A Catalogue of Combinatorial Geometries

By John E. Blackburn, Henry H. Crapo and Denis A. Higgs

Abstract. We include in the microfiche section of this issue a catalogue of all the different geometric configurations which may be constructed from n points, $n \leqq 8$, by specifying their points, lines, planes, . . . , colines, copoints, their *flats* of each rank. It suffices to list the copoints of each combinatorial geometry G, because the colines of G are the copoints of a geometry earlier in the list, which may be located by deleting one component of the designator of G.

1. **Introduction.** We list, in the microfiche section of this issue, all the different geometrical configurations which may be constructed with n points, $n \leqq 8$.

Combinatorial geometries [2] are very general, including the projective, affine, and Möbius (etc.) geometries over various fields, any subgeometry (determined by a subset of the set of points) of such a geometry, as well as many geometries that are not so representable. The flats of a combinatorial geometry satisfy the following simple axioms: Each flat is a set of points, the empty set $\varnothing$ and the one-point sets are flats, any intersection of flats is a flat, and

> the points not in a flat Y (of rank k, say)
> are partitioned by inclusion in the flats of
> rank $k + 1$ which contain the flat Y.

The theory of single-point extensions of geometric lattices [1] provides a scheme for computer generation of combinatorial geometries. Using that scheme, we verified the catalogue [5] of the 26 geometries on 6 points and of the 101 geometries on 7 points and used it as the input for the next stage in generation. We compared the resulting geometries pairwise for isomorphism, and retained one representative of each isomorphism class. Finally, we made the catalogue consistent with respect to the truncation operation: The colines of any listed geometry are also the copoints of another listed geometry. This enables us to give complete information about each geometric lattice, using a single typed line for each geometry.

The information in this catalogue is relevant to a variety of current research efforts. It is intended primarily as a source of counterexamples.* The theory of

* Readers desiring a copy of this catalogue on punched cards, for computational use, should communicate directly with the authors.

combinatorial geometries has fortunately progressed now to a point where the geometries on 5 points, and to some extent the graphically-representable geometries, no longer suffice for checking conjectures.

Some typical unsolved problems which may become more accessible after a close look at these small geometries, are the following:

(a) Provide a general coordinatization scheme for combinatorial geometries, and characterize those coordinatizable over various fields (known for GF(2) and GF(3)).

(b) Characterize the geometries (or subgeometries of the geometries) A_k^n, the lattices of varieties of n-dimensional space over a field F, varieties determined by polynomials in n variables, degree $\leq k$.

(c) Characterize the subgeometries of Dilworth completions of lower k-truncations of free geometries (known for $k = 0$, the free geometries, and for $k = 1$, the graphic geometries).

(d) Characterize simplicial geometries.

(e) Investigate the chromatic number, or critical exponent, of a geometry with respect to a field over which it is coordinatizable.

For a discussion of geometries, and for definitions of terms used in this paper, we refer the reader to the monograph *Combinatorial Geometries* [2].

2. Using the Catalogue.   Geometries are listed in increasing order by number of points, then by rank. Geometries of equal cardinality and rank are arranged in an order reflecting increasing triviality (points in more general position).

The listing for each geometry of cardinality n and rank k begins with the designator sequence

$$1 \quad n \quad f_2 \quad f_3 \quad \cdots \quad f_{k-1} \quad 1,$$

where f_i is the number of flats of rank i. The digit f_i is followed by a letter if there is more than one possible configuration with the sequence

$$1 \quad n \quad f_2 \quad \cdots \quad f_i \quad 1.$$

Following the designator, we list the nontrivial copoints of the geometry, each copoint being given as a set of points. The *trivial* copoints in a geometry of rank k are those consisting of exactly $k - 1$ points, the least possible number. The concluding entry "$m(_{k-1}^{n})$" in each copoint list indicates for each geometry of rank k on n points, the number of trivial copoints. These can easily be reconstructed by hand, because every $k - 1$ element subset of the point set must be in at least one copoint. The listing of copoints provides immediate access to the point-copoint incidence relation which determines the geometry. (Recall that the set-theoretic complements of the copoints are the bonds of the geometry, i.e., the circuits of the orthogonal geometry.)

In order to draw the Hasse diagram of the geometric lattice of a geometry with designator

$$1 \quad 8 \quad 22c \quad 19b \quad 1,$$

say, we start with the unit element "*ABCDEFGH*" at the top, and list all the copoints

(including trivial copoints) on a line beneath this. The colines (in this case, the lines) are given earlier in the catalogue with designator

$$1 \quad 8 \quad 22c \quad 1.$$

The coplanes occur still earlier, with designator

$$1 \quad 8 \quad 1,$$

etc. If each flat is joined to those flats of the next higher rank which contain it, the Hasse diagram is completed.

To draw the associated geometric configuration, begin with complete information about the nontrivial flats of various ranks. The nontrivial lines in the geometry $1 \quad 8 \quad 22c \quad 19b \quad 1$ are listed after the designator $1 \quad 8 \quad 22c \quad 1$:

$$ABC \qquad AED \qquad DFG.$$

We begin by drawing these in, as in Fig. 1.
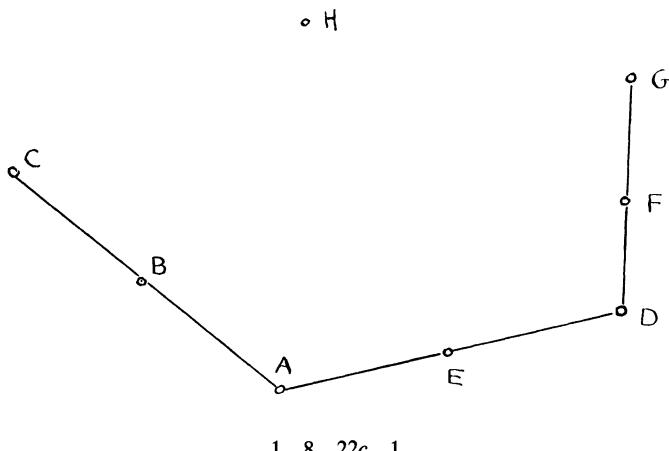
$$1 \quad 8 \quad 22c \quad 1$$

FIGURE 1

The geometry will now be completely determined, once we ascertain whether the lines ABC and DFG are coplanar and determine the position of the point H.

Turning now to the list of nontrivial planes, after the designator $1 \quad 8 \quad 22c \quad 19b \quad 1$, we see that ABC and DFG are not coplanar. All the planes such as $ABCF$ and $ABCDE$ are predictable. The only new information is given by the planes

$$BEFH \quad \text{and} \quad CEGH.$$

If we redraw our 7 point geometry $ABCDEFG$ in such a way that the planes BEF and CEG intersect in a clearly recognizable line, we may now place the point H anywhere on that line, just so long as it does not line up with any pair of points.
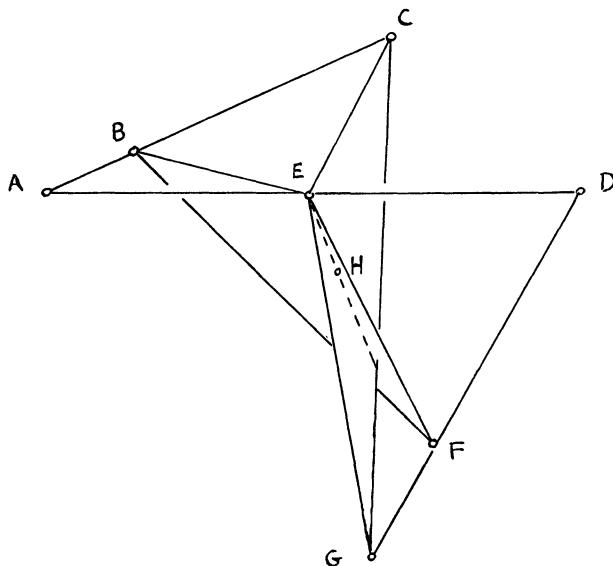
1   8   22c   19b   1

FIGURE 2

3. Observations.

(a) *Representability.* Among the 8-point geometries are some that are relevant to questions on representability. By taking a failed Pappus configuration, we obtain a geometry on 9 points which is not representable over any field and, by taking a failed Desargues configuration, we obtain a geometry on 10 points which is not representable over any division ring. Ingleton [6] had conjectured that every geometry on k points is representable over some field if $k \leq 8$ and over some division ring if $k \leq 9$. An inspection of the geometries on 7 or fewer points shows that these are all representable over some field—indeed, except for the 7-point projective plane and its orthogonal, they are all representable over the rationals. However, among the 8-point geometries occur some, such as   1   8   28   17   1, which are not representable over any division ring. This is a consequence of the fact that every subgeometry G of a projective geometry has the following property: Whenever 4 distinct lines of G are such that no 3 of the lines are coplanar, but the 4 lines are coplanar in pairs with the possible exception of one of the 6 pairs, then the 2 lines of this remaining pair are also coplanar. Since   1   8   28   17   1   fails to possess this property, it is not isomorphic to any subgeometry of a projective geometry and is therefore not representable over any division ring. Incidentally,   1   8   28   17   1 may be regarded as the affine geometry on 8 points over GF(2) (1   8   28   14   1) in which one of the planes has been broken into 4 trivial planes. Richard Rado has described a similar 8-point nonrepresentable geometry, but with more broken planes. Another 8-point geometry which has been mentioned in connection with repre-

sentation problems is 1 8 12*a* 1. This is one of the classical configurations and is known to be representable over the complex numbers but not over the real numbers.
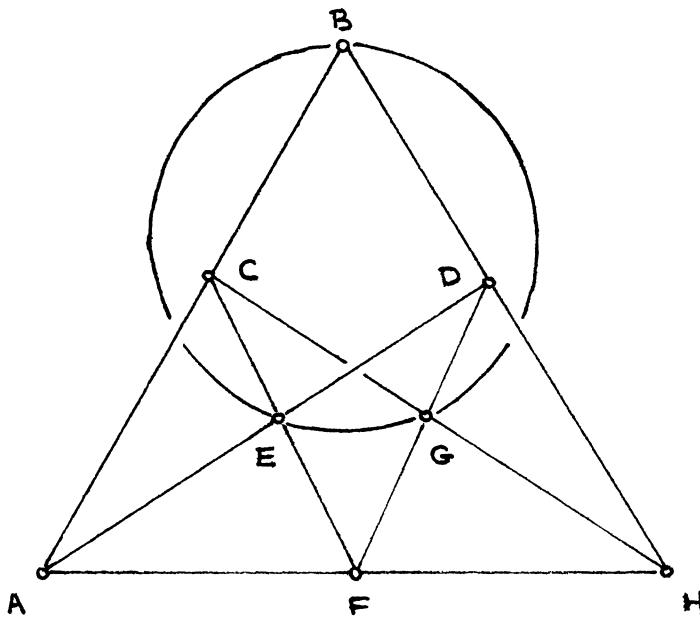
1 8 12*a* 1

A	B	E	C	G	F	H	D
x	x		x				
	x	x		x			
		x	x		x		
			x	x		x	
				x	x		x
x					x	x	
		x				x	x
x		x					x

FIGURE 3

(b) *Geometries with Equal Polynomials.* The catalogue reveals many different geometries having the same Tutte polynomial [3]. The first example is on six points, where the geometries 1 6 11*a* 1 and 1 6 11*b* 1 have Tutte polynomial

$$\alpha(x, y) = x^3 + 3x^2 + 4x + 2xy + 4y + 3y^2 + y^3.$$

(Both these geometries are isomorphic to their orthogonal geometries, so the Tutte polynomial has x-y symmetry.)
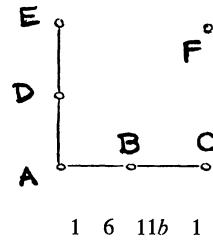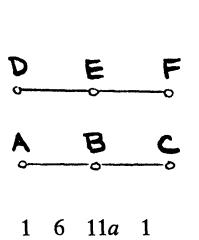
FIGURE 4

Geometries have the same Tutte polynomial if and only if they have the same numbers s_{ij} of subsets with i points and rank j, for all i, j. Geometries with equal Tutte polynomials have lattices with the same characteristic polynomials, and so do their orthogonal geometries. They also have the same numbers of coboundaries and cycles with kernels of given rank, and images of given size, whenever these constructions are relevant.
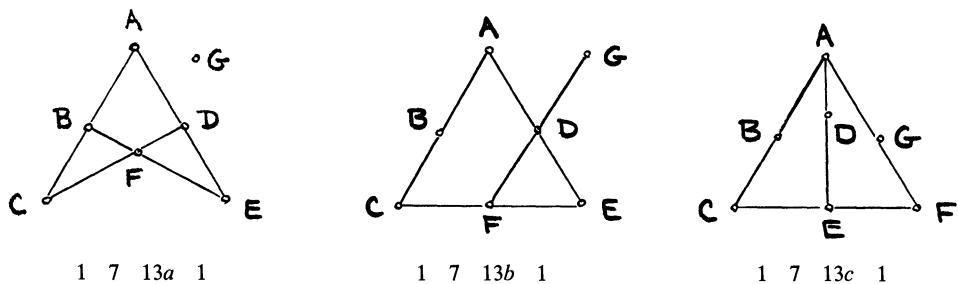
FIGURE 5

On seven points, the geometries $1 \quad 7 \quad 13a \quad 1$, $1 \quad 7 \quad 13b \quad 1$, and $1 \quad 7 \quad 13c \quad 1$ all have the Tutte polynomial

$$x^3 + 4x^2 + 6x + 4xy + 6y + 6y^2 + 3y^3 + y^4.$$

(c) *Isomorphic Extensions from Nonisomorphic Cuts.* We generated 8-point geometries by taking the distinct 7-point geometric lattices one at a time, searching for all modular cuts on them, and producing the corresponding single-point extensions, in which the added point depends upon the flats which are in the cut. Consider a situation in which, for two modular cuts M, N on a geometry with lattice L, there is an automorphism of the geometry (a permutation of the points of L which carries flats to flats) carrying the cut M onto the cut N. In that event, the associated extensions will be isomorphic (under an isomorphism which fixes the added point). It seemed reasonable to suspect that if there were *no* such automorphism, then the

extensions of the lattice L by the cuts M and N would be extensions of the *same* geometry in two essentially different ways, and therefore would be nonisomorphic. But this is not true.

Before we give a counterexample, let us rephrase the above conjecture in such a way as to make it appear much less likely. Given two $(n - 1)$-point subgeometries $H = G - e$ and $H' = G - e'$ in an n-point geometry G, consider the modular cuts M and M' used to extend H and H' to G. There is an isomorphism from H to H', carrying the cut M onto the cut M' if and only if there is an automorphism of G which carries H onto H' (that is, if and only if H and H' are *conjugate* in G). Thus, the above situation arises precisely when the subgeometries H and H' are conjugate subgeometries of G. The (false) conjecture then reads: If two $(n - 1)$-point subgeometries of an n-point geometry are isomorphic, they are conjugate. Put this way, the conjecture sounds appropriately dubious.
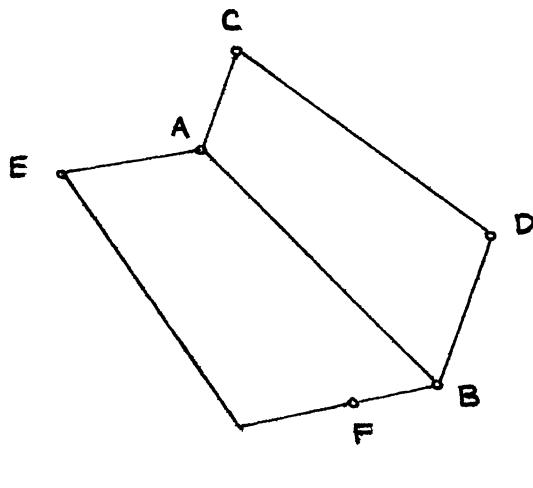
1　6　15　14　1

FIGURE 6

In the geometry 1　6　15　14　1, we form modular cuts M and N as follows:

$$M = \{ ACE, \quad BDF, \quad ABCDEF \},$$

$$N = \{ CDE, \quad BDF, \quad ABCDEF \}.$$

No automorphism can carry M into N, because the planes in N intersect, those in M do not. The extensions are both isomorphic to the geometry 1　7　21　23c　1, as indicated in Fig. 7.

We have a geometry on seven points, containing two 6-point subgeometries which are *isomorphic but not conjugate*.

(d) *The Number of Geometries.* Tabulated below are the numbers of non-isomorphic geometries of rank k on n points, for $1 \leqq k \leqq n \leqq 8$.

1 6 15 14 1
extended by *N*

1 6 15 14 1
extended by *M*

1 7 21 23*c* 1
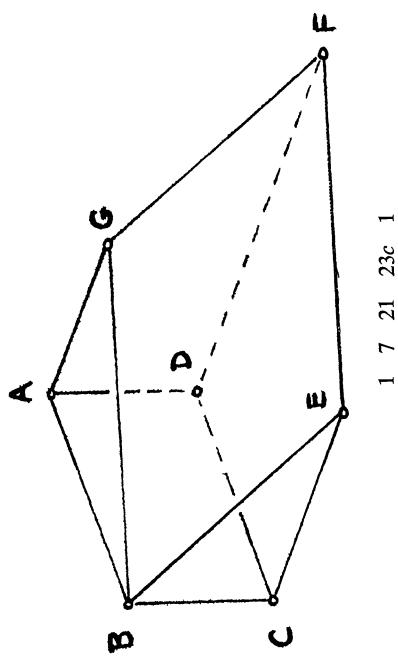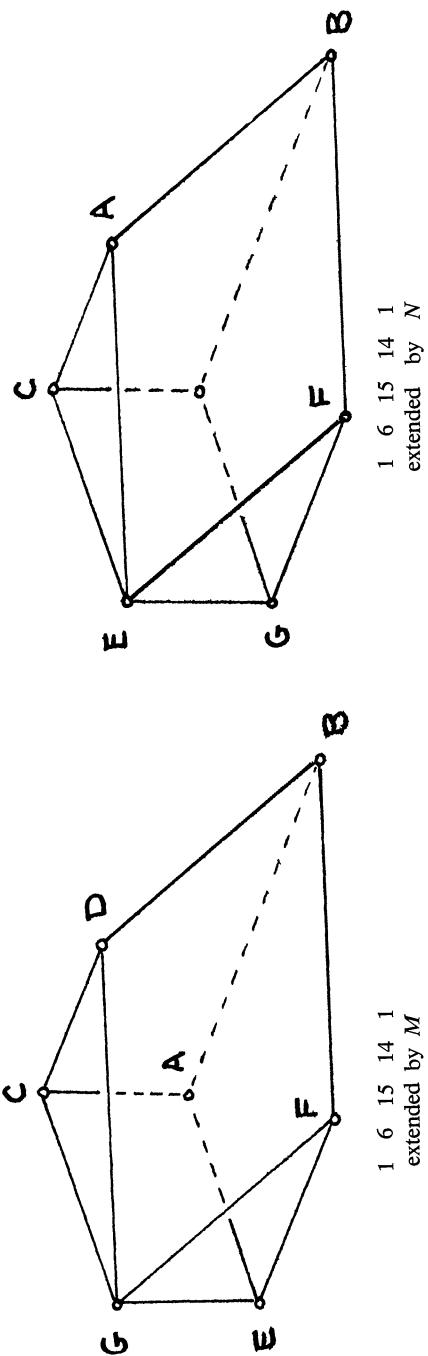
FIGURE 7

	8 pts	7 pts	6 pts	5 pts	4 pts	3 pts	2 pts	1 pt
rank 1	·	·	·	·	·	·	·	1
2	1	1	1	1	1	1	1	
3	68	23	9	4	2	1		
4	617	49	11	3	1			
5	217	22	4	1				
6	40	5	1					
7	6	1						
8	1							

We note that geometries of rank equal to or just greater than $n/2$ soon predominate, as n increases. An enumeration of the catalogue entries 1 8 28 f_3 1 also reveals that among the 617 geometries of rank $n/2$ on $n = 8$ points, 322 have only trivial colines. These are the geometries associated with Hartmanis partitions of type 3, in [2].

Doyen [4] has given the number of plane geometries on nine points as 383. Doyen has proved that these are at least 2^n nonisomorphic *planes* on n points, for $n \geqq 10$.

Welsh [9] conjectures that

$$f_{m+n} > f_m \cdot f_n$$

where f_n is the number of nonisomorphic pregeometries on n elements. This is surely correct.

This catalogue exhibits the rapid growth of the number $g(n)$ of geometries on n points. Piff and Welsh [8] have now replaced the Crapo-Rota estimate [2]

$$g(n+1) \simeq (g(n))^{3/2}, \qquad g(n) \simeq k^{((3/2)^n)}$$

by proven asymptotic lower bounds b_λ, for any $\lambda < 1$,

$$(\exists\, N,\ \forall n > N)\quad g(n) > b_\lambda(n) = 2^{(2^{\lambda n})},$$

which is even closer to the absolute upper bound $2^{(2^n)}$ for structures which are determined by families of subsets of a set. Piff and Welsh give an even larger asymptotic lower bound

$$(\exists\, N,\ \forall n > N)\quad g(n) > n^{(2^n/(n^{5/2}))}.$$

It is unlikely that a complete tabulation of 9-point geometries will be either feasible or desirable, as there will be many thousands of them.** The recursion $g(9) = (g(8))^{3/2}$ predicts 29260. We must caution projective plane theorists that this program is not recommended for the construction of a projective plane on 111 points!

4. On the Program. Of the three stages in the production of the catalogue: search for modular cuts, construction of the corresponding lattice extension, and isomorphism check, the first stage requires the most computer time. We tried in a

** The Piff-Welsh lower bound gives no information concerning $g(9)$, because it asserts merely that $g(8) \geqq 19$, $g(9) \geqq 103$.

variety of ways to reduce that time demand, and evolved a number of procedures, two of which we now describe.

At one stage in the development of the program, we thought it advisable to search through all subsets of the copoint sets of the 7-point geometries, generating from each the smallest modular cut containing that subset. We could eliminate all subsets which generate modular cuts containing any point, because the associated extensions leave the geometry unchanged (merely doubling a point, or placing a point in the closure of the empty set). Once such a subset is found, it is clearly futile to inspect any subsets containing it.

This sort of situation occurs frequently in combinatorial problems. We wish to follow a circular path through 2^n points (representing the subsets of an n-element set), but wish to omit those points which represent supersets of sets at which we have already obtained trivial results. Consider the following flow diagram. Subsets of an n-element set are indicated as usual by n-place binary numbers. Choice "A" is made 0 or 1 in accordance with the last digit in the binary number. Choice "B" is made 1 if the subset just checked gave trivial results (so that all larger subsets should be ignored).
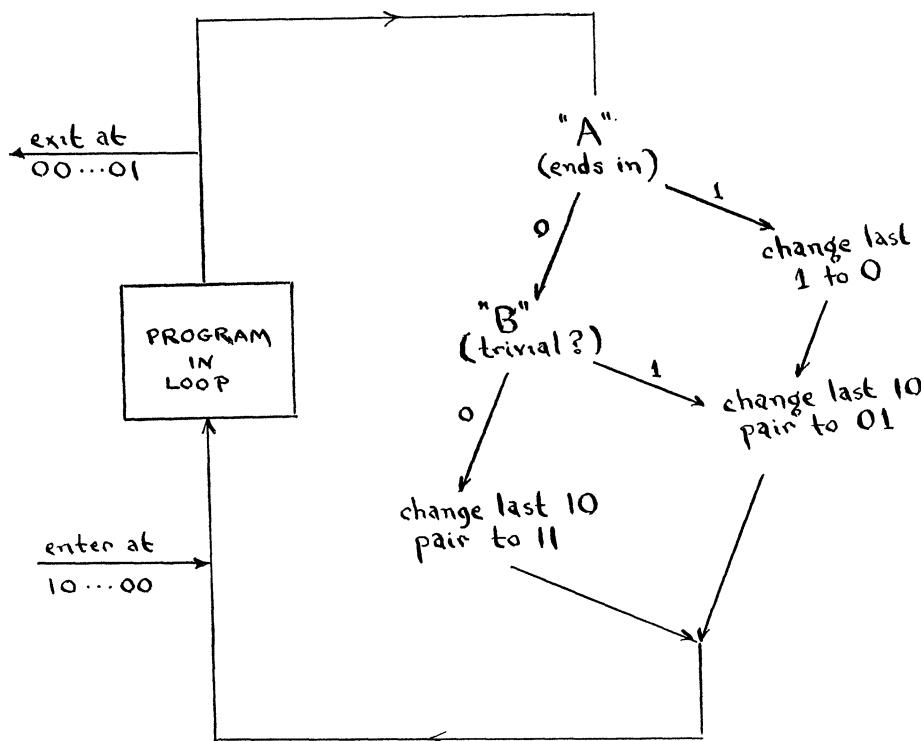
FIGURE 8

On the Boolean algebra diagram, below, we indicate the path followed if choice "B" is always 0 (nontrivial). From any set C, the path proceeds through all supersets of C before going to any other set.
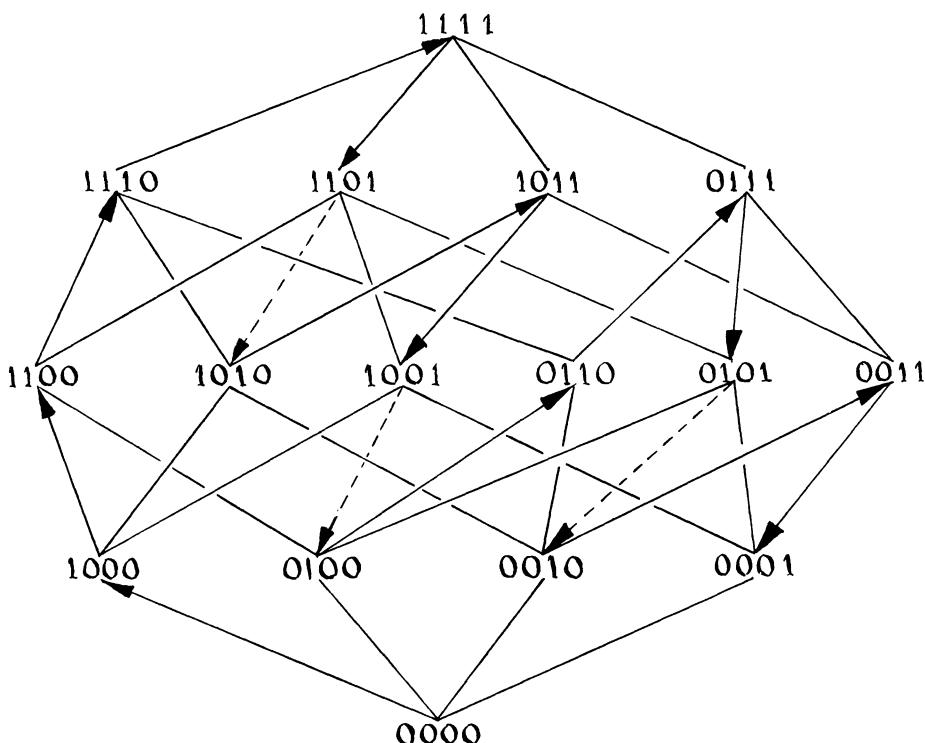
FIGURE 9

If the set 1110 produces a trivial result, the next set is 1101 (which must be checked next because it is a superset of 1100). If 0100 is trivial, the next set is 0010. It is clear that the time saved will be substantial whenever all fairly large subsets give trivial results.

We were eventually forced to discard this procedure, in preference for the method we now describe, in which we complete partially-determined cuts to modular cuts in all possible ways. We read from left to right on each level of the lattice, and then upwards by levels. We proceed by assigning labels 0 (not in the cut) and 1 (in the cut) to each flat. Labels which are assigned by free choice are set at 1 first, and are indicated 1′ ("tagged"). Having made a free choice, we work out the consequences of that choice as follows:

(a) Any flat containing a flat labeled 1 must also be labeled 1.

(b) If a flat is labeled 0, and is covered by a flat labeled 1, then all other flats covering it must be labeled 0 (because the cut must be modular).

(c) If a flat is labeled 0, then all flats contained in it must also be labeled 0.

Having worked out the consequences of our free choice, we proceed to the next unlabeled flat, and make a free choice 1′.

When all flats have been labeled, a modular cut is determined. We read it out, and proceed to determine the next modular cut by resetting the last freely-chosen 1′ equal to 0, erasing all labels beyond that point, and proceeding as before.

The procedure is initiated by labeling all points 0, and making a free choice of

1' on the first line (i.e., the first flat of rank 2). It terminates when all flats have been labeled 0.

The other subroutines, being less wasteful of computer time, are more conventional. The lattice extensions are produced from modular cuts by the procedure outlined in [1].

To see whether two geometric lattices are isomorphic, we list the copoints of each in decreasing order of cardinality, and extend these lists to include the points in some order. We endeavor to rearrange the copoints and the points in the second list until each pairwise intersection of flats in the second list agrees in cardinality with the intersection of those flats in the same positions in the first list. This can be accomplished if and only if the point-copoint incidence relations are the same, that is, if and only if the two geometries are isomorphic.

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1. H. H. CRAPO, "Single-element extensions of matroids," *J. Res. Nat. Bur. Standards Sect. B*, v. 69B, 1965, pp. 55–65. MR **32** #7461.
2. H. H. CRAPO & G.-C. ROTA, *On the Foundations of Combinational Theory: Combinatorial Geometries*, M.I.T. Press, Cambridge, Mass., 1970. (Preliminary edition.)
3. H. H. CRAPO, "The Tutte polynomial," *Aequationes Math.*, v. 3, 1969, pp. 211–229. MR **41** #6705.
4. J. DOYEN, "Sur le nombre d'espaces linéaires non isomorphes de *n* points," *Bull. Soc. Math. Belg.*, v. 19, 1967, pp. 421–437. MR **40** #2562.
5. D. A. HIGGS, "Matroids on 6, 7 elements," 1966. (Unpublished.)
6. A. W. INGLETON, "A note on independence functions and rank," *J. London Math. Soc.*, v. 34, 1959, pp. 49–56. MR **21** #655.
7. A. W. INGLETON, "Representation of matroids," *Combinatorial Mathematics and Its Applications* (Proc. Conf., Oxford, 1969), Academic Press, London, 1971, pp. 149–167. MR **43** #4700.
8. M. J. PIFF & D. J. A. WELSH, *On the Number of Combinatorial Geometries*, Mathematical Institute, University of Oxford, 1971. (Preprint.)
9. D. J. A. WELSH, "A bound for the number of matroids," *J. Combinatorial Theory*, v. 6, 1969, pp. 313–316. MR **39** #87.

A CATALOGUE OF

COMBINATORIAL GEOMETRIES

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Geometries on 1 Point

1 1 $1 \ \binom{1}{1}$

Geometries on 2 Points

1 2 1 $2 \ \binom{2}{1}$

Geometries on 3 Points

1 3 1 $3 \ \binom{3}{1}$

                 $3 \ \binom{3}{2}$

Geometries on 4 Points

1 4 1 $4 \ \binom{4}{1}$

1 4 4 1   ABC $3 \ \binom{4}{2}$

1 4 6 1 $6 \ \binom{4}{2}$

1 4 6 4 1 $4 \ \binom{4}{3}$

Geometries on 5 Points

1 5 1   5 $\binom{5}{1}$

1 5 5 1   ABCD 4 $\binom{5}{2}$

1 5 6 1   ABC ADE 4 $\binom{5}{2}$

1 5 8 1   ABC 7$\binom{5}{2}$

1 5 10 1   10 $\binom{5}{2}$

1 5 8 5 1   ABCD ABCE 3 $\binom{5}{3}$

1 5 10 7 1   ABCD 6 $\binom{5}{3}$

1 5 10 10 1   10 $\binom{5}{3}$

1 5 10 10 5 1   5 $\binom{5}{4}$

Geometries on 6 Points

1 6 1   6 $\binom{6}{1}$

1 6 6 1   ABCDE 5 $\binom{6}{2}$

1 6 7 ·1   ABC ADE BEF CDF 3 $\binom{6}{2}$

1 6 8 1   ABCD AEF 6 $\binom{6}{2}$

1 6 9 1   ABC ADE CEF 6 $\binom{6}{2}$

1 6 10 1   ABCD 9 $\binom{6}{2}$

1 6 11a 1   ABC DEF   9 $\binom{6}{2}$

1 6 11b 1   ABC ADE   9 $\binom{6}{2}$

1 6 13 1   ABC   12 $\binom{6}{2}$

1 6 15 1   15 $\binom{6}{2}$

1 6 10 6   1   ABCDE ABCDF   4 $\binom{6}{3}$

1 6 11a 6   1   ABCD ABCE ABCF ADEF BDEF CDEF   0 $\binom{6}{3}$

1 6 11b 7   1   ABCDE ABCF ADEF   4 $\binom{6}{3}$

1 6 13 9   1   ABCDE ABCF   7 $\binom{6}{3}$

1 6 13 10 1   ABCD ABCE ABCF ADEF   6 $\binom{6}{3}$

1 6 13 13 1   ABCD ABCE ABCF   10 $\binom{6}{3}$

1 6 15 11a 1   ABCD ABEF CDEF   8 $\binom{6}{3}$

1 6 15 11b 1   ABCDE   10 $\binom{6}{3}$

1 6 15 14 1   ABCD ABEF   12 $\binom{6}{3}$

1 6 15 17 1   ABCD   16 $\binom{6}{3}$

1 6 15 20 1   20 $\binom{6}{3}$

1 6 13 13 6 1   ABCDE ABCDF ABCEF   3 $\binom{6}{4}$

1 6 15 17 8 1   ABCDE ABCDF   6 $\binom{6}{4}$

1 6 15 20 11 1   ABCDE   10 $\binom{6}{4}$

1 6 15 20 15 1   15 $\binom{6}{4}$

1 6 15 20 15 6 1   6 $\binom{6}{5}$

Geometries on 7 Points

1 7 1   7 $\binom{7}{1}$

1 7 7a 1   ABCDEF   6 $\binom{7}{2}$

1 7 7b 1   ABC ADE AFG BDG BEF CDF CEG   0 $\binom{7}{2}$

1 7 9 1   ABC ADE AFG BDG BEF CDF   3 $\binom{7}{2}$

1 7 10a 1   ABCDE AFG   8 $\binom{7}{2}$

1 7 10b 1   ABCD AFG BEG CEF   6 $\binom{7}{2}$

1 7 11a 1   ABC ADE AFG BDF BEG   6 $\binom{7}{2}$

1 7 11b 1   ABCD AEFG   9 $\binom{7}{2}$

1 7 11c 1   ABC ADE BEG CEF DFG   6 $\binom{7}{2}$

1 7 12a 1   ABCDE   11 $\binom{7}{2}$

1 7 12b 1   ABCD AEF DFG   9 $\binom{7}{2}$

1 7 13a 1   ABC ADE BEF CDF   9 $\binom{7}{2}$

1 7 13b 1   ABC ADE CEF DFG   9 $\binom{7}{2}$

1 7 13c 1   ABC ADE AFG CEF   9 $\binom{7}{2}$

1 7 14a 1   ABCD AEF   12 $\binom{7}{2}$

1 7 14b 1   ABCD EFG   12 $\binom{7}{2}$

1 7 15a 1   ABC ADE CEF   12 $\binom{7}{2}$

1 7 15b 1   ABC ADE DFG   12 $\binom{7}{2}$

1 7 15c 1   ABC ADE AFG   12 $\binom{7}{2}$

1 7 16 1   ABCD   15 $\binom{7}{2}$

1 7 17a 1   ABC DEF   15 $\binom{7}{2}$

1 7 17b 1   ABC ADE   15 $\binom{7}{2}$

1 7 19 1   ABC   18 $\binom{7}{2}$

1 7 21 1   21 $\binom{7}{2}$

1 7 12a 7 1   ABCDEF ABCDEG   5 $\binom{7}{3}$

1 7 13a 8 1   ABCDEF ABCG ADEG BEFG CDFG   3 $\binom{7}{3}$

1 7 14a 9 1   ABCDEF ABCDG AEFG   6 $\binom{7}{3}$

1 7 14b 7 1   ABCDE ABCDF ABCDG AEFG BEFG CEFG

                     DEFG   0 $\binom{7}{3}$

1 7 15a 10　1　　　　　　　　ABCDEF ABCG ADEG CEFG　6 $\binom{7}{3}$

1 7 15b 10　1　　　　　　　　ABCDE ADEFG ABCF ABCG BDFG CDFG.　4 $\binom{7}{3}$

1 7 15c 11　1　　　　　　　　ABCDE ABCFG ADEFG　8 $\binom{7}{3}$

1 7 16　11　1　　　　　　　　ABCDEF ABCDG　9 $\binom{7}{3}$

1 7 16　13　1　　　　　　　　ABCDE ABCDF ABCDG AEFG　9 $\binom{7}{3}$

1 7 16　16　1　　　　　　　　ABCDE ABCDF ABCDG　13 $\binom{7}{3}$

1 7 17a 12　1　　　　　　　　ABCDEF ABCG DEFG　9 $\binom{7}{3}$

1 7 17a 13　1　　　　　　　　ADEFG ABCD ABCE ABCF ABCG BDEF

　　　　　　　　　　　　　　　CDEF　6 $\binom{7}{3}$

1 7 17a 17　1　　　　　　　　ABCD ABCE ABCF ABCG ADEF BDEF CDEF

　　　　　　　　　　　　　　　DEFG　9 $\binom{7}{3}$

1 7 17b 12a 1　　　　　　　　ABCDEF ABCG ADEG　9 $\binom{7}{3}$

1 7 17b 12b 1　　　　　　　　ABCDE ABCF ABCG ADEF ADEG BDFG

　　　　　　　　　　　　　　　CEFG　5 $\binom{7}{3}$

1 7 17b 14　1　　　　　　　　ABCDE ABCFG ADEF ADEG　10 $\binom{7}{3}$

1 7 17b 15　1　　　　　　　　ABCDE ABCF ABCG ADEF ADEG CEFG　9 $\binom{7}{3}$

1 7 17b 18　1　　　　　　　　ABCDE ABCF ABCG ADEF ADEG　13 $\binom{7}{3}$

1 7 19 14 1   ABCDEF ABCG   12 $\binom{7}{3}$

1 7 19 15 1   ABCDE ABCFG DEFG   12 $\binom{7}{3}$

1 7 19 16 1   ABCDE ABCF ABCG ADFG CEFG   11 $\binom{7}{3}$

1 7 19 17a 1   ABCD ABCE ABCF ABCG ADEF BDEG

             CDFG   10 $\binom{7}{3}$

1 7 19 17b 1   ADEFG ABCD ABCE ABCF ABCG   12 $\binom{7}{3}$

1 7 19 18 1   ABCDE ABCFG   16 $\binom{7}{3}$

1 7 19 19a 1   ABCDE ABCF ABCG ADFG   15 $\binom{7}{3}$

1 7 19 19b 1   ABCDE ABCF ABCG DEFG   15 $\binom{7}{3}$

1 7 19 20 1   ABCD ABCE ABCF ABCG ADEF BDEG   14 $\binom{7}{3}$

1 7 19 22 1   ABCDE ABCF ABCG   19 $\binom{7}{3}$

1 7 19 23a 1   ABCD ABCE ABCF ABCG ADEF   18 $\binom{7}{3}$

1 7 19 23b 1   ABCD ABCE ABCF ABCG DEFG   18 $\binom{7}{3}$

1 7 19 26 1   ABCD ABCE ABCF ABCG   22 $\binom{7}{3}$

1 7 21 14 1   ABCD ABEF ACFG ADEG BCEG BDFG

             CDEF   7 $\binom{7}{3}$

1 7 21 16 1   ABCDEF   15 $\binom{7}{3}$

1 7 21 17 1   ABCD ABEF ADEG BCEG BDFG CDEF   11 $\binom{7}{3}$

1	7	21	20a	1	CDEFG ABCD ABEF	17	$\binom{7}{3}$
1	7	21	20b	1	ABCD ABEF BCEG BDFG CDEF	15	$\binom{7}{3}$
1	7	21	20c	1	ABCD ABEF ACEG BDFG CDEF	15	$\binom{7}{3}$
1	7	21	23a	1	ABCD ABEF BDFG CDEF	19	$\binom{7}{3}$
1	7	21	23b	1	ABCDE DEFG	21	$\binom{7}{3}$
1	7	21	23c	1	ABCD ADFG BEFG CDEF	19	$\binom{7}{3}$
1	7	21	23d	1	ABCD ADEG BDFG CDEF	19	$\binom{7}{3}$
1	7	21	26a	1	ABCD ABEF CDEF	23	$\binom{7}{3}$
1	7	21	26b	1	ABCDE	25	$\binom{7}{3}$
1	7	21	26c	1	ABCD BEFG CDEF	23	$\binom{7}{3}$
1	7	21	26d	1	ABCD BDFG CDEF	23	$\binom{7}{3}$
1	7	21	29a	1	ABCD AEFG	27	$\binom{7}{3}$
1	7	21	29b	1	ABCD CDEF	27	$\binom{7}{3}$ ·
1	7	21	32	1	ABCD	31	$\binom{7}{3}$
1	7	21	35	1		35	$\binom{7}{3}$
1	7	16	16	7 1	ABCDEF ABCDEG ABCDFG	4	$\binom{7}{4}$
1	7	17a	17	7 1	ABCDEF ABCDG ABCEG ABCFG ADEFG BDEFG CDEFG	0	$\binom{7}{4}$

1 7 17b 18 8 1   ABCDEF ABCDEG ABCFG ADEFG 4 $\binom{7}{4}$

1 7 19 22 10 1   ABCDEF ABCDEG ABCFG 7 $\binom{7}{4}$

1 7 19 23a 11 1   ABCDEF ABCDG ABCEG ABCFG ADEFG 6 $\binom{7}{4}$

1 7 19 23b 9 1   ABCDE ABCDF ABCDG ABCEF ABCEG ABCFG
ADEFG BDEFG CDEFG 0 $\binom{7}{4}$

1 7 19 26 14 1   ABCDEF ABCDG ABCEG ABCFG 10 $\binom{7}{4}$

1 7 19 26 15 1   ABCDE ABCDF ABCDG ABCEF ABCEG ABCFG
ADEFG 8 $\binom{7}{4}$

1 7 19 26 19 1   ABCDE ABCDF ABCDG ABCEF ABCEG ABCFG
13 $\binom{7}{4}$

1 7 21 26a 12 1   ABCDEF ABCDG ABEFG CDEFG 8 $\binom{7}{4}$

1 7 21 26b 12 1   ABCDEF ABCDEG 10 $\binom{7}{4}$

1 7 21 29a 15 1   ABCDE ABCDF ABCDG ABEFG ACEFG ADEFG
9 $\binom{7}{4}$

1 7 21 29b 15 1   ABCDEF ABCDG CDEFG 12 $\binom{7}{4}$

1 7 21 32 17 1   ABCDE ABCDF ABCDG ABEFG CDEFG 12 $\binom{7}{4}$

1 7 21 32 18 1   ABCDEF ABCDG 16 $\binom{7}{4}$

1 7 21 32 21 1   ABCDE ABCDF ABCDG CDEFG 17 $\binom{7}{4}$

1 7 21 32 25 1   ABCDE ABCDF ABCDG 22 $\binom{7}{4}$

1 7 21 35 21 1   ABCDEF 20 $\binom{7}{4}$

1 7 21 35 23 1   ABCDE ABCFG ADEFG 20 $\binom{7}{4}$

1 7 21 35 27 1   ABCDE ABCFG 25 $\binom{7}{4}$

1 7 21 35 31 1   ABCDE 30 $\binom{7}{4}$

1 7 21 35 35 1   35 $\binom{7}{4}$

1 7 19 26 19 7 1   ABCDEF ABCDEG ABCDFG ABCEFG 3 $\binom{7}{5}$

1 7 21 32 25 9 1   ABCDEF ABCDEG ABCDFG 6 $\binom{7}{5}$

1 7 21 35 31 12 1   ABCDEF ABCDEG 10 $\binom{7}{5}$

1 7 21 35 35 16 1   ABCDEF 15 $\binom{7}{5}$

1 7 21 35 35 21 1   21 $\binom{7}{5}$

1 7 21 35 35 21 7 1   7 $\binom{7}{6}$

Geometries on 8 Points

1 8 1   8 $\binom{8}{1}$

1 8 8 1   ABCDEFG 7 $\binom{8}{2}$

1 8 11a 1   ABCH ADE AFG BDG BEF CDF CEG 4 $\binom{8}{2}$

1 8 11b 1   ABCH ADE AFG BDG BEF CDF EGH 4 $\binom{8}{2}$

1 8 12a 1   ABC ADE AFH BDH BEG CEF CGH DFG

$4 \binom{8}{2}$

1 8 12b 1   ABCH DFGH ADE BEG CEF $7 \binom{8}{2}$

1 8 12c 1   ABCDEF AGH $10 \binom{8}{2}$

1 8 13a 1   ABCD AEF AGH BFH DEH DFG $7 \binom{8}{2}$

1 8 13b 1   ABCD AEH AFG BEG CEF DFH $7 \binom{8}{2}$

1 8 13c 1   ABCDH AFG BEG CEF $9 \binom{8}{2}$

1 8 14a 1   ABC ADE AFH BDH CEF DFG EGH $7 \binom{8}{2}$

1 8 14b 1   ABC ADE AFH BDH BEF CDF CEH $7 \binom{8}{2}$

1 8 14c 1   ABC ADE AFH BDH BEF CDF CGH $7 \binom{8}{2}$

1 8 14d 1   ABC ADE AFG BEH CEF CGH DFH $7 \binom{8}{2}$

1 8 14e 1   ABCD AFGH BEG CEF $10 \binom{8}{2}$

1 8 14f 1   ABCDEH $13 \binom{8}{2}$

1 8 14g 1   ABCDH EFGH $12 \binom{8}{2}$

1 8 15a 1   ABCD AEF BEH CGH DFG $10 \binom{8}{2}$

1 8 15b 1   ABCH ADE AFG DFH EGH $10 \binom{8}{2}$

1 8 15c 1   ABCD AEH BFH CGH EFG $10 \binom{8}{2}$

1 8 15d 1   CEFH ABC ADE AFG BDH $10 \binom{8}{2}$

1 8 15e 1   ABCD AEF AGH BEH CFH   10 $\binom{8}{2}$

1 8 15f 1   ADEH ABC BFH CGH DFG   10 $\binom{8}{2}$

1 8 15g 1   ABCDE AFG BFH   12 $\binom{8}{2}$

1 8 16a 1   ABC ADE AGH BFH CEF DFG   10 $\binom{8}{2}$

1 8 16b 1   ABC ADE AFG BDG BEF CDF   10 $\binom{8}{2}$

1 8 16c 1   ABC ADE AFH CDH CEF DFG   10 $\binom{8}{2}$

1 8 16d 1   ABC ADE AFH BGH CEF DFG   10 $\binom{8}{2}$

1 8 16e 1   ABC ADE AFH BEH CEF DFG   10 $\binom{8}{2}$

1 8 16f 1   ABC ADE AFH BDH CEF DFG   10 $\binom{8}{2}$

1 8 16g 1   ABCD AEFH BGH   13 $\binom{8}{2}$

1 8 17a 1   ABCD AEF BEH DFG   13 $\binom{8}{2}$

1 8 17b 1   ABCD AFG BEG CEF   13 $\binom{8}{2}$

1 8 17c 1   ABCD AEF BFH DFG   13 $\binom{8}{2}$

1 8 17d 1   ABCH ADE AFG CEF   13 $\binom{8}{2}$

1 8 17e 1   ABCD AEF DFG EGH   13 $\binom{8}{2}$

1 8 17f 1   ABCDE AFH   15 $\binom{8}{2}$

1 8 17g 1   ABCDH EFG   15 $\binom{8}{2}$

1 8 18a 1   ABC ADH BEH CFH DEF   13 $\binom{8}{2}$

1 8 18b 1   ABC ADE AFH BDH CEH   13 $\binom{8}{2}$

1 8 18c 1   ABC ADE AFH BEH DFG   13 $\binom{8}{2}$

1 8 18d 1   ABC ADE AFH BDH CGH   13 $\binom{8}{2}$

1 8 18e 1   ABC ADE BDH CFH EGH   13 $\binom{8}{2}$

1 8 18f 1   ABC ADE BEH CFH DFG   13 $\binom{8}{2}$

1 8 18g 1   ABC ADE BDH CEH FGH   13 $\binom{8}{2}$

1 8 18h 1   ABCD EFGH   16 $\binom{8}{2}$

1 8 18i 1   ABCD AEFG   16 $\binom{8}{2}$

1 8 19a 1   ABCD AEH EFG   16 $\binom{8}{2}$

1 8 19b 1   ABCH ADE DFH   15 $\binom{8}{2}$

1 8 19c 1   ABCH ADE AFG   16 $\binom{8}{2}$

1 8 19d 1   ADEH ABC DFG   16 $\binom{8}{2}$

1 8 19e 1   ABCDH   18 $\binom{8}{2}$

1 8 20a 1   ABC ADE BFH DGH   16 $\binom{8}{2}$

1 8 20b 1   ABC ADE BDH FGH   16 $\binom{8}{2}$

1 8 20c 1   ABC ADE AFG BDH   16 $\binom{8}{2}$

1 8 20d 1   ABC ADE AFG CEF   16 $\binom{8}{2}$

1 8 20e 1   ABC ADE BEF CDF   16 $\binom{8}{2}$

1 8 20f 1   ABC ADE CEF DFG   16 $\binom{8}{2}$

1 8 21a 1		ABCD AEH	19 $\binom{8}{2}$
1 8 21b 1		ABCD EFH	19 $\binom{8}{2}$
1 8 22a 1		ABC ADE FGH	19 $\binom{8}{2}$
1 8 22b 1		ABC ADE AFG	19 $\binom{8}{2}$
1 8 22c 1		ABC ADE DFG	19 $\binom{8}{2}$
1 8 22d 1		ABC ADE BDH	19 $\binom{8}{2}$
1 8 23 1		ABCD	22 $\binom{8}{2}$
1 8 24a 1		ABC DEF	22 $\binom{8}{2}$
1 8 24b 1		ABC ADE	22 $\binom{8}{2}$
1 8 26 1		ABC	25 $\binom{8}{2}$
1 8 28 1		28 $\binom{8}{2}$
1 8 14b 8 1		ABCDEFH ABCG ADEG AFGH BDGH BEFG CDFG CEGH	0 $\binom{8}{3}$
1 8 14f 8 1		ABCDEFH ABCDEGH	6 $\binom{8}{3}$
1 8 16b 10 1		ABCDEFG ABCH ADEH AFGH BDGH BEFH CDFH	3 $\binom{8}{3}$
1 8 17b 11 1		ABCDEFG ABCDH AFGH BEGH CEFH	6 $\binom{8}{3}$
1 8 17f 11 1		ABCDEFH ABCDEG AFGH	8 $\binom{8}{3}$

1 8 17g 8 1   ABCDFH ABCDGH ABCDEH AEFG BEFG

CEFG DEFG EFGH 0 $\binom{8}{3}$

1 8 18a 12 1   ABCDEFH ABCG ADGH BEGH CFGH DEFG 6 $\binom{8}{3}$

1 8 18b 12 1   ABCDEFH ABCG ADEG AFGH BDGH CEGH 6 $\binom{8}{3}$

1 8 18g 12 1   ABCDEH BDFGH CEFGH ABCF ABCG ADEF

ADEG AFGH 4 $\binom{8}{3}$

1 8 18h 8 1   ABCDE ABCDF ABCDG ABCDH AEFGH BEFGH

CEFGH DEFGH 0 $\binom{8}{3}$

1 8 18i 12 1   ABCDEFG ABCDH AEFGH 9 $\binom{8}{3}$

1 8 19a 13 1   ABCDEH ABCDF ABCDG AEFGH BEFG CEFG

DEFG 6 $\binom{8}{3}$

1 8 19b 13 1   ABCDEFH ABCGH ADEG DFGH 9 $\binom{8}{3}$

1 8 19c 15 1   ABCDEH ABCFGH ADEFG 12 $\binom{8}{3}$

1 8 19d 14 1   ABCDEH ADEFGH ABCF ABCG BDFG CDFG

8 $\binom{8}{3}$

1 8 19e 13 1   ABCDEFH ABCDGH 11 $\binom{8}{3}$

1 8 19e 16 1   ABCDEH ABCDFH ABCDGH AEFG 12 $\binom{8}{3}$

1 8 19e 19 1   ABCDEH ABCDFH ABCDGH 16 $\binom{8}{3}$

1 8 20a 13 1   ABCDE ABCFH ADEGH BDFGH ABCG ADEF

BEFH CDGH CEFG 4 $\binom{8}{3}$

1 8 20a 16 1   ABCDE ABCFH ADEGH BDFGH ABCG ADEF

BEFH CDGH   8 $\binom{8}{3}$

1 8 20b 15 1   ABCDEH BDFGH ABCF ABCG ADEF ADEG

AFGH CFGH EFGH   6 $\binom{8}{3}$

1 8 20c 16 1   ABCDEH ABCFG ADEFG AFGH BDFH BDGH

10   $\binom{8}{3}$

1 8 20d 14 1   ABCDEFG ABCH ADEH AFGH CEFH   9 $\binom{8}{3}$

1 8 20e 12 1   ABCDEF ABCG ABCH ADEG ADEH AFGH

BDGH BEFG BEFH CDFG CDFH CEGH   0 $\binom{8}{3}$

1 8 20e 14 1   ABCDEFH ABCG ADEG BEFG CDFG   9 $\binom{8}{3}$

1 8 20e 15 1   ABCDEF ABCG ABCH ADEG ADEH BDGH BEFG

BEFH CDFG CDFH CEGH   4 $\binom{8}{3}$

1 8 20e 17 1   ABCDEF ABCGH ADEG ADEH BEFG BEFH CDFG

CDFH   9 $\binom{8}{3}$

1 8 20e 18 1   ABCDEF ABCG ABCH ADEG ADEH AFGH BEFG

BEFH CDFG CDFH   8 $\binom{8}{3}$

1 8 20e 21 1   ABCDEF ABCG ABCH ADEG ADEH BEFG BEFH

CDFG CDFH   12 $\binom{8}{3}$

1 8 20f 14 1   ABCDEFG ABCH ADEH CEFH DFGH   9 $\binom{8}{3}$

1 8 21a 15 1   ABCDEFH ABCDG AEGH   12 $\binom{8}{3}$

1 8 21a 17 1   ABCDEH ABCDF ABCDG AEFH AEGH CEFG DFGH

10   $\binom{8}{3}$

1 8 21a 18 1   ABCDEH ABCDFG AEFH AEGH   14 $\binom{8}{3}$

1 8 21a 19 1   ABCDEH ABCDF ABCDG AEFGH   15 $\binom{8}{3}$

1 8 21a 20 1   ABCDEH ABCDF ABCDG AEFH AEGH BFGH

                               14 $\binom{8}{3}$

1 8 21a 23 1   ABCDEH ABCDF ABCDG AEFH AEGH   18 $\binom{8}{3}$

1 8 21b 15 1   ABCDEFH ABCDG EFGH   12 $\binom{8}{3}$

1 8 21b 16 1   ABCDEG ABCDF ABCDH AEFH BEFH CEFH DEFH

                         EFGH   8 $\binom{8}{3}$

1 8 21b 17 1   ABCDE ABCDF ABCDG ABCDH AEFGH BEFH

                         CEFH DEFH   9 $\binom{8}{3}$

1 8 21b 21 1   ABCDE ABCDF ABCDG ABCDH AEFH BEFH

                         CEFH DEFH EFGH   12 $\binom{8}{3}$

1 8 22a 16 1   ABCDE BDFGH CEFGH ABCF ABCG ABCH ADEF

                         ADEG ADEH AFGH   6 $\binom{8}{3}$

1 8 22a 18 1   ABCDEF ABCG ABCH ADEG ADEH AFGH BFGH CFGH

                         DFGH EFGH   8 $\binom{8}{3}$

1 8 22a 19 1   ABCFGH ABCDE ADEF ADEG ADEH DFGH EFGH   12 $\binom{8}{3}$

1 8 22a 20 1   ABCDE BDFGH ABCF ABCG ABCH ADEF ADEG

                         ADEH AFGH CFGH EFGH   9 $\binom{8}{3}$

1 8 22a 24 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH

AFGH BFGH CFGH DFGH EFGH 12 $\binom{8}{3}$

1 8 22b 14 1   ABCDE ABCFG ADEFG ABCH ADEH AFGH BDFH

BEGH CDGH CEFH 4 $\binom{8}{3}$

1 8 22b 16 1   ABCDEFG ABCH ADEH AFGH 12 $\binom{8}{3}$

1 8 22b 17 1   ABCDE ABCFG ADEFG ABCH ADEH AFGH BDFH

BEGH CEFH 8 $\binom{8}{3}$

1 8 22b 20a 1   ABCFGH ABCDE ADEFG ADEH 16 $\binom{8}{3}$

1 8 22b 20b 1   ABCDE ABCFG ADEFG ABCH ADEH AFGH BDGH

CEFH 12 $\binom{8}{3}$

1 8 22b 20c 1   ABCDE ABCFG ADEFG ABCH ADEH AFGH BDGH

CEGH 12 $\binom{8}{3}$

1 8 22b 23 1   ABCDE ABCFG ADEFG ABCH ADEH AFGH BDGH

16 $\binom{8}{3}$

1 8 22b 26 1   ABCDE ABCFG ADEFG ABCH ADEH AFGH 20 $\binom{8}{3}$

1 8 22c 16 1   ABCDEFG ABCH ADEH DFGH 12 $\binom{8}{3}$

1 8 22c 18 1   ABCDE ABCFH ADEFG ABCG ADEH BDFG BEGH CDFG

DFGH 9 $\binom{8}{3}$

1 8 22c 19a 1   ADEFGH ABCDE ABCF ABCG ABCH BDFG CDFG 12 $\binom{8}{3}$

1 8 22c 19b 1   ABCDE ADEFG ABCF ABCG ABCH ADEH

BDFG BEFH CDFG CEGH DFGH   8 $\binom{8}{3}$

1 8 22c 21   1   ABCDE ABCFH ADEFG ABCG ADEH BDFG

CDFG DFGH   13 $\binom{8}{3}$

1 8 22c 22   1   ABCDE ADEFG ABCF ABCG ABCH ADEH

BDFG BEFH CDFG DFGH   12 $\binom{8}{3}$

1 8 22c 25   1   ABCDE ADEFG ABCF ABCG ABCH ADEH

BDFG CDFG DFGH   16 $\binom{8}{3}$

1 8 22d 16a 1   ABCDEFH ABCG ADEG BDGH   12 $\binom{8}{3}$

1 8 22d 16b 1   ABCDEH ABCF ABCG ADEF ADEG AFGH

BDFH BDGH BEFG CDFG   6 $\binom{8}{3}$

1 8 22d 18   1   ABCDEH ABCFG ADEF ADEG BDFH BDGH

EFGH   11 $\binom{8}{3}$

1 8 22d 19a 1   ABCDEH ABCF ABCG ADEF ADEG AFGH BDFH

BDGH CEFG   10 $\binom{8}{3}$

1 8 22d 19b 1   ABCDEH ABCF ABCG ADEF ADEG BDFH BDGH

BEFG CDFG   10 $\binom{8}{3}$

1 8 22d 21   1   ABCDEH ABCFG ADEF ADEG BDFH BDGH   15 $\binom{8}{3}$

1 8 22d 22a 1   ABCDEH ABCF ABCG ADEF ADEG BDFH BDGH

CFGH   14 $\binom{8}{3}$

1 8 22d 22b 1		ABCDEH ABCF ABCG ADEF ADEG AFGH BDFH BDGH 14 $\binom{8}{3}$			
1 8 22d 25 1		ABCDEH ABCF ABCG ADEF ADEG BDFH BDGH 18 $\binom{8}{3}$			
1 8 23 17 1		ABCDEFH ABCDG 15 $\binom{8}{3}$			
1 8 23 19 1		ABCDEF ABCDGH EFGH 16 $\binom{8}{3}$			
1 8 23 20 1		ABCDE ABCDF ABCDG ABCDH AEFG BEFH CEGH DFGH 12 $\binom{8}{3}$			
1 8 23 21 1		ABCDEF ABCDG ABCDH AEGH BFGH 16 $\binom{8}{3}$			
1 8 23 22 1		ABCDEH ABCDFG 20 $\binom{8}{3}$			
1 8 23 23a 1		ABCDE ABCDF ABCDG ABCDH AEFG BEFH CEGH 16 $\binom{8}{3}$			
1 8 23 23b 1		ABCDE ABCDF ABCDG ABCDH AEFGH 18 $\binom{8}{3}$			
1 8 23 24a 1		ABCDEH ABCDF ABCDG EFGH 20 $\binom{8}{3}$			
1 8 23 24b 1		ABCDEH ABCDF ABCDG DFGH 20 $\binom{8}{3}$			
1 8 23 26 1		ABCDE ABCDF ABCDG ABCDH AEFH BEGH 20 $\binom{8}{3}$			
1 8 23 27 1		ABCDEF ABCDG ABCDH 24 $\binom{8}{3}$			
1 8 23 29a 1		ABCDE ABCDF ABCDG ABCDH EFGH 24 $\binom{8}{3}$			

1 8 23 29b 1   ABCDE ABCDF ABCDG ABCDH AEFH 24 $\binom{8}{3}$

1 8 23 32 1   ABCDE ABCDF ABCDG ABCDH 28 $\binom{8}{3}$

1 8 24a 18 1   ABCDEFH ABCG DEFG 15 $\binom{8}{3}$

1 8 24a 20a 1   ABCDEF ABCG ABCH ADGH BFGH CEGH DEFG

DEFH 12 $\binom{8}{3}$

1 8 24a 20b 1   ABCDH ADEFG ABCE ABCF ABCG BDEF BEGH

CDEF CFGH DEFH 10 $\binom{8}{3}$

1 8 24a 21 1   ABCDEF ABCGH DEFGH 18 $\binom{8}{3}$

1 8 24a 22a 1   ABCEGH ABCD ABCF ADEF BDEF CDEF DEFG

DEFH 14 $\binom{8}{3}$

1 8 24a 22b 1   ABCGH ADEFG BDEFH ABCD ABCE ABCF CDEF

15 $\binom{8}{3}$

1 8 24a 23a 1   ABCDEF ABCG ABCH ADGH CEGH DEFG DEFH

16 $\binom{8}{3}$

1 8 24a 23b 1   ABCFH BDEFG ABCD ABCE ABCG ADEF ADGH

CDEF DEFH 14 $\binom{8}{3}$

1 8 24a 23c 1   ADEFH BDEFG ABCD ABCE ABCF ABCG ABCH

CDEF CFGH 14 $\binom{8}{3}$

1 8 24a 24 1   BDEFG ABCD ABCE ABCF ABCG ABCH ADEF

ADGH CDEF CFGH DEFH 13 $\binom{8}{3}$

1 8 24a 25a 1   ABCD ABCE ABCF ABCG ABCH ADEF AFGH
BDEF BDGH CDEF CEGH DEFG DEFH   12 $\binom{8}{3}$

1 8 24a 25b 1   ABCDEF ABCGH DEFG DEFH   21 $\binom{8}{3}$

1 8 24a 26a 1   ABCDEF ABCG ABCH AFGH DEFG DEFH   20 $\binom{8}{3}$

1 8 24a 26b 1   ABCGH DEFGH ABCD ABCE ABCF ADEF BDEF
CDEF   18 $\binom{8}{3}$

1 8 24a 26c 1   ABCFG ADEFH ABCD ABCE ABCH BDEF CDEF
DEFG   18 $\binom{8}{3}$

1 8 24a 26d 1   ABCFH DEFGH ABCD ABCE ABCG ADEF BDEF
CDEF   18 $\binom{8}{3}$

1 8 24a 26e 1   ADEFH BDEFG ABCD ABCE ABCF ABCG ABCH
CDEF   18 $\binom{8}{3}$

1 8 24a 27 1   ABCEH ABCD ABCF ABCG ADEF AFGH BDEF
CDEF DEFG DEFH   17 $\binom{8}{3}$

1 8 24a 28 1   ABCD ABCE ABCF ABCG ABCH ADEF ADGH BDEF
BFGH CDEF DEFG DEFH   16 $\binom{8}{3}$

1 8 24a 29 1   ABCDEF ABCG ABCH DEFG DEFH   24 $\binom{8}{3}$

1 8 24a 30a 1   ABCGH ABCD ABCE ABCF ADEF BDEF CDEF
DEFG DEFH   21 $\binom{8}{3}$

1 8 24a 30b 1   ABCDH ABCE ABCF ABCG ADEF BDEF CDEF
DEFG DEFH   21 $\binom{8}{3}$

1 8 24a 31 1   ABCD ABCE ABCF ABCG ABCH ADEF ADGH BDEF
CDEF DEFG DEFH   20 $\binom{8}{3}$

1 8 24a 34 1   ABCD ABCE ABCF ABCG ABCH ADEF BDEF CDEF
DEFG DEFH   24 $\binom{8}{3}$

1 8 24b 18 1   ABCDEFH ABCG ADEG   15 $\binom{8}{3}$

1 8 24b 19 1   ABCDE ABCFH ABCG ADEF ADEG ADEH BDFG
BEGH CDGH CEFG   9 $\binom{8}{3}$

1 8 24b 20a 1   ABCDEH ABCF ABCG ADEF ADEG AFGH BDFG
CEFG   12 $\binom{8}{3}$

1 8 24b 20b 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH
AFGH BDFG BEFH CDFH CEFG   8 $\binom{8}{3}$

1 8 24b 20c 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH
AFGH BDFG BEFH CDGH CEFG   8 $\binom{8}{3}$

1 8 24b 21 1   ABCDE ABCFH ADEFG ABCG ADEH BEGH CDGH
14 $\binom{8}{3}$

1 8 24b 22a 1   ABCDEH ABCFG ADEF ADEG DFGH   17 $\binom{8}{3}$

1 8 24b 22b 1   ABCDE ABCFH ABCG ADEF ADEG ADFH BEGH
CEFG DFGH   13 $\binom{8}{3}$

1 8 24b 22c 1   ABCDE ADEFH ABCF ABCG ABCH ADEG BDGH

BEFG CEGH   13 $\binom{8}{3}$

1 8 24b 23a 1   ABCDEH ABCF ABCG ADEF ADEG BDFG CEFG

16 $\binom{8}{3}$

1 8 24b 23b 1   ABCDEH ABCF ABCG ADEF ADEG AFGH CEFG

16 $\binom{8}{3}$

1 8 24b 23c 1   ABCDEH ABCF ABCG ADEF ADEG BDFG CFGH

16 $\binom{8}{3}$

1 8 24b 23d 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH

AFGH BDFH CDFG CEGH   12 $\binom{8}{3}$

1 8 24b 23e 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH

BDFG BEFH CDFH CEFG   12 $\binom{8}{3}$

1 8 24b 23f 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH

AFGH BDFG BEFH CDGH   12 $\binom{8}{3}$

1 8 24b 23g 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH

BDFH BEGH CDFG CEFH   12 $\binom{8}{3}$

1 8 24b 23h 1   ADEFGH ABCDE ABCF ABCG ABCH   18 $\binom{8}{3}$

1 8 24b 23i 1   ABCDE CDFGH ABCF ABCG ABCH ADEF ADEG

ADEH BEFH   14 $\binom{8}{3}$

1 8 24b 24 1   ABCDE ABCFH ADEFG ABCG ADEH BDGH   18 $\binom{8}{3}$

1 8 24b 25a 1   ABCDEH ABCFG ADEF ADEG   21 $\binom{8}{3}$

1 8 24b 25b 1   ABCDE ABCFH ABCG ADEF ADEG ADEH BDGH CEGH   17 $\binom{8}{3}$

1 8 24b 25c 1   ABCDE ABCFH ABCG ADEF ADEG ADEH BDGH CEFG   17 $\binom{8}{3}$

1 8 24b 25d 1   ABCDE ABCFH ABCG ADEF ADEG ADEH BEFG CEGH   17 $\binom{8}{3}$

1 8 24b 25e 1   ABCDE ADEFH ABCF ABCG ABCH ADEG BFGH CEFG   17 $\binom{8}{3}$

1 8 24b 25f 1   ABCDE ADEFH ABCF ABCG ABCH ADEG BEGH CEFG ·17 $\binom{8}{3}$

1 8 24b 26a 1   ABCDEF ABCG ABCH ADEG ADEH AFGH   20 $\binom{8}{3}$

1 8 24b 26b 1   ABCDEH ABCF ABCG ADEF ADEG BEFG   20 $\binom{8}{3}$

1 8 24b 26c 1   ABCDEH ABCF ABCG ADEF ADEG EFGH   20 $\binom{8}{3}$

1 8 24b 26d 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH AFGH BDFG CDFH   16 $\binom{8}{3}$

1 8 24b 26e 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH AFGH BEFG CDFH   16 $\binom{8}{3}$

1 8 24b 26f 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH AFGH BEFH CDFH   16 $\binom{8}{3}$

1 8 24b 26g 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH
BDFG CDFH EFGH   16 $\binom{8}{3}$

1 8 24b 26h 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH
BDFH CDFG CEGH   16 $\binom{8}{3}$

1 8 24b 26i 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH
BDFG BEFH CDFH   16 $\binom{8}{3}$

1 8 24b 26j 1   ABCDE BEFGH ABCF ABCG ABCH ADEF ADEG
ADEH   18 $\binom{8}{3}$

1 8 24b 27 1   ABCDE ABCFH ADEFG ABCG ADEH   22 $\binom{8}{3}$

1 8 24b 28a 1   ABCDE ABCFH ABCG ADEF ADEG ADEH EFGH
21 $\binom{8}{3}$

1 8 24b 28b 1   ABCDE ADEFH ABCF ABCG ABCH ADEG BEGH
21 $\binom{8}{3}$

1 8 24b 29a 1   ABCDEH ABCF ABCG ADEF ADEG   24 $\binom{8}{3}$

1 8 24b 29b 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH
BFGH CEFG   20 $\binom{8}{3}$

1 8 24b 29c 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH
BDFH CEFH   20 $\binom{8}{3}$

1 8 24b 29d 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH
BDFH BEGH   20 $\binom{8}{3}$

1 8 24b 29e 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH
AFGH BDFH   20 $\binom{8}{3}$

1 8 24b 29f 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH

BDFH CEFG   20 $\binom{8}{3}$

1 8 24b 31 1   ABCDE ABCFH ABCG ADEF ADEG ADEH   25 $\binom{8}{3}$

1 8 24b 32a 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH

BDFH   24 $\binom{8}{3}$

1 8 24b 32b 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH

AFGH   24 $\binom{8}{3}$

1 8 24b 32c 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH

BFGH   24 $\binom{8}{3}$

1 8 24b 35 1   ABCDE ABCF ABCG ABCH ADEF ADEG ADEH

28   $\binom{8}{3}$

1 8 26 20 1   ABCDEFH ABCG   18 $\binom{8}{3}$

1 8 26 22a 1   ABCDH ABCEF ABCG BDFG BEGH CDEG CFGH

DEFH   14 $\binom{8}{3}$

1 8 26 22b 1   ABCDH ABCEF ABCG AEGH BDFG CDEG CFGH

DEFH   14 $\binom{8}{3}$

1 8 26 23a 1   ABCDH ABCE ABCF ABCG ADEF AEGH BDEG

BFGH CDFG CEFH   13 $\binom{8}{3}$

1 8 26 23b 1   ABCEH ABCD ABCF ABCG ADEF ADGH BDEG

BDFH CDFG EFGH   13 $\binom{8}{3}$

1 8 26 24a 1   ABCD ABCE ABCF ABCG ABCH ADGH AEFG

BDFG BEGH CDEG CFGH DEFH   12 $\binom{8}{3}$

1 8 26 24b 1   ABCDFG ABCE ABCH AEFH BEGH CDEH   18 $\binom{8}{3}$

1 8 26 24c 1   ADEFG ABCD ABCE ABCF ABCG ABCH BDEH

       BFGH CDFH CEGH   14 $\binom{8}{3}$

1 8 26 25a 1   ABCDH ABCEF ABCG BDFG CDEG CFGH   DEFH

       18 $\binom{8}{3}$

1 8 26 25b 1   ABCDH ABCEF ABCG AEGH BDFG CFGH DEFH

       18 $\binom{8}{3}$

1 8 26 25c 1   ABCDG ABCEH ABCF ADFH BEFG CDEF CFGH

       18 $\binom{8}{3}$

1 8 26 25d 1   ABCDH ABCEG ABCF BDFG BEFH CDEF CFGH

       18 $\binom{8}{3}$

1 8 26 26a 1   CDEFGH ABCD ABCE ABCF ABCG ABCH   20 $\binom{8}{3}$

1 8 26 26b 1   ABCEH ABCD ABCF ABCG ADEF ADGH BDEG

       BFGH CDFG   17 $\binom{8}{3}$

1 8 26 26c 1   ABCDH ABCE ABCF ABCG ADEF AEGH BDEG

       BFGH CEFH   17 $\binom{8}{3}$

1 8 26 26d 1   ABCDH ABCE ABCF ABCG ADEF AEGH BDEG

       BEFH CFGH   17 $\binom{8}{3}$

1 8 26 26e 1   ABCDH ABCE ABCF ABCG ADEF AEGH BDEG

       CEFH DFGH   17 $\binom{8}{3}$

1 8 26 26f 1   ABCFH ABCD ABCE ABCG ADEF ADGH BDEG

       CDEH EFGH   17 $\binom{8}{3}$

1 8 26 26g 1	ABCDH ABCE ABCF ABCG ADEG AEFH CDEF CEGH DFGH	$17 \ \binom{8}{3}$
1 8 26 26h 1	ABCDE ABCF ABCG ABCH ADFH AEGH BDGH BEFH CFGH	$17 \ \binom{8}{3}$
1 8 26 26i 1	ABCEFG ABCDH DEFH	$23 \ \binom{8}{3}$
1 8 26 26j 1	ABCDH BEFGH ABCE ABCF ABCG ADFG CDEF	$19 \ \binom{8}{3}$
1 8 26 27a 1	ABCD ABCE ABCF ABCG ABCH ADGH AEFG BDFG CDEG CFGH DEFH	$16 \ \binom{8}{3}$
1 8 26 27b 1	ABCD ABCE ABCF ABCG ABCH ADEH ADFG BDFH BEFG CDEG CEFH	$16 \ \binom{8}{3}$
1 8 26 27c 1	ABCD ABCE ABCF ABCG ABCH ADEH ADFG BDFH BEFG CDGH CEFH	$16 \ \binom{8}{3}$
1 8 26 27d 1	ABCD ABCE ABCF ABCG ABCH ADEG ADFH BDEH BDFG CDGH CEFH	$16 \ \binom{8}{3}$
1 8 26 27e 1	ABCD ABCE ABCF ABCG ABCH ADEG ADFH BDEH BDFG CDEF CDGH	$16 \ \binom{8}{3}$
1 8 26 27f 1	ABCDEH ABCF ABCG ADFG BFGH	$22 \ \binom{8}{3}$
1 8 26 27g 1	ABCDEH ABCF ABCG AFGH DEFG	$22 \ \binom{8}{3}$
1 8 26 27h 1	CDEFH ABCD ABCE ABCF ABCG ABCH ADGH AEFG BDFG	$18 \ \binom{8}{3}$
1 8 26 28a 1	ABCDH ABCEF ABCG AEGH BDFG DEFH	$22 \ \binom{8}{3}$

1 8 26 28b 1   ABCDF ABCGH ABCE AEFH CDEH DFGH   22 $\binom{8}{3}$

1 8 26 28c 1   ABCDG ABCEH ABCF ADFH BEFG CDEF   22 $\binom{8}{3}$

1 8 26 28d 1   ABCDH ABCFG ABCE BEFH CEGH DEFG   22 $\binom{8}{3}$

1 8 26 28e 1   ABCDH ABCEF ABCG CDFG CEGH DEFH   22 $\binom{8}{3}$

1 8 26 28f 1   ABCDH ABCFG ABCE AEFH CDEF CEGH   22 $\binom{8}{3}$

1 8 26 28g 1   ABCDE ABCFG DEFGH ABCH   24 $\binom{8}{3}$

1 8 26 29a 1   ABCDH ABCE ABCF ABCG ADFG BEFG CDEG DEFH

     21 $\binom{8}{3}$

1 8 26 29b 1   ABCDF ABCE ABCG ABCH ADGH BEFG CFGH DEFH

     21 $\binom{8}{3}$

1 8 26 29c 1   ABCDH ABCE ABCF ABCG ADFG BDEG CDEF EFGH

     21 $\binom{8}{3}$

1 8 26 29d 1   ABCDH ABCE ABCF ABCG ADFG BEFG CFGH DEFH

     21 $\binom{8}{3}$

1 8 26 29e 1   ABCDH ABCE ABCF ABCG ADFG BEFG CEGH DEFH

     21 $\binom{8}{3}$

1 8 26 29f 1   ABCDH ABCE ABCF ABCG ADEG AEFH BEFG CDEF

     21 $\binom{8}{3}$

1 8 26 29g 1	ABCDH ABCE ABCF ABCG BEFG CDFG CEGH DEFH 21 $\binom{8}{3}$
1 8 26 29h 1	ABCDH ABCE ABCF ABCG AEFH BDFG BEGH CDEF 21 $\binom{8}{3}$
1 8 26 29i 1	ABCDH ABCE ABCF ABCG ADEG AEFH BDFG CDEF 21 $\binom{8}{3}$
1 8 26 29j 1	ABCDH ABCE ABCF ABCG BDFG BEFH CDEF CFGH 21 $\binom{8}{3}$
1 8 26 29k 1	ABCDH ABCE ABCF ABCG BDFG BEFH CDEF CEGH 21 $\binom{8}{3}$
1 8 26 29ℓ 1	ABCDF ABCE ABCG ABCH AFGH BDGH BEFH CDEH 21 $\binom{8}{3}$
1 8 26 29m 1	ABCDH ABCE ABCF ABCG ADFG AEGH BEFG CDEF 21 $\binom{8}{3}$
1 8 26 29n 1	ABCDH ABCE ABCF ABCG BDFG CDEG CFGH DEFH 21 $\binom{8}{3}$
1 8 26 29o 1	ABCDF ABCE ABCG ABCH AFGH BDEG BEFH CDEH 21 $\binom{8}{3}$
1 8 26 29p 1	ABCDEF ABCGH 27 $\binom{8}{3}$
1 8 26 29q 1	ABCFH BDEGH ABCD ABCE ABCG ADEF 23 $\binom{8}{3}$
1 8 26 30a 1	ABCD ABCE ABCF ABCG ABCH ADEH BDFH BEFG CDFG CEGH 20 $\binom{8}{3}$

1 8 26 30b 1   ABCD ABCE ABCF ABCG ABCH ADEH BDFH
BEFG CDFG CEFH   20 $\binom{8}{3}$

1 8 26 30c 1   ABCD ABCE ABCF ABCG ABCH ADGH AEFG
CDFG CEGH DEFH   20 $\binom{8}{3}$

1 8 26 30d 1   ABCD ABCE ABCF ABCG ABCH ADGH BEFG
CDFG CEGH DEFH   20 $\binom{8}{3}$

1 8 26 30e 1   ABCD ABCE ABCF ABCG ABCH ADFH BDEH
BDFG CDGH CEFH   20 $\binom{8}{3}$

1 8 26 30f 1   ABCD ABCE ABCF ABCG ABCH ADEH BDFH
CDGH CEFH DEFG   20 $\binom{8}{3}$

1 8 26 30g 1   ABCD ABCE ABCF ABCG ABCH ADFH BDEH
BDFG CDEG CEFH . 20 $\binom{8}{3}$

1 8 26 30h 1   ABCD ABCE ABCF ABCG ABCH ADFH BDEH
BDFG CDEF CEGH   20 $\binom{8}{3}$

1 8 26 30i 1   ABCD ABCE ABCF ABCG ABCH ADFH BDEH
BDFG CDEF CDGH   20 $\binom{8}{3}$

1 8 26 30j 1   ABCDEH ABCF ABCG DEFG   26 $\binom{8}{3}$

1 8 26 30k 1   ABCDEH ABCF ABCG CFGH   26 $\binom{8}{3}$

1 8 26 30ℓ 1   ADEFH ABCD ABCE ABCF ABCG ABCH BDEG
CDFG   22 $\binom{8}{3}$

1 8 26 30m 1   CDEFH ABCD ABCE ABCF ABCG ABCH ADGH
BEFG   22 $\binom{8}{3}$

1 8 26 30n 1   CDEFH ABCD ABCE ABCF ABCG ABCH ADGH AEFG 22 $\binom{8}{3}$

1 8 26 31a 1   ABCDE ABCFH ABCG ADGH DEFG 26 $\binom{8}{3}$

1 8 26 31b 1   ABCDE ABCFH ABCG ADFG BEGH 26 $\binom{8}{3}$

1 8 26 31c 1   ABCDE ABCFG ABCH ADFH DEFG 26 $\binom{8}{3}$

1 8 26 31d 1   ABCDE ABCFH ABCG ADFG CEFG 26 $\binom{8}{3}$

1 8 26 31e 1   ABCDH ABCEF ABCG BDEG BFGH 26 $\binom{8}{3}$

1 8 26 32a 1   ABCDH ABCE ABCF ABCG ADEF BEGH DFGH 25 $\binom{8}{3}$

1 8 26 32b 1   ABCDE ABCF ABCG ABCH ADFH BDGH CEFH 25 $\binom{8}{3}$

1 8 26 32c 1   ABCDE ABCF ABCG ABCH ADFH BEFH CFGH 25 $\binom{8}{3}$

1 8 26 32d 1   ABCDH ABCE ABCF ABCG ADEF BEGH CFGH 25 $\binom{8}{3}$

1 8 26 32e 1   ABCGH ABCD ABCE ABCF ADEF BDEH CDFH 25 $\binom{8}{3}$

1 8 26 32f 1   ABCDE ABCF ABCG ABCH ADFH BEGH CFGH 25 $\binom{8}{3}$

1 8 26 32g 1   ABCDE ABCF ABCG ABCH ADFH BFGH DEGH 25 $\binom{8}{3}$

1 8 26 32h 1   ABCDE ABCF ABCG ABCH ADFH BEFH DEGH

25 $\binom{8}{3}$

1 8 26 32i 1   ABCDH ABCE ABCF ABCG AEFH BEGH DEFG

25 $\binom{8}{3}$

1 8 26 32j 1   ABCDH ABCE ABCF ABCG AEFH BEGH DFGH

25 $\binom{8}{3}$

1 8 26 32k 1   ABCDH ABCE ABCF ABCG AEFH BEGH CFGH

25 $\binom{8}{3}$

1 8 26 32ℓ 1   ABCDH ABCE ABCF ABCG BEFG CDEF CEGH

25 $\binom{8}{3}$

1 8 26 32m 1   ABCDH ABCE ABCF ABCG CDFG CEGH DEFH

25 $\binom{8}{3}$

1 8 26 32n 1   ABCDH ABCE ABCF ABCG BDFG BEGH CDEF

25 $\binom{8}{3}$

1 8 26 32o 1   ABCDH ABCE ABCF ABCG BDEG BEFH CDEF

25 $\binom{8}{3}$

1 8 26 32p 1   ABCDE DEFGH ABCF ABCG ABCH   27 $\binom{8}{3}$

1 8 26 32q 1   ABCEG ADEFH ABCD ABCF ABCH   27 $\binom{8}{3}$

1 8 26 33a 1   ABCD ABCE ABCF ABCG ABCH ADEH BDFH

CDGH DEFG   24 $\binom{8}{3}$

1 8 26 33b 1   ABCD ABCE ABCF ABCG ABCH ADEH BDFH

CEGH DEFG   24 $\binom{8}{3}$

1 8 26 33c 1   ABCD ABCE ABCF ABCG ABCH ADEH BDFH

CEFH DEFG   24 $\binom{8}{3}$

1 8 26 33d 1   ABCD ABCE ABCF ABCG ABCH ADEH BDFH

CDGH CEFH   24 $\binom{8}{3}$

1 8 26 33e 1   ABCD ABCE ABCF ABCG ABCH ADEH BDFH

CDEG CEFH   24 $\binom{8}{3}$

1 8 26 33f 1   ABCD ABCE ABCF ABCG ABCH BDFG BEGH

CDEF CDGH   24 $\binom{8}{3}$

1 8 26 33g 1   ABCD ABCE ABCF ABCG ABCH ADEH BDFH

CDFG CEGH   24 $\binom{8}{3}$

1 8 26 33h 1   ABCD ABCE ABCF ABCG ABCH BDEG BDFH

CDEF CDGH   24 $\binom{8}{3}$

1 8 26 33i 1   ABCD ABCE ABCF ABCG ABCH ADEH BDFH

CDGH CEFG   24 $\binom{8}{3}$

1 8 26 33j 1   ABCD ABCE ABCF ABCG ABCH ADGH CDFG

CEGH DEFH   24 $\binom{8}{3}$

1 8 26 33k 1   ABCD ABCE ABCF ABCG ABCH ADEH BDFG

CDEG CEFH   24 $\binom{8}{3}$

1 8 26 33ℓ 1   ABCD ABCE ABCF ABCG ABCH ADEH BDFG

CDEF CDGH   24 $\binom{8}{3}$

1 8 26 33m 1   ABCDEH ABCF ABCG   30 $\binom{8}{3}$

1 8 26 33n 1   ADEFH ABCD ABCE ABCF ABCG ABCH BDEG

26 $\binom{8}{3}$

1 8 26 34a 1   ABCDH ABCEF ABCG DEFH   30 $\binom{8}{3}$

1 8 26 34b 1   ABCDH ABCFG ABCE DEFH   30 $\binom{8}{3}$

1 8 26 34c 1   ABCDH ABCFG ABCE AEFH   30 $\binom{8}{3}$

1 8 26 35a 1   ABCDE ABCF ABCG ABCH AFGH DEFH

                           29 $\binom{8}{3}$

1 8 26 35b 1   ABCDE ABCF ABCG ABCH ADFH BFGH

                           29 $\binom{8}{3}$

1 8 26 35c 1   ABCDH ABCE ABCF ABCG ADEF BEGH

                           29 $\binom{8}{3}$

1 8 26 35d 1   ABCDH ABCE ABCF ABCG ADEF EFGH   29 $\binom{8}{3}$

1 8 26 35e 1   ABCDH ABCE ABCF ABCG ADEF BEFH

                           29 $\binom{8}{3}$

1 8 26 35f 1   ABCDE ABCF ABCG ABCH ADFH AEGH

                           29 $\binom{8}{3}$

1 8 26 35g 1   ABCDH ABCE ABCF ABCG AEFH BEGH

                           29 $\binom{8}{3}$

1 8 26 35h 1   ABCDH ABCE ABCF ABCG AEFH DEGH

                           29 $\binom{8}{3}$

1 8 26 36a 1   ABCD ABCE ABCF ABCG ABCH ADGH CEGH

                    DEFH   28 $\binom{8}{3}$

1 8 26 36b 1   ABCD ABCE ABCF ABCG ABCH ADEH BDFH

                    CDGH   28 $\binom{8}{3}$

1 8 26 36c 1   ABCD ABCE ABCF ABCG ABCH ADGH CEFG

DEFH   28 $\binom{8}{3}$

1 8 26 36d 1   ABCD ABCE ABCF ABCG ABCH ADEH BDFH

CEFH   28 $\binom{8}{3}$

1 8 26 36e 1   ABCD ABCE ABCF ABCG ABCH ADEH BDFG

CEFH   28 $\binom{8}{3}$

1 8 26 36f 1   ABCD ABCE ABCF ABCG ABCH ADEH BDFG

CDEF   28 $\binom{8}{3}$

1 8 26 36g 1   ABCD ABCE ABCF ABCG ABCH ADEH CDEG

CEFH   28 $\binom{8}{3}$

1 8 26 36h 1   ABCD ABCE ABCF ABCG ABCH ADEH CDFG

CEFH   28 $\binom{8}{3}$

1 8 26 36i 1   ABCD ABCE ABCF ABCG ABCH CDGH CEFG

DEFH   28 $\binom{8}{3}$

1 8 26 36j 1   DEFGH ABCD ABCE ABCF ABCG ABCH   30 $\binom{8}{3}$

1 8 26 36k 1   CDEFH ABCD ABCE ABCF ABCG ABCH   30 $\binom{8}{3}$

1 8 26 37 1   ABCDE ABCFH ABCG   34 $\binom{8}{3}$

1 8 26 38a 1   ABCGH ABCD ABCE ABCF ADEF   33 $\binom{8}{3}$

1 8 26 38b 1   ABCDH ABCE ABCF ABCG EFGH   33 $\binom{8}{3}$

1 8 26 38c 1   ABCDH ABCE ABCF ABCG DEFH   33 $\binom{8}{3}$

1 8 26 38d 1   ABCDH ABCE ABCF ABCG AEFH   33 $\binom{8}{3}$

1 8 26 39a 1   ABCD ABCE ABCF ABCG ABCH ADEH CEFH

                       32 $\binom{8}{3}$

1 8 26 39b 1   ABCD ABCE ABCF ABCG ABCH ADEH CEFG

                       32 $\binom{8}{3}$

1 8 26 39c 1   ABCD ABCE ABCF ABCG ABCH CEFG DEFH

                       32 $\binom{8}{3}$

1 8 26 39d 1   ABCD ABCE ABCF ABCG ABCH CDEH CFGH

                       32 $\binom{8}{3}$

1 8 26 41 1   ABCDH ABCE ABCF ABCG   37 $\binom{8}{3}$

1 8 26 42a 1   ABCD ABCE ABCF ABCG ABCH DEFH   36 $\binom{8}{3}$

1 8 26 42b 1   ABCD ABCE ABCF ABCG ABCH CDEH   36 $\binom{8}{3}$

1 8 26 45 1   ABCD ABCE ABCF ABCG ABCH   40 $\binom{8}{3}$

1 8 28 14 1   ABCD ABEF ABGH ACEH ACFG ADEG ADFH BCEG

                       BCFH BDEH BDFG CDEF CDGH EFGH   0 $\binom{8}{3}$

1 8 28 17 1   ABCD ABEF ABGH ACEH ACFG ADEG ADFH BCEG

                       BCFH BDEH BDFG CDEF CDGH   4 $\binom{8}{3}$

1 8 28 20a 1   ABCD ABEF ABGH ACEH ADEG ADFH BCEG BCFH

                       BDFG CDEF CDGH EFGH   8 $\binom{8}{3}$

1 8 28 20b 1   ABCD ABEF ABGH ACEH ADEG ADFH BCEG BCFH

                       BDEH BDFG CDEF CDGH   8 $\binom{8}{3}$

1 8 28 22 1   ABCDEFH   21 $\binom{8}{3}$

1 8 28 23a 1   ABCD ABEF ABGH ACEH ADEG ADFH BCEG

                       BDEH BDFG CDEF CFGH 12 $\binom{8}{3}$

1 8 28 23b 1   ABCD ABEF ABGH ACEH ADEG BCEG BCFH

                       BDEH BDFG CDEF EFGH 12 $\binom{8}{3}$

1 8 28 23c 1   ABCD ABEF ABGH ACEH ADFH BCEG BCFH

                       BDEH BDFG CDEF CDGH 12 $\binom{8}{3}$

1 8 28 23d 1   ABCD ABEF ABGH ACEH ADFH BCEG BCFH

                       BDFG CDEF CDGH EFGH 12 $\binom{8}{3}$

1 8 28 23e 1   ABCD ABEF ACEH ADFH BCEG BCFH BDEH

                       BDFG CDEF CDGH EFGH 12 $\binom{8}{3}$

1 8 28 26a 1   ABCD ABEF ABGH ACEG ADFH BCEH BDFG

                       CDEF CFGH DEGH 16 $\binom{8}{3}$

1 8 28 26b 1   ABCD ABEF ABGH ADFH BCFH BDEH BDFG

                       CDEF CDGH EFGH 16 $\binom{8}{3}$

1 8 28 26c 1   ABCD ABEF ACEH ADGH BCEG BCFH BDEH

                       BDFG CDEF EFGH 16 $\binom{8}{3}$

1 8 28 26d 1   ABCD ABEF ABGH ACEH ADFH BCEG BCFH

                       BDFG CDEF DEGH 16 $\binom{8}{3}$

1 8 28 26e 1   ABCD ABEF ABGH ACEH ADFH BCEG BCFH

                       BDFG CDEF CDGH 16 $\binom{8}{3}$

1 8 28 26f 1   ABCD ABEF ABGH ACEH ADFH BCEG BCFH

                       BDEH BDFG CDEF 16 $\binom{8}{3}$

1 8 28 26g 1   ABCD ABEF ABGH ACEH ADFH BCEG BDFG
CDEF CFGH DEGH 16 $\binom{8}{3}$.

1 8 28 26h 1   ABCD ABEF ACEH ADFH BCEG BCFH BDEH
BDFG CDEF CDGH 16 $\binom{8}{3}$

1 8 28 26i 1   ABCD ABEF ABGH ACEH BCEG BCFH BDEH
BDFG CDEF CDGH 16 $\binom{8}{3}$

1 8 28 26j 1   ABCD ABEF ACEH ADFH BCEG BCFH BDFG
CDEF CDGH EFGH 16 $\binom{8}{3}$

1 8 28 26k 1   ABCD ABEF ABGH ACEH ADFH BCEG BDFG
CDEF CDGH EFGH 16 $\binom{8}{3}$

1 8 28 26ℓ 1   ABCDH ABEF ACFG ADEG BCEG BDFG
CDEF EFGH 18 $\binom{8}{3}$

1 8 28 28 1   CDEFGH ABCD ABEF ABGH 24 $\binom{8}{3}$

1 8 28 29a 1   ABCD ABEF ABGH ACEG ACFH BDEH BDFG
CDEF CDGH 20 $\binom{8}{3}$

1 8 28 29b 1   ABCD ABEF ACEG ACFH ADGH BCGH BDEH
BDFG CDEF 20 $\binom{8}{3}$

1 8 28 29c 1   ABCD ABEF ABGH ACEH ADFH BCFH BDFG
CDEF CDGH 20 $\binom{8}{3}$

1 8 28 29d 1   ABCD ABEF ABGH ACEG ADFH BCEH BDFG
CDEF CFGH 20 $\binom{8}{3}$

1 8 28 29e 1   ABCD ABEF ACEH ADFH BCEG BCFH BDFG
CDEF DEGH 20 $\binom{8}{3}$

1 8 28 29f 1	ABCD ABEF ACEH ADFH BCEG BDFG CDEF CDGH EFGH 20 $\binom{8}{3}$
1 8 28 29g 1	ABCD ABEF ACEH ADGH BCEG BDEH BDFG CDEF CFGH 20 $\binom{8}{3}$
1 8 28 29h 1	ABCD ABEF ACEH BCEG BCFH BDEH BDFG CDEF CDGH 20 $\binom{8}{3}$
1 8 28 29i 1	ABCD ABEF ABGH ACEH BCEG BCFH BDFG CDEF EFGH 20 $\binom{8}{3}$
1 8 28 29j 1	ABCD ABEF ACEH ADFH BCEG BDFG CDEF CFGH DEGH 20 $\binom{8}{3}$
1 8 28 29k 1	ABCD ABEF ABGH ACEH ADFH BCEG BCFH BDFG CDEF 20 $\binom{8}{3}$
1 8 28 29ℓ 1	ABCD ABEF ABGH ACEH ADFH BCEG BDFG CDEF CFGH 20 $\binom{8}{3}$
1 8 28 29m 1	ABCD ABEF ACEH ADGH BCEG BCFH BDFG CDEF EFGH 20 $\binom{8}{3}$
1 8 28 29n 1	ABCD ABEF ABGH ACEH BCEG BDFG CDEF CFGH DEGH 20 $\binom{8}{3}$
1 8 28 29o 1	ABCD ABEF ACEH ADGH BCEG BCFH BDEH BDFG CDEF 20 $\binom{8}{3}$
1 8 28 29p 1	ABCD ABEF ABGH ACEH BCEG BCFH BDFG CDEF DEGH 20 $\binom{8}{3}$

1 8 28 29q 1	ABCD ABEF ABGH ACEH BCEG BCFH BDFG CDEF CDGH 20 $\binom{8}{3}$
1 8 28 29r 1	ABCD ABEF ABGH ACEH BCEG BCFH BDEH BDFG CDEF 20 $\binom{8}{3}$
1 8 28 29s 1	ABCD ABEF ABGH ACEH ADFH BCEG BDFG CDEF CDGH 20 $\binom{8}{3}$
1 8 28 29t 1	ABCD ABEF ACEH ADFH BCEG BCFH BDEH BDFG CDEF 20 $\binom{8}{3}$
1 8 28 29u 1	ABCDH ABEF ACEG AFGH BDFG BEGH CDEF 22 $\binom{8}{3}$
1 8 28 29v 1	ABCDH ABEF ACEG AFGH BDFG CDEF DEGH 22 $\binom{8}{3}$
1 8 28 29w 1	ABCDH ABEF ACFG ADEG BCEG BDFG CDEF 22 $\binom{8}{3}$
1 8 28 29x 1	ABCDH ABEF ADEG AFGH BCEG BDFG CDEF 22 $\binom{8}{3}$
1 8 28 29y 1	ABCDH ABEF ADEG BCEG BDFG CDEF EFGH 22 $\binom{8}{3}$
1 8 28 29z 1	ACEGH BDFGH ABCD ABEF CDEF 24 $\binom{8}{3}$
1 8 28 31 1	ABCDEF ABGH CDGH 28 $\binom{8}{3}$
1 8 28 32a 1	ABCD ABGH ACEH ADEG BCFH BDFG CDEF EFGH 24 $\binom{8}{3}$

1 8 28 32b 1	ABCD ABEH ACGH ADEG BCFH BDFG CDEF EFGH 24 $\binom{8}{3}$
1 8 28 32c 1	ABCD ABEH ACFH ADFG BCGH BEFG CDEF DEGH 24 $\binom{8}{3}$
1 8 28 32d 1	ABCD ABFH ACGH ADFG BCEH BEFG CDEF DEGH 24 $\binom{8}{3}$
1 8 28 32e 1	ABCD ABEH ACFH ADFG BDGH BEFG CDEF CEGH 24 $\binom{8}{3}$
1 8 28 32f 1	ABCD ABEF ACEG ADGH BDFG BEGH CDEF CFGH 24 $\binom{8}{3}$
1 8 28 32g 1	ABCD ABEF ABGH ACEH BDFG CDEF CFGH DEGH 24 $\binom{8}{3}$
1 8 28 32h 1	ABCD ABEF ABGH ACFH ADEH BCEH BDFG CDEF 24 $\binom{8}{3}$
1 8 28 32i 1	ABCD ABEF ACEG ACFH ADGH BDEH BDFG CDEF 24 $\binom{8}{3}$
1 8 28 32j 1	ABCD ABEF ACFH ADGH BDEH BDFG CDEF CEGH 24 $\binom{8}{3}$
1 8 28 32k 1	ABCD ABEF ACFH ADGH BCGH BDEH BDFG CDEF 24 $\binom{8}{3}$
1 8 28 32ℓ 1	ABCD ABEF ABGH ACEH BDFG CDEF CDGH EFGH 24 $\binom{8}{3}$
1 8 28 32m 1	ABCD ABEF ACEH ADFH BCFH BDEH BDFG CDEF 24 $\binom{8}{3}$

1 8 28 32n 1	ABCD ABEF ABGH ACEH BCFH BDEH BDFG CDEF 24 $\binom{8}{3}$
1 8 28 32o 1	ABCD ABEF ACEH ADGH BDFG BEGH CDEF CFGH 24 $\binom{8}{3}$
1 8 28 32p 1	ABCD ABEF ACEG ACFH ADEH BCEH BDFG CDEF 24 $\binom{8}{3}$
1 8 28 32q 1	ABCD ABEF ABGH ACEG BDFG CDEF CFGH DEGH 24 $\binom{8}{3}$
1 8 28 32r 1	ABCD ABEF ACEH ADFH BCEG BDFG CDEF CFGH 24 $\binom{8}{3}$
1 8 28 32s 1	ABCD ABEF ABGH ACEG BDFG CDEF CDGH EFGH 24 $\binom{8}{3}$
1 8 28 32t 1	ABCD ABEF ACEH ADGH BCEG BCFH BDFG CDEF 24 $\binom{8}{3}$
1 8 28 32u 1	ABCD ABEF ABGH ACEG ADFH BDFG CDEF CFGH 24 $\binom{8}{3}$
1 8 28 32v 1	ABCD ABEF ABGH ACEG ADFH BCEH BDFG CDEF 24 $\binom{8}{3}$
1 8 28 32w 1	ABCD ABEF ABGH ACEH BCEG BDFG CDEF CDGH 24 $\binom{8}{3}$
1 8 28 32x 1	ABCD ABEF ABGH ACEH BCEG BCFH BDFG CDEF 24 $\binom{8}{3}$
1 8 28 32y 1	ABCD ABEF ABGH ACEG ACFH BDFG CDEF EFGH 24 $\binom{8}{3}$

1 8 28 32z 1   ABCD ABEF ABGH ACEG ACFH BDFG CDEF

DEGH 24 $\binom{8}{3}$

1 8 28 32a' 1   ABCD ABEF ABGH ACEG ACFH BDFG CDEF

CDGH 24 $\binom{8}{3}$

1 8 28 32b' 1   ABCD ABEF ACFH ADGH BCEG BDEH BDFG

CDEF 24 $\binom{8}{3}$

1·8 28 32c' 1   ABCD ABEF ABGH ACEG ACFH BDEH BDFG

CDEF 24 $\binom{8}{3}$

1 8 28 32d' 1   ABCD ABEF ACEH BCEG BCFH BDEH BDFG

CDEF 24 $\binom{8}{3}$

1 8 28 32e' 1   ABCD ABEF ACEH ADFH BCEG BDFG CDEF

CDGH 24 $\binom{8}{3}$

1 8 28 32f' 1   ABCD ABEF ACEH BCEG BCFH BDFG CDEF

EFGH 24 $\binom{8}{3}$

1 8 28 32g' 1   ABCD ABEF ABGH ACEH ADFH BCEG BDFG

CDEF 24 $\binom{8}{3}$

1 8 28 32h' 1   ABCD ABEF ABGH ACFH ADEH BCEG BDFG

CDEF 24 $\binom{8}{3}$

1 8 28 32i' 1   ABCD ABEF ACEH ADFH BCEG BCFH BDFG

CDEF 24 $\binom{8}{3}$

1 8 28 32j' 1   ABCD ABEF ACEH BCEG BDFG CDEF CFGH

DEGH 24 $\binom{8}{3}$

1 8 28 32k' 1   ABCD ABEF ACEH ADGH BCEG BDFG CDEF

EFGH 24 $\binom{8}{3}$

1 8 28 32ℓ' 1   ABCD ABEF ABGH BCEG BCFH BDEH BDFG

CDEF   24 .$\binom{8}{3}$

1 8 28 32m' 1   ABCD ABEF ABGH ACFH BCEG BDFG CDEF

DEGH   24 $\binom{8}{3}$

1 8 28 32n' 1   ABCD ABEF ABGH ACFH BCEG BDEH BDFG

CDEF   24 $\binom{8}{3}$

1 8 28 32o' 1   ABCD ABEF ACGH BCEG BCFH BDEH BDFG

CDEF   24 $\binom{8}{3}$

1 8 28 32p' 1   ABCD ABEF ACEH ADGH BCEG BDEH/BDFG

CDEF   24 $\binom{8}{3}$

1 8 28 32q' 1   ABCD ABEF ACEH ADGH BCEG BDFG CDEF

CFGH   24 $\binom{8}{3}$

1 8 28 32r' 1   CDEFG ABCD ABEF ACEH ADFH BCFH

26 $\binom{8}{3}$

1 8 28 32s' 1   ABCDH ADFG AEFH BEFG CDEF CEGH

26 $\binom{8}{3}$

1 8 28 32t' 1   ADFGH ABCD BCFH BDEH BEFG CDEF

26 $\binom{8}{3}$

1 8 28 32u' 1   BEFGH ABCD ADEH ADFG CDEF CDGH

26 $\binom{8}{3}$

1 8 28 32v' 1   BEFGH ABCD ACFH ADEH ADFG CDEF

26 $\binom{8}{3}$

1 8 28 32w' 1   ADFGH ABCD BCGH BDEH BEFG CDEF

26 $\binom{8}{3}$

1 8 28 32x' 1   CDEFH ABCD ACGH ADFG BDGH BEFG

$26 \ \binom{8}{3}$

1 8 28 32y' 1   ADFGH ABCD BDEH BEFG CDEF CEGH

$26 \ \binom{8}{3}$

1 8 28 32z' 1   CDEFH ABCD ADFG AEGH BCGH BEFG

$26 \ \binom{8}{3}$

1 8 28 32a" 1   ABCDH CDEFG ABEF AEGH $28 \ \binom{8}{3}$

1 8 28 34 1   ABCDEF ABGH $32 \ \binom{8}{3}$

1 8 28 35a 1   ABCD ABEH ACGH ADEG BCFH BDFG CDEF

$28 \ \binom{8}{3}$

1 8 28 35b 1   ABCD ABEH ADEG ADFH BDFG CDEF CDGH

$28 \ \binom{8}{3}$

1 8 28 35c 1   ABCD ADEG ADFH BDEH BDFG CDEF CDGH

$28 \ \binom{8}{3}$

1 8 28 35d 1   ABCD ABGH ACEH ADEG BCFH BDFG CDEF

$28 \ \binom{8}{3}$

1 8 28 35e 1   ABCD ABEH ADEG BCFH BDFG CDEF EFGH

$28 \ \binom{8}{3}$

1 8 28 35f 1   ABCD ABEH ADEG ADFH BDFG CDEF CFGH

$28 \ \binom{8}{3}$

1 8 28 35g 1   ABCD ABFH ACGH ADFG BCEH BEFG CDEF

$28 \ \binom{8}{3}$

1 8 28 35h 1   ABCD ABFH ACGH ADFG BDEH BEFG CDEF

$28 \ \binom{8}{3}$

1 8 28 35i 1   ABCD ABFH ACGH ADFG BEFG CDEF DEGH

28 $\binom{8}{3}$

1 8 28 35j 1   ABCD ABEH ACFH ADFG BDGH BEFG CDEF

28 $\binom{8}{3}$

1 8 28 35k 1   ABCD ABEH ADFG BCGH BDFH BEFG CDEF

28 $\binom{8}{3}$

1 8 28 35ℓ 1   ABCD ABEH ACFH ADFG BCGH BEFG CDEF

28 $\binom{8}{3}$

1 8 28 35m 1   ABCD ABFH ADFG BCEH BEFG CDEF CDGH

28 $\binom{8}{3}$

1 8 28 35n 1   ABCD ABEH ADFG BDFH BEFG CDEF CDGH

28 $\binom{8}{3}$

1 8 28 35o 1   ABCD ABEH ACGH ADFG BDFH BEFG CDEF

28 $\binom{8}{3}$

1 8 28 35p 1   ABCD ABEH ADFG BCFH BDGH BEFG CDEF

28 $\binom{8}{3}$

1 8 28 35q 1   ABCD ABEF BCEG BCFH BDEH BDFG CDEF

28 $\binom{8}{3}$

1 8 28 35r 1   ABCD ABEF ACFH ADEH BCEG BDFG CDEF

28 $\binom{8}{3}$

1 8 28 35s 1   ABCD ABEF ACEG ADGH BDFG BEGH CDEF

28 $\binom{8}{3}$

1 8 28 35t 1   ABCD ABEF ACEG ACFH BDEH BDFG CDEF

28 $\binom{8}{3}$

1 8 28 35u 1   ABCD ABEF ACEH ADFH BCEG BDFG CDEF

28 $\binom{8}{3}$

1 8 28 35v 1   ABCD ABEF ABGH ACEG BDFG CDEF CFGH

28 $\binom{8}{3}$

1 8 28 35w 1   ABCD ABEF ACFG ADEG BCEG BDFG CDEF

28 $\binom{8}{3}$

1 8 28 35x 1   ABCD ABEF ACEH ADFH BCFH BDFG CDEF

28 $\binom{8}{3}$

1 8 28 35y 1   ABCD ABEF ACEH ADFH BCGH BDFG CDEF

28 $\binom{8}{3}$

1 8 28 35z 1   ABCD ABEF ABGH ACEH BCFH BDFG CDEF

28 $\binom{8}{3}$

1 8 28 35a' 1   ABCD ABEF ACEH ADGH BCGH BDFG CDEF

28 $\binom{8}{3}$

1 8 28 35b' 1   ABCD ABEF ACEH ADGH BDFG BEGH CDEF

28 $\binom{8}{3}$

1 8 28 35c' 1   ABCD ABEF ACFH ADEH BCEH BDFG CDEF

28 $\binom{8}{3}$

1 8 28 35d' 1   ABCD ABEF ACFH ADEH BCGH BDFG CDEF

28 $\binom{8}{3}$

1 8 28 35e' 1   ABCD ABEF ABGH BCFH BDEH BDFG CDEF

28 $\binom{8}{3}$

1 8 28 35f' 1   ABCD ABEF ABGH BCFH BDFG CDEF CEGH

28 $\binom{8}{3}$

1 8 28 35g' 1   ABCD ABEF ACFH ADEH BDFG CDEF CEGH

28 $\binom{8}{3}$

1 8 28 35h' 1   ABCD ABEF BCFH BDEH BDFG CDEF CDGH

28 $\binom{8}{3}$

1 8 28 35i' 1   ABCD ABEF ABGH BCEH BDFG CDEF CFGH

28 $\binom{8}{3}$

1 8 28 35j' 1   ABCD ABEF ACFH ADGH BCGH BDFG CDEF

28 $\binom{8}{3}$

1 8 28 35k' 1   ABCD ABEF ACFH ADGH BDEH BDFG CDEF

28 $\binom{8}{3}$

1 8 28 35ℓ' 1   ABCD ABEF AEGH BCFH BDFG CDEF CDGH

28 $\binom{8}{3}$

1 8 28 35m' 1   ABCD ABEF ACFH ADGH BDFG BEGH CDEF

28 $\binom{8}{3}$

1 8 28 35n' 1   ABCD ABEF ABGH ACEH BDFG CDEF CFGH

28 $\binom{8}{3}$

1 8 28 35o' 1   ABCD ABEF ACFH AEGH BDEH BDFG CDEF

28 $\binom{8}{3}$

1 8 28 35p' 1   ABCD ABEF ABGH ACEH BDFG CDEF CDGH

28 $\binom{8}{3}$

1 8 28 35q' 1	ABCD ABEF ADGH BDFG BEGH CDEF CFGH
	28 $\binom{8}{3}$
1 8 28 35r' 1	ABCD ABEF ABGH BDFG CDEF CFGH DEGH
	28 $\binom{8}{3}$
1 8 28 35s' 1	ABCD ABEF ABGH ADFH BCEH BDFG CDEF
	28 $\binom{8}{3}$
. 1 8 28 35t' 1	ABCD ABEF ACGH ADFH BCFH BDFG CDEF
	28 $\binom{8}{3}$
1 8 28 35u' 1	ABCD ABEF ABGH ACEH ADFH BDFG CDEF
	28 $\binom{8}{3}$
1 8 28 35v' 1	ABCD ABEF ADFH BDFG CDEF CFGH DEGH
	28 $\binom{8}{3}$
1 8 28 35w' 1	ABCD ABEF ABGH BDFG CDEF CDGH EFGH
	28 $\binom{8}{3}$
1 8 28 35x' 1	ABCD ABEF ADFH BCFH BDFG BEGH CDEF
	28 $\binom{8}{3}$
1 8 28 35y' 1	ABCD ABEF ADFH BCFH BDEH BDFG CDEF
	28 $\binom{8}{3}$
1 8 28 35z' 1	ABCD ABEF ACGH ADFH BDEH BDFG CDEF
	28 $\binom{8}{3}$
1 8 28 35a" 1	ABCD ABEF ACGH ADFH BDFG BEGH CDEF
	28 $\binom{8}{3}$
1 8 28 35b" 1	ABCD ABEF ADEH BDFG CDEF CDGH EFGH
	28 $\binom{8}{3}$

1 8 28 35c" 1   ABCD ABEF ADEH BCGH BDFG CDEF EFGH

28 $\binom{8}{3}$

1 8 28 35d" 1   ABCD ABEF ADEH BCEH BDFG CDEF CDGH

28 $\binom{8}{3}$

1 8 28 35e" 1   ABCD ABEF ABGH ACFH BDFG CDEF CDGH

28 $\binom{8}{3}$

1 8 28 35f" 1   ABCD ABEF ACGH ADFH BDFG CDEF DEGH

28 $\binom{8}{3}$

1 8 28 35g" 1   ABCD ABEF ABGH ACFH BDEH BDFG CDEF

28 $\binom{8}{3}$

1 8 28 35h" 1   ABCD ABEF ABGH ACFH ADEH BDFG CDEF

28 $\binom{8}{3}$

1 8 28 35i" 1   ABCD ABEF ABGH BCFH BDFG CDEF EFGH

28 $\binom{8}{3}$

1 8 28 35j" 1   ABCD ABGH ADEH ADFG BEFG CDEF CFGH

28 $\binom{8}{3}$

1 8 28 35k" 1   ABCD ABEH ACGH ADEG ADFH BDFG CDEF

28 $\binom{8}{3}$

1 8 28 35ℓ" 1   ABCDH ADFG BEFG CDEF DEGH   30 $\binom{8}{3}$

1 8 28 35m" 1   BEFGH ABCD ACEH CDEF CDGH   30 $\binom{8}{3}$'

1 8 28 35n" 1   BEFGH ABCD ACEH ADGH CDEF   30 $\binom{8}{3}$

1 8 28 35o" 1   BEFGH ABCD ACEH ADFH CDEF   30 $\binom{8}{3}$

1 8 28 35p" 1   CDEFH ABCD ABEH AFGH BEFG   30 $\binom{8}{3}$

1 8 28 35q" 1   ABCDH AEFH BDFG BEGH CDEF   30 $\binom{8}{3}$

1 8 28 35r" 1   ABCDH BDFG BEFH CDEF CEGH   30 $\binom{8}{3}$

1 8 28 35s" 1   ABCDH AEFH BDFG CDEF DEGH   30 $\binom{8}{3}$

1 8 28 35t" 1   CDEFH ABCD ABFH BDFG BEGH   30 $\binom{8}{3}$

1 8 28 35u" 1   CDEFH ABCD ABFH ADGH BDFG   30 $\binom{8}{3}$

1 8 28 35v" 1   ABCDH AEFH BDFG CDEF CEGH   30 $\binom{8}{3}$

1 8 28 35w" 1   CDEFH ABCD ABFH BCGH BDFG   30 $\binom{8}{3}$

1 8 28 35x" 1   ABCDH CDEFG ABEF   32 $\binom{8}{3}$

1 8 28 37   1   ABCDEF   36 $\binom{8}{3}$

1 8 28 38a 1   ABCD ABEF BCFH BDFG CDEF CDGH

     32 $\binom{8}{3}$

1 8 28 38b 1   ABCD ABEF BCEG BCFH BDFG CDEF

     32 $\binom{8}{3}$

1 8 28 38c 1   ABCD ABGH ACEH BDFG CDEF EFGH

     32 $\binom{8}{3}$

1 8 28 38d 1   ABCD ABGH ACEH BDEH BDFG CDEF

     32 $\binom{8}{3}$

1 8 28 38e 1   ABCD AEFH BCEH BDFH BEFG CDEF

     32 $\binom{8}{3}$

1 8 28 38f 1   ABCD ACEH ADFH BEFG CDEF CDGH

32 $\binom{8}{3}$

1 8 28 38g 1   ABCD ACEH ADFH BEFG CDEF CFGH

32 $\binom{8}{3}$

1 8 28 38h 1   ABCD ACFH AEGH BDGH BEFG CDEF

32 $\binom{8}{3}$

1 8 28 38i 1   ABCD ABGH BCEH BDFH BEFG CDEF

32 $\binom{8}{3}$

1 8 28 38j 1   ABCD ABGH ACEH BEFG CDEF DFGH

32 $\binom{8}{3}$

1 8 28 38k 1   ABCD ABGH ACEH BDEH BEFG CDEF

32 $\binom{8}{3}$

1 8 28 38ℓ 1   ABCD ABEH ADFG BCGH BEFG CDEF

32 $\binom{8}{3}$

1 8 28 38m 1   ABCD ADEH ADFG BCGH BEFG CDEF

32 $\binom{8}{3}$

1 8 28 38n 1   ABCD ADEH ADFG BDGH BEFG CDEF

32 $\binom{8}{3}$

1 8 28 38o 1   ABCD ACGH ADFG BEFG CDEF DEGH

32 $\binom{8}{3}$

1 8 28 38p 1   ABCD ADEH ADFG BEFG CDEF CFGH

32 $\binom{8}{3}$

1 8 28 38q   1   ABCD ABGH ADFG BCEH BEFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38r   1   ABCD ACGH ADFG BDEH BEFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38s   1   ABCD ACGH ADFG BCFH BEFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38t   1   ABCD ACGH ADFG BCEH BEFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38u   1   ABCD ADFG AEFH BCEH BEFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38v   1   ABCD ADFG AEFH BDEH BEFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38w   1   ABCD ACGH ADFG AEFH BEFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38x   1   ABCD ADFG AEGH BCGH BEFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38y   1   ABCD ADFG BEFG CDEF CFGH DEGH

$32 \ \binom{8}{3}$

1 8 28 38z   1   ABCD ADFG AEGH BDFH BEFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38a' 1   ABCD ACFH ADFG BDFH BEFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38b' 1   ABCD ACFH ADFG BEFG CDEF DEGH

$32 \ \binom{8}{3}$

1 8 28 38c' 1   ABCD ACFH ADFG BCGH BEFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38d' 1   ABCD ADFG BCEH BDFH BEFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38e' 1   ABCD ADFG BCFH BDGH BEFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38f' 1   ABCD ADFG BCFH BDEH BEFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38g' 1   ABCD ADFG BCEH BDGH BEFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38h' 1   ABCD ABEF ABGH ACEH ADFH CDEF

$32 \ \binom{8}{3}$

1 8 28 38i' 1   ABCD ABEF ACEH ADFH BCFH CDEF

$32 \ \binom{8}{3}$

1 8 28 38j' 1   ABCD ABEF ACEH ADFH BCGH CDEF

$32 \ \binom{8}{3}$

1 8 28 38k' 1   ABCD ABEF ACEH ADFH CDEF CFGH

$32 \ \binom{8}{3}$

1 8 28 38ℓ' 1   ABCD ABGH ADEG ADFH BDFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38m' 1   ABCD ABEH ADEG ADFH BDFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38n' 1

ABCD ABEF ACEH ADGH BCGH CDEF

$32 \ \binom{8}{3}$

1 8 28 38o' 1

ABCD ABEH ACFH ADEG BDFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38p' 1

ABCD ABEF ACEH ADGH BDFH CDEF

$32 \ \binom{8}{3}$

1 8 28 38q' 1

ABCD ABEF ACEH ADGH BEGH CDEF

$32 \ \binom{8}{3}$

1 8 28 38r' 1

ABCD ABEH ACGH ADEG BDFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38s' 1

ABCD ABEF ACEH ADGH BFGH CDEF

$32 \ \binom{8}{3}$

1 8 28 38t' 1

ABCD ABEF ABGH ACEH BDFH CDEF

$32 \ \binom{8}{3}$

1 8 28 38u' 1

ABCD ABEH ADEG BCFH BDFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38v' 1

ABCD ABGH ACEH ADEG BDFG CDEF

$32 \ \binom{8}{3}$

1 8 28 38w' 1

ABCD ABEF ABGH ACEH CDEF CDGH

$32 \ \binom{8}{3}$

1 8 28 38x' 1

ABCD ABEH ADEG BDFG CDEF CDGH

$32 \ \binom{8}{3}$

1 8 28 38y' 1	ABCD ABEF ABGH ACEH CDEF CFGH 32 $\binom{8}{3}$	
1 8 28 38z' 1	ABCD ABEH ADEG BDFG CDEF CFGH 32 $\binom{8}{3}$	
1 8 28 38a" 1	ABCD ADEG ADFH BDEH BDFG CDEF 32 $\binom{8}{3}$	
1 8 28 38b" 1	ABCD ABEF ABGH CDEF CEGH DFGH 32 $\binom{8}{3}$	
1 8 28 38c" 1	ABCD ABEF ABGH ACEH BCFH CDEF 32 $\binom{8}{3}$	
1 8 28 38d" 1	ABCD ABEF ABGH ACEH CDEF DFGH 32 $\binom{8}{3}$	
1 8 28 38e" 1	ABCD ABEF ACGH BEGH CDEF DFGH 32 $\binom{8}{3}$	
1 8 28 38f" 1	ABCD ABEF ABGH CDEF CDGH EFGH 32 $\binom{8}{3}$	
1 8 28 38g" 1	ABCDH AEGH BEFG CDEF 34 $\binom{8}{3}$	
1 8 28 38h" 1	ABCDH ABEF CDEF EFGH 34 $\binom{8}{3}$	
1 8 28 38i" 1	ABCDH AEFH BEGH CFGH 34 $\binom{8}{3}$	
1 8 28 38j" 1	ABCDH AEFH BEGH DEFG 34 $\binom{8}{3}$	
1 8 28 38k" 1	ABCDH AEGH CDEF CFGH 34 $\binom{8}{3}$	

1 8 28 38ℓ" 1	ABCDH AEFH CDEF CEGH	34 $\binom{8}{3}$
1 8 28 38m" 1	ABCDH AEGH BFGH CDEF	34 $\binom{8}{3}$
1 8 28 38n" 1	ABCDH AEFH BEGH CDEF	34 $\binom{8}{3}$
1 8 28 38o" 1	ABCDH CDEF CEGH DFGH	34 $\binom{8}{3}$
1 8 28 38p" 1 .	ABCDH DEFGH	36 $\binom{8}{3}$
1 8 28 41a 1	ABCD AEGH BFGH CDEF CDGH	36 $\binom{8}{3}$
1 8 28 41b 1	ABCD ABEH ACFH ADGH EFGH	36 $\binom{8}{3}$
1 8 28 41c 1	ABCD ABEH CDEH CFGH DEFG	36 $\binom{8}{3}$
1 8 28 41d 1	ABCD ADEH BDFH CDGH DEFG	36 $\binom{8}{3}$
1 8 28 41e 1	ABCD AEGH BCFH BDFG CDEF	36 $\binom{8}{3}$
1 8 28 41f 1	ABCD ACEH ADFH BCGH CDEF	36 $\binom{8}{3}$
1 8 28 41g 1	ABCD ACEH ADFH CDEF CDGH	36 $\binom{8}{3}$
1 8 28 41h 1	ABCD ACEH ADFH CDEF CFGH	36 $\binom{8}{3}$
1 8 28 41i 1	ABCD ACEH ADGH BCFH CDEF	36 $\binom{8}{3}$
1 8 28 41j 1	ABCD ACEH AFGH BCGH CDEF	36 $\binom{8}{3}$
1 8 28 41k 1	ABCD ACEH AFGH BDFH CDEF	36 $\binom{8}{3}$
1 8 28 41ℓ 1	ABCD ACEH AFGH BEGH CDEF	36 $\binom{8}{3}$
1 8 28 41m 1	ABCD ACFH BDFH CDEF EFGH	36 $\binom{8}{3}$

1 8 28 41n 1	ABCD	ACEH	AFGH	CDEF	CDGH	36 $\binom{8}{3}$
1 8 28 41o 1	ABCD	ABEH	AFGH	CDEF	CDGH	36 $\binom{8}{3}$
1 8 28 41p 1	ABCD	ACEH	BCFH	CDEF	CDGH	36 $\binom{8}{3}$
1 8 28 41q 1	ABCD	ABGH	ACEH	BCFH	CDEF	36 $\binom{8}{3}$
1 8 28 41r 1	ABCD	ACFH	ADEH	BEFH	CDEF	36 $\binom{8}{3}$
1 8 28 41s 1	ABCD	ABEH	CDEF	CEGH	DFGH	36 $\binom{8}{3}$
1 8 28 41t 1	ABCD	ACEH	ADFH	BCFH	CDEF	36 $\binom{8}{3}$
1 8 28 41u 1	ABCD	ABGH	ACEH	BDEH	CDEF	36 $\binom{8}{3}$
1 8 28 41v 1	ABCD	ACEH	BCGH	BDFH	CDEF	36 $\binom{8}{3}$
1 8 28 41w 1	ABCD	ABGH	CDEF	CDGH	EFGH	36 $\binom{8}{3}$
1 8 28 41x 1	ABCD	ABEH	CDEF	CDGH	EFGH	36 $\binom{8}{3}$
1 8 28 41y 1	ABCD	ABEH	ACFH	BDGH	CDEF	36 $\binom{8}{3}$
1 8 28 41z 1	ABCD	ACEH	BFGH	CDEF	DEGH	36 $\binom{8}{3}$
1 8 28 41a' 1	ABCD	ACEH	BFGH	CDEF	CDGH	36 $\binom{8}{3}$
1 8 28 41b' 1	ABCD	ACEH	BEFH	CDEF	CFGH	36 $\binom{8}{3}$
1 8 28 41c' 1	ABCD	ACEH	BDGH	CDEF	EFGH	36 $\binom{8}{3}$
1 8 28 41d' 1	ABCD	ABEH	ACGH	CDEF	DFGH	36 $\binom{8}{3}$
1 8 28 41e' 1	ABCD	ABGH	ACEH	CDEF	CFGH	36 $\binom{8}{3}$

1 8 28 41f' 1	ABCD ACEH BDFH CDEF EFGH	36 $\binom{8}{3}$
1 8 28 41g' 1	ABCD ACEH BDFH CDEF CDGH	36 $\binom{8}{3}$
1 8 28 41h' 1	ABCD ACEH BDEH BFGH CDEF	36 $\binom{8}{3}$
1 8 28 41i' 1	ABCD ABGH ACEH CDEF EFGH	36 $\binom{8}{3}$
1 8 28 41j' 1	ABCD ACEH BCGH CDEF DFGH	36 $\binom{8}{3}$
1 8 28 41k' 1	ABCDH AEFH CDEF	38 $\binom{8}{3}$
1 8 28 41ℓ' 1	ABCDH CDEF EFGH	38 $\binom{8}{3}$
1 8 28 41m' 1	CDEFH ABCD AEGH	38 $\binom{8}{3}$
1 8 28 41n' 1	ABCDH AEFH BEGH	38 $\binom{8}{3}$
1 8 28 44a 1	ABCD ABGH CDEF EFGH	40 $\binom{8}{3}$
1 8 28 44b 1	ABCD ABEH ACFH BCGH	40 $\binom{8}{3}$
1 8 28 44c 1	ABCD ABEH ACFH BDFH	40 $\binom{8}{3}$
1 8 28 44d 1	ABCD ABEH ACFH BDGH	40 $\binom{8}{3}$
1 8 28 44e 1	ABCD ABEH ACFH DEGH	40 $\binom{8}{3}$.
1 8 28 44f 1	ABCD ABEH ACFH EFGH	40 $\binom{8}{3}$
1 8 28 44g 1	ABCD AEGH BFGH CDEF	40 $\binom{8}{3}$
1 8 28 44h 1	ABCD ABEH AFGH CDEH	40 $\binom{8}{3}$
1 8 28 44i 1	ABCD ABEH AFGH CDFH	40 $\binom{8}{3}$

1 8 28 44j 1	ABCD ADFH BDEH CDEF	40 $\binom{8}{3}$
1 8 28 44k 1	ABCD ADFH BDGH CDEF	40 $\binom{8}{3}$
1 8 28 44ℓ 1	ABCD ADFH BEGH CDEF	40 $\binom{8}{3}$
1 8 28 44m 1	ABCD ADFH BCEH CDEF	40 $\binom{8}{3}$
1 8 28 44n 1	ABCD ABEH CEFH DFGH	40 $\binom{8}{3}$
1 8 28 44o 1	ABCD ABEH CEFH DEGH	40 $\binom{8}{3}$
1 8 28 44p 1	ABCD ABEH ACFH ADGH	40 $\binom{8}{3}$
1 8 28 44q 1	ABCD ABEH CDFH EFGH	40 $\binom{8}{3}$
1 8 28 44r 1	ABCD ABEH CDEH EFGH	40 $\binom{8}{3}$
1 8 28 44s 1	ABCDE AFGH	42 $\binom{8}{3}$
1 8 28 44t 1	ABCDE ABFH	42 $\binom{8}{3}$
1 8 28 47a 1	ABCD ABEF CDEF	44 $\binom{8}{3}$
1 8 28 47b 1	ABCD CDEF EFGH	44 $\binom{8}{3}$
1 8 28 47c 1	ABCD AEGH CDEF	44 $\binom{8}{3}$
1 8 28 47d 1	ABCH ADEH AFGH	44 $\binom{8}{3}$
1 8 28 47e 1	ABCD ABEH AFGH	44 $\binom{8}{3}$
1 8 28 47f 1	ABCD AEFH CDEF	44 $\binom{8}{3}$
1 8 28 47g 1	ABCD ABEH ACFH	44 $\binom{8}{3}$

1	8	28	47h	1			

ABCDE 46 $\binom{8}{3}$

1 8 28 50a 1

ABCD ABEF 48 $\binom{8}{3}$

1 8 28 50b 1

ABCD EFGH 48 $\binom{8}{3}$

1 8 28 50c 1

ABCD AEFG 48 $\binom{8}{3}$

1 8 28 53 1

ABCD 52 $\binom{8}{3}$

1 8 28 56 1

56 $\binom{8}{3}$

1 8 19e 19 8 1

ABCDEFH ABCDEGH ABCDFGH 5 $\binom{8}{4}$

1 8 20e 21 9 1

ABCDEFG ABCDEFH ABCGH ADEGH BEFGH

CDFGH 3 $\binom{8}{4}$

1 8 21a 23 10 1

ABCDEFH ABCDEGH ABCDFG AEFGH 6 $\binom{8}{4}$

1 8 21b 21 8 1

ABCDEFH ABCDEG ABCDFG ABCDGH AEFGH

BEFGH CEFGH DEFGH σ $\binom{8}{4}$

1 8 22a 24 9 1

ABCDEF ABCDEG ABCDEH ABCFGH ADEFGH

BDFGH BEFGH CDFGH CEFGH 0 $\binom{8}{4}$

1 8 22b 26 12 1

ABCDEFG ABCDEH ABCFGH ADEFGH 8 $\binom{8}{4}$

1 8 22c 25 11 1

ABCDEFG ABCDEH ADEFGH ABCFH ABCGH

BDFGH CDFGH 4 $\binom{8}{4}$

1 8 22d 25 11 1

ABCDEFH ABCDEGH ABCFG ADEFG BDFGH

6 $\binom{8}{4}$

1 8 23 27 12 1

ABCDEFG ABCDEFH ABCDGH 9 $\binom{8}{4}$

1 8 23 29a 10 1   ABCDEF ABCDEG ABCDEH ABCDFG ABCDFH

ABCDGH AEFGH BEFGH CEFGH DEFGH 0 $\binom{8}{4}$

1 8 23 29b 14 1   ABCDEFH ABCDEG ABCDFG ABCDGH AEFGH

9 $\binom{8}{4}$

1 8 23 32 17 1   ABCDEFH ABCDEG ABCDFG ABCDGH 13 $\binom{8}{4}$

1 8 23 32 19 1   ABCDEF ABCDEG ABCDEH ABCDFG ABCDFH

ABCDGH AEFGH 12 $\binom{8}{4}$

1 8 23 32 23 1   ABCDEF ABCDEG ABCDEH ABCDFG ABCDFH

ABCDGH 17 $\binom{8}{4}$

1 8 24a 29 13 1   ABCDEFG ABCDEFH ABCGH DEFGH 9 $\binom{8}{4}$

1 8 24a 30a 11 1   ABCDEF ABCDGH ABCEGH ABCFGH ADEFG

ADEFH BDEFG BDEFH CDEFG CDEFH DEFGH

0 $\binom{8}{4}$

1 8 24a 30b 14 1   ABCDEFH ABCDGH ABCEG ABCEG ADEFG

BDEFG CDEFG DEFGH 6 $\binom{8}{4}$

1 8 24a 31 15 1   ABCDEF ABCDGH ADEFGH ABCEG ABCEH

ABCFG ABCFH BDEFG BDEFH CDEFG CDEFH

4 $\binom{8}{4}$

1 8 24a 34 18 1   ABCDEFH ABCDG ABCEG ABCFG ABCGH ADEFG

BDEFG CDEFG DEFGH 9 $\binom{8}{4}$

1 8 24a 34 19 1   ABCDEF ABCFGH ABCDG ABCDH ABCEG ABCEH

ADEFG ADEFH BDEFG BDEFH CDEFG CDEFH

DEFGH 6 $\binom{8}{4}$

1 8 24a 34 24 1   ABCDEF ABCDG ABCDH ABCEG ABCEH ABCFG

ABCFH ABCGH ADEFG ADEFH BDEFG BDEFH

CDEFG CDEFH DEFGH 9 $\binom{8}{4}$

1 8 24b 29a 13 1   ABCDEFH ABCDEGH ABCFG ADEFG 9 $\binom{8}{4}$

1 8 24b 29c 13 1   ABCDEFH ABCDEG ABCFG ABCGH ADEFG

ADEGH BDFGH CEFGH 5 $\binom{8}{4}$

1 8 24b 31 15 1   ABCDEFH ABCDEG ABCFGH ADEFG ADEGH

10 $\binom{8}{4}$

1 8 24b 32a 16 1   ABCDEFH ABCDEG ABCFG ABCGH ADEFG

ADEGH BDFGH 9 $\binom{8}{4}$

1 8 24b 32b 17 1   ABCDEF ABCDEG ABCDEH ABCFGH ADEFGH

12 $\binom{8}{4}$

1 8 24b 32c 15 1   ABCDEF ABCDEG ABCDEH ABCFGH ADEFG-

ADEFH ADEGH BDFGH BEFGH 6 $\binom{8}{4}$

1 8 24b 35 18 1   ABCDEF ABCDEG ABCDEH ABCFG ABCFH

ABCGH ADEFG ADEFH ADEGH BDFGH CEFGH

7 $\binom{8}{4}$

1 8 24b 35 19 1   ABCDEFH ABCDEG ABCFG ABCGH ADEFG

ADEGH 13 $\binom{8}{4}$

1 8 24b 35 21 1   ABCDEF ABCDEG ABCDEH ABCFGH ADEFG

ADEFH ADEGH 14 $\binom{8}{4}$

1 8 24b 35 22 1   ABCDEF ABCDEG ABCDEH ABCFG ABCFH

ABCGH ADEFG ADEFH ADEGH BEFGH 12 $\binom{8}{4}$

1 8 24b 35 26 1   ABCDEF ABCDEG ABCDEH ABCFG ABCFH

ABCGH ADEFG ADEFH ADEGH 17 $\binom{8}{4}$

1 8 26 33m 15 1   ABCDEFH ABCDEGH ABCFG   12 $\binom{8}{4}$

1 8 26 34a 16 1   ABCDEFH ABCDGH ABCEFG DEFGH   12 $\binom{8}{4}$

1 8 26 35e 17 1   ABCDEFH ABCDGH ABCEG ABCFG ADEFG

BEFGH 11 $\binom{8}{4}$

1 8 26 36d 18 1   ABCDEFH ABCDG ABCEG ABCFG ABCGH

ADEGH BDFGH CEFGH   10 $\binom{8}{4}$

1 8 26 36i 17 1   ABCDGH ABCEFG CDEFGH ABCDE ABCDF

ABCEH ABCFH ADEFH BDEFH 8 $\binom{8}{4}$

1 8 26 36j 13 1   ADEFGH BDEFGH CDEFGH ABCDE ABCDF

ABCDG ABCDH ABCEF ABCEG ABCEH ABCFG

ABCFH ABCGH   0 $\binom{8}{4}$

1 8 26 36k 18 1   ABCDEFH CDEFGH ABCDG ABCEG ABCFG

ABCGH   12 $\binom{8}{4}$

1 8 26 37 19 1   ABCDEFH ABCDEG ABCFGH   16 $\binom{8}{4}$

1 8 26 38a 21 1   ABCDEF ABCDGH ABCEGH ABCFGH ADEFG

ADEFH   15 $\binom{8}{4}$

1 8 26 38b 19 1   ABCDEH ABCDFH ABCDGH ABCEF ABCEG

ABCFG AEFGH BEFGH CEFGH DEFGH   9 $\binom{8}{4}$

1 8 26 38c 20 1   ABCDEFH ABCDGH ABCEG ABCFG DEFGH

15 $\binom{8}{4}$

1 8 26 38d 20 1   ABCDEFH ABCDGH ABCEG ABCFG AEFGH

15 $\binom{8}{4}$

1 8·26 39a 21 1   ABCDEFH ABCDG ABCEG ABCFG ABCGH

ADEGH CEFGH   14 $\binom{8}{4}$

1 8 26 39b 19 1 ABCDEH ABCEFG ABCDF ABCDG ABCFH

ABCGH ADEFH ADEGH BDFGH CDEFG

CEFGH 8 $\binom{8}{4}$

1 8 26 39b 23 1 ABCDEH ABCEFG ABCDF ABCDG ABCFH

ABCGH ADEFH ADEGH CDEFG .CEFGH 13 $\binom{8}{4}$

1 8 26 39c 21 1 ABCEFG CDEFGH ABCDE ABCDF ABCDG ABCDH

ABCEH ABCFH ABCGH ADEFH BDEFH 10 $\binom{8}{4}$

1 8 26 39d 23 1 ABCDEH ABCFGH CDEFGH ABCDF ABCDG

ABCEF ABCEG 16 $\binom{8}{4}$

1 8 26 41 23a 1 ABCDEH ABCDFH ABCDGH ABCEFG DEFGH

18 $\binom{8}{4}$

1 8 26 41 23b 1 ABCDEFH ABCDGH ABCEG ABCFG 19 $\binom{8}{4}$

1 8 26 41 24 1 ABCDEH ABCDFH ABCDGH ABCEF ABCEG

ABCFG ADEFG BEFGH 16 $\binom{8}{4}$

1 8 26 41 27 1 ABCDEH ABCDFH ABCDGH ABCEFG 23 $\binom{8}{4}$

1 8 26 41 28a 1 ABCDEH ABCDFH ABCDGH ABCEF ABCEG

ABCFG DEFGH 21 $\binom{8}{4}$

1 8 26 41 28b 1 ABCDEH ABCDFH ABCDGH ABCEF ABCEG

ABCFG CEFGH 21 $\binom{8}{4}$

1 8 26 41 32 1 ABCDEH ABCDFH ABCDGH ABCEF ABCEG

ABCFG 26 $\binom{8}{4}$

1 8 26 42a 22 1 ABCDGH ABCEFG ABCDE ABCDF ABCEH

ABCFH ADEFH BDEFH CDEFH DEFGH 12 $\binom{8}{4}$

1 8 26 42a 24 1 ABCDEFH ABCDG ABCEG ABCFG ABCGH

DEFGH 18 $\binom{8}{4}$

1 8 26 42a 25 1   ADEFGH ABCDE ABCDF ABCDG ABCDH ABCEF

                          ABCEG ABCEH ABCFG ABCFH ABCGH BDEFH

                          CDEFH 12 $\binom{8}{4}$

1 8 26 42a 27 1   ABCDEG ABCDF ABCDH ABCEF ABCEH ABCFG

                          ABCFH ABCGH ADEFH BDEFH CDEFH DEFGH

                          15 $\binom{8}{4}$

1 8 26 42a 32 1   ABCDE ABCDF ABCDG ABCDH ABCEF ABCEG

                          ABCEH ABCFG ABCFH ABCGH ADEFH BDEFH

                          CDEFH DEFGH 18 $\binom{8}{4}$

1 8 26 42b 24 1   ABCDEFH ABCDG ABCEG ABCFG ABCGH

                          CDEGH 18 $\binom{8}{4}$

1 8 26 42b 25 1   ABCDEH ABCDFG ABCEF ABCEG ABCFH ABCGH

                          BEFGH CDEFH CDEGH 16 $\binom{8}{4}$

1 8 26 42b 26 1   ABCDEH ABCDF ABCDG ABCEF ABCEG ABCFG

                          ABCFH ABCGH ADEFG BDFGH CDEFH CDEGH

                          14 $\binom{8}{4}$

1 8 26 42b 27 1   ABCDEH CDEFGH ABCDF ABCDG ABCEF

                          ABCEG ABCFG ABCFH ABCGH 18 $\binom{8}{4}$

1 8 26 42b 29 1   ABCDEH ABCDFG ABCEF ABCEG ABCFH ABCGH

                          CDEFH CDEGH 21 $\binom{8}{4}$

1 8 26 42b 30 1   ABCDEH ABCDF ABCDG ABCEF ABCEG ABCFG

                          ABCFH ABCGH AEFGH CDEFH CDEGH 19 $\binom{8}{4}$

1 8 26 42b 34 1   ABCDEH ABCDF ABCDG ABCEF ABCEG ABCFG

                          ABCFH ABCGH CDEFH CDEGH 24 $\binom{8}{4}$

1 8 26 45 27 1

ABCDEFH ABCDG ABCEG ABCFG ABCGH

22 $\binom{8}{4}$

1 8 26 45 28 1

ABCDEF ABCDG ABCDH ABCEG ABCEH ABCFG

ABCFH ABCGH ADEGH BDFGH CEFGH 17 $\binom{8}{4}$

1 8 26 45 31a 1

ABCDEH ABCFGH ABCDF ABCDG ABCEF ABCEG

DEFGH 24 $\binom{8}{4}$

1 8 26 45 31b 1

ABCDEH ABCFGH ABCDF ABCDG ABCEF ABCEG

CDEFG 24 $\binom{8}{4}$

1 8 26 45 31c 1

CDEFGH ABCDE ABCDF ABCDG ABCDH ABCEF

ABCEG ABCEH ABCFG ABCFH ABCGH 20 $\binom{8}{4}$

1 8 26 45 32 1

ABCDEH ABCDF ABCDG ABCEF ABCEG ABCFG

ABCFH ABCGH ADEFG BDFGH 22 $\binom{8}{4}$

1 8 26 45 33 1

ABCDE ABCDF ABCDG ABCDH ABCEF ABCEG

ABCEH ABCFG ABCFH ABCGH ADEFH BDFGH

CDEFG 20 $\binom{8}{4}$

1 8 26 45 35 1

ABCDEH ABCFGH ABCDF ABCDG ABCEF ABCEG

29 $\binom{8}{4}$

1 8 26 45 36a 1

ABCDEF ABCDG ABCDH ABCEG ABCEH ABCFG

ABCFH ABCGH ADEGH 27 $\binom{8}{4}$

1 8 26 45 36b 1

ABCDEF ABCDG ABCDH ABCEG ABCEH ABCFG

ABCFH ABCGH DEFGH 27 $\binom{8}{4}$

1 8 26 45 37 1

ABCDE ABCDF ABCDG ABCDH ABCEF ABCEG

ABCEH ABCFG ABCFH ABCGH ADEFH BDEGH

25 $\binom{8}{4}$

1 8 26 45	40	1	ABCDEF ABCDG ABCDH ABCEG ABCEH ABCFG ABCFH ABCGH 32 $\binom{8}{4}$
1 8 26 45	41a	1	ABCDE ABCDF ABCDG ABCDH ABCEF ABCEG ABCEH ABCFG ABCFH ABCGH ADEFG 30 $\binom{8}{4}$
1 8 26 45	41b	1	ABCDE ABCDF ABCDG ABCDH ABCEF ABCEG ABCEH ABCFG ABCFH ABCGH DEFGH 30 $\binom{8}{4}$
1 8 26 45	45	1	ABCDE ABCDF ABCDG ABCDH ABCEF ABCEG ABCEH ABCFG ABCFH ABCGH 35 $\binom{8}{4}$
1 8 28 35w	15	1	ABCDEFG ABCDH ABEFH ACFGH ADEGH BCEGH BDFGH CDEFH 7 $\binom{8}{4}$
1 8 28 37	17	1	ABCDEFG ABCDEFH 15 $\binom{8}{4}$
1 8 28 38i'	18	1	ABCDEFH ABCDG ABEFG ACEGH ADFGH BCFGH CDEFG 11 $\binom{8}{4}$
1 8 28 38f"	20	1	ABCDEF ABCDGH ABEFGH CDEFGH 16 $\binom{8}{4}$
1 8 28 41c	19	1	ABCDEH CDEFGH ABCDF ABCDG ABEFH ABEGH ACFGH ADEFG BCFGH BDEFG 9 $\binom{8}{4}$
1 8 28 41r	21	1	ABCDEFH ABCDG ACFGH ADEGH BEFGH CDEFG 15 $\binom{8}{4}$
1 8 28 41t	21	1	ABCDEFH ABCDG ACEGH ADFGH BCFGH CDEFG 15 $\binom{8}{4}$
1 8 28 41k'	21	1	ABCDEFH ABCDGH AEFGH CDEFG 17 $\binom{8}{4}$
1 8 28 44c	24	1	ABCDEFH ABCDG ABEGH ACFGH BDFGH 19 $\binom{8}{4}$

1 8 28 44h 25 1   ABCDEH ABEFGH ABCDF ABCDG ACFGH ADFGH

CDEFH CDEGH 17 $\binom{8}{4}$

1 8 28 44j 24 1   ABCDEFH ABCDG ADFGH BDEGH CDEFG 19 $\binom{8}{4}$

1 8 28 44m 24 1   ABCDEFH ABCDG ADFGH BCEGH CDEFG

19 $\binom{8}{4}$

1 8 28 44r 25 1   ABCDEH ABEFGH CDEFGH ABCDF ABCDG

20 $\binom{8}{4}$

1 8 28 44s 25 1   ABCDEF ABCDEG ABCDEH ABFGH ACFGH

ADFGH AEFGH 18 $\binom{8}{4}$

1 8 28 44t 24 1   ABCDEFH ABCDEG ABFGH 21 $\binom{8}{4}$

1 8 28 47a 22 1   ABCDEF ABCDG ABCDH ABEFG ABEFH ACEGH

ADFGH BCFGH BDEGH CDEFG CDEFH 11 $\binom{8}{4}$

1 8 28 47a 26 1   ABCDEF ABCDG ABCDH ABEFG ABEFH ACEGH

ADFGH BDEGH CDEFG CDEFH 16 $\binom{8}{4}$

1 8 28 47a 27 1   ABCDEFG ABCDH ABEFH CDEFH 23 $\binom{8}{4}$

1 8 28 47a 30a 1   ABCDEF ABCDG ABCDH ABEFG ABEFH ACEGH

BDEGH CDEFG CDEFH 21 $\binom{8}{4}$

1 8 28 47a 30b 1   ABCDEF ABCDG ABCDH ABEFG ABEFH ACEGH

BDFGH CDEFG CDEFH 21 $\binom{8}{4}$

1 8 28 47a 31 1   ABCDEF ABCDGH ABEFG ABEFH CDEFG CDEFH

25 $\binom{8}{4}$

1 8 28 47a 34 1   ABCDEF ABCDG ABCDH ABEFG ABEFH ACEGH

CDEFG CDEFH 26 $\binom{8}{4}$

1 8 28 47a 38 1   ABCDEF ABCDG ABCDH ABEFG ABEFH CDEFG

CDEFH   31 $\binom{8}{4}$

1 8 28 47b 31 1   ABCDEF CDEFGH ABCDG ABCDH AEFGH

BEFGH   25 $\binom{8}{4}$

1 8 28 47c 27 1   ABCDEF ABCDG ABCDH ABEGH ACEGH ADEGH

AEFGH BCFGH CDEFG CDEFH   17 $\binom{8}{4}$

1 8 28 47c 31 1   ABCDEF ABCDG ABCDH ABEGH ACEGH ADEGH

AEFGH CDEFG CDEFH   22 $\binom{8}{4}$

1 8 28 47d 31 1   ABCDEH ABCFGH ADEFGH   28 $\binom{8}{4}$

1 8 28 47e 27 1   ABCDEH ABEFGH ABCDF ABCDG ACFGH

ADFGH CDEFG   20 $\binom{8}{4}$

1 8 28 47e 31 1   ABCDEH ABEFGH ABCDF ABCDG ACFGH

ADFGH   25 $\binom{8}{4}$

1 8 28 47f 27 1   ABCDEFH ABCDG AEFGH CDEFG   23 $\binom{8}{4}$

1 8 28 47g 27 1   ABCDEFH ABCDG ABEGH ACFGH   23 $\binom{8}{4}$

1 8 28 47h 27 1   ABCDEFG ABCDEH   25 $\binom{8}{4}$

1 8 28 47h 30 1   ABCDEF ABCDEG ABCDEH ABFGH CDFGH

25   $\binom{8}{4}$

1 8 28 47h 34 1   ABCDEF ABCDEG ABCDEH ABFGH   30 $\binom{8}{4}$

1 8 28 47h 38 1   ABCDEF ABCDEG ABCDEH   35 $\binom{8}{4}$

1 8 28 50a 28 1   ABCDEF ABCDG ABCDH ABEFG ABEFH ACEGH

ADFGH BCFGH BDEGH   19 $\binom{8}{4}$

1 8 28 50a 30 1	ABCDEFG ABCDH ABEFH 27 $\binom{8}{4}$	
1 8 28 50a 32a 1	ABCDEF ABCDG ABCDH ABEFG ABEFH ACEGH BDEGH CDFGH 24 $\binom{8}{4}$	
1 8 28 50a 32b 1	ABCDEF ABCDG ABCDH ABEFG ABEFH ACEGH ADFGH BCFGH 24 $\binom{8}{4}$	
1 8 28 50a 33 1	ABCDEF ABCDGH ABEFG ABEFH CEFGH 28 $\binom{8}{4}$	
1 8 28 50a 36a 1	ABCDEF ABCDG ABCDH ABEFG ABEFH ACFGH BCEGH 29 $\binom{8}{4}$	
1 8 28 50a 36b 1	ABCDEF ABCDG ABCDH ABEFG ABEFH ACFGH BDEGH 29 $\binom{8}{4}$	
1 8 28 50a 36c 1	ABCDEF ABCDG ABCDH ABEFG ABEFH ACFGH ADEGH 29 $\binom{8}{4}$	
1 8 28 50a 36d 1	ABCDEF ABCDG ABCDH ABEFG ABEFH BDEGH CDFGH 29 $\binom{8}{4}$	
1 8 28 50a 37 1	ABCDEF ABCDGH ABEFG ABEFH 33 $\binom{8}{4}$	
1 8 28 50a 40a 1	ABCDEF ABCDG ABCDH ABEFG ABEFH ACFGH 34 $\binom{8}{4}$	
1 8 28 50a 40b 1	ABCDEF ABCDG ABCDH ABEFG ABEFH CDFGH 34 $\binom{8}{4}$	
1 8 28 50a 44 1	ABCDEF ABCDG ABCDH ABEFG ABEFH 39 $\binom{8}{4}$	
1 8 28 50b 30 1	ABEFGH CDEFGH ABCDE ABCDF ABCDG ABCDH 24 $\binom{8}{4}$	

1 8 28 50b 37 1   CDEFGH ABCDE ABCDF ABCDG ABCDH AEFGH

BEFGH 30 $\binom{8}{4}$

1 8 28 50b 44 1   ABCDE ABCDF ABCDG ABCDH AEFGH BEFGH

CEFGH DEFGH 36 $\binom{8}{4}$

1 8 28 50c 30 1   ABCDEFG ABCDH AEFGH 27 $\binom{8}{4}$

1 8 28 50c 32 1   ABCDE ABCDF ABCDG ABCDH ABEFG ACEFG

ADEFG AEFGH BCFGH BDEFH CDEGH 21 $\binom{8}{4}$

1 8 28 50c 33 1   ABCDEH ABCDF ABCDG ABEFG ACEFG ADEFG

AEFGH BCFGH 25 $\binom{8}{4}$

1 8 28 50c 36 1   ABCDE ABCDF ABCDG ABCDH ABEFG ACEFG

ADEFG AEFGH BCEGH CDEFH 26 $\binom{8}{4}$

1 8 28 50c 37 1   ADEFGH ABCDE ABCDF ABCDG ABCDH ABEFG

ACEFG 30 $\binom{8}{4}$

1 8 28 50c 40 1   ABCDE ABCDF ABCDG ABCDH ABEFG ACEFG

ADEFG AEFGH BCEFH 31 $\binom{8}{4}$

1 8 28 50c 44 1   ABCDE ABCDF ABCDG ABCDH ABEFG ACEFG

ADEFG AEFGH 36 $\binom{8}{4}$

1 8 28 53 33a 1   ABCDEFG ABCDH 31 $\binom{8}{4}$

1 8 28 53 33b 1   ABCDE ABCDF ABCDG ABCDH ABFGH ACEFH

ADEFG BCEFG BDEFH CDFGH 23 $\binom{8}{4}$

1 8 28 53 33c 1   ABCDE ABCDF ABCDG ABCDH ABFGH ACEGH

ADEFG BCEFG BDEFH CDFGH 23 $\binom{8}{4}$

1 8 28 53 34 1   ABCDEF ABCDG ABCDH ABEGH ACFGH BDFGH

CDEGH 27 $\binom{8}{4}$

1 8 28 53 37a 1	ABCDE ABCDF ABCDG ABCDH ABEFG ACEFH ADEGH BCEGH CDEFG 28 $\binom{8}{4}$
1 8 28 53 37b 1	ABCDE ABCDF ABCDG ABCDH ABEFG ACEFH ADEGH BCFGH CDEFG 28 $\binom{8}{4}$
1 8 28 53 38a 1	ABCDEH ABCDF ABCDG ABFGH ADEFG BCEFG 32 $\binom{8}{4}$
1 8 28 53 38b 1	ABCDEH ABCDF ABCDG ABFGH ADEFG CEFGH 32 $\binom{8}{4}$
1 8 28 53 39a 1	ABCDEF ABCDGH AEFGH 36 $\binom{8}{4}$
1 8 28 53 39b 1	ABEFGH ABCDE ABCDF ABCDG ABCDH CDEFG 33 $\binom{8}{4}$
1 8 28 53 41a 1	ABCDE ABCDF ABCDG ABCDH ABFGH ADEFH BCEFG CDFGH 33 $\binom{8}{4}$
1 8 28 53 41b 1	ABCDE ABCDF ABCDG ABCDH ABFGH ADEFH BCEGH CDEFG 33 $\binom{8}{4}$
1 8 28 53 41c 1	ABCDE ABCDF ABCDG ABCDH ACEGH ADEFH BEFGH CDEFG 33 $\binom{8}{4}$
1 8 28 53 41d 1	ABCDE ABCDF ABCDG ABCDH ABFGH ADEFH BCEFH CDFGH 33 $\binom{8}{4}$
1 8 28 53 41e 1	ABCDE ABCDF ABCDG ABCDH ABFGH ACEFG ADEFH CDEGH 33 $\binom{8}{4}$
1 8 28 53 41f 1	ABCDE ABCDF ABCDG ABCDH ABFGH ACEFG ADEFH CDFGH 33 $\binom{8}{4}$
1 8 28 53 42a 1	ABCDEH ABCDF ABCDG ABFGH CDEFG 37 $\binom{8}{4}$

1 8 28 53 42b 1	ABCDEH ABCDF ABCDG ABFGH CDFGH 37 $\binom{8}{4}$
1 8 28 53 42c 1	ABCDEH ABCDF ABCDG ABFGH ADEFG 37 $\binom{8}{4}$
1 8 28 53 42d 1	ABCDEH ABCDF ABCDG BCFGH DEFGH 37 $\binom{8}{4}$
1 8 28 53 43a 1	ABCDEF ABCDGH 41 $\binom{8}{4}$
1 8 28 53 43b 1	ADEFGH ABCDE ABCDF ABCDG ABCDH 38 $\binom{8}{4}$
1 8 28 53 45a 1	ABCDE ABCDF ABCDG ABCDH ABFGH ADEFH CDEFG 38 $\binom{8}{4}$
1 8 28 53 45b 1	ABCDE ABCDF ABCDG ABCDH ABFGH ACEFG ADEFH 38 $\binom{8}{4}$
1 8 28 53 45c 1	ABCDE ABCDF ABCDG ABCDH ABFGH ADEFH CEFGH 38 $\binom{8}{4}$
1 8 28 53 45d 1	ABCDE ABCDF ABCDG ABCDH ABFGH ADEFH CDFGH 38 $\binom{8}{4}$
1 8 28 53 45e 1	ABCDE ABCDF ABCDG ABCDH ABFGH ADEFG BDEFH 38 $\binom{8}{4}$
1 8 28 53 46a 1	ABCDEH ABCDF ABCDG DEFGH 42 $\binom{8}{4}$
1 8 28 53 46b 1	ABCDEH ABCDF ABCDG ADFGH 42 $\binom{8}{4}$
1 8 28 53 49a 1	ABCDE ABCDF ABCDG ABCDH ABEFH CDEFH 43 $\binom{8}{4}$
1 8 28 53 49b 1	ABCDE ABCDF ABCDG ABCDH ADEFH BEFGH 43 $\binom{8}{4}$
1 8 28 53 49c 1	ABCDE ABCDF ABCDG ABCDH ABEFH CDFGH 43 $\binom{8}{4}$

1 8 28 53 49d 1   ABCDE ABCDF ABCDG ABCDH ABFGH ADEFH

43 $\binom{8}{4}$

1 8 28 53 50 1   ABCDEH ABCDF ABCDG   47 $\binom{8}{4}$

1 8 28 53 53a 1   ABCDE ABCDF ABCDG ABCDH ABEFH   48 $\binom{8}{4}$

1 8 28 53 53b 1   ABCDE ABCDF ABCDG ABCDH AEFGH   48 $\binom{8}{4}$

1 8 28 53 57 1   ABCDE ABCDF ABCDG ABCDH   53 $\binom{8}{4}$

1 8 28 56 36 1   ABCDEFG   35 $\binom{8}{4}$

1 8 28 56 38 1   ABCDE ABCFG ABDFH ACEGH ADEFG BCDGH

BEFGH CDEFH   30 $\binom{8}{4}$

1 8 28 56 40 1   ABCDEH ABCFG ADEFG BDFGH CEFGH   35 $\binom{8}{4}$

1 8 28 56 42a 1   ABCDE ABCFH ABDGH ACEGH ADEFH BEFGH

CDFGH   35 $\binom{8}{4}$

1 8 28 56 42b 1   ABCDE ABCFG ABDFH ABEGH ACDGH BCEFH

DEFGH   35 $\binom{8}{4}$

1 8 28 56 42c 1   ABCDE ABCFG ABDFH ACDGH AEFGH BCEFH

BDEGH   35 $\binom{8}{4}$

1 8 28 56 42d 1   ABCDH ABEFH ACEGH ADFGH BCFGH BDEGH

CDEFH   35 $\binom{8}{4}$

1 8 28 56 44 1   ABCDEH ABCFG ADEFG BDFGH   40 $\binom{8}{4}$

1 8 28 56 46a 1   ABCDE ABCFG ADEFH BCDFH BDEGH CEFGH

40 $\binom{8}{4}$

1 8 28 56 46b 1   ABCDE ABCFG ABDFH ABEGH ADEFG BCDGH

40 $\binom{8}{4}$

1 8 28 56 46c 1	ABCDE ABCFG ABDFH ADEFG BCDGH CEFGH	
	40 $\binom{8}{4}$	
1 8 28 56 46d 1	ABCDE ABCFG ABDFH ACEGH ADEFG BCDGH	
	40 $\binom{8}{4}$	
1 8 28 56 46e 1	ABCDE ABCFG ABDFH ABEGH ACDGH ADEFG	
	40 $\binom{8}{4}$	
1 8 28 56 46f 1	ABCDE ABCFG ABDFH ABEGH ADEFG CDEFH	
	40 $\binom{8}{4}$	
1 8 28 56 48a 1	ABCDEF ABCGH DEFGH	45 $\binom{8}{4}$
1 8 28 56 48b 1	ABCDEH ABCFG ADEFG	45 $\binom{8}{4}$
1 8 28 56 50a 1	ABCDE ABCFG ABDFH ADEFG BCEGH	45 $\binom{8}{4}$
1 8 28 56 50b 1	ABCDE ABCFG ABDFH ABEGH ADEFG	45 $\binom{8}{4}$
1 8 28 56 50c 1	ABCDE ABCFG ADEFG BCDFH BDEGH	45 $\binom{8}{4}$
1 8 28 56 50d 1	ABCDE ABCFG ADEFG BCDFH BCEGH	45 $\binom{8}{4}$
1 8 28 56 50e 1	ABCDE ABCFG ABDFH ACEGH ADEFG	45 $\binom{8}{4}$
1 8 28 56 50f 1	ABCDE ABCFG ABDFH ADEFG BCDGH	45 $\binom{8}{4}$
1 8 28 56 50g 1	ABCDE ABCFH ADEGH BDFGH CEFGH	45 $\binom{8}{4}$
1 8 28 56 52 1	ABCDEF ABCGH	50 $\binom{8}{4}$
1 8 28 56 54a 1	ABCDH ABEFH ACEGH BDFGH	50 $\binom{8}{4}$
1 8 28 56 54b 1	ABCDE ABCFG ABDFH ADEFG	50 $\binom{8}{4}$

1	8	28	56	54c	1			ABCDE ABCFG ADEFH BDFGH $\ 50\ \binom{8}{4}$
1	8	28	56	54d	1			ABCDE ABCFG ADEFG BCDFH $\ 50\ \binom{8}{4}$
1	8	28	56	54e	1			ABCDE ABCFG ADEFH BCDGH $\ 50\ \binom{8}{4}$
1	8	28	56	54f	1			ABCDE ABCFG ABDFH ABEGH $\ 50\ \binom{8}{4}$
1	8	28	56	56	1			ABCDEF $\ 55\ \binom{8}{4}$
1	8	28	56	58a	1			ABCDE ABCFH ABDGH $\ 55\ \binom{8}{4}$
1	8	28	56	58b	1			ABCDE ABCFG DEFGH $\ 55\ \binom{8}{4}$
1	8	28	56	58c	1			ABCDE ABCFG ADEFH $\ 55\ \binom{8}{4}$
1	8	28	56	58d	1			ABCDE ABCFG ADEFG $\ 55\ \binom{8}{4}$
1	8	28	56	62a	1			ABCDH AEFGH $\ 60\ \binom{8}{4}$
1	8	28	56	62b	1			ABCDE ABCFG $\ 60\ \binom{8}{4}$
1	8	28	56	66	1			ABCDE $\ 65\ \binom{8}{4}$
1	8	28	56	70	1			$70\ \binom{8}{4}$
1	8	23	32	23	8	1		ABCDEFG ABCDEFH ABCDEGH ABCDFGH $\ 4\ \binom{8}{5}$
1	8	24a	34	24	8	1		ABCDEFG ABCDEFH ABCDGH ABCEGH ABCFGH ADEFGH BDEFGH CDEFGH $\ 0\ \binom{8}{5}$
1	8	24b	35	26	9	1		ABCDEFG ABCDEFH ABCDEGH ABCFGH ADEFGH $4\ \binom{8}{5}$
1	8	26	41	32	11	1		ABCDEFH ABCDEGH ABCDFGH ABCEFG $\ 7\ \binom{8}{5}$

1 8 26 42a 32 10 1   ABCDEFH ABCDEG ABCDFG ABCDGH

ABCEFG ABCEGH ABCFGH ADEFGH

BDEFGH CDEFGH 0 $\binom{8}{5}$

1 8 26 42b 34 12 1   ABCDEFH ABCDEGH ABCDFG ABCEFG

ABCFGH CDEFGH 6 $\binom{8}{5}$

1 8 26 45 40 15 1   ABCDEFG ABCDEFH ABCDGH ABCEGH

ABCFGH 10 $\binom{8}{5}$

1 8 26 45 41b 13 1   ABCDEF ABCDEG ABCDEH ABCDFG ABCDFH

ABCDGH ABCEFG ABCEFH ABCEGH ABCFGH

ADEFGH BDEFGH CDEFGH 0 $\binom{8}{5}$

1 8 26 45 41a 16 1   ABCDEFG ABCDEH ABCDFH ABCDGH

ABCEFH ABCEGH ABCFGH ADEFGH 8 $\binom{8}{5}$

1 8 26 45 45 20 1   ABCDEFG ABCDEH ABCDFH ABCDGH ABCEFH

ABCEGH ABCFGH 13 $\binom{8}{5}$

1 8 26 45 45 21 1   ABCDEF ABCDEG ABCDEH ABCDFG ABCDFH

ABCDGH ABCEFG ABCEFH ABCEGH ABCFGH

ADEFGH 10 $\binom{8}{5}$

1 8 26 45 45 26 1   ABCDEF ABCDEG ABCDEH ABCDFG ABCDFH

ABCDGH ABCEFG ABCEFH ABCEGH ABCFGH

16 $\binom{8}{5}$

1 8 28 47a 38 13 1   ABCDEFG ABCDEFH ABCDGH ABEFGH

CDEFGH 8 $\binom{8}{5}$

1 8 28 47h 38 13 1   ABCDEFG ABCDEFH ABCDEGH 10 $\binom{8}{5}$

1 8 28 50a 44 16 1   ABCDEFG ABCDEFH ABCDGH ABEFGH

12 $\binom{8}{5}$

1 8 28 50b 44 12 1   ABCDEF ABCDEG ABCDEH ABCDFG

ABCDFH ABCDGH ABEFGH ACEFGH

ADEFGH BCEFGH BDEFGH CDEFGH 0 $\binom{8}{5}$

1 8 28 50c 44 16 1   ABCDEFG ABCDEH ABCDFH ABCDGH

ABEFGH ACEFGH ADEFGH 9 $\binom{8}{5}$

1 8 28 53 49a 18 1   ABCDEFH ABCDEG ABCDFG ABCDGH

ABEFGH CDEFGH 12 $\binom{8}{5}$

1 8 28 53 50 19 1   ABCDEFH ABCDEGH ABCDFG 16 $\binom{8}{5}$

1 8 28 53 53a 22 1   ABCDEFH ABCDEG ABCDFG ABCDGH

ABEFGH 17 $\binom{8}{5}$

1 8 28 53 53b 21 1   ABCDEF ABCDEG ABCDEH ABCDFG ABCDFH

ABCDGH ABEFGH ACEFGH ADEFGH 12 $\binom{8}{5}$

1 8 28 53 57 24 1   ABCDEF ABCDEG ABCDEH ABCDFG ABCDFH

ABCDGH ABEFGH CDEFGH 16 $\binom{8}{5}$

1 8 28 53 57 26 1   ABCDEFH ABCDEG ABCDFG ABCDGH

22 $\binom{8}{5}$

1 8 28 53 57 29 1   ABCDEF ABCDEG ABCDEH ABCDFG ABCDFH

ABCDGH ABEFGH 22 $\binom{8}{5}$

1 8 28 53 57 34 1   ABCDEF ABCDEG ABCDEH ABCDFG ABCDFH

ABCDGH 28 $\binom{8}{5}$

1 8 28 56 56 22 1   ABCDEFG ABCDEFH 20 $\binom{8}{5}$

1 8 28 56 58d 24 1   ABCDEFG ABCDEH ABCFGH ADEFGH 20 $\binom{8}{5}$

1 8 28 56 62a 25 1   ABCDEH ABCDFH ABCDGH ABEFGH

                              ACEFGH ADEFGH BCDEFG 18 $\binom{8}{5}$

1 8 28 56 62a 30 1   ABCDEH ABCDFH ABCDGH ABEFGH

                              ACEFGH ADEFGH 24 $\binom{8}{5}$

1 8 28 56 62b 28 1   ABCDEFG ABCDEH ABCFGH 25 $\binom{8}{5}$

1 8 28 56 66 32 1   ABCDEFG ABCDEH 30 $\binom{8}{5}$

1 8 28 56 66 33 1   ABCDEF ABCDEG ABCDEH ABCFGH

                              ADEFGH 28 $\binom{8}{5}$

1 8 28 56 66 38 11   ABCDEF ABCDEG ABCDEH ABCFGH

                              34 $\binom{8}{5}$

1 8 28 56 66 43 1   ABCDEF ABCDEG ABCDEH 40 $\binom{8}{5}$

1 8 28 56 70 36a 1   ABCDEF ABCDGH ABEFGH CDEFGH

                              32 $\binom{8}{5}$

1 8 28 56 70 36b 1   ABCDEFG 35 $\binom{8}{5}$

1 8 28 56 70 41 1   ABCDEF ABCDGH ABEFGH 38 $\binom{8}{5}$

1 8 28 56 70 46 1   ABCDEF ABCDGH 44 $\binom{8}{5}$

1 8 28 56 70 51 1   ABCDEF 50 $\binom{8}{5}$

1 8 28 56 70 56 1   56 $\binom{8}{5}$

1 8 28 45 45 26 8 1   ABCDEFG ABCDEFH ABCDEGH ABCDFGH

                              ABCEFGH 3 $\binom{8}{6}$

1 8 28 53 57 34 10 1   ABCDEFG ABCDEFH ABCDEGH ABCDFGH

                              6 $\binom{8}{6}$

1 8 28 56 66 43 13 1   ABCDEFG ABCDEFH ABCDEGH   10 $\binom{8}{6}$

1 8 28 56 70 51 17 1   ABCDEFG ABCDEFH   15 $\binom{8}{6}$

1 8 28 56 70 56 22 1   ABCDEFG   21 $\binom{8}{6}$

1 8 28 56 70 56 28 1   28 $\binom{8}{6}$

1 8 28 56 70 56 28 8 1   8 $\binom{8}{7}$