

**stichting
mathematisch
centrum**



AFDELING ZUIVERE WISKUNDE
(DEPARTMENT OF PURE MATHEMATICS)

ZN 81/78

AUGUSTUS

A.E. BROUWER

MUTUALLY ORTHOGONAL LATIN SQUARES

2e boerhaavestraat 49 amsterdam

BIBLIOTHEEK MATHEMATISCH CENTRUM
—AMSTERDAM—

Printed at the Mathematical Centre, 49, 2e Boerhaavestraat, Amsterdam.

The Mathematical Centre, founded the 11-th of February 1946, is a non-profit institution aiming at the promotion of pure mathematics and its applications. It is sponsored by the Netherlands Government through the Netherlands Organization for the Advancement of Pure Research (Z.W.O).

Mutually orthogonal latin squares

a) one more square

b) table up to order 10000

by

A.E. Brouwer

ABSTRACT

We prove the existence of four mutually orthogonal latin squares of order 48 and give a table of lower bounds for $N(v)$, the maximum number of mutually orthogonal latin squares of order v , for $v < 10000$.

KEY WORDS & PHRASES: *orthogonal latin squares*.

1. CONSTRUCTION OF A GD[5,1,8;48]

Let $X = (I_2 \times Z_3) \times (Z_2 \times Z_4)$. Take the groups

$$\{g\} \times (Z_2 \times Z_4)$$

for $g \in I_2 \times Z_3$. Take the blocks

$$\{0000, 0102, 0210, 1011, 1112\},$$

$$\{0000, 0100, 0211, 1000, 1103\},$$

$$\{0000, 0101, 1002, 1102, 1211\},$$

$$\{0000, 0103, 1013, 1111, 1203\},$$

all mod $(-, 3, 2, 4)$. (Where we wrote $ijkl$ instead of (i, j, k, l) .) This yields the desired design.

2. CONSTRUCTION OF A T[6,1;48]

In the previous section we constructed a pairwise balanced design $(X, \mathcal{B})$ on 48 points and with block sizes 5 and 8 in such a way that we have a tactical decomposition $\mathcal{B} = \mathcal{B}_0 \cup \mathcal{B}_1 \cup \mathcal{B}_2$ where $\mathcal{B}_1$ and $\mathcal{B}_2$ are symmetric 1-designs (with blocks of size 5) and $\mathcal{B}_0$ is a parallel class (consisting of blocks of size 8). [For: take for $\mathcal{B}_1$ the 1st and the 3rd orbits given, etc.] Since $5, 8 \in T(6, 1)$ it follows that $48 \in T(6, 1)$.

[In the terminology of RAGHAVARAO [1] this design is separable; now apply this theorem 3.4.2.]

Therefore we have 4 mutually orthogonal latin squares of order 48.

REFERENCE

- [1] RAGHAVARAO, D., *Constructions and Combinatorial Problems in Design of Experiments*, John Wiley & sons, New York etc., 1971.

3. TABLE OF LOWER BOUNDS FOR $N(v)$

Let $N(v)$ be the maximum number of mutually orthogonal latin squares of order v . Below we give a table of lower bounds for $N(v)$ found by application of the following propositions.

PROPOSITION 0,1. $N(0) = N(1) = +\infty$,

$N(q) = q-1$ if q is a prime power.

$N(v) \geq 1$ for all v .

PROPOSITION 2. $N(uv) \geq N(u) \cdot N(v)$

PROPOSITION 3. $N(12) \geq 5$ [JOHNSON, DULMAGE & MENDELSON],

$N(15) \geq 4$ [SCHELLENBERG, VAN REES & VANSTONE],

$N(36) \geq 4$ [WILSON],

$N(46) \geq 4$ [WILSON],

$N(48) \geq 4$ [section 2],

$N(50) \geq 6$ [WILSON].

PROPOSITION 4. $N(v) \geq 2$ for $v > 6$ [BOSE, PARKER & SHRIKHANDE],

$N(v) \geq 3$ for $v > 14$ [WANG & WILSON].

PROPOSITION 5. If $k \leq N(m) + 1$ then for $1 \leq x \leq m-1$

$N(km+x) \geq \min(N(m), N(x), N(k) - 1, N(k+1) - 1)$.

PROPOSITION 6. If $0 \leq u \leq t$ then

$N(mt+u) \geq \min(N(m), N(m+1), N(t) - 1, N(u))$.

PROPOSITION 7. If there is a symmetric BIB($v, k, 1$) then

(i) $N(v) \geq N(k)$

(ii) $N(k^2+1) \geq \min(N(k), N(k+1) - 1)$

PROPOSITION 8. Since a resolvable RB[$2^{m-1}, 1; 2^{m-1}(2^m-1)$] exists it follows that $N(2^{m-1}(2^m-1)) \geq N(2^{m-1}) = 2^{m-1} - 1$.

PROPOSITION 9. If there exists a B[$k, 1; v$] then

(i) $N(v-1) \geq \min(N(k-1), N(k) - 1)$,

(ii) $N(v-3) \geq \min(N(k-2), N(k-1) - 1, N(k) - 1)$,

(iii) $N(v-x) \geq \min(N(k-x), N(k-1) - 1, N(k) - 1)$ for $2 \leq x \leq k$.

If there are m points, no three of which lie in a block then

(iv) $N(v-m) \geq \min(N(k), N(k-1), N(k-2)) - 1$.

PROPOSITION 10. *If $0 \leq u \leq t$ and $0 \leq v \leq t$ then*

$$N(mt+u+v) \geq \min(N(m), N(m+1), N(m+2), N(t) - 2, N(u), N(v)).$$

PROPOSITION 11. *If $r > (t-1)(t-2)/2$ or $r \geq t$ and r is a primepower then*

$$N(mr+t) \geq \min(N(m), N(m+1), N(m+2), N(r) - t).$$

PROPOSITION 12. *If $0 \leq w \leq t$ then*

$$N(mt+w) \geq \min(N(m), N(m+1), N(m+w) - 1, N(t) - w).$$

PROPOSITION 13. *(Was formulated more generally, but the only application the program found was:)*

$$N(135) \geq 7.$$

PROOF. $135 = 8 \cdot 16 + 7$. Take a $PG(2, 16)$, i.e. a $T[17, 1; 16]$, remove one group entirely and truncate seven other groups in such a way that on each group one point remains, these seven points forming a Fano subplane of $PG(2, 16)$. Now apply Wilson's theorem. $\square$

The table gives for $v < 10000$ either a lower bound for $N(v)$ followed by an indication of the proposition used to obtain this estimate between square brackets (where 10, 11, 12, 13 are coded a, b, c, d) or an entry ** if this lower bound exceeds 99. For $v > 1$ this means a practice that v is a primepower and $N(v) = v-1$. Between square brackets we give k if $v = p^k$ for some prime p , and 0 otherwise.

2nd issue, August 1978

Extension of proposition 3 by the results of MILLS:

$$N(39) \geq 4, N(48) \geq 4, N(55) \geq 5, N(56) \geq 7.$$

(Mills constructed 4 squares of order 48 in a way quite different from that of section 2.)

Extension of proposition 11 as indicated by Van REES:

PROPOSITION 11. *If $t \geq b + \frac{1}{2}s(s-1)$, then*

$$N(mt+b+s) \geq \min(N(m), N(m+1), N(m+2), N(b), N(t)-s-1).$$

Combining all results we now find $n_7 \leq 2862$ and $n_8 \leq 7768$.

 *
 * Lower bounds for N(v),
 * the number of mutually orthogonal Latin squares of order v
 * AEB, 780824
 *

0:	**	[0]	**	[0]	1	[0]	2	[0]	3	[0]	4	[0]	1	[0]	6	[0]	7	[0]	8	[0]
10:	2	[4]	10	[0]	5	[3]	12	[0]	2	[4]	4	[3]	15	[0]	16	[0]	3	[4]	18	[0]
20:	3	[9]	4	[7]	3	[4]	22	[0]	3	[9]	24	[0]	3	[4]	26	[0]	3	[2]	28	[0]
30:	3	[4]	30	[0]	31	[0]	3	[6]	3	[4]	4	[2]	4	[3]	36	[0]	3	[4]	4	[3]
40:	4	[2]	40	[0]	3	[4]	42	[0]	3	[2]	4	[2]	4	[3]	46	[0]	4	[3]	48	[0]
50:	6	[3]	4	[a]	3	[2]	52	[0]	4	[9]	5	[3]	7	[3]	7	[7]	5	[a]	58	[0]
60:	4	[2]	60	[0]	4	[a]	6	[9]	63	[0]	7	[7]	5	[9]	66	[0]	5	[9]	5	[9]
70:	6	[9]	70	[0]	7	[9]	72	[0]	5	[9]	5	[9]	5	[9]	6	[2]	6	[9]	78	[0]
80:	7	[9]	80	[0]	8	[3]	82	[0]	6	[6]	6	[6]	6	[6]	6	[a]	7	[2]	88	[0]
90:	5	[a]	7	[c]	6	[6]	6	[a]	6	[a]	6	[5]	7	[6]	96	[0]	6	[6]	8	[2]
100:	8	[3]	**	[1]	6	[6]	**	[1]	7	[2]	7	[6]	6	[a]	**	[1]	6	[a]	**	[1]
110:	6	[a]	6	[5]	7	[6]	**	[1]	6	[a]	7	[6]	6	[b]	8	[2]	6	[b]	6	[2]
120:	7	[8]	**	[2]	6	[a]	6	[6]	6	[a]	**	[3]	6	[6]	**	[1]	**	[7]	7	[6]
130:	6	[6]	**	[1]	6	[6]	7	[c]	6	[6]	7	[d]	7	[8]	**	[1]	6	[a]	**	[1]
140:	6	[6]	7	[6]	6	[6]	10	[2]	8	[2]	7	[6]	6	[6]	7	[6]	6	[a]	**	[1]
150:	6	[6]	**	[1]	7	[2]	8	[2]	6	[a]	7	[c]	6	[a]	**	[1]	6	[a]	6	[5]
160:	7	[6]	7	[6]	6	[6]	**	[1]	6	[b]	7	[6]	6	[a]	**	[1]	7	[6]	**	[2]
170:	6	[6]	8	[2]	6	[6]	**	[1]	6	[6]	6	[2]	10	[2]	9	[6]	6	[6]	**	[1]
180:	6	[6]	**	[1]	6	[6]	6	[6]	7	[2]	8	[6]	6	[6]	10	[2]	6	[6]	7	[c]
190:	6	[6]	**	[1]	7	[6]	**	[1]	6	[6]	7	[6]	6	[6]	**	[1]	6	[6]	**	[1]
200:	7	[2]	7	[6]	6	[6]	7	[6]	6	[6]	7	[c]	6	[6]	8	[2]	12	[2]	11	[6]
210:	6	[6]	**	[1]	6	[6]	7	[6]	6	[6]	7	[c]	7	[2]	8	[6]	6	[6]	10	[6]
220:	6	[6]	12	[2]	6	[6]	**	[1]	7	[6]	8	[2]	6	[6]	**	[1]	6	[6]	**	[1]
230:	6	[6]	7	[c]	7	[2]	**	[1]	6	[6]	7	[6]	6	[6]	7	[c]	6	[a]	**	[1]
240:	7	[6]	**	[1]	6	[6]	**	[5]	6	[6]	7	[6]	6	[6]	12	[2]	7	[2]	7	[6]
250:	6	[a]	**	[1]	6	[a]	10	[2]	6	[a]	7	[6]	**	[8]	**	[1]	6	[a]	12	[c]
260:	6	[6]	8	[2]	6	[a]	**	[1]	7	[9]	8	[9]	6	[6]	10	[9]	6	[6]	**	[1]
270:	6	[6]	**	[1]	15	[9]	16	[7]	6	[a]	13	[c]	6	[6]	**	[1]	6	[6]	9	[c]
280:	7	[9]	**	[1]	6	[6]	**	[1]	6	[6]	12	[9]	6	[6]	7	[6]	15	[9]	**	[2]
290:	6	[6]	6	[6]	6	[a]	**	[1]	6	[6]	6	[6]	7	[2]	10	[2]	6	[6]	12	[2]
300:	6	[6]	7	[c]	6	[6]	6	[5]	15	[2]	15	[6]	6	[6]	**	[1]	6	[6]	7	[6]
310:	6	[6]	**	[1]	7	[5]	**	[1]	6	[6]	10	[5]	6	[6]	**	[1]	6	[6]	10	[2]
320:	15	[6]	15	[6]	6	[a]	16	[2]	6	[6]	12	[2]	6	[6]	7	[6]	7	[2]	7	[6]
330:	6	[6]	**	[1]	6	[6]	8	[2]	6	[a]	6	[5]	7	[6]	**	[1]	6	[6]	7	[6]
340:	6	[6]	10	[2]	9	[6]	**	[3]	7	[2]	7	[6]	6	[6]	**	[1]	6	[6]	**	[1]
350:	8	[6]	12	[2]	10	[2]	**	[1]	6	[6]	7	[6]	6	[6]	7	[6]	6	[6]	**	[1]
360:	7	[6]	**	[2]	6	[6]	7	[6]	6	[a]	7	[6]	6	[6]	**	[1]	15	[2]	15	[6]
370:	6	[6]	15	[c]	6	[6]	**	[1]	6	[6]	15	[c]	7	[2]	13	[c]	6	[6]	**	[1]
380:	6	[6]	12	[5]	6	[6]	**	[1]	15	[6]	15	[6]	6	[6]	15	[6]	6	[6]	**	[1]
390:	6	[6]	16	[2]	7	[2]	7	[8]	6	[6]	7	[6]	6	[6]	**	[1]	6	[6]	7	[6]
400:	15	[2]	**	[1]	6	[6]	15	[c]	11	[6]	7	[6]	6	[6]	15	[c]	7	[5]	**	[1]
410:	6	[6]	13	[c]	8	[6]	12	[5]	10	[6]	9	[c]	15	[6]	15	[6]	6	[6]	**	[1]
420:	6	[6]	**	[1]	6	[6]	15	[6]	7	[2]	16	[2]	6	[6]	7	[c]	6	[6]	7	[6]
430:	6	[6]	**	[1]	15	[2]	**	[1]	6	[6]	15	[c]	6	[6]	18	[2]	6	[6]	**	[1]
440:	7	[5]	15	[c]	6	[6]	**	[1]	6	[6]	13	[c]	6	[6]	11	[c]	15	[6]	**	[1]
450:	6	[2]	15	[6]	6	[6]	7	[6]	6	[6]	15	[6]	7	[2]	**	[1]	6	[6]	16	[2]
460:	6	[6]	**	[1]	6	[6]	**	[1]	15	[2]	15	[6]	6	[6]	**	[1]	6	[6]	7	[c]
470:	6	[6]	15	[c]	7	[2]	15	[c]	6	[5]	18	[2]	6	[6]	15	[c]	6	[6]	**	[1]
480:	15	[6]	15	[6]	6	[6]	15	[6]	6	[6]	7	[6]	6	[6]	**	[1]	7	[2]	15	[6]
490:	6	[2]	**	[1]	6	[6]	16	[2]	6	[6]	7	[6]	15	[2]	15	[6]	6	[5]	**	[1]

500:	6	[6]	7	[6]	9	[c]	**	[1]	7	[8]	15	[c]	6	[5]	15	[c]	6	[6]	**	[1]
510:	6	[6]	15	[c]	**	[9]	18	[2]	6	[6]	15	[6]	6	[6]	10	[2]	6	[6]	15	[6]
520:	7	[2]	**	[1]	6	[5]	**	[1]	6	[6]	15	[6]	6	[6]	16	[2]	15	[8]	**	[2]
530:	6	[6]	15	[6]	6	[6]	12	[2]	6	[6]	15	[6]	8	[6]	15	[6]	10	[6]	15	[6]
540:	12	[6]	**	[1]	6	[6]	15	[6]	16	[2]	7	[6]	6	[2]	**	[1]	6	[6]	8	[2]
550:	6	[2]	18	[2]	7	[6]	7	[6]	6	[6]	7	[6]	6	[6]	**	[1]	6	[6]	12	[2]
560:	7	[c]	7	[6]	6	[5]	**	[1]	6	[6]	7	[6]	6	[6]	7	[6]	7	[2]	**	[1]
570:	6	[5]	**	[1]	6	[6]	7	[6]	6	[2]	22	[2]	8	[2]	**	[1]	6	[6]	7	[6]
580:	6	[6]	7	[6]	6	[6]	10	[2]	7	[2]	7	[2]	6	[5]	**	[1]	6	[2]	18	[2]
590:	17	[6]	7	[6]	15	[2]	**	[1]	6	[6]	15	[c]	6	[6]	7	[6]	8	[6]	**	[1]
600:	10	[6]	**	[1]	12	[6]	15	[c]	6	[6]	15	[6]	16	[6]	**	[1]	18	[2]	15	[6]
610:	6	[6]	15	[6]	6	[6]	**	[1]	6	[6]	15	[6]	7	[2]	**	[1]	6	[5]	**	[1]
620:	6	[6]	22	[2]	6	[6]	15	[6]	15	[6]	**	[4]	6	[5]	7	[2]	6	[6]	16	[2]
630:	6	[2]	**	[1]	7	[2]	7	[6]	6	[5]	7	[6]	6	[6]	12	[2]	6	[5]	8	[2]
640:	7	[2]	**	[1]	6	[6]	**	[1]	6	[2]	7	[6]	6	[5]	**	[1]	7	[2]	10	[2]
650:	6	[2]	7	[6]	6	[6]	**	[1]	6	[5]	7	[6]	15	[2]	15	[6]	6	[2]	**	[1]
660:	6	[6]	**	[1]	6	[6]	15	[c]	7	[2]	15	[c]	6	[6]	22	[2]	6	[6]	15	[c]
670:	6	[6]	15	[c]	15	[6]	**	[1]	6	[6]	24	[2]	6	[6]	**	[1]	6	[6]	15	[6]
680:	7	[6]	15	[6]	6	[5]	**	[1]	6	[6]	15	[6]	6	[2]	15	[6]	15	[2]	15	[6]
690:	6	[5]	**	[1]	6	[6]	15	[6]	6	[6]	15	[c]	7	[5]	16	[2]	6	[5]	15	[c]
700:	6	[2]	**	[1]	6	[2]	18	[2]	15	[6]	15	[6]	6	[5]	15	[6]	6	[6]	**	[1]
710:	6	[5]	15	[6]	7	[2]	22	[2]	21	[6]	15	[6]	6	[6]	15	[6]	6	[5]	**	[1]
720:	15	[6]	9	[c]	8	[6]	12	[c]	10	[6]	24	[2]	12	[6]	**	[1]	7	[2]	**	[6]
730:	16	[6]	16	[2]	18	[6]	**	[1]	6	[5]	7	[6]	22	[2]	10	[2]	8	[2]	**	[1]
740:	6	[6]	7	[2]	6	[2]	**	[1]	7	[6]	7	[6]	7	[6]	8	[2]	6	[6]	7	[6]
750:	6	[6]	**	[1]	15	[2]	15	[6]	6	[5]	15	[c]	6	[2]	**	[1]	6	[6]	15	[c]
760:	7	[5]	**	[1]	6	[5]	15	[c]	6	[6]	15	[c]	6	[6]	15	[c]	15	[6]	**	[1]
770:	6	[2]	15	[6]	6	[6]	**	[1]	6	[2]	24	[2]	23	[6]	15	[6]	6	[5]	18	[2]
780:	6	[6]	18	[c]	7	[6]	26	[2]	15	[2]	15	[6]	10	[6]	**	[1]	12	[6]	15	[6]
790:	7	[6]	15	[6]	16	[6]	15	[6]	18	[6]	15	[6]	6	[5]	**	[1]	22	[6]	16	[2]
800:	24	[2]	15	[6]	6	[6]	15	[6]	6	[6]	15	[c]	6	[5]	15	[6]	7	[2]	**	[1]
810:	6	[5]	**	[1]	6	[2]	15	[6]	6	[5]	15	[6]	15	[6]	18	[2]	6	[5]	7	[2]
820:	6	[6]	**	[1]	6	[6]	**	[1]	7	[2]	15	[6]	6	[2]	**	[1]	6	[2]	**	[1]
830:	6	[6]	15	[6]	12	[2]	16	[2]	6	[6]	7	[6]	6	[6]	26	[2]	25	[6]	**	[1]
840:	7	[2]	**	[2]	6	[5]	20	[c]	6	[6]	7	[2]	8	[6]	16	[c]	15	[2]	15	[6]
850:	12	[6]	22	[2]	6	[5]	**	[1]	16	[6]	15	[c]	18	[6]	**	[1]	7	[6]	**	[1]
860:	22	[6]	15	[c]	24	[6]	**	[1]	26	[2]	15	[6]	6	[6]	15	[6]	6	[2]	15	[c]
870:	7	[6]	15	[6]	7	[2]	15	[6]	7	[6]	15	[6]	6	[5]	**	[1]	7	[6]	15	[6]
880:	15	[6]	**	[1]	7	[6]	**	[1]	6	[5]	15	[6]	7	[a]	**	[1]	7	[6]	15	[6]
890:	7	[6]	15	[6]	8	[6]	18	[2]	7	[b]	15	[6]	7	[2]	15	[6]	7	[a]	28	[2]
900:	27	[6]	16	[2]	8	[2]	8	[6]	7	[2]	22	[c]	7	[6]	**	[1]	8	[6]	18	[c]
910:	10	[6]	**	[1]	12	[6]	10	[2]	6	[5]	15	[6]	16	[6]	10	[c]	18	[6]	**	[1]
920:	7	[2]	7	[6]	22	[6]	12	[2]	24	[6]	24	[2]	26	[6]	8	[2]	28	[2]	**	[1]
930:	7	[c]	18	[2]	7	[6]	7	[6]	7	[6]	7	[6]	7	[2]	**	[1]	7	[6]	7	[6]
940:	7	[a]	**	[1]	7	[a]	22	[2]	15	[2]	15	[6]	7	[c]	**	[1]	7	[c]	12	[2]
950:	6	[2]	15	[c]	7	[2]	**	[1]	7	[6]	15	[c]	7	[6]	15	[c]	6	[5]	15	[c]
960:	15	[6]	**	[2]	29	[5]	15	[6]	7	[c]	15	[c]	6	[2]	**	[1]	7	[2]	15	[6]
970:	8	[9]	**	[1]	10	[9]	18	[c]	12	[9]	15	[6]	15	[2]	**	[1]	16	[9]	15	[c]
980:	18	[9]	15	[6]	6	[5]	**	[1]	22	[9]	15	[6]	24	[9]	15	[6]	26	[9]	22	[2]
990:	28	[9]	**	[1]	30	[9]	31	[7]	6	[2]	15	[6]	7	[c]	**	[1]	25	[c]	26	[2]
1000:	7	[9]	15	[6]	21	[c]	16	[2]	19	[c]	15	[6]	6	[5]	18	[2]	15	[9]	**	[1]
1010:	13	[c]	18	[9]	6	[2]	**	[1]	9	[c]	22	[9]	7	[2]	24	[9]	7	[6]	**	[1]
1020:	6	[5]	**	[1]	6	[2]	30	[9]	**	[a]	24	[2]	6	[2]	15	[c]	7	[6]	15	[6]
1030:	7	[b]	**	[1]	7	[2]	**	[1]	6	[2]	15	[6]	7	[6]	16	[2]	7	[6]	**	[1]
1040:	15	[6]	15	[6]	7	[a]	15	[6]	7	[a]	15	[c]	7	[a]	15	[6]	7	[2]	**	[1]
1050:	7	[6]	**	[1]	7	[a]	15	[6]	8	[6]	15	[6]	15	[6]	15	[6]	7	[a]	7	[6]
1060:	7	[a]	**	[1]	8	[6]	**	[1]	8	[6]	15	[6]	8	[2]	15	[6]	7	[6]	**	[1]
1070:	7	[a]	15	[6]	15	[2]	28	[2]	7	[6]	24	[2]	6	[5]	15	[6]	6	[2]	15	[c]
1080:	7	[2]	22	[2]	7	[6]	15	[6]	6	[5]	15	[6]	6	[5]	**	[1]	16	[2]	15	[6]
1090:	8	[6]	**	[1]	7	[b]	**	[1]	6	[5]	15	[6]	7	[2]	**	[1]	8	[6]	15	[6]

1100:	8	[2]	15	[6]	6	[5]	**	[1]	15	[6]	15	[c]	7	[6]	26	[2]	7	[6]	**	[1]
1110:	6	[5]	10	[2]	7	[2]	15	[6]	6	[5]	15	[6]	7	[6]	**	[1]	6	[2]	15	[6]
1120:	15	[c]	18	[2]	7	[c]	**	[1]	7	[6]	15	[6]	6	[5]	22	[2]	7	[2]	**	[1]
1130:	7	[6]	15	[6]	6	[5]	15	[6]	7	[6]	7	[6]	15	[2]	15	[6]	7	[a]	16	[2]
1140:	7	[b]	7	[6]	7	[6]	15	[c]	7	[2]	15	[c]	7	[a]	30	[2]	30	[6]	15	[c]
1150:	7	[a]	**	[1]	15	[6]	**	[1]	7	[a]	15	[6]	8	[5]	26	[c]	10	[5]	24	[c]
1160:	12	[5]	26	[2]	7	[a]	**	[1]	16	[5]	18	[c]	18	[5]	15	[6]	15	[2]	15	[6]
1170:	22	[5]	**	[1]	24	[5]	15	[6]	26	[5]	24	[2]	28	[5]	15	[6]	30	[6]	30	[6]
1180:	6	[5]	**	[1]	6	[5]	15	[6]	31	[2]	15	[6]	7	[c]	**	[1]	7	[c]	28	[2]
1190:	6	[2]	15	[6]	7	[2]	**	[1]	7	[6]	15	[6]	7	[6]	15	[6]	6	[5]	15	[6]
1200:	15	[6]	**	[1]	6	[5]	15	[6]	7	[c]	15	[6]	6	[2]	16	[2]	7	[2]	15	[6]
1210:	7	[b]	15	[6]	7	[6]	**	[1]	7	[b]	15	[6]	18	[2]	**	[1]	7	[6]	22	[2]
1220:	7	[6]	15	[6]	7	[b]	**	[1]	7	[2]	24	[2]	7	[6]	15	[6]	7	[a]	**	[1]
1230:	6	[5]	**	[1]	15	[6]	8	[2]	7	[6]	15	[6]	7	[a]	**	[1]	6	[5]	15	[6]
1240:	7	[2]	16	[2]	6	[2]	10	[2]	7	[6]	7	[6]	6	[2]	28	[2]	7	[2]	**	[1]
1250:	6	[2]	8	[2]	7	[6]	7	[6]	6	[2]	7	[6]	7	[2]	7	[6]	6	[5]	**	[1]
1260:	6	[2]	12	[2]	6	[5]	7	[6]	15	[2]	15	[6]	7	[a]	15	[c]	7	[b]	26	[2]
1270:	7	[b]	30	[2]	30	[6]	18	[2]	7	[6]	15	[c]	7	[a]	**	[1]	7	[a]	**	[1]
1280:	15	[6]	30	[c]	10	[5]	**	[1]	12	[5]	15	[c]	7	[a]	24	[c]	16	[5]	**	[1]
1290:	18	[5]	**	[1]	7	[6]	18	[c]	22	[5]	15	[6]	24	[5]	**	[1]	26	[5]	15	[c]
1300:	28	[5]	**	[1]	30	[6]	**	[1]	7	[2]	15	[6]	8	[a]	**	[1]	30	[6]	15	[c]
1310:	8	[a]	15	[6]	31	[2]	15	[6]	8	[a]	15	[6]	8	[a]	15	[6]	8	[a]	**	[1]
1320:	8	[a]	**	[1]	8	[a]	26	[2]	7	[6]	24	[2]	6	[2]	**	[1]	15	[2]	15	[6]
1330:	7	[c]	**	[3]	6	[2]	30	[2]	30	[6]	15	[6]	7	[2]	15	[6]	7	[6]	30	[c]
1340:	7	[6]	15	[c]	8	[5]	30	[c]	15	[6]	30	[c]	12	[5]	15	[6]	7	[6]	26	[c]
1350:	16	[5]	24	[c]	18	[5]	15	[6]	7	[6]	20	[c]	22	[5]	22	[2]	24	[5]	15	[6]
1360:	26	[5]	**	[1]	28	[5]	28	[2]	30	[6]	30	[6]	9	[c]	**	[1]	7	[2]	**	[2]
1370:	30	[6]	15	[6]	7	[a]	**	[1]	30	[6]	15	[6]	31	[2]	16	[2]	8	[6]	15	[c]
1380:	8	[b]	**	[1]	8	[b]	15	[c]	8	[b]	15	[c]	8	[6]	18	[2]	8	[6]	15	[6]
1390:	8	[6]	15	[c]	15	[6]	15	[c]	8	[2]	15	[6]	7	[a]	10	[2]	9	[6]	**	[1]
1400:	7	[2]	15	[6]	8	[a]	22	[2]	8	[a]	8	[6]	8	[6]	15	[6]	10	[2]	**	[1]
1410:	8	[5]	16	[2]	6	[5]	8	[2]	7	[a]	7	[6]	7	[2]	12	[2]	7	[6]	7	[2]
1420:	6	[5]	28	[2]	6	[2]	**	[1]	15	[2]	15	[6]	7	[c]	**	[1]	7	[c]	**	[1]
1430:	6	[2]	26	[2]	7	[2]	**	[1]	7	[6]	15	[c]	7	[6]	15	[c]	6	[5]	**	[1]
1440:	15	[6]	15	[6]	6	[2]	15	[6]	7	[c]	15	[c]	6	[5]	**	[1]	7	[2]	15	[6]
1450:	7	[6]	**	[1]	7	[6]	**	[1]	6	[5]	15	[6]	15	[6]	30	[2]	30	[6]	**	[1]
1460:	6	[5]	15	[6]	6	[2]	30	[c]	7	[6]	15	[6]	8	[5]	30	[c]	10	[5]	30	[c]
1470:	12	[5]	**	[1]	22	[2]	30	[c]	16	[5]	28	[c]	18	[5]	15	[6]	6	[5]	24	[c]
1480:	22	[5]	**	[1]	24	[5]	**	[1]	26	[5]	18	[c]	28	[5]	**	[1]	30	[6]	**	[1]
1490:	13	[c]	15	[6]	6	[5]	**	[1]	30	[6]	15	[6]	7	[2]	15	[6]	30	[6]	**	[1]
1500:	30	[6]	18	[2]	7	[6]	15	[6]	31	[2]	15	[6]	8	[5]	15	[6]	7	[6]	7	[6]
1510:	7	[6]	**	[1]	7	[2]	16	[2]	7	[6]	7	[6]	7	[6]	36	[2]	7	[6]	30	[2]
1520:	30	[6]	8	[2]	7	[a]	**	[1]	7	[b]	30	[c]	7	[a]	7	[5]	8	[5]	30	[c]
1530:	10	[5]	**	[1]	12	[5]	7	[6]	7	[a]	30	[c]	16	[5]	30	[c]	18	[5]	18	[2]
1540:	8	[6]	26	[c]	22	[5]	**	[1]	24	[5]	8	[b]	26	[5]	20	[c]	28	[5]	**	[1]
1550:	30	[6]	30	[6]	15	[2]	**	[1]	8	[b]	15	[c]	30	[6]	8	[2]	8	[2]	**	[1]
1560:	30	[6]	15	[c]	30	[6]	15	[c]	8	[a]	15	[c]	30	[6]	**	[1]	31	[2]	15	[6]
1570:	6	[5]	**	[1]	8	[a]	15	[c]	8	[6]	15	[6]	7	[2]	18	[2]	7	[6]	**	[1]
1580:	7	[6]	15	[6]	8	[6]	**	[1]	15	[6]	15	[c]	8	[a]	8	[b]	8	[b]	15	[6]
1590:	8	[b]	36	[2]	7	[2]	26	[2]	8	[a]	15	[6]	8	[a]	**	[1]	8	[a]	15	[6]
1600:	24	[2]	**	[1]	8	[a]	15	[c]	8	[a]	15	[6]	8	[a]	**	[1]	8	[a]	**	[1]
1610:	8	[a]	15	[6]	6	[2]	**	[1]	6	[5]	15	[c]	15	[2]	15	[6]	7	[c]	**	[1]
1620:	7	[c]	**	[1]	6	[5]	15	[6]	7	[2]	15	[6]	7	[6]	**	[1]	7	[6]	15	[c]
1630:	6	[5]	15	[6]	15	[6]	22	[2]	8	[5]	15	[6]	7	[b]	**	[1]	7	[b]	15	[6]
1640:	7	[2]	15	[6]	7	[6]	30	[2]	30	[6]	15	[6]	7	[6]	26	[2]	15	[2]	30	[c]
1650:	7	[6]	15	[c]	11	[6]	30	[c]	10	[5]	30	[c]	12	[5]	**	[1]	7	[6]	30	[c]
1660:	16	[5]	30	[c]	18	[5]	**	[1]	15	[6]	30	[c]	22	[5]	**	[1]	24	[5]	**	[1]
1670:	26	[5]	24	[c]	28	[5]	22	[c]	30	[6]	30	[6]	19	[c]	15	[6]	7	[a]	22	[2]
1680:	30	[6]	**	[2]	7	[6]	15	[6]	30	[6]	15	[6]	30	[6]	15	[6]	8	[b]	15	[6]
1690:	30	[6]	18	[2]	30	[6]	**	[1]	8	[6]	15	[6]	31	[2]	**	[1]	8	[5]	**	[1]

1700: 8 [2] 15 [6] 7 [a] 15 [c] 7 [2] 15 [6] 6 [5] 15 [6] 8 [a] ** [1]
 1710: 8 [a] 28 [2] 15 [2] 15 [6] 7 [c] 15 [6] 8 [5] 16 [2] 6 [5] 15 [6]
 1720: 7 [2] ** [1] 6 [2] ** [1] 6 [5] 15 [c] 6 [5] 15 [6] 26 [2] 15 [6]
 1730: 8 [5] 15 [6] 7 [c] ** [1] 6 [2] 15 [6] 7 [2] 15 [6] 7 [6] 36 [2]
 1740: 6 [5] ** [1] 6 [2] 15 [6] 15 [2] 15 [6] 7 [6] ** [1] 8 [5] 15 [6]
 1750: 6 [2] 16 [2] 7 [2] ** [1] 7 [6] 15 [6] 7 [6] 15 [c] 7 [b] ** [1]
 1760: 15 [6] 15 [6] 7 [6] 40 [2] 7 [6] 15 [6] 7 [6] 15 [6] 7 [2] 28 [2]
 1770: 7 [6] 15 [6] 7 [6] 15 [6] 7 [a] 24 [2] 15 [6] ** [1] 7 [a] 15 [6]
 1780: 7 [a] 15 [6] 7 [b] ** [1] 7 [2] 15 [6] 7 [6] ** [1] 7 [6] ** [1]
 1790: 7 [b] 15 [6] 15 [c] 15 [6] 8 [5] 15 [6] 7 [a] 15 [6] 7 [6] 15 [c]

1800: 7 [2] ** [1] 7 [a] 15 [6] 7 [a] 15 [6] 7 [a] 15 [c] 15 [2] 26 [2]
 1810: 7 [a] ** [1] 8 [5] 36 [2] 7 [a] 15 [6] 7 [2] 22 [2] 7 [6] 16 [2]
 1820: 7 [b] 15 [c] 7 [b] ** [1] 15 [6] 24 [2] 8 [5] 15 [6] 7 [6] 30 [2]
 1830: 30 [6] ** [1] 7 [2] 15 [6] 7 [6] 30 [c] 7 [6] 15 [6] 8 [5] 30 [c]
 1840: 15 [6] 30 [c] 12 [5] 18 [2] 8 [5] 30 [c] 16 [5] ** [1] 18 [5] ** [2]
 1850: 7 [6] 30 [c] 22 [5] 16 [2] 24 [5] 15 [6] 28 [2] 30 [c] 28 [5] 28 [c]
 1860: 30 [6] ** [1] 25 [c] 22 [2] 8 [6] 22 [c] 30 [6] ** [1] 8 [6] 18 [c]
 1870: 30 [6] ** [1] 30 [6] ** [1] 8 [6] 15 [6] 30 [6] ** [1] 30 [6] ** [1]
 1880: 8 [6] 15 [6] 30 [6] 8 [a] 8 [b] 8 [a] 8 [2] 15 [6] 31 [2] ** [1]
 1890: 8 [5] 30 [2] 30 [6] 15 [c] 8 [6] 15 [c] 8 [a] 30 [c] 8 [6] 15 [c]

1900: 8 [2] ** [1] 10 [5] 30 [c] 12 [5] 15 [6] 8 [a] ** [1] 16 [5] 30 [c]
 1910: 18 [5] 15 [6] 7 [2] ** [1] 22 [5] 15 [6] 24 [5] 26 [2] 26 [5] 30 [c]
 1920: 28 [5] 30 [c] 30 [6] 30 [6] 27 [c] 7 [6] 7 [6] 40 [2] 30 [6] 7 [6]
 1930: 7 [6] ** [1] 30 [6] ** [1] 30 [6] 7 [2] 15 [2] 15 [6] 30 [6] 15 [c]
 1940: 30 [6] 10 [c] 7 [6] 28 [2] 30 [6] 15 [c] 7 [6] 15 [c] 7 [5] ** [1]
 1950: 30 [6] ** [1] 31 [2] 15 [6] 7 [6] 15 [6] 7 [a] 18 [2] 7 [6] 15 [6]
 1960: 7 [2] 36 [2] 7 [b] 15 [6] 7 [6] 15 [6] 7 [6] 15 [6] 15 [6] 15 [c]
 1970: 7 [6] 26 [2] 7 [6] ** [1] 7 [6] 24 [2] 7 [2] 15 [6] 7 [a] ** [1]
 1980: 7 [a] 15 [c] 7 [a] 15 [6] 30 [2] 30 [6] 7 [6] ** [1] 7 [6] 15 [6]
 1990: 30 [c] 15 [c] 7 [2] ** [1] 30 [c] 15 [6] 30 [c] ** [1] 7 [6] ** [1]

2000: 30 [c] 16 [5] 30 [c] ** [1] 7 [a] 7 [6] 30 [c] 22 [5] 7 [2] 40 [2]
 2010: 7 [6] ** [1] 30 [c] 28 [5] 30 [c] 30 [6] 31 [8] ** [1] 8 [5] 15 [6]
 2020: 27 [c] 42 [2] 7 [a] 15 [6] 23 [c] 30 [6] 21 [c] ** [1] 8 [b] ** [1]
 2030: 8 [b] 30 [6] 15 [2] 30 [6] 13 [c] 15 [c] 11 [c] 30 [6] 8 [6] ** [1]
 2040: 8 [b] 15 [6] 8 [6] 30 [6] 8 [6] 30 [6] 8 [b] 22 [2] ** [b] 15 [6]
 2050: 8 [2] 15 [6] 8 [a] ** [1] 8 [a] 15 [6] 7 [2] 16 [2] 8 [a] 28 [2]
 2060: 8 [a] 15 [6] 7 [b] ** [1] 15 [6] 15 [6] 8 [6] 15 [6] 7 [6] ** [1]
 2070: 7 [6] 18 [2] 7 [2] 15 [6] 7 [b] 24 [2] 7 [6] 30 [2] 30 [6] 15 [6]
 2080: 15 [6] ** [1] 8 [5] ** [1] 7 [6] 15 [6] 8 [5] ** [1] 10 [5] ** [1]
 2090: 12 [5] 15 [6] 7 [a] 30 [c] 16 [5] 30 [c] 18 [5] 15 [6] 7 [a] ** [1]

2100: 22 [5] 15 [6] 24 [5] 15 [6] 26 [5] 30 [c] 28 [5] 42 [2] 30 [6] 30 [6]
 2110: 30 [c] ** [1] 15 [6] ** [1] 30 [6] 15 [6] 7 [c] 28 [2] 30 [6] 24 [c]
 2120: 30 [6] 15 [6] 7 [c] 15 [6] 30 [6] 18 [c] 30 [6] 16 [c] 15 [6] ** [1]
 2130: 30 [6] ** [1] 8 [5] 26 [2] 7 [5] 15 [6] 30 [6] ** [1] 30 [6] 15 [6]
 2140: 7 [b] ** [1] 7 [5] ** [1] 31 [2] 15 [6] 7 [6] 18 [2] 8 [5] 15 [6]
 2150: 7 [6] 15 [6] 7 [2] ** [1] 7 [6] 15 [6] 7 [6] 15 [6] 7 [6] 16 [2]
 2160: 15 [6] ** [1] 7 [a] 15 [6] 7 [a] 8 [5] 7 [a] 15 [6] 8 [6] 15 [6]
 2170: 10 [6] 12 [2] 12 [6] 40 [2] 7 [a] 15 [6] 16 [2] 15 [6] 8 [5] ** [1]
 2180: 7 [6] 15 [c] 7 [6] 36 [2] 7 [2] 15 [6] 7 [6] ** [7] 8 [6] 15 [c]
 2190: 8 [b] 8 [b] 15 [2] 15 [6] 8 [b] 15 [c] 8 [5] ** [3] 8 [6] 15 [6]

2200: 8 [6] 30 [2] 30 [6] ** [1] 8 [6] 15 [6] 8 [6] ** [1] 15 [6] ** [2]
 2210: 8 [5] 30 [c] 10 [5] ** [1] 12 [5] 15 [6] 8 [a] 30 [c] 16 [5] 30 [c]
 2220: 18 [5] ** [1] 8 [a] 30 [c] 22 [5] 24 [2] 24 [5] 16 [2] 26 [5] 30 [c]
 2230: 28 [5] 30 [c] 30 [6] 30 [6] 30 [c] 15 [6] 7 [6] ** [1] 30 [6] ** [1]
 2240: 15 [6] 30 [c] 30 [6] ** [1] 30 [6] 15 [6] 7 [a] 15 [6] 30 [6] 22 [c]
 2250: 30 [6] ** [1] 7 [6] 18 [c] 30 [6] 15 [6] 15 [6] 36 [2] 7 [5] 15 [6]
 2260: 30 [6] 15 [6] 30 [6] 30 [2] 30 [6] 30 [6] 7 [5] ** [1] 30 [6] ** [1]
 2270: 6 [5] 15 [6] 31 [2] ** [1] 10 [5] 30 [c] 12 [5] 15 [6] 8 [6] 42 [2]
 2280: 16 [5] ** [1] 18 [5] 15 [6] 8 [b] 30 [c] 22 [5] ** [1] 24 [5] 15 [6]
 2290: 26 [5] 30 [c] 28 [5] ** [1] 30 [6] 30 [6] 30 [c] ** [1] 8 [b] 30 [c]

2300:	30	[6]	15	[6]	8	[a]	46	[2]	30	[6]	30	[c]	30	[6]	15	[6]	7	[6]	**	[1]
2310:	30	[6]	**	[1]	30	[6]	22	[c]	7	[6]	20	[c]	30	[6]	15	[6]	7	[6]	15	[6]
2320:	15	[6]	15	[6]	30	[6]	22	[2]	30	[6]	15	[6]	7	[a]	30	[6]	7	[5]	16	[2]
2330:	30	[6]	15	[6]	7	[6]	**	[1]	30	[6]	15	[c]	31	[2]	15	[6]	7	[a]	**	[1]
2340:	7	[a]	**	[1]	7	[a]	7	[2]	7	[2]	15	[6]	7	[6]	**	[1]	7	[6]	28	[2]
2350:	8	[6]	**	[1]	15	[6]	12	[2]	8	[b]	15	[6]	8	[b]	**	[1]	8	[6]	9	[6]
2360:	8	[6]	15	[6]	8	[6]	16	[2]	8	[b]	8	[6]	8	[6]	9	[6]	36	[2]	22	[2]
2370:	8	[6]	**	[1]	8	[6]	8	[a]	8	[6]	18	[2]	8	[6]	**	[1]	8	[2]	8	[6]
2380:	7	[6]	**	[1]	8	[a]	**	[1]	15	[2]	15	[6]	7	[6]	15	[c]	8	[6]	**	[1]
2390:	8	[a]	15	[c]	8	[a]	**	[1]	8	[6]	15	[c]	7	[a]	15	[c]	7	[a]	**	[1]
2400:	15	[6]	**	[4]	7	[a]	26	[2]	7	[6]	15	[c]	6	[5]	28	[2]	7	[2]	15	[6]
2410:	6	[5]	**	[1]	7	[6]	18	[2]	17	[6]	15	[6]	15	[2]	**	[1]	7	[a]	40	[2]
2420:	7	[b]	15	[6]	8	[6]	**	[1]	10	[6]	24	[2]	12	[6]	15	[6]	7	[a]	15	[6]
2430:	16	[6]	15	[6]	18	[2]	15	[6]	7	[a]	15	[6]	7	[a]	**	[1]	7	[a]	15	[6]
2440:	8	[6]	**	[1]	8	[6]	15	[6]	8	[6]	15	[6]	7	[a]	**	[1]	15	[6]	30	[2]
2450:	30	[6]	15	[6]	7	[a]	15	[6]	7	[6]	30	[c]	7	[2]	15	[6]	8	[5]	**	[1]
2460:	10	[5]	30	[c]	12	[5]	15	[6]	15	[c]	30	[c]	16	[5]	**	[1]	18	[5]	15	[6]
2470:	7	[a]	30	[c]	22	[5]	**	[1]	24	[5]	15	[6]	26	[5]	**	[1]	28	[5]	36	[2]
2480:	30	[6]	30	[6]	30	[c]	15	[6]	8	[5]	30	[c]	30	[6]	15	[6]	8	[6]	30	[c]
2490:	30	[6]	46	[2]	30	[6]	15	[6]	8	[6]	15	[6]	30	[6]	30	[c]	30	[6]	28	[c]
2500:	8	[2]	40	[2]	30	[6]	**	[1]	8	[a]	15	[6]	7	[5]	22	[2]	30	[6]	15	[6]
2510:	30	[6]	30	[2]	30	[6]	30	[6]	8	[a]	15	[6]	30	[6]	30	[c]	8	[b]	15	[6]
2520:	30	[6]	**	[1]	30	[6]	30	[c]	12	[5]	24	[2]	8	[b]	30	[c]	31	[2]	30	[c]
2530:	18	[5]	**	[1]	8	[b]	30	[c]	22	[5]	15	[6]	24	[5]	42	[2]	26	[5]	**	[1]
2540:	28	[5]	30	[c]	30	[6]	**	[1]	30	[c]	15	[c]	8	[a]	30	[c]	30	[6]	**	[1]
2550:	8	[a]	**	[1]	30	[6]	30	[c]	30	[6]	15	[6]	8	[a]	**	[1]	30	[6]	30	[c]
2560:	30	[6]	30	[c]	7	[a]	28	[c]	30	[6]	15	[6]	7	[6]	16	[2]	7	[2]	22	[c]
2570:	30	[6]	15	[6]	30	[6]	30	[2]	30	[6]	30	[6]	15	[6]	15	[c]	30	[6]	**	[1]
2580:	7	[6]	28	[2]	30	[6]	30	[c]	30	[6]	30	[c]	12	[5]	12	[2]	7	[6]	30	[c]
2590:	30	[6]	**	[1]	31	[2]	**	[1]	8	[5]	30	[c]	22	[5]	48	[2]	24	[5]	22	[2]
2600:	26	[5]	30	[c]	28	[5]	30	[c]	30	[6]	30	[6]	30	[c]	8	[b]	15	[2]	**	[1]
2610:	30	[6]	15	[c]	8	[5]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]	8	[a]	26	[2]
2620:	30	[6]	**	[1]	30	[6]	42	[2]	40	[2]	30	[c]	30	[6]	36	[2]	8	[a]	15	[c]
2630:	8	[a]	24	[c]	30	[6]	**	[1]	30	[6]	15	[6]	8	[a]	30	[6]	8	[a]	16	[c]
2640:	30	[6]	18	[2]	8	[a]	15	[6]	30	[6]	15	[6]	30	[6]	**	[1]	8	[a]	15	[6]
2650:	8	[a]	15	[6]	30	[6]	15	[c]	30	[6]	15	[6]	31	[2]	**	[1]	7	[6]	**	[1]
2660:	7	[6]	15	[6]	7	[a]	**	[1]	7	[2]	15	[c]	7	[6]	15	[6]	7	[6]	16	[2]
2670:	7	[a]	**	[1]	15	[2]	15	[6]	8	[6]	24	[2]	8	[b]	**	[1]	8	[b]	15	[6]
2680:	8	[b]	15	[6]	8	[6]	**	[1]	8	[6]	15	[c]	8	[6]	**	[1]	15	[6]	**	[1]
2690:	8	[5]	15	[6]	8	[6]	**	[1]	8	[b]	15	[6]	8	[6]	15	[6]	8	[6]	**	[1]
2700:	8	[2]	36	[2]	8	[6]	15	[6]	15	[2]	15	[6]	8	[a]	**	[1]	8	[5]	15	[6]
2710:	7	[a]	**	[1]	8	[a]	**	[1]	8	[a]	15	[6]	8	[6]	15	[6]	8	[6]	**	[1]
2720:	15	[6]	15	[6]	7	[b]	15	[6]	7	[b]	24	[2]	8	[6]	26	[2]	8	[6]	**	[1]
2730:	8	[6]	**	[1]	7	[b]	15	[6]	8	[6]	15	[6]	15	[6]	15	[c]	7	[a]	15	[6]
2740:	7	[c]	**	[1]	7	[a]	15	[6]	7	[2]	15	[6]	7	[6]	40	[2]	7	[6]	**	[1]
2750:	7	[a]	15	[6]	42	[2]	**	[1]	8	[5]	15	[6]	7	[c]	15	[6]	6	[2]	30	[2]
2760:	30	[6]	15	[6]	6	[5]	15	[6]	7	[6]	30	[c]	6	[5]	**	[1]	15	[2]	30	[c]
2770:	10	[5]	30	[c]	12	[5]	46	[2]	6	[2]	30	[c]	16	[5]	**	[1]	18	[5]	15	[6]
2780:	6	[5]	30	[c]	22	[5]	22	[2]	24	[5]	15	[6]	26	[5]	30	[c]	28	[5]	**	[1]
2790:	30	[6]	**	[1]	30	[c]	15	[6]	7	[6]	30	[c]	30	[6]	**	[1]	7	[6]	30	[c]
2800:	30	[6]	**	[1]	30	[6]	**	[1]	8	[5]	15	[6]	30	[6]	30	[c]	30	[6]	**	[2]
2810:	7	[6]	30	[c]	30	[6]	26	[2]	7	[6]	15	[6]	15	[c]	30	[c]	30	[6]	**	[1]
2820:	30	[6]	15	[6]	7	[a]	30	[6]	7	[2]	24	[2]	30	[6]	15	[6]	7	[6]	18	[c]
2830:	30	[6]	18	[2]	30	[6]	**	[1]	7	[c]	15	[6]	7	[6]	**	[1]	30	[6]	16	[2]
2840:	30	[6]	15	[6]	30	[6]	**	[1]	7	[6]	15	[c]	7	[b]	15	[6]	31	[2]	15	[6]
2850:	8	[5]	**	[1]	7	[6]	15	[6]	7	[b]	15	[6]	7	[2]	**	[1]	7	[6]	15	[c]
2860:	7	[a]	**	[1]	6	[2]	9	[6]	15	[2]	15	[6]	7	[a]	46	[2]	8	[5]	18	[2]
2870:	7	[6]	15	[6]	8	[6]	16	[2]	8	[b]	22	[2]	8	[b]	15	[6]	8	[b]	**	[1]
2880:	15	[6]	42	[2]	8	[6]	15	[6]	8	[6]	15	[c]	8	[b]	**	[1]	8	[6]	26	[2]
2890:	8	[6]	48	[2]	8	[b]	15	[6]	8	[6]	15	[6]	15	[2]	**	[1]	8	[6]	15	[6]

2900:	8	[2]	15	[6]	7	[6]	**	[1]	8	[a]	15	[6]	8	[a]	15	[6]	7	[6]	**	[1]
2910:	8	[a]	40	[2]	15	[6]	15	[6]	8	[6]	15	[6]	8	[6]	**	[1]	7	[a]	15	[6]
2920:	7	[2]	22	[2]	21	[6]	36	[2]	7	[6]	18	[c]	7	[b]	**	[1]	15	[6]	28	[2]
2930:	8	[6]	15	[6]	10	[6]	15	[6]	12	[6]	15	[6]	7	[2]	15	[6]	16	[6]	**	[1]
2940:	18	[6]	16	[2]	7	[6]	26	[2]	22	[2]	15	[6]	8	[5]	15	[6]	7	[6]	15	[6]
2950:	7	[6]	15	[c]	7	[2]	**	[1]	7	[6]	15	[6]	7	[a]	**	[1]	7	[a]	15	[c]
2960:	15	[6]	15	[6]	7	[a]	**	[1]	8	[5]	15	[6]	7	[a]	15	[6]	7	[2]	**	[1]
2970:	7	[6]	**	[1]	7	[6]	15	[6]	7	[a]	15	[6]	15	[c]	15	[6]	8	[5]	15	[6]
2980:	7	[a]	15	[c]	9	[6]	18	[2]	7	[2]	15	[6]	7	[a]	28	[2]	7	[6]	48	[2]
2990:	8	[6]	15	[6]	15	[6]	40	[2]	7	[a]	15	[6]	8	[5]	36	[2]	8	[6]	**	[1]
3000:	8	[b]	**	[1]	8	[b]	15	[6]	8	[b]	15	[6]	8	[6]	30	[2]	46	[2]	15	[6]
3010:	8	[6]	**	[1]	8	[b]	30	[c]	8	[6]	15	[6]	8	[5]	30	[c]	10	[5]	**	[1]
3020:	12	[5]	15	[6]	8	[6]	**	[1]	16	[5]	30	[c]	18	[5]	15	[6]	8	[6]	30	[c]
3030:	22	[5]	15	[6]	24	[5]	15	[6]	26	[5]	30	[c]	28	[5]	**	[1]	30	[6]	30	[6]
3040:	30	[c]	**	[1]	8	[a]	30	[c]	30	[6]	15	[6]	8	[a]	30	[c]	30	[6]	**	[1]
3050:	30	[6]	26	[2]	8	[a]	42	[2]	30	[6]	30	[c]	30	[6]	30	[c]	8	[a]	30	[c]
3060:	30	[6]	**	[1]	7	[6]	15	[6]	7	[2]	30	[c]	30	[6]	**	[1]	30	[6]	15	[6]
3070:	8	[6]	36	[2]	15	[6]	30	[c]	30	[6]	15	[6]	8	[b]	26	[c]	30	[6]	**	[1]
3080:	30	[6]	15	[6]	8	[6]	**	[1]	8	[b]	18	[c]	30	[6]	15	[6]	30	[6]	**	[1]
3090:	30	[6]	15	[c]	8	[6]	15	[6]	8	[6]	15	[c]	30	[6]	18	[2]	8	[6]	15	[6]
3100:	8	[2]	15	[c]	8	[a]	28	[2]	31	[2]	15	[6]	7	[6]	15	[6]	8	[a]	**	[1]
3110:	8	[a]	15	[6]	8	[a]	15	[6]	8	[a]	15	[6]	8	[6]	15	[6]	7	[6]	**	[1]
3120:	15	[6]	**	[1]	7	[6]	15	[6]	7	[6]	**	[5]	7	[6]	52	[2]	7	[2]	15	[6]
3130:	7	[6]	30	[2]	30	[6]	15	[c]	7	[6]	15	[6]	48	[2]	**	[1]	8	[5]	42	[2]
3140:	8	[5]	30	[c]	10	[5]	30	[c]	12	[5]	15	[6]	7	[6]	30	[c]	16	[5]	46	[2]
3150:	18	[5]	22	[2]	15	[2]	30	[c]	22	[5]	15	[6]	24	[5]	15	[6]	26	[5]	30	[c]
3160:	28	[5]	30	[c]	30	[6]	**	[1]	30	[c]	15	[6]	7	[6]	**	[1]	30	[6]	**	[1]
3170:	8	[5]	30	[c]	30	[6]	30	[c]	30	[6]	24	[2]	23	[6]	15	[6]	30	[6]	30	[c]
3180:	30	[6]	**	[1]	8	[a]	30	[c]	30	[6]	15	[6]	10	[6]	**	[1]	12	[6]	30	[c]
3190:	30	[6]	**	[1]	30	[6]	30	[2]	30	[6]	30	[6]	8	[a]	30	[c]	30	[6]	30	[c]
3200:	24	[2]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]	12	[5]	24	[c]	8	[a]	**	[1]
3210:	30	[6]	30	[c]	30	[6]	18	[c]	30	[6]	30	[c]	22	[5]	**	[1]	24	[5]	15	[6]
3220:	30	[6]	**	[1]	28	[5]	30	[c]	30	[6]	30	[6]	30	[c]	15	[6]	30	[6]	**	[1]
3230:	30	[6]	15	[6]	31	[2]	52	[2]	30	[6]	30	[c]	30	[6]	15	[6]	7	[6]	40	[2]
3240:	30	[6]	30	[c]	30	[6]	30	[c]	7	[b]	30	[c]	30	[6]	16	[2]	15	[6]	15	[6]
3250:	7	[5]	**	[1]	30	[6]	**	[1]	30	[6]	15	[6]	7	[2]	**	[1]	7	[5]	**	[1]
3260:	30	[6]	15	[6]	7	[6]	30	[c]	30	[6]	30	[c]	30	[6]	26	[2]	7	[6]	26	[c]
3270:	7	[6]	**	[1]	30	[6]	15	[6]	30	[6]	24	[2]	30	[6]	28	[2]	7	[6]	15	[6]
3280:	15	[6]	16	[2]	30	[6]	48	[2]	8	[5]	15	[6]	7	[6]	18	[2]	7	[2]	15	[6]
3290:	30	[6]	15	[6]	8	[5]	36	[2]	30	[6]	15	[c]	31	[2]	15	[6]	8	[6]	**	[1]
3300:	8	[6]	**	[1]	8	[6]	15	[6]	7	[2]	15	[6]	8	[6]	**	[1]	8	[6]	15	[6]
3310:	7	[6]	15	[6]	15	[6]	**	[1]	8	[a]	15	[6]	8	[b]	30	[2]	30	[6]	**	[1]
3320:	7	[2]	40	[2]	8	[6]	**	[1]	8	[a]	15	[6]	8	[5]	30	[c]	12	[2]	**	[1]
3330:	12	[5]	**	[1]	8	[6]	30	[c]	16	[5]	30	[c]	18	[5]	46	[2]	8	[6]	30	[c]
3340:	22	[5]	15	[6]	24	[5]	**	[1]	26	[5]	30	[c]	28	[5]	**	[1]	30	[6]	30	[6]
3350:	30	[c]	15	[6]	8	[6]	30	[c]	30	[6]	11	[6]	8	[a]	30	[c]	30	[6]	**	[1]
3360:	30	[6]	**	[1]	8	[2]	15	[6]	30	[6]	30	[c]	30	[6]	30	[c]	8	[a]	30	[c]
3370:	30	[6]	**	[1]	8	[a]	**	[1]	8	[a]	30	[c]	30	[6]	15	[6]	30	[6]	30	[2]
3380:	30	[6]	30	[6]	8	[a]	30	[c]	30	[6]	30	[c]	7	[6]	30	[c]	30	[6]	**	[1]
3390:	30	[6]	**	[1]	52	[2]	30	[c]	8	[6]	30	[c]	30	[6]	42	[2]	30	[6]	24	[c]
3400:	30	[6]	30	[c]	22	[5]	40	[2]	24	[5]	15	[6]	30	[6]	**	[1]	28	[5]	30	[c]
3410:	30	[6]	30	[6]	30	[c]	**	[1]	30	[6]	30	[c]	30	[6]	15	[6]	30	[6]	30	[c]
3420:	30	[6]	30	[c]	30	[6]	15	[6]	31	[2]	24	[2]	30	[6]	30	[c]	30	[6]	30	[c]
3430:	25	[6]	46	[2]	30	[6]	**	[1]	7	[6]	15	[6]	7	[5]	30	[c]	30	[6]	18	[2]
3440:	30	[6]	15	[c]	12	[6]	30	[6]	8	[6]	30	[c]	30	[6]	15	[6]	18	[6]	**	[1]
3450:	30	[6]	30	[c]	30	[6]	11	[6]	24	[6]	30	[c]	26	[2]	**	[1]	30	[6]	15	[6]
3460:	30	[6]	**	[1]	30	[6]	**	[1]	7	[2]	15	[6]	7	[6]	**	[1]	30	[6]	**	[1]
3470:	7	[5]	10	[2]	10	[6]	22	[2]	7	[6]	24	[2]	30	[6]	15	[6]	8	[5]	48	[2]
3480:	30	[6]	**	[2]	30	[6]	42	[2]	8	[6]	15	[6]	30	[6]	15	[c]	31	[2]	15	[6]
3490:	8	[b]	**	[1]	8	[6]	10	[6]	8	[6]	11	[6]	8	[6]	15	[6]	8	[b]	**	[1]

3500:	8	[6]	15	[6]	8	[6]	30	[2]	30	[6]	9	[6]	8	[6]	15	[6]	8	[6]	30	[c]
3510:	9	[6]	**	[1]	8	[5]	30	[c]	10	[5]	30	[c]	12	[5]	**	[1]	8	[6]	30	[c]
3520:	16	[5]	30	[c]	18	[5]	15	[c]	11	[6]	30	[c]	22	[5]	**	[1]	24	[5]	**	[1]
3530:	26	[5]	30	[c]	28	[5]	**	[1]	30	[6]	30	[c]	30	[6]	26	[2]	8	[a]	**	[1]
3540:	30	[6]	**	[1]	8	[6]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]	8	[a]	15	[6]
3550:	30	[6]	52	[2]	30	[6]	30	[c]	7	[6]	30	[c]	30	[6]	**	[1]	8	[6]	**	[1]
3560:	7	[2]	30	[c]	30	[6]	11	[6]	30	[6]	11	[6]	7	[6]	30	[6]	15	[2]	42	[2]
3570:	30	[6]	**	[1]	7	[6]	30	[c]	30	[6]	30	[c]	30	[6]	48	[2]	7	[6]	30	[c]
3580:	7	[6]	**	[1]	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	16	[2]	8	[6]	36	[2]
3590:	7	[a]	15	[6]	30	[6]	**	[1]	8	[6]	15	[6]	7	[6]	18	[c]	8	[6]	58	[2]
3600:	30	[6]	15	[c]	8	[5]	12	[c]	30	[6]	15	[6]	30	[6]	**	[1]	7	[2]	15	[6]
3610:	30	[6]	22	[2]	30	[6]	**	[1]	7	[6]	15	[6]	31	[2]	**	[1]	8	[6]	15	[c]
3620:	7	[c]	15	[6]	7	[6]	**	[1]	7	[2]	28	[2]	7	[6]	15	[6]	7	[6]	18	[2]
3630:	7	[6]	**	[1]	15	[2]	15	[6]	7	[b]	15	[6]	8	[2]	**	[1]	7	[6]	15	[6]
3640:	7	[2]	15	[6]	7	[6]	**	[1]	7	[6]	15	[c]	7	[6]	15	[6]	15	[6]	40	[2]
3650:	8	[5]	15	[6]	7	[6]	15	[c]	7	[6]	15	[6]	7	[2]	15	[6]	7	[6]	**	[1]
3660:	7	[6]	15	[6]	7	[6]	15	[6]	15	[2]	15	[6]	8	[b]	18	[2]	8	[5]	15	[6]
3670:	8	[b]	**	[1]	8	[6]	**	[1]	8	[6]	15	[6]	8	[6]	**	[1]	8	[b]	15	[6]
3680:	15	[6]	15	[6]	8	[6]	28	[2]	27	[6]	15	[6]	8	[6]	24	[c]	8	[6]	15	[6]
3690:	8	[6]	**	[1]	8	[6]	18	[c]	10	[6]	16	[c]	15	[6]	**	[1]	8	[a]	26	[2]
3700:	16	[6]	**	[1]	18	[6]	15	[6]	8	[a]	15	[6]	22	[6]	15	[6]	24	[6]	**	[1]
3710:	26	[6]	15	[6]	28	[2]	46	[2]	8	[5]	15	[6]	8	[6]	15	[6]	8	[a]	**	[1]
3720:	8	[a]	**	[2]	8	[a]	15	[6]	8	[a]	24	[2]	8	[2]	**	[1]	15	[2]	15	[6]
3730:	7	[6]	15	[6]	8	[5]	**	[1]	7	[6]	15	[6]	7	[2]	36	[2]	7	[6]	**	[1]
3740:	7	[6]	15	[6]	7	[6]	18	[2]	15	[6]	15	[6]	8	[5]	15	[6]	7	[6]	22	[2]
3750:	7	[6]	30	[2]	30	[6]	26	[2]	7	[6]	15	[6]	7	[6]	30	[c]	7	[a]	15	[6]
3760:	15	[6]	**	[1]	10	[5]	52	[2]	12	[5]	15	[6]	7	[6]	**	[1]	16	[5]	**	[1]
3770:	18	[5]	15	[6]	7	[6]	30	[c]	22	[5]	24	[2]	58	[2]	15	[6]	26	[5]	**	[1]
3780:	28	[5]	30	[c]	30	[6]	30	[6]	30	[c]	15	[6]	7	[6]	30	[c]	30	[6]	15	[6]
3790:	7	[6]	30	[c]	30	[6]	**	[1]	30	[6]	15	[6]	7	[6]	**	[1]	30	[6]	30	[c]
3800:	30	[6]	30	[c]	7	[6]	**	[1]	30	[6]	15	[6]	7	[6]	46	[2]	10	[5]	30	[c]
3810:	30	[6]	36	[2]	30	[6]	15	[6]	8	[b]	30	[6]	8	[6]	30	[c]	30	[6]	15	[c]
3820:	8	[6]	**	[1]	30	[6]	**	[1]	30	[6]	15	[6]	8	[6]	42	[2]	8	[5]	30	[c]
3830:	30	[6]	15	[6]	30	[6]	**	[1]	30	[6]	15	[6]	8	[6]	15	[6]	8	[6]	15	[c]
3840:	30	[6]	30	[c]	8	[a]	15	[6]	8	[6]	26	[c]	8	[a]	**	[1]	30	[6]	15	[6]
3850:	8	[2]	**	[1]	30	[6]	**	[1]	30	[6]	15	[6]	15	[2]	15	[6]	30	[6]	16	[2]
3860:	30	[6]	15	[6]	9	[6]	**	[1]	30	[6]	15	[6]	8	[a]	15	[6]	8	[5]	52	[2]
3870:	8	[6]	48	[2]	31	[2]	15	[6]	8	[6]	30	[2]	30	[6]	**	[1]	8	[6]	15	[6]
3880:	8	[6]	**	[1]	8	[a]	15	[6]	8	[5]	30	[c]	10	[5]	30	[c]	15	[2]	**	[1]
3890:	7	[6]	30	[c]	16	[5]	30	[c]	18	[5]	15	[6]	7	[2]	30	[c]	22	[5]	15	[6]
3900:	24	[5]	46	[2]	26	[5]	30	[c]	60	[2]	30	[c]	30	[6]	**	[1]	30	[c]	15	[6]
3910:	7	[6]	**	[1]	30	[6]	15	[6]	7	[6]	30	[c]	30	[6]	**	[1]	30	[6]	**	[1]
3920:	15	[6]	15	[6]	30	[6]	**	[1]	30	[6]	30	[c]	7	[6]	30	[c]	30	[6]	**	[1]
3930:	7	[6]	**	[1]	7	[5]	30	[c]	30	[6]	15	[6]	30	[6]	30	[2]	30	[6]	30	[6]
3940:	8	[b]	30	[c]	30	[6]	**	[1]	8	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]
3950:	12	[5]	30	[c]	15	[6]	58	[2]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	36	[2]
3960:	22	[5]	16	[2]	24	[5]	15	[6]	30	[6]	30	[c]	28	[5]	**	[1]	30	[2]	48	[2]
3970:	30	[c]	28	[c]	30	[6]	30	[c]	30	[6]	24	[c]	30	[6]	40	[2]	30	[6]	30	[c]
3980:	30	[6]	18	[c]	30	[6]	16	[c]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]
3990:	30	[6]	22	[5]	8	[5]	24	[5]	8	[6]	30	[c]	30	[6]	28	[5]	30	[6]	30	[6]
4000:	31	[2]	**	[1]	8	[a]	**	[1]	30	[6]	30	[6]	8	[6]	**	[1]	30	[6]	30	[6]
4010:	30	[6]	30	[6]	8	[6]	**	[1]	8	[a]	30	[6]	30	[6]	30	[6]	30	[6]	**	[1]
4020:	30	[6]	**	[1]	8	[a]	26	[2]	8	[a]	15	[6]	30	[6]	**	[1]	8	[a]	30	[6]
4030:	8	[a]	30	[c]	30	[6]	36	[2]	30	[6]	30	[6]	8	[5]	26	[c]	30	[6]	30	[6]
4040:	30	[6]	30	[6]	8	[a]	20	[c]	30	[6]	18	[c]	30	[6]	30	[6]	15	[6]	**	[1]
4050:	30	[6]	**	[1]	8	[6]	15	[6]	8	[5]	15	[6]	7	[2]	**	[1]	30	[6]	15	[6]
4060:	8	[6]	30	[2]	30	[6]	16	[2]	31	[2]	30	[6]	8	[b]	48	[2]	27	[c]	30	[6]
4070:	8	[5]	30	[6]	10	[5]	**	[1]	21	[c]	30	[6]	19	[c]	30	[6]	16	[5]	**	[1]
4080:	18	[5]	30	[6]	8	[6]	30	[c]	22	[5]	15	[6]	24	[5]	60	[2]	26	[5]	30	[6]
4090:	28	[5]	**	[1]	30	[6]	**	[1]	30	[c]	30	[6]	**	[c]	30	[c]	30	[6]	**	[1]

4100:	8	[2]	30	[c]	30	[6]	30	[c]	30	[6]	15	[6]	8	[a]	15	[c]	30	[6]	30	[c]
4110:	30	[6]	**	[1]	15	[2]	30	[c]	30	[6]	15	[6]	8	[5]	22	[2]	8	[a]	30	[c]
4120:	30	[6]	15	[6]	30	[6]	15	[6]	7	[6]	30	[6]	7	[5]	**	[1]	30	[6]	**	[1]
4130:	8	[6]	30	[c]	30	[6]	**	[1]	30	[6]	15	[6]	7	[2]	30	[c]	7	[6]	**	[1]
4140:	30	[6]	40	[2]	30	[6]	30	[c]	30	[6]	15	[6]	7	[c]	15	[6]	10	[6]	15	[6]
4150:	30	[6]	30	[c]	7	[2]	**	[1]	7	[6]	30	[c]	8	[6]	**	[1]	30	[6]	**	[1]
4160:	15	[6]	30	[c]	30	[6]	22	[2]	30	[6]	15	[6]	8	[6]	24	[c]	30	[6]	22	[c]
4170:	30	[6]	42	[2]	8	[6]	15	[6]	30	[6]	24	[2]	15	[6]	**	[1]	8	[5]	15	[6]
4180:	7	[6]	36	[2]	30	[6]	46	[2]	7	[2]	15	[6]	30	[6]	52	[2]	30	[6]	58	[2]
4190:	7	[5]	15	[6]	31	[2]	15	[6]	8	[5]	15	[6]	8	[5]	15	[6]	7	[6]	15	[6]
4200:	7	[2]	**	[1]	7	[6]	15	[6]	7	[6]	15	[6]	7	[6]	15	[6]	15	[2]	15	[6]
4210:	7	[6]	**	[1]	8	[5]	15	[6]	9	[6]	15	[6]	7	[2]	**	[1]	7	[6]	**	[1]
4220:	7	[6]	15	[6]	8	[6]	40	[2]	15	[6]	24	[2]	8	[6]	15	[6]	7	[6]	**	[1]
4230:	7	[6]	**	[1]	7	[2]	15	[6]	7	[6]	15	[6]	7	[6]	18	[2]	7	[6]	26	[2]
4240:	15	[6]	**	[1]	7	[6]	**	[1]	8	[6]	15	[6]	7	[6]	30	[2]	30	[6]	15	[6]
4250:	7	[6]	15	[6]	7	[6]	**	[1]	7	[6]	15	[6]	15	[c]	30	[c]	10	[5]	**	[1]
4260:	12	[5]	**	[1]	8	[b]	30	[c]	16	[5]	30	[c]	18	[5]	16	[2]	8	[6]	30	[c]
4270:	22	[5]	**	[1]	24	[5]	**	[1]	26	[5]	30	[c]	28	[5]	30	[c]	30	[6]	30	[6]
4280:	30	[c]	15	[6]	8	[6]	**	[1]	30	[6]	15	[6]	8	[6]	30	[c]	63	[2]	**	[1]
4290:	30	[6]	15	[6]	8	[a]	52	[2]	30	[6]	30	[c]	30	[6]	**	[1]	8	[6]	30	[c]
4300:	30	[6]	15	[c]	8	[6]	15	[6]	15	[2]	30	[c]	30	[6]	58	[2]	30	[6]	30	[2]
4310:	30	[6]	30	[6]	8	[6]	30	[c]	30	[6]	30	[c]	8	[6]	30	[c]	30	[6]	30	[c]
4320:	30	[6]	30	[c]	12	[5]	30	[c]	8	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]
4330:	30	[6]	60	[2]	22	[5]	15	[6]	24	[5]	15	[6]	30	[6]	**	[1]	28	[5]	**	[1]
4340:	30	[6]	30	[6]	30	[c]	42	[2]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]
4350:	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	28	[c]	30	[6]	**	[1]	30	[6]	30	[c]
4360:	30	[6]	48	[2]	30	[6]	**	[1]	8	[5]	18	[c]	8	[a]	30	[c]	30	[6]	16	[2]
4370:	30	[6]	15	[6]	30	[6]	**	[1]	30	[6]	30	[6]	30	[6]	15	[6]	30	[6]	30	[c]
4380:	30	[6]	30	[c]	30	[6]	15	[6]	31	[2]	30	[c]	8	[5]	40	[2]	30	[6]	15	[6]
4390:	30	[6]	**	[1]	30	[6]	22	[2]	7	[6]	15	[6]	7	[6]	**	[1]	30	[6]	52	[2]
4400:	15	[6]	26	[2]	7	[6]	30	[c]	8	[5]	30	[c]	30	[6]	15	[6]	8	[5]	**	[1]
4410:	30	[6]	15	[6]	30	[6]	15	[6]	7	[5]	30	[c]	30	[6]	30	[c]	30	[6]	15	[6]
4420:	7	[6]	**	[1]	30	[6]	**	[1]	7	[2]	15	[6]	8	[5]	20	[c]	7	[6]	42	[2]
4430:	30	[6]	15	[6]	15	[2]	15	[6]	30	[6]	15	[6]	30	[6]	30	[6]	7	[5]	22	[2]
4440:	30	[6]	**	[1]	8	[6]	15	[6]	10	[2]	15	[6]	30	[6]	**	[1]	31	[2]	15	[6]
4450:	9	[6]	**	[1]	9	[6]	60	[2]	7	[6]	15	[6]	9	[6]	**	[1]	9	[6]	15	[6]
4460:	9	[6]	15	[6]	9	[6]	**	[1]	15	[6]	15	[6]	7	[6]	15	[6]	8	[5]	40	[2]
4470:	9	[6]	16	[2]	7	[2]	15	[6]	9	[6]	24	[2]	9	[6]	36	[2]	7	[6]	15	[6]
4480:	15	[c]	**	[1]	9	[6]	**	[1]	7	[6]	15	[6]	9	[6]	15	[6]	7	[2]	**	[2]
4490:	7	[6]	15	[6]	9	[6]	**	[1]	9	[6]	15	[6]	15	[2]	15	[6]	7	[6]	15	[6]
4500:	9	[6]	15	[6]	7	[6]	15	[6]	9	[6]	15	[6]	9	[6]	**	[1]	7	[6]	26	[2]
4510:	7	[6]	15	[6]	15	[6]	**	[1]	9	[6]	15	[6]	9	[6]	**	[1]	8	[2]	**	[1]
4520:	7	[2]	15	[6]	9	[6]	**	[1]	7	[6]	24	[2]	7	[6]	15	[6]	15	[2]	15	[6]
4530:	9	[6]	22	[2]	8	[2]	15	[6]	9	[6]	15	[6]	9	[6]	15	[6]	8	[6]	15	[6]
4540:	9	[6]	18	[2]	9	[6]	15	[6]	63	[2]	15	[6]	9	[6]	**	[1]	8	[6]	**	[1]
4550:	8	[2]	15	[6]	8	[6]	28	[2]	10	[2]	15	[6]	8	[a]	15	[6]	9	[6]	46	[2]
4560:	15	[6]	**	[1]	8	[a]	26	[2]	10	[6]	15	[6]	9	[6]	**	[1]	8	[a]	15	[6]
4570:	9	[6]	15	[6]	9	[6]	16	[2]	10	[6]	15	[6]	15	[c]	22	[2]	8	[5]	18	[2]
4580:	7	[6]	15	[6]	8	[c]	**	[1]	8	[c]	15	[6]	7	[6]	15	[6]	7	[6]	15	[6]
4590:	8	[c]	**	[1]	15	[6]	15	[6]	7	[6]	15	[6]	8	[5]	**	[1]	7	[6]	15	[6]
4600:	7	[2]	42	[2]	7	[a]	**	[1]	7	[6]	15	[6]	7	[6]	16	[2]	15	[2]	15	[6]
4610:	13	[b]	15	[6]	11	[b]	15	[6]	9	[b]	15	[c]	8	[6]	18	[2]	10	[6]	30	[2]
4620:	30	[6]	**	[1]	12	[b]	15	[6]	15	[2]	36	[2]	7	[a]	15	[6]	8	[5]	30	[c]
4630:	10	[5]	30	[c]	12	[5]	40	[2]	10	[a]	30	[c]	16	[5]	**	[1]	18	[5]	**	[1]
4640:	15	[6]	30	[c]	22	[5]	**	[1]	24	[5]	15	[6]	26	[5]	30	[c]	28	[5]	**	[1]
4650:	30	[6]	**	[1]	30	[c]	15	[6]	8	[6]	30	[c]	30	[6]	**	[1]	8	[b]	30	[c]
4660:	30	[6]	58	[2]	30	[6]	**	[1]	8	[6]	15	[6]	30	[6]	30	[c]	30	[6]	30	[c]
4670:	8	[6]	30	[c]	63	[2]	**	[1]	8	[b]	15	[6]	8	[6]	30	[c]	30	[6]	**	[1]
4680:	30	[6]	30	[2]	30	[6]	30	[6]	8	[6]	30	[c]	30	[6]	42	[2]	15	[2]	30	[c]
4690:	30	[6]	**	[1]	30	[6]	30	[c]	12	[5]	30	[c]	8	[6]	30	[c]	30	[6]	36	[2]

4700:	35	[6]	30	[c]	30	[6]	**	[1]	22	[5]	15	[6]	24	[5]	15	[6]	30	[6]	30	[c]
4710:	28	[5]	30	[c]	30	[6]	30	[6]	30	[c]	30	[c]	30	[6]	52	[2]	30	[6]	30	[c]
4720:	30	[6]	**	[1]	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]
4730:	30	[6]	31	[6]	30	[6]	**	[1]	30	[6]	15	[6]	36	[2]	30	[c]	7	[5]	30	[c]
4740:	30	[6]	15	[6]	30	[6]	15	[c]	30	[6]	30	[6]	30	[6]	46	[2]	30	[6]	15	[6]
4750:	30	[6]	**	[1]	30	[6]	48	[2]	30	[6]	15	[6]	30	[6]	66	[2]	30	[6]	**	[1]
4760:	30	[6]	15	[6]	30	[6]	30	[c]	30	[6]	15	[6]	8	[b]	15	[6]	31	[2]	18	[2]
4770:	30	[6]	30	[c]	11	[6]	15	[6]	9	[b]	30	[c]	8	[b]	30	[c]	30	[6]	58	[2]
4780:	8	[5]	30	[c]	30	[6]	**	[1]	30	[6]	15	[6]	8	[a]	**	[1]	30	[6]	**	[1]
4790:	30	[6]	15	[6]	8	[6]	**	[1]	30	[6]	15	[6]	8	[6]	15	[6]	8	[5]	**	[1]
4800:	15	[6]	**	[1]	30	[6]	15	[6]	8	[6]	15	[6]	30	[6]	24	[c]	30	[6]	30	[6]
4810:	8	[6]	16	[2]	30	[6]	**	[1]	8	[a]	15	[6]	15	[6]	**	[1]	30	[6]	60	[2]
4820:	30	[6]	15	[6]	8	[6]	15	[6]	10	[5]	24	[2]	8	[6]	15	[6]	8	[6]	15	[c]
4830:	30	[6]	**	[1]	31	[2]	26	[2]	8	[6]	15	[6]	8	[a]	15	[6]	8	[2]	15	[6]
4840:	8	[a]	46	[2]	8	[2]	28	[2]	8	[a]	15	[6]	7	[6]	36	[2]	11	[6]	15	[c]
4850:	7	[6]	15	[6]	8	[6]	22	[2]	8	[6]	15	[6]	8	[b]	15	[6]	8	[a]	42	[2]
4860:	8	[2]	**	[1]	8	[6]	15	[6]	18	[2]	17	[6]	8	[6]	30	[2]	30	[6]	15	[6]
4870:	8	[6]	**	[1]	8	[b]	30	[c]	8	[6]	15	[6]	8	[5]	**	[1]	10	[5]	30	[c]
4880:	15	[2]	16	[6]	8	[6]	30	[c]	16	[5]	30	[c]	18	[5]	26	[2]	8	[6]	**	[1]
4890:	22	[5]	66	[2]	24	[5]	15	[6]	26	[5]	30	[c]	28	[5]	58	[2]	30	[6]	30	[6]
4900:	30	[c]	28	[2]	8	[a]	**	[1]	30	[6]	15	[6]	8	[a]	30	[c]	30	[6]	**	[1]
4910:	30	[6]	15	[6]	15	[2]	**	[3]	30	[6]	30	[c]	30	[6]	30	[c]	9	[6]	**	[1]
4920:	30	[6]	15	[6]	7	[6]	15	[c]	8	[a]	30	[c]	30	[6]	15	[6]	30	[6]	15	[6]
4930:	8	[a]	**	[1]	8	[6]	**	[1]	30	[6]	15	[6]	7	[2]	**	[1]	30	[6]	30	[c]
4940:	30	[6]	60	[2]	8	[6]	**	[1]	15	[6]	30	[c]	30	[6]	14	[5]	30	[6]	48	[2]
4950:	30	[6]	**	[1]	8	[6]	15	[6]	8	[6]	15	[6]	30	[6]	**	[1]	8	[6]	15	[6]
4960:	15	[6]	40	[2]	8	[5]	30	[c]	30	[6]	15	[6]	8	[5]	**	[1]	30	[6]	**	[1]
4970:	30	[6]	15	[6]	8	[6]	**	[1]	30	[6]	30	[c]	30	[6]	15	[6]	8	[6]	15	[6]
4980:	30	[6]	16	[2]	9	[b]	15	[6]	8	[5]	30	[c]	8	[a]	**	[1]	30	[6]	15	[c]
4990:	10	[6]	15	[6]	30	[6]	**	[1]	30	[6]	30	[6]	8	[a]	18	[2]	30	[6]	**	[1]
5000:	8	[6]	15	[6]	8	[2]	**	[1]	30	[6]	18	[c]	30	[6]	15	[6]	15	[2]	**	[1]
5010:	10	[5]	**	[1]	9	[c]	15	[6]	8	[a]	15	[6]	30	[6]	28	[2]	30	[6]	15	[6]
5020:	8	[5]	**	[1]	8	[a]	**	[1]	31	[2]	15	[6]	8	[a]	15	[6]	7	[6]	46	[2]
5030:	7	[6]	15	[6]	8	[a]	15	[6]	8	[6]	15	[6]	7	[6]	15	[6]	7	[6]	**	[1]
5040:	15	[6]	**	[2]	7	[6]	15	[6]	7	[6]	15	[6]	7	[6]	48	[2]	8	[c]	15	[6]
5050:	7	[6]	**	[1]	7	[6]	30	[2]	30	[6]	15	[6]	63	[2]	15	[6]	8	[5]	**	[1]
5060:	7	[6]	15	[6]	8	[5]	60	[2]	10	[5]	30	[c]	12	[5]	15	[6]	7	[6]	36	[2]
5070:	16	[5]	30	[c]	18	[5]	15	[6]	7	[6]	30	[c]	22	[5]	**	[1]	24	[5]	15	[6]
5080:	26	[5]	**	[1]	28	[5]	30	[c]	30	[6]	30	[6]	30	[6]	**	[1]	15	[6]	30	[c]
5090:	30	[6]	15	[6]	7	[6]	30	[c]	30	[6]	30	[c]	30	[6]	15	[6]	7	[6]	**	[1]
5100:	30	[6]	**	[1]	30	[6]	30	[c]	15	[6]	30	[c]	30	[6]	**	[1]	10	[b]	15	[6]
5110:	9	[b]	30	[c]	30	[6]	**	[1]	30	[6]	15	[6]	10	[a]	30	[6]	10	[a]	**	[1]
5120:	30	[6]	15	[6]	8	[6]	46	[2]	30	[6]	40	[2]	30	[6]	15	[6]	10	[a]	30	[c]
5130:	10	[a]	30	[c]	30	[6]	15	[6]	30	[6]	30	[c]	30	[6]	15	[c]	7	[6]	15	[6]
5140:	8	[6]	52	[2]	30	[6]	36	[2]	7	[2]	15	[6]	7	[6]	**	[1]	7	[6]	30	[c]
5150:	30	[6]	15	[6]	15	[b]	**	[1]	30	[6]	15	[6]	30	[6]	26	[2]	9	[b]	30	[c]
5160:	30	[6]	30	[c]	30	[6]	15	[6]	12	[b]	15	[6]	30	[6]	**	[1]	15	[2]	15	[6]
5170:	8	[5]	**	[1]	8	[5]	30	[c]	30	[6]	15	[6]	10	[a]	30	[2]	30	[6]	**	[1]
5180:	30	[6]	30	[6]	15	[a]	70	[2]	63	[2]	30	[c]	8	[5]	30	[c]	10	[5]	**	[1]
5190:	30	[6]	28	[2]	30	[6]	30	[c]	16	[5]	30	[c]	18	[5]	**	[1]	9	[c]	30	[c]
5200:	22	[5]	15	[6]	30	[6]	42	[2]	30	[6]	30	[c]	28	[5]	40	[2]	39	[6]	**	[1]
5210:	30	[6]	36	[c]	8	[a]	30	[c]	30	[6]	15	[6]	31	[2]	30	[c]	30	[6]	30	[c]
5220:	30	[6]	22	[2]	8	[a]	15	[6]	30	[6]	30	[c]	30	[6]	**	[1]	8	[a]	30	[c]
5230:	30	[6]	**	[1]	24	[6]	**	[1]	26	[6]	30	[c]	30	[6]	**	[1]	30	[6]	31	[6]
5240:	30	[6]	30	[6]	8	[a]	48	[2]	36	[6]	30	[c]	8	[a]	30	[c]	40	[2]	30	[c]
5250:	30	[6]	58	[2]	12	[5]	30	[c]	8	[a]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]
5260:	30	[6]	**	[1]	22	[5]	18	[2]	24	[5]	15	[6]	30	[6]	30	[c]	28	[5]	30	[c]
5270:	30	[6]	30	[6]	30	[c]	**	[1]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]
5280:	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]
5290:	30	[6]	30	[c]	30	[6]	66	[2]	8	[5]	30	[c]	15	[2]	**	[1]	30	[6]	15	[6]

5300:	30	[6]	15	[6]	30	[6]	**	[1]	30	[6]	30	[6]	30	[6]	15	[6]	30	[6]	**	[1]
5310:	30	[6]	46	[2]	63	[2]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	26	[2]
5320:	30	[6]	30	[c]	30	[6]	**	[1]	7	[5]	18	[c]	30	[6]	16	[c]	30	[6]	**	[2]
5330:	8	[5]	15	[6]	8	[6]	**	[1]	30	[6]	30	[c]	30	[6]	15	[6]	8	[5]	30	[c]
5340:	30	[6]	48	[2]	30	[6]	15	[6]	31	[2]	30	[c]	30	[6]	**	[1]	30	[6]	15	[6]
5350:	7	[6]	**	[1]	30	[6]	52	[2]	8	[6]	15	[6]	8	[2]	30	[c]	8	[a]	30	[c]
5360:	30	[6]	15	[6]	7	[6]	30	[2]	30	[6]	30	[c]	30	[6]	30	[6]	8	[a]	30	[c]
5370:	30	[6]	40	[2]	9	[b]	30	[c]	10	[5]	42	[2]	30	[6]	30	[c]	30	[6]	30	[c]
5380:	16	[5]	**	[1]	18	[5]	15	[6]	9	[a]	30	[c]	22	[5]	**	[1]	30	[6]	18	[c]
5390:	30	[6]	30	[c]	28	[5]	**	[1]	30	[6]	30	[6]	30	[6]	15	[6]	9	[b]	**	[1]
5400:	30	[6]	15	[6]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]	31	[2]	15	[6]
5410:	30	[6]	30	[c]	30	[6]	**	[1]	7	[6]	30	[c]	30	[6]	**	[1]	8	[2]	**	[1]
5420:	7	[5]	30	[c]	30	[6]	15	[6]	30	[6]	15	[6]	10	[b]	66	[2]	10	[b]	60	[2]
5430:	30	[6]	**	[1]	8	[6]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]	10	[b]	30	[c]
5440:	15	[2]	**	[1]	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	15	[6]	8	[a]	**	[1]
5450:	10	[a]	15	[6]	30	[6]	30	[c]	8	[2]	15	[c]	15	[6]	30	[c]	9	[a]	52	[2]
5460:	30	[6]	42	[2]	41	[6]	30	[c]	30	[6]	38	[c]	30	[6]	12	[5]	9	[a]	30	[c]
5470:	30	[6]	**	[1]	30	[6]	30	[c]	12	[6]	15	[6]	30	[6]	**	[1]	16	[6]	**	[1]
5480:	18	[6]	30	[c]	9	[a]	**	[1]	30	[6]	18	[c]	24	[6]	15	[6]	30	[6]	30	[c]
5490:	30	[6]	30	[6]	30	[6]	31	[6]	30	[6]	30	[c]	8	[6]	22	[2]	36	[6]	30	[c]
5500:	30	[6]	**	[1]	40	[6]	**	[1]	42	[2]	30	[c]	10	[5]	**	[1]	9	[c]	15	[c]
5510:	8	[6]	24	[c]	30	[6]	36	[2]	30	[6]	15	[6]	8	[5]	15	[6]	8	[6]	**	[1]
5520:	30	[6]	**	[1]	9	[2]	15	[6]	8	[6]	15	[6]	30	[6]	**	[1]	8	[6]	15	[6]
5530:	30	[6]	**	[1]	30	[6]	15	[c]	8	[5]	15	[6]	31	[2]	48	[2]	8	[6]	28	[2]
5540:	8	[6]	15	[6]	7	[6]	22	[2]	8	[a]	15	[c]	8	[6]	15	[6]	8	[6]	30	[2]
5550:	30	[6]	15	[c]	15	[2]	15	[6]	8	[6]	30	[c]	8	[6]	**	[1]	8	[5]	30	[c]
5560:	10	[5]	66	[2]	12	[5]	**	[1]	7	[6]	30	[c]	16	[5]	30	[c]	18	[5]	**	[1]
5570:	8	[5]	30	[c]	22	[5]	**	[1]	24	[5]	24	[2]	26	[5]	30	[c]	28	[5]	30	[c]
5580:	30	[6]	**	[1]	30	[c]	15	[6]	15	[2]	30	[c]	30	[6]	36	[2]	8	[5]	30	[c]
5590:	30	[6]	**	[1]	30	[6]	15	[6]	8	[6]	15	[6]	30	[6]	30	[c]	30	[6]	30	[c]
5600:	15	[6]	30	[c]	30	[6]	15	[6]	11	[6]	15	[6]	9	[b]	30	[c]	30	[6]	70	[2]
5610:	30	[6]	30	[2]	30	[6]	30	[6]	10	[6]	30	[c]	30	[6]	40	[2]	10	[a]	30	[c]
5620:	30	[6]	30	[c]	30	[6]	**	[1]	12	[5]	30	[c]	8	[6]	30	[c]	30	[6]	30	[c]
5630:	30	[6]	30	[c]	30	[6]	42	[2]	22	[5]	15	[6]	24	[5]	15	[6]	30	[6]	**	[1]
5640:	28	[5]	**	[1]	30	[6]	30	[6]	30	[c]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]
5650:	30	[6]	**	[1]	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	**	[1]
5660:	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	15	[6]	8	[5]	30	[c]	7	[5]	**	[1]
5670:	30	[6]	52	[2]	30	[6]	15	[6]	30	[6]	30	[6]	30	[6]	30	[6]	30	[6]	15	[6]
5680:	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	46	[2]	30	[6]	**	[1]
5690:	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	15	[6]	63	[2]	30	[c]	30	[6]	40	[2]
5700:	30	[6]	**	[1]	8	[5]	15	[6]	7	[2]	30	[c]	30	[6]	30	[c]	30	[6]	18	[c]
5710:	8	[5]	**	[1]	30	[6]	28	[2]	30	[6]	15	[6]	30	[6]	**	[1]	30	[6]	30	[c]
5720:	30	[6]	15	[6]	30	[6]	58	[2]	30	[6]	24	[2]	9	[5]	15	[6]	31	[2]	30	[c]
5730:	8	[5]	30	[c]	30	[6]	15	[6]	7	[6]	15	[6]	30	[6]	**	[1]	30	[6]	30	[6]
5740:	7	[5]	**	[1]	30	[6]	**	[1]	15	[2]	15	[6]	7	[5]	30	[c]	30	[6]	**	[1]
5750:	30	[6]	70	[2]	8	[6]	30	[c]	10	[5]	15	[6]	9	[c]	15	[6]	8	[b]	30	[c]
5760:	30	[6]	30	[c]	30	[6]	15	[6]	8	[5]	15	[6]	8	[b]	72	[2]	30	[6]	15	[6]
5770:	8	[6]	28	[2]	8	[b]	22	[2]	30	[6]	15	[6]	15	[2]	52	[2]	30	[6]	**	[1]
5780:	30	[6]	15	[6]	8	[5]	**	[1]	30	[6]	15	[6]	8	[a]	15	[6]	9	[5]	15	[c]
5790:	30	[6]	**	[1]	31	[2]	15	[6]	8	[6]	15	[2]	8	[a]	15	[6]	9	[6]	15	[6]
5800:	9	[b]	**	[1]	9	[b]	15	[6]	9	[b]	15	[6]	8	[6]	**	[1]	15	[6]	36	[2]
5810:	9	[6]	15	[6]	11	[6]	**	[1]	9	[2]	15	[6]	9	[6]	15	[6]	8	[6]	15	[6]
5820:	9	[6]	**	[1]	10	[6]	15	[6]	15	[6]	24	[2]	9	[6]	**	[1]	9	[6]	15	[6]
5830:	9	[5]	16	[2]	8	[a]	18	[2]	9	[6]	15	[6]	8	[a]	15	[6]	9	[6]	**	[1]
5840:	15	[6]	15	[6]	8	[6]	**	[1]	9	[6]	15	[6]	9	[6]	15	[6]	8	[b]	**	[1]
5850:	9	[6]	**	[1]	8	[6]	15	[6]	8	[6]	15	[6]	15	[6]	**	[1]	9	[6]	15	[6]
5860:	8	[6]	**	[1]	8	[a]	15	[6]	9	[6]	15	[6]	8	[6]	**	[1]	9	[6]	**	[1]
5870:	9	[6]	15	[6]	15	[2]	15	[6]	13	[a]	46	[2]	11	[b]	15	[6]	9	[6]	**	[1]
5880:	9	[6]	**	[1]	8	[6]	15	[6]	10	[a]	15	[6]	12	[a]	15	[6]	22	[2]	21	[6]
5890:	8	[6]	42	[2]	8	[6]	70	[2]	10	[a]	15	[6]	10	[a]	**	[1]	12	[a]	16	[2]

5900: 9 [6] 15 [6] 8 [a] ** [1] 15 [2] 16 [6] 9 [6] 18 [6] 9 [6] 18 [2]
5910: 9 [6] 22 [2] 7 [2] 72 [2] 8 [6] 15 [6] 8 [6] 60 [2] 10 [2] 15 [6]
5920: 15 [6] 30 [2] 30 [6] ** [1] 9 [6] 15 [6] 9 [5] ** [1] 9 [6] 48 [2]
5930: 9 [6] 30 [c] 10 [5] 30 [c] 12 [5] 15 [6] 15 [2] 30 [c] 16 [5] ** [1]
5940: 18 [5] 15 [6] 8 [6] 30 [c] 22 [5] 15 [6] 24 [5] 18 [2] 26 [5] 30 [c]
5950: 28 [5] 30 [c] 30 [6] ** [1] 30 [c] 15 [6] 8 [6] 30 [c] 30 [6] 58 [2]
5960: 9 [6] 30 [c] 30 [6] 66 [2] 30 [6] 15 [6] 9 [6] 15 [6] 30 [6] 46 [2]
5970: 45 [6] 30 [c] 10 [b] 42 [c] 30 [6] 24 [2] 9 [6] 42 [2] 10 [6] 36 [c]
5980: 30 [6] ** [1] 30 [6] 30 [2] 30 [6] 30 [6] 16 [6] ** [1] 30 [6] 52 [2]
5990: 9 [5] 30 [c] 30 [6] 30 [c] 30 [6] 30 [c] 26 [6] 30 [c] 28 [6] 30 [c]

6000: 30 [6] 31 [6] 30 [6] 30 [c] 30 [6] 30 [c] 36 [6] ** [1] 24 [5] 15 [6]
6010: 40 [6] ** [1] 42 [6] 30 [c] 30 [6] 30 [6] 46 [2] 30 [c] 30 [6] 30 [c]
6020: 30 [6] 30 [c] 30 [6] 30 [c] 30 [6] 30 [c] 30 [6] 30 [c] 30 [6] ** [1]
6030: 30 [6] 36 [2] 30 [6] 30 [c] 30 [6] 30 [c] 30 [6] ** [1] 8 [5] 30 [c]
6040: 8 [6] 30 [c] 30 [6] ** [1] 30 [6] 15 [6] 30 [6] ** [1] 30 [6] 30 [6]
6050: 30 [6] 15 [6] 30 [6] ** [1] 30 [6] 30 [c] 30 [6] 30 [c] 30 [6] 72 [2]
6060: 30 [6] 30 [c] 30 [6] 30 [c] 30 [6] 30 [c] 30 [6] ** [1] 10 [b] 30 [c]
6070: 30 [6] 30 [c] 30 [6] ** [1] 10 [6] 24 [2] 10 [b] 58 [2] 30 [6] ** [1]
6080: 30 [6] 30 [c] 8 [5] 30 [c] 30 [6] 15 [c] 30 [6] 24 [c] 30 [6] ** [1]
6090: 30 [6] ** [1] 30 [6] 15 [6] 30 [6] 15 [6] 30 [6] 15 [6] 11 [c] 15 [2]

6100: 30 [6] ** [1] 30 [6] 30 [c] 30 [6] 15 [6] 8 [5] 30 [2] 30 [6] 40 [2]
6110: 30 [6] 30 [6] 31 [2] ** [1] 30 [6] 30 [c] 8 [5] 30 [c] 10 [5] 30 [c]
6120: 30 [6] ** [1] 30 [6] 30 [c] 16 [5] 48 [2] 18 [5] 15 [c] 15 [2] 30 [c]
6130: 22 [5] ** [1] 30 [6] ** [1] 30 [6] 30 [c] 28 [5] 30 [c] 30 [6] 30 [6]
6140: 30 [6] 15 [6] 12 [a] ** [1] 30 [6] 30 [c] 30 [6] 30 [c] 30 [6] 30 [c]
6150: 30 [6] ** [1] 30 [6] 15 [6] 30 [6] 30 [c] 30 [6] 46 [2] 8 [6] 30 [c]
6160: 30 [6] 60 [2] 30 [6] ** [1] 30 [6] 30 [c] 30 [6] 15 [6] 30 [6] 30 [2]
6170: 30 [6] 30 [6] 8 [6] ** [1] 30 [6] 30 [c] 31 [2] 30 [c] 30 [6] 36 [2]
6180: 30 [6] 30 [c] 12 [5] 30 [c] 7 [2] 30 [c] 30 [6] 30 [c] 30 [6] 30 [c]
6190: 30 [6] 40 [2] 22 [5] 15 [6] 24 [5] 15 [6] 30 [6] ** [1] 28 [5] ** [1]

6200: 30 [6] 30 [6] 30 [c] ** [1] 30 [6] 30 [c] 30 [6] 30 [c] 63 [2] 30 [c]
6210: 30 [6] ** [1] 30 [6] 30 [c] 30 [6] 30 [c] 30 [6] ** [1] 30 [6] 30 [c]
6220: 30 [6] ** [1] 30 [6] 48 [2] 47 [6] 30 [c] 8 [5] 44 [c] 30 [6] ** [1]
6230: 30 [6] 15 [6] 30 [6] 38 [c] 30 [6] 36 [c] 30 [6] 15 [6] 30 [6] 30 [c]
6240: 30 [6] ** [2] 30 [6] 30 [c] 30 [6] 30 [c] 30 [6] ** [1] 30 [6] 30 [c]
6250: 30 [6] 30 [c] 30 [6] 36 [2] 30 [6] 31 [6] 30 [6] ** [1] 30 [6] 30 [c]
6260: 36 [6] 15 [6] 12 [a] ** [1] 40 [6] 30 [c] 42 [6] 30 [c] 15 [a] ** [1]
6270: 46 [6] ** [1] 48 [2] 30 [c] 30 [6] 30 [c] 30 [6] ** [1] 30 [6] 16 [2]
6280: 30 [6] 15 [6] 30 [6] 60 [2] 11 [c] 15 [6] 30 [6] ** [1] 30 [6] 30 [c]
6290: 30 [6] 26 [2] 8 [5] 15 [6] 30 [6] 30 [c] 30 [6] 30 [6] 30 [6] ** [1]

6300: 30 [6] ** [1] 7 [5] 15 [6] 31 [2] 30 [c] 30 [6] 30 [c] 30 [6] 15 [6]
6310: 9 [5] ** [1] 10 [5] 58 [2] 9 [c] 15 [6] 7 [5] ** [1] 30 [6] 70 [2]
6320: 30 [6] 15 [6] 8 [5] ** [1] 8 [5] 15 [6] 30 [6] 15 [6] 7 [2] ** [1]
6330: 7 [5] 30 [c] 30 [6] 15 [6] 8 [6] 30 [c] 30 [6] ** [1] 30 [6] 15 [6]
6340: 8 [5] 16 [2] 30 [6] ** [1] 8 [b] 15 [6] 11 [c] 15 [6] 30 [6] 18 [c]
6350: 30 [6] 15 [6] 15 [2] ** [1] 8 [5] 15 [6] 10 [5] 15 [6] 8 [a] ** [1]
6360: 30 [6] ** [1] 30 [6] 15 [6] 8 [a] 15 [6] 30 [6] ** [1] 31 [2] 15 [6]
6370: 8 [a] 22 [2] 8 [a] ** [1] 9 [6] 15 [2] 8 [a] 15 [6] 8 [a] ** [1]
6380: 8 [a] 15 [6] 8 [6] 15 [6] 15 [6] 15 [6] 8 [a] 15 [6] 8 [a] ** [1]
6390: 8 [a] 15 [6] 8 [a] 15 [6] 8 [a] 15 [6] 8 [a] ** [1] 8 [a] 78 [2]

6400: 24 [2] 36 [2] 8 [a] 18 [2] 10 [c] 15 [6] 9 [5] 42 [2] 8 [6] 15 [6]
6410: 8 [6] 15 [6] 8 [6] 52 [2] 8 [5] 15 [6] 15 [2] 16 [6] 8 [6] 48 [2]
6420: 8 [a] ** [1] 8 [6] 22 [6] 8 [6] 24 [2] 8 [2] ** [1] 8 [6] 15 [6]
6430: 8 [6] 58 [2] 15 [6] 15 [6] 8 [5] 15 [6] 8 [6] 40 [2] 9 [6] 46 [2]
6440: 8 [6] 15 [6] 8 [6] 16 [2] 8 [6] 15 [6] 8 [6] 15 [6] 15 [2] ** [1]
6450: 8 [a] ** [1] 11 [c] 26 [2] 9 [c] 15 [6] 8 [a] 15 [6] 8 [6] 15 [6]
6460: 8 [6] 15 [6] 8 [a] 22 [2] 63 [2] 15 [6] 8 [6] 28 [2] 8 [a] ** [1]
6470: 9 [5] 15 [6] 8 [6] ** [1] 8 [a] 15 [6] 8 [a] 15 [6] 8 [2] 15 [6]
6480: 15 [6] ** [1] 9 [b] 15 [6] 9 [b] 15 [6] 9 [5] 15 [6] 9 [b] 15 [6]
6490: 10 [2] ** [1] 10 [6] 42 [2] 9 [b] 15 [6] 15 [6] 72 [2] 10 [6] 66 [2]

6500:	8	[5]	15	[6]	10	[6]	15	[6]	10	[6]	15	[6]	10	[6]	26	[2]	10	[6]	22	[2]
6510:	10	[6]	16	[2]	15	[2]	15	[6]	13	[b]	15	[6]	11	[b]	18	[2]	9	[b]	15	[6]
6520:	10	[6]	**	[1]	10	[6]	15	[6]	12	[6]	15	[6]	12	[b]	60	[2]	15	[2]	**	[1]
6530:	8	[5]	15	[6]	10	[6]	46	[2]	9	[5]	15	[6]	8	[a]	15	[6]	10	[6]	15	[6]
6540:	12	[a]	30	[2]	30	[6]	15	[6]	15	[2]	15	[2]	10	[6]	**	[1]	8	[5]	15	[6]
6550:	10	[6]	**	[1]	10	[5]	**	[1]	12	[5]	15	[6]	7	[6]	78	[2]	16	[5]	30	[c]
6560:	18	[5]	**	[8]	10	[6]	**	[1]	22	[5]	15	[6]	24	[5]	15	[6]	26	[5]	**	[1]
6570:	28	[5]	**	[1]	30	[6]	30	[6]	30	[c]	24	[2]	15	[6]	**	[1]	30	[6]	15	[2]
6580:	10	[6]	**	[1]	30	[6]	30	[c]	30	[6]	15	[6]	10	[6]	15	[6]	30	[6]	30	[c]
6590:	30	[6]	30	[c]	63	[2]	30	[c]	30	[6]	15	[6]	8	[6]	15	[6]	9	[5]	**	[1]
6600:	30	[6]	15	[c]	30	[6]	15	[6]	10	[6]	30	[6]	10	[6]	**	[1]	30	[6]	15	[6]
6610:	10	[6]	30	[c]	30	[6]	30	[c]	30	[6]	15	[6]	10	[6]	30	[c]	10	[6]	**	[1]
6620:	30	[6]	15	[6]	30	[6]	36	[2]	30	[6]	52	[2]	9	[a]	15	[6]	10	[6]	15	[6]
6630:	30	[6]	30	[c]	9	[a]	15	[6]	9	[a]	30	[c]	10	[6]	**	[1]	30	[6]	15	[6]
6640:	15	[6]	30	[c]	30	[6]	15	[6]	30	[6]	15	[6]	10	[6]	30	[c]	30	[6]	60	[2]
6650:	30	[6]	15	[6]	10	[6]	**	[1]	30	[6]	15	[6]	15	[2]	15	[6]	10	[6]	**	[1]
6660:	10	[6]	**	[1]	30	[6]	15	[6]	9	[a]	15	[6]	30	[6]	58	[2]	30	[6]	30	[6]
6670:	10	[6]	15	[6]	30	[6]	**	[1]	10	[b]	15	[6]	10	[6]	30	[c]	30	[6]	**	[1]
6680:	30	[6]	15	[6]	10	[6]	40	[2]	10	[5]	15	[6]	10	[6]	15	[6]	15	[6]	**	[1]
6690:	30	[6]	**	[1]	30	[6]	15	[6]	9	[5]	15	[6]	10	[a]	36	[2]	30	[6]	15	[6]
6700:	8	[2]	**	[1]	10	[a]	**	[1]	30	[6]	15	[6]	8	[6]	30	[c]	30	[6]	**	[1]
6710:	30	[6]	15	[6]	8	[5]	48	[2]	30	[6]	15	[c]	8	[6]	15	[6]	11	[c]	**	[1]
6720:	30	[6]	30	[c]	30	[6]	80	[2]	8	[2]	24	[2]	8	[5]	15	[6]	10	[5]	15	[6]
6730:	8	[6]	52	[2]	51	[6]	**	[1]	30	[6]	48	[c]	15	[2]	**	[1]	30	[6]	22	[2]
6740:	30	[6]	42	[c]	10	[6]	40	[c]	12	[6]	15	[6]	8	[6]	15	[6]	16	[6]	16	[2]
6750:	18	[6]	42	[2]	31	[2]	30	[c]	22	[6]	28	[c]	24	[6]	28	[2]	26	[6]	15	[6]
6760:	28	[6]	**	[1]	30	[6]	**	[1]	8	[6]	15	[6]	8	[5]	66	[2]	36	[6]	15	[6]
6770:	8	[6]	15	[6]	40	[6]	15	[6]	42	[6]	24	[2]	15	[6]	26	[2]	46	[6]	**	[1]
6780:	48	[6]	**	[1]	15	[b]	15	[6]	52	[2]	15	[6]	13	[b]	15	[6]	12	[6]	15	[6]
6790:	12	[b]	**	[1]	15	[6]	**	[1]	15	[6]	15	[6]	15	[b]	15	[6]	15	[6]	15	[6]
6800:	15	[2]	15	[6]	10	[a]	**	[1]	12	[a]	15	[6]	9	[6]	15	[6]	15	[a]	15	[6]
6810:	15	[a]	48	[2]	9	[6]	15	[6]	15	[a]	15	[6]	15	[6]	16	[2]	9	[6]	15	[6]
6820:	9	[6]	18	[2]	8	[6]	**	[1]	8	[a]	16	[2]	9	[6]	**	[1]	8	[a]	**	[1]
6830:	9	[6]	15	[6]	15	[6]	**	[1]	8	[a]	15	[6]	9	[6]	15	[6]	9	[6]	15	[6]
6840:	8	[a]	**	[1]	9	[6]	15	[6]	7	[9]	15	[6]	8	[a]	40	[2]	63	[2]	15	[6]
6850:	9	[6]	15	[2]	11	[6]	15	[6]	9	[5]	15	[6]	9	[6]	**	[1]	8	[a]	**	[3]
6860:	9	[6]	15	[6]	10	[6]	**	[1]	15	[6]	15	[6]	8	[a]	15	[6]	11	[2]	**	[1]
6870:	11	[6]	**	[1]	9	[6]	15	[6]	11	[6]	15	[6]	11	[6]	15	[6]	11	[6]	15	[6]
6880:	14	[5]	15	[6]	11	[6]	**	[1]	8	[a]	15	[6]	9	[5]	70	[2]	11	[6]	**	[2]
6890:	9	[6]	15	[6]	11	[6]	60	[2]	11	[6]	15	[6]	15	[2]	15	[6]	13	[a]	**	[1]
6900:	11	[6]	66	[2]	9	[6]	15	[6]	11	[6]	15	[6]	8	[6]	**	[1]	10	[a]	15	[6]
6910:	12	[a]	**	[1]	26	[2]	30	[2]	30	[6]	15	[6]	11	[5]	**	[1]	11	[6]	30	[c]
6920:	10	[a]	15	[6]	12	[a]	30	[c]	11	[6]	30	[c]	12	[5]	15	[6]	15	[2]	40	[2]
6930:	16	[5]	30	[c]	18	[5]	15	[6]	11	[6]	30	[c]	22	[5]	24	[6]	24	[5]	26	[2]
6940:	26	[5]	30	[c]	28	[5]	52	[2]	30	[6]	30	[6]	30	[c]	**	[1]	11	[5]	**	[1]
6950:	30	[6]	15	[6]	11	[6]	30	[c]	30	[6]	30	[c]	30	[6]	15	[6]	11	[6]	**	[1]
6960:	30	[6]	**	[1]	30	[6]	30	[c]	11	[6]	30	[c]	30	[6]	**	[1]	9	[6]	15	[6]
6970:	9	[6]	**	[1]	30	[6]	18	[2]	30	[6]	15	[6]	63	[2]	**	[1]	13	[b]	30	[c]
6980:	30	[6]	15	[6]	11	[6]	**	[1]	30	[6]	30	[c]	30	[6]	15	[6]	12	[b]	30	[c]
6990:	15	[6]	**	[1]	30	[6]	15	[6]	30	[6]	30	[c]	30	[6]	**	[1]	9	[5]	15	[6]
7000:	11	[6]	**	[1]	30	[6]	46	[2]	8	[2]	15	[6]	15	[a]	30	[c]	15	[6]	42	[2]
7010:	30	[6]	15	[2]	11	[6]	**	[1]	30	[6]	15	[2]	30	[6]	15	[6]	11	[6]	**	[1]
7020:	30	[6]	30	[c]	30	[6]	15	[6]	15	[2]	24	[2]	30	[6]	**	[1]	9	[6]	15	[6]
7030:	11	[6]	78	[2]	11	[6]	30	[c]	30	[6]	15	[6]	9	[b]	30	[c]	30	[6]	**	[1]
7040:	30	[6]	30	[6]	11	[6]	**	[1]	30	[6]	30	[c]	9	[5]	30	[c]	11	[6]	30	[c]
7050:	30	[6]	30	[c]	30	[6]	30	[c]	16	[5]	30	[c]	18	[5]	**	[1]	9	[b]	30	[c]
7060:	22	[5]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]	28	[5]	36	[2]	30	[6]	**	[1]
7070:	30	[6]	15	[6]	15	[2]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]
7080:	30	[6]	72	[2]	30	[6]	15	[6]	30	[6]	30	[c]	30	[6]	30	[c]	15	[2]	30	[c]
7090:	30	[6]	15	[6]	30	[6]	40	[2]	30	[6]	30	[c]	30	[6]	46	[2]	30	[6]	30	[2]

7100:	30	[6]	30	[6]	9	[c]	**	[1]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]
7110:	30	[6]	30	[c]	30	[6]	30	[c]	8	[a]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]
7120:	30	[6]	**	[1]	22	[5]	16	[2]	30	[6]	15	[2]	30	[6]	**	[1]	28	[5]	**	[1]
7130:	30	[6]	30	[6]	30	[c]	30	[c]	30	[6]	30	[c]	31	[2]	30	[c]	30	[6]	58	[2]
7140:	30	[6]	36	[2]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]
7150:	30	[6]	**	[1]	30	[6]	22	[2]	11	[a]	30	[c]	11	[b]	30	[c]	30	[6]	**	[1]
7160:	30	[6]	15	[6]	30	[6]	30	[6]	30	[6]	30	[6]	30	[6]	15	[6]	30	[6]	66	[2]
7170:	30	[6]	70	[2]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]
7180:	30	[6]	42	[2]	30	[6]	15	[6]	15	[2]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]
7190:	8	[5]	15	[2]	7	[2]	**	[1]	30	[6]	30	[c]	30	[6]	30	[c]	8	[5]	30	[c]
7200:	30	[6]	18	[2]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	80	[2]
7210:	30	[6]	**	[1]	30	[6]	**	[1]	11	[c]	15	[6]	30	[6]	30	[c]	30	[6]	**	[1]
7220:	30	[6]	15	[6]	8	[5]	30	[2]	30	[6]	30	[c]	30	[6]	30	[6]	30	[6]	**	[1]
7230:	30	[6]	30	[c]	63	[2]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]
7240:	16	[5]	30	[c]	18	[5]	**	[1]	9	[c]	30	[c]	22	[5]	**	[1]	30	[6]	30	[c]
7250:	30	[6]	30	[c]	28	[5]	**	[1]	30	[6]	30	[6]	30	[6]	15	[6]	12	[5]	30	[c]
7260:	30	[6]	52	[2]	30	[6]	30	[c]	31	[2]	30	[c]	30	[6]	42	[2]	30	[6]	15	[6]
7270:	30	[6]	30	[c]	30	[6]	30	[c]	8	[6]	30	[c]	30	[6]	18	[2]	30	[6]	30	[c]
7280:	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	15	[6]	10	[5]	30	[6]	10	[6]	36	[2]
7290:	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]
7300:	11	[5]	48	[2]	30	[6]	66	[2]	30	[6]	30	[c]	30	[6]	**	[1]	11	[5]	**	[1]
7310:	30	[6]	16	[c]	30	[6]	70	[2]	8	[6]	15	[2]	11	[5]	30	[c]	15	[6]	30	[c]
7320:	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	24	[2]	30	[6]	16	[2]	31	[2]	30	[c]
7330:	30	[6]	**	[1]	30	[6]	**	[1]	15	[6]	15	[6]	30	[6]	15	[6]	15	[b]	40	[2]
7340:	15	[6]	30	[c]	15	[6]	30	[c]	30	[6]	15	[6]	12	[a]	15	[6]	30	[6]	**	[1]
7350:	30	[6]	**	[1]	15	[a]	15	[2]	30	[6]	30	[c]	15	[a]	15	[6]	15	[a]	30	[c]
7360:	30	[6]	30	[c]	30	[6]	36	[2]	11	[5]	30	[c]	10	[5]	52	[2]	9	[c]	**	[1]
7370:	10	[a]	30	[c]	30	[6]	72	[2]	30	[6]	58	[2]	15	[2]	15	[6]	7	[5]	46	[2]
7380:	30	[6]	60	[2]	9	[6]	30	[c]	7	[2]	30	[c]	30	[6]	82	[2]	7	[5]	30	[c]
7390:	30	[6]	30	[c]	30	[6]	**	[1]	8	[5]	15	[2]	30	[6]	15	[6]	9	[5]	48	[2]
7400:	11	[c]	15	[6]	30	[6]	30	[c]	30	[6]	15	[6]	10	[5]	15	[6]	15	[2]	30	[2]
7410:	30	[6]	**	[1]	11	[b]	15	[6]	30	[6]	30	[c]	30	[6]	**	[1]	8	[5]	30	[c]
7420:	30	[6]	40	[2]	30	[6]	15	[6]	28	[2]	30	[c]	16	[5]	30	[c]	18	[5]	16	[2]
7430:	10	[a]	30	[c]	22	[5]	**	[1]	30	[6]	20	[c]	26	[5]	30	[c]	28	[5]	42	[2]
7440:	30	[6]	30	[6]	30	[c]	18	[6]	12	[5]	30	[c]	30	[6]	22	[6]	8	[5]	30	[c]
7450:	30	[6]	**	[1]	30	[6]	28	[2]	7	[5]	15	[6]	31	[2]	**	[1]	30	[6]	**	[1]
7460:	11	[5]	30	[c]	30	[6]	16	[2]	7	[2]	15	[6]	7	[5]	30	[c]	30	[6]	15	[6]
7470:	30	[6]	30	[2]	30	[6]	30	[6]	7	[5]	30	[c]	30	[6]	**	[1]	8	[b]	30	[c]
7480:	30	[6]	**	[1]	30	[6]	30	[c]	12	[5]	30	[c]	9	[c]	**	[1]	30	[6]	**	[1]
7490:	30	[6]	30	[c]	30	[6]	58	[2]	57	[6]	15	[6]	24	[5]	54	[c]	30	[6]	**	[1]
7500:	28	[5]	30	[c]	30	[6]	48	[c]	30	[c]	46	[c]	30	[6]	**	[1]	30	[6]	30	[c]
7510:	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	36	[c]	30	[6]	**	[1]	30	[6]	72	[2]
7520:	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	31	[6]	9	[5]	30	[c]	7	[2]	**	[1]
7530:	36	[6]	16	[2]	30	[6]	30	[2]	40	[6]	30	[6]	42	[6]	**	[1]	30	[6]	30	[c]
7540:	46	[6]	**	[1]	48	[6]	30	[c]	30	[6]	30	[c]	52	[6]	**	[1]	30	[6]	**	[1]
7550:	30	[6]	30	[c]	58	[2]	30	[c]	30	[6]	30	[c]	22	[5]	30	[c]	30	[6]	**	[1]
7560:	30	[6]	**	[1]	28	[5]	30	[c]	30	[6]	30	[6]	30	[6]	30	[c]	30	[6]	30	[c]
7570:	30	[6]	66	[2]	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]
7580:	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	26	[2]	30	[6]	**	[1]
7590:	30	[6]	**	[1]	30	[6]	15	[6]	30	[6]	15	[6]	30	[6]	70	[2]	30	[6]	30	[6]
7600:	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]
7610:	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]	11	[5]	30	[c]
7620:	30	[6]	**	[1]	30	[6]	30	[c]	8	[5]	60	[2]	10	[a]	30	[c]	30	[6]	30	[c]
7630:	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	15	[6]	30	[6]	30	[c]	30	[6]	**	[1]
7640:	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	15	[6]	30	[6]	15	[6]	31	[2]	**	[1]
7650:	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	15	[6]	8	[5]	15	[2]	30	[6]	30	[c]
7660:	30	[6]	46	[2]	30	[6]	78	[2]	30	[6]	30	[c]	13	[a]	30	[c]	30	[6]	**	[1]
7670:	30	[6]	30	[c]	30	[6]	**	[1]	11	[6]	30	[c]	11	[2]	15	[6]	12	[a]	30	[c]
7680:	15	[2]	**	[1]	30	[6]	30	[c]	30	[6]	15	[6]	11	[6]	**	[1]	11	[6]	15	[6]
7690:	30	[6]	**	[1]	12	[5]	48	[2]	30	[6]	30	[c]	30	[6]	42	[2]	30	[6]	**	[1]

7700:	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	15	[6]	30	[6]	15	[6]	8	[a]	15	[6]
7710:	30	[6]	15	[6]	31	[2]	30	[c]	30	[6]	15	[6]	11	[5]	**	[1]	11	[6]	15	[6]
7720:	10	[5]	15	[6]	8	[a]	**	[1]	30	[6]	30	[c]	30	[6]	**	[1]	15	[2]	58	[2]
7730:	30	[6]	30	[c]	30	[6]	15	[2]	9	[6]	30	[c]	11	[6]	15	[6]	11	[6]	70	[2]
7740:	11	[6]	**	[1]	11	[5]	30	[c]	63	[2]	30	[c]	11	[6]	60	[2]	59	[6]	15	[6]
7750:	9	[5]	56	[c]	10	[5]	**	[1]	12	[5]	15	[6]	30	[6]	**	[1]	17	[c]	**	[1]
7760:	30	[6]	15	[6]	30	[6]	15	[6]	16	[6]	15	[6]	30	[6]	15	[6]	7	[2]	38	[c]
7770:	22	[6]	36	[c]	30	[6]	15	[6]	30	[6]	24	[2]	31	[2]	30	[c]	30	[6]	31	[6]
7780:	11	[5]	30	[2]	30	[6]	42	[2]	36	[6]	15	[6]	8	[a]	30	[c]	40	[6]	**	[1]
7790:	42	[6]	30	[c]	15	[2]	**	[1]	46	[6]	15	[6]	48	[6]	30	[c]	16	[5]	30	[c]
7800:	52	[6]	28	[2]	10	[a]	30	[c]	22	[5]	15	[6]	58	[6]	36	[2]	60	[2]	30	[c]
7810:	28	[5]	72	[2]	30	[6]	30	[6]	30	[c]	15	[6]	9	[b]	**	[1]	30	[6]	15	[6]
7820:	11	[6]	30	[c]	30	[6]	**	[1]	30	[6]	24	[2]	12	[2]	15	[6]	30	[6]	**	[1]
7830:	30	[6]	40	[2]	8	[6]	30	[c]	30	[6]	15	[6]	11	[6]	16	[2]	11	[6]	30	[c]
7840:	30	[6]	**	[1]	30	[6]	15	[6]	11	[5]	30	[6]	9	[b]	30	[c]	30	[6]	46	[2]
7850:	11	[6]	30	[c]	30	[6]	**	[1]	30	[6]	15	[6]	15	[2]	80	[2]	10	[6]	30	[c]
7860:	30	[6]	15	[6]	30	[6]	30	[c]	30	[6]	15	[6]	15	[b]	**	[1]	15	[b]	15	[6]
7870:	30	[6]	30	[c]	15	[6]	**	[1]	13	[b]	30	[c]	15	[6]	**	[1]	30	[6]	**	[1]
7880:	15	[b]	30	[c]	30	[6]	**	[1]	30	[6]	15	[6]	15	[6]	30	[c]	30	[6]	30	[c]
7890:	30	[6]	15	[6]	15	[a]	15	[6]	30	[6]	15	[6]	11	[6]	52	[2]	15	[a]	30	[c]
7900:	15	[a]	**	[1]	30	[6]	15	[6]	15	[2]	15	[2]	30	[6]	**	[1]	30	[6]	30	[6]
7910:	9	[5]	26	[2]	30	[6]	40	[2]	9	[6]	15	[6]	9	[6]	30	[c]	30	[6]	**	[1]
7920:	30	[6]	**	[2]	9	[6]	30	[c]	10	[5]	24	[2]	9	[6]	**	[1]	8	[6]	30	[c]
7930:	30	[6]	30	[c]	30	[6]	**	[1]	8	[5]	15	[6]	30	[2]	**	[1]	30	[6]	16	[2]
7940:	11	[5]	30	[c]	30	[c]	46	[2]	30	[6]	15	[6]	30	[c]	30	[c]	30	[6]	**	[1]
7950:	30	[6]	**	[1]	30	[c]	16	[5]	30	[6]	18	[5]	9	[6]	72	[2]	30	[c]	22	[5]
7960:	30	[6]	30	[c]	30	[6]	**	[1]	30	[c]	28	[5]	30	[c]	30	[2]	30	[6]	30	[c]
7970:	9	[6]	15	[6]	30	[6]	30	[6]	30	[6]	15	[6]	30	[c]	30	[6]	30	[6]	78	[2]
7980:	30	[6]	22	[2]	10	[5]	30	[6]	30	[c]	30	[6]	30	[c]	48	[2]	30	[c]	30	[6]
7990:	22	[5]	60	[2]	30	[6]	**	[1]	30	[c]	30	[6]	28	[5]	30	[6]	30	[6]	30	[6]
8000:	63	[2]	30	[c]	30	[c]	52	[2]	30	[6]	15	[6]	30	[c]	30	[6]	30	[6]	**	[1]
8010:	30	[6]	**	[1]	30	[c]	18	[c]	30	[6]	30	[6]	30	[6]	**	[1]	30	[c]	30	[6]
8020:	30	[6]	15	[6]	30	[6]	70	[2]	30	[6]	30	[6]	30	[6]	22	[2]	30	[6]	15	[6]
8030:	30	[c]	30	[6]	31	[2]	30	[6]	30	[6]	15	[6]	30	[c]	30	[6]	30	[6]	**	[1]
8040:	30	[6]	15	[2]	30	[c]	30	[6]	30	[c]	30	[6]	30	[6]	15	[6]	30	[6]	30	[6]
8050:	30	[6]	82	[2]	11	[6]	**	[1]	30	[c]	15	[6]	30	[6]	30	[6]	11	[6]	**	[1]
8060:	11	[6]	30	[6]	30	[c]	30	[6]	30	[6]	15	[6]	11	[6]	30	[6]	30	[6]	**	[1]
8070:	30	[6]	15	[6]	30	[c]	30	[6]	30	[6]	30	[6]	30	[6]	40	[2]	30	[c]	15	[6]
8080:	30	[6]	**	[1]	11	[6]	58	[2]	30	[c]	30	[6]	30	[c]	**	[1]	30	[6]	**	[1]
8090:	11	[6]	15	[6]	30	[6]	**	[1]	30	[6]	30	[6]	30	[c]	15	[6]	30	[6]	30	[6]
8100:	11	[5]	**	[1]	30	[c]	30	[6]	30	[6]	30	[6]	30	[6]	66	[2]	11	[6]	30	[6]
8110:	11	[6]	**	[1]	15	[2]	15	[6]	10	[c]	30	[6]	30	[6]	**	[1]	30	[6]	22	[2]
8120:	8	[5]	15	[6]	8	[a]	**	[1]	30	[6]	15	[6]	11	[6]	30	[6]	63	[2]	62	[6]
8130:	30	[6]	46	[2]	59	[c]	30	[6]	30	[6]	30	[6]	30	[6]	78	[2]	53	[c]	15	[6]
8140:	51	[c]	15	[6]	11	[6]	16	[2]	30	[c]	16	[6]	30	[6]	**	[1]	30	[6]	28	[2]
8150:	41	[c]	22	[6]	39	[c]	30	[2]	30	[6]	26	[6]	30	[c]	28	[6]	33	[c]	40	[2]
8160:	31	[6]	**	[1]	29	[c]	30	[6]	30	[6]	36	[6]	30	[6]	**	[1]	23	[c]	40	[6]
8170:	21	[c]	**	[1]	18	[5]	15	[6]	17	[c]	46	[6]	22	[5]	48	[6]	30	[6]	**	[1]
8180:	26	[5]	80	[2]	28	[5]	48	[2]	30	[6]	30	[6]	30	[c]	58	[6]	12	[5]	60	[6]
8190:	30	[6]	**	[1]	**	[d]	30	[6]	30	[6]	30	[c]	30	[6]	15	[6]	11	[6]	24	[c]
8200:	30	[6]	58	[2]	30	[6]	30	[c]	12	[b]	30	[c]	30	[6]	28	[2]	30	[6]	**	[1]
8210:	30	[6]	30	[c]	30	[6]	42	[2]	30	[6]	22	[6]	10	[6]	30	[6]	30	[6]	**	[1]
8220:	30	[6]	**	[1]	15	[a]	30	[6]	31	[2]	30	[c]	30	[6]	18	[2]	11	[5]	30	[c]
8230:	9	[5]	**	[1]	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	**	[1]	11	[6]	15	[6]
8240:	15	[2]	15	[6]	30	[6]	**	[1]	10	[c]	15	[6]	8	[6]	30	[c]	10	[6]	72	[2]
8250:	30	[6]	36	[2]	11	[6]	30	[c]	30	[6]	15	[6]	30	[6]	22	[2]	11	[6]	30	[c]
8260:	30	[6]	30	[c]	30	[6]	**	[1]	8	[6]	15	[2]	30	[6]	15	[6]	11	[6]	**	[1]
8270:	11	[6]	30	[c]	15	[6]	**	[1]	30	[6]	24	[2]	11	[6]	15	[6]	30	[6]	30	[c]
8280:	30	[6]	48	[2]	10	[6]	15	[6]	30	[6]	30	[c]	11	[6]	**	[1]	15	[6]	30	[c]
8290:	30	[6]	**	[1]	30	[6]	**	[1]	9	[5]	30	[c]	10	[5]	**	[1]	9	[c]	42	[2]

8300:	9	[6]	30	[c]	30	[6]	30	[c]	30	[6]	15	[6]	9	[6]	15	[6]	9	[6]	15	[6]
8310:	30	[6]	**	[1]	8	[a]	30	[c]	9	[6]	30	[c]	30	[6]	**	[1]	9	[6]	30	[c]
8320:	30	[6]	52	[2]	30	[6]	15	[6]	9	[6]	15	[6]	30	[6]	15	[6]	8	[a]	**	[1]
8330:	11	[c]	15	[6]	30	[6]	30	[c]	30	[6]	15	[6]	15	[2]	15	[6]	9	[6]	30	[2]
8340:	30	[6]	18	[2]	8	[a]	80	[2]	30	[6]	30	[c]	30	[6]	16	[2]	9	[6]	30	[c]
8350:	30	[6]	30	[c]	30	[6]	**	[1]	8	[6]	30	[c]	16	[5]	60	[2]	18	[5]	15	[6]
8360:	9	[6]	30	[c]	22	[5]	**	[1]	30	[6]	30	[c]	26	[5]	30	[c]	28	[5]	**	[1]
8370:	30	[6]	30	[6]	30	[c]	30	[c]	12	[5]	66	[2]	30	[6]	**	[1]	30	[c]	30	[c]
8380:	30	[6]	30	[c]	30	[6]	82	[2]	63	[2]	30	[c]	30	[6]	**	[1]	30	[6]	**	[1]
8390:	9	[5]	30	[c]	30	[6]	22	[c]	30	[6]	15	[6]	30	[6]	30	[c]	30	[6]	36	[2]
8400:	30	[6]	30	[2]	30	[6]	30	[6]	30	[6]	30	[c]	30	[6]	30	[c]	15	[b]	30	[6]
8410:	30	[6]	30	[c]	30	[6]	46	[2]	15	[b]	30	[c]	31	[2]	30	[c]	30	[6]	**	[1]
8420:	30	[6]	30	[c]	30	[6]	**	[1]	22	[5]	24	[2]	24	[5]	15	[6]	30	[6]	**	[1]
8430:	28	[5]	**	[1]	30	[6]	30	[6]	30	[c]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]
8440:	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]
8450:	30	[6]	30	[c]	30	[6]	78	[2]	30	[6]	15	[6]	12	[b]	30	[c]	15	[6]	30	[c]
8460:	30	[6]	**	[1]	30	[6]	16	[2]	30	[6]	30	[6]	30	[6]	**	[1]	30	[6]	15	[6]
8470:	30	[6]	42	[2]	30	[6]	36	[2]	30	[6]	30	[c]	30	[6]	48	[2]	30	[6]	60	[2]
8480:	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	15	[6]	15	[6]	30	[c]	30	[6]	30	[c]
8490:	30	[6]	30	[c]	15	[6]	15	[6]	15	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]
8500:	15	[6]	**	[1]	30	[6]	15	[6]	30	[6]	30	[c]	30	[6]	46	[2]	30	[6]	66	[2]
8510:	65	[6]	15	[6]	30	[6]	**	[1]	30	[6]	15	[6]	15	[6]	15	[6]	30	[6]	56	[c]
8520:	30	[6]	**	[1]	30	[6]	15	[6]	15	[6]	15	[6]	30	[6]	**	[1]	30	[6]	30	[6]
8530:	30	[6]	44	[c]	30	[6]	42	[c]	24	[6]	30	[c]	30	[6]	**	[1]	30	[6]	**	[1]
8540:	30	[6]	31	[6]	15	[6]	**	[1]	15	[6]	30	[c]	36	[6]	30	[c]	12	[6]	82	[2]
8550:	40	[6]	30	[c]	42	[6]	15	[6]	12	[6]	20	[c]	46	[6]	42	[2]	48	[6]	30	[c]
8560:	15	[2]	30	[c]	52	[6]	**	[1]	30	[6]	30	[c]	30	[6]	30	[c]	58	[6]	30	[c]
8570:	60	[6]	30	[c]	30	[6]	**	[1]	30	[6]	24	[2]	66	[2]	30	[c]	30	[6]	28	[c]
8580:	30	[6]	**	[1]	30	[6]	15	[6]	15	[6]	22	[c]	12	[5]	30	[2]	30	[6]	18	[c]
8590:	30	[6]	70	[2]	30	[6]	30	[c]	30	[6]	30	[6]	30	[6]	**	[1]	30	[6]	**	[1]
8600:	30	[6]	15	[6]	30	[6]	30	[c]	16	[5]	30	[c]	18	[5]	15	[6]	31	[2]	**	[1]
8610:	22	[5]	78	[2]	30	[6]	30	[c]	26	[5]	30	[c]	28	[5]	30	[c]	30	[6]	30	[6]
8620:	30	[c]	36	[2]	12	[5]	**	[1]	30	[6]	15	[2]	30	[c]	**	[1]	30	[6]	**	[1]
8630:	30	[6]	15	[6]	15	[6]	88	[2]	30	[6]	30	[c]	30	[6]	30	[c]	12	[6]	52	[2]
8640:	30	[6]	**	[1]	30	[6]	15	[6]	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	15	[6]
8650:	12	[6]	40	[2]	30	[6]	30	[c]	30	[6]	15	[6]	15	[2]	30	[6]	30	[6]	30	[c]
8660:	30	[6]	15	[6]	15	[6]	**	[1]	30	[6]	30	[c]	30	[6]	80	[2]	30	[6]	**	[1]
8670:	30	[6]	15	[6]	31	[2]	15	[6]	15	[6]	24	[2]	30	[6]	**	[1]	15	[b]	15	[6]
8680:	15	[b]	**	[1]	15	[b]	30	[c]	30	[6]	15	[6]	15	[6]	30	[c]	30	[6]	**	[1]
8690:	30	[6]	15	[6]	15	[6]	**	[1]	30	[6]	30	[c]	30	[6]	15	[6]	15	[a]	**	[1]
8700:	30	[6]	15	[6]	15	[6]	15	[6]	16	[2]	30	[c]	15	[6]	**	[1]	30	[6]	15	[6]
8710:	15	[a]	30	[2]	30	[6]	**	[1]	30	[6]	30	[6]	15	[a]	30	[c]	30	[6]	**	[1]
8720:	15	[6]	30	[c]	15	[a]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]	16	[5]	30	[c]
8730:	18	[5]	**	[1]	15	[6]	30	[c]	22	[5]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]
8740:	28	[5]	**	[1]	30	[6]	30	[6]	30	[6]	15	[6]	12	[6]	**	[1]	30	[6]	30	[c]
8750:	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	15	[6]	30	[6]	30	[c]
8760:	30	[6]	**	[1]	8	[6]	30	[c]	30	[6]	15	[6]	30	[6]	30	[c]	63	[2]	30	[c]
8770:	30	[6]	48	[2]	30	[6]	30	[2]	30	[6]	30	[6]	12	[6]	66	[2]	30	[6]	**	[1]
8780:	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	30	[c]	12	[6]	30	[c]
8790:	30	[6]	58	[2]	30	[6]	30	[c]	30	[6]	30	[c]	22	[5]	30	[c]	30	[6]	30	[c]
8800:	30	[6]	30	[c]	28	[5]	**	[1]	30	[6]	30	[6]	30	[c]	**	[1]	30	[6]	30	[c]
8810:	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]
8820:	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	80	[2]
8830:	30	[6]	**	[1]	30	[6]	72	[2]	30	[6]	15	[2]	30	[6]	**	[1]	30	[6]	**	[1]
8840:	30	[6]	15	[6]	30	[6]	36	[2]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]
8850:	30	[6]	52	[2]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	16	[2]	30	[6]	30	[c]
8860:	30	[6]	**	[1]	30	[6]	**	[1]	31	[2]	15	[6]	11	[6]	**	[1]	30	[6]	48	[2]
8870:	30	[6]	30	[c]	11	[6]	30	[c]	30	[6]	70	[2]	30	[6]	30	[c]	30	[6]	30	[c]
8880:	30	[6]	82	[2]	30	[6]	15	[6]	30	[6]	15	[6]	30	[6]	**	[1]	11	[6]	15	[6]
8890:	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	15	[6]	63	[2]	15	[6]	30	[6]	30	[c]

8900:	30	[6]	30	[6]	30	[6]	30	[c]	30	[6]	30	[c]	11	[6]	30	[c]	30	[6]	58	[2]
8910:	30	[6]	30	[c]	30	[6]	30	[c]	11	[6]	30	[c]	11	[6]	36	[2]	11	[6]	30	[c]
8920:	11	[5]	30	[c]	30	[6]	**	[1]	30	[6]	15	[2]	8	[5]	78	[2]	15	[2]	**	[1]
8930:	30	[6]	30	[c]	12	[5]	**	[1]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]
8940:	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	15	[6]	30	[6]	22	[2]	11	[6]	30	[c]
8950:	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	15	[6]	11	[6]	52	[2]	12	[5]	30	[2]
8960:	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	30	[6]	30	[6]	**	[1]
8970:	30	[6]	**	[1]	30	[6]	18	[c]	30	[6]	30	[c]	16	[5]	46	[2]	18	[5]	15	[6]
8980:	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]	26	[5]	30	[c]	30	[6]	88	[2]
8990:	30	[6]	36	[2]	31	[2]	30	[c]	12	[5]	30	[c]	30	[6]	15	[6]	30	[c]	**	[1]
9000:	30	[6]	**	[1]	30	[6]	15	[6]	11	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]
9010:	8	[6]	**	[1]	30	[6]	**	[1]	30	[6]	15	[6]	30	[6]	70	[2]	69	[6]	30	[c]
9020:	30	[6]	66	[c]	10	[6]	30	[6]	30	[6]	30	[c]	30	[6]	60	[c]	11	[5]	**	[1]
9030:	30	[6]	30	[c]	30	[6]	15	[6]	16	[6]	30	[c]	30	[6]	30	[c]	30	[6]	48	[c]
9040:	30	[6]	**	[1]	30	[6]	**	[1]	30	[6]	15	[5]	28	[6]	82	[2]	30	[6]	**	[1]
9050:	30	[6]	15	[6]	9	[5]	34	[c]	36	[6]	30	[c]	31	[2]	30	[c]	40	[6]	**	[1]
9060:	42	[6]	15	[6]	30	[6]	24	[c]	46	[6]	30	[c]	48	[6]	**	[1]	30	[6]	18	[c]
9070:	52	[6]	46	[2]	30	[6]	42	[2]	11	[6]	15	[6]	58	[6]	30	[c]	60	[6]	30	[c]
9080:	30	[6]	63	[6]	11	[6]	30	[2]	66	[6]	30	[c]	30	[6]	30	[6]	70	[2]	60	[2]
9090:	30	[6]	**	[1]	11	[5]	30	[c]	11	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]
9100:	16	[5]	30	[c]	18	[5]	**	[1]	15	[2]	30	[c]	22	[5]	30	[c]	30	[6]	**	[1]
9110:	30	[6]	30	[c]	28	[5]	30	[c]	30	[6]	30	[6]	30	[6]	15	[6]	15	[6]	30	[c]
9120:	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	72	[2]	30	[6]	**	[1]	30	[6]	15	[2]
9130:	30	[6]	30	[c]	30	[6]	**	[1]	15	[a]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]
9140:	30	[6]	30	[c]	30	[6]	40	[2]	30	[6]	15	[6]	10	[2]	30	[6]	10	[a]	30	[c]
9150:	30	[6]	**	[1]	30	[6]	80	[2]	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]
9160:	10	[a]	**	[1]	30	[6]	15	[2]	30	[6]	30	[c]	30	[6]	88	[2]	15	[6]	52	[2]
9170:	30	[6]	30	[c]	30	[6]	**	[1]	10	[6]	24	[2]	15	[6]	30	[c]	15	[b]	66	[2]
9180:	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]
9190:	30	[6]	30	[c]	30	[6]	28	[2]	15	[6]	15	[6]	30	[6]	30	[c]	30	[6]	**	[1]
9200:	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]	12	[5]	15	[6]	30	[6]	**	[1]
9210:	30	[6]	60	[2]	10	[5]	15	[6]	30	[6]	30	[6]	30	[6]	30	[c]	12	[5]	30	[c]
9220:	30	[6]	**	[1]	30	[6]	22	[2]	9	[6]	30	[c]	10	[5]	**	[1]	30	[6]	15	[6]
9230:	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	15	[6]	30	[6]	15	[6]	9	[5]	**	[1]
9240:	30	[6]	**	[1]	30	[6]	30	[c]	12	[5]	30	[c]	30	[6]	15	[5]	31	[2]	30	[c]
9250:	30	[6]	30	[c]	30	[6]	18	[2]	10	[b]	15	[6]	30	[6]	**	[1]	10	[b]	46	[2]
9260:	11	[c]	26	[2]	30	[6]	58	[2]	30	[6]	15	[6]	10	[b]	15	[6]	10	[6]	15	[2]
9270:	11	[6]	72	[2]	71	[6]	15	[6]	30	[6]	68	[c]	30	[6]	**	[1]	10	[6]	30	[c]
9280:	30	[6]	**	[1]	30	[6]	**	[1]	12	[6]	30	[c]	11	[6]	36	[2]	16	[6]	15	[6]
9290:	18	[6]	30	[c]	12	[5]	**	[1]	30	[6]	48	[c]	24	[6]	15	[6]	26	[6]	16	[2]
9300:	28	[6]	70	[2]	30	[6]	31	[6]	12	[5]	15	[6]	30	[6]	40	[2]	36	[6]	30	[c]
9310:	30	[6]	**	[1]	40	[6]	66	[2]	42	[6]	30	[c]	30	[6]	26	[c]	46	[6]	**	[1]
9320:	48	[6]	30	[c]	30	[6]	**	[1]	52	[6]	24	[2]	30	[6]	15	[6]	15	[6]	30	[c]
9330:	58	[6]	15	[6]	60	[6]	30	[c]	30	[6]	63	[6]	11	[6]	**	[1]	66	[6]	30	[6]
9340:	30	[6]	**	[1]	70	[6]	**	[1]	72	[2]	30	[c]	30	[6]	15	[6]	11	[6]	**	[1]
9350:	11	[6]	15	[6]	30	[6]	46	[2]	30	[6]	15	[5]	16	[5]	15	[6]	13	[5]	48	[2]
9360:	30	[6]	15	[2]	9	[5]	15	[6]	30	[6]	15	[6]	30	[6]	16	[2]	12	[5]	26	[2]
9370:	11	[6]	**	[1]	30	[6]	15	[6]	9	[6]	15	[2]	31	[2]	**	[1]	11	[6]	82	[2]
9380:	9	[6]	15	[6]	11	[6]	15	[6]	9	[6]	15	[6]	9	[6]	15	[6]	9	[6]	40	[2]
9390:	11	[6]	**	[1]	15	[2]	15	[6]	11	[6]	15	[6]	11	[6]	**	[1]	9	[6]	15	[6]
9400:	11	[6]	15	[6]	9	[b]	**	[1]	9	[6]	15	[6]	11	[6]	22	[2]	15	[6]	**	[2]
9410:	10	[6]	15	[6]	11	[5]	**	[1]	10	[a]	15	[6]	10	[2]	15	[6]	11	[6]	**	[1]
9420:	11	[6]	**	[1]	10	[5]	26	[2]	15	[2]	15	[6]	11	[6]	15	[6]	11	[c]	15	[6]
9430:	9	[6]	**	[1]	11	[6]	**	[1]	10	[a]	15	[6]	11	[6]	**	[1]	12	[2]	**	[1]
9440:	15	[2]	15	[6]	11	[6]	15	[2]	8	[b]	15	[6]	9	[5]	15	[6]	11	[6]	15	[6]
9450:	11	[6]	15	[6]	12	[5]	15	[6]	9	[6]	15	[2]	15	[6]	48	[2]	9	[6]	15	[6]
9460:	11	[6]	**	[1]	11	[6]	**	[1]	9	[6]	15	[6]	11	[6]	**	[1]	12	[6]	16	[2]
9470:	9	[6]	15	[6]	36	[2]	**	[1]	14	[6]	24	[2]	9	[6]	15	[6]	14	[6]	**	[1]
9480:	14	[6]	18	[2]	14	[6]	15	[6]	14	[6]	23	[c]	14	[6]	52	[2]	15	[2]	16	[6]
9490:	12	[2]	**	[1]	14	[6]	15	[6]	10	[6]	22	[6]	14	[6]	**	[1]	14	[6]	26	[6]

9500:	10	[6]	28	[6]	14	[6]	30	[6]	31	[6]	15	[6]	10	[a]	15	[6]	14	[6]	36	[2]
9510:	11	[6]	**	[1]	11	[6]	15	[6]	14	[6]	15	[6]	14	[6]	30	[2]	30	[6]	15	[6]
9520:	15	[2]	**	[1]	14	[6]	88	[2]	10	[c]	15	[6]	14	[6]	30	[c]	14	[6]	30	[c]
9530:	12	[5]	26	[2]	11	[6]	**	[1]	16	[5]	30	[c]	63	[2]	15	[6]	14	[6]	**	[1]
9540:	22	[5]	15	[6]	24	[5]	15	[6]	26	[5]	30	[c]	28	[5]	**	[1]	30	[6]	30	[6]
9550:	30	[c]	**	[1]	15	[6]	40	[2]	30	[6]	15	[6]	14	[6]	30	[c]	30	[6]	78	[2]
9560:	30	[6]	15	[6]	14	[6]	72	[2]	30	[6]	30	[c]	30	[6]	30	[c]	15	[2]	30	[c]
9570:	30	[6]	16	[2]	9	[a]	15	[6]	9	[5]	30	[c]	30	[6]	60	[2]	30	[6]	15	[6]
9580:	15	[b]	30	[6]	15	[b]	30	[c]	30	[6]	15	[6]	14	[6]	**	[1]	30	[6]	42	[2]
9590:	30	[6]	15	[2]	15	[6]	52	[2]	15	[6]	30	[c]	30	[6]	15	[6]	30	[6]	30	[c]
9600:	30	[6]	**	[1]	10	[a]	15	[6]	14	[6]	15	[6]	30	[6]	30	[c]	15	[a]	15	[6]
9610:	15	[a]	30	[c]	14	[6]	**	[1]	30	[6]	15	[6]	15	[2]	58	[2]	30	[6]	**	[1]
9620:	30	[6]	15	[6]	14	[6]	**	[1]	30	[6]	30	[c]	30	[6]	15	[6]	14	[6]	**	[1]
9630:	30	[6]	**	[1]	15	[6]	15	[2]	14	[6]	30	[c]	14	[6]	30	[c]	30	[6]	15	[6]
9640:	10	[a]	30	[2]	30	[6]	**	[1]	30	[6]	30	[6]	14	[6]	30	[c]	30	[6]	**	[1]
9650:	8	[5]	30	[c]	14	[6]	48	[2]	30	[6]	30	[c]	30	[6]	30	[c]	16	[5]	30	[c]
9660:	18	[5]	**	[1]	9	[c]	30	[c]	63	[2]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]
9670:	28	[5]	30	[c]	30	[6]	30	[6]	30	[6]	15	[2]	12	[5]	**	[1]	30	[6]	**	[1]
9680:	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	15	[6]	30	[6]	**	[1]
9690:	30	[6]	30	[c]	10	[a]	30	[c]	30	[6]	15	[6]	30	[6]	**	[1]	30	[6]	30	[c]
9700:	30	[6]	88	[2]	30	[6]	30	[2]	30	[6]	30	[6]	14	[6]	30	[c]	30	[6]	30	[c]
9710:	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]	14	[6]	**	[1]
9720:	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	30	[c]	22	[5]	70	[2]	30	[6]	30	[c]
9730:	30	[6]	36	[2]	28	[5]	**	[1]	30	[6]	30	[6]	30	[c]	30	[c]	30	[6]	**	[1]
9740:	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]
9750:	30	[6]	48	[2]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]
9760:	30	[6]	42	[2]	30	[6]	30	[c]	30	[6]	15	[6]	30	[6]	**	[1]	30	[6]	**	[1]
9770:	30	[6]	15	[6]	30	[6]	30	[6]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]
9780:	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]
9790:	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	15	[6]	11	[5]	96	[2]	30	[6]	40	[2]
9800:	30	[6]	80	[2]	12	[5]	**	[1]	30	[6]	15	[5]	30	[6]	30	[c]	30	[6]	30	[c]
9810:	30	[6]	**	[1]	30	[6]	15	[6]	30	[6]	15	[6]	30	[6]	**	[1]	11	[c]	15	[6]
9820:	30	[6]	30	[c]	30	[6]	30	[c]	31	[2]	15	[6]	9	[6]	30	[2]	30	[6]	**	[1]
9830:	30	[6]	30	[6]	30	[6]	**	[1]	30	[6]	30	[c]	9	[6]	30	[c]	30	[6]	**	[1]
9840:	30	[6]	30	[c]	30	[6]	30	[c]	16	[5]	30	[c]	18	[5]	42	[2]	9	[6]	30	[c]
9850:	22	[5]	**	[1]	30	[6]	58	[2]	30	[6]	30	[c]	28	[5]	**	[1]	30	[6]	**	[1]
9860:	30	[6]	30	[c]	12	[5]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	70	[2]
9870:	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	78	[2]	30	[6]	30	[c]	9	[6]	30	[c]
9880:	30	[6]	40	[2]	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	15	[6]
9890:	10	[5]	30	[6]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[6]	30	[6]	30	[c]
9900:	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]	30	[6]	30	[c]
9910:	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	46	[2]	30	[6]	15	[6]
9920:	15	[2]	30	[c]	30	[6]	**	[1]	30	[6]	24	[2]	30	[6]	30	[c]	30	[6]	**	[1]
9930:	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	18	[2]	12	[a]	15	[6]
9940:	30	[6]	**	[1]	30	[6]	60	[2]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	**	[1]
9950:	15	[a]	15	[2]	31	[2]	36	[2]	30	[6]	30	[6]	10	[5]	15	[6]	30	[6]	30	[6]
9960:	30	[6]	30	[c]	12	[5]	40	[2]	30	[6]	30	[c]	30	[6]	**	[1]	15	[2]	30	[c]
9970:	14	[6]	58	[2]	30	[6]	**	[1]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	30	[c]
9980:	30	[6]	15	[6]	14	[6]	66	[2]	30	[6]	30	[c]	30	[6]	30	[c]	14	[6]	30	[c]
9990:	30	[6]	96	[2]	30	[6]	30	[c]	30	[6]	30	[c]	30	[6]	15	[6]	14	[6]	15	[6]

prop0: used 1279 times (necessary: 1283)
 0 1 2 3 4 5 6 7 8 9
 prop2: used 13047 times (necessary: 1313)
 28 35 40 44 45 52 60 77 88 99
 prop3: used 11 times (necessary: 11)
 12 15 36 39 46 48 50 55 56 82
 prop4: used 9 times (necessary: 9)
 10 14 18 22 26 30 34 38 42
 prop5: used 10340 times (necessary: 707)
 95 111 159 303 312 315 335 381 408 413
 prop6: used 6114 times (necessary: 4639)
 33 84 85 86 92 96 98 102 105 112
 prop7: used 58 times (necessary: 5)
 21 57 65 273 993
 prop8: used 1196 times (necessary: 6)
 120 136 393 504 528 2016
 prop9: used 3161 times (necessary: 38)
 20 24 54 63 66 68 69 70 72 74
 prop10: used 426 times (necessary: 365)
 51 58 62 87 90 93 94 106 108 110
 prop11: used 171 times (necessary: 161)
 116 118 164 894 1030 1092 1140 1210 1214 1222
 prop12: used 1516 times (necessary: 1462)
 91 133 155 189 205 215 231 237 259 275
 prop13: used 1 time (necessary: 1)
 135

nmax(d):

2 6
 3 14
 4 52
 5 62
 6 90
 7 2862
 8 7768

2 squares not known

2 6

3 squares not known

2 3 6 10 14

4 squares not known

2 3 4 6 10 14 18 20 22 24
 26 28 30 33 34 38 42 44 52

5 squares not known

2 3 4 5 6 10 14 15 18 20
 21 22 24 26 28 30 33 34 35 36
 38 39 40 42 44 45 46 48 51 52
 54 60 62

6 squares not known

2 3 4 5 6 10 12 14 15 18
 20 21 22 24 26 28 30 33 34 35
 36 38 39 40 42 44 45 46 48 51
 52 54 55 58 60 62 66 68 69 74
 75 76 90

7 squares not known

2	3	4	5	6	7	10	12	14	15
18	20	21	22	24	26	28	30	33	34
35	36	38	39	40	42	44	45	46	48
50	51	52	54	55	58	60	62	63	66
68	69	70	74	75	76	77	78	84	85
86	87	90	92	93	94	95	98	102	106
108	110	111	114	116	118	119	122	123	124
126	130	132	134	138	140	142	146	148	150
154	156	158	159	162	164	166	170	172	174
175	178	180	182	183	186	188	190	194	196
198	202	204	206	210	212	214	218	220	222
226	228	230	234	236	238	242	244	246	250
252	254	258	260	262	266	268	270	274	276
278	282	284	286	290	291	292	294	295	298
300	302	303	306	308	310	314	316	318	322
324	326	330	332	334	335	338	340	346	348
354	356	358	362	364	366	370	372	374	378
380	382	386	388	390	394	396	398	402	406
410	418	420	422	426	428	430	434	436	438
442	444	446	450	452	454	458	460	462	466
468	470	474	476	478	482	484	486	490	492
494	498	500	506	508	510	514	516	518	522
524	526	530	532	534	542	546	548	550	554
556	558	562	564	566	570	572	574	578	580
582	586	588	594	596	604	610	612	614	618
620	622	626	628	630	634	636	638	642	644
646	650	652	654	658	660	662	666	668	670
674	676	678	682	684	686	690	692	694	698
700	702	706	708	710	716	718	734	740	742
748	750	754	756	758	762	764	766	770	772
774	778	780	796	802	804	806	810	812	814
818	820	822	826	828	830	834	836	842	844
852	866	868	876	884	914	950	958	966	982
994	1006	1012	1020	1022	1026	1034	1076	1078	1084
1086	1094	1102	1110	1114	1118	1126	1132	1180	1182
1190	1198	1202	1206	1230	1238	1242	1246	1250	1254
1258	1260	1262	1326	1332	1412	1420	1422	1430	1438
1442	1446	1454	1460	1462	1478	1492	1570	1612	1614
1622	1630	1706	1718	1722	1724	1726	1734	1740	1742
1750	2270	2406	2410	2758	2762	2766	2774	2780	2862

8 squares not known

2	3	4	5	6	7	8	10	12	14
15	18	20	21	22	24	26	28	30	33
34	35	36	38	39	40	42	44	45	48
48	50	51	52	54	55	56	57	58	60
62	63	65	66	68	69	70	72	74	75
76	77	78	80	84	85	86	87	88	90
91	92	93	94	95	96	98	102	104	105
106	108	110	111	112	114	115	116	118	119
120	122	123	124	126	129	130	132	133	134
135	136	138	140	141	142	145	146	147	148
150	152	154	155	156	158	159	160	161	162
164	165	166	168	170	172	174	175	178	180
182	183	184	186	188	189	190	192	194	195
196	198	200	201	202	203	204	205	206	210
212	213	214	215	216	218	220	222	224	226
228	230	231	232	234	235	236	237	238	240
242	244	245	246	248	249	250	252	254	255
258	260	262	264	266	268	270	274	276	278
280	282	284	286	287	290	291	292	294	295
296	298	300	301	302	303	306	308	309	310
312	314	316	318	322	324	326	327	328	329
330	332	334	335	336	338	339	340	344	345
346	348	354	355	356	357	358	360	362	363
364	365	366	370	372	374	376	378	380	382
386	388	390	392	393	394	395	396	398	399
402	405	406	408	410	418	420	422	424	426
427	428	429	430	434	436	438	440	442	444
446	450	452	453	454	456	458	460	462	466
468	469	470	472	474	476	478	482	484	485
486	488	490	492	494	495	498	500	501	504
506	508	510	514	516	518	520	522	524	526
530	532	534	542	545	546	548	550	552	553
554	555	556	558	560	561	562	564	565	566
567	568	570	572	573	574	578	579	580	581
582	584	585	586	588	591	594	596	597	604
610	612	614	616	618	620	622	626	627	628
630	632	633	634	635	636	638	640	642	644
645	646	648	650	651	652	654	655	658	660
662	664	666	668	670	674	676	678	680	682
684	686	690	692	694	696	698	700	702	706
708	710	712	716	718	728	734	735	740	741
742	744	745	746	748	749	750	754	756	758
760	762	764	766	770	772	774	778	780	782
790	796	802	804	806	808	810	812	814	818
819	820	822	824	826	828	830	834	835	836
840	842	844	845	852	858	866	868	870	872
874	876	878	882	884	886	888	890	894	896
898	904	906	914	920	921	930	932	933	934
935	936	938	939	940	942	946	948	950	952
954	956	958	964	966	968	982	994	996	1000

1006	1012	1016	1018	1020	1022	1026	1028	1030	1032
1034	1036	1038	1042	1044	1046	1048	1050	1052	1058
1059	1060	1068	1070	1074	1076	1078	1080	1082	1084
1086	1092	1094	1096	1102	1106	1108	1110	1112	1114
1116	1118	1122	1124	1126	1128	1130	1132	1134	1135
1138	1140	1141	1142	1144	1146	1150	1154	1162	1180
1182	1186	1188	1190	1192	1194	1196	1198	1202	1204
1206	1208	1210	1212	1214	1218	1220	1222	1224	1226
1228	1230	1234	1236	1238	1240	1242	1244	1245	1246
1248	1250	1252	1253	1254	1255	1256	1257	1258	1260
1262	1263	1266	1268	1270	1274	1276	1278	1286	1292
1304	1324	1326	1330	1332	1336	1338	1340	1348	1354
1368	1372	1396	1400	1412	1414	1415	1416	1418	1419
1420	1422	1426	1428	1430	1432	1434	1436	1438	1442
1444	1446	1448	1450	1452	1454	1460	1462	1464	1478
1492	1496	1502	1508	1509	1510	1512	1514	1515	1516
1518	1522	1524	1526	1527	1533	1534	1570	1576	1578
1580	1592	1612	1614	1618	1620	1622	1624	1626	1628
1630	1636	1638	1640	1642	1646	1650	1658	1678	1682
1702	1704	1706	1714	1718	1720	1722	1724	1726	1732
1734	1736	1738	1740	1742	1746	1750	1752	1754	1756
1758	1762	1764	1766	1768	1770	1772	1774	1778	1780
1782	1784	1786	1788	1790	1796	1798	1800	1802	1804
1806	1810	1814	1816	1818	1820	1822	1828	1832	1834
1836	1850	1912	1925	1926	1929	1930	1935	1942	1946
1948	1954	1956	1958	1960	1962	1964	1966	1970	1972
1974	1976	1978	1980	1982	1986	1988	1992	1998	2004
2005	2008	2010	2022	2056	2062	2068	2070	2072	2074
2076	2084	2092	2098	2116	2122	2134	2140	2142	2146
2150	2152	2154	2156	2158	2162	2164	2166	2174	2180
2182	2184	2186	2236	2246	2252	2258	2266	2270	2308
2314	2318	2326	2328	2332	2338	2340	2342	2343	2344
2346	2348	2380	2386	2396	2398	2402	2404	2406	2408
2410	2412	2418	2420	2428	2434	2436	2438	2446	2452
2454	2456	2470	2506	2562	2566	2568	2580	2588	2658
2660	2662	2664	2666	2668	2670	2710	2722	2724	2732
2738	2740	2742	2744	2746	2748	2750	2756	2758	2762
2764	2766	2774	2780	2794	2798	2810	2814	2822	2824
2828	2834	2836	2844	2846	2852	2854	2856	2858	2860
2862	2866	2870	2902	2908	2918	2920	2924	2926	2936
2942	2948	2950	2952	2954	2956	2958	2962	2966	2968
2970	2972	2974	2980	2984	2986	2988	2994	3062	3064
3106	3118	3122	3124	3126	3128	3130	3134	3146	3166
3238	3244	3250	3256	3258	3262	3268	3270	3278	3286
3288	3304	3310	3320	3386	3434	3436	3464	3466	3470
3474	3554	3560	3566	3572	3578	3580	3590	3596	3608
3614	3620	3622	3624	3626	3628	3630	3634	3638	3640
3642	3644	3646	3652	3654	3656	3658	3660	3662	3730
3734	3736	3738	3740	3742	3748	3750	3754	3756	3758
3766	3772	3786	3790	3796	3802	3806	3890	3896	3910
3914	3926	3930	3932	4056	4124	4126	4136	4138	4146
4152	4154	4180	4184	4190	4198	4200	4202	4204	4206
4210	4216	4218	4220	4228	4230	4232	4234	4236	4238
4242	4246	4250	4252	4254	4394	4396	4402	4414	4420
4424	4428	4438	4454	4466	4472	4478	4484	4488	4490
4498	4502	4508	4510	4520	4524	4526	4580	4586	4588
4594	4598	4600	4602	4604	4606	4626	4738	4846	4850
4922	4936	5028	5030	5036	5038	5042	5044	5046	5050
5052	5060	5068	5074	5092	5098	5138	5144	5146	5148
5324	5350	5362	5414	5420	5542	5564	5668	5704	5734
5740	5746	5912	6184	6302	6316	6328	6330	6556	6844
7192	7378	7384	7388	7454	7464	7466	7474	7528	7768

References MOLS

G. Tarry

Le problème des 36 officiers,
C.R. Assoc. Fr. Av. Sci. 1 (1900) 122-123, 2 (1901) 170-203.
{ $N(6) = 1$. }

H.F. MacNeish

Euler squares,
Ann. Math. 23 (1922) 221-227.

R.C. Bose & S.S. Shrikhande

On the construction of sets of mutually orthogonal Latin squares
and the falsity of a conjecture of Euler,
Trans. Am. Math. Soc. 95 (1960) 191-209.

R.C. Bose, S.S. Shrikhande & E.T. Parker

Further results on the construction of mutually orthogonal
Latin squares and the falsity of Euler's conjecture,
Canad. J. Math. 12 (1960) 189-203.
{ $N(v) \geq 2$ unless $v = 2$ or $v = 6$. }

S. Chowla, P. Erdős & E.G. Straus,

On the maximal number of pairwise orthogonal Latin squares
of a given order,
Canad. J. Math. 12 (1960) 204-208.
{ $N(v) \geq s$ for $v \geq n(s)$. }

Diana M. Johnson, A.L. Dulmage & N.S. Mendelsohn,

Orthomorphisms of groups and orthogonal Latin squares, I
Canad. J. Math. 13 (1961) 356-372.
{ $N(12) \geq 5$. }

Chi-Chi Shin

A method of constructing orthogonal Latin squares (Chinese),
Shuxue Jinzhan 8 (1965) 98-104.
{ $N(v) \geq 3$ for $v = 46, 93, 106, 118, 159$. }

H. Hanani

On the number of orthogonal Latin squares,
J. Combinatorial Theory 8 (1970) 247-271.
{ $n(5) \leq 62$, $n(29) \leq 34115553$. }

A. Hedayat

A set of three mutually orthogonal Latin squares of order 15,
Technometrics 13 (1971) 696-698.
{ $N(15) \geq 3$. }

W.H. Mills

Three mutually orthogonal Latin squares,
J. Combinatorial Theory A 13 (1972) 79-82.
{ $N(v) \geq 3$ when $v \equiv 0, 1 \pmod{4}$. }

J.H. van Lint

Combinatorial Theory Seminar,
Lecture Notes #382, Springer 1974
(page 117: table, and 119: references).
{ $n(7) \leq 5036$. }

R.M. Wilson

Concerning the number of mutually orthogonal Latin squares,
Discrete Math. 9 (1974) 181-198.
{ $n(6) \leq 90$; $n(s) \leq s^{*17}$ for large s . }

R.M. Wilson

A few more squares,
Proc. 5th S-E Conf. Combinatorics, Graph Theory,
and Computing, 1974, pp. 675-680.
{ $N(30) \geq 3$, $N(36) \geq 4$, $N(46) \geq 4$, $N(50) \geq 6$. }

Haim Hanani

Balanced incomplete block designs and related designs,
Discrete Math. 11 (1975) 255-369.

Esther Seiden & Ching-Jung Wu

On Construction of three mutually orthogonal Latin squares
by the method of sum composition,
in: Essays in probability and statistics, S. Ikeda e.a. (eds.),
1976, Shinko Tsusho Co. Ltd. (dist.), Tokyo.

K. Szajowski

The number of orthogonal Latin squares
Applicationes Mathematicae 15 (1976) 85-102.
{ $N(v) \geq 7$ for v odd, $v > 303$ except perhaps $v = 335, 427, 469$.
 $N(v) \geq 15$ for v odd, $v > 54047$. }

Mieczyslaw Wojtas

On seven mutually orthogonal Latin squares,
Discrete Math. 20 (1977) 193-201.
{ $n(7) \leq 4922$; $N(427) \geq 7$, $N(469) \geq 7$. }

W.H. Mills

Some mutually orthogonal Latin squares
Proc. 8th S-E Conf. Combinatorics, Graph Theory,
and Computing, 1977, pp. 473-487.
{ $N(39) \geq 4$, $N(48) \geq 4$, $N(55) \geq 5$, $N(56) \geq 7$. }

S.M.P. Wang & R.M. Wilson

A few more squares II,
Proc. 9th S-E Conf. Combinatorics, Graph Theory,
and Computing, 1978.
{ $N(v) \geq 3$ for $v = 18, 22, 26, 34, 38, 42$ and hence
for all $v > 14$. }

P.J. Schellenberg, G.H.J. van Rees & S.A. Vanstone

Four pairwise orthogonal Latin squares of order 15.
(preprint, 1978)
{ $N(15) \geq 4$. }

R.C. Mullin, P.J. Schellenberg, D.R. Stinson & S.A. Vanstone

Some results on the existence of squares.
(preprint, 1978)
{ $N(82) \geq 8$, $N(100) \geq 8$; $n(7) \leq 4146$, $n(8) \leq 9402$. }

R.C. Mullin & D.R. Stinson

On the existence of 7 and 8 pairwise orthogonal Latin squares,
Research report CORR 78/14, University of Waterloo.

G.H.J. van Rees

A corollary to a theorem of Wilson,
Research report CORR 78/15, University of Waterloo.

ONTVANGEN 2 8 SEP. 1978