 32 49 64 17 46 3|130+130|130+130\260/260|130 130 130 130 130 130 130 130
52 29 34 15 2 47 20 61|130+130|130+130\260/260|130 130 130 130 130 130 130 130
9 40 27 54 59 22 41 8|130+130|130+130\260/260|130 130 130 130 130 130 130 130
55 26 37 12 5 44 23 58|130+130|130+130\260/260|130 130 130 130 130 130 130 130

```

601#|Rw1+Rw2|C11+C12\Pd1/Pd2|Composite Fours

```

1 32 35 62 51 46 17 16|130+130|130+130\260/260|130 130 130 130 130 130 130 130
63 34 29 4 13 20 47 50|130+130|130+130\260/260|130 130 130 130 130 130 130 130
6 27 40 57 56 41 22 11|130+130|130+130\260/260|130 130 130 130 130 130 130 130
60 37 26 7 10 23 44 53|130+130|130+130\260/260|130 130 130 130 130 130 130 130
14 19 48 49 64 33 30 3|130+130|130+130\260/260|130 130 130 130 130 130 130 130
52 45 18 15 2 31 36 61|130+130|130+130\260/260|130 130 130 130 130 130 130 130
9 24 43 54 59 38 25 8|130+130|130+130\260/260|130 130 130 130 130 130 130 130
55 42 21 12 5 28 39 58|130+130|130+130\260/260|130 130 130 130 130 130 130 130

```

721#|R\C\p|Composite Fours

1441#|R\C\p|Composite Fours

```

2 64 5 59 37 27 34 32|0\0\0\0|0 0 0 0 0 0 0 0 3 64 5 58 37 26 35 32|0\0\0\0|0 0 0 0 0 0 0 0
61 3 58 8 26 40 29 35|0\0\0\0|0 0 0 0 0 0 0 0 61 2 59 8 27 40 29 34|0\0\0\0|0 0 0 0 0 0 0 0
12 54 15 49 47 17 44 22|0\0\0\0|0 0 0 0 0 0 0 0 12 55 14 49 46 17 44 23|0\0\0\0|0 0 0 0 0 0 0 0
55 9 52 14 20 46 23 41|0\0\0\0|0 0 0 0 0 0 0 0 54 9 52 15 20 47 22 41|0\0\0\0|0 0 0 0 0 0 0 0
28 38 31 33 63 1 60 6|0\0\0\0|0 0 0 0 0 0 0 0 28 39 30 33 62 1 60 7|0\0\0\0|0 0 0 0 0 0 0 0
39 25 36 30 4 62 7 57|0\0\0\0|0 0 0 0 0 0 0 0 38 25 36 31 4 63 6 57|0\0\0\0|0 0 0 0 0 0 0 0
18 48 21 43 53 11 50 16|0\0\0\0|0 0 0 0 0 0 0 0 19 48 21 42 53 10 51 16|0\0\0\0|0 0 0 0 0 0 0 0
45 19 42 24 10 56 13 51|0\0\0\0|0 0 0 0 0 0 0 0 45 18 43 24 11 56 13 50|0\0\0\0|0 0 0 0 0 0 0 0

```

2161#|R\C\p|Composite Fours

2881#|R\C\p|Composite Fours

```

4 63 6 57 38 25 36 31|0\0\0\0|0 0 0 0 0 0 0 0 5 64 3 58 35 26 37 32|0\0\0\0|0 0 0 0 0 0 0 0
62 1 60 7 28 39 30 33|0\0\0\0|0 0 0 0 0 0 0 0 59 2 61 8 29 40 27 34|0\0\0\0|0 0 0 0 0 0 0 0
11 56 13 50 45 18 43 24|0\0\0\0|0 0 0 0 0 0 0 0 14 55 12 49 44 17 46 23|0\0\0\0|0 0 0 0 0 0 0 0
53 10 51 16 19 48 21 42|0\0\0\0|0 0 0 0 0 0 0 0 52 9 54 15 22 47 20 41|0\0\0\0|0 0 0 0 0 0 0 0
27 40 29 34 61 2 59 8|0\0\0\0|0 0 0 0 0 0 0 0 30 39 28 33 60 1 62 7|0\0\0\0|0 0 0 0 0 0 0 0
37 26 35 32 3 64 5 58|0\0\0\0|0 0 0 0 0 0 0 0 36 25 38 31 6 63 4 57|0\0\0\0|0 0 0 0 0 0 0 0
20 47 22 41 54 9 52 15|0\0\0\0|0 0 0 0 0 0 0 0 21 48 19 42 51 10 53 16|0\0\0\0|0 0 0 0 0 0 0 0
46 17 44 23 12 55 14 49|0\0\0\0|0 0 0 0 0 0 0 0 43 18 45 24 13 56 11 50|0\0\0\0|0 0 0 0 0 0 0 0

```

3601#|R\C\p|Composite Fours

4321#|R\C\p|Composite Fours

```

6 63 4 57 36 25 38 31|0\0\0\0|0 0 0 0 0 0 0 0 7 62 4 57 36 25 39 30|0\0\0\0|0 0 0 0 0 0 0 0
60 1 62 7 30 39 28 33|0\0\0\0|0 0 0 0 0 0 0 0 60 1 63 6 31 38 28 33|0\0\0\0|0 0 0 0 0 0 0 0
13 56 11 50 43 18 45 24|0\0\0\0|0 0 0 0 0 0 0 0 13 56 10 51 42 19 45 24|0\0\0\0|0 0 0 0 0 0 0 0
51 10 53 16 21 48 19 42|0\0\0\0|0 0 0 0 0 0 0 0 50 11 53 16 21 48 18 43|0\0\0\0|0 0 0 0 0 0 0 0
29 40 27 34 59 2 61 8|0\0\0\0|0 0 0 0 0 0 0 0 29 40 26 35 58 3 61 8|0\0\0\0|0 0 0 0 0 0 0 0
35 26 37 32 5 64 3 58|0\0\0\0|0 0 0 0 0 0 0 0 34 27 37 32 5 64 2 59|0\0\0\0|0 0 0 0 0 0 0 0
22 47 20 41 52 9 54 15|0\0\0\0|0 0 0 0 0 0 0 0 23 46 20 41 52 9 55 14|0\0\0\0|0 0 0 0 0 0 0 0
44 17 46 23 14 55 12 49|0\0\0\0|0 0 0 0 0 0 0 0 44 17 47 22 15 54 12 49|0\0\0\0|0 0 0 0 0 0 0 0

```

5041#|R\C\p|Composite Fours

5761#|R\C\p|Composite Fours

```

8 61 3 58 35 26 40 29|0\0\0\0|0 0 0 0 0 0 0 0 9 64 3 54 35 22 41 32|0\0\0\0|0 0 0 0 0 0 0 0
59 2 64 5 32 37 27 34|0\0\0\0|0 0 0 0 0 0 0 0 55 2 61 12 29 44 23 34|0\0\0\0|0 0 0 0 0 0 0 0
14 55 9 52 41 20 46 23|0\0\0\0|0 0 0 0 0 0 0 0 14 59 8 49 40 17 46 27|0\0\0\0|0 0 0 0 0 0 0 0
49 12 54 15 22 47 17 44|0\0\0\0|0 0 0 0 0 0 0 0 52 5 58 15 26 47 20 37|0\0\0\0|0 0 0 0 0 0 0 0
30 39 25 36 57 4 62 7|0\0\0\0|0 0 0 0 0 0 0 0 30 43 24 33 56 1 62 11|0\0\0\0|0 0 0 0 0 0 0 0
33 28 38 31 6 63 1 60|0\0\0\0|0 0 0 0 0 0 0 0 36 21 42 31 10 63 4 53|0\0\0\0|0 0 0 0 0 0 0 0
24 45 19 42 51 10 56 13|0\0\0\0|0 0 0 0 0 0 0 0 25 48 19 38 51 6 57 16|0\0\0\0|0 0 0 0 0 0 0 0
43 18 48 21 16 53 11 50|0\0\0\0|0 0 0 0 0 0 0 0 39 18 45 28 13 60 7 50|0\0\0\0|0 0 0 0 0 0 0 0

```

6481#|R\C\p|Composite Fours

7201#|R\C\p|Composite Fours

```

10 63 4 53 36 21 42 31|0\0\0\0|0 0 0 0 0 0 0 0 11 62 4 53 36 21 43 30|0\0\0\0|0 0 0 0 0 0 0 0
56 1 62 11 30 43 24 33|0\0\0\0|0 0 0 0 0 0 0 0 56 1 63 10 31 42 24 33|0\0\0\0|0 0 0 0 0 0 0 0
13 60 7 50 39 18 45 28|0\0\0\0|0 0 0 0 0 0 0 0 13 60 6 51 38 19 45 28|0\0\0\0|0 0 0 0 0 0 0 0
51 6 57 16 25 48 19 38|0\0\0\0|0 0 0 0 0 0 0 0 50 7 57 16 25 48 18 39|0\0\0\0|0 0 0 0 0 0 0 0
29 44 23 34 55 2 61 12|0\0\0\0|0 0 0 0 0 0 0 0 29 44 22 35 54 3 61 12|0\0\0\0|0 0 0 0 0 0 0 0
35 22 41 32 9 64 3 54|0\0\0\0|0 0 0 0 0 0 0 0 34 23 41 32 9 64 2 55|0\0\0\0|0 0 0 0 0 0 0 0
26 47 20 37 52 5 58 15|0\0\0\0|0 0 0 0 0 0 0 0 27 46 20 37 52 5 59 14|0\0\0\0|0 0 0 0 0 0 0 0
40 17 46 27 14 59 8 49|0\0\0\0|0 0 0 0 0 0 0 0 40 17 47 26 15 58 8 49|0\0\0\0|0 0 0 0 0 0 0 0

```

.....

6. 出発点が違うのに、どうして同じ終点に着いてしまうのか？ 同じ3タイプが何故に一度に出来てしまうのだろうか？

今までの解のリスト3種類をもう一度良く見てほしい。

一番最初に登場する六次元二方陣の小立方体8個が、全リストで同じではないか。

そう、出発点がたとえ違っても、我々は常に同じ六次元二方陣を作っていたのである。

それを展開すれば、3タイプとも同じ解になるのは当然だ。そうでなくてはならない。

これが、新構成法の特長だ。ずいぶん簡単な仕掛けなのに、効果はテキメンだった。

では、何故に3タイプに展開されたのか？ それは、3つの「基本図」の中に3つの「変換法」を仕込んでおいたからだ（この変換法は、第7章を研究・執筆中に発見した）。

では、この成果が全体として意味するものとは、一体何なのだろうか？

この奇跡的な一致が意味するものは、3タイプの魔方陣が、同じ六次元二方陣を「根源」とする同一系統の「近親・類縁」の間柄だということだ。解の総数が、原始解のレベルで同じ46080個。構造的にはいずれも「正方連結型」であり、また「多重四方陣型」だ。

そして、根源たる六次元二方陣をアイデア的普遍性を持つ「概念」と考え、3タイプの魔方陣を我々の住む現実世界に現れ出て来た「現象」だ、と考えるのが良いと思う。

六次元二方陣の方は、それ自身数学的対称性が余りにも高過ぎて、我々にはいかにも見え難いが、この世に現れる時に対称性の一部を失い、代わりに「個性」を獲得した。

後者の3タイプの現象ならば、わかりやすい。既におなじみの愛すべき魔方陣群だ。

私自身は、六次元二方陣を「万物の創造主」が胸中に抱いたコンセプト。それが現実世界に存在するべく贈られたプレゼントが、3タイプの魔方陣だと考えている。

こういう哲学的思考を好まない人ならば、六次元二方陣を無視して現実の3タイプを並列に置き、相互に変換・逆変換が可能な存在として定義するのが良いだろう。垂直の関係を無視して、全てを水平に並べて公平に扱えばよい。…

その立場の説でも、出発点を立方体四方陣とすると後の説明がきつとしやすいだろう。何しろ、与える基本図が一番自然で難しくないから。

そして、2つの正方形八方陣用基本図を単なる「変換図」として説明すればよい。

(最新稿初稿 : Written on Nov. 27, 2013; 最新改訂稿 : Written on Sep. 5, 2014;

Working with MacOSX 10.9.4 and Xcode 5.1.1;

計算・作図・著述 by 摂田 寛二(Kanji Setsuda))

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【プログラムのリスト1】

```
/** Make the 6-dimensional Extra-Cubic Magic Objects of Order 2 and **
/** Transform them into 3-d 'Composite & Complete' Magic Cubes 4x4x4 **
/** File: 'ECO26CCMC4.c' Dictated by Kanji Setsuda in 2005; **
/** and on Sep. 5, 2014 with MacOSX 10.9.4 and Xcode 5.1.1 **
//
#include <stdio.h>
//
/** Variables *
long int cnt;
short cnt2;
short CC, SSM, LSM;
short nm[65], uflg[65];
//
/** Sub-Routines *
void stp01(void), stp02(void), stp03(void), stp04(void), stp05(void);
void stp06(void), stp07(void), stp08(void), stp09(void), stp10(void);
void stp11(void), stp12(void), stp13(void), stp14(void), stp15(void);
void stp16(void), stp17(void), stp18(void), stp19(void), stp20(void);
void stp21(void), stp22(void), stp23(void), stp24(void), stp25(void);
void stp26(void), stp27(void), stp28(void), stp29(void), stp30(void);
void stp31(void), stp32(void);
void ans26print(void), pr1pat26(void), pr2pat26(void);
//
/** Main Program *
int main(){
short n;
printf("\n");
printf("** Make the 6-dimensional Extra-Cubic Magic Objects of Order 2 and\n");
```



```

printf("    Transform them into 3 types of Magic Objects: Multiple Type of\n");
printf("    3-d 'C&C' MC444, 2-d 'C&C' MS88 and 4T Simultaneous 'C&S&P' MS88 **\n");
printf("    [List of Primitive Solutions in a compact style]\n");
printf("\n");
for(n=0;n<65;n++){nm[n]=0; uflg[n]=0;}
CC=65; SSM=130; LSM=260; cnt=0;
stp01();          /* Begin the Calculation *
printf(" [Count = %ld] OK!\n",cnt);
printf("\n");
printf("*** Calculated and Listed by Kanji Setsuda on\n");
printf("    Sep. 5, 2014 with MacOSX 10.9.4 and Xcode 5.1.1 **\n");
printf("\n");
return 0;
}
//
/* Begin the Calculations *
/* Define Level 1: *
/* Set N1 & n43=64 *
void stp01(){
short a,b;
for(a=1;a<65;a++){b=CC-a;
if((uflg[a]==0)&&(uflg[b]==0)){cnt2=0;
nm[1]=a; nm[43]=b;
uflg[a]=1; uflg[b]=1;
stp02();
uflg[b]=0; uflg[a]=0;}
}
}
/* Set N2 & n44 *
void stp02(){
short a,b;
for(a=64;a>0;a--){b=CC-a;
if((uflg[a]==0)&&(uflg[b]==0)){if(nm[1]==1){cnt2=0;}
nm[2]=a; nm[44]=b;
uflg[a]=1; uflg[b]=1;
stp03();
uflg[b]=0; uflg[a]=0;}
}
}
/* Set N5 & n47 *
void stp03(){
short a,b;
for(a=64;a>0;a--){b=CC-a;
if((uflg[a]==0)&&(uflg[b]==0)){
nm[5]=a; nm[47]=b;
uflg[a]=1; uflg[b]=1;
stp04();
uflg[b]=0; uflg[a]=0;}
}
}
/* Set n6=130-n1-n2-n5 & n48 *
void stp04(){
short a,b;
a=SSM-nm[1]-nm[2]-nm[5];
if((0<a)&&(a<65)){
b=SSM-nm[43]-nm[44]-nm[47];
if(a+b==CC){
if((uflg[a]==0)&&(uflg[b]==0)){
nm[6]=a; nm[48]=b;
uflg[a]=1; uflg[b]=1;
stp05();
uflg[b]=0; uflg[a]=0;}}}
}
/* Set N4 & n42 *
void stp05(){
short a,b;

```



```

for(a=64;a>0;a--){b=CC-a;
  if((uflg[a]==0)&&(uflg[b]==0)){
    nm[4]=a; nm[42]=b;
    uflg[a]=1; uflg[b]=1;
    stp06();
    uflg[b]=0; uflg[a]=0;}
}
}
/* Set n3=130-n1-n2-n4 & n41 *
void stp06(){
short a,b;
a=SSM-nm[1]-nm[2]-nm[4];
if((0<a)&&(a<65)){
  b=SSM-nm[43]-nm[44]-nm[42];
  if(a+b==CC){
    if((uflg[a]==0)&&(uflg[b]==0)){
      nm[3]=a; nm[41]=b;
      uflg[a]=1; uflg[b]=1;
      stp07();
      uflg[b]=0; uflg[a]=0;}}}}
}
/* Set n7=130-n2-n3-n6 & n45 *
void stp07(){
short a,b;
a=SSM-nm[2]-nm[3]-nm[6];
if((0<a)&&(a<65)){
  b=SSM-nm[44]-nm[41]-nm[48];
  if(a+b==CC){
    if((uflg[a]==0)&&(uflg[b]==0)){
      nm[7]=a; nm[45]=b;
      uflg[a]=1; uflg[b]=1;
      stp08();
      uflg[b]=0; uflg[a]=0;}}}}
}
/* Set n8=130-n3-n4-n7 & n46 *
void stp08(){
short a,b,c,d;
a=SSM-nm[3]-nm[4]-nm[7];
if((0<a)&&(a<65)){
  b=SSM-nm[41]-nm[42]-nm[45];
  if(a+b==CC){
    c=SSM-nm[4]-nm[1]-nm[5];
    d=SSM-nm[42]-nm[43]-nm[47];
    if((a==c)&&(b==d)){
      if((uflg[a]==0)&&(uflg[b]==0)){
        nm[8]=a; nm[46]=b;
        uflg[a]=1; uflg[b]=1;
        stp09();
        uflg[b]=0; uflg[a]=0;}}}}}}
}
/* Define Level 2: *
/* Set N13 & n39 *
void stp09(){
short a,b;
for(a=64;a>0;a--){b=CC-a;
  if((uflg[a]==0)&&(uflg[b]==0)){
    nm[13]=a; nm[39]=b;
    uflg[a]=1; uflg[b]=1;
    stp10();
    uflg[b]=0; uflg[a]=0;}
}
}
/* Set n9=130-n1-n5-n13 & n35 *
void stp10(){
short a,b;
a=SSM-nm[1]-nm[5]-nm[13];

```

```

if((0<a)&&(a<65)){
    b=SSM-nm[43]-nm[47]-nm[39];
    if(a+b==CC){
        if((uflg[a]==0)&&(uflg[b]==0)){
            nm[9]=a; nm[35]=b;
            uflg[a]=1; uflg[b]=1;
            stp11();
            uflg[b]=0; uflg[a]=0;}}}}
}
/* Set n10=130-n5-n6-n9 & n36 *
void stp11(){
    short a,b;
    a=SSM-nm[5]-nm[6]-nm[9];
    if((0<a)&&(a<65)){
        b=SSM-nm[47]-nm[48]-nm[35];
        if(a+b==CC){
            if((uflg[a]==0)&&(uflg[b]==0)){
                nm[10]=a; nm[36]=b;
                uflg[a]=1; uflg[b]=1;
                stp12();
                uflg[b]=0; uflg[a]=0;}}}}
}
/* Set n11=130-n6-n7-n10 & n33 *
void stp12(){
    short a,b;
    a=SSM-nm[6]-nm[7]-nm[10];
    if((0<a)&&(a<65)){
        b=SSM-nm[48]-nm[45]-nm[36];
        if(a+b==CC){
            if((uflg[a]==0)&&(uflg[b]==0)){
                nm[11]=a; nm[33]=b;
                uflg[a]=1; uflg[b]=1;
                stp13();
                uflg[b]=0; uflg[a]=0;}}}}
}
/* Set n12=130-n7-n8-n11 & n34 *
void stp13(){
    short a,b,c,d;
    a=SSM-nm[7]-nm[8]-nm[11];
    if((0<a)&&(a<65)){
        b=SSM-nm[45]-nm[46]-nm[33];
        if(a+b==CC){
            c=SSM-nm[8]-nm[5]-nm[9];
            d=SSM-nm[46]-nm[47]-nm[35];
            if((a==c)&&(b==d)){
                if((uflg[a]==0)&&(uflg[b]==0)){
                    nm[12]=a; nm[34]=b;
                    uflg[a]=1; uflg[b]=1;
                    stp14();
                    uflg[b]=0; uflg[a]=0;}}}}}}
}
/* Set n14=130-n9-n10-n13 & n40 *
void stp14(){
    short a,b,c,d;
    a=SSM-nm[9]-nm[10]-nm[13];
    if((0<a)&&(a<65)){
        b=SSM-nm[35]-nm[36]-nm[39];
        if(a+b==CC){
            c=SSM-nm[13]-nm[1]-nm[2];
            d=SSM-nm[39]-nm[43]-nm[44];
            if((a==c)&&(b==d)){
                if((uflg[a]==0)&&(uflg[b]==0)){
                    nm[14]=a; nm[40]=b;
                    uflg[a]=1; uflg[b]=1;
                    stp15();
                    uflg[b]=0; uflg[a]=0;}}}}}}
}

```

```

}
/* Set n15=130-n10-n11-n14 & n37 *
void stp15(){
short a,b,c,d;
a=SSM-nm[10]-nm[11]-nm[14];
if((0<a)&&(a<65)){
b=SSM-nm[36]-nm[33]-nm[40];
if(a+b==CC){
c=SSM-nm[14]-nm[2]-nm[3];
d=SSM-nm[40]-nm[44]-nm[41];
if((a==c)&&(b==d)){
if((uflg[a]==0)&&(uflg[b]==0)){
nm[15]=a; nm[37]=b;
uflg[a]=1; uflg[b]=1;
stp16();
uflg[b]=0; uflg[a]=0;}}}}
}
/* Set n16=130-n11-n12-n15 & n38 *
void stp16(){
short a,b,c,d;
a=SSM-nm[11]-nm[12]-nm[15];
if((0<a)&&(a<65)){
b=SSM-nm[33]-nm[34]-nm[37];
if(a+b==CC){
c=SSM-nm[15]-nm[3]-nm[4];
d=SSM-nm[34]-nm[35]-nm[39];
if((a==c)&&(b==d)){
if((uflg[a]==0)&&(uflg[b]==0)){
nm[16]=a; nm[38]=b;
uflg[a]=1; uflg[b]=1;
stp17();
uflg[b]=0; uflg[a]=0;}}}}
}
/* Define Level 3: *
/* Set n17 & n59 *
void stp17(){
short a,b;
for(a=64;a>0;a--){b=CC-a;
if((uflg[a]==0)&&(uflg[b]==0)){
nm[17]=a; nm[59]=b;
uflg[a]=1; uflg[b]=1;
stp18();
uflg[b]=0; uflg[a]=0;}
}
}
/* Set n49=130-n1-n17-n33 & n27 *
void stp18(){
short a,b;
a=SSM-nm[1]-nm[17]-nm[33];
if((0<a)&&(a<65)){
b=SSM-nm[43]-nm[59]-nm[11];
if(a+b==CC){
if((uflg[a]==0)&&(uflg[b]==0)){
nm[49]=a; nm[27]=b;
uflg[a]=1; uflg[b]=1;
stp19();
uflg[b]=0; uflg[a]=0;}}}}
}
/* Set n18=130-n1-n2-n17 & n60 *
void stp19(){
short a,b,c,d;
a=SSM-nm[1]-nm[2]-nm[17];
if((0<a)&&(a<65)){
b=SSM-nm[43]-nm[44]-nm[59];
if(a+b==CC){
c=SSM-nm[17]-nm[33]-nm[34];

```

```

        d=SSM-nm[59]-nm[11]-nm[12];
        if((a==c)&&(b==d)){
            if((uflg[a]==0)&&(uflg[b]==0)){
                nm[18]=a; nm[60]=b;
                uflg[a]=1; uflg[b]=1;
                stp20();
                uflg[b]=0; uflg[a]=0;}}}}
    }
    /* Set n19=130-n2-n3-n18 & n57 *
void stp20(){
    short a,b,c,d;
    a=SSM-nm[2]-nm[3]-nm[18];
    if((0<a)&&(a<65)){
        b=SSM-nm[44]-nm[41]-nm[60];
        if(a+b==CC){
            c=SSM-nm[18]-nm[34]-nm[35];
            d=SSM-nm[60]-nm[12]-nm[9];
            if((a==c)&&(b==d)){
                if((uflg[a]==0)&&(uflg[b]==0)){
                    nm[19]=a; nm[57]=b;
                    uflg[a]=1; uflg[b]=1;
                    stp21();
                    uflg[b]=0; uflg[a]=0;}}}}
    }
    /* Set n20=130-n3-n4-n19 & n58 *
void stp21(){
    short a,b,c,d;
    a=SSM-nm[3]-nm[4]-nm[19];
    if((0<a)&&(a<65)){
        b=SSM-nm[41]-nm[42]-nm[57];
        if(a+b==CC){
            c=SSM-nm[19]-nm[35]-nm[36];
            d=SSM-nm[10]-nm[11]-nm[59];
            if((a==c)&&(b==d)){
                if((uflg[a]==0)&&(uflg[b]==0)){
                    nm[20]=a; nm[58]=b;
                    uflg[a]=1; uflg[b]=1;
                    stp22();
                    uflg[b]=0; uflg[a]=0;}}}}
    }
    /* Set n21=130-n1-n5-n17 & n63 *
void stp22(){
    short a,b,c,d;
    a=SSM-nm[1]-nm[5]-nm[17];
    if((0<a)&&(a<65)){
        b=SSM-nm[43]-nm[47]-nm[59];
        if(a+b==CC){
            c=SSM-nm[17]-nm[33]-nm[37];
            d=SSM-nm[59]-nm[11]-nm[15];
            if((a==c)&&(b==d)){
                if((uflg[a]==0)&&(uflg[b]==0)){
                    nm[21]=a; nm[63]=b;
                    uflg[a]=1; uflg[b]=1;
                    stp23();
                    uflg[b]=0; uflg[a]=0;}}}}
    }
    /* Set n25=130-n5-n9-n21 & n51 *
void stp23(){
    short a,b,c,d;
    a=SSM-nm[5]-nm[9]-nm[21];
    if((0<a)&&(a<65)){
        b=SSM-nm[47]-nm[35]-nm[63];
        if(a+b==CC){
            c=SSM-nm[21]-nm[37]-nm[41];
            d=SSM-nm[63]-nm[15]-nm[3];
            if((a==c)&&(b==d)){

```

```

        if((uflg[a]==0)&&(uflg[b]==0)){
            nm[25]=a; nm[51]=b;
            uflg[a]=1; uflg[b]=1;
            stp24();
            uflg[b]=0; uflg[a]=0;}}}}
    }
    /* Set n29=130-n9-n13-n25 & n55 *
void stp24(){
    short a,b,c,d;
    a=SSM-nm[9]-nm[13]-nm[25];
    if((0<a)&&(a<65)){
        b=SSM-nm[35]-nm[39]-nm[51];
        if(a+b==CC){
            c=SSM-nm[25]-nm[41]-nm[45];
            d=SSM-nm[39]-nm[43]-nm[59];
            if((a==c)&&(b==d)){
                if((uflg[a]==0)&&(uflg[b]==0)){
                    nm[29]=a; nm[55]=b;
                    uflg[a]=1; uflg[b]=1;
                    stp25();
                    uflg[b]=0; uflg[a]=0;}}}}
    }
    /* Define Level 4: *
    /* Set n22=130-n2-n6-n18 & n64 *
void stp25(){
    short a,b,c,d;
    a=SSM-nm[2]-nm[6]-nm[18];
    if((0<a)&&(a<65)){
        b=SSM-nm[44]-nm[48]-nm[60];
        if(a+b==CC){
            c=SSM-nm[5]-nm[6]-nm[21];
            d=SSM-nm[17]-nm[18]-nm[21];
            if((a==c)&&(a==d)){
                if((uflg[a]==0)&&(uflg[b]==0)){
                    nm[22]=a; nm[64]=b;
                    uflg[a]=1; uflg[b]=1;
                    stp26();
                    uflg[b]=0; uflg[a]=0;}}}}
    }
    /* Set n23=130-n3-n7-n19 & n61 *
void stp26(){
    short a,b,c,d;
    a=SSM-nm[3]-nm[7]-nm[19];
    if((0<a)&&(a<65)){
        b=SSM-nm[41]-nm[45]-nm[57];
        if(a+b==CC){
            c=SSM-nm[6]-nm[7]-nm[22];
            d=SSM-nm[18]-nm[19]-nm[22];
            if((a==c)&&(a==d)){
                if((uflg[a]==0)&&(uflg[b]==0)){
                    nm[23]=a; nm[61]=b;
                    uflg[a]=1; uflg[b]=1;
                    stp27();
                    uflg[b]=0; uflg[a]=0;}}}}
    }
    /* Set n24=130-n4-n8-n20 & n62 *
void stp27(){
    short a,b,c,d,e;
    a=SSM-nm[4]-nm[8]-nm[20];
    if((0<a)&&(a<65)){
        b=SSM-nm[42]-nm[46]-nm[58];
        if(a+b==CC){
            c=SSM-nm[7]-nm[8]-nm[23];
            d=SSM-nm[19]-nm[20]-nm[23];
            e=SSM-nm[20]-nm[36]-nm[40];
            if((a==c)&&(a==d)&&(a==e)){

```

```

        if((uflg[a]==0)&&(uflg[b]==0)){
            nm[24]=a; nm[62]=b;
            uflg[a]=1; uflg[b]=1;
            stp28();
            uflg[b]=0; uflg[a]=0;}}}}
    }
    /* Set n26=130-n6-n10-n22 & n52 *
void stp28(){
    short a,b,c,d,e;
    a=SSM-nm[6]-nm[10]-nm[22];
    if((0<a)&&(a<65)){
        b=SSM-nm[48]-nm[36]-nm[64];
        if(a+b==CC){
            c=SSM-nm[9]-nm[10]-nm[25];
            d=SSM-nm[21]-nm[22]-nm[25];
            e=SSM-nm[22]-nm[38]-nm[42];
            if((a==c)&&(a==d)&&(a==e)){
                if((uflg[a]==0)&&(uflg[b]==0)){
                    nm[26]=a; nm[52]=b;
                    uflg[a]=1; uflg[b]=1;
                    stp29();
                    uflg[b]=0; uflg[a]=0;}}}}
        }
    /* Set n28=130-n8-n12-n24 & n50 *
void stp29(){
    short a,b,c,d,e;
    a=SSM-nm[8]-nm[12]-nm[24];
    if((0<a)&&(a<65)){
        b=SSM-nm[46]-nm[34]-nm[62];
        if(a+b==CC){
            c=SSM-nm[11]-nm[12]-nm[27];
            d=SSM-nm[23]-nm[24]-nm[27];
            e=SSM-nm[27]-nm[43]-nm[44];
            if((a==c)&&(a==d)&&(a==e)){
                if((uflg[a]==0)&&(uflg[b]==0)){
                    nm[28]=a; nm[50]=b;
                    uflg[a]=1; uflg[b]=1;
                    stp30();
                    uflg[b]=0; uflg[a]=0;}}}}
        }
    /* Set n30=130-n10-n14-n26 & n56 *
void stp30(){
    short a,b,c,d,e;
    a=SSM-nm[10]-nm[14]-nm[26];
    if((0<a)&&(a<65)){
        b=SSM-nm[36]-nm[40]-nm[52];
        if(a+b==CC){
            c=SSM-nm[13]-nm[14]-nm[29];
            d=SSM-nm[25]-nm[26]-nm[29];
            e=SSM-nm[29]-nm[45]-nm[46];
            if((a==c)&&(a==d)&&(a==e)){
                if((uflg[a]==0)&&(uflg[b]==0)){
                    nm[30]=a; nm[56]=b;
                    uflg[a]=1; uflg[b]=1;
                    stp31();
                    uflg[b]=0; uflg[a]=0;}}}}
        }
    /* Set n31=130-n11-n15-n27 & n53 *
void stp31(){
    short a,b,c,d,e;
    a=SSM-nm[11]-nm[15]-nm[27];
    if((0<a)&&(a<65)){
        b=SSM-nm[33]-nm[37]-nm[49];
        if(a+b==CC){
            c=SSM-nm[14]-nm[15]-nm[30];
            d=SSM-nm[26]-nm[27]-nm[30];

```

```

    e=SSM-nm[27]-nm[43]-nm[47];
    if((a==c)&&(a==d)&&(a==e)){
        if((uflg[a]==0)&&(uflg[b]==0)){
            nm[31]=a; nm[53]=b;
            uflg[a]=1; uflg[b]=1;
            stp32();
            uflg[b]=0; uflg[a]=0;}}}}
}
/* Set n32=130-n12-n16-n28 & n54 *
void stp32(){
    short a,b,c,d,e;
    a=SSM-nm[12]-nm[16]-nm[28];
    if((0<a)&&(a<65)){
        b=SSM-nm[34]-nm[38]-nm[50];
        if(a+b==CC){
            c=SSM-nm[15]-nm[16]-nm[31];
            d=SSM-nm[27]-nm[28]-nm[31];
            e=SSM-nm[48]-nm[29]-nm[45];
            if((a==c)&&(a==d)&&(a==e)){
                if((uflg[a]==0)&&(uflg[b]==0)){
                    nm[32]=a; nm[54]=b;
                    uflg[a]=1; uflg[b]=1;
                    ans26print();        /* Print all in a compact style *
                    uflg[b]=0; uflg[a]=0;}}}}
}
//
/* Print all in a plural compact style *
void ans26print(){
    cnt++; cnt2++;
    if(cnt2==1){
        printf(" %ld/6dEC02\n",cnt);
        pr1pat26();
        pr2pat26();
    }
}
//
/* Print the Pattern-1 *
void pr1pat26(){
    printf("%4d----%2d%7d----%2d",nm[1],nm[2],nm[3],nm[4]);
    printf("%8d----%2d%7d----%2d\n",nm[33],nm[34],nm[35],nm[36]);
    printf("  |%3d--+-%2d  |%3d--+-%2d",nm[17],nm[18],nm[19],nm[20]);
    printf("  |%3d--+-%2d  |%3d--+-%2d\n",nm[49],nm[50],nm[51],nm[52]);
    printf("%4d--l-%2d  |%4d--l-%2d  |",nm[5],nm[6],nm[7],nm[8]);
    printf("%5d--l-%2d  |%4d--l-%2d  | \n",nm[37],nm[38],nm[39],nm[40]);
    printf("%7d----%2d%7d----%2d",nm[21],nm[22],nm[23],nm[24]);
    printf("%8d----%2d%7d----%2d\n",nm[53],nm[54],nm[55],nm[56]);
    printf("\n");
    /**/
    printf("%4d----%2d%7d----%2d",nm[9],nm[10],nm[11],nm[12]);
    printf("%8d----%2d%7d----%2d\n",nm[41],nm[42],nm[43],nm[44]);
    printf("  |%3d--+-%2d  |%3d--+-%2d",nm[25],nm[26],nm[27],nm[28]);
    printf("  |%3d--+-%2d  |%3d--+-%2d\n",nm[57],nm[58],nm[59],nm[60]);
    printf("%4d--l-%2d  |%4d--l-%2d  |",nm[13],nm[14],nm[15],nm[16]);
    printf("%5d--l-%2d  |%4d--l-%2d  | \n",nm[45],nm[46],nm[47],nm[48]);
    printf("%7d----%2d%7d----%2d",nm[29],nm[30],nm[31],nm[32]);
    printf("%8d----%2d%7d----%2d\n",nm[61],nm[62],nm[63],nm[64]);
    printf("\n");
}
//
/* Conceptual Diagrams for Dimensional Conversion *
// 1----- 2----- 3----- 4  /CC4          1/C8M          1/SmI
// |17      18      19      |20      1  2  3  4 25 26 27 28      1  2  3  4 18 17 20 19
// 5 33     6 34     7 35     8 36     5  6  7  8 29 30 31 32      5  6  7  8 22 21 24 23
// |21 49---22---50---23---51---24---52      9 10 11 12 17 18 19 20      9 10 11 12 26 25 28 27
// 9 37 | 10 38   11 39   12 40 | 13 14 15 16 21 22 23 24      13 14 15 16 30 29 32 31

```



```

// |25 53 26 54 27 55 |28 56 51 52 49 50 43 44 41 42 53 54 55 56 38 37 40 39
// 13--41--|14--42---15--43---16 44 | 55 56 53 54 47 48 45 46 49 50 51 52 34 33 36 35
// 29 57 30 58 31 59 32 60 59 60 57 58 35 36 33 34 61 62 63 64 46 45 48 47
// 45 | 46 47 48 | 63 64 61 62 39 40 37 38 57 58 59 60 42 41 44 43
// 61-----62-----63-----64
//
/** Print the Solution Set of 'C&C'MC4, CCMS88 and MS88Sm13 *
void pr2pat26(){
printf("%3d-----%2d-----%2d-----%2d ",
nm[1],nm[2],nm[3],nm[4]);
printf(" /MC4 /C8M /Sm1\n");
printf(" |%2d %2d %2d |%2d ",
nm[17],nm[18],nm[19],nm[20]);
printf("%4d%3d%3d%3d%3d%3d%3d",
nm[1],nm[2],nm[3],nm[4],nm[25],nm[26],nm[27],nm[28]);
printf("%5d%3d%3d%3d%3d%3d%3d\n",
nm[1],nm[2],nm[3],nm[4],nm[18],nm[17],nm[20],nm[19]);
printf(" %2d %2d %2d %2d %2d %2d %2d %2d ",
nm[5],nm[33],nm[6],nm[34],nm[7],nm[35],nm[8],nm[36]);
printf("%4d%3d%3d%3d%3d%3d%3d",
nm[5],nm[6],nm[7],nm[8],nm[29],nm[30],nm[31],nm[32]);
printf("%5d%3d%3d%3d%3d%3d%3d\n",
nm[5],nm[6],nm[7],nm[8],nm[22],nm[21],nm[24],nm[23]);
printf(" |%2d %2d---%2d---%2d---%2d---%2d---%2d---%2d ",
nm[21],nm[49],nm[22],nm[50],nm[23],nm[51],nm[24],nm[52]);
printf("%4d%3d%3d%3d%3d%3d%3d",
nm[9],nm[10],nm[11],nm[12],nm[17],nm[18],nm[19],nm[20]);
printf("%5d%3d%3d%3d%3d%3d%3d\n",
nm[9],nm[10],nm[11],nm[12],nm[26],nm[25],nm[28],nm[27]);
printf(" %2d %2d | %2d %2d %2d %2d %2d %2d | ",
nm[9],nm[37],nm[10],nm[38],nm[11],nm[39],nm[12],nm[40]);
printf("%4d%3d%3d%3d%3d%3d%3d",
nm[13],nm[14],nm[15],nm[16],nm[21],nm[22],nm[23],nm[24]);
printf("%5d%3d%3d%3d%3d%3d%3d\n",
nm[13],nm[14],nm[15],nm[16],nm[30],nm[29],nm[32],nm[31]);
printf(" |%2d %2d %2d %2d %2d %2d |%2d %2d ",
nm[25],nm[53],nm[26],nm[54],nm[27],nm[55],nm[28],nm[56]);
printf("%4d%3d%3d%3d%3d%3d%3d",
nm[51],nm[52],nm[49],nm[50],nm[43],nm[44],nm[41],nm[42]);
printf("%5d%3d%3d%3d%3d%3d%3d\n",
nm[53],nm[54],nm[55],nm[56],nm[38],nm[37],nm[40],nm[39]);
printf(" %2d--%2d-|-%2d--%2d---%2d--%2d---%2d %2d | ",
nm[13],nm[41],nm[14],nm[42],nm[15],nm[43],nm[16],nm[44]);
printf("%4d%3d%3d%3d%3d%3d%3d",
nm[55],nm[56],nm[53],nm[54],nm[47],nm[48],nm[45],nm[46]);
printf("%5d%3d%3d%3d%3d%3d%3d\n",
nm[49],nm[50],nm[51],nm[52],nm[34],nm[33],nm[36],nm[35]);
printf(" %2d %2d %2d %2d %2d %2d %2d %2d ",
nm[29],nm[57],nm[30],nm[58],nm[31],nm[59],nm[32],nm[60]);
printf("%4d%3d%3d%3d%3d%3d%3d",
nm[59],nm[60],nm[57],nm[58],nm[35],nm[36],nm[33],nm[34]);
printf("%5d%3d%3d%3d%3d%3d%3d\n",
nm[61],nm[62],nm[63],nm[64],nm[46],nm[45],nm[48],nm[47]);
printf(" %2d | %2d %2d %2d | ",
nm[45],nm[46],nm[47],nm[48]);
printf("%4d%3d%3d%3d%3d%3d%3d",
nm[63],nm[64],nm[61],nm[62],nm[39],nm[40],nm[37],nm[38]);
printf("%5d%3d%3d%3d%3d%3d%3d\n",
nm[57],nm[58],nm[59],nm[60],nm[42],nm[41],nm[44],nm[43]);
printf(" %2d-----%2d-----%2d-----%2d\n",
nm[61],nm[62],nm[63],nm[64]);
printf("\n");
}
//

```

【プログラムのリスト2】

```
/** Make the 6-Dimensional Extra-Cubic Magic Objects of Order 2 **
/** and Convert them down to 3 types of Magic Objects: **
/** 'Multiple' Types of 'C&C'MC444, 'C&C'MS88 and 'C&S&P'MS88; **
/** File: 'ECO26MCSP88.c' Dictated by Kanji Setsuda in 2005; **
/** and on Sep. 4, 2014 with MacOSX 10.9.4 and Xcode 5.1.1 **
//
#include <stdio.h>
//
/** Variables *
long int cnt;
short cnt2, cnt3;
short CC, SSM, LSM;
short nm[65], flg[65];
//
/** Sub-Routines *
void stp01(void), stp02(void), stp03(void), stp04(void), stp05(void);
void stp06(void), stp07(void), stp08(void), stp09(void), stp10(void);
void stp11(void), stp12(void), stp13(void), stp14(void), stp15(void);
void stp16(void), stp17(void), stp18(void), stp19(void), stp20(void);
void stp21(void), stp22(void), stp23(void), stp24(void), stp25(void);
void stp26(void), stp27(void), stp28(void), stp29(void), stp30(void);
void stp31(void), stp32(void), stp33(void);
void ans26print(void), pr1pat26(void), pr2pat26(void);
//
/** Main Program *
int main(){
short n;
printf("\n");
printf("*** Make the 6-Dimensional Extra-Cubic Magic Objects of Order 2 and\n");
printf(" Convert them down to 3 'Multiple' Types of Magic Objects: 3d'C&C'MC444,\n");
printf(" 2d'C&C'MS88 and 2d 'Composite, Self-complementary and Pandiagonal' MS88; **\n");
printf(" [List of Primitive Solutions in compact style]\n");
printf("\n");
for(n=0;n<65;n++){nm[n]=0; flg[n]=0;}
CC=65; SSM=130; LSM=260; cnt=0; cnt3=0;
stp01(); /* Begin the Calculation *
printf(" [Count = %ld] OK!\n",cnt);
printf("\n");
printf("*** Calculated and Listed by Kanji Setsuda on\n");
printf(" Sep. 4, 2014 with MacOSX 10.9.4 and Xcode 5.1.1 **\n");
printf("\n");
return 0;
}
//
/** Begin the Search *
/** Set n1 & n43 *
void stp01(){
short a,b;
for(a=1;a<65;a++){b=CC-a;
if((flg[a]==0)&&(flg[b]==0)){cnt2=0;
nm[1]=a; nm[43]=b;
flg[a]=1; flg[b]=1;
stp02();
flg[b]=0; flg[a]=0;}
}
}
/** Set n2 & n44 *
void stp02(){
short a,b;
for(a=64;a>0;a--){b=CC-a;
if((flg[a]==0)&&(flg[b]==0)){if(nm[1]==1){cnt2=0;}
nm[2]=a; nm[44]=b;
flg[a]=1; flg[b]=1;
```

```

        stp03();
        flg[b]=0; flg[a]=0;}
    }
}
/** Set n5 & n47 *
void stp03(){
    short a,b;
    for(a=64;a>0;a--){b=CC-a;
        if((flg[a]==0)&&(flg[b]==0)){
            nm[5]=a; nm[47]=b;
            flg[a]=1; flg[b]=1;
            stp04();
            flg[b]=0; flg[a]=0;}
        }
}
/** Set n6=SSM-n1-n2-n5 & n48 *
void stp04(){
    short a,b;
    a=SSM-nm[1]-nm[2]-nm[5];
    b=SSM-nm[43]-nm[44]-nm[47];
    if((0<a)&&(a<65)&&(a+b==CC)){
        if((flg[a]==0)&&(flg[b]==0)){
            nm[6]=a; nm[48]=b;
            flg[a]=1; flg[b]=1;
            stp05();
            flg[b]=0; flg[a]=0;}}
    }
}
/** Set n3 & n41 *
void stp05(){
    short a,b;
    for(a=1;a<65;a++){b=CC-a;
        if((flg[a]==0)&&(flg[b]==0)){
            nm[3]=a; nm[41]=b;
            flg[a]=1; flg[b]=1;
            stp06();
            flg[b]=0; flg[a]=0;}
        }
    }
}
/** Set n4=SSM-n1-n2-n3 & n42 *
void stp06(){
    short a,b;
    a=SSM-nm[1]-nm[2]-nm[3];
    b=SSM-nm[43]-nm[44]-nm[41];
    if((0<a)&&(a<65)&&(a+b==CC)){
        if((flg[a]==0)&&(flg[b]==0)){
            nm[4]=a; nm[42]=b;
            flg[a]=1; flg[b]=1;
            stp07();
            flg[b]=0; flg[a]=0;}}
    }
}
/** Set n7=SSM-n2-n3-n6 & n45 *
void stp07(){
    short a,b;
    a=SSM-nm[2]-nm[3]-nm[6];
    b=SSM-nm[44]-nm[41]-nm[48];
    if((0<a)&&(a<65)&&(a+b==CC)){
        if((flg[a]==0)&&(flg[b]==0)){
            nm[7]=a; nm[45]=b;
            flg[a]=1; flg[b]=1;
            stp08();
            flg[b]=0; flg[a]=0;}}
    }
}
/** Set n8=SSM-n3-n4-n7 & n46 *
void stp08(){
    short a,b;
    a=SSM-nm[3]-nm[4]-nm[7];

```

```

b=SSM-nm[41]-nm[42]-nm[45];
if((0<a)&&(a<65)&&(a+b==CC)){
    if((flg[a]==0)&&(flg[b]==0)){
        nm[8]=a; nm[46]=b;
        flg[a]=1; flg[b]=1;
        stp09();
        flg[b]=0; flg[a]=0;}}
}
/* Level #2 *
/* Set n9 & n35 *
void stp09(){
    short a,b;
    for(a=1;a<65;a++){b=CC-a;
        if((flg[a]==0)&&(flg[b]==0)){
            nm[9]=a; nm[35]=b;
            flg[a]=1; flg[b]=1;
            stp10();
            flg[b]=0; flg[a]=0;}}
}
}
/* Set n10=SSM-n5-n6-n9 & n36 *
void stp10(){
    short a,b;
    a=SSM-nm[5]-nm[6]-nm[9];
    b=SSM-nm[47]-nm[48]-nm[35];
    if((0<a)&&(a<65)&&(a+b==CC)){
        if((flg[a]==0)&&(flg[b]==0)){
            nm[10]=a; nm[36]=b;
            flg[a]=1; flg[b]=1;
            stp11();
            flg[b]=0; flg[a]=0;}}
}
}
/* Set n11=SSM-n6-n7-n10 & n33 *
void stp11(){
    short a,b;
    a=SSM-nm[6]-nm[7]-nm[10];
    b=SSM-nm[48]-nm[45]-nm[36];
    if((0<a)&&(a<65)&&(a+b==CC)){
        if((flg[a]==0)&&(flg[b]==0)){
            nm[11]=a; nm[33]=b;
            flg[a]=1; flg[b]=1;
            stp12();
            flg[b]=0; flg[a]=0;}}
}
}
/* Set n12=SSM-n7-n8-n11 & n34 *
void stp12(){
    short a,b;
    a=SSM-nm[7]-nm[8]-nm[11];
    b=SSM-nm[45]-nm[46]-nm[33];
    if((0<a)&&(a<65)&&(a+b==CC)){
        if((flg[a]==0)&&(flg[b]==0)){
            nm[12]=a; nm[34]=b;
            flg[a]=1; flg[b]=1;
            stp13();
            flg[b]=0; flg[a]=0;}}
}
}
/* Set n13=SSM-n1-n5-n9 & n39 *
void stp13(){
    short a,b;
    a=SSM-nm[1]-nm[5]-nm[9];
    b=SSM-nm[43]-nm[47]-nm[35];
    if((0<a)&&(a<65)&&(a+b==CC)){
        if((flg[a]==0)&&(flg[b]==0)){
            nm[13]=a; nm[39]=b;
            flg[a]=1; flg[b]=1;
            stp14();

```

```

        flg[b]=0; flg[a]=0;}}
}
/** Set n14=SSM-n9-n10-n13 & n40 *
void stp14(){
    short a,b;
    a=SSM-nm[9]-nm[10]-nm[13];
    b=SSM-nm[35]-nm[36]-nm[39];
    if((0<a)&&(a<65)&&(a+b==CC)){
        if((flg[a]==0)&&(flg[b]==0)){
            nm[14]=a; nm[40]=b;
            flg[a]=1; flg[b]=1;
            stp15();
            flg[b]=0; flg[a]=0;}}
}
/** Set n15=SSM-n10-n11-n14 & n37 *
void stp15(){
    short a,b;
    a=SSM-nm[10]-nm[11]-nm[14];
    b=SSM-nm[36]-nm[33]-nm[40];
    if((0<a)&&(a<65)&&(a+b==CC)){
        if((flg[a]==0)&&(flg[b]==0)){
            nm[15]=a; nm[37]=b;
            flg[a]=1; flg[b]=1;
            stp16();
            flg[b]=0; flg[a]=0;}}
}
/** Set n16=SSM-n11-n12-n15 & n38 *
void stp16(){
    short a,b,sm;
    a=SSM-nm[11]-nm[12]-nm[15];
    b=SSM-nm[33]-nm[34]-nm[37];
    if((0<a)&&(a<65)&&(a+b==CC)){
        if((flg[a]==0)&&(flg[b]==0)){
            nm[16]=a; nm[38]=b;
            flg[a]=1; flg[b]=1;
            sm=nm[1]+nm[6]+nm[11]+nm[16]+nm[38]+nm[33]+nm[48]+nm[43];
            if(sm==LSM){stp17();}
            flg[b]=0; flg[a]=0;}}
}
/** Level #3 *
/** Set n18 & n60 *
void stp17(){
    short a,b;
    for(a=1;a<65;a++){b=CC-a;
        if((flg[a]==0)&&(flg[b]==0)){
            nm[18]=a; nm[60]=b;
            flg[a]=1; flg[b]=1;
            if(nm[4]+nm[18]+nm[60]+nm[42]==SSM){stp18();}
            flg[b]=0; flg[a]=0;}}
}
/** Set n17=SSM-n42-n41-n18 & n59 *
void stp18(){
    short a,b;
    a=SSM-nm[42]-nm[41]-nm[18];
    b=SSM-nm[4]-nm[3]-nm[60];
    if((0<a)&&(a<65)&&(a+b==CC)){
        if((flg[a]==0)&&(flg[b]==0)){
            nm[17]=a; nm[59]=b;
            flg[a]=1; flg[b]=1;
            stp19();
            flg[b]=0; flg[a]=0;}}
}
/** Set n20=SSM-n17-n41-n44 & n58 *
void stp19(){
    short a,b;

```

```

a=SSM-nm[17]-nm[41]-nm[44];
b=SSM-nm[59]-nm[3]-nm[2];
if((0<a)&&(a<65)&&(a+b==CC)){
    if((flg[a]==0)&&(flg[b]==0)){
        nm[20]=a; nm[58]=b;
        flg[a]=1; flg[b]=1;
        stp20();
        flg[b]=0; flg[a]=0;}}
}
/* Set n19=SSM-n20-n44-n43 & n57 *
void stp20(){
short a,b,c;
a=SSM-nm[20]-nm[44]-nm[43];
b=SSM-nm[58]-nm[2]-nm[1];
c=LSM-nm[1]-nm[2]-nm[3]-nm[4]-nm[18]-nm[17]-nm[20];
if((0<a)&&(a<65)&&(a+b==CC)){
    if((a==c)&&(flg[a]==0)&&(flg[b]==0)){
        nm[19]=a; nm[57]=b;
        flg[a]=1; flg[b]=1;
        stp21();
        flg[b]=0; flg[a]=0;}}
}
/* Set n23=SSM-n19-n1-n5 & n61 *
void stp21(){
short a,b;
a=SSM-nm[19]-nm[1]-nm[5];
b=SSM-nm[57]-nm[43]-nm[47];
if((0<a)&&(a<65)&&(a+b==CC)){
    if((flg[a]==0)&&(flg[b]==0)){
        nm[23]=a; nm[61]=b;
        flg[a]=1; flg[b]=1;
        stp22();
        flg[b]=0; flg[a]=0;}}
}
/* Set n27=SSM-n23-n5-n9 & n49 *
void stp22(){
short a,b;
a=SSM-nm[23]-nm[5]-nm[9];
b=SSM-nm[61]-nm[47]-nm[35];
if((0<a)&&(a<65)&&(a+b==CC)){
    if((flg[a]==0)&&(flg[b]==0)){
        nm[27]=a; nm[49]=b;
        flg[a]=1; flg[b]=1;
        stp23();
        flg[b]=0; flg[a]=0;}}
}
/* Set n31=SSM-n27-n9-n13 & n53 *
void stp23(){
short a,b,sm;
a=SSM-nm[27]-nm[9]-nm[13];
b=SSM-nm[49]-nm[35]-nm[39];
if((0<a)&&(a<65)&&(a+b==CC)){
    if((flg[a]==0)&&(flg[b]==0)){
        nm[31]=a; nm[53]=b;
        flg[a]=1; flg[b]=1;
        sm=nm[1]+nm[5]+nm[9]+nm[13]+nm[53]+nm[49]+nm[61]+nm[57];
        if(sm==LSM){stp24();}
        flg[b]=0; flg[a]=0;}}
}
/* Level #4 *
/* Set n24=SSM-n20-n19-n23 & n62 *
void stp24(){
short a,b;
a=SSM-nm[20]-nm[19]-nm[23];
b=SSM-nm[58]-nm[57]-nm[61];
if((0<a)&&(a<65)&&(a+b==CC)){

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        if((flg[a]==0)&&(flg[b]==0)){
            nm[24]=a; nm[62]=b;
            flg[a]=1; flg[b]=1;
            stp25();
            flg[b]=0; flg[a]=0;}}
    }
    /* Set n21=SSM-n17-n20-n24 & n63 */
    void stp25(){
        short a,b;
        a=SSM-nm[17]-nm[20]-nm[24];
        b=SSM-nm[59]-nm[58]-nm[62];
        if((0<a)&&(a<65)&&(a+b==CC)){
            if((flg[a]==0)&&(flg[b]==0)){
                nm[21]=a; nm[63]=b;
                flg[a]=1; flg[b]=1;
                stp26();
                flg[b]=0; flg[a]=0;}}
        }
    /* Set n22=SSM-n18-n17-n21 & n64 */
    void stp26(){
        short a,b,c,d;
        a=SSM-nm[18]-nm[17]-nm[21];
        b=SSM-nm[60]-nm[59]-nm[63];
        c=SSM-nm[18]-nm[4]-nm[8];
        d=SSM-nm[60]-nm[42]-nm[46];
        if((0<a)&&(a<65)&&(a+b==CC)){
            if((a==c)&&(flg[a]==0)&&(flg[b]==0)){
                nm[22]=a; nm[64]=b;
                flg[a]=1; flg[b]=1;
                stp27();
                flg[b]=0; flg[a]=0;}}
        }
    /* Set n28=SSM-n24-n23-n27 & n50 */
    void stp27(){
        short a,b;
        a=SSM-nm[24]-nm[23]-nm[27];
        b=SSM-nm[62]-nm[61]-nm[49];
        if((0<a)&&(a<65)&&(a+b==CC)){
            if((flg[a]==0)&&(flg[b]==0)){
                nm[28]=a; nm[50]=b;
                flg[a]=1; flg[b]=1;
                stp28();
                flg[b]=0; flg[a]=0;}}
        }
    /* Set n25=SSM-n21-n24-n28 & n51 */
    void stp28(){
        short a,b;
        a=SSM-nm[21]-nm[24]-nm[28];
        b=SSM-nm[63]-nm[62]-nm[50];
        if((0<a)&&(a<65)&&(a+b==CC)){
            if((flg[a]==0)&&(flg[b]==0)){
                nm[25]=a; nm[51]=b;
                flg[a]=1; flg[b]=1;
                stp29();
                flg[b]=0; flg[a]=0;}}
        }
    /* Set n26=SSM-n22-n21-n25 & n52 */
    void stp29(){
        short a,b,c,d;
        a=SSM-nm[22]-nm[21]-nm[25];
        b=SSM-nm[64]-nm[63]-nm[51];
        c=SSM-nm[22]-nm[8]-nm[12];
        d=SSM-nm[64]-nm[46]-nm[34];
        if((0<a)&&(a<65)&&(a+b==CC)){
            if((a==c)&&(flg[a]==0)&&(flg[b]==0)){
                nm[26]=a; nm[52]=b;

```

```

        flg[a]=1; flg[b]=1;
        stp30();
        flg[b]=0; flg[a]=0;}}
}
/* Set n32=SSM-n28-n27-n31 & n54 *
void stp30(){
short a,b,c,d;
a=SSM-nm[28]-nm[27]-nm[31];
b=SSM-nm[50]-nm[49]-nm[53];
c=SSM-nm[31]-nm[39]-nm[40];
d=SSM-nm[53]-nm[13]-nm[14];
if((0<a)&&(a<65)&&(a+b==CC)){
    if((a==c)&&(flg[a]==0)&&(flg[b]==0)){
        nm[32]=a; nm[54]=b;
        flg[a]=1; flg[b]=1;
        stp31();
        flg[b]=0; flg[a]=0;}}
}
/* Set n29=SSM-n25-n28-n32 & n55 *
void stp31(){
short a,b,c,d;
a=SSM-nm[25]-nm[28]-nm[32];
b=SSM-nm[51]-nm[50]-nm[54];
c=SSM-nm[32]-nm[37]-nm[40];
d=SSM-nm[54]-nm[15]-nm[14];
if((0<a)&&(a<65)&&(a+b==CC)){
    if((a==c)&&(flg[a]==0)&&(flg[b]==0)){
        nm[29]=a; nm[55]=b;
        flg[a]=1; flg[b]=1;
        stp32();
        flg[b]=0; flg[a]=0;}}
}
/* Set n30=SSM-n12-n26-n16 & n56 *
void stp32(){
short a,b,c,d;
a=SSM-nm[12]-nm[26]-nm[16];
b=SSM-nm[34]-nm[52]-nm[38];
c=SSM-nm[26]-nm[25]-nm[29];
d=SSM-nm[52]-nm[51]-nm[55];
if((a+b==CC)&&(0<a)&&(a<65)){
    if((a==c)&&(b==d)&&(flg[a]==0)&&(flg[b]==0)){
        nm[30]=a; nm[56]=b;
        flg[a]=1; flg[b]=1;
        stp33();
        flg[b]=0; flg[a]=0;}}
}
/* Check some Composite Sums *
void stp33(){
short sm1,sm2,sm3;
sm1=nm[30]+nm[29]+nm[38]+nm[37];
sm2=nm[16]+nm[30]+nm[56]+nm[38];
sm3=nm[15]+nm[16]+nm[55]+nm[56];
if((sm1==SSM)&&(sm2==SSM)&&(sm3==SSM)){ans26print();}
}
//
/* Print Procedure for Listing the Answers *
void ans26print(){
cnt++; cnt2++;
if(cnt2==1){
    printf("%31d/6dEC02\n",cnt);
    pr1pat26();
    pr2pat26();
}
}
//
/* Print the Pattern-1 *

```

```

void pr1pat26(){
printf("%4d----%2d%7d----%2d", nm[1], nm[2], nm[3], nm[4]);
printf("%8d----%2d%7d----%2d\n", nm[33], nm[34], nm[35], nm[36]);
printf("   %3d--+-%2d   %3d--+-%2d", nm[17], nm[18], nm[19], nm[20]);
printf("   %3d--+-%2d   %3d--+-%2d\n", nm[49], nm[50], nm[51], nm[52]);
printf("%4d--l-%2d %4d--l-%2d l", nm[5], nm[6], nm[7], nm[8]);
printf("%5d--l-%2d %4d--l-%2d l\n", nm[37], nm[38], nm[39], nm[40]);
printf("%7d----%2d%7d----%2d", nm[21], nm[22], nm[23], nm[24]);
printf("%8d----%2d%7d----%2d\n", nm[53], nm[54], nm[55], nm[56]);
printf("\n");
//
printf("%4d----%2d%7d----%2d", nm[9], nm[10], nm[11], nm[12]);
printf("%8d----%2d%7d----%2d\n", nm[41], nm[42], nm[43], nm[44]);
printf("   %3d--+-%2d   %3d--+-%2d", nm[25], nm[26], nm[27], nm[28]);
printf("   %3d--+-%2d   %3d--+-%2d\n", nm[57], nm[58], nm[59], nm[60]);
printf("%4d--l-%2d %4d--l-%2d l", nm[13], nm[14], nm[15], nm[16]);
printf("%5d--l-%2d %4d--l-%2d l\n", nm[45], nm[46], nm[47], nm[48]);
printf("%7d----%2d%7d----%2d", nm[29], nm[30], nm[31], nm[32]);
printf("%8d----%2d%7d----%2d\n", nm[61], nm[62], nm[63], nm[64]);
printf("\n");
}
//
/* Conceptual Diagrams for Dimensional Conversion *
// 1----- 2----- 3----- 4   /CG4                1/C8M                1/Sm1
// |17      18      19      |20      1  2  3  4 25 26 27 28      1  2  3  4 18 17 20 19
// 5 33     6 34     7 35     8 36     5  6  7  8 29 30 31 32     5  6  7  8 22 21 24 23
// |21 49---22---50---23---51---24---52     9 10 11 12 17 18 19 20     9 10 11 12 26 25 28 27
// 9 37 |10 38   11 39   12 40 |     13 14 15 16 21 22 23 24     13 14 15 16 30 29 32 31
// |25 53  26 54  27 55 |28 56     51 52 49 50 43 44 41 42     53 54 55 56 38 37 40 39
// 13--41-|-14--42---15--43---16 44 |     55 56 53 54 47 48 45 46     49 50 51 52 34 33 36 35
//  29 57  30 58  31 59  32 60     59 60 57 58 35 36 33 34     61 62 63 64 46 45 48 47
//    45 |    46    47    48 |     63 64 61 62 39 40 37 38     57 58 59 60 42 41 44 43
//      61-----62-----63-----64
//
/* Print the Solution Set of 'C&C'MC4, CCMS8Multi and MS88Sm13 *
void pr2pat26(){
printf("%3d-----%2d-----%2d-----%2d ",
nm[1], nm[2], nm[3], nm[4]);
printf(" /MC4                /C8M                /CSP\n");
printf(" %2d      %2d      %2d      %2d      ",
nm[17], nm[18], nm[19], nm[20]);
printf("%4d%3d%3d%3d%3d%3d%3d%3d",
nm[1], nm[2], nm[3], nm[4], nm[25], nm[26], nm[27], nm[28]);
printf("%5d%3d%3d%3d%3d%3d%3d%3d\n",
nm[1], nm[2], nm[3], nm[4], nm[18], nm[17], nm[20], nm[19]);
printf(" %2d %2d %2d %2d %2d %2d %2d %2d ",
nm[5], nm[33], nm[6], nm[34], nm[7], nm[35], nm[8], nm[36]);
printf("%4d%3d%3d%3d%3d%3d%3d%3d",
nm[5], nm[6], nm[7], nm[8], nm[29], nm[30], nm[31], nm[32]);
printf("%5d%3d%3d%3d%3d%3d%3d%3d\n",
nm[5], nm[6], nm[7], nm[8], nm[22], nm[21], nm[24], nm[23]);
printf(" %2d %2d %2d %2d %2d %2d %2d %2d %2d %2d ",
nm[21], nm[49], nm[22], nm[50], nm[23], nm[51], nm[24], nm[52]);
printf("%4d%3d%3d%3d%3d%3d%3d%3d",
nm[9], nm[10], nm[11], nm[12], nm[17], nm[18], nm[19], nm[20]);
printf("%5d%3d%3d%3d%3d%3d%3d%3d\n",
nm[9], nm[10], nm[11], nm[12], nm[26], nm[25], nm[28], nm[27]);
printf(" %2d %2d l %2d %2d %2d %2d %2d %2d l ",
nm[9], nm[37], nm[10], nm[38], nm[11], nm[39], nm[12], nm[40]);
printf("%4d%3d%3d%3d%3d%3d%3d%3d",
nm[13], nm[14], nm[15], nm[16], nm[21], nm[22], nm[23], nm[24]);
printf("%5d%3d%3d%3d%3d%3d%3d%3d\n",
nm[13], nm[14], nm[15], nm[16], nm[30], nm[29], nm[32], nm[31]);
printf(" %2d %2d %2d %2d %2d %2d %2d %2d %2d %2d ",
nm[25], nm[53], nm[26], nm[54], nm[27], nm[55], nm[28], nm[56]);

```

```

printf("%4d%3d%3d%3d%3d%3d%3d",
       nm[51], nm[52], nm[49], nm[50], nm[43], nm[44], nm[41], nm[42]);
printf("%5d%3d%3d%3d%3d%3d%3d\n",
       nm[53], nm[54], nm[55], nm[56], nm[38], nm[37], nm[40], nm[39]);
printf(" %2d--%2d-|-%2d--%2d---%2d---%2d---%2d %2d | ",
       nm[13], nm[41], nm[14], nm[42], nm[15], nm[43], nm[16], nm[44]);
printf("%4d%3d%3d%3d%3d%3d%3d",
       nm[55], nm[56], nm[53], nm[54], nm[47], nm[48], nm[45], nm[46]);
printf("%5d%3d%3d%3d%3d%3d%3d\n",
       nm[49], nm[50], nm[51], nm[52], nm[34], nm[33], nm[36], nm[35]);
printf(" %2d %2d %2d %2d %2d %2d %2d %2d ",
       nm[29], nm[57], nm[30], nm[58], nm[31], nm[59], nm[32], nm[60]);
printf("%4d%3d%3d%3d%3d%3d%3d",
       nm[59], nm[60], nm[57], nm[58], nm[35], nm[36], nm[33], nm[34]);
printf("%5d%3d%3d%3d%3d%3d%3d\n",
       nm[61], nm[62], nm[63], nm[64], nm[46], nm[45], nm[48], nm[47]);
printf(" %2d | %2d %2d %2d | ",
       nm[45], nm[46], nm[47], nm[48]);
printf("%4d%3d%3d%3d%3d%3d%3d",
       nm[63], nm[64], nm[61], nm[62], nm[39], nm[40], nm[37], nm[38]);
printf("%5d%3d%3d%3d%3d%3d%3d\n",
       nm[57], nm[58], nm[59], nm[60], nm[42], nm[41], nm[44], nm[43]);
printf(" %2d-----%2d-----%2d-----%2d\n",
       nm[61], nm[62], nm[63], nm[64]);
printf("\n");
}
//

```