Tables of sizes of small complete arcs in the plane $PG(2, q)$, $q \leq 190027$, obtained by an algorithm with fixed order of points (FOP)

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Abstract

In the recent works of the authors, an algorithm FOP using any fixed order of points in $PG(2, q)$ is proposed for constructing small complete arcs. The algorithm is based on an intuitive postulate that $PG(2, q)$ contains a sufficient number of relatively small complete arcs. Also, in these works, it is shown that the type of order on the points of $PG(2, q)$ is not relevant. In this work we collect the sizes of complete arcs obtained by the algorithm FOP with the lexicographical and the Singer orders of points in the following regions:

Lexicographical order: $3 \leq q \leq 67993$, $q$ prime;
Lexicographical order: 43 sporadic prime $q$’s in the interval $[69997 \ldots 190027]$;
Singer order: $5 \leq q \leq 40009$, $q$ prime.

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1 Introduction

Let $PG(2, q)$ be the projective plane over the Galois field $F_q$. An $n$-arc is a set of $n$ points no three of which are collinear. An $n$-arc is called complete if it is not contained in an $(n+1)$-arc of $PG(2, q)$. For an introduction to projective geometries over finite fields see [27, 47, 49].

In [29, 55] the close relationship among the theory of $n$-arcs, coding theory, and mathematical statistics is presented. In particular, a complete arc in a plane $PG(2, q)$, the points of which are treated as 3-dimensional $q$-ary columns, defines a parity check matrix of a $q$-ary linear code with codimension 3, Hamming distance 4, and covering radius 2. Arcs can be interpreted as linear maximum distance separable (MDS) codes [53, Sec. 7], [56] and they are related to optimal covering arrays [25] and to superregular matrices [30].

One of the main problems in the study of projective planes, which is also of interest in coding theory, is finding of the spectrum of possible sizes of complete arcs. In particular, the value of $t_2(2, q)$, the smallest size of a complete arc in $PG(2, q)$, is interesting. Finding estimates of the minimum size $t_2(2, q)$ is a hard open problem.

This work is devoted to upper bounds for $t_2(2, q)$.

Surveys of results on the sizes of plane complete arcs, methods of their construction and comprehension of the relating properties can be found in [5–8, 10, 13, 14, 19, 26, 27, 29, 31, 34, 40, 42, 44, 47, 54]. Some problems connected with small complete plane arcs are considered in [11, 14, 18, 15, 16, 20, 23, 26, 27, 29, 31, 32, 39, 41, 46, 57].

The exact values of $t_2(2, q)$ are known only for $q \leq 32$; see [2, 18, 24, 27, 28, 33, 35, 36] and recent work [11] where the equalities $t_2(2, 31) = t_2(2, 32) = 14$ are established.

Let $t(P_q)$ be the size of the smallest complete arc in any (not necessarily Galois) projective plane $P_q$ of order $q$. In [31], for sufficiently large $q$, the following result is proved by probabilistic methods (we give it in the form of [29, Table 2.6] taking into account that all logarithms in [31] have natural base, see [31, p. 10]):

$$t(P_q) \leq D \sqrt{q \ln C} q, \quad C \leq 300,$$

where $C$ and $D$ are constants independent of $q$ (so-called universal or absolute constants). The authors of [31] conjecture that the constant can be reduced to $C = 10$. A survey and an analysis of random constructions for geometrical objects can be found in [21]; see also the references therein.

Regarding complete arcs of sizes smaller than $\frac{1}{3}q$ obtained by algebraic constructions, following [29, p. 209], complete arcs in $PG(2, q)$ have been constructed with sizes approximately $\frac{1}{3}q$ (see [11, 15, 32, 50, 51, 57]), $\frac{1}{7}q$ (see [5, 32, 52]), $2q^{0.9}$ (see [50] where such arcs are constructed for $q > 7^{10}$). It is noted in [21, Sec. 8], that the smallest size of a complete arc in $PG(2, q)$ obtained via algebraic constructions is $cq^{3/4}$ where $c$ is a universal constant; see [52, Sec. 3] and [53, Th. 6.8].
In [5,6], for large ranges of $q$, the form of the bound of (1.1) is applied but the value of the constant $C$ was essentially reduced to $C = 0.75$ [5] and to $C = 0.73$ [6] whereas $D < 1$. In particular, the following results are obtained in [5,6] using randomized greedy algorithms:

$$t_2(2, q) < \sqrt{q} \ln^{0.75} q \quad \text{for} \quad 23 \leq q \leq 5107 \ [5];$$  \hfill (1.2)

$$t_2(2, q) < \sqrt{q} \ln^{0.73} q \quad \text{for} \quad 109 \leq q \leq 13627 \ [6].$$  \hfill (1.3)

In [4], the smallest known sizes of complete arcs in $PG(2, q)$ (up to November 2013) are collected for the following huge region $H$:

$$H = \{q : 173 \leq q \leq 49727, \ q \text{ power prime}\} \cup \{q : 173 \leq q \leq 125003, \ q \text{ prime}\} \cup \{59 \text{ sporadic prime } q\text{'s in the interval } [125101 \ldots 360007], \text{ see } [4, \text{ Table 7}]\}.$$  \hfill (1.4)

The data collected in [4-6] provide the following result.

$$t_2(2, q) < \sqrt{q} \ln^{0.7295} q \quad \text{for} \quad 109 \leq q \leq 169 \text{ and } q \in H.$$  \hfill (1.5)

In the recent works of the authors, see [8-10], a new algorithm FOP (fixed order of points) constructing small complete arcs in $PG(2, q)$ is proposed. The lexicographical and the Singer fixed orders are investigated. We briefly describe the algorithm and the orders of points in Section 2.

In the following we use the notations $t_2^L(2, q)$ and $t_2^S(2, q)$ in order to represent the results obtained by the algorithm FOP with the lexicographical order and the Singer order, respectively.

In this work we collect sizes of small complete arcs in $PG(2, q)$ obtained by the algorithm FOP in the following regions $L$ and $S$ (see [8-10]):

**Lexicographical order:** $L = \{q : 3 \leq q \leq 67993, \ q \text{ prime}\} \cup \{43 \text{ sporadic prime } q\text{'s in the interval } [69997 \ldots 190027], \text{ see Table 2}\}$

**Singer order:** $S = \{q : 5 \leq q \leq 40009, \ q \text{ prime}\}.$  \hfill (1.6)

(1.7)

The collected sizes are represented in Tables 1–3 and on Figures 1 and 2.

From Tables 1–3 and Figures 1 and 2 it follows that

$$t_2(2, q) < t_2^L(2, q) < 1.83 \sqrt{q \ln q} \quad \text{if} \quad q \in L,$$  \hfill (1.8)

$$t_2(2, q) < t_2^S(2, q) < 1.83 \sqrt{q \ln q} \quad \text{if} \quad q \in S.$$  \hfill (1.9)

Tables 1–3 and Figures 1 and 2 confirm the conclusion of the papers [8-10] that the type of order on the points of $PG(2, q)$ is not relevant.
2 Algorithm FOP (fixed order of points)

The new type of algorithm proposed in [8–10] is described in the following. Consider the projective plane $PG(2, q)$ and fix a particular order on its points. The algorithm builds a complete arc iteratively.

Let $K^{(i-1)}$ be the arc obtained on the $(i - 1)$-th step. On the next step, the first point in the fixed order not lying on the bisecants of $K^{(i-1)}$ is added to $K^{(i-1)}$. Suppose that the points of $PG(2, q)$ are ordered as $A_1, A_2, \ldots, A_{q^2+q+1}$. Consider the empty set as root of the search and let $K^{(j)}$ be the partial solution obtained in the $j$-th step, as extension of the root. We put

$$K^{(0)} = \emptyset, \ K^{(1)} = \{A_1\}, \ K^{(2)} = \{A_1, A_2\}, \ m(1) = 2, \ K^{(j+1)} = K^{(j)} \cup \{A_{m(j)}\},$$

$$m(j) = \min\{i \in [m(j - 1) + 1, q^2 + q + 1] | \not\exists P, Q \in K^{(j)} : A_i, P, Q \text{ are collinear}\},$$

that is $m(j)$ is the minimum subscript $i$ such that the corresponding point $A_i$ is not saturated by $K^{(j)}$. The process ends when a complete arc is obtained.

In [8–10] two different types of order on the points of $PG(2, q)$, the lexicographical order and the Singer order, are used.

**Lexicographical order.** Let $q$ be prime and let the elements of the field $\mathbb{F}_q = \{0, 1, \ldots, q - 1\}$ be treated as integers modulo $q$. Let the points $A_i$ of $PG(2, q)$ be represented in homogenous coordinates so that $A_i = (x^{(i)}_0, x^{(i)}_1, x^{(i)}_2), \ x_j \in \mathbb{F}_q$, where the leftmost non-zero element is 1. For $A_i$, we put $i = x^{(i)}_0 q^2 + x^{(i)}_1 q + x^{(i)}_2$. So, the homogenous coordinates of a point $A_i$ are treated as its number $i$ written in the $q$-ary scale of notation.

**Singer order.** The plane $PG(2, q)$ has a cyclic Singer group of order $q^2 + q + 1$. The order associated to the Singer group is the following:

$$A_1 = (1, 0, 0), \ A_{i+1} = T(A_i), \ i = 1, 2, \ldots, q^2 + q,$$

where $T \in PGL(3, q)$ is the collineation with associated matrix

$$\bar{T} = \begin{pmatrix} 0 & 0 & c \\ 1 & 0 & b \\ 0 & 1 & a \end{pmatrix},$$

with $x^3 - ax^2 - bx - c$ minimal polynomial of a primitive element of $F_{q^3}$.

Note that in Coding Theory, greedy codes (or lexicographical codes, or lexicodes) are considered; see e.g. [12, 37, 38, 45, 58] and the references therein. A formal connection of the algorithm FOP with these codes are noted in [S] Remark 2.1.
3 List of tables. Figures

Table 1. The sizes $t_L^L = t_L^L(2, q)$ of complete arcs in planes $\text{PG}(2, q)$, $3 \leq q \leq 67993$, $q$ prime, obtained by the algorithm FOP with the lexicographical order of points, pp. 8–40.

Table 2. The sizes $t_L^L = t_L^L(2, q)$ of complete arcs in planes $\text{PG}(2, q)$, sporadic $69997 \leq q \leq 190027$, $q$ prime, obtained by the algorithm FOP with the lexicographical order of points, p. 41.

Table 3. The sizes $t_S^S = t_S^S(2, q)$ of complete arcs in planes $\text{PG}(2, q)$, $5 \leq q \leq 40009$, $q$ prime, obtained by the algorithm FOP with the Singer order of points, pp. 42–61.

Using Tables 1–3 we draw Figures 1 and 2 where, respectively, values $t_L^L(2, q)/\sqrt{q \ln q}$ and $t_S^S(2, q)/\sqrt{q \ln q}$ are represented.
Figure 1: Values $t^L_2(2, q)/\sqrt{q \ln q}$ from complete arcs obtained by the algorithm FOP with the lexicographical order of points.
Figure 2: Values $t_2^S(q)/\sqrt{\ln q}$ from complete arcs obtained by the algorithm FOP with the Singer order of points
4 Tables of values of $t_2^L = t_2^L(2, q)$ and $t_2^S = t_2^S(2, q)$

Table 1 The sizes $t_2^L = t_2^L(2, q)$ of complete arcs in planes $PG(2, q)$, $3 \leq q \leq 67993$, $q$ prime, obtained by the algorithm FOP with the lexicographical order of points

| $q$ | $t_2^L$ | $q$ | $t_2^L$ | $q$ | $t_2^L$ | $q$ | $t_2^L$ | $q$ | $t_2^L$ |
|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|
| 3   | 4       | 12  | 5       | 8    | 14       | 16  | 16       | 11  | 14       |
| 19  | 4       | 12  | 7       | 16   | 14       | 16  | 16       | 11  | 14       |
| 43  | 20      | 22  | 23      | 25   | 25       | 27  | 27       | 27  | 27       |
| 71  | 28      | 27  | 30      | 32   | 32       | 35  | 35       | 35  | 35       |
| 101 | 35      | 37  | 39      | 38   | 38       | 40  | 40       | 40  | 40       |
| 131 | 41      | 44  | 42      | 46   | 46       | 46  | 46       | 46  | 46       |
| 163 | 47      | 48  | 50      | 53   | 53       | 53  | 53       | 53  | 53       |
| 193 | 54      | 52  | 55      | 58   | 58       | 58  | 58       | 58  | 58       |
| 229 | 58      | 58  | 61      | 62   | 62       | 63  | 63       | 63  | 63       |
| 263 | 65      | 64  | 66      | 68   | 68       | 70  | 70       | 70  | 70       |
| 293 | 69      | 70  | 72      | 73   | 73       | 73  | 73       | 73  | 73       |
| 337 | 76      | 77  | 76      | 79   | 79       | 79  | 79       | 79  | 79       |
| 373 | 79      | 80  | 81      | 83   | 83       | 83  | 83       | 83  | 83       |
| 409 | 84      | 86  | 86      | 88   | 88       | 88  | 88       | 88  | 88       |
| 443 | 88      | 89  | 90      | 90   | 90       | 90  | 90       | 90  | 90       |
| 479 | 93      | 93  | 94      | 94   | 94       | 94  | 94       | 94  | 94       |
| 521 | 97      | 100 | 98      | 102  | 102      | 102 | 102      | 102 | 102      |
| 569 | 105     | 106 | 103     | 107  | 107      | 107 | 107      | 107 | 107      |
| 601 | 109     | 105 | 111     | 108  | 108      | 108 | 108      | 108 | 108      |
| 641 | 110     | 114 | 112     | 112  | 112      | 112 | 112      | 112 | 112      |
| 673 | 118     | 115 | 113     | 117  | 117      | 117 | 117      | 117 | 117      |
| 719 | 116     | 120 | 121     | 121  | 121      | 121 | 121      | 121 | 121      |
| 757 | 122     | 124 | 125     | 123  | 123      | 123 | 123      | 123 | 123      |
| 809 | 131     | 129 | 127     | 129  | 129      | 129 | 129      | 129 | 129      |
| 839 | 128     | 130 | 134     | 134  | 134      | 134 | 134      | 134 | 134      |
| 881 | 134     | 133 | 133     | 138  | 138      | 138 | 138      | 138 | 138      |
| 929 | 140     | 139 | 141     | 141  | 141      | 141 | 141      | 141 | 141      |
| 971 | 142     | 143 | 142     | 143  | 143      | 143 | 143      | 143 | 143      |
| 1013| 144     | 146 | 145     | 149  | 149      | 149 | 149      | 149 | 149      |
| 1049| 151     | 147 | 150     | 148  | 148      | 148 | 148      | 148 | 148      |
| 1091| 154     | 154 | 156     | 156  | 156      | 156 | 156      | 156 | 156      |
| 1123| 154     | 154 | 155     | 158  | 158      | 158 | 158      | 158 | 158      |
| 1181| 160     | 165 | 158     | 162  | 162      | 162 | 162      | 162 | 162      |
| 1223| 163     | 163 | 163     | 164  | 164      | 164 | 164      | 164 | 164      |
| 1277| 168     | 164 | 168     | 169  | 169      | 169 | 169      | 169 | 169      |
Table 1 Continue 1

| q  | $t_2^l$ | q  | $t_2^l$ | q  | $t_2^l$ | q  | $t_2^l$ | q  | $t_2^l$ |
|----|--------|----|--------|----|--------|----|--------|----|--------|
| 1301 | 172    | 1303 | 171    | 1307 | 171    | 1319 | 170    | 1321 | 170    | 1327 | 171    |
| 1361 | 175    | 1367 | 176    | 1373 | 173    | 1381 | 175    | 1399 | 178    | 1409 | 177    |
| 1423 | 178    | 1427 | 180    | 1429 | 179    | 1433 | 178    | 1439 | 178    | 1447 | 180    |
| 1451 | 178    | 1453 | 182    | 1459 | 181    | 1471 | 179    | 1481 | 182    | 1483 | 181    |
| 1487 | 181    | 1489 | 182    | 1493 | 185    | 1499 | 183    | 1511 | 183    | 1523 | 186    |
| 1531 | 189    | 1543 | 186    | 1549 | 184    | 1553 | 190    | 1559 | 187    | 1567 | 188    |
| 1571 | 189    | 1579 | 188    | 1583 | 188    | 1597 | 190    | 1601 | 191    | 1607 | 188    |
| 1609 | 194    | 1613 | 193    | 1619 | 191    | 1621 | 193    | 1627 | 191    | 1637 | 189    |
| 1657 | 194    | 1663 | 194    | 1667 | 194    | 1669 | 196    | 1693 | 196    | 1697 | 198    |
| 1699 | 197    | 1709 | 199    | 1721 | 201    | 1723 | 200    | 1733 | 200    | 1741 | 200    |
| 1747 | 200    | 1753 | 201    | 1759 | 201    | 1777 | 203    | 1783 | 205    | 1787 | 208    |
| 1789 | 206    | 1801 | 204    | 1811 | 202    | 1823 | 205    | 1831 | 205    | 1847 | 207    |
| 1861 | 205    | 1867 | 210    | 1871 | 206    | 1873 | 208    | 1877 | 206    | 1879 | 209    |
| 1889 | 209    | 1901 | 212    | 1907 | 209    | 1913 | 212    | 1931 | 215    | 1933 | 214    |
| 1949 | 212    | 1951 | 210    | 1973 | 217    | 1979 | 218    | 1987 | 220    | 1993 | 220    |
| 1997 | 216    | 1999 | 218    | 2003 | 218    | 2011 | 215    | 2017 | 224    | 2027 | 219    |
| 2029 | 217    | 2039 | 219    | 2053 | 216    | 2063 | 223    | 2069 | 220    | 2081 | 220    |
| 2083 | 221    | 2087 | 223    | 2089 | 220    | 2099 | 226    | 2111 | 222    | 2113 | 229    |
| 2129 | 229    | 2131 | 228    | 2137 | 228    | 2141 | 229    | 2143 | 227    | 2153 | 226    |
| 2161 | 227    | 2179 | 226    | 2203 | 233    | 2207 | 230    | 2213 | 231    | 2221 | 233    |
| 2237 | 234    | 2239 | 233    | 2243 | 234    | 2251 | 231    | 2267 | 233    | 2269 | 236    |
| 2273 | 238    | 2281 | 237    | 2287 | 235    | 2293 | 232    | 2297 | 234    | 2309 | 233    |
| 2311 | 240    | 2333 | 236    | 2339 | 239    | 2341 | 239    | 2347 | 237    | 2351 | 236    |
| 2357 | 237    | 2371 | 239    | 2377 | 242    | 2381 | 239    | 2383 | 241    | 2389 | 240    |
| 2393 | 238    | 2399 | 243    | 2411 | 239    | 2417 | 244    | 2423 | 241    | 2437 | 243    |
| 2441 | 246    | 2447 | 245    | 2459 | 248    | 2467 | 243    | 2473 | 248    | 2477 | 244    |
| 2503 | 251    | 2521 | 249    | 2531 | 246    | 2539 | 246    | 2543 | 251    | 2549 | 251    |
| 2551 | 249    | 2557 | 251    | 2579 | 247    | 2591 | 253    | 2593 | 253    | 2609 | 252    |
| 2617 | 255    | 2621 | 255    | 2633 | 254    | 2647 | 256    | 2657 | 259    | 2659 | 254    |
| 2663 | 258    | 2671 | 259    | 2677 | 257    | 2683 | 261    | 2687 | 255    | 2689 | 262    |
| 2693 | 256    | 2699 | 258    | 2707 | 255    | 2711 | 259    | 2713 | 258    | 2719 | 256    |
| 2729 | 262    | 2731 | 263    | 2741 | 261    | 2749 | 261    | 2753 | 263    | 2767 | 265    |
| 2777 | 267    | 2789 | 263    | 2791 | 266    | 2797 | 268    | 2801 | 262    | 2803 | 264    |
| 2819 | 261    | 2833 | 265    | 2837 | 264    | 2843 | 265    | 2851 | 269    | 2857 | 270    |
| 2861 | 264    | 2879 | 269    | 2887 | 272    | 2897 | 270    | 2903 | 269    | 2909 | 270    |
| $q$ | $t_{L_2}$ | $q$ | $t_{L_2}$ | $q$ | $t_{L_2}$ | $q$ | $t_{L_2}$ | $q$ | $t_{L_2}$ |
|-----|-----------|-----|-----------|-----|-----------|-----|-----------|-----|-----------|
| 2917 | 271       | 2917 | 271       | 2917 | 271       | 2917 | 271       | 2917 | 271       |
| 2917 | 271       | 2917 | 271       | 2917 | 271       | 2917 | 271       | 2917 | 271       |
| 2917 | 271       | 2917 | 271       | 2917 | 271       | 2917 | 271       | 2917 | 271       |
| $q$ | $t_2^L$ | $q$ | $t_2^L$ | $q$ | $t_2^L$ | $q$ | $t_2^L$ | $q$ | $t_2^L$ |
|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|
| 4673 | 352    | 4679 | 359    | 4691 | 353    | 4703 | 361    | 4721 | 360    |
| 4729 | 356    | 4733 | 356    | 4751 | 356    | 4759 | 355    | 4783 | 361    |
| 4789 | 359    | 4793 | 360    | 4799 | 361    | 4801 | 362    | 4813 | 361    |
| 4831 | 362    | 4861 | 363    | 4871 | 362    | 4877 | 356    | 4889 | 369    |
| 4909 | 362    | 4919 | 364    | 4931 | 369    | 4933 | 366    | 4937 | 365    |
| 4951 | 363    | 4957 | 366    | 4967 | 366    | 4969 | 370    | 4973 | 369    |
| 4993 | 360    | 4999 | 372    | 5003 | 369    | 5009 | 371    | 5011 | 366    |
| 5023 | 364    | 5039 | 369    | 5051 | 368    | 5059 | 370    | 5077 | 370    |
| 5087 | 370    | 5099 | 369    | 5101 | 370    | 5107 | 371    | 5113 | 370    |
| 5147 | 373    | 5153 | 371    | 5167 | 376    | 5171 | 377    | 5179 | 370    |
| 5197 | 378    | 5209 | 374    | 5227 | 381    | 5231 | 380    | 5233 | 379    |
| 5261 | 374    | 5273 | 378    | 5279 | 375    | 5281 | 380    | 5297 | 381    |
| 5309 | 382    | 5323 | 382    | 5333 | 380    | 5347 | 382    | 5351 | 381    |
| 5387 | 383    | 5393 | 387    | 5399 | 383    | 5407 | 386    | 5413 | 382    |
| 5419 | 387    | 5431 | 392    | 5437 | 385    | 5441 | 383    | 5443 | 388    |
| 5471 | 387    | 5477 | 386    | 5479 | 389    | 5483 | 387    | 5501 | 386    |
| 5507 | 387    | 5519 | 391    | 5521 | 390    | 5527 | 385    | 5531 | 384    |
| 5563 | 391    | 5569 | 389    | 5573 | 390    | 5581 | 394    | 5591 | 394    |
| 5639 | 395    | 5641 | 390    | 5647 | 390    | 5651 | 397    | 5653 | 393    |
| 5659 | 393    | 5669 | 398    | 5683 | 389    | 5689 | 397    | 5693 | 394    |
| 5711 | 395    | 5717 | 393    | 5737 | 398    | 5741 | 401    | 5743 | 402    |
| 5779 | 398    | 5783 | 400    | 5791 | 402    | 5801 | 397    | 5807 | 397    |
| 5821 | 400    | 5827 | 396    | 5839 | 399    | 5843 | 399    | 5849 | 401    |
| 5857 | 400    | 5861 | 404    | 5867 | 401    | 5869 | 402    | 5879 | 400    |
| 5897 | 401    | 5903 | 404    | 5923 | 404    | 5927 | 403    | 5939 | 408    |
| 5981 | 411    | 5987 | 407    | 6007 | 408    | 6011 | 407    | 6029 | 412    |
| 6043 | 413    | 6047 | 411    | 6053 | 414    | 6067 | 413    | 6073 | 410    |
| 6089 | 409    | 6091 | 408    | 6101 | 405    | 6113 | 412    | 6121 | 413    |
| 6133 | 411    | 6143 | 413    | 6151 | 408    | 6163 | 414    | 6173 | 415    |
| 6199 | 419    | 6203 | 412    | 6211 | 421    | 6217 | 412    | 6221 | 417    |
| 6247 | 420    | 6257 | 419    | 6263 | 424    | 6269 | 414    | 6271 | 413    |
| 6287 | 420    | 6299 | 423    | 6301 | 417    | 6311 | 422    | 6317 | 418    |
| 6329 | 423    | 6337 | 424    | 6343 | 413    | 6353 | 421    | 6359 | 420    |
| 6367 | 421    | 6373 | 423    | 6379 | 421    | 6389 | 423    | 6397 | 422    |
| 6427 | 425    | 6449 | 422    | 6451 | 422    | 6469 | 425    | 6473 | 427    |

Table 1 Continue 3
Table 1 Continue 4

| $q$  | $t_{L}^2$ | $q$  | $t_{L}^2$ | $q$  | $t_{L}^2$ | $q$  | $t_{L}^2$ | $q$  | $t_{L}^2$ |
|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|
| 6491 | 427      | 6521 | 429      | 6547 | 430      | 6551 | 427      | 6553 | 425      |
| 6563 | 428      | 6567 | 430      | 6577 | 426      | 6581 | 429      | 6599 | 433      |
| 6607 | 431      | 6619 | 432      | 6637 | 432      | 6653 | 429      | 6659 | 433      | 6661 | 433 |
| 6673 | 433      | 6679 | 428      | 6689 | 432      | 6691 | 431      | 6701 | 433      | 6703 | 431 |
| 6709 | 440      | 6719 | 437      | 6733 | 435      | 6737 | 432      | 6761 | 438      | 6763 | 435 |
| 6779 | 436      | 6781 | 437      | 6791 | 438      | 6793 | 441      | 6803 | 438      | 6823 | 437 |
| 6827 | 443      | 6829 | 438      | 6833 | 444      | 6841 | 435      | 6857 | 437      | 6863 | 438 |
| 6869 | 435      | 6871 | 439      | 6883 | 439      | 6899 | 440      | 6907 | 439      | 6911 | 443 |
| 6917 | 444      | 6947 | 443      | 6949 | 439      | 6959 | 445      | 6961 | 442      | 6967 | 437 |
| 6971 | 445      | 6977 | 446      | 6983 | 442      | 6991 | 441      | 6997 | 445      | 7001 | 442 |
| 7013 | 443      | 7019 | 443      | 7027 | 449      | 7039 | 443      | 7043 | 449      | 7057 | 444 |
| 7069 | 448      | 7079 | 456      | 7103 | 447      | 7109 | 445      | 7121 | 447      | 7127 | 448 |
| 7129 | 450      | 7151 | 451      | 7159 | 449      | 7177 | 455      | 7187 | 450      | 7193 | 450 |
| 7207 | 450      | 7211 | 452      | 7213 | 452      | 7219 | 452      | 7229 | 457      | 7237 | 455 |
| 7243 | 454      | 7247 | 454      | 7253 | 454      | 7283 | 455      | 7297 | 455      | 7307 | 457 |
| 7309 | 454      | 7321 | 453      | 7331 | 457      | 7333 | 459      | 7349 | 460      | 7351 | 458 |
| 7369 | 460      | 7393 | 456      | 7411 | 454      | 7417 | 462      | 7433 | 465      | 7451 | 458 |
| 7457 | 462      | 7459 | 457      | 7477 | 458      | 7481 | 464      | 7487 | 461      | 7489 | 464 |
| 7499 | 463      | 7507 | 463      | 7517 | 466      | 7523 | 464      | 7529 | 468      | 7537 | 462 |
| 7541 | 460      | 7547 | 464      | 7549 | 465      | 7559 | 465      | 7561 | 462      | 7573 | 464 |
| 7577 | 465      | 7583 | 464      | 7589 | 462      | 7591 | 463      | 7603 | 464      | 7607 | 467 |
| 7621 | 465      | 7639 | 470      | 7643 | 465      | 7649 | 470      | 7669 | 471      | 7673 | 467 |
| 7681 | 466      | 7687 | 468      | 7691 | 469      | 7699 | 472      | 7703 | 473      | 7717 | 464 |
| 7723 | 468      | 7727 | 471      | 7741 | 468      | 7753 | 471      | 7757 | 470      | 7759 | 473 |
| 7789 | 469      | 7793 | 469      | 7817 | 472      | 7823 | 473      | 7829 | 476      | 7841 | 479 |
| 7853 | 469      | 7867 | 475      | 7873 | 472      | 7877 | 475      | 7879 | 477      | 7883 | 476 |
| 7901 | 475      | 7907 | 477      | 7919 | 476      | 7927 | 475      | 7933 | 478      | 7937 | 475 |
| 7949 | 473      | 7951 | 475      | 7963 | 480      | 7993 | 478      | 8009 | 481      | 8011 | 478 |
| 8017 | 478      | 8039 | 481      | 8053 | 480      | 8059 | 483      | 8069 | 484      | 8081 | 478 |
| 8087 | 485      | 8089 | 482      | 8093 | 484      | 8101 | 486      | 8111 | 483      | 8117 | 482 |
| 8123 | 482      | 8147 | 482      | 8161 | 483      | 8167 | 485      | 8171 | 485      | 8179 | 488 |
| 8191 | 480      | 8209 | 487      | 8219 | 484      | 8221 | 484      | 8231 | 485      | 8233 | 489 |
| 8237 | 493      | 8243 | 488      | 8263 | 488      | 8269 | 482      | 8273 | 493      | 8287 | 495 |
| 8291 | 487      | 8293 | 488      | 8297 | 488      | 8311 | 494      | 8317 | 491      | 8329 | 486 |
| 8353 | 490      | 8363 | 492      | 8369 | 489      | 8377 | 491      | 8387 | 492      | 8389 | 491 |
| $q$  | $t^L_1$ | $q$  | $t^L_1$ | $q$  | $t^L_1$ | $q$  | $t^L_1$ | $q$  | $t^L_1$ |
|------|---------|------|---------|------|---------|------|---------|------|---------|
| 8419 | 493     | 8423 | 493     | 8429 | 493     | 8431 | 492     | 8443 | 494     | 8447 | 496     |
| 8461 | 491     | 8467 | 493     | 8501 | 492     | 8513 | 497     | 8521 | 497     | 8527 | 505     |
| 8537 | 497     | 8539 | 494     | 8543 | 494     | 8563 | 500     | 8573 | 493     | 8581 | 499     |
| 8597 | 496     | 8599 | 496     | 8609 | 497     | 8623 | 500     | 8627 | 499     | 8629 | 498     |
| 8641 | 503     | 8647 | 507     | 8663 | 504     | 8669 | 503     | 8677 | 503     | 8681 | 502     |
| 8689 | 499     | 8693 | 504     | 8699 | 499     | 8707 | 506     | 8713 | 499     | 8719 | 502     |
| 8731 | 504     | 8737 | 506     | 8741 | 505     | 8747 | 502     | 8753 | 505     | 8761 | 503     |
| 8779 | 502     | 8783 | 505     | 8803 | 508     | 8807 | 511     | 8819 | 504     | 8821 | 503     |
| 8831 | 507     | 8837 | 508     | 8839 | 504     | 8849 | 499     | 8861 | 509     | 8863 | 511     |
| 8867 | 507     | 8887 | 515     | 8893 | 511     | 8923 | 514     | 8929 | 510     | 8933 | 509     |
| 8941 | 511     | 8951 | 508     | 8963 | 509     | 8969 | 507     | 8971 | 515     | 8999 | 512     |
| 9001 | 513     | 9007 | 514     | 9011 | 511     | 9013 | 510     | 9029 | 512     | 9041 | 513     |
| 9043 | 510     | 9049 | 513     | 9059 | 517     | 9067 | 516     | 9091 | 513     | 9103 | 512     |
| 9109 | 517     | 9127 | 510     | 9133 | 518     | 9137 | 521     | 9151 | 511     | 9157 | 518     |
| 9161 | 516     | 9173 | 518     | 9181 | 525     | 9187 | 519     | 9199 | 517     | 9203 | 519     |
| 9209 | 517     | 9221 | 514     | 9227 | 522     | 9239 | 521     | 9241 | 528     | 9257 | 519     |
| 9277 | 520     | 9281 | 518     | 9283 | 518     | 9293 | 528     | 9311 | 521     | 9319 | 520     |
| 9323 | 524     | 9337 | 520     | 9341 | 522     | 9343 | 522     | 9349 | 519     | 9371 | 523     |
| 9377 | 524     | 9391 | 523     | 9397 | 522     | 9403 | 520     | 9413 | 525     | 9419 | 523     |
| 9421 | 525     | 9431 | 527     | 9433 | 529     | 9437 | 522     | 9439 | 526     | 9461 | 524     |
| 9463 | 524     | 9467 | 526     | 9473 | 529     | 9479 | 529     | 9491 | 530     | 9497 | 528     |
| 9511 | 525     | 9521 | 525     | 9533 | 534     | 9539 | 533     | 9547 | 533     | 9551 | 530     |
| 9587 | 531     | 9601 | 534     | 9613 | 532     | 9619 | 528     | 9623 | 532     | 9629 | 529     |
| 9631 | 533     | 9643 | 532     | 9649 | 531     | 9661 | 532     | 9677 | 533     | 9679 | 530     |
| 9689 | 537     | 9697 | 527     | 9719 | 530     | 9721 | 531     | 9733 | 535     | 9739 | 530     |
| 9743 | 531     | 9749 | 540     | 9767 | 536     | 9769 | 538     | 9781 | 536     | 9787 | 540     |
| 9791 | 540     | 9803 | 540     | 9811 | 533     | 9817 | 539     | 9829 | 539     | 9833 | 539     |
| 9839 | 537     | 9851 | 542     | 9857 | 540     | 9859 | 535     | 9871 | 537     | 9883 | 536     |
| 9887 | 539     | 9901 | 538     | 9907 | 537     | 9923 | 545     | 9929 | 542     | 9931 | 540     |
| 9941 | 538     | 9949 | 541     | 9967 | 541     | 9973 | 538     | 10007 | 544     | 10009 | 543     |
| 10037 | 542    | 10039 | 541    | 10061 | 543    | 10067 | 544    | 10069 | 544    | 10079 | 546     |
| 10091 | 544    | 10093 | 545    | 10099 | 547    | 10103 | 546    | 10111 | 549    | 10133 | 551     |
| 10139 | 550    | 10141 | 549    | 10151 | 548    | 10159 | 551    | 10163 | 546    | 10169 | 544     |
| 10177 | 553    | 10181 | 546    | 10193 | 550    | 10211 | 550    | 10223 | 551    | 10243 | 546     |
| 10247 | 552    | 10253 | 545    | 10259 | 551    | 10267 | 559    | 10271 | 547    | 10273 | 553     |
| $q$  | $t_2^L$ | $q$  | $t_2^L$ | $q$  | $t_2^L$ | $q$  | $t_2^L$ | $q$  | $t_2^L$ |
|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|
| 10289 | 559 | 10301 | 552 | 10303 | 552 | 10313 | 551 | 10321 | 553 |
| 10333 | 552 | 10337 | 550 | 10343 | 553 | 10357 | 558 | 10369 | 559 |
| 10399 | 559 | 10427 | 560 | 10429 | 561 | 10433 | 557 | 10453 | 561 |
| 10459 | 556 | 10463 | 561 | 10477 | 557 | 10487 | 563 | 10499 | 560 |
| 10513 | 558 | 10529 | 564 | 10531 | 560 | 10559 | 565 | 10567 | 556 |
| 10597 | 557 | 10601 | 565 | 10607 | 560 | 10613 | 560 | 10627 | 560 |
| 10639 | 557 | 10651 | 557 | 10657 | 564 | 10663 | 563 | 10667 | 564 |
| 10691 | 562 | 10709 | 566 | 10711 | 564 | 10723 | 564 | 10729 | 567 |
| 10739 | 567 | 10753 | 563 | 10771 | 568 | 10781 | 570 | 10789 | 565 |
| 10831 | 573 | 10837 | 566 | 10847 | 571 | 10853 | 571 | 10859 | 573 |
| 10867 | 568 | 10883 | 571 | 10889 | 570 | 10891 | 573 | 10903 | 569 |
| 10937 | 568 | 10939 | 570 | 10949 | 571 | 10957 | 574 | 10973 | 575 |
| 10987 | 573 | 10993 | 578 | 11003 | 574 | 11027 | 571 | 11047 | 581 |
| 11059 | 571 | 11069 | 574 | 11071 | 578 | 11083 | 579 | 11087 | 573 |
| 11113 | 574 | 11117 | 577 | 11131 | 573 | 11149 | 582 | 11159 | 571 |
| 11161 | 573 | 11171 | 576 | 11173 | 575 | 11177 | 581 | 11197 | 577 |
| 11239 | 579 | 11243 | 577 | 11251 | 577 | 11257 | 578 | 11261 | 585 |
| 11279 | 578 | 11287 | 588 | 11299 | 582 | 11311 | 579 | 11317 | 577 |
| 11329 | 583 | 11351 | 581 | 11353 | 587 | 11369 | 581 | 11383 | 585 |
| 11399 | 590 | 11411 | 591 | 11423 | 584 | 11437 | 589 | 11443 | 592 |
| 11467 | 588 | 11471 | 585 | 11483 | 585 | 11489 | 586 | 11491 | 582 |
| 11503 | 592 | 11519 | 586 | 11527 | 587 | 11549 | 592 | 11551 | 596 |
| 11587 | 585 | 11593 | 587 | 11597 | 590 | 11617 | 589 | 11621 | 588 |
| 11657 | 599 | 11677 | 594 | 11681 | 588 | 11689 | 593 | 11699 | 589 |
| 11717 | 595 | 11719 | 594 | 11731 | 591 | 11743 | 595 | 11777 | 594 |
| 11783 | 599 | 11789 | 594 | 11801 | 592 | 11807 | 595 | 11813 | 595 |
| 11827 | 596 | 11831 | 597 | 11833 | 597 | 11839 | 595 | 11863 | 599 |
| 11887 | 595 | 11897 | 600 | 11903 | 605 | 11909 | 599 | 11923 | 597 |
| 11933 | 596 | 11939 | 601 | 11941 | 596 | 11953 | 597 | 11959 | 601 |
| 11971 | 602 | 11981 | 596 | 11987 | 603 | 12007 | 602 | 12011 | 603 |
| 12041 | 602 | 12043 | 606 | 12049 | 599 | 12071 | 609 | 12073 | 609 |
| 12101 | 606 | 12107 | 605 | 12109 | 604 | 12113 | 602 | 12119 | 600 |
| 12149 | 605 | 12157 | 602 | 12161 | 604 | 12163 | 605 | 12197 | 606 |
| 12211 | 609 | 12227 | 612 | 12239 | 613 | 12241 | 610 | 12251 | 603 |
| 12263 | 616 | 12269 | 607 | 12277 | 606 | 12281 | 611 | 12289 | 609 |

Table 1 Continues 6
Table 1 Continue 7

| $q$  | $t_2^L$ | $q$  | $t_2^L$ | $q$  | $t_2^L$ | $q$  | $t_2^L$ | $q$  | $t_2^L$ |
|------|---------|------|---------|------|---------|------|---------|------|---------|
| 12323| 609     | 12329| 613     | 12343| 611     | 12347| 611     | 12373| 608     |
| 12379| 608     | 12391| 611     | 12401| 613     | 12409| 616     | 12413| 618     |
| 12433| 616     | 12437| 618     | 12451| 611     | 12457| 612     | 12473| 617     |
| 12487| 614     | 12491| 614     | 12497| 609     | 12503| 614     | 12511| 613     |
| 12527| 615     | 12539| 620     | 12541| 620     | 12547| 612     | 12553| 615     |
| 12577| 619     | 12583| 620     | 12589| 621     | 12601| 618     | 12611| 619     |
| 12619| 615     | 12637| 621     | 12641| 617     | 12647| 623     | 12653| 623     |
| 12671| 616     | 12689| 621     | 12697| 624     | 12703| 621     | 12713| 616     |
| 12739| 618     | 12743| 623     | 12757| 619     | 12763| 630     | 12781| 621     |
| 12799| 629     | 12809| 626     | 12821| 626     | 12823| 623     | 12829| 629     |
| 12853| 625     | 12889| 624     | 12893| 620     | 12899| 630     | 12907| 630     |
| 12917| 634     | 12919| 627     | 12923| 633     | 12941| 631     | 12953| 626     |
| 12967| 627     | 12973| 630     | 12979| 625     | 12983| 626     | 13001| 632     |
| 13007| 629     | 13009| 633     | 13033| 626     | 13037| 634     | 13043| 634     |
| 13063| 628     | 13093| 628     | 13099| 634     | 13103| 628     | 13109| 634     |
| 13127| 636     | 13147| 631     | 13151| 637     | 13159| 634     | 13163| 631     |
| 13177| 632     | 13183| 635     | 13187| 635     | 13217| 633     | 13219| 636     |
| 13241| 636     | 13249| 633     | 13259| 632     | 13267| 630     | 13291| 644     |
| 13309| 637     | 13313| 631     | 13327| 636     | 13331| 634     | 13337| 638     |
| 13367| 637     | 13381| 649     | 13397| 635     | 13399| 640     | 13411| 645     |
| 13421| 644     | 13441| 635     | 13451| 644     | 13457| 641     | 13463| 638     |
| 13477| 645     | 13487| 641     | 13499| 645     | 13513| 644     | 13523| 643     |
| 13553| 647     | 13567| 639     | 13577| 642     | 13591| 643     | 13597| 648     |
| 13619| 644     | 13627| 640     | 13633| 651     | 13649| 647     | 13669| 647     |
| 13681| 653     | 13687| 646     | 13691| 643     | 13693| 645     | 13697| 645     |
| 13711| 650     | 13721| 651     | 13723| 648     | 13729| 650     | 13751| 649     |
| 13759| 656     | 13763| 647     | 13781| 647     | 13789| 653     | 13799| 645     |
| 13829| 652     | 13831| 655     | 13841| 651     | 13859| 646     | 13873| 646     |
| 13879| 648     | 13883| 655     | 13901| 650     | 13903| 653     | 13907| 654     |
| 13921| 652     | 13931| 652     | 13933| 652     | 13963| 651     | 13967| 651     |
| 13999| 657     | 14009| 657     | 14011| 655     | 14029| 657     | 14033| 650     |
| 14057| 659     | 14071| 656     | 14081| 661     | 14083| 652     | 14087| 656     |
| 14143| 660     | 14149| 658     | 14153| 664     | 14159| 660     | 14173| 660     |
| 14197| 660     | 14207| 654     | 14221| 661     | 14243| 658     | 14249| 661     |
| 14281| 665     | 14293| 663     | 14303| 662     | 14321| 660     | 14323| 666     |
| 15   |
Table 1 Continue 8

| $q$  | $t_2^L$ | $q$  | $t_2^L$ | $q$  | $t_2^L$ | $q$  | $t_2^L$ | $q$  | $t_2^L$ |
|------|---------|------|---------|------|---------|------|---------|------|---------|
| 14341| 667     | 14347| 664     | 14387| 672     | 14389| 663     | 14401| 665     |
| 14407| 669     | 14411| 661     | 14423| 671     | 14431| 667     | 14437| 666     |
| 14447| 672     | 14449| 670     | 14479| 670     | 14489| 668     | 14503| 666     |
| 14519| 671     | 14533| 674     | 14537| 670     | 14543| 668     | 14549| 669     | 14551| 676     |
| 14557| 669     | 14561| 669     | 14563| 670     | 14591| 670     | 14593| 669     | 14621| 675     |
| 14627| 673     | 14629| 675     | 14633| 670     | 14639| 676     | 14653| 668     | 14657| 671     |
| 14669| 674     | 14683| 676     | 14699| 676     | 14713| 671     | 14717| 675     | 14723| 673     |
| 14731| 671     | 14737| 681     | 14741| 672     | 14747| 679     | 14753| 681     | 14759| 676     |
| 14767| 670     | 14771| 671     | 14779| 675     | 14783| 677     | 14797| 676     | 14813| 684     |
| 14821| 684     | 14827| 676     | 14831| 677     | 14843| 671     | 14851| 676     | 14867| 679     |
| 14869| 680     | 14879| 676     | 14887| 676     | 14891| 680     | 14897| 680     | 14923| 681     |
| 14929| 681     | 14939| 683     | 14947| 680     | 14951| 679     | 14957| 676     | 14969| 685     |
| 14983| 684     | 15013| 680     | 15017| 680     | 15031| 683     | 15053| 682     | 15061| 682     |
| 15073| 681     | 15077| 680     | 15083| 679     | 15091| 686     | 15101| 679     | 15107| 685     |
| 15121| 682     | 15131| 679     | 15137| 682     | 15139| 692     | 15149| 687     | 15161| 688     |
| 15173| 689     | 15187| 680     | 15193| 680     | 15199| 683     | 15217| 691     | 15227| 687     |
| 15233| 683     | 15241| 687     | 15259| 689     | 15263| 691     | 15269| 690     | 15271| 687     |
| 15277| 688     | 15287| 685     | 15289| 684     | 15299| 691     | 15307| 689     | 15313| 693     |
| 15319| 691     | 15329| 692     | 15331| 688     | 15349| 683     | 15359| 688     | 15361| 685     |
| 15373| 688     | 15377| 687     | 15383| 690     | 15391| 693     | 15401| 689     | 15413| 696     |
| 15427| 699     | 15439| 691     | 15443| 691     | 15451| 701     | 15461| 691     | 15467| 690     |
| 15473| 692     | 15493| 698     | 15497| 696     | 15511| 686     | 15527| 692     | 15541| 691     |
| 15551| 692     | 15559| 696     | 15569| 693     | 15581| 694     | 15583| 702     | 15601| 698     |
| 15607| 698     | 15619| 694     | 15629| 699     | 15641| 691     | 15643| 695     | 15647| 702     |
| 15649| 698     | 15661| 698     | 15667| 703     | 15671| 701     | 15679| 698     | 15683| 699     |
| 15727| 702     | 15731| 697     | 15733| 697     | 15737| 698     | 15739| 705     | 15749| 700     |
| 15761| 703     | 15767| 698     | 15773| 698     | 15787| 695     | 15791| 703     | 15797| 701     |
| 15803| 703     | 15809| 700     | 15817| 697     | 15823| 702     | 15859| 709     | 15877| 699     |
| 15881| 700     | 15887| 707     | 15889| 702     | 15901| 704     | 15907| 709     | 15913| 706     |
| 15919| 706     | 15923| 703     | 15937| 704     | 15959| 706     | 15971| 706     | 15973| 705     |
| 15991| 707     | 16001| 708     | 16007| 711     | 16033| 712     | 16057| 706     | 16061| 702     |
| 16063| 709     | 16067| 707     | 16069| 707     | 16073| 710     | 16087| 710     | 16091| 706     |
| 16097| 706     | 16103| 709     | 16111| 707     | 16127| 714     | 16139| 715     | 16141| 715     |
| 16183| 710     | 16187| 712     | 16189| 711     | 16193| 716     | 16217| 711     | 16223| 717     |
| 16229| 710     | 16231| 709     | 16249| 715     | 16253| 710     | 16267| 716     | 16273| 713     |

16
| \( q \) | \( t^L_2 \) | \( q \) | \( t^L_2 \) | \( q \) | \( t^L_2 \) | \( q \) | \( t^L_2 \) | \( q \) | \( t^L_2 \) |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 16301 706 | 16319 715 | 16333 715 | 16339 719 | 16349 711 | 16361 712 |
| 16363 715 | 16369 714 | 16381 715 | 16411 718 | 16417 709 | 16421 718 |
| 16427 714 | 16433 712 | 16447 715 | 16451 716 | 16453 716 | 16477 715 |
| 16481 714 | 16487 726 | 16493 719 | 16519 724 | 16529 726 | 16547 723 |
| 16553 719 | 16561 718 | 16567 717 | 16573 727 | 16603 717 | 16607 717 |
| 16619 722 | 16631 726 | 16633 719 | 16649 720 | 16651 719 | 16657 725 |
| 16661 725 | 16673 725 | 16691 727 | 16693 720 | 16699 720 | 16703 729 |
| 16729 730 | 16741 723 | 16747 725 | 16759 723 | 16763 735 | 16787 731 |
| 16811 728 | 16823 726 | 16829 731 | 16831 726 | 16843 726 | 16871 726 |
| 16879 725 | 16883 723 | 16889 722 | 16901 735 | 16903 729 | 16921 728 |
| 16927 732 | 16931 727 | 16937 731 | 16943 729 | 16963 732 | 16979 726 |
| 16981 730 | 16987 729 | 16993 728 | 17011 732 | 17021 734 | 17027 730 |
| 17029 735 | 17033 732 | 17041 737 | 17047 733 | 17053 729 | 17077 731 |
| 17093 730 | 17099 732 | 17107 734 | 17117 741 | 17123 732 | 17137 730 |
| 17159 738 | 17167 738 | 17183 740 | 17189 735 | 17191 735 | 17203 733 |
| 17207 734 | 17209 733 | 17231 737 | 17239 742 | 17257 740 | 17291 736 |
| 17293 733 | 17299 739 | 17317 740 | 17321 740 | 17327 741 | 17333 737 |
| 17341 735 | 17351 739 | 17359 742 | 17377 738 | 17383 736 | 17387 741 |
| 17389 739 | 17393 743 | 17401 739 | 17417 737 | 17419 750 | 17431 742 |
| 17443 740 | 17449 735 | 17467 739 | 17471 743 | 17477 740 | 17483 738 |
| 17489 742 | 17491 748 | 17497 742 | 17509 739 | 17519 745 | 17539 735 |
| 17551 742 | 17569 739 | 17573 740 | 17579 744 | 17581 736 | 17597 742 |
| 17599 739 | 17609 746 | 17623 747 | 17627 744 | 17657 748 | 17659 751 |
| 17669 750 | 17681 745 | 17683 749 | 17707 749 | 17713 744 | 17729 755 |
| 17737 750 | 17747 749 | 17749 753 | 17761 745 | 17783 749 | 17789 746 |
| 17791 754 | 17807 752 | 17827 751 | 17837 752 | 17839 754 | 17851 755 |
| 17863 755 | 17881 753 | 17891 754 | 17903 754 | 17909 749 | 17911 753 |
| 17921 753 | 17923 751 | 17929 746 | 17939 754 | 17957 756 | 17959 748 |
| 17971 753 | 17977 754 | 17981 759 | 17987 755 | 17989 761 | 18013 752 |
| 18041 757 | 18043 751 | 18047 755 | 18049 759 | 18059 759 | 18061 758 |
| 18077 752 | 18089 755 | 18097 755 | 18119 754 | 18121 756 | 18127 758 |
| 18131 756 | 18133 754 | 18143 763 | 18149 752 | 18169 757 | 18181 758 |
| 18191 757 | 18199 763 | 18211 758 | 18217 763 | 18223 759 | 18229 756 |
| 18233 760 | 18251 761 | 18253 762 | 18257 764 | 18269 764 | 18287 764 |
| 18289 766 | 18301 758 | 18307 761 | 18311 764 | 18313 758 | 18329 760 |
Table 1 Continue 10

| $q$   | $t_2$ | $q$   | $t_2$ | $q$   | $t_2$ | $q$   | $t_2$ |
|-------|-------|-------|-------|-------|-------|-------|-------|
| 18341 | 760   | 18353 | 761   | 18367 | 762   | 18371 | 761   |
| 18401 | 765   | 18413 | 768   | 18427 | 767   | 18433 | 760   |
| 18451 | 761   | 18457 | 764   | 18461 | 765   | 18481 | 770   |
| 18517 | 766   | 18521 | 763   | 18523 | 768   | 18539 | 769   |
| 18583 | 769   | 18587 | 762   | 18593 | 770   | 18617 | 766   |
| 18671 | 766   | 18679 | 768   | 18691 | 760   | 18701 | 769   |
| 18731 | 773   | 18743 | 774   | 18749 | 772   | 18757 | 776   |
| 18793 | 769   | 18797 | 774   | 18803 | 768   | 18839 | 774   |
| 18899 | 775   | 18911 | 778   | 18913 | 774   | 18917 | 775   |
| 18959 | 775   | 18973 | 776   | 18979 | 778   | 19001 | 775   |
| 19031 | 779   | 19037 | 773   | 19051 | 779   | 19069 | 781   |
| 19081 | 781   | 19087 | 778   | 19121 | 783   | 19139 | 782   |
| 19163 | 782   | 19181 | 783   | 19183 | 781   | 19207 | 777   |
| 19219 | 783   | 19231 | 784   | 19237 | 783   | 19249 | 782   |
| 19273 | 785   | 19289 | 789   | 19301 | 789   | 19309 | 782   |
| 19373 | 788   | 19397 | 781   | 19381 | 782   | 19387 | 786   |
| 19417 | 790   | 19421 | 787   | 19423 | 787   | 19427 | 786   |
| 19441 | 785   | 19447 | 790   | 19457 | 790   | 19463 | 788   |
| 19477 | 792   | 19483 | 783   | 19489 | 789   | 19501 | 788   |
| 19541 | 788   | 19543 | 800   | 19553 | 787   | 19559 | 794   |
| 19583 | 790   | 19597 | 791   | 19603 | 790   | 19609 | 793   |
| 19687 | 790   | 19697 | 796   | 19699 | 794   | 19709 | 791   |
| 19739 | 793   | 19751 | 791   | 19753 | 794   | 19759 | 794   |
| 19793 | 792   | 19801 | 797   | 19813 | 800   | 19819 | 794   |
| 19853 | 801   | 19861 | 798   | 19867 | 808   | 19889 | 793   |
| 19919 | 798   | 19927 | 801   | 19937 | 806   | 19949 | 799   |
| 19973 | 801   | 19979 | 800   | 19991 | 805   | 19993 | 796   |
| 20021 | 796   | 20023 | 798   | 20029 | 799   | 20047 | 799   |
| 20071 | 807   | 20089 | 793   | 20101 | 804   | 20107 | 799   |
| 20123 | 800   | 20129 | 807   | 20143 | 809   | 20147 | 805   |
| 20173 | 806   | 20177 | 800   | 20183 | 801   | 20201 | 805   |
| 20233 | 803   | 20249 | 806   | 20261 | 802   | 20269 | 806   |
| 20323 | 801   | 20327 | 810   | 20333 | 808   | 20341 | 813   |
| 20357 | 810   | 20359 | 803   | 20369 | 805   | 20389 | 809   |
| 20407 | 809   | 20411 | 808   | 20431 | 815   | 20441 | 809   |
|       |       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |       |
Table 1 Continue 11

|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
|\(q\) | \(t_{1/2}^L\) | \(q\) | \(t_{1/2}^L\) | \(q\) | \(t_{1/2}^L\) | \(q\) | \(t_{1/2}^L\) |
| 20479 | 814 | 20483 | 814 | 20507 | 810 | 20509 | 809 | 20521 | 813 | 20533 | 815 |
| 20543 | 816 | 20549 | 806 | 20551 | 816 | 20563 | 813 | 20593 | 809 | 20599 | 816 |
| 20611 | 814 | 20627 | 812 | 20639 | 812 | 20641 | 821 | 20663 | 812 | 20681 | 817 |
| 20693 | 818 | 20707 | 819 | 20717 | 811 | 20719 | 812 | 20731 | 820 | 20743 | 817 |
| 20747 | 813 | 20749 | 814 | 20753 | 811 | 20759 | 816 | 20771 | 814 | 20773 | 815 |
| 20789 | 813 | 20807 | 817 | 20809 | 814 | 20849 | 816 | 20857 | 818 | 20873 | 821 |
| 20879 | 815 | 20887 | 823 | 20897 | 810 | 20899 | 824 | 20903 | 820 | 20921 | 825 |
| 20929 | 825 | 20939 | 824 | 20947 | 822 | 20959 | 818 | 20963 | 817 | 20981 | 819 |
| 20983 | 828 | 21001 | 820 | 21011 | 818 | 21013 | 818 | 21017 | 819 | 21019 | 827 |
| 21023 | 819 | 21031 | 817 | 21059 | 825 | 21061 | 820 | 21067 | 826 | 21089 | 825 |
| 21101 | 823 | 21107 | 828 | 21121 | 824 | 21139 | 819 | 21143 | 825 | 21149 | 825 |
| 21157 | 828 | 21163 | 825 | 21169 | 827 | 21179 | 831 | 21187 | 826 | 21191 | 826 |
| 21193 | 829 | 21211 | 831 | 21221 | 830 | 21227 | 824 | 21247 | 828 | 21269 | 826 |
| 21277 | 834 | 21283 | 830 | 21313 | 826 | 21317 | 832 | 21319 | 829 | 21323 | 828 |
| 21341 | 842 | 21347 | 830 | 21377 | 827 | 21379 | 825 | 21383 | 830 | 21391 | 829 |
| 21397 | 825 | 21401 | 831 | 21407 | 839 | 21419 | 828 | 21433 | 836 | 21467 | 840 |
| 21481 | 833 | 21487 | 834 | 21491 | 830 | 21493 | 837 | 21499 | 835 | 21503 | 835 |
| 21517 | 827 | 21521 | 832 | 21523 | 836 | 21529 | 831 | 21557 | 844 | 21559 | 833 |
| 21563 | 831 | 21569 | 828 | 21577 | 834 | 21587 | 835 | 21589 | 834 | 21599 | 833 |
| 21601 | 839 | 21611 | 835 | 21613 | 833 | 21617 | 830 | 21647 | 838 | 21649 | 833 |
| 21661 | 843 | 21673 | 830 | 21683 | 835 | 21701 | 833 | 21713 | 838 | 21727 | 833 |
| 21737 | 838 | 21739 | 830 | 21751 | 836 | 21757 | 839 | 21767 | 839 | 21773 | 841 |
| 21787 | 840 | 21799 | 843 | 21803 | 842 | 21817 | 843 | 21821 | 833 | 21839 | 839 |
| 21841 | 834 | 21851 | 847 | 21859 | 844 | 21863 | 843 | 21871 | 847 | 21881 | 835 |
| 21893 | 838 | 21911 | 840 | 21929 | 837 | 21937 | 843 | 21943 | 842 | 21961 | 843 |
| 21977 | 842 | 21991 | 847 | 21997 | 842 | 22003 | 841 | 22013 | 839 | 22027 | 839 |
| 22031 | 840 | 22037 | 849 | 22039 | 849 | 22051 | 845 | 22063 | 849 | 22067 | 849 |
| 22073 | 845 | 22079 | 849 | 22091 | 842 | 22093 | 843 | 22109 | 851 | 22111 | 845 |
| 22123 | 839 | 22129 | 845 | 22133 | 848 | 22147 | 845 | 22153 | 843 | 22157 | 845 |
| 22159 | 848 | 22171 | 848 | 22189 | 850 | 22193 | 847 | 22229 | 846 | 22247 | 852 |
| 22259 | 850 | 22271 | 850 | 22273 | 847 | 22277 | 843 | 22279 | 854 | 22283 | 851 |
| 22291 | 855 | 22303 | 849 | 22307 | 854 | 22343 | 851 | 22349 | 851 | 22367 | 854 |
| 22369 | 850 | 22381 | 855 | 22391 | 852 | 22397 | 854 | 22409 | 852 | 22433 | 851 |
| 22441 | 854 | 22447 | 855 | 22453 | 854 | 22469 | 856 | 22481 | 852 | 22483 | 851 |
| 22501 | 853 | 22511 | 857 | 22531 | 850 | 22541 | 852 | 22543 | 861 | 22549 | 853 |
| $q$ | $t^L_2$ | $q$ | $t^L_2$ | $q$ | $t^L_2$ | $q$ | $t^L_2$ | $q$ | $t^L_2$ |
|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|
| 22567 856 | 22571 859 | 22573 855 | 22613 855 | 22619 853 | 22621 857 |
| 22637 852 | 22639 862 | 22643 857 | 22651 863 | 22669 850 | 22679 862 |
| 22691 859 | 22697 863 | 22699 851 | 22709 863 | 22717 862 | 22721 860 |
| 22727 857 | 22739 862 | 22741 860 | 22751 860 | 22769 854 | 22777 855 |
| 22783 859 | 22787 857 | 22807 859 | 22811 860 | 22817 859 | 22853 856 |
| 22859 858 | 22861 867 | 22871 861 | 22877 864 | 22901 865 | 22907 861 |
| 22921 864 | 22937 860 | 22943 865 | 22961 862 | 22963 860 | 22973 867 |
| 22993 865 | 23003 867 | 23011 863 | 23017 871 | 23021 864 | 23027 866 |
| 23029 860 | 23039 866 | 23041 865 | 23053 868 | 23057 870 | 23059 866 |
| 23063 866 | 23071 867 | 23081 865 | 23087 864 | 23099 871 | 23117 870 |
| 23131 866 | 23143 868 | 23159 866 | 23167 868 | 23173 870 | 23189 875 |
| 23197 871 | 23201 873 | 23203 863 | 23209 866 | 23227 868 | 23251 870 |
| 23269 873 | 23279 870 | 23291 875 | 23293 867 | 23297 867 | 23311 867 |
| 23321 879 | 23327 869 | 23333 872 | 23339 873 | 23357 868 | 23369 863 |
| 23371 876 | 23399 870 | 23417 871 | 23431 869 | 23447 867 | 23459 881 |
| 23473 872 | 23497 871 | 23509 876 | 23531 875 | 23537 871 | 23539 871 |
| 23549 873 | 23557 876 | 23561 881 | 23563 879 | 23567 881 | 23581 874 |
| 23593 874 | 23599 869 | 23603 873 | 23609 878 | 23623 877 | 23627 875 |
| 23629 873 | 23633 884 | 23663 872 | 23669 885 | 23671 880 | 23677 878 |
| 23687 874 | 23689 880 | 23719 882 | 23741 876 | 23743 875 | 23747 872 |
| 23753 883 | 23761 880 | 23767 878 | 23773 878 | 23789 879 | 23801 885 |
| 23813 875 | 23819 875 | 23827 884 | 23831 885 | 23833 883 | 23857 882 |
| 23869 879 | 23873 880 | 23879 875 | 23887 882 | 23893 881 | 23899 881 |
| 23909 881 | 23911 879 | 23917 886 | 23929 888 | 23957 882 | 23971 879 |
| 23977 874 | 23981 890 | 23993 886 | 24001 887 | 24007 885 | 24019 889 |
| 24023 885 | 24029 881 | 24043 884 | 24049 891 | 24061 885 | 24071 891 |
| 24077 885 | 24083 893 | 24091 892 | 24097 888 | 24103 884 | 24107 887 |
| 24109 887 | 24113 885 | 24121 883 | 24133 886 | 24137 885 | 24151 887 |
| 24169 889 | 24179 890 | 24181 892 | 24197 891 | 24203 888 | 24223 894 |
| 24229 884 | 24239 898 | 24247 888 | 24251 889 | 24281 896 | 24317 895 |
| 24329 888 | 24337 888 | 24359 892 | 24371 896 | 24373 892 | 24379 893 |
| 24391 896 | 24407 896 | 24413 901 | 24419 901 | 24421 891 | 24439 889 |
| 24443 898 | 24469 893 | 24473 886 | 24481 898 | 24499 892 | 24509 895 |
| 24517 889 | 24527 893 | 24533 896 | 24547 895 | 24551 893 | 24571 891 |
| 24593 894 | 24611 895 | 24623 897 | 24631 900 | 24659 900 | 24671 902 |
| \( q \) | \( t^L_2 \) | \( q \) | \( t^L_2 \) | \( q \) | \( t^L_2 \) | \( q \) | \( t^L_2 \) | \( q \) | \( t^L_2 \) |
|---|---|---|---|---|---|---|---|---|---|
| 24677 897 | 24683 896 | 24691 900 | 24697 901 | 24709 896 | 24733 897 |
| 24749 902 | 24763 898 | 24767 898 | 24781 905 | 24793 900 | 24799 900 |
| 24809 896 | 24821 903 | 24841 898 | 24847 899 | 24851 899 | 24859 901 |
| 24877 901 | 24889 907 | 24907 901 | 24917 905 | 24919 896 | 24923 904 |
| 24943 901 | 24953 902 | 24967 905 | 24971 900 | 24977 908 | 24979 904 |
| 24989 901 | 25013 905 | 25031 906 | 25033 904 | 25037 912 | 25057 902 |
| 25073 903 | 25087 906 | 25097 916 | 25111 904 | 25117 907 | 25121 904 |
| 25127 906 | 25147 909 | 25153 911 | 25163 909 | 25169 913 | 25171 904 |
| 25183 908 | 25189 907 | 25219 910 | 25229 911 | 25237 911 | 25243 910 |
| 25247 907 | 25253 911 | 25261 906 | 25301 905 | 25303 912 | 25307 908 |
| 25309 909 | 25321 906 | 25339 907 | 25343 908 | 25349 910 | 25357 913 |
| 25367 909 | 25373 909 | 25391 909 | 25409 912 | 25411 907 | 25423 910 |
| 25439 916 | 25447 906 | 25453 918 | 25457 911 | 25463 911 | 25469 923 |
| 25471 916 | 25523 909 | 25537 920 | 25541 916 | 25561 919 | 25577 917 |
| 25579 912 | 25583 912 | 25589 920 | 25601 915 | 25603 919 | 25609 919 |
| 25621 913 | 25633 920 | 25639 916 | 25643 913 | 25657 914 | 25667 914 |
| 25673 923 | 25679 918 | 25693 921 | 25703 917 | 25717 915 | 25733 919 |
| 25741 920 | 25747 918 | 25759 918 | 25763 920 | 25771 922 | 25793 918 |
| 25799 909 | 25801 922 | 25819 923 | 25841 921 | 25847 921 | 25849 925 |
| 25867 923 | 25873 921 | 25889 918 | 25903 931 | 25913 921 | 25919 928 |
| 25931 925 | 25933 921 | 25939 918 | 25943 929 | 25951 927 | 25969 923 |
| 25981 926 | 25997 921 | 25999 924 | 26003 922 | 26017 927 | 26021 925 |
| 26029 932 | 26041 924 | 26053 930 | 26083 930 | 26099 927 | 26107 931 |
| 26111 925 | 26113 927 | 26119 927 | 26141 924 | 26153 921 | 26161 930 |
| 26171 933 | 26177 922 | 26183 925 | 26189 929 | 26203 928 | 26209 928 |
| 26227 928 | 26237 929 | 26249 930 | 26251 932 | 26261 930 | 26263 929 |
| 26267 929 | 26293 925 | 26297 932 | 26309 934 | 26317 930 | 26321 935 |
| 26339 931 | 26347 931 | 26357 931 | 26371 930 | 26387 931 | 26393 930 |
| 26399 929 | 26407 931 | 26417 931 | 26423 933 | 26431 929 | 26437 928 |
| 26449 934 | 26459 937 | 26479 933 | 26489 938 | 26497 932 | 26501 930 |
| 26513 933 | 26539 931 | 26557 942 | 26561 935 | 26573 931 | 26591 934 |
| 26597 938 | 26627 938 | 26633 947 | 26641 942 | 26647 938 | 26669 937 |
| 26681 938 | 26683 937 | 26687 935 | 26693 945 | 26699 942 | 26701 940 |
| 26711 946 | 26713 936 | 26717 935 | 26723 945 | 26729 938 | 26731 939 |
| 26737 946 | 26759 932 | 26777 940 | 26783 942 | 26801 942 | 26813 937 |
| \( q \)  | \( t^L_2 \) | \( q \)  | \( t^L_2 \) | \( q \)  | \( t^L_2 \) | \( q \)  | \( t^L_2 \) | \( q \)  | \( t^L_2 \) |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 26821 | 938 | 26833 | 937 | 26839 | 941 | 26849 | 941 | 26861 | 940 |
| 26879 | 945 | 26881 | 938 | 26891 | 942 | 26893 | 947 | 26903 | 945 |
| 26927 | 944 | 26947 | 934 | 26951 | 938 | 26953 | 944 | 26959 | 944 |
| 26987 | 943 | 26993 | 943 | 27011 | 945 | 27017 | 940 | 27031 | 943 |
| 27059 | 945 | 27061 | 942 | 27067 | 943 | 27073 | 945 | 27077 | 947 |
| 27103 | 947 | 27107 | 950 | 27109 | 950 | 27127 | 946 | 27143 | 947 |
| 27191 | 947 | 27197 | 950 | 27211 | 954 | 27239 | 953 | 27241 | 951 |
| 27259 | 950 | 27271 | 949 | 27277 | 956 | 27281 | 952 | 27283 | 948 |
| 27329 | 954 | 27337 | 956 | 27361 | 955 | 27367 | 958 | 27397 | 951 |
| 27409 | 949 | 27427 | 956 | 27431 | 951 | 27437 | 950 | 27449 | 945 |
| 27479 | 957 | 27481 | 956 | 27487 | 953 | 27509 | 955 | 27527 | 952 |
| 27539 | 958 | 27541 | 956 | 27551 | 964 | 27581 | 951 | 27583 | 957 |
| 27617 | 958 | 27631 | 954 | 27647 | 953 | 27653 | 951 | 27673 | 952 |
| 27691 | 960 | 27697 | 960 | 27733 | 960 | 27737 | 956 | 27739 | 959 |
| 27743 | 953 | 27749 | 957 | 27751 | 962 | 27763 | 959 | 27767 | 962 |
| 27779 | 967 | 27791 | 959 | 27793 | 958 | 27799 | 958 | 27803 | 959 |
| 27817 | 965 | 27823 | 964 | 27827 | 961 | 27847 | 955 | 27851 | 961 |
| 27893 | 961 | 27901 | 964 | 27917 | 953 | 27919 | 963 | 27941 | 957 |
| 27947 | 956 | 27953 | 961 | 27961 | 960 | 27967 | 959 | 27983 | 967 |
| 28001 | 956 | 28019 | 961 | 28027 | 963 | 28031 | 963 | 28051 | 962 |
| 28069 | 973 | 28081 | 961 | 28087 | 966 | 28097 | 958 | 28099 | 963 |
| 28111 | 966 | 28123 | 966 | 28151 | 968 | 28163 | 961 | 28181 | 969 |
| 28201 | 971 | 28211 | 970 | 28219 | 964 | 28229 | 967 | 28277 | 968 |
| 28283 | 963 | 28289 | 967 | 28297 | 964 | 28307 | 969 | 28309 | 969 |
| 28349 | 964 | 28351 | 972 | 28387 | 972 | 28393 | 972 | 28403 | 967 |
| 28411 | 968 | 28429 | 969 | 28433 | 970 | 28439 | 970 | 28447 | 978 |
| 28477 | 968 | 28493 | 976 | 28499 | 968 | 28513 | 972 | 28517 | 972 |
| 28541 | 980 | 28547 | 975 | 28549 | 977 | 28559 | 972 | 28571 | 978 |
| 28579 | 971 | 28591 | 977 | 28597 | 970 | 28603 | 973 | 28607 | 975 |
| 28621 | 974 | 28627 | 979 | 28631 | 972 | 28643 | 977 | 28649 | 972 |
| 28661 | 974 | 28663 | 986 | 28669 | 981 | 28687 | 972 | 28697 | 975 |
| 28711 | 974 | 28723 | 972 | 28729 | 973 | 28751 | 981 | 28753 | 981 |
| 28771 | 976 | 28789 | 984 | 28793 | 986 | 28807 | 976 | 28813 | 982 |
| 28837 | 973 | 28843 | 977 | 28859 | 985 | 28867 | 976 | 28871 | 976 |
| 28901 | 980 | 28909 | 983 | 28921 | 980 | 28927 | 982 | 28933 | 981 |
Table 1 Continue 15

| \( q \) | \( t^L_2 \) | \( q \) | \( t^L_2 \) | \( q \) | \( t^L_2 \) | \( q \) | \( t^L_2 \) | \( q \) | \( t^L_2 \) |
|------|-------|------|-------|------|-------|------|-------|------|-------|
| 28961 986 | 28979 979 | 29009 981 | 29017 982 | 29021 988 | 29023 979 |
| 29027 975 | 29033 982 | 29059 984 | 29063 979 | 29077 983 | 29101 984 |
| 29123 987 | 29129 985 | 29131 978 | 29137 989 | 29147 985 | 29153 986 |
| 29167 980 | 29173 987 | 29179 981 | 29191 987 | 29201 991 | 29207 984 |
| 29209 987 | 29221 986 | 29231 987 | 29243 980 | 29251 990 | 29269 987 |
| 29287 994 | 29297 991 | 29303 992 | 29311 989 | 29327 987 | 29333 986 |
| 29339 989 | 29347 988 | 29363 986 | 29383 989 | 29387 989 | 29389 986 |
| 29399 990 | 29401 993 | 29411 990 | 29423 996 | 29429 993 | 29437 990 |
| 29443 987 | 29453 993 | 29473 985 | 29483 992 | 29501 986 | 29527 992 |
| 29531 998 | 29537 991 | 29567 990 | 29569 998 | 29573 992 | 29581 992 |
| 29587 989 | 29599 996 | 29611 993 | 29629 996 | 29633 993 | 29641 990 |
| 29663 990 | 29669 994 | 29671 994 | 29683 1002 | 29717 990 | 29723 992 |
| 29741 997 | 29753 993 | 29759 994 | 29761 979 | 29789 1001 | 29803 998 |
| 29819 1003 | 29833 999 | 29837 1000 | 29851 993 | 29863 1005 | 29867 997 |
| 29873 998 | 29879 1001 | 29881 996 | 29917 1001 | 29921 997 | 29927 1009 |
| 29947 995 | 29959 997 | 29983 1006 | 29989 1000 | 30011 1002 | 30013 1000 |
| 30029 1006 | 30047 1004 | 30059 1000 | 30071 1002 | 30089 1002 | 30091 996 |
| 30097 1003 | 30103 1000 | 30109 1010 | 30113 1006 | 30119 1001 | 30133 1004 |
| 30137 1006 | 30139 1002 | 30161 1011 | 30169 996 | 30181 1005 | 30187 1003 |
| 30197 998 | 30203 1002 | 30211 998 | 30223 1003 | 30241 995 | 30253 1007 |
| 30259 1006 | 30269 1004 | 30271 1003 | 30293 1007 | 30307 1009 | 30313 1002 |
| 30319 1004 | 30323 1005 | 30341 1009 | 30347 1012 | 30367 1006 | 30389 1006 |
| 30391 1009 | 30403 1007 | 30427 1005 | 30431 1015 | 30449 1004 | 30467 1004 |
| 30469 1013 | 30491 1013 | 30493 1011 | 30497 1009 | 30509 1011 | 30517 1011 |
| 30529 1014 | 30539 1008 | 30553 1012 | 30557 1016 | 30559 1015 | 30577 1011 |
| 30593 1013 | 30631 1017 | 30637 1009 | 30643 1010 | 30649 1003 | 30661 1016 |
| 30671 1013 | 30677 1015 | 30689 1004 | 30697 1015 | 30703 1010 | 30707 1014 |
| 30713 1015 | 30727 1015 | 30757 1017 | 30763 1013 | 30773 1015 | 30781 1006 |
| 30803 1018 | 30809 1018 | 30817 1021 | 30829 1013 | 30839 1014 | 30841 1018 |
| 30851 1018 | 30853 1018 | 30859 1009 | 30869 1015 | 30871 1012 | 30881 1017 |
| 30893 1014 | 30911 1020 | 30931 1012 | 30937 1018 | 30941 1015 | 30949 1016 |
| 30971 1020 | 30977 1016 | 30983 1018 | 31013 1016 | 31019 1014 | 31033 1026 |
| 31039 1023 | 31051 1021 | 31063 1020 | 31069 1021 | 31079 1021 | 31081 1024 |
| 31091 1021 | 31121 1022 | 31123 1014 | 31139 1033 | 31147 1023 | 31151 1024 |
| 31153 1015 | 31159 1022 | 31177 1025 | 31181 1018 | 31183 1019 | 31189 1023 |
Table 1 Continue 16

| $q$ | $t^L_2$ | $q$ | $t^L_2$ | $q$ | $t^L_2$ | $q$ | $t^L_2$ | $q$ | $t^L_2$ | $q$ | $t^L_2$ |
|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|
| 31193 | 1023 | 31219 | 1024 | 31223 | 1028 | 31231 | 1025 | 31237 | 1023 | 31247 | 1021 |
| 31249 | 1019 | 31253 | 1022 | 31259 | 1017 | 31267 | 1026 | 31271 | 1018 | 31277 | 1020 |
| 31307 | 1025 | 31319 | 1021 | 31321 | 1021 | 31327 | 1025 | 31333 | 1030 | 31337 | 1026 |
| 31357 | 1027 | 31379 | 1029 | 31387 | 1028 | 31391 | 1023 | 31393 | 1023 | 31397 | 1028 |
| 31469 | 1034 | 31477 | 1028 | 31481 | 1028 | 31489 | 1027 | 31511 | 1029 | 31513 | 1030 |
| 31517 | 1025 | 31531 | 1031 | 31541 | 1033 | 31543 | 1031 | 31547 | 1033 | 31567 | 1032 |
| 31573 | 1034 | 31583 | 1030 | 31601 | 1028 | 31607 | 1035 | 31627 | 1024 | 31643 | 1025 |
| 31649 | 1030 | 31657 | 1030 | 31663 | 1037 | 31667 | 1032 | 31687 | 1033 | 31699 | 1033 |
| 31721 | 1036 | 31723 | 1028 | 31727 | 1033 | 31729 | 1034 | 31741 | 1030 | 31751 | 1030 |
| 31769 | 1033 | 31771 | 1034 | 31793 | 1035 | 31799 | 1038 | 31817 | 1037 | 31847 | 1036 |
| 31849 | 1038 | 31859 | 1038 | 31873 | 1033 | 31883 | 1039 | 31891 | 1038 | 31907 | 1042 |
| 31957 | 1034 | 31963 | 1040 | 31973 | 1035 | 31981 | 1032 | 31991 | 1039 | 32003 | 1037 |
| 32009 | 1033 | 32027 | 1036 | 32029 | 1036 | 32051 | 1033 | 32057 | 1040 | 32059 | 1045 |
| 32063 | 1036 | 32069 | 1042 | 32077 | 1041 | 32083 | 1042 | 32089 | 1037 | 32099 | 1044 |
| 32117 | 1042 | 32119 | 1043 | 32141 | 1038 | 32143 | 1039 | 32159 | 1038 | 32173 | 1044 |
| 32183 | 1040 | 32189 | 1041 | 32191 | 1044 | 32203 | 1038 | 32213 | 1033 | 32233 | 1034 |
| 32237 | 1034 | 32251 | 1038 | 32257 | 1040 | 32261 | 1039 | 32297 | 1040 | 32299 | 1040 |
| 32303 | 1035 | 32309 | 1043 | 32321 | 1041 | 32323 | 1040 | 32327 | 1039 | 32341 | 1037 |
| 32353 | 1041 | 32359 | 1052 | 32363 | 1044 | 32369 | 1044 | 32371 | 1042 | 32377 | 1048 |
| 32381 | 1051 | 32401 | 1044 | 32411 | 1050 | 32413 | 1048 | 32423 | 1048 | 32429 | 1042 |
| 32441 | 1051 | 32443 | 1052 | 32467 | 1045 | 32479 | 1047 | 32491 | 1042 | 32497 | 1049 |
| 32503 | 1044 | 32507 | 1045 | 32531 | 1050 | 32533 | 1047 | 32537 | 1049 | 32561 | 1056 |
| 32563 | 1051 | 32569 | 1050 | 32573 | 1046 | 32579 | 1046 | 32587 | 1042 | 32603 | 1038 |
| 32609 | 1052 | 32611 | 1049 | 32621 | 1046 | 32633 | 1046 | 32647 | 1050 | 32653 | 1055 |
| 32687 | 1046 | 32693 | 1052 | 32707 | 1053 | 32713 | 1055 | 32717 | 1049 | 32719 | 1048 |
| 32749 | 1046 | 32771 | 1045 | 32779 | 1035 | 32783 | 1046 | 32789 | 1053 | 32797 | 1050 |
| 32801 | 1050 | 32803 | 1055 | 32831 | 1053 | 32833 | 1048 | 32839 | 1056 | 32843 | 1054 |
| 32869 | 1054 | 32887 | 1051 | 32909 | 1052 | 32911 | 1056 | 32917 | 1052 | 32933 | 1056 |
| 32939 | 1055 | 32941 | 1059 | 32957 | 1052 | 32969 | 1059 | 32971 | 1055 | 32983 | 1061 |
| 32987 | 1050 | 32993 | 1054 | 32999 | 1052 | 33013 | 1061 | 33023 | 1058 | 33029 | 1053 |
| 33037 | 1056 | 33049 | 1056 | 33053 | 1058 | 33071 | 1059 | 33073 | 1054 | 33083 | 1056 |
| 33091 | 1056 | 33107 | 1060 | 33113 | 1051 | 33119 | 1063 | 33149 | 1060 | 33151 | 1060 |
| 33161 | 1066 | 33179 | 1063 | 33181 | 1054 | 33191 | 1059 | 33199 | 1054 | 33203 | 1059 |
| 33211 | 1059 | 33223 | 1055 | 33247 | 1054 | 33287 | 1062 | 33289 | 1062 | 33301 | 1062 |
| 33311 | 1058 | 33317 | 1061 | 33329 | 1057 | 33331 | 1061 | 33343 | 1060 | 33347 | 1063 |
| $q$  | $t^L_2$ | $q$  | $t^L_2$ | $q$  | $t^L_2$ | $q$  | $t^L_2$ | $q$  | $t^L_2$ |
|------|--------|------|--------|------|--------|------|--------|------|--------|
| 33349 | 1061  | 33353 | 1063  | 33359 | 1061  | 33377 | 1059  | 33391 | 1062  |
| 33409 | 1071  | 33413 | 1055  | 33427 | 1064  | 33457 | 1068  | 33461 | 1059  |
| 33479 | 1061  | 33487 | 1070  | 33493 | 1060  | 33503 | 1069  | 33521 | 1066  |
| 33533 | 1057  | 33547 | 1064  | 33563 | 1060  | 33569 | 1064  | 33577 | 1064  |
| 33587 | 1058  | 33589 | 1066  | 33599 | 1064  | 33601 | 1059  | 33613 | 1068  |
| 33619 | 1063  | 33623 | 1070  | 33629 | 1067  | 33637 | 1058  | 33641 | 1071  |
| 33679 | 1066  | 33703 | 1074  | 33713 | 1065  | 33721 | 1068  | 33739 | 1069  |
| 33751 | 1065  | 33757 | 1070  | 33767 | 1062  | 33769 | 1067  | 33773 | 1071  |
| 33797 | 1068  | 33809 | 1069  | 33811 | 1072  | 33827 | 1066  | 33829 | 1065  |
| 33857 | 1067  | 33863 | 1064  | 33871 | 1075  | 33889 | 1070  | 33931 | 1062  |
| 33923 | 1073  | 33931 | 1072  | 33937 | 1072  | 33941 | 1068  | 33961 | 1073  |
| 33997 | 1071  | 34019 | 1070  | 34031 | 1079  | 34033 | 1076  | 34039 | 1069  |
| 34061 | 1074  | 34123 | 1066  | 34127 | 1082  | 34129 | 1080  | 34141 | 1076  |
| 34157 | 1069  | 34159 | 1081  | 34171 | 1082  | 34183 | 1073  | 34211 | 1078  |
| 34217 | 1078  | 34231 | 1082  | 34253 | 1079  | 34259 | 1077  | 34261 | 1077  |
| 34273 | 1073  | 34283 | 1082  | 34297 | 1080  | 34301 | 1073  | 34303 | 1071  |
| 34319 | 1080  | 34327 | 1075  | 34337 | 1082  | 34351 | 1075  | 34361 | 1081  |
| 34369 | 1084  | 34381 | 1072  | 34403 | 1083  | 34421 | 1075  | 34429 | 1081  |
| 34457 | 1067  | 34469 | 1078  | 34471 | 1080  | 34483 | 1081  | 34487 | 1083  |
| 34501 | 1083  | 34511 | 1076  | 34513 | 1080  | 34519 | 1080  | 34537 | 1079  |
| 34549 | 1073  | 34583 | 1070  | 34589 | 1083  | 34591 | 1086  | 34603 | 1086  |
| 34613 | 1086  | 34631 | 1079  | 34649 | 1087  | 34651 | 1085  | 34667 | 1087  |
| 34679 | 1084  | 34687 | 1082  | 34693 | 1090  | 34703 | 1087  | 34721 | 1084  |
| 34739 | 1090  | 34747 | 1086  | 34757 | 1078  | 34759 | 1086  | 34763 | 1090  |
| 34807 | 1088  | 34819 | 1081  | 34841 | 1090  | 34843 | 1088  | 34847 | 1093  |
| 34871 | 1084  | 34877 | 1088  | 34883 | 1082  | 34897 | 1086  | 34913 | 1082  |
| 34939 | 1091  | 34949 | 1088  | 34961 | 1085  | 34963 | 1089  | 34981 | 1083  |
| 35027 | 1099  | 35051 | 1093  | 35053 | 1088  | 35059 | 1090  | 35069 | 1090  |
| 35083 | 1089  | 35089 | 1087  | 35099 | 1096  | 35107 | 1086  | 35111 | 1095  |
| 35129 | 1090  | 35141 | 1082  | 35149 | 1093  | 35153 | 1088  | 35159 | 1097  |
| 35201 | 1092  | 35221 | 1092  | 35227 | 1092  | 35251 | 1093  | 35257 | 1099  |
| 35279 | 1092  | 35281 | 1097  | 35291 | 1104  | 35311 | 1096  | 35317 | 1094  |
| 35327 | 1098  | 35339 | 1100  | 35353 | 1092  | 35363 | 1102  | 35381 | 1093  |
| 35401 | 1090  | 35407 | 1106  | 35419 | 1098  | 35423 | 1092  | 35437 | 1094  |
| 35449 | 1094  | 35461 | 1101  | 35491 | 1094  | 35507 | 1101  | 35509 | 1094  |
| 35521 | 1094  |
| $q$ | $t^L_2$ | $q$ | $t^L_2$ | $q$ | $t^L_2$ | $q$ | $t^L_2$ | $q$ | $t^L_2$ | $q$ | $t^L_2$ |
|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|
| 35527 | 1103 | 35531 | 1104 | 35533 | 1099 | 35537 | 1099 | 35543 | 1098 | 35569 | 1095 |
| 35573 | 1105 | 35591 | 1105 | 35593 | 1097 | 35597 | 1106 | 35603 | 1098 | 35617 | 1102 |
| 35671 | 1102 | 35677 | 1100 | 35729 | 1106 | 35731 | 1106 | 35747 | 1098 | 35753 | 1105 |
| 35759 | 1098 | 35771 | 1101 | 35797 | 1102 | 35801 | 1101 | 35803 | 1103 | 35809 | 1106 |
| 35831 | 1101 | 35837 | 1107 | 35839 | 1103 | 35851 | 1093 | 35863 | 1102 | 35869 | 1097 |
| 35879 | 1103 | 35897 | 1104 | 35899 | 1108 | 35911 | 1109 | 35923 | 1110 | 35933 | 1105 |
| 35951 | 1108 | 35963 | 1108 | 35969 | 1106 | 35977 | 1100 | 35983 | 1103 | 35993 | 1108 |
| 35999 | 1106 | 36007 | 1103 | 36011 | 1101 | 36013 | 1101 | 36017 | 1108 | 36037 | 1099 |
| 36061 | 1108 | 36067 | 1106 | 36073 | 1111 | 36083 | 1110 | 36097 | 1117 | 36107 | 1110 |
| 36109 | 1103 | 36131 | 1114 | 36137 | 1108 | 36151 | 1108 | 36161 | 1104 | 36187 | 1116 |
| 36191 | 1101 | 36209 | 1114 | 36217 | 1107 | 36229 | 1111 | 36241 | 1110 | 36251 | 1111 |
| 36263 | 1110 | 36269 | 1110 | 36277 | 1111 | 36293 | 1109 | 36299 | 1108 | 36307 | 1115 |
| 36313 | 1104 | 36319 | 1107 | 36341 | 1114 | 36343 | 1107 | 36353 | 1117 | 36373 | 1115 |
| 36383 | 1120 | 36389 | 1108 | 36433 | 1110 | 36451 | 1120 | 36457 | 1119 | 36467 | 1115 |
| 36469 | 1116 | 36473 | 1116 | 36479 | 1116 | 36493 | 1120 | 36497 | 1115 | 36523 | 1112 |
| 36527 | 1112 | 36529 | 1118 | 36541 | 1114 | 36551 | 1114 | 36559 | 1110 | 36563 | 1114 |
| 36571 | 1114 | 36583 | 1114 | 36587 | 1124 | 36599 | 1115 | 36607 | 1111 | 36629 | 1113 |
| 36637 | 1118 | 36643 | 1120 | 36653 | 1119 | 36671 | 1122 | 36677 | 1123 | 36683 | 1116 |
| 36691 | 1118 | 36697 | 1120 | 36709 | 1116 | 36713 | 1118 | 36721 | 1128 | 36739 | 1121 |
| 36749 | 1115 | 36761 | 1120 | 36767 | 1116 | 36779 | 1126 | 36781 | 1118 | 36787 | 1122 |
| 36791 | 1126 | 36793 | 1121 | 36809 | 1131 | 36821 | 1127 | 36833 | 1122 | 36847 | 1125 |
| 36857 | 1122 | 36871 | 1111 | 36877 | 1123 | 36887 | 1127 | 36899 | 1123 | 36901 | 1120 |
| 36913 | 1122 | 36919 | 1123 | 36923 | 1117 | 36929 | 1125 | 36931 | 1127 | 36943 | 1127 |
| 36947 | 1114 | 36973 | 1122 | 36979 | 1121 | 36997 | 1128 | 37003 | 1121 | 37013 | 1123 |
| 37019 | 1127 | 37021 | 1125 | 37039 | 1121 | 37049 | 1117 | 37057 | 1125 | 37061 | 1138 |
| 37087 | 1125 | 37097 | 1124 | 37117 | 1121 | 37123 | 1127 | 37139 | 1123 | 37159 | 1126 |
| 37171 | 1127 | 37181 | 1128 | 37189 | 1121 | 37199 | 1132 | 37201 | 1127 | 37217 | 1127 |
| 37223 | 1127 | 37243 | 1136 | 37253 | 1127 | 37273 | 1131 | 37277 | 1128 | 37307 | 1125 |
| 37309 | 1132 | 37313 | 1125 | 37321 | 1130 | 37337 | 1130 | 37339 | 1128 | 37357 | 1128 |
| 37361 | 1132 | 37363 | 1131 | 37369 | 1124 | 37379 | 1129 | 37397 | 1135 | 37409 | 1124 |
| 37423 | 1128 | 37441 | 1134 | 37447 | 1123 | 37463 | 1136 | 37483 | 1127 | 37489 | 1132 |
| 37493 | 1131 | 37501 | 1137 | 37507 | 1137 | 37511 | 1135 | 37517 | 1135 | 37529 | 1129 |
| 37537 | 1128 | 37547 | 1126 | 37549 | 1133 | 37561 | 1135 | 37567 | 1125 | 37571 | 1137 |
| 37573 | 1135 | 37579 | 1130 | 37589 | 1132 | 37591 | 1138 | 37607 | 1134 | 37619 | 1127 |
| 37633 | 1127 | 37643 | 1133 | 37649 | 1128 | 37657 | 1142 | 37663 | 1135 | 37691 | 1136 |
Table 1 Continue 19

| $q$   | $t_2^L$ | $q$   | $t_2^L$ | $q$   | $t_2^L$ | $q$   | $t_2^L$ | $q$   | $t_2^L$ |
|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|
| 37693 | 1129    | 37699 | 1130    | 37717 | 1134    | 37747 | 1136    | 37781 | 1142    |
| 37799 | 1137    | 37811 | 1140    | 37831 | 1140    | 37847 | 1144    | 37853 | 1143    |
| 37861 | 1131    | 37871 | 1142    | 37879 | 1134    | 37889 | 1132    | 37897 | 1137    |
| 37951 | 1141    | 37957 | 1137    | 37963 | 1139    | 37967 | 1139    | 37987 | 1140    |
| 37993 | 1144    | 37997 | 1142    | 38011 | 1139    | 38039 | 1149    | 38047 | 1141    |
| 38069 | 1136    | 38083 | 1148    | 38113 | 1141    | 38119 | 1138    | 38149 | 1143    |
| 38167 | 1137    | 38177 | 1148    | 38183 | 1144    | 38189 | 1149    | 38197 | 1144    |
| 38219 | 1156    | 38231 | 1134    | 38237 | 1143    | 38239 | 1143    | 38261 | 1145    |
| 38281 | 1151    | 38287 | 1146    | 38299 | 1137    | 38303 | 1145    | 38317 | 1141    |
| 38327 | 1150    | 38329 | 1142    | 38333 | 1141    | 38351 | 1148    | 38371 | 1148    |
| 38393 | 1137    | 38431 | 1148    | 38447 | 1144    | 38449 | 1145    | 38453 | 1147    |
| 38461 | 1144    | 38501 | 1141    | 38543 | 1153    | 38557 | 1152    | 38561 | 1153    |
| 38569 | 1159    | 38593 | 1158    | 38603 | 1157    | 38609 | 1152    | 38611 | 1148    |
| 38639 | 1141    | 38651 | 1151    | 38653 | 1148    | 38669 | 1139    | 38671 | 1149    |
| 38693 | 1147    | 38699 | 1156    | 38707 | 1154    | 38711 | 1156    | 38713 | 1154    |
| 38729 | 1152    | 38737 | 1149    | 38747 | 1154    | 38749 | 1153    | 38767 | 1151    |
| 38791 | 1144    | 38803 | 1154    | 38821 | 1154    | 38833 | 1156    | 38839 | 1150    |
| 38861 | 1154    | 38867 | 1152    | 38873 | 1155    | 38891 | 1159    | 38903 | 1151    |
| 38921 | 1159    | 38923 | 1158    | 38933 | 1154    | 38953 | 1158    | 38959 | 1155    |
| 38977 | 1159    | 38993 | 1152    | 39019 | 1162    | 39023 | 1155    | 39041 | 1160    |
| 39047 | 1153    | 39079 | 1164    | 39089 | 1159    | 39097 | 1159    | 39103 | 1155    |
| 39113 | 1157    | 39119 | 1156    | 39133 | 1157    | 39139 | 1157    | 39157 | 1160    |
| 39163 | 1158    | 39181 | 1158    | 39191 | 1162    | 39199 | 1162    | 39209 | 1156    |
| 39227 | 1160    | 39229 | 1161    | 39233 | 1156    | 39239 | 1162    | 39241 | 1162    |
| 39293 | 1162    | 39301 | 1159    | 39313 | 1165    | 39317 | 1163    | 39323 | 1160    |
| 39343 | 1162    | 39359 | 1160    | 39367 | 1160    | 39371 | 1159    | 39373 | 1163    |
| 39397 | 1163    | 39409 | 1156    | 39419 | 1169    | 39439 | 1157    | 39443 | 1163    |
| 39461 | 1163    | 39499 | 1160    | 39503 | 1171    | 39509 | 1163    | 39511 | 1160    |
| 39541 | 1164    | 39551 | 1159    | 39563 | 1171    | 39569 | 1171    | 39581 | 1169    |
| 39619 | 1163    | 39623 | 1171    | 39631 | 1171    | 39659 | 1171    | 39667 | 1170    |
| 39679 | 1163    | 39703 | 1169    | 39709 | 1171    | 39719 | 1166    | 39727 | 1172    |
| 39749 | 1169    | 39761 | 1169    | 39769 | 1164    | 39779 | 1168    | 39791 | 1168    |
| 39821 | 1170    | 39827 | 1167    | 39829 | 1167    | 39839 | 1168    | 39841 | 1165    |
| 39857 | 1165    | 39863 | 1165    | 39869 | 1168    | 39877 | 1173    | 39883 | 1172    |
| 39901 | 1175    | 39929 | 1172    | 39937 | 1176    | 39953 | 1173    | 39971 | 1171    | 39979 | 1173 |
| $q$   | $t_2^L$ | $q$   | $t_2^L$ | $q$   | $t_2^L$ | $q$   | $t_2^L$ | $q$   | $t_2^L$ |
|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|
| 39983 | 1169    | 39989 | 1173    | 40009 | 1168    | 40013 | 1171    | 40031 | 1167    |
| 40039 | 1178    | 40063 | 1175    | 40087 | 1177    | 40093 | 1174    | 40099 | 1174    |
| 40123 | 1172    | 40127 | 1171    | 40129 | 1172    | 40151 | 1174    | 40153 | 1174    |
| 40169 | 1178    | 40177 | 1179    | 40189 | 1171    | 40193 | 1176    | 40213 | 1172    |
| 40237 | 1175    | 40241 | 1179    | 40253 | 1174    | 40277 | 1174    | 40283 | 1181    |
| 40343 | 1179    | 40351 | 1176    | 40357 | 1178    | 40361 | 1172    | 40387 | 1178    |
| 40427 | 1179    | 40429 | 1179    | 40433 | 1182    | 40459 | 1179    | 40471 | 1176    |
| 40487 | 1174    | 40493 | 1181    | 40499 | 1184    | 40507 | 1181    | 40519 | 1184    |
| 40531 | 1183    | 40543 | 1179    | 40559 | 1181    | 40577 | 1181    | 40583 | 1181    |
| 40597 | 1184    | 40609 | 1185    | 40627 | 1180    | 40637 | 1186    | 40639 | 1174    |
| 40697 | 1181    | 40699 | 1181    | 40709 | 1188    | 40739 | 1180    | 40751 | 1192    |
| 40763 | 1183    | 40771 | 1176    | 40787 | 1184    | 40801 | 1187    | 40813 | 1183    |
| 40823 | 1186    | 40829 | 1192    | 40841 | 1188    | 40847 | 1194    | 40849 | 1187    |
| 40867 | 1187    | 40879 | 1186    | 40883 | 1187    | 40897 | 1187    | 40903 | 1191    |
| 40933 | 1193    | 40939 | 1185    | 40949 | 1191    | 40961 | 1183    | 40973 | 1183    |
| 41011 | 1190    | 41017 | 1184    | 41023 | 1192    | 41039 | 1187    | 41047 | 1192    |
| 41057 | 1189    | 41077 | 1190    | 41081 | 1199    | 41113 | 1195    | 41117 | 1190    |
| 41141 | 1190    | 41143 | 1199    | 41149 | 1193    | 41161 | 1190    | 41177 | 1191    |
| 41183 | 1186    | 41189 | 1185    | 41201 | 1193    | 41203 | 1195    | 41213 | 1183    |
| 41227 | 1197    | 41231 | 1189    | 41233 | 1188    | 41243 | 1193    | 41257 | 1199    |
| 41269 | 1192    | 41281 | 1191    | 41299 | 1195    | 41333 | 1194    | 41341 | 1194    |
| 41357 | 1190    | 41381 | 1197    | 41387 | 1198    | 41389 | 1196    | 41399 | 1195    |
| 41413 | 1193    | 41443 | 1188    | 41453 | 1187    | 41467 | 1196    | 41479 | 1191    |
| 41507 | 1197    | 41513 | 1194    | 41519 | 1191    | 41521 | 1195    | 41539 | 1196    |
| 41549 | 1190    | 41579 | 1197    | 41593 | 1196    | 41597 | 1202    | 41603 | 1195    |
| 41611 | 1206    | 41617 | 1198    | 41621 | 1198    | 41627 | 1199    | 41641 | 1199    |
| 41651 | 1203    | 41659 | 1208    | 41669 | 1200    | 41681 | 1203    | 41687 | 1197    |
| 41729 | 1203    | 41737 | 1199    | 41759 | 1200    | 41761 | 1203    | 41771 | 1200    |
| 41801 | 1200    | 41809 | 1191    | 41813 | 1198    | 41843 | 1205    | 41849 | 1198    |
| 41863 | 1205    | 41879 | 1208    | 41887 | 1197    | 41893 | 1206    | 41897 | 1205    |
| 41911 | 1196    | 41927 | 1206    | 41941 | 1201    | 41947 | 1203    | 41953 | 1203    |
| 41959 | 1209    | 41969 | 1199    | 41981 | 1205    | 41983 | 1206    | 41999 | 1201    |
| 42017 | 1197    | 42019 | 1202    | 42023 | 1199    | 42043 | 1207    | 42061 | 1204    |
| 42073 | 1212    | 42083 | 1202    | 42089 | 1211    | 42101 | 1206    | 42131 | 1208    |
| 42157 | 1199    | 42169 | 1209    | 42179 | 1198    | 42181 | 1204    | 42187 | 1203    | 42193 | 1208 |
| $t_2^2$ | $q$ | $t_2^2$ | $q$ | $t_2^2$ | $q$ | $t_2^2$ | $q$ | $t_2^2$ | $q$ | $t_2^2$ |
|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| 1204  | 42197| 1208  | 42209| 1209  | 42221| 1207  | 42223| 1201  | 42239| 1208  |
| 1211  | 42257| 1206  | 42281| 1211  | 42293| 1208  | 42299| 1214  | 42307| 1212  |
| 1204  | 42323| 1213  | 42331| 1207  | 42337| 1210  | 42349| 1209  | 42359| 1214  |
| 1208  | 42379| 1212  | 42391| 1213  | 42397| 1212  | 42403| 1212  | 42407| 1205  |
| 1205  | 42433| 1211  | 42437| 1213  | 42443| 1213  | 42451| 1211  | 42457| 1209  |
| 1208  | 42463| 1209  | 42467| 1210  | 42473| 1210  | 42487| 1212  | 42491| 1213  |
| 1212  | 42509| 1214  | 42533| 1211  | 42557| 1220  | 42569| 1207  | 42571| 1210  |
| 1213  | 42589| 1213  | 42611| 1213  | 42641| 1214  | 42643| 1215  | 42649| 1213  |
| 1215  | 42677| 1214  | 42683| 1213  | 42689| 1208  | 42697| 1208  | 42701| 1223  |
| 1213  | 42709| 1212  | 42719| 1222  | 42727| 1209  | 42737| 1215  | 42743| 1216  |
| 1212  | 42767| 1219  | 42773| 1219  | 42787| 1220  | 42793| 1212  | 42797| 1217  |
| 1214  | 42829| 1218  | 42839| 1220  | 42841| 1220  | 42853| 1219  | 42859| 1217  |
| 1223  | 42899| 1217  | 42901| 1217  | 42923| 1215  | 42929| 1214  | 42937| 1217  |
| 1223  | 42953| 1225  | 42961| 1219  | 42967| 1219  | 42979| 1228  | 42989| 1220  |
| 1215  | 43013| 1218  | 43019| 1214  | 43037| 1214  | 43049| 1223  | 43051| 1216  |
| 1227  | 43067| 1216  | 43093| 1217  | 43103| 1217  | 43117| 1213  | 43133| 1233  |
| 1223  | 43159| 1221  | 43177| 1224  | 43189| 1219  | 43201| 1224  | 43207| 1218  |
| 1219  | 43237| 1222  | 43261| 1222  | 43271| 1225  | 43283| 1222  | 43291| 1225  |
| 1224  | 43319| 1229  | 43331| 1226  | 43391| 1220  | 43397| 1223  | 43399| 1222  |
| 1224  | 43403| 1231  | 43411| 1231  | 43427| 1223  | 43441| 1227  | 43451| 1226  |
| 1223  | 43481| 1223  | 43487| 1223  | 43499| 1227  | 43517| 1225  | 43541| 1227  |
| 1226  | 43573| 1227  | 43577| 1235  | 43579| 1235  | 43591| 1234  | 43597| 1224  |
| 1232  | 43609| 1242  | 43613| 1242  | 43627| 1229  | 43633| 1233  | 43649| 1225  |
| 1233  | 43661| 1236  | 43669| 1236  | 43691| 1232  | 43711| 1236  | 43717| 1223  |
| 1233  | 43753| 1226  | 43759| 1226  | 43777| 1231  | 43781| 1224  | 43783| 1235  |
| 1236  | 43789| 1236  | 43793| 1229  | 43801| 1226  | 43853| 1234  | 43867| 1235  |
| 1234  | 43891| 1236  | 43913| 1235  | 43933| 1235  | 43943| 1228  | 43951| 1231  |
| 1234  | 43963| 1230  | 43969| 1230  | 43973| 1231  | 43987| 1235  | 43991| 1236  |
| 1238  | 44017| 1241  | 44021| 1241  | 44027| 1233  | 44029| 1238  | 44041| 1240  |
| 1239  | 44059| 1242  | 44071| 1236  | 44087| 1235  | 44089| 1235  | 44101| 1237  |
| 1234  | 44119| 1235  | 44123| 1242  | 44129| 1235  | 44131| 1235  | 44159| 1238  |
| 1237  | 44179| 1237  | 44189| 1242  | 44201| 1234  | 44203| 1234  | 44207| 1236  |
| 1243  | 44249| 1245  | 44257| 1240  | 44263| 1240  | 44267| 1241  | 44269| 1243  |
| 1238  | 44279| 1239  | 44281| 1241  | 44293| 1239  | 44351| 1247  | 44357| 1237  |
| 1249  | 44381| 1241  | 44383| 1241  | 44389| 1244  | 44417| 1238  | 44449| 1237  |

Table 1 Continue 21
Table 1 Continue 22

| $q$  | $t_2^L$ | $q$  | $t_2^L$ | $q$  | $t_2^L$ | $q$  | $t_2^L$ | $q$  | $t_2^L$ |
|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|
| 44483 | 1243 | 44491 | 1247 | 44497 | 1244 | 44501 | 1244 | 44507 | 1251 | 44519 | 1237 |
| 44531 | 1238 | 44533 | 1243 | 44537 | 1239 | 44543 | 1252 | 44549 | 1245 | 44563 | 1246 |
| 44579 | 1248 | 44587 | 1246 | 44617 | 1248 | 44621 | 1244 | 44623 | 1242 | 44633 | 1243 |
| 44641 | 1245 | 44647 | 1240 | 44651 | 1246 | 44657 | 1245 | 44683 | 1241 | 44687 | 1246 |
| 44699 | 1244 | 44701 | 1249 | 44711 | 1250 | 44729 | 1243 | 44741 | 1248 | 44753 | 1254 |
| 44771 | 1246 | 44773 | 1238 | 44777 | 1253 | 44789 | 1243 | 44797 | 1250 | 44809 | 1245 |
| 44819 | 1256 | 44839 | 1247 | 44843 | 1237 | 44851 | 1245 | 44867 | 1249 | 44879 | 1255 |
| 44887 | 1253 | 44893 | 1255 | 44909 | 1245 | 44917 | 1250 | 44927 | 1249 | 44939 | 1256 |
| 44953 | 1251 | 44959 | 1246 | 44963 | 1255 | 44971 | 1242 | 44983 | 1248 | 44987 | 1251 |
| 45007 | 1250 | 45013 | 1253 | 45053 | 1251 | 45061 | 1247 | 45077 | 1251 | 45083 | 1259 |
| 45119 | 1254 | 45121 | 1254 | 45127 | 1245 | 45131 | 1256 | 45137 | 1251 | 45139 | 1250 |
| 45161 | 1264 | 45179 | 1254 | 45181 | 1256 | 45191 | 1258 | 45197 | 1258 | 45233 | 1258 |
| 45247 | 1252 | 45259 | 1267 | 45263 | 1256 | 45281 | 1262 | 45289 | 1259 | 45293 | 1263 |
| 45307 | 1255 | 45317 | 1264 | 45319 | 1254 | 45329 | 1255 | 45337 | 1254 | 45341 | 1254 |
| 45343 | 1254 | 45361 | 1252 | 45377 | 1254 | 45389 | 1250 | 45403 | 1256 | 45413 | 1251 |
| 45427 | 1256 | 45433 | 1249 | 45439 | 1256 | 45481 | 1262 | 45491 | 1255 | 45497 | 1258 |
| 45503 | 1257 | 45523 | 1249 | 45533 | 1265 | 45541 | 1252 | 45553 | 1259 | 45557 | 1258 |
| 45569 | 1252 | 45587 | 1267 | 45589 | 1258 | 45599 | 1261 | 45613 | 1261 | 45631 | 1271 |
| 45641 | 1266 | 45659 | 1255 | 45667 | 1261 | 45673 | 1261 | 45677 | 1261 | 45691 | 1251 |
| 45697 | 1269 | 45707 | 1265 | 45737 | 1260 | 45751 | 1260 | 45757 | 1263 | 45763 | 1259 |
| 45767 | 1262 | 45779 | 1257 | 45817 | 1258 | 45821 | 1265 | 45823 | 1267 | 45827 | 1264 |
| 45833 | 1264 | 45841 | 1265 | 45853 | 1264 | 45863 | 1266 | 45869 | 1262 | 45887 | 1269 |
| 45893 | 1265 | 45943 | 1267 | 45949 | 1274 | 45953 | 1263 | 45959 | 1272 | 45971 | 1262 |
| 45979 | 1260 | 45989 | 1272 | 46021 | 1265 | 46027 | 1264 | 46049 | 1267 | 46051 | 1268 |
| 46061 | 1264 | 46073 | 1267 | 46091 | 1263 | 46093 | 1265 | 46099 | 1269 | 46103 | 1270 |
| 46133 | 1275 | 46141 | 1271 | 46147 | 1271 | 46153 | 1264 | 46171 | 1272 | 46181 | 1267 |
| 46183 | 1270 | 46187 | 1272 | 46199 | 1272 | 46219 | 1268 | 46229 | 1267 | 46237 | 1272 |
| 46261 | 1264 | 46271 | 1264 | 46273 | 1273 | 46279 | 1271 | 46301 | 1273 | 46307 | 1267 |
| 46309 | 1269 | 46327 | 1268 | 46337 | 1271 | 46349 | 1267 | 46351 | 1271 | 46381 | 1274 |
| 46399 | 1271 | 46411 | 1272 | 46439 | 1265 | 46441 | 1273 | 46447 | 1267 | 46451 | 1267 |
| 46457 | 1279 | 46471 | 1267 | 46477 | 1277 | 46489 | 1276 | 46499 | 1275 | 46507 | 1271 |
| 46511 | 1273 | 46523 | 1274 | 46549 | 1269 | 46559 | 1274 | 46567 | 1272 | 46573 | 1279 |
| 46589 | 1276 | 46591 | 1266 | 46601 | 1272 | 46619 | 1281 | 46633 | 1273 | 46639 | 1270 |
| 46643 | 1280 | 46649 | 1274 | 46663 | 1284 | 46679 | 1275 | 46681 | 1278 | 46687 | 1269 |
| 46691 | 1273 | 46703 | 1274 | 46723 | 1279 | 46727 | 1280 | 46747 | 1282 | 46751 | 1284 |
| $q$  | $t_2^L$ | $q$  | $t_2^L$ | $q$  | $t_2^L$ | $q$  | $t_2^L$ | $q$  | $t_2^L$ |
|------|---------|------|---------|------|---------|------|---------|------|---------|
| 46757 | 1281    | 46769 | 1282    | 46771 | 1278    | 46807 | 1282    | 46811 | 1282    |
| 46819 | 1276    | 46829 | 1280    | 46831 | 1274    | 46853 | 1281    | 46861 | 1287    |
| 46877 | 1273    | 46889 | 1282    | 46901 | 1274    | 46919 | 1284    | 46933 | 1275    |
| 46993 | 1277    | 46997 | 1285    | 47017 | 1291    | 47041 | 1283    | 47051 | 1284    |
| 47059 | 1280    | 47087 | 1280    | 47093 | 1277    | 47111 | 1284    | 47119 | 1283    |
| 47129 | 1278    | 47137 | 1281    | 47143 | 1287    | 47147 | 1287    | 47149 | 1282    |
| 47189 | 1285    | 47207 | 1284    | 47221 | 1294    | 47237 | 1280    | 47251 | 1285    |
| 47279 | 1284    | 47287 | 1288    | 47293 | 1283    | 47297 | 1287    | 47303 | 1283    |
| 47317 | 1280    | 47339 | 1283    | 47351 | 1288    | 47353 | 1287    | 47363 | 1281    |
| 47387 | 1292    | 47399 | 1287    | 47407 | 1282    | 47417 | 1287    | 47419 | 1280    |
| 47441 | 1283    | 47459 | 1286    | 47491 | 1290    | 47497 | 1293    | 47501 | 1290    |
| 47513 | 1287    | 47521 | 1284    | 47527 | 1288    | 47533 | 1286    | 47543 | 1293    |
| 47569 | 1293    | 47581 | 1290    | 47591 | 1293    | 47599 | 1289    | 47609 | 1287    |
| 47629 | 1283    | 47639 | 1294    | 47653 | 1293    | 47657 | 1288    | 47659 | 1288    |
| 47699 | 1291    | 47701 | 1293    | 47711 | 1290    | 47713 | 1292    | 47717 | 1289    |
| 47741 | 1296    | 47743 | 1288    | 47777 | 1298    | 47779 | 1290    | 47791 | 1289    |
| 47807 | 1295    | 47809 | 1293    | 47819 | 1288    | 47837 | 1289    | 47843 | 1294    |
| 47869 | 1293    | 47881 | 1296    | 47903 | 1293    | 47911 | 1303    | 47917 | 1292    |
| 47939 | 1293    | 47947 | 1293    | 47951 | 1297    | 47963 | 1292    | 47969 | 1296    |
| 47981 | 1297    | 48017 | 1296    | 48023 | 1290    | 48029 | 1296    | 48049 | 1296    |
| 48079 | 1295    | 48091 | 1301    | 48109 | 1303    | 48119 | 1293    | 48121 | 1298    |
| 48157 | 1296    | 48163 | 1305    | 48179 | 1294    | 48187 | 1295    | 48193 | 1297    |
| 48221 | 1300    | 48239 | 1299    | 48247 | 1298    | 48259 | 1301    | 48271 | 1304    |
| 48299 | 1303    | 48311 | 1300    | 48313 | 1291    | 48337 | 1300    | 48341 | 1308    |
| 48371 | 1311    | 48383 | 1305    | 48397 | 1304    | 48407 | 1309    | 48409 | 1301    |
| 48437 | 1306    | 48449 | 1305    | 48463 | 1303    | 48473 | 1301    | 48479 | 1298    |
| 48487 | 1302    | 48491 | 1313    | 48497 | 1300    | 48523 | 1308    | 48527 | 1304    |
| 48539 | 1306    | 48541 | 1305    | 48563 | 1303    | 48571 | 1301    | 48589 | 1306    |
| 48611 | 1308    | 48619 | 1302    | 48623 | 1309    | 48647 | 1309    | 48649 | 1306    |
| 48673 | 1303    | 48677 | 1304    | 48679 | 1308    | 48731 | 1306    | 48733 | 1306    |
| 48757 | 1312    | 48761 | 1307    | 48767 | 1301    | 48779 | 1301    | 48781 | 1307    |
| 48799 | 1305    | 48809 | 1310    | 48817 | 1309    | 48821 | 1306    | 48823 | 1308    |
| 48857 | 1304    | 48859 | 1308    | 48869 | 1308    | 48871 | 1309    | 48883 | 1309    |
| 48907 | 1308    | 48947 | 1304    | 48953 | 1310    | 48973 | 1306    | 48989 | 1312    |
| 49003 | 1308    | 49009 | 1316    | 49019 | 1313    | 49031 | 1314    | 49033 | 1316    | 49037 | 1314 |
| $q$ | $t_2^L$ | $q$ | $t_2^L$ | $q$ | $t_2^L$ | $q$ | $t_2^L$ | $q$ | $t_2^L$ | $q$ | $t_2^L$ |
|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|
| 49043 | 1314 | 49057 | 1312 | 49069 | 1313 | 49081 | 1310 | 49103 | 1308 | 49109 | 1308 |
| 49117 | 1311 | 49121 | 1308 | 49123 | 1310 | 49139 | 1310 | 49157 | 1322 | 49169 | 1310 |
| 49171 | 1314 | 49177 | 1309 | 49193 | 1318 | 49199 | 1317 | 49201 | 1317 | 49207 | 1309 |
| 49211 | 1311 | 49223 | 1311 | 49253 | 1317 | 49261 | 1310 | 49277 | 1313 | 49279 | 1310 |
| 49297 | 1312 | 49307 | 1314 | 49331 | 1316 | 49333 | 1317 | 49339 | 1315 | 49363 | 1318 |
| 49367 | 1315 | 49369 | 1322 | 49391 | 1322 | 49393 | 1317 | 49409 | 1320 | 49411 | 1316 |
| 49417 | 1314 | 49429 | 1311 | 49433 | 1323 | 49451 | 1315 | 49459 | 1323 | 49463 | 1312 |
| 49477 | 1320 | 49481 | 1325 | 49499 | 1314 | 49523 | 1313 | 49529 | 1315 | 49531 | 1322 |
| 49537 | 1313 | 49547 | 1319 | 49549 | 1310 | 49559 | 1320 | 49597 | 1323 | 49603 | 1315 |
| 49613 | 1317 | 49627 | 1323 | 49633 | 1313 | 49639 | 1326 | 49663 | 1320 | 49667 | 1323 |
| 49669 | 1328 | 49681 | 1322 | 49697 | 1321 | 49711 | 1330 | 49727 | 1320 | 49739 | 1319 |
| 49741 | 1322 | 49747 | 1317 | 49757 | 1318 | 49783 | 1325 | 49787 | 1327 | 49789 | 1323 |
| 49801 | 1331 | 49807 | 1327 | 49811 | 1326 | 49823 | 1323 | 49831 | 1321 | 49843 | 1315 |
| 49853 | 1322 | 49871 | 1321 | 49877 | 1325 | 49891 | 1316 | 49919 | 1322 | 49921 | 1317 |
| 49927 | 1324 | 49937 | 1320 | 49939 | 1318 | 49943 | 1331 | 49957 | 1320 | 49991 | 1326 |
| 49993 | 1325 | 49999 | 1332 | 50021 | 1328 | 50023 | 1324 | 50033 | 1332 | 50047 | 1327 |
| 50051 | 1320 | 50053 | 1325 | 50069 | 1327 | 50077 | 1330 | 50087 | 1326 | 50093 | 1328 |
| 50101 | 1321 | 50111 | 1327 | 50119 | 1325 | 50123 | 1327 | 50129 | 1332 | 50131 | 1328 |
| 50147 | 1330 | 50153 | 1327 | 50159 | 1325 | 50177 | 1325 | 50207 | 1337 | 50221 | 1325 |
| 50227 | 1326 | 50231 | 1330 | 50261 | 1330 | 50263 | 1331 | 50273 | 1325 | 50287 | 1334 |
| 50291 | 1336 | 50311 | 1336 | 50321 | 1335 | 50329 | 1327 | 50333 | 1333 | 50341 | 1333 |
| 50359 | 1328 | 50363 | 1335 | 50377 | 1330 | 50383 | 1331 | 50387 | 1332 | 50411 | 1327 |
| 50417 | 1322 | 50423 | 1336 | 50441 | 1332 | 50459 | 1327 | 50461 | 1335 | 50497 | 1333 |
| 50503 | 1329 | 50513 | 1329 | 50527 | 1326 | 50539 | 1330 | 50543 | 1325 | 50549 | 1337 |
| 50551 | 1336 | 50581 | 1332 | 50587 | 1328 | 50591 | 1330 | 50593 | 1329 | 50599 | 1341 |
| 50627 | 1331 | 50647 | 1339 | 50651 | 1338 | 50671 | 1327 | 50683 | 1337 | 50707 | 1336 |
| 50723 | 1335 | 50741 | 1336 | 50753 | 1342 | 50767 | 1329 | 50773 | 1338 | 50777 | 1333 |
| 50789 | 1335 | 50821 | 1339 | 50833 | 1342 | 50839 | 1340 | 50849 | 1345 | 50857 | 1345 |
| 50867 | 1336 | 50873 | 1342 | 50891 | 1339 | 50893 | 1334 | 50909 | 1343 | 50923 | 1343 |
| 50929 | 1338 | 50951 | 1343 | 50957 | 1345 | 50969 | 1341 | 50971 | 1336 | 50989 | 1337 |
| 50993 | 1341 | 51001 | 1339 | 51031 | 1340 | 51043 | 1331 | 51047 | 1345 | 51059 | 1348 |
| 51061 | 1346 | 51071 | 1339 | 51109 | 1342 | 51131 | 1335 | 51133 | 1342 | 51137 | 1343 |
| 51151 | 1346 | 51157 | 1337 | 51169 | 1338 | 51193 | 1347 | 51197 | 1339 | 51199 | 1345 |
| 51203 | 1345 | 51217 | 1338 | 51229 | 1343 | 51239 | 1342 | 51241 | 1334 | 51257 | 1343 |
| 51263 | 1343 | 51283 | 1343 | 51287 | 1342 | 51307 | 1343 | 51329 | 1344 | 51341 | 1344 |
Table 1 Continue 25

| $q$  | $t_2^q$ | $q$  | $t_2^q$ | $q$  | $t_2^q$ | $q$  | $t_2^q$ | $q$  | $t_2^q$ |
|------|---------|------|---------|------|---------|------|---------|------|---------|
| 51343 1341 | 51347 1341 | 51349 1344 | 51361 1346 | 51383 1352 | 51407 1347 |
| 51413 1342 | 51419 1343 | 51421 1350 | 51427 1341 | 51431 1347 | 51437 1346 |
| 51439 1348 | 51449 1344 | 51461 1345 | 51473 1353 | 51479 1347 | 51481 1339 |
| 51487 1346 | 51503 1352 | 51511 1339 | 51517 1351 | 51521 1349 | 51539 1348 |
| 51551 1347 | 51563 1347 | 51577 1345 | 51581 1345 | 51593 1344 | 51599 1345 |
| 51607 1353 | 51613 1347 | 51631 1349 | 51637 1351 | 51647 1348 | 51659 1351 |
| 51673 1346 | 51679 1344 | 51683 1347 | 51691 1351 | 51713 1357 | 51719 1357 |
| 51721 1349 | 51749 1353 | 51767 1348 | 51769 1355 | 51787 1346 | 51797 1352 |
| 51803 1347 | 51817 1357 | 51827 1348 | 51829 1352 | 51839 1353 | 51853 1355 |
| 51859 1354 | 51869 1359 | 51871 1350 | 51893 1357 | 51899 1362 | 51907 1364 |
| 51913 1361 | 51929 1357 | 51941 1355 | 51949 1354 | 51971 1349 | 51973 1363 |
| 51977 1354 | 51991 1357 | 52009 1357 | 52021 1361 | 52027 1345 | 52051 1356 |
| 52057 1354 | 52067 1355 | 52069 1363 | 52081 1356 | 52103 1358 | 52121 1351 |
| 52127 1354 | 52147 1354 | 52153 1359 | 52163 1347 | 52177 1360 | 52181 1361 |
| 52183 1350 | 52189 1357 | 52201 1354 | 52223 1352 | 52237 1361 | 52249 1357 |
| 52253 1360 | 52259 1352 | 52267 1359 | 52289 1361 | 52291 1360 | 52301 1352 |
| 52313 1363 | 52321 1366 | 52361 1357 | 52363 1364 | 52369 1361 | 52379 1360 |
| 52387 1357 | 52391 1359 | 52433 1357 | 52453 1370 | 52457 1358 | 52489 1361 |
| 52501 1359 | 52511 1364 | 52517 1361 | 52529 1364 | 52541 1366 | 52543 1364 |
| 52553 1357 | 52561 1362 | 52567 1354 | 52571 1371 | 52579 1366 | 52583 1365 |
| 52609 1362 | 52627 1359 | 52631 1360 | 52639 1366 | 52667 1358 | 52673 1375 |
| 52691 1358 | 52697 1361 | 52709 1364 | 52711 1357 | 52721 1364 | 52727 1361 |
| 52733 1370 | 52747 1372 | 52757 1358 | 52769 1357 | 52783 1366 | 52807 1365 |
| 52813 1370 | 52817 1371 | 52837 1374 | 52859 1365 | 52861 1365 | 52879 1369 |
| 52883 1377 | 52889 1371 | 52901 1369 | 52903 1368 | 52919 1374 | 52937 1366 |
| 52951 1365 | 52957 1371 | 52963 1367 | 52967 1363 | 52973 1362 | 52981 1373 |
| 52999 1370 | 53003 1364 | 53017 1377 | 53047 1370 | 53051 1372 | 53069 1365 |
| 53077 1366 | 53087 1372 | 53089 1371 | 53093 1369 | 53101 1370 | 53113 1368 |
| 53117 1376 | 53129 1378 | 53147 1367 | 53149 1373 | 53161 1370 | 53171 1368 |
| 53173 1368 | 53189 1373 | 53197 1369 | 53201 1367 | 53231 1375 | 53233 1377 |
| 53239 1364 | 53267 1369 | 53269 1368 | 53279 1377 | 53281 1377 | 53299 1368 |
| 53309 1366 | 53323 1373 | 53327 1377 | 53353 1377 | 53359 1378 | 53377 1375 |
| 53381 1377 | 53401 1371 | 53407 1371 | 53411 1379 | 53419 1376 | 53437 1367 |
| 53441 1376 | 53453 1379 | 53479 1380 | 53503 1371 | 53507 1369 | 53527 1377 |
| 53549 1382 | 53551 1376 | 53569 1375 | 53591 1375 | 53593 1380 | 53597 1376 |
### Table 1 Continue 26

| $q$  | $t^L_2$ | $q$  | $t^L_2$ | $q$  | $t^L_2$ | $q$  | $t^L_2$ | $q$  | $t^L_2$ |
|------|--------|------|--------|------|--------|------|--------|------|--------|
| 53609 | 1365 | 53611 | 1368 | 53617 | 1382 | 53623 | 1372 | 53629 | 1378 |
| 53639 | 1372 | 53653 | 1376 | 53657 | 1375 | 53681 | 1377 | 53693 | 1379 |
| 53717 | 1379 | 53719 | 1387 | 53731 | 1385 | 53759 | 1377 | 53773 | 1376 |
| 53783 | 1380 | 53791 | 1383 | 53813 | 1378 | 53819 | 1379 | 53831 | 1377 |
| 53857 | 1382 | 53861 | 1379 | 53881 | 1383 | 53887 | 1376 | 53891 | 1380 |
| 53899 | 1386 | 53917 | 1377 | 53923 | 1383 | 53927 | 1373 | 53939 | 1381 |
| 53959 | 1378 | 53987 | 1381 | 53993 | 1380 | 54001 | 1381 | 54011 | 1385 |
| 54037 | 1384 | 54049 | 1383 | 54059 | 1386 | 54083 | 1378 | 54091 | 1379 |
| 54121 | 1390 | 54133 | 1381 | 54139 | 1380 | 54151 | 1387 | 54163 | 1388 |
| 54181 | 1385 | 54193 | 1377 | 54217 | 1388 | 54251 | 1381 | 54269 | 1387 |
| 54287 | 1380 | 54293 | 1386 | 54311 | 1389 | 54319 | 1388 | 54323 | 1388 |
| 54347 | 1377 | 54361 | 1386 | 54367 | 1386 | 54371 | 1382 | 54377 | 1392 |
| 54403 | 1391 | 54409 | 1387 | 54413 | 1392 | 54419 | 1387 | 54421 | 1389 |
| 54443 | 1390 | 54449 | 1392 | 54469 | 1391 | 54493 | 1396 | 54497 | 1390 |
| 54503 | 1385 | 54517 | 1390 | 54521 | 1399 | 54539 | 1386 | 54541 | 1389 |
| 54559 | 1387 | 54563 | 1394 | 54577 | 1390 | 54581 | 1392 | 54583 | 1385 |
| 54617 | 1389 | 54623 | 1390 | 54629 | 1397 | 54631 | 1390 | 54647 | 1387 |
| 54673 | 1391 | 54679 | 1396 | 54709 | 1396 | 54713 | 1393 | 54721 | 1387 |
| 54751 | 1395 | 54767 | 1389 | 54773 | 1395 | 54779 | 1404 | 54787 | 1394 |
| 54829 | 1384 | 54833 | 1400 | 54851 | 1391 | 54869 | 1399 | 54877 | 1393 |
| 54907 | 1394 | 54917 | 1394 | 54919 | 1391 | 54941 | 1398 | 54949 | 1399 |
| 54973 | 1390 | 54979 | 1399 | 54983 | 1390 | 55001 | 1403 | 55009 | 1398 |
| 55049 | 1394 | 55051 | 1393 | 55057 | 1404 | 55061 | 1395 | 55073 | 1402 |
| 55103 | 1391 | 55109 | 1399 | 55117 | 1401 | 55127 | 1396 | 55147 | 1407 |
| 55171 | 1389 | 55201 | 1408 | 55207 | 1399 | 55213 | 1395 | 55217 | 1396 |
| 55229 | 1401 | 55243 | 1406 | 55249 | 1406 | 55259 | 1399 | 55291 | 1402 |
| 55331 | 1406 | 55333 | 1399 | 55337 | 1394 | 55339 | 1396 | 55343 | 1395 |
| 55373 | 1397 | 55381 | 1401 | 55399 | 1403 | 55411 | 1399 | 55439 | 1410 |
| 55457 | 1404 | 55469 | 1404 | 55487 | 1397 | 55501 | 1407 | 55511 | 1402 |
| 55541 | 1399 | 55547 | 1395 | 55579 | 1405 | 55589 | 1405 | 55603 | 1406 |
| 55619 | 1414 | 55621 | 1402 | 55631 | 1412 | 55633 | 1412 | 55639 | 1404 |
| 55663 | 1405 | 55667 | 1403 | 55673 | 1417 | 55681 | 1408 | 55691 | 1410 |
| 55711 | 1408 | 55717 | 1407 | 55721 | 1406 | 55733 | 1407 | 55763 | 1407 |
| 55793 | 1406 | 55799 | 1411 | 55807 | 1409 | 55813 | 1407 | 55817 | 1407 |
| 55823 | 1404 | 55829 | 1409 | 55837 | 1415 | 55843 | 1412 | 55849 | 1407 |
|        |        |        |        |        |        |        |        |        |        |
| $q$  | $t^L_2$ | $q$  | $t^L_2$ | $q$  | $t^L_2$ | $q$  | $t^L_2$ | $q$  | $t^L_2$ |
|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|
| 55889 | 1409 | 55897 | 1414 | 55901 | 1410 | 55903 | 1411 | 55921 | 1407 | 55927 | 1409 |
| 55931 | 1406 | 55933 | 1406 | 55949 | 1407 | 55967 | 1408 | 55987 | 1409 | 55997 | 1405 |
| 56009 | 1409 | 56039 | 1411 | 56041 | 1412 | 56053 | 1403 | 56081 | 1414 | 56087 | 1412 |
| 56093 | 1416 | 56099 | 1405 | 56101 | 1413 | 56113 | 1416 | 56123 | 1412 | 56131 | 1409 |
| 56149 | 1414 | 56167 | 1409 | 56171 | 1409 | 56179 | 1419 | 56197 | 1415 | 56207 | 1418 |
| 56209 | 1406 | 56237 | 1410 | 56239 | 1413 | 56249 | 1415 | 56263 | 1413 | 56267 | 1418 |
| 56269 | 1407 | 56299 | 1414 | 56311 | 1412 | 56333 | 1414 | 56359 | 1411 | 56369 | 1417 |
| 56377 | 1417 | 56383 | 1421 | 56393 | 1411 | 56401 | 1415 | 56417 | 1415 | 56431 | 1417 |
| 56437 | 1417 | 56443 | 1420 | 56453 | 1414 | 56467 | 1411 | 56473 | 1421 | 56477 | 1418 |
| 56479 | 1417 | 56489 | 1419 | 56501 | 1422 | 56503 | 1418 | 56509 | 1406 | 56519 | 1413 |
| 56527 | 1416 | 56531 | 1415 | 56533 | 1414 | 56543 | 1417 | 56569 | 1418 | 56591 | 1414 |
| 56597 | 1417 | 56599 | 1420 | 56611 | 1425 | 56629 | 1417 | 56633 | 1414 | 56659 | 1427 |
| 56663 | 1426 | 56671 | 1417 | 56681 | 1421 | 56687 | 1422 | 56701 | 1417 | 56711 | 1416 |
| 56713 | 1414 | 56731 | 1422 | 56737 | 1418 | 56747 | 1423 | 56767 | 1422 | 56773 | 1415 |
| 56779 | 1416 | 56783 | 1423 | 56807 | 1425 | 56809 | 1423 | 56813 | 1420 | 56821 | 1422 |
| 56827 | 1428 | 56843 | 1421 | 56857 | 1425 | 56873 | 1426 | 56891 | 1421 | 56893 | 1419 |
| 56897 | 1426 | 56909 | 1421 | 56911 | 1425 | 56921 | 1417 | 56923 | 1417 | 56929 | 1426 |
| 56941 | 1421 | 56951 | 1422 | 56957 | 1415 | 56963 | 1432 | 56983 | 1425 | 56989 | 1419 |
| 56993 | 1430 | 56999 | 1424 | 57037 | 1430 | 57041 | 1419 | 57047 | 1424 | 57059 | 1420 |
| 57073 | 1429 | 57077 | 1420 | 57089 | 1424 | 57097 | 1422 | 57107 | 1428 | 57119 | 1426 |
| 57131 | 1424 | 57139 | 1430 | 57143 | 1430 | 57149 | 1425 | 57163 | 1429 | 57173 | 1425 |
| 57179 | 1424 | 57191 | 1435 | 57193 | 1426 | 57203 | 1438 | 57221 | 1420 | 57223 | 1440 |
| 57241 | 1422 | 57251 | 1420 | 57259 | 1427 | 57269 | 1428 | 57271 | 1424 | 57283 | 1426 |
| 57287 | 1425 | 57301 | 1418 | 57329 | 1432 | 57331 | 1431 | 57347 | 1429 | 57349 | 1430 |
| 57367 | 1426 | 57373 | 1420 | 57383 | 1426 | 57389 | 1432 | 57397 | 1426 | 57413 | 1432 |
| 57427 | 1426 | 57457 | 1431 | 57467 | 1426 | 57487 | 1429 | 57493 | 1434 | 57503 | 1427 |
| 57527 | 1428 | 57529 | 1427 | 57557 | 1434 | 57559 | 1428 | 57571 | 1438 | 57587 | 1430 |
| 57593 | 1435 | 57601 | 1432 | 57637 | 1433 | 57641 | 1433 | 57649 | 1433 | 57653 | 1434 |
| 57667 | 1435 | 57679 | 1430 | 57689 | 1427 | 57697 | 1429 | 57709 | 1430 | 57713 | 1430 |
| 57719 | 1439 | 57727 | 1434 | 57731 | 1434 | 57737 | 1437 | 57751 | 1430 | 57773 | 1438 |
| 57781 | 1436 | 57787 | 1431 | 57791 | 1428 | 57793 | 1428 | 57803 | 1442 | 57809 | 1437 |
| 57829 | 1434 | 57839 | 1430 | 57847 | 1434 | 57853 | 1428 | 57859 | 1433 | 57881 | 1441 |
| 57899 | 1440 | 57901 | 1447 | 57917 | 1432 | 57923 | 1441 | 57943 | 1439 | 57947 | 1443 |
| 57973 | 1437 | 57977 | 1441 | 57991 | 1437 | 58013 | 1433 | 58027 | 1438 | 58031 | 1438 |
| 58043 | 1434 | 58049 | 1443 | 58057 | 1435 | 58061 | 1430 | 58067 | 1447 | 58073 | 1438 |
Table 1 Continue 28

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| $q$ | $t_2^L$ | $q$ | $t_2^L$ | $q$ | $t_2^L$ | $q$ | $t_2^L$ |
| 58099 | 1438 | 58109 | 1442 | 58111 | 1449 | 58129 | 1434 |
| 58153 | 1434 | 58169 | 1440 | 58171 | 1441 | 58189 | 1439 |
| 58207 | 1446 | 58211 | 1442 | 58217 | 1451 | 58229 | 1440 |
| 58243 | 1444 | 58271 | 1445 | 58309 | 1445 | 58313 | 1438 |
| 58363 | 1436 | 58367 | 1442 | 58369 | 1437 | 58379 | 1445 |
| 58403 | 1441 | 58411 | 1442 | 58417 | 1443 | 58427 | 1440 |
| 58451 | 1442 | 58453 | 1435 | 58477 | 1443 | 58481 | 1441 |
| 58543 | 1448 | 58549 | 1445 | 58567 | 1445 | 58573 | 1438 |
| 58603 | 1446 | 58613 | 1441 | 58631 | 1442 | 58657 | 1446 |
| 58687 | 1440 | 58693 | 1441 | 58699 | 1441 | 58711 | 1449 |
| 58741 | 1441 | 58757 | 1450 | 58763 | 1449 | 58771 | 1452 |
| 58831 | 1446 | 58889 | 1461 | 58897 | 1451 | 58901 | 1445 |
| 58913 | 1445 | 58921 | 1454 | 58937 | 1455 | 58943 | 1452 |
| 58979 | 1456 | 58991 | 1452 | 58997 | 1460 | 59009 | 1448 |
| 59023 | 1452 | 59029 | 1448 | 59051 | 1454 | 59053 | 1445 |
| 59077 | 1456 | 59083 | 1460 | 59093 | 1457 | 59107 | 1454 |
| 59123 | 1454 | 59141 | 1446 | 59149 | 1448 | 59159 | 1456 |
| 59197 | 1459 | 59207 | 1447 | 59209 | 1452 | 59219 | 1459 |
| 59239 | 1457 | 59243 | 1463 | 59263 | 1454 | 59273 | 1455 |
| 59341 | 1460 | 59351 | 1464 | 59357 | 1460 | 59359 | 1453 |
| 59387 | 1454 | 59393 | 1456 | 59399 | 1451 | 59407 | 1455 |
| 59441 | 1459 | 59443 | 1455 | 59447 | 1448 | 59453 | 1454 |
| 59473 | 1465 | 59497 | 1448 | 59509 | 1464 | 59513 | 1464 |
| 59561 | 1468 | 59567 | 1455 | 59581 | 1453 | 59611 | 1464 |
| 59627 | 1461 | 59629 | 1468 | 59651 | 1466 | 59659 | 1453 |
| 59671 | 1461 | 59693 | 1458 | 59699 | 1463 | 59707 | 1459 |
| 59743 | 1454 | 59747 | 1470 | 59753 | 1465 | 59771 | 1473 |
| 59797 | 1460 | 59809 | 1468 | 59833 | 1465 | 59863 | 1466 |
| 59921 | 1468 | 59929 | 1465 | 59951 | 1470 | 59957 | 1465 |
| 59999 | 1463 | 60013 | 1470 | 60017 | 1468 | 60029 | 1457 |
| 60077 | 1463 | 60083 | 1469 | 60089 | 1468 | 60091 | 1462 |
| 60107 | 1468 | 60127 | 1464 | 60133 | 1471 | 60139 | 1464 |
| 60167 | 1462 | 60169 | 1463 | 60209 | 1466 | 60217 | 1463 |
| 60257 | 1464 | 60259 | 1458 | 60271 | 1466 | 60289 | 1466 |
| 60331 | 1473 | 60337 | 1469 | 60343 | 1463 | 60353 | 1471 |

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Table 1 Continue 29

| $q$  | $t_2^L$ | $q$  | $t_2^L$ | $q$  | $t_2^L$ | $q$  | $t_2^L$ |
|------|---------|------|---------|------|---------|------|---------|
| 60397 1472 | 60413 1468 | 60427 1467 | 60443 1466 | 60449 1480 | 60457 1472 |
| 60493 1466 | 60497 1479 | 60509 1471 | 60521 1471 | 60527 1467 | 60539 1470 |
| 60589 1467 | 60601 1477 | 60607 1474 | 60611 1479 | 60617 1472 | 60623 1485 |
| 60631 1468 | 60637 1468 | 60647 1476 | 60649 1474 | 60659 1470 | 60661 1470 |
| 60679 1472 | 60689 1474 | 60703 1473 | 60719 1476 | 60727 1474 | 60733 1475 |
| 60737 1472 | 60757 1482 | 60761 1473 | 60763 1477 | 60773 1470 | 60779 1471 |
| 60793 1473 | 60811 1470 | 60821 1476 | 60859 1483 | 60869 1475 | 60887 1475 |
| 60889 1476 | 60899 1468 | 60901 1479 | 60913 1478 | 60917 1482 | 60919 1486 |
| 60923 1471 | 60937 1476 | 60943 1472 | 60953 1485 | 60961 1483 | 61001 1475 |
| 61007 1472 | 61027 1475 | 61031 1478 | 61043 1479 | 61051 1480 | 61057 1473 |
| 61091 1469 | 61099 1480 | 61121 1479 | 61129 1483 | 61141 1479 | 61151 1478 |
| 61153 1481 | 61169 1483 | 61211 1488 | 61223 1477 | 61231 1482 | 61253 1482 |
| 61261 1483 | 61283 1479 | 61291 1491 | 61297 1473 | 61331 1479 | 61333 1479 |
| 61339 1483 | 61343 1481 | 61357 1488 | 61363 1476 | 61379 1484 | 61381 1484 |
| 61403 1486 | 61409 1484 | 61417 1476 | 61441 1481 | 61463 1488 | 61469 1487 |
| 61471 1482 | 61483 1489 | 61487 1488 | 61493 1484 | 61507 1481 | 61511 1485 |
| 61519 1483 | 61543 1481 | 61547 1490 | 61553 1481 | 61559 1478 | 61561 1484 |
| 61583 1484 | 61603 1483 | 61609 1488 | 61613 1489 | 61627 1487 | 61631 1490 |
| 61637 1485 | 61643 1488 | 61651 1483 | 61657 1482 | 61667 1489 | 61673 1483 |
| 61681 1490 | 61687 1487 | 61703 1491 | 61717 1479 | 61723 1486 | 61729 1488 |
| 61751 1496 | 61757 1493 | 61781 1487 | 61813 1486 | 61819 1491 | 61837 1489 |
| 61843 1492 | 61861 1487 | 61871 1486 | 61879 1485 | 61909 1497 | 61927 1495 |
| 61933 1488 | 61949 1484 | 61961 1487 | 61967 1485 | 61979 1500 | 61981 1491 |
| 61987 1489 | 61991 1484 | 62003 1490 | 62011 1491 | 62017 1500 | 62039 1494 |
| 62047 1489 | 62053 1491 | 62057 1490 | 62071 1489 | 62081 1489 | 62099 1492 |
| 62119 1490 | 62129 1491 | 62131 1486 | 62137 1487 | 62141 1496 | 62143 1491 |
| 62171 1485 | 62189 1500 | 62191 1498 | 62201 1496 | 62207 1489 | 62213 1485 |
| 62219 1496 | 62233 1497 | 62273 1491 | 62297 1494 | 62299 1495 | 62303 1494 |
| 62311 1500 | 62323 1491 | 62327 1490 | 62347 1497 | 62351 1495 | 62383 1499 |
| 62401 1501 | 62417 1498 | 62423 1493 | 62459 1495 | 62467 1490 | 62473 1498 |
| 62477 1491 | 62483 1493 | 62497 1499 | 62501 1497 | 62507 1499 | 62533 1499 |
| 62539 1496 | 62549 1492 | 62563 1491 | 62581 1496 | 62591 1496 | 62597 1495 |
| 62603 1493 | 62617 1496 | 62627 1498 | 62633 1507 | 62639 1495 | 62653 1498 |
| 62659 1499 | 62683 1498 | 62687 1506 | 62701 1502 | 62723 1505 | 62731 1494 |
| 62743 1502 | 62753 1496 | 62761 1498 | 62773 1503 | 62791 1503 | 62801 1505 |
Table 1 Continue 30

| \( q \) | \( t^L_q \) | \( q \) | \( t^L_q \) | \( q \) | \( t^L_q \) | \( q \) | \( t^L_q \) | \( q \) | \( t^L_q \) |
|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|
| 62819 | 1503   | 62827 | 1503   | 62851 | 1505   | 62861 | 1504   | 62869 | 1503   |
| 62897 | 1503   | 62903 | 1510   | 62921 | 1505   | 62927 | 1507   | 62929 | 1504   |
| 62969 | 1511   | 62971 | 1506   | 62981 | 1507   | 62983 | 1507   | 62987 | 1505   |
| 63029 | 1502   | 63031 | 1510   | 63059 | 1511   | 63067 | 1502   | 63073 | 1501   |
| 63097 | 1501   | 63103 | 1512   | 63113 | 1502   | 63127 | 1505   | 63131 | 1499   |
| 63179 | 1510   | 63197 | 1513   | 63199 | 1502   | 63211 | 1508   | 63241 | 1515   |
| 63277 | 1508   | 63281 | 1498   | 63299 | 1505   | 63311 | 1512   | 63313 | 1504   |
| 63331 | 1515   | 63337 | 1510   | 63347 | 1508   | 63353 | 1519   | 63361 | 1516   |
| 63377 | 1505   | 63389 | 1508   | 63391 | 1513   | 63397 | 1500   | 63409 | 1510   |
| 63421 | 1512   | 63439 | 1515   | 63443 | 1509   | 63463 | 1512   | 63467 | 1514   |
| 63487 | 1508   | 63493 | 1506   | 63499 | 1504   | 63521 | 1508   | 63527 | 1514   |
| 63541 | 1507   | 63559 | 1515   | 63577 | 1511   | 63587 | 1509   | 63589 | 1506   |
| 63601 | 1508   | 63607 | 1517   | 63611 | 1518   | 63617 | 1521   | 63629 | 1513   |
| 63649 | 1515   | 63659 | 1517   | 63667 | 1514   | 63671 | 1512   | 63689 | 1511   |
| 63697 | 1516   | 63703 | 1514   | 63709 | 1506   | 63719 | 1515   | 63727 | 1515   |
| 63743 | 1512   | 63761 | 1521   | 63773 | 1519   | 63781 | 1522   | 63793 | 1514   |
| 63803 | 1513   | 63809 | 1510   | 63823 | 1516   | 63839 | 1511   | 63841 | 1517   |
| 63857 | 1512   | 63863 | 1521   | 63901 | 1518   | 63907 | 1522   | 63913 | 1520   |
| 63949 | 1517   | 63977 | 1519   | 63997 | 1516   | 64007 | 1512   | 64013 | 1510   |
| 64033 | 1514   | 64037 | 1520   | 64063 | 1512   | 64067 | 1519   | 64081 | 1509   |
| 64109 | 1516   | 64123 | 1521   | 64151 | 1513   | 64153 | 1517   | 64157 | 1522   |
| 64187 | 1526   | 64189 | 1522   | 64217 | 1518   | 64223 | 1516   | 64231 | 1523   |
| 64271 | 1517   | 64279 | 1518   | 64283 | 1521   | 64301 | 1527   | 64303 | 1525   |
| 64327 | 1526   | 64333 | 1529   | 64373 | 1519   | 64381 | 1522   | 64399 | 1517   |
| 64433 | 1524   | 64439 | 1518   | 64451 | 1527   | 64453 | 1512   | 64483 | 1526   |
| 64499 | 1518   | 64513 | 1520   | 64553 | 1528   | 64567 | 1519   | 64577 | 1532   |
| 64591 | 1541   | 64601 | 1531   | 64609 | 1529   | 64613 | 1521   | 64621 | 1526   |
| 64633 | 1531   | 64661 | 1521   | 64663 | 1532   | 64667 | 1526   | 64679 | 1527   |
| 64709 | 1525   | 64717 | 1525   | 64747 | 1518   | 64763 | 1528   | 64781 | 1525   |
| 64793 | 1524   | 64811 | 1525   | 64817 | 1536   | 64849 | 1526   | 64853 | 1523   |
| 64877 | 1536   | 64879 | 1528   | 64891 | 1529   | 64901 | 1529   | 64919 | 1533   |
| 64927 | 1537   | 64937 | 1525   | 64951 | 1531   | 64969 | 1526   | 64997 | 1534   |
| 65011 | 1529   | 65027 | 1531   | 65029 | 1539   | 65033 | 1527   | 65053 | 1523   |
| 65071 | 1526   | 65089 | 1528   | 65099 | 1534   | 65101 | 1531   | 65111 | 1532   |
| 65123 | 1527   | 65129 | 1539   | 65141 | 1542   | 65147 | 1533   | 65167 | 1529   | 65171 | 1530 |
| $q$  | $t_2^L$ | $q$  | $t_2^L$ | $q$  | $t_2^L$ | $q$  | $t_2^L$ | $q$  | $t_2^L$ |
|------|---------|------|---------|------|---------|------|---------|------|---------|
| 65173| 1534    | 65179| 1531    | 65183| 1535    | 65203| 1541    | 65213| 1531    |
| 65257| 1529    | 65267| 1531    | 65269| 1525    | 65287| 1542    | 65293| 1534    |
| 65323| 1530    | 65327| 1529    | 65353| 1535    | 65357| 1530    | 65371| 1532    |
| 65437| 1539    | 65444| 1538    | 65447| 1533    | 65467| 1537    | 65519| 1530    |
| 65579| 1541    | 65581| 1531    | 65587| 1543    | 65599| 1545    | 65609| 1547    |
| 65629| 1541    | 65633| 1550    | 65647| 1541    | 65651| 1554    | 65657| 1530    |
| 65687| 1535    | 65699| 1539    | 65701| 1539    | 65707| 1535    | 65713| 1538    |
| 65719| 1541    | 65729| 1536    | 65731| 1538    | 65761| 1552    | 65777| 1534    |
| 65809| 1536    | 65827| 1531    | 65831| 1544    | 65837| 1537    | 65839| 1544    |
| 65851| 1538    | 65867| 1540    | 65881| 1543    | 65899| 1547    | 65921| 1541    |
| 65929| 1536    | 65951| 1538    | 65957| 1540    | 65963| 1542    | 65981| 1546    |
| 65993| 1542    | 66029| 1543    | 66037| 1542    | 66041| 1537    | 66047| 1539    |
| 66071| 1545    | 66083| 1545    | 66089| 1535    | 66103| 1536    | 66107| 1544    |
| 66137| 1549    | 66161| 1538    | 66169| 1542    | 66173| 1549    | 66179| 1543    |
| 66221| 1551    | 66239| 1542    | 66271| 1540    | 66293| 1558    | 66301| 1548    |
| 66343| 1544    | 66347| 1546    | 66359| 1549    | 66361| 1548    | 66373| 1542    |
| 66383| 1545    | 66403| 1551    | 66413| 1555    | 66431| 1539    | 66449| 1547    |
| 66463| 1547    | 66467| 1544    | 66491| 1542    | 66499| 1544    | 66509| 1548    |
| 66529| 1553    | 66533| 1555    | 66541| 1550    | 66553| 1554    | 66559| 1550    |
| 66587| 1545    | 66593| 1543    | 66601| 1552    | 66617| 1548    | 66629| 1552    |
| 66653| 1549    | 66683| 1552    | 66697| 1555    | 66701| 1545    | 66713| 1550    |
| 66733| 1552    | 66739| 1556    | 66749| 1549    | 66751| 1546    | 66763| 1562    |
| 66797| 1551    | 66809| 1559    | 66821| 1557    | 66841| 1553    | 66851| 1542    |
| 66863| 1560    | 66877| 1564    | 66883| 1559    | 66889| 1551    | 66919| 1543    |
| 66931| 1557    | 66943| 1555    | 66947| 1561    | 66949| 1549    | 66959| 1557    |
| 66977| 1563    | 67003| 1548    | 67021| 1559    | 67033| 1552    | 67043| 1559    |
| 67037| 1559    | 67061| 1552    | 67073| 1555    | 67079| 1563    | 67103| 1555    |
| 67129| 1557    | 67139| 1554    | 67141| 1559    | 67153| 1554    | 67157| 1554    |
| 67181| 1557    | 67187| 1556    | 67189| 1559    | 67211| 1554    | 67213| 1554    |
| 67219| 1566    | 67231| 1564    | 67247| 1556    | 67261| 1557    | 67271| 1557    |
| 67289| 1560    | 67307| 1564    | 67339| 1558    | 67343| 1570    | 67349| 1562    |
| 67391| 1565    | 67399| 1566    | 67409| 1567    | 67411| 1559    | 67421| 1566    |
| 67429| 1568    | 67433| 1564    | 67447| 1561    | 67453| 1563    | 67477| 1557    |
| \( q \) | \( t_L^2 \) | \( q \) | \( t_L^2 \) | \( q \) | \( t_L^2 \) | \( q \) | \( t_L^2 \) | \( q \) | \( t_L^2 \) |
|---|---|---|---|---|---|---|---|---|---|
| 67489 | 1568 | 67493 | 1559 | 67499 | 1563 | 67511 | 1560 | 67523 | 1570 |
| 67537 | 1561 | 67547 | 1563 | 67559 | 1572 | 67567 | 1558 | 67577 | 1574 |
| 67589 | 1569 | 67601 | 1568 | 67607 | 1565 | 67619 | 1559 | 67631 | 1559 |
| 67679 | 1564 | 67699 | 1566 | 67709 | 1564 | 67723 | 1564 | 67733 | 1567 |
| 67751 | 1565 | 67757 | 1561 | 67759 | 1558 | 67763 | 1561 | 67777 | 1568 |
| 67789 | 1560 | 67801 | 1569 | 67807 | 1566 | 67819 | 1564 | 67829 | 1563 |
| 67853 | 1570 | 67867 | 1569 | 67883 | 1565 | 67891 | 1572 | 67901 | 1566 |
| 67931 | 1562 | 67933 | 1563 | 67939 | 1567 | 67943 | 1571 | 67957 | 1568 |
| 67967 | 1568 | 67979 | 1563 | 67987 | 1575 | 67993 | 1571 | 67961 | 1567 |
Table 2 The sizes \( t^L_2 = t^L_2(2, q) \) of complete arcs in planes \( \text{PG}(2, q) \), sporadic \( 69997 \leq q \leq 190027 \), \( q \) prime, obtained by the algorithm FOP with the lexicographical order of points.

| \( q \)   | \( t^L_2 \) | \( q \)   | \( t^L_2 \) | \( q \)   | \( t^L_2 \) | \( q \)   | \( t^L_2 \) |
|---------|-------------|---------|-------------|---------|-------------|---------|-------------|
| 69997   | 1595        | 70001   | 1599       | 79999   | 1707        | 80021   | 1715        |
| 83003   | 1740        | 84011   | 1756       | 85009   | 1771        | 86011   | 1779        |
| 89003   | 1817        | 90001   | 1839       | 91009   | 1840        | 92003   | 1842        |
| 95003   | 1883        | 96001   | 1891       | 97001   | 1909        | 98009   | 1911        |
| 99991   | 1932        | 109987  | 2046       | 110017  | 2048        | 115001  | 2081        |
| 130003  | 2231        | 135007  | 2273       | 140009  | 2317        | 145007  | 2372        |
| 160001  | 2497        | 165001  | 2542       | 170003  | 2579        | 175003  | 2625        |
| 190027  | 2745        |          |            |          |             |          |             |
Table 3 The sizes $t^S_2 = t^S_2(2,q)$ of complete arcs in planes $\text{PG}(2,q)$, $5 \leq q \leq 40009$, $q$ prime, obtained by the algorithm FOP with the Singer order of points

| $q$ | $t^S_2$ | $q$ | $t^S_2$ | $q$ | $t^S_2$ | $q$ | $t^S_2$ | $q$ | $t^S_2$ | $q$ | $t^S_2$ |
|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|
| 5   | 5       | 23  | 13      | 47  | 22      | 73  | 29      | 103 | 36      | 137 | 44      |
| 23  | 13      | 47  | 22      | 73  | 29      | 103 | 36      | 137 | 44      | 167 | 50      |
| 47  | 22      | 73  | 29      | 103 | 36      | 137 | 44      | 167 | 50      | 197 | 55      |
| 73  | 29      | 103 | 36      | 137 | 44      | 197 | 55      | 233 | 60      | 269 | 67      |
| 103 | 36      | 137 | 44      | 197 | 55      | 269 | 67      | 307 | 73      | 347 | 78      |
| 137 | 44      | 197 | 55      | 269 | 67      | 347 | 78      | 379 | 83      | 419 | 84      |
| 233 | 60      | 269 | 67      | 347 | 78      | 379 | 83      | 419 | 84      | 449 | 91      |
| 269 | 67      | 347 | 78      | 379 | 83      | 449 | 91      | 487 | 93      | 523 | 96      |
| 307 | 73      | 379 | 83      | 449 | 91      | 523 | 96      | 571 | 105     | 607 | 107     |
| 347 | 78      | 449 | 91      | 523 | 96      | 571 | 105     | 607 | 107     | 643 | 110     |
| 379 | 83      | 487 | 93      | 571 | 105     | 643 | 110     | 677 | 114     | 727 | 120     |
| 419 | 84      | 523 | 96      | 607 | 107     | 677 | 114     | 727 | 120     | 761 | 127     |
| 449 | 91      | 571 | 105     | 643 | 110     | 761 | 127     | 811 | 129     | 853 | 131     |
| 487 | 93      | 607 | 107     | 677 | 114     | 811 | 129     | 853 | 131     | 883 | 134     |
| 523 | 96      | 643 | 110     | 761 | 127     | 883 | 134     | 937 | 141     | 977 | 141     |
| 571 | 105     | 677 | 114     | 811 | 129     | 977 | 141     | 1019| 149     | 1051| 153     |
| 607 | 107     | 761 | 127     | 853 | 131     | 1019| 149     | 1051| 153     | 1093| 153     |
| 643 | 110     | 811 | 129     | 883 | 134     | 1093| 153     | 1093| 153     | 1129| 156     |
| 677 | 114     | 853 | 131     | 937 | 141     | 1129| 156     | 1129| 156     | 1187| 156     |
| 727 | 120     | 883 | 134     | 977 | 141     | 1187| 156     | 1187| 156     | 1229| 165     |
| 761 | 127     | 937 | 141     | 1019| 149     | 1229| 165     | 1279| 167     |      |          |
| 811 | 129     | 977 | 141     | 1051| 153     | 1279| 167     |      |          |      |          |
|  q  | \( t_2^S \) |  q  | \( t_2^S \) |  q  | \( t_2^S \) |  q  | \( t_2^S \) |  q  | \( t_2^S \) |
|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|
| 1303|  168     | 1307|  171     | 1319|  170     | 1321|  169     | 1327|  171     |
| 1367|  174     | 1373|  175     | 1381|  177     | 1399|  176     | 1409|  175     |
| 1427|  178     | 1429|  182     | 1433|  181     | 1439|  178     | 1447|  182     |
| 1453|  183     | 1459|  182     | 1471|  185     | 1481|  181     | 1483|  183     |
| 1489|  184     | 1493|  185     | 1499|  183     | 1511|  183     | 1523|  182     |
| 1543|  186     | 1549|  188     | 1559|  186     | 1567|  191     | 1571|  187     |
| 1579|  191     | 1583|  191     | 1597|  188     | 1601|  189     | 1607|  193     |
| 1613|  193     | 1619|  194     | 1621|  196     | 1627|  191     | 1637|  195     |
| 1663|  193     | 1667|  195     | 1669|  197     | 1693|  196     | 1697|  196     |
| 1709|  198     | 1721|  202     | 1723|  198     | 1733|  202     | 1741|  201     |
| 1753|  197     | 1759|  201     | 1777|  205     | 1783|  202     | 1787|  203     |
| 1801|  203     | 1811|  202     | 1823|  206     | 1831|  205     | 1847|  209     |
| 1867|  209     | 1871|  209     | 1873|  211     | 1877|  212     | 1879|  213     |
| 1901|  213     | 1907|  210     | 1913|  211     | 1931|  215     | 1933|  212     |
| 1951|  211     | 1973|  215     | 1979|  215     | 1987|  217     | 1993|  219     |
| 1999|  212     | 2003|  220     | 2011|  215     | 2017|  218     | 2027|  222     |
| 2039|  217     | 2053|  219     | 2063|  223     | 2069|  221     | 2081|  220     |
| 2087|  224     | 2089|  225     | 2099|  226     | 2111|  225     | 2113|  221     |
| 2131|  224     | 2137|  225     | 2141|  228     | 2143|  224     | 2153|  226     |
| 2179|  231     | 2203|  233     | 2207|  232     | 2213|  228     | 2221|  230     |
| 2239|  232     | 2243|  232     | 2251|  233     | 2267|  237     | 2269|  232     |
| 2281|  235     | 2287|  234     | 2293|  239     | 2297|  235     | 2309|  239     |
| 2333|  239     | 2339|  238     | 2341|  241     | 2347|  238     | 2351|  238     |
| 2371|  240     | 2377|  240     | 2381|  243     | 2383|  241     | 2389|  240     |
| 2399|  240     | 2411|  240     | 2417|  242     | 2423|  244     | 2437|  242     |
| 2447|  246     | 2459|  247     | 2467|  242     | 2473|  248     | 2477|  249     |
| 2521|  248     | 2531|  247     | 2539|  248     | 2543|  253     | 2549|  248     |
| 2557|  249     | 2579|  251     | 2591|  253     | 2593|  251     | 2609|  257     |
| 2621|  253     | 2633|  252     | 2647|  257     | 2657|  258     | 2659|  258     |
| 2671|  253     | 2677|  258     | 2683|  258     | 2687|  256     | 2689|  263     |
| 2699|  257     | 2707|  255     | 2711|  259     | 2713|  259     | 2719|  259     |
| 2731|  260     | 2741|  259     | 2749|  261     | 2753|  258     | 2767|  261     |
| 2789|  263     | 2791|  266     | 2797|  264     | 2801|  266     | 2803|  263     |
| 2833|  262     | 2837|  268     | 2843|  266     | 2851|  269     | 2857|  266     |
| 2879|  269     | 2887|  266     | 2897|  270     | 2903|  269     | 2909|  269     |
Table 3 Continue 2

| q  | $t_\frac{q}{2}$ | q  | $t_\frac{q}{2}$ | q  | $t_\frac{q}{2}$ | q  | $t_\frac{q}{2}$ |
|----|----------------|----|----------------|----|----------------|----|----------------|
| 2927 | 267 | 2939 | 273 | 2953 | 269 | 2957 | 271 | 2963 | 272 | 2969 | 273 |
| 2971 | 276 | 2999 | 273 | 3001 | 274 | 3011 | 275 | 3019 | 273 | 3023 | 275 |
| 3037 | 277 | 3041 | 270 | 3049 | 278 | 3061 | 279 | 3067 | 277 | 3079 | 278 |
| 3083 | 277 | 3089 | 282 | 3109 | 283 | 3119 | 281 | 3121 | 281 | 3137 | 287 |
| 3163 | 282 | 3167 | 287 | 3169 | 281 | 3181 | 285 | 3187 | 285 | 3191 | 283 |
| 3203 | 284 | 3209 | 284 | 3217 | 286 | 3221 | 288 | 3229 | 287 | 3251 | 288 |
| 3253 | 286 | 3257 | 288 | 3259 | 287 | 3271 | 285 | 3299 | 291 | 3301 | 290 |
| 3307 | 290 | 3313 | 291 | 3319 | 292 | 3323 | 295 | 3329 | 292 | 3331 | 291 |
| 3343 | 291 | 3347 | 297 | 3359 | 295 | 3361 | 288 | 3371 | 292 | 3373 | 292 |
| 3389 | 293 | 3391 | 295 | 3407 | 292 | 3413 | 296 | 3433 | 298 | 3449 | 298 |
| 3457 | 296 | 3461 | 297 | 3463 | 299 | 3467 | 300 | 3469 | 298 | 3491 | 302 |
| 3499 | 300 | 3511 | 302 | 3517 | 300 | 3527 | 302 | 3529 | 305 | 3533 | 297 |
| 3539 | 299 | 3541 | 302 | 3547 | 302 | 3557 | 303 | 3559 | 303 | 3571 | 306 |
| 3581 | 304 | 3583 | 301 | 3593 | 307 | 3607 | 306 | 3613 | 307 | 3617 | 305 |
| 3623 | 302 | 3631 | 308 | 3637 | 308 | 3643 | 305 | 3659 | 307 | 3671 | 308 |
| 3673 | 307 | 3677 | 303 | 3691 | 308 | 3697 | 310 | 3701 | 309 | 3709 | 306 |
| 3719 | 309 | 3727 | 309 | 3733 | 314 | 3739 | 311 | 3761 | 314 | 3767 | 309 |
| 3769 | 313 | 3779 | 316 | 3793 | 317 | 3797 | 313 | 3803 | 317 | 3821 | 314 |
| 3823 | 316 | 3833 | 313 | 3847 | 315 | 3851 | 315 | 3853 | 315 | 3863 | 317 |
| 3877 | 319 | 3881 | 316 | 3889 | 314 | 3907 | 314 | 3911 | 325 | 3917 | 317 |
| 3919 | 321 | 3923 | 319 | 3929 | 319 | 3931 | 320 | 3943 | 327 | 3947 | 325 |
| 3967 | 325 | 3989 | 321 | 4001 | 319 | 4003 | 325 | 4007 | 323 | 4013 | 325 |
| 4019 | 325 | 4021 | 322 | 4027 | 324 | 4049 | 327 | 4051 | 326 | 4057 | 329 |
| 4073 | 328 | 4079 | 325 | 4091 | 327 | 4093 | 324 | 4099 | 326 | 4111 | 329 |
| 4127 | 332 | 4129 | 331 | 4133 | 331 | 4139 | 332 | 4153 | 335 | 4157 | 333 |
| 4159 | 327 | 4177 | 333 | 4201 | 334 | 4211 | 339 | 4217 | 335 | 4219 | 334 |
| 4229 | 335 | 4231 | 337 | 4241 | 333 | 4243 | 337 | 4253 | 335 | 4259 | 333 |
| 4261 | 341 | 4271 | 342 | 4273 | 337 | 4283 | 335 | 4289 | 340 | 4297 | 333 |
| 4327 | 336 | 4337 | 339 | 4339 | 333 | 4349 | 338 | 4357 | 345 | 4363 | 337 |
| 4373 | 341 | 4391 | 344 | 4397 | 343 | 4409 | 341 | 4421 | 343 | 4423 | 351 |
| 4441 | 343 | 4447 | 343 | 4451 | 345 | 4457 | 346 | 4463 | 350 | 4481 | 344 |
| 4483 | 343 | 4493 | 346 | 4507 | 351 | 4513 | 344 | 4517 | 345 | 4519 | 348 |
| 4523 | 346 | 4547 | 347 | 4549 | 346 | 4561 | 352 | 4567 | 347 | 4583 | 349 |
| 4591 | 351 | 4597 | 346 | 4603 | 349 | 4621 | 352 | 4637 | 354 | 4639 | 351 |
| 4643 | 354 | 4649 | 354 | 4651 | 351 | 4657 | 351 | 4663 | 353 | 4673 | 355 |
| $q$ | $t^S_2$ | $q$ | $t^S_2$ | $q$ | $t^S_2$ | $q$ | $t^S_2$ | $q$ | $t^S_2$ |
|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|
| 4679 | 354     | 4691 | 353     | 4703 | 357     | 4721 | 354     | 4723 | 357     |
| 4733 | 358     | 4751 | 350     | 4759 | 356     | 4783 | 354     | 4787 | 356     |
| 4793 | 362     | 4799 | 363     | 4801 | 361     | 4813 | 357     | 4817 | 359     |
| 4861 | 362     | 4871 | 365     | 4877 | 362     | 4889 | 362     | 4903 | 361     |
| 4919 | 362     | 4931 | 365     | 4933 | 365     | 4937 | 364     | 4943 | 369     |
| 4957 | 364     | 4967 | 365     | 4969 | 370     | 4973 | 367     | 4987 | 368     |
| 4999 | 373     | 5003 | 366     | 5009 | 370     | 5011 | 367     | 5021 | 365     |
| 5039 | 371     | 5051 | 369     | 5059 | 370     | 5077 | 369     | 5081 | 377     |
| 5099 | 373     | 5101 | 371     | 5107 | 374     | 5113 | 373     | 5119 | 374     |
| 5153 | 375     | 5167 | 374     | 5171 | 374     | 5179 | 375     | 5189 | 377     |
| 5209 | 370     | 5227 | 377     | 5231 | 378     | 5233 | 375     | 5237 | 376     |
| 5273 | 378     | 5279 | 378     | 5281 | 380     | 5297 | 383     | 5303 | 381     |
| 5323 | 382     | 5333 | 383     | 5347 | 380     | 5351 | 379     | 5381 | 381     |
| 5393 | 382     | 5399 | 385     | 5407 | 385     | 5413 | 386     | 5417 | 382     |
| 5431 | 387     | 5437 | 386     | 5441 | 388     | 5443 | 381     | 5449 | 387     |
| 5477 | 385     | 5479 | 386     | 5483 | 385     | 5501 | 386     | 5503 | 386     |
| 5519 | 387     | 5521 | 388     | 5527 | 391     | 5531 | 392     | 5557 | 393     |
| 5569 | 389     | 5573 | 395     | 5581 | 392     | 5591 | 391     | 5623 | 396     |
| 5641 | 387     | 5647 | 393     | 5651 | 394     | 5653 | 392     | 5657 | 397     |
| 5669 | 391     | 5683 | 395     | 5689 | 394     | 5693 | 398     | 5701 | 398     |
| 5717 | 395     | 5737 | 399     | 5741 | 396     | 5743 | 401     | 5749 | 396     |
| 5783 | 405     | 5791 | 397     | 5801 | 397     | 5807 | 400     | 5813 | 399     |
| 5827 | 401     | 5839 | 401     | 5843 | 401     | 5849 | 402     | 5851 | 401     |
| 5861 | 400     | 5867 | 404     | 5869 | 405     | 5879 | 402     | 5881 | 405     |
| 5903 | 406     | 5923 | 404     | 5927 | 403     | 5939 | 405     | 5953 | 404     |
| 5987 | 410     | 6007 | 408     | 6011 | 408     | 6029 | 413     | 6037 | 406     |
| 6047 | 406     | 6053 | 411     | 6067 | 412     | 6073 | 409     | 6079 | 412     |
| 6091 | 415     | 6101 | 408     | 6113 | 412     | 6121 | 413     | 6131 | 414     |
| 6143 | 413     | 6151 | 412     | 6163 | 411     | 6173 | 416     | 6197 | 418     |
| 6203 | 415     | 6211 | 416     | 6217 | 411     | 6221 | 415     | 6229 | 415     |
| 6257 | 419     | 6263 | 420     | 6269 | 421     | 6271 | 413     | 6277 | 418     |
| 6299 | 418     | 6301 | 422     | 6311 | 422     | 6317 | 424     | 6323 | 424     |
| 6337 | 420     | 6343 | 421     | 6353 | 420     | 6359 | 421     | 6361 | 417     |
| 6373 | 422     | 6379 | 423     | 6389 | 419     | 6397 | 416     | 6421 | 422     |
| 6449 | 427     | 6451 | 429     | 6469 | 429     | 6473 | 425     | 6481 | 423     |
| $q$ | $t^S_2$ | $q$ | $t^S_2$ | $q$ | $t^S_2$ | $q$ | $t^S_2$ | $q$ | $t^S_2$ | $q$ | $t^S_2$ |
|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|
| 6521 | 424 | 6529 | 424 | 6547 | 431 | 6551 | 429 | 6553 | 428 | 6563 | 429 |
| 6569 | 428 | 6571 | 426 | 6577 | 424 | 6581 | 429 | 6599 | 426 | 6607 | 429 |
| 6619 | 428 | 6637 | 432 | 6653 | 432 | 6659 | 429 | 6661 | 433 | 6673 | 433 |
| 6679 | 440 | 6689 | 440 | 6691 | 432 | 6701 | 431 | 6703 | 436 | 6709 | 432 |
| 6719 | 437 | 6733 | 434 | 6737 | 436 | 6761 | 437 | 6763 | 438 | 6779 | 437 |
| 6781 | 442 | 6791 | 436 | 6793 | 435 | 6803 | 438 | 6823 | 439 | 6827 | 437 |
| 6829 | 437 | 6833 | 437 | 6841 | 437 | 6857 | 439 | 6863 | 438 | 6869 | 438 |
| 6871 | 437 | 6883 | 436 | 6899 | 439 | 6907 | 436 | 6911 | 442 | 6917 | 446 |
| 6947 | 441 | 6949 | 446 | 6959 | 441 | 6961 | 440 | 6967 | 442 | 6971 | 442 |
| 6977 | 445 | 6983 | 450 | 6991 | 443 | 6997 | 445 | 7001 | 442 | 7013 | 448 |
| 7019 | 447 | 7027 | 441 | 7039 | 446 | 7043 | 442 | 7057 | 444 | 7069 | 446 |
| 7079 | 444 | 7103 | 448 | 7109 | 447 | 7121 | 449 | 7127 | 451 | 7129 | 451 |
| 7151 | 448 | 7159 | 450 | 7177 | 451 | 7187 | 450 | 7193 | 451 | 7207 | 455 |
| 7211 | 454 | 7213 | 452 | 7219 | 449 | 7229 | 455 | 7237 | 452 | 7243 | 452 |
| 7247 | 455 | 7253 | 452 | 7283 | 455 | 7297 | 454 | 7307 | 455 | 7309 | 458 |
| 7321 | 451 | 7331 | 455 | 7333 | 457 | 7349 | 457 | 7351 | 456 | 7369 | 462 |
| 7393 | 460 | 7411 | 455 | 7417 | 460 | 7433 | 464 | 7451 | 462 | 7457 | 460 |
| 7459 | 459 | 7477 | 461 | 7481 | 464 | 7487 | 460 | 7489 | 467 | 7499 | 465 |
| 7507 | 457 | 7517 | 463 | 7523 | 465 | 7529 | 465 | 7537 | 461 | 7541 | 467 |
| 7547 | 467 | 7549 | 467 | 7559 | 461 | 7561 | 462 | 7573 | 468 | 7577 | 465 |
| 7583 | 461 | 7589 | 464 | 7591 | 466 | 7603 | 466 | 7607 | 463 | 7621 | 463 |
| 7639 | 463 | 7643 | 461 | 7649 | 465 | 7669 | 468 | 7673 | 470 | 7681 | 470 |
| 7687 | 466 | 7691 | 468 | 7699 | 468 | 7703 | 469 | 7717 | 468 | 7723 | 466 |
| 7727 | 470 | 7741 | 473 | 7753 | 475 | 7757 | 474 | 7759 | 473 | 7789 | 467 |
| 7793 | 472 | 7817 | 475 | 7823 | 476 | 7829 | 471 | 7841 | 474 | 7853 | 477 |
| 7867 | 476 | 7873 | 473 | 7877 | 475 | 7879 | 473 | 7883 | 476 | 7901 | 476 |
| 7907 | 475 | 7919 | 480 | 7927 | 474 | 7933 | 473 | 7937 | 476 | 7949 | 476 |
| 7951 | 481 | 7963 | 477 | 7993 | 477 | 8009 | 485 | 8011 | 481 | 8017 | 479 |
| 8039 | 481 | 8053 | 481 | 8059 | 486 | 8069 | 478 | 8081 | 479 | 8087 | 478 |
| 8089 | 483 | 8093 | 486 | 8101 | 484 | 8111 | 480 | 8117 | 484 | 8123 | 481 |
| 8147 | 484 | 8161 | 488 | 8167 | 488 | 8171 | 483 | 8179 | 485 | 8191 | 484 |
| 8209 | 486 | 8219 | 480 | 8221 | 487 | 8231 | 498 | 8233 | 486 | 8237 | 487 |
| 8243 | 491 | 8263 | 486 | 8269 | 488 | 8273 | 490 | 8287 | 489 | 8291 | 487 |
| 8293 | 488 | 8297 | 487 | 8311 | 495 | 8317 | 485 | 8329 | 488 | 8353 | 492 |
| 8363 | 488 | 8369 | 492 | 8377 | 487 | 8387 | 488 | 8389 | 491 | 8419 | 488 |
Table 3 Continue 5

| q   | $t^S_2$ | q   | $t^S_2$ | q   | $t^S_2$ | q   | $t^S_2$ | q   | $t^S_2$ | q   | $t^S_2$ |
|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|
| 8423| 496     | 8429| 494     | 8431| 494     | 8443| 497     | 8447| 499     | 8461| 492    |
| 8467| 489     | 8501| 493     | 8513| 493     | 8521| 495     | 8527| 495     | 8537| 496    |
| 8539| 494     | 8543| 496     | 8563| 501     | 8573| 501     | 8581| 497     | 8597| 500    |
| 8599| 494     | 8609| 499     | 8623| 501     | 8627| 502     | 8629| 499     | 8641| 497    |
| 8647| 501     | 8663| 502     | 8669| 502     | 8677| 499     | 8681| 502     | 8689| 499    |
| 8693| 506     | 8699| 499     | 8707| 502     | 8713| 504     | 8719| 506     | 8731| 497    |
| 8737| 506     | 8741| 504     | 8747| 505     | 8753| 502     | 8761| 505     | 8779| 501    |
| 8783| 509     | 8803| 503     | 8807| 505     | 8819| 508     | 8821| 505     | 8831| 507    |
| 8837| 507     | 8839| 508     | 8849| 504     | 8861| 505     | 8863| 508     | 8867| 504    |
| 8887| 513     | 8893| 507     | 8923| 509     | 8929| 508     | 8933| 508     | 8941| 507    |
| 8951| 513     | 8963| 511     | 8969| 510     | 8971| 509     | 8999| 511     | 9001| 509    |
| 9007| 509     | 9011| 510     | 9013| 515     | 9029| 515     | 9041| 510     | 9043| 515    |
| 9049| 512     | 9059| 511     | 9067| 517     | 9091| 516     | 9103| 519     | 9109| 515    |
| 9127| 519     | 9133| 518     | 9137| 521     | 9151| 522     | 9157| 519     | 9161| 520    |
| 9173| 520     | 9181| 515     | 9187| 515     | 9199| 520     | 9203| 515     | 9209| 515    |
| 9221| 517     | 9227| 523     | 9239| 517     | 9241| 520     | 9257| 519     | 9277| 519    |
| 9281| 520     | 9283| 521     | 9293| 520     | 9311| 520     | 9319| 520     | 9323| 518    |
| 9337| 527     | 9341| 526     | 9343| 521     | 9349| 526     | 9371| 527     | 9377| 525    |
| 9391| 523     | 9397| 519     | 9403| 521     | 9413| 528     | 9419| 528     | 9421| 523    |
| 9431| 528     | 9433| 527     | 9437| 523     | 9439| 524     | 9461| 523     | 9463| 526    |
| 9467| 524     | 9473| 520     | 9479| 529     | 9491| 529     | 9497| 525     | 9511| 529    |
| 9521| 528     | 9533| 529     | 9539| 527     | 9547| 535     | 9551| 531     | 9587| 529    |
| 9601| 524     | 9613| 536     | 9619| 530     | 9623| 529     | 9629| 533     | 9631| 530    |
| 9643| 534     | 9649| 530     | 9661| 532     | 9677| 538     | 9679| 532     | 9689| 540    |
| 9697| 534     | 9719| 538     | 9721| 536     | 9733| 536     | 9739| 534     | 9743| 538    |
| 9749| 536     | 9767| 539     | 9769| 533     | 9781| 535     | 9787| 538     | 9791| 532    |
| 9803| 533     | 9811| 529     | 9817| 534     | 9829| 537     | 9833| 534     | 9839| 537    |
| 9851| 538     | 9857| 542     | 9859| 545     | 9871| 542     | 9883| 537     | 9887| 539    |
| 9901| 540     | 9907| 539     | 9923| 541     | 9929| 541     | 9931| 544     | 9941| 539    |
| 9949| 545     | 9967| 542     | 9973| 547     | 10007| 540    | 10009| 544     | 10037| 546   |
| 10039| 544    | 10061| 546    | 10067| 539    | 10069| 548    | 10079| 542    | 10091| 545   |
| 10093| 549    | 10099| 550    | 10103| 545    | 10111| 548    | 10133| 542    | 10139| 543   |
| 10141| 549    | 10151| 548    | 10159| 543    | 10163| 550    | 10169| 552    | 10177| 543   |
| 10181| 546    | 10193| 546    | 10211| 543    | 10223| 556    | 10243| 547    | 10247| 556   |
| 10253| 552    | 10259| 551    | 10267| 551    | 10271| 556    | 10273| 547    | 10289| 552   |

47
Table 3 Continue 6

| q     | $t_2^S$ | q     | $t_2^S$ | q     | $t_2^S$ | q     | $t_2^S$ | q     | $t_2^S$ |
|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|
| 10301 | 552     | 10303 | 550     | 10313 | 553     | 10321 | 553     | 10331 | 553     |
| 10337 | 549     | 10343 | 552     | 10357 | 559     | 10369 | 560     | 10391 | 553     |
| 10427 | 558     | 10429 | 554     | 10433 | 562     | 10453 | 556     | 10457 | 553     |
| 10463 | 561     | 10477 | 561     | 10487 | 558     | 10499 | 562     | 10501 | 558     |
| 10529 | 558     | 10531 | 558     | 10559 | 561     | 10567 | 560     | 10589 | 566     |
| 10601 | 565     | 10607 | 558     | 10613 | 561     | 10627 | 559     | 10631 | 558     |
| 10651 | 560     | 10657 | 557     | 10663 | 561     | 10667 | 560     | 10687 | 562     |
| 10709 | 562     | 10711 | 563     | 10723 | 569     | 10729 | 565     | 10733 | 567     |
| 10753 | 565     | 10771 | 562     | 10781 | 569     | 10789 | 566     | 10799 | 565     |
| 10837 | 568     | 10847 | 563     | 10853 | 573     | 10859 | 567     | 10861 | 567     |
| 10883 | 573     | 10889 | 571     | 10903 | 571     | 10909 | 564     | 10937 | 572     |
| 10939 | 571     | 10949 | 576     | 10957 | 573     | 10973 | 569     | 10979 | 577     |
| 10993 | 567     | 11003 | 579     | 11027 | 573     | 11047 | 573     | 11057 | 577     |
| 11069 | 573     | 11071 | 575     | 11083 | 573     | 11087 | 573     | 11093 | 575     |
| 11117 | 576     | 11119 | 574     | 11131 | 577     | 11149 | 574     | 11159 | 578     |
| 11171 | 581     | 11173 | 581     | 11177 | 576     | 11197 | 582     | 11213 | 571     |
| 11243 | 582     | 11251 | 585     | 11257 | 577     | 11261 | 579     | 11273 | 579     |
| 11287 | 584     | 11299 | 579     | 11311 | 585     | 11317 | 590     | 11321 | 579     |
| 11351 | 586     | 11353 | 584     | 11369 | 585     | 11383 | 576     | 11393 | 585     |
| 11411 | 581     | 11423 | 587     | 11437 | 590     | 11443 | 586     | 11447 | 584     |
| 11471 | 587     | 11483 | 591     | 11489 | 591     | 11491 | 586     | 11497 | 590     |
| 11519 | 589     | 11527 | 590     | 11549 | 593     | 11551 | 585     | 11579 | 590     |
| 11593 | 589     | 11597 | 589     | 11617 | 595     | 11621 | 588     | 11633 | 592     |
| 11677 | 591     | 11681 | 588     | 11689 | 593     | 11699 | 600     | 11701 | 593     |
| 11719 | 592     | 11731 | 591     | 11743 | 593     | 11777 | 593     | 11779 | 587     |
| 11789 | 597     | 11801 | 593     | 11807 | 595     | 11813 | 597     | 11821 | 596     |
| 11831 | 600     | 11833 | 599     | 11839 | 597     | 11863 | 596     | 11867 | 595     |
| 11897 | 595     | 11903 | 598     | 11909 | 599     | 11923 | 598     | 11927 | 601     |
| 11939 | 603     | 11941 | 594     | 11953 | 604     | 11959 | 601     | 11969 | 597     |
| 11981 | 603     | 11987 | 604     | 12007 | 598     | 12011 | 601     | 12037 | 603     |
| 12043 | 604     | 12049 | 606     | 12071 | 597     | 12073 | 603     | 12097 | 614     |
| 12107 | 610     | 12109 | 600     | 12113 | 608     | 12119 | 605     | 12143 | 610     |
| 12157 | 605     | 12161 | 609     | 12163 | 603     | 12197 | 606     | 12203 | 602     |
| 12227 | 612     | 12239 | 610     | 12241 | 605     | 12251 | 607     | 12253 | 609     |
| 12269 | 611     | 12277 | 611     | 12281 | 609     | 12289 | 610     | 12301 | 611     |
Table 3 Continue 7

|   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|
| q | t₂^S | q | t₂^S | q | t₂^S | q | t₂^S | q | t₂^S |
|---|---|---|---|---|---|---|---|---|---|
| 12329 615 | 12343 610 | 12347 613 | 12373 614 | 12377 616 | 12379 616 |
| 12391 611 | 12401 614 | 12413 615 | 12421 612 | 12431 612 |
| 12437 615 | 12451 610 | 12473 616 | 12479 621 | 12487 614 |
| 12491 616 | 12497 615 | 12511 623 | 12517 618 | 12527 616 |
| 12539 613 | 12541 623 | 12547 613 | 12553 619 | 12569 617 | 12577 623 |
| 12583 612 | 12589 623 | 12601 618 | 12613 613 | 12619 615 |
| 12637 623 | 12641 625 | 12647 618 | 12653 622 | 12659 622 | 12671 620 |
| 12689 622 | 12697 620 | 12703 621 | 12713 617 | 12721 623 | 12739 615 |
| 12743 621 | 12757 622 | 12763 617 | 12781 628 | 12791 626 | 12799 619 |
| 12809 621 | 12821 628 | 12823 621 | 12829 624 | 12841 627 | 12853 626 |
| 12889 626 | 12893 630 | 12899 623 | 12907 625 | 12911 632 | 12917 630 |
| 12919 632 | 12923 630 | 12941 628 | 12953 624 | 12959 632 | 12967 625 |
| 12973 627 | 12979 627 | 12983 629 | 13001 627 | 13003 626 | 13007 628 |
| 13009 635 | 13033 636 | 13037 630 | 13043 632 | 13049 628 | 13063 631 |
| 13093 629 | 13099 634 | 13103 632 | 13109 635 | 13121 635 | 13127 631 |
| 13147 631 | 13151 638 | 13159 630 | 13163 633 | 13171 636 | 13177 630 |
| 13183 637 | 13187 636 | 13217 640 | 13219 635 | 13229 630 | 13241 635 |
| 13249 641 | 13259 634 | 13267 635 | 13291 636 | 13297 636 | 13309 636 |
| 13313 644 | 13327 645 | 13331 640 | 13337 641 | 13339 644 | 13339 644 | 13367 646 |
| 13381 639 | 13397 639 | 13399 646 | 13411 644 | 13417 642 | 13421 646 |
| 13441 641 | 13451 640 | 13457 643 | 13463 639 | 13469 643 | 13477 649 |
| 13487 648 | 13499 640 | 13513 641 | 13523 644 | 13537 644 | 13553 643 |
| 13567 645 | 13577 647 | 13591 647 | 13597 648 | 13613 646 | 13619 647 |
| 13627 646 | 13633 646 | 13649 642 | 13669 648 | 13679 650 | 13681 648 |
| 13687 647 | 13691 650 | 13693 643 | 13697 646 | 13709 647 | 13711 648 |
| 13721 646 | 13723 649 | 13729 650 | 13751 649 | 13757 645 | 13759 642 |
| 13763 645 | 13781 653 | 13789 648 | 13799 652 | 13807 656 | 13829 655 |
| 13831 655 | 13841 649 | 13859 651 | 13873 658 | 13877 652 | 13879 655 |
| 13883 649 | 13901 652 | 13903 651 | 13907 651 | 13913 651 | 13921 656 |
| 13931 652 | 13933 651 | 13963 652 | 13967 657 | 13997 654 | 13999 661 |
| 14009 652 | 14011 654 | 14029 657 | 14033 655 | 14051 650 | 14057 658 |
| 14071 656 | 14081 657 | 14083 656 | 14087 658 | 14107 659 | 14143 663 |
| 14149 662 | 14153 660 | 14159 658 | 14173 661 | 14177 659 | 14197 662 |
| 14207 664 | 14221 662 | 14243 657 | 14249 665 | 14251 657 | 14281 666 |
| 14293 660 | 14303 658 | 14321 660 | 14323 663 | 14327 665 | 14341 661 |
Table 3 Continue 8

| q  | t_2^S | q  | t_2^S | q  | t_2^S | q  | t_2^S | q  | t_2^S |
|----|-------|----|-------|----|-------|----|-------|----|-------|
| 14347 667 | 14369 665 | 14387 661 | 14389 668 | 14401 668 | 14407 663 | 14411 664 | 14419 666 | 14423 667 | 14431 673 | 14437 667 | 14447 665 |
| 14449 675 | 14461 664 | 14479 671 | 14489 672 | 14503 667 | 14519 670 | 14533 674 | 14537 669 | 14549 668 | 14551 667 | 14557 675 | 14561 676 |
| 14563 672 | 14591 668 | 14593 673 | 14621 670 | 14627 672 | 14629 669 | 14633 672 | 14639 673 | 14653 681 | 14657 678 | 14669 668 | 14683 673 |
| 14699 672 | 14713 667 | 14717 676 | 14723 678 | 14731 676 | 14737 680 | 14741 668 | 14747 672 | 14753 674 | 14759 679 | 14767 675 | 14771 682 |
| 14779 669 | 14783 682 | 14797 678 | 14813 678 | 14821 682 | 14827 673 | 14831 684 | 14843 678 | 14851 675 | 14867 680 | 14869 678 | 14879 676 |
| 14887 678 | 14891 685 | 14897 677 | 14923 682 | 14929 676 | 14939 677 | 14947 680 | 14951 682 | 14957 680 | 14969 681 | 14983 677 | 15013 682 |
| 15017 688 | 15031 677 | 15053 683 | 15061 682 | 15073 683 | 15077 684 | 15083 683 | 15091 686 | 15101 689 | 15107 682 | 15121 688 | 15131 684 |
| 15137 689 | 15159 686 | 15149 684 | 15161 681 | 15173 689 | 15187 687 | 15193 688 | 15199 685 | 15207 687 | 15227 686 | 15233 685 | 15241 691 |
| 15259 685 | 15263 689 | 15269 684 | 15271 693 | 15277 688 | 15287 691 | 15295 688 | 15299 688 | 15307 690 | 15313 688 | 15319 692 | 15329 692 |
| 15331 686 | 15349 698 | 15359 687 | 15361 683 | 15373 686 | 15377 685 | 15383 692 | 15391 692 | 15401 690 | 15413 688 | 15427 690 | 15439 689 |
| 15443 696 | 15451 691 | 15461 695 | 15467 690 | 15473 693 | 15493 690 | 15497 686 | 15511 697 | 15527 697 | 15541 694 | 15551 703 | 15559 699 |
| 15569 696 | 15581 692 | 15583 696 | 15601 698 | 15607 699 | 15619 699 | 15629 708 | 15641 695 | 15643 700 | 15647 703 | 15649 694 | 15661 706 |
| 15667 703 | 15671 697 | 15679 703 | 15683 699 | 15727 695 | 15731 705 | 15733 700 | 15737 701 | 15739 696 | 15749 707 | 15761 703 | 15767 700 |
| 15773 703 | 15787 701 | 15791 704 | 15797 699 | 15803 703 | 15809 702 | 15817 702 | 15823 702 | 15859 701 | 15877 708 | 15881 702 | 15887 703 |
| 15889 698 | 15901 706 | 15907 705 | 15913 709 | 15919 707 | 15923 700 | 15937 709 | 15959 703 | 15971 704 | 15973 706 | 15991 701 | 16001 707 |
| 16007 702 | 16033 706 | 16057 706 | 16061 708 | 16063 700 | 16067 712 | 16069 709 | 16073 709 | 16087 712 | 16091 710 | 16097 712 | 16103 705 |
| 16111 710 | 16127 709 | 16139 707 | 16141 708 | 16183 713 | 16187 711 | 16189 711 | 16193 709 | 16217 715 | 16223 705 | 16229 712 | 16231 715 |
| 16249 710 | 16253 713 | 16267 714 | 16273 713 | 16301 718 |
\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline
$q$ & $t^S_2$ & $q$ & $t^S_2$ & $q$ & $t^S_2$ & $q$ & $t^S_2$ & $q$ & $t^S_2$ \\
\hline
16319 & 718 & 16333 & 710 & 16339 & 713 & 16349 & 711 & 16361 & 712 \\
16369 & 712 & 16381 & 716 & 16417 & 719 & 16421 & 719 & 16427 & 713 \\
16433 & 717 & 16447 & 716 & 16453 & 715 & 16477 & 722 & 16481 & 717 \\
16487 & 720 & 16493 & 721 & 16529 & 725 & 16547 & 721 & 16553 & 719 \\
16561 & 723 & 16567 & 720 & 16603 & 720 & 16607 & 721 & 16619 & 723 \\
16631 & 724 & 16633 & 723 & 16649 & 723 & 16651 & 722 & 16661 & 723 \\
16673 & 721 & 16691 & 720 & 16693 & 725 & 16699 & 727 & 16703 & 721 \\
16741 & 722 & 16747 & 728 & 16753 & 717 & 16763 & 729 & 16783 & 723 \\
16823 & 723 & 16829 & 734 & 16831 & 727 & 16843 & 728 & 16871 & 734 \\
16883 & 727 & 16889 & 728 & 16901 & 727 & 16903 & 730 & 16921 & 725 \\
16931 & 724 & 16937 & 728 & 16943 & 730 & 16963 & 724 & 16979 & 732 \\
16987 & 730 & 16993 & 731 & 17011 & 729 & 17021 & 731 & 17027 & 732 \\
17033 & 733 & 17041 & 737 & 17047 & 728 & 17053 & 729 & 17077 & 731 \\
17099 & 732 & 17107 & 724 & 17117 & 729 & 17123 & 740 & 17137 & 732 \\
17167 & 732 & 17183 & 734 & 17189 & 738 & 17191 & 734 & 17203 & 745 \\
17209 & 738 & 17231 & 737 & 17239 & 734 & 17257 & 731 & 17291 & 736 \\
17299 & 731 & 17317 & 737 & 17321 & 736 & 17327 & 737 & 17333 & 739 \\
17351 & 738 & 17359 & 733 & 17377 & 739 & 17383 & 741 & 17387 & 740 \\
17393 & 742 & 17401 & 739 & 17417 & 739 & 17419 & 743 & 17431 & 739 \\
17449 & 743 & 17467 & 733 & 17471 & 742 & 17477 & 744 & 17483 & 741 \\
17491 & 742 & 17497 & 745 & 17509 & 748 & 17519 & 747 & 17539 & 754 \\
17569 & 746 & 17573 & 746 & 17579 & 743 & 17581 & 749 & 17597 & 749 \\
17609 & 744 & 17623 & 751 & 17627 & 744 & 17657 & 744 & 17659 & 750 \\
17681 & 747 & 17683 & 740 & 17707 & 754 & 17713 & 746 & 17729 & 753 \\
17747 & 750 & 17749 & 748 & 17761 & 746 & 17783 & 750 & 17789 & 748 \\
17807 & 759 & 17827 & 751 & 17837 & 745 & 17839 & 754 & 17851 & 748 \\
17881 & 753 & 17891 & 752 & 17903 & 755 & 17909 & 753 & 17911 & 746 \\
17923 & 753 & 17929 & 755 & 17939 & 748 & 17957 & 754 & 17959 & 746 \\
17977 & 752 & 17981 & 749 & 17987 & 748 & 17989 & 757 & 18013 & 754 \\
18043 & 761 & 18047 & 758 & 18049 & 760 & 18059 & 755 & 18061 & 760 \\
18089 & 759 & 18097 & 766 & 18119 & 760 & 18121 & 758 & 18127 & 757 \\
18133 & 758 & 18143 & 756 & 18149 & 758 & 18169 & 759 & 18181 & 757 \\
18199 & 765 & 18211 & 757 & 18217 & 759 & 18223 & 753 & 18229 & 754 \\
18251 & 759 & 18253 & 760 & 18257 & 759 & 18269 & 758 & 18287 & 759 \\
18301 & 763 & 18307 & 763 & 18311 & 757 & 18313 & 763 & 18329 & 754 \\
\hline
\end{tabular}
\end{table}

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Table 3 Continue 10

| $q$  | $t_s^2$ | $q$  | $t_s^2$ | $q$  | $t_s^2$ | $q$  | $t_s^2$ | $q$  | $t_s^2$ |
|------|---------|------|---------|------|---------|------|---------|------|---------|
| 18353 | 768 | 18367 | 764 | 18371 | 760 | 18379 | 759 | 18397 | 760 | 18401 | 766 |
| 18413 | 762 | 18427 | 764 | 18433 | 763 | 18439 | 769 | 18443 | 768 | 18451 | 759 |
| 18457 | 764 | 18461 | 767 | 18481 | 763 | 18493 | 759 | 18503 | 769 | 18517 | 761 |
| 18521 | 763 | 18523 | 774 | 18539 | 768 | 18541 | 761 | 18553 | 761 | 18583 | 767 |
| 18587 | 769 | 18593 | 769 | 18617 | 771 | 18637 | 762 | 18661 | 768 | 18671 | 774 |
| 18679 | 772 | 18691 | 769 | 18701 | 769 | 18713 | 775 | 18719 | 769 | 18731 | 771 |
| 18743 | 769 | 18749 | 770 | 18757 | 767 | 18773 | 775 | 18787 | 779 | 18793 | 774 |
| 18797 | 772 | 18803 | 772 | 18839 | 773 | 18859 | 767 | 18869 | 773 | 18899 | 778 |
| 18911 | 772 | 18913 | 779 | 18917 | 778 | 18919 | 778 | 18947 | 779 | 18959 | 776 |
| 18973 | 783 | 18979 | 780 | 19001 | 773 | 19009 | 774 | 19013 | 781 | 19031 | 775 |
| 19037 | 781 | 19051 | 781 | 19069 | 784 | 19073 | 777 | 19079 | 780 | 19081 | 782 |
| 19087 | 783 | 19121 | 776 | 19139 | 775 | 19141 | 787 | 19157 | 780 | 19163 | 776 |
| 19181 | 778 | 19183 | 785 | 19207 | 776 | 19211 | 781 | 19213 | 781 | 19219 | 787 |
| 19231 | 779 | 19237 | 780 | 19249 | 783 | 19259 | 786 | 19267 | 782 | 19273 | 781 |
| 19289 | 786 | 19301 | 786 | 19309 | 778 | 19319 | 783 | 19333 | 787 | 19373 | 785 |
| 19379 | 784 | 19381 | 784 | 19387 | 784 | 19391 | 791 | 19403 | 789 | 19417 | 787 |
| 19421 | 787 | 19423 | 787 | 19427 | 787 | 19429 | 783 | 19433 | 783 | 19441 | 787 |
| 19447 | 783 | 19457 | 786 | 19463 | 787 | 19469 | 792 | 19471 | 786 | 19477 | 792 |
| 19483 | 789 | 19489 | 788 | 19501 | 791 | 19507 | 793 | 19531 | 791 | 19541 | 790 |
| 19543 | 791 | 19553 | 788 | 19559 | 787 | 19571 | 787 | 19577 | 796 | 19583 | 788 |
| 19597 | 790 | 19603 | 788 | 19609 | 788 | 19661 | 793 | 19681 | 794 | 19687 | 794 |
| 19697 | 797 | 19699 | 795 | 19709 | 798 | 19717 | 789 | 19727 | 795 | 19739 | 795 |
| 19751 | 792 | 19753 | 792 | 19759 | 789 | 19763 | 800 | 19777 | 794 | 19793 | 796 |
| 19801 | 800 | 19813 | 794 | 19819 | 800 | 19841 | 798 | 19843 | 795 | 19853 | 803 |
| 19861 | 793 | 19867 | 798 | 19889 | 795 | 19891 | 796 | 19913 | 799 | 19919 | 801 |
| 19927 | 802 | 19937 | 801 | 19949 | 793 | 19961 | 795 | 19963 | 799 | 19973 | 800 |
| 19979 | 802 | 19991 | 796 | 19993 | 803 | 19997 | 799 | 20011 | 798 | 20021 | 798 |
| 20023 | 799 | 20029 | 800 | 20047 | 806 | 20051 | 799 | 20063 | 797 | 20071 | 802 |
| 20089 | 808 | 20101 | 796 | 20107 | 808 | 20113 | 804 | 20117 | 802 | 20123 | 803 |
| 20129 | 806 | 20143 | 808 | 20147 | 804 | 20149 | 803 | 20161 | 804 | 20173 | 808 |
| 20177 | 807 | 20183 | 804 | 20201 | 802 | 20219 | 799 | 20231 | 804 | 20233 | 808 |
| 20249 | 806 | 20261 | 807 | 20269 | 806 | 20287 | 807 | 20297 | 806 | 20323 | 802 |
| 20327 | 809 | 20333 | 810 | 20341 | 803 | 20347 | 805 | 20353 | 808 | 20357 | 813 |
| 20359 | 807 | 20369 | 807 | 20389 | 803 | 20393 | 808 | 20399 | 814 | 20407 | 807 |
| 20411 | 803 | 20431 | 808 | 20441 | 811 | 20443 | 806 | 20477 | 808 | 20479 | 810 |
| $q$ | $t^s_2$ | $q$ | $t^s_2$ | $q$ | $t^s_2$ | $q$ | $t^s_2$ | $q$ | $t^s_2$ |
|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|
| 20483 | 812 | 20507 | 811 | 20509 | 813 | 20521 | 810 | 20533 | 809 |
| 20549 | 807 | 20551 | 808 | 20563 | 822 | 20593 | 813 | 20599 | 809 |
| 20627 | 818 | 20639 | 814 | 20641 | 815 | 20663 | 818 | 20681 | 811 |
| 20707 | 817 | 20717 | 816 | 20719 | 819 | 20731 | 820 | 20743 | 817 |
| 20749 | 818 | 20753 | 820 | 20759 | 811 | 20771 | 819 | 20773 | 815 |
| 20807 | 818 | 20809 | 817 | 20849 | 819 | 20857 | 820 | 20873 | 816 |
| 20887 | 816 | 20897 | 819 | 20899 | 814 | 20903 | 822 | 20921 | 824 |
| 20939 | 820 | 20947 | 823 | 20959 | 820 | 20963 | 824 | 20981 | 826 |
| 21001 | 828 | 21011 | 821 | 21013 | 824 | 21017 | 827 | 21019 | 824 |
| 21031 | 827 | 21059 | 816 | 21061 | 825 | 21067 | 825 | 21089 | 825 |
| 21107 | 827 | 21121 | 823 | 21139 | 828 | 21143 | 826 | 21149 | 824 |
| 21163 | 823 | 21169 | 828 | 21179 | 825 | 21187 | 823 | 21191 | 830 |
| 21211 | 821 | 21221 | 831 | 21227 | 826 | 21247 | 827 | 21269 | 826 |
| 21283 | 821 | 21313 | 831 | 21317 | 833 | 21319 | 828 | 21323 | 834 |
| 21347 | 828 | 21377 | 829 | 21379 | 822 | 21383 | 830 | 21391 | 836 |
| 21401 | 833 | 21407 | 830 | 21419 | 829 | 21433 | 834 | 21467 | 830 |
| 21487 | 832 | 21491 | 834 | 21493 | 830 | 21499 | 826 | 21503 | 833 |
| 21521 | 833 | 21523 | 827 | 21529 | 840 | 21557 | 833 | 21559 | 826 |
| 21569 | 832 | 21577 | 832 | 21587 | 837 | 21589 | 833 | 21599 | 831 |
| 21611 | 838 | 21613 | 835 | 21617 | 840 | 21647 | 835 | 21649 | 841 |
| 21673 | 834 | 21683 | 832 | 21701 | 838 | 21713 | 838 | 21727 | 838 |
| 21739 | 840 | 21751 | 838 | 21757 | 842 | 21767 | 832 | 21773 | 831 |
| 21799 | 842 | 21803 | 844 | 21817 | 837 | 21821 | 838 | 21839 | 844 |
| 21851 | 840 | 21859 | 837 | 21863 | 843 | 21871 | 845 | 21881 | 846 |
| 21911 | 837 | 21929 | 840 | 21937 | 849 | 21943 | 844 | 21961 | 837 |
| 21991 | 846 | 21997 | 848 | 22003 | 841 | 22013 | 840 | 22027 | 844 |
| 22037 | 848 | 22039 | 846 | 22051 | 840 | 22063 | 842 | 22067 | 846 |
| 22079 | 848 | 22091 | 848 | 22093 | 848 | 22109 | 843 | 22111 | 846 |
| 22129 | 844 | 22133 | 844 | 22147 | 848 | 22153 | 853 | 22157 | 848 |
| 22171 | 849 | 22189 | 853 | 22193 | 849 | 22229 | 842 | 22247 | 847 |
| 22271 | 842 | 22273 | 847 | 22277 | 851 | 22279 | 848 | 22283 | 848 |
| 22303 | 854 | 22307 | 849 | 22343 | 849 | 22349 | 854 | 22367 | 849 |
| 22381 | 857 | 22391 | 846 | 22397 | 852 | 22409 | 846 | 22433 | 853 |
| 22447 | 852 | 22453 | 851 | 22469 | 850 | 22481 | 852 | 22483 | 854 |
| 22511 | 852 | 22531 | 855 | 22541 | 855 | 22543 | 850 | 22549 | 857 |

53
| $q$   | $t^S_2$ | $q$   | $t^S_2$ | $q$   | $t^S_2$ | $q$   | $t^S_2$ | $q$   | $t^S_2$ |
|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|
| 22571 | 855     | 22573 | 856     | 22613 | 855     | 22619 | 858     | 22621 | 849     |
| 22639 | 850     | 22643 | 865     | 22651 | 852     | 22669 | 857     | 22679 | 854     |
| 22697 | 853     | 22699 | 855     | 22709 | 860     | 22717 | 859     | 22721 | 857     |
| 22739 | 855     | 22741 | 856     | 22751 | 860     | 22769 | 863     | 22777 | 858     |
| 22787 | 858     | 22807 | 860     | 22811 | 866     | 22817 | 863     | 22853 | 861     |
| 22861 | 866     | 22871 | 861     | 22877 | 860     | 22901 | 858     | 22907 | 858     |
| 22937 | 861     | 22943 | 863     | 22961 | 869     | 22963 | 857     | 22973 | 868     |
| 23003 | 861     | 23011 | 863     | 23017 | 868     | 23021 | 866     | 23027 | 861     |
| 23039 | 860     | 23041 | 860     | 23053 | 868     | 23057 | 863     | 23059 | 871     |
| 23071 | 866     | 23081 | 861     | 23087 | 867     | 23099 | 869     | 23117 | 869     |
| 23143 | 867     | 23159 | 868     | 23167 | 866     | 23173 | 866     | 23189 | 867     |
| 23201 | 870     | 23203 | 873     | 23209 | 878     | 23227 | 873     | 23251 | 869     |
| 23279 | 868     | 23291 | 871     | 23293 | 873     | 23297 | 870     | 23311 | 874     |
| 23327 | 869     | 23333 | 877     | 23339 | 872     | 23357 | 874     | 23369 | 862     |
| 23399 | 875     | 23417 | 872     | 23431 | 876     | 23447 | 870     | 23459 | 875     |
| 23497 | 865     | 23509 | 877     | 23531 | 871     | 23537 | 879     | 23539 | 873     |
| 23557 | 872     | 23561 | 883     | 23563 | 875     | 23567 | 869     | 23581 | 875     |
| 23599 | 882     | 23603 | 875     | 23609 | 877     | 23623 | 868     | 23627 | 883     |
| 23633 | 883     | 23663 | 878     | 23669 | 881     | 23671 | 877     | 23677 | 883     |
| 23689 | 881     | 23719 | 883     | 23741 | 880     | 23743 | 879     | 23747 | 879     |
| 23761 | 877     | 23767 | 890     | 23773 | 882     | 23789 | 880     | 23801 | 879     |
| 23819 | 880     | 23827 | 879     | 23831 | 877     | 23833 | 879     | 23857 | 883     |
| 23873 | 876     | 23879 | 884     | 23887 | 890     | 23893 | 882     | 23899 | 886     |
| 23911 | 882     | 23917 | 881     | 23929 | 879     | 23957 | 880     | 23971 | 881     |
| 23981 | 883     | 23993 | 885     | 24001 | 885     | 24007 | 883     | 24019 | 890     |
| 24029 | 891     | 24043 | 879     | 24049 | 887     | 24061 | 879     | 24071 | 883     |
| 24083 | 880     | 24091 | 881     | 24097 | 884     | 24103 | 886     | 24107 | 883     |
| 24113 | 885     | 24121 | 890     | 24133 | 887     | 24137 | 884     | 24151 | 892     |
| 24179 | 889     | 24181 | 892     | 24197 | 888     | 24203 | 893     | 24223 | 892     |
| 24239 | 890     | 24247 | 891     | 24251 | 896     | 24281 | 886     | 24317 | 894     |
| 24337 | 883     | 24359 | 895     | 24371 | 897     | 24373 | 888     | 24379 | 891     |
| 24407 | 897     | 24413 | 890     | 24419 | 900     | 24421 | 899     | 24439 | 896     |
| 24469 | 893     | 24473 | 893     | 24481 | 893     | 24499 | 895     | 24509 | 893     |
| 24527 | 894     | 24533 | 891     | 24547 | 904     | 24551 | 897     | 24571 | 895     |
| 24611 | 897     | 24623 | 899     | 24631 | 897     | 24659 | 897     | 24671 | 903     |

54
|  $q$  | $t^S_2$ |  $q$  | $t^S_2$ |  $q$  | $t^S_2$ |  $q$  | $t^S_2$ |  $q$  | $t^S_2$ |
|------|--------|------|--------|------|--------|------|--------|------|--------|
| 24683 | 891    | 24691 | 896    | 24697 | 899    | 24709 | 902    | 24733 | 901    |
| 24763 | 897    | 24767 | 907    | 24781 | 898    | 24793 | 903    | 24799 | 896    |
| 24821 | 901    | 24841 | 903    | 24847 | 905    | 24851 | 898    | 24859 | 903    |
| 24889 | 904    | 24907 | 904    | 24907 | 897    | 24919 | 906    | 24923 | 901    |
| 24973 | 904    | 24967 | 906    | 24971 | 905    | 24977 | 905    | 24979 | 900    |
| 25013 | 905    | 25031 | 908    | 25033 | 910    | 25037 | 907    | 25057 | 912    |
| 25087 | 906    | 25097 | 908    | 25111 | 906    | 25117 | 907    | 25121 | 910    |
| 25147 | 911    | 25153 | 906    | 25163 | 902    | 25169 | 903    | 25171 | 914    |
| 25189 | 912    | 25219 | 911    | 25229 | 911    | 25237 | 911    | 25243 | 904    |
| 25253 | 910    | 25261 | 917    | 25301 | 913    | 25303 | 909    | 25307 | 905    |
| 25321 | 914    | 25339 | 917    | 25343 | 911    | 25349 | 910    | 25357 | 912    |
| 25373 | 910    | 25391 | 910    | 25409 | 914    | 25411 | 917    | 25423 | 922    |
| 25447 | 915    | 25453 | 914    | 25457 | 912    | 25463 | 916    | 25469 | 916    |
| 25523 | 914    | 25537 | 914    | 25541 | 915    | 25561 | 918    | 25577 | 919    |
| 25583 | 923    | 25589 | 921    | 25601 | 918    | 25603 | 917    | 25609 | 918    |
| 25633 | 917    | 25639 | 917    | 25643 | 912    | 25657 | 912    | 25667 | 918    |
| 25679 | 921    | 25693 | 918    | 25703 | 921    | 25717 | 912    | 25733 | 911    |
| 25747 | 919    | 25759 | 920    | 25763 | 922    | 25771 | 923    | 25793 | 917    |
| 25801 | 926    | 25819 | 924    | 25841 | 915    | 25847 | 933    | 25849 | 927    |
| 25873 | 920    | 25889 | 924    | 25903 | 925    | 25913 | 925    | 25919 | 923    |
| 25933 | 922    | 25939 | 921    | 25943 | 922    | 25951 | 919    | 25969 | 923    |
| 25997 | 924    | 25999 | 926    | 26003 | 926    | 26017 | 925    | 26021 | 924    |
| 26041 | 928    | 26053 | 920    | 26083 | 928    | 26099 | 925    | 26107 | 924    |
| 26113 | 930    | 26119 | 926    | 26141 | 924    | 26153 | 927    | 26161 | 926    |
| 26177 | 923    | 26183 | 929    | 26189 | 927    | 26203 | 929    | 26209 | 932    |
| 26237 | 928    | 26249 | 927    | 26251 | 930    | 26261 | 929    | 26263 | 927    |
| 26293 | 931    | 26297 | 928    | 26309 | 931    | 26317 | 929    | 26321 | 931    |
| 26347 | 934    | 26357 | 934    | 26371 | 934    | 26387 | 942    | 26393 | 932    |
| 26407 | 929    | 26417 | 930    | 26423 | 933    | 26431 | 934    | 26437 | 930    |
| 26459 | 935    | 26479 | 931    | 26489 | 937    | 26497 | 929    | 26501 | 940    |
| 26539 | 935    | 26557 | 939    | 26561 | 936    | 26573 | 933    | 26591 | 945    |
| 26627 | 940    | 26633 | 941    | 26641 | 932    | 26647 | 935    | 26669 | 937    |
| 26683 | 934    | 26687 | 938    | 26693 | 939    | 26699 | 941    | 26701 | 938    |
| 26713 | 934    | 26717 | 943    | 26723 | 941    | 26729 | 944    | 26731 | 933    |
| 26759 | 939    | 26777 | 939    | 26783 | 938    | 26801 | 939    | 26813 | 941    |

Table 3 Continue 13
Table 3

| \( t_2^q \) | \( t_3^q \) | \( t_4^q \) | \( t_5^q \) | \( t_6^q \) | \( t_7^q \) | \( t_8^q \) | \( t_9^q \) | \( t_{10}^q \) |
|---|---|---|---|---|---|---|---|---|
| 26833 | 947 | 26839 | 936 | 26849 | 941 | 26861 | 938 | 26863 | 945 |
| 26881 | 938 | 26891 | 947 | 26893 | 942 | 26903 | 941 | 26921 | 939 |
| 26947 | 938 | 26951 | 944 | 26953 | 941 | 26959 | 946 | 26981 | 947 |
| 26993 | 941 | 27011 | 940 | 27017 | 946 | 27031 | 954 | 27043 | 942 |
| 27061 | 943 | 27067 | 946 | 27073 | 946 | 27077 | 943 | 27091 | 954 |
| 27107 | 947 | 27109 | 945 | 27127 | 950 | 27143 | 948 | 27179 | 949 |
| 27197 | 947 | 27211 | 942 | 27239 | 949 | 27241 | 945 | 27253 | 948 |
| 27271 | 947 | 27277 | 941 | 27281 | 946 | 27283 | 949 | 27299 | 952 |
| 27337 | 956 | 27361 | 956 | 27367 | 951 | 27397 | 955 | 27407 | 958 |
| 27427 | 947 | 27431 | 953 | 27437 | 951 | 27449 | 950 | 27457 | 959 |
| 27481 | 951 | 27487 | 955 | 27509 | 958 | 27527 | 954 | 27529 | 954 |
| 27541 | 957 | 27551 | 962 | 27581 | 956 | 27583 | 950 | 27611 | 952 |
| 27631 | 949 | 27647 | 959 | 27653 | 960 | 27673 | 955 | 27689 | 953 |
| 27697 | 960 | 27701 | 958 | 27733 | 959 | 27737 | 962 | 27739 | 957 |
| 27749 | 958 | 27751 | 958 | 27763 | 957 | 27767 | 962 | 27773 | 951 |
| 27791 | 961 | 27793 | 960 | 27799 | 954 | 27803 | 956 | 27809 | 963 |
| 27823 | 957 | 27827 | 958 | 27847 | 958 | 27851 | 964 | 27883 | 965 |
| 27901 | 960 | 27917 | 961 | 27919 | 961 | 27941 | 958 | 27943 | 965 |
| 27953 | 960 | 27961 | 966 | 27967 | 966 | 27983 | 956 | 27997 | 963 |
| 28019 | 965 | 28027 | 963 | 28031 | 961 | 28051 | 963 | 28057 | 965 |
| 28081 | 970 | 28087 | 974 | 28097 | 967 | 28099 | 966 | 28109 | 964 |
| 28123 | 973 | 28151 | 965 | 28163 | 968 | 28181 | 966 | 28183 | 965 |
| 28211 | 966 | 28219 | 966 | 28229 | 969 | 28277 | 969 | 28279 | 962 |
| 28289 | 970 | 28297 | 968 | 28307 | 970 | 28309 | 966 | 28319 | 970 |
| 28351 | 974 | 28387 | 976 | 28393 | 974 | 28403 | 971 | 28409 | 975 |
| 28429 | 971 | 28433 | 973 | 28439 | 978 | 28447 | 971 | 28463 | 977 |
| 28493 | 971 | 28499 | 980 | 28513 | 976 | 28517 | 971 | 28537 | 978 |
| 28547 | 969 | 28549 | 973 | 28559 | 970 | 28571 | 975 | 28573 | 971 |
| 28591 | 969 | 28597 | 982 | 28603 | 976 | 28607 | 967 | 28619 | 974 |
| 28627 | 981 | 28631 | 982 | 28643 | 971 | 28649 | 976 | 28657 | 977 |
| 28663 | 984 | 28669 | 979 | 28687 | 979 | 28697 | 983 | 28703 | 976 |
| 28723 | 978 | 28729 | 975 | 28751 | 976 | 28753 | 971 | 28759 | 976 |
| 28789 | 970 | 28793 | 976 | 28807 | 976 | 28813 | 975 | 28817 | 982 |
| 28843 | 981 | 28859 | 981 | 28867 | 978 | 28871 | 971 | 28879 | 983 |
| 28909 | 972 | 28921 | 977 | 28927 | 974 | 28933 | 978 | 28949 | 982 |
Table 3 Continue 15

| $q$ | $t_2^S$ | $q$ | $t_2^S$ | $q$ | $t_2^S$ | $q$ | $t_2^S$ | $q$ | $t_2^S$ |
|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|
| 28979 980 | 29009 982 | 29017 979 | 29021 984 | 29023 984 | 29027 984 |
| 29033 984 | 29059 984 | 29063 981 | 29077 987 | 29101 982 | 29123 985 |
| 29129 986 | 29131 983 | 29137 991 | 29147 985 | 29153 986 | 29167 989 |
| 29173 993 | 29179 987 | 29191 986 | 29201 989 | 29207 976 | 29229 989 |
| 29211 982 | 29231 985 | 29243 994 | 29251 980 | 29269 980 | 29271 985 |
| 29279 997 | 29303 982 | 29311 988 | 29327 991 | 29333 985 | 29339 993 |
| 29347 983 | 29363 983 | 29383 987 | 29387 994 | 29389 989 | 29399 984 |
| 29401 987 | 29411 990 | 29423 992 | 29429 989 | 29437 989 | 29443 988 |
| 29453 994 | 29473 998 | 29483 994 | 29501 993 | 29527 989 | 29531 993 |
| 29537 993 | 29567 995 | 29569 995 | 29573 995 | 29581 995 | 29587 1003 |
| 29599 992 | 29611 993 | 29629 996 | 29633 996 | 29641 990 | 29663 993 |
| 29669 990 | 29671 996 | 29683 996 | 29717 995 | 29723 998 | 29741 990 |
| 29753 992 | 29759 995 | 29761 999 | 29789 1001 | 29803 997 | 29819 996 |
| 29833 993 | 29837 998 | 29851 1001 | 29863 1000 | 29867 994 | 29873 1004 |
| 29879 997 | 29881 996 | 29917 1005 | 29921 1001 | 29927 996 | 29947 1000 |
| 29959 1006 | 29983 1004 | 29989 997 | 30011 1002 | 30013 992 | 30029 1000 |
| 30047 996 | 30059 1007 | 30071 996 | 30089 1005 | 30091 997 | 30097 1005 |
| 30103 1007 | 30109 997 | 30113 1004 | 30119 996 | 30133 1010 | 30137 996 |
| 30139 1002 | 30161 995 | 30169 1004 | 30181 998 | 30187 1010 | 30197 1002 |
| 30203 1005 | 30211 1000 | 30223 1007 | 30241 1006 | 30253 1008 | 30259 1005 |
| 30269 1007 | 30271 1007 | 30293 1010 | 30307 1012 | 30313 1007 | 30319 1008 |
| 30323 1004 | 30341 1014 | 30347 1010 | 30367 1001 | 30389 1002 | 30391 998 |
| 30403 1000 | 30427 1005 | 30431 1008 | 30449 1011 | 30467 1003 | 30469 1014 |
| 30491 1014 | 30493 1009 | 30497 1008 | 30509 1006 | 30517 1006 | 30529 1014 |
| 30539 1010 | 30553 1008 | 30557 1012 | 30559 1011 | 30577 1018 | 30593 1011 |
| 30631 1006 | 30637 1009 | 30643 1015 | 30649 1013 | 30661 1013 | 30671 1020 |
| 30677 1005 | 30689 1011 | 30697 1015 | 30703 1009 | 30707 1015 | 30713 1016 |
| 30727 1013 | 30757 1017 | 30763 1017 | 30773 1021 | 30781 1015 | 30803 1006 |
| 30809 1017 | 30817 1011 | 30829 1013 | 30839 1014 | 30841 1014 | 30851 1014 |
| 30853 1012 | 30859 1023 | 30869 1011 | 30871 1012 | 30881 1015 | 30893 1019 |
| 30911 1016 | 30931 1021 | 30937 1022 | 30941 1012 | 30949 1020 | 30971 1018 |
| 30977 1017 | 30983 1021 | 31013 1024 | 31019 1018 | 31033 1019 | 31039 1021 |
| 31051 1023 | 31063 1018 | 31069 1021 | 31079 1027 | 31081 1021 | 31091 1024 |
| 31121 1021 | 31123 1022 | 31139 1014 | 31147 1022 | 31151 1021 | 31153 1015 |
| 31159 1022 | 31177 1024 | 31181 1029 | 31183 1019 | 31189 1017 | 31193 1023 |
|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| 31219 | 1026 | 31223 | 1021 | 31231 | 1022 | 31237 | 1031 |
| 31253 | 1026 | 31259 | 1021 | 31271 | 1028 | 31277 | 1016 |
| 31319 | 1033 | 31321 | 1021 | 31327 | 1025 | 31333 | 1027 |
| 31379 | 1036 | 31387 | 1024 | 31391 | 1025 | 31393 | 1018 |
| 31477 | 1029 | 31481 | 1027 | 31489 | 1023 | 31511 | 1024 |
| 31531 | 1027 | 31541 | 1029 | 31543 | 1025 | 31547 | 1035 |
| 31583 | 1025 | 31601 | 1031 | 31607 | 1030 | 31627 | 1030 |
| 31657 | 1034 | 31663 | 1028 | 31667 | 1034 | 31687 | 1030 |
| 31723 | 1030 | 31727 | 1034 | 31729 | 1038 | 31741 | 1034 |
| 31771 | 1039 | 31793 | 1031 | 31799 | 1042 | 31817 | 1034 |
| 31859 | 1030 | 31873 | 1038 | 31883 | 1031 | 31891 | 1029 |
| 31963 | 1032 | 31973 | 1032 | 31981 | 1037 | 31991 | 1033 |
| 32027 | 1036 | 32029 | 1039 | 32051 | 1029 | 32057 | 1036 |
| 32069 | 1037 | 32077 | 1042 | 32083 | 1026 | 32089 | 1040 |
| 32119 | 1040 | 32141 | 1041 | 32143 | 1041 | 32159 | 1034 |
| 32189 | 1041 | 32191 | 1045 | 32203 | 1048 | 32213 | 1043 |
| 32251 | 1040 | 32257 | 1043 | 32261 | 1039 | 32297 | 1040 |
| 32309 | 1044 | 32321 | 1042 | 32323 | 1042 | 32327 | 1039 |
| 32359 | 1044 | 32363 | 1045 | 32369 | 1044 | 32371 | 1044 |
| 32401 | 1045 | 32411 | 1030 | 32413 | 1045 | 32423 | 1044 |
| 32443 | 1043 | 32467 | 1038 | 32479 | 1056 | 32491 | 1051 |
| 32507 | 1046 | 32531 | 1046 | 32533 | 1046 | 32537 | 1047 |
| 32569 | 1045 | 32573 | 1046 | 32579 | 1050 | 32587 | 1050 |
| 32611 | 1046 | 32621 | 1046 | 32633 | 1048 | 32647 | 1052 |
| 32693 | 1047 | 32707 | 1053 | 32713 | 1049 | 32717 | 1043 |
| 32771 | 1050 | 32779 | 1053 | 32783 | 1053 | 32789 | 1049 |
| 32803 | 1052 | 32831 | 1049 | 32833 | 1051 | 32839 | 1049 |
| 32887 | 1054 | 32909 | 1053 | 32911 | 1053 | 32917 | 1055 |
| 32941 | 1053 | 32957 | 1059 | 32969 | 1050 | 32971 | 1058 |
| 32993 | 1045 | 32999 | 1057 | 33013 | 1056 | 33023 | 1056 |
| 33049 | 1056 | 33053 | 1048 | 33071 | 1051 | 33073 | 1055 |
| 33107 | 1061 | 33113 | 1048 | 33119 | 1058 | 33149 | 1067 |
| 33179 | 1062 | 33181 | 1056 | 33191 | 1056 | 33199 | 1065 |
| 33223 | 1060 | 33247 | 1058 | 33287 | 1061 | 33289 | 1057 |
| 33317 | 1062 | 33329 | 1059 | 33331 | 1063 | 33343 | 1061 |

Table 3 Continue 16
| $q$  | $t^S_{2}$ | $q$  | $t^S_{2}$ | $q$  | $t^S_{2}$ | $q$  | $t^S_{2}$ | $q$  | $t^S_{2}$ |
|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|
| 33353 | 1055      | 33359 | 1060      | 33377 | 1058      | 33391 | 1061      | 33403 | 1059      |
| 33357 | 1055      | 33359 | 1060      | 33377 | 1058      | 33391 | 1061      | 33403 | 1059      |
| 33409 | 1058      | 33409 | 1058      | 33413 | 1063      | 33417 | 1063      | 33419 | 1064      |
| 33457 | 1065      | 33457 | 1065      | 33461 | 1065      | 33463 | 1065      | 33469 | 1066      |
| 33475 | 1065      | 33475 | 1065      | 33477 | 1065      | 33479 | 1065      | 33481 | 1066      |
| 33499 | 1066      | 33499 | 1066      | 33501 | 1066      | 33503 | 1066      | 33505 | 1067      |
| 33513 | 1067      | 33513 | 1067      | 33517 | 1067      | 33519 | 1067      | 33521 | 1068      |
| 33539 | 1068      | 33539 | 1068      | 33541 | 1068      | 33543 | 1068      | 33545 | 1069      |
| 33557 | 1069      | 33557 | 1069      | 33559 | 1069      | 33561 | 1069      | 33563 | 1070      |
| 33579 | 1070      | 33579 | 1070      | 33581 | 1070      | 33583 | 1070      | 33585 | 1071      |
| 33595 | 1071      | 33595 | 1071      | 33597 | 1071      | 33599 | 1071      | 33601 | 1072      |
| 33615 | 1072      | 33615 | 1072      | 33617 | 1072      | 33619 | 1072      | 33621 | 1073      |
| 33635 | 1073      | 33635 | 1073      | 33637 | 1073      | 33639 | 1073      | 33641 | 1074      |
| 33649 | 1074      | 33649 | 1074      | 33651 | 1074      | 33653 | 1074      | 33655 | 1075      |
| 33661 | 1075      | 33661 | 1075      | 33663 | 1075      | 33665 | 1075      | 33667 | 1076      |
| 33679 | 1076      | 33679 | 1076      | 33681 | 1076      | 33683 | 1076      | 33685 | 1077      |
| 33695 | 1077      | 33695 | 1077      | 33701 | 1077      | 33703 | 1077      | 33705 | 1078      |
| 33713 | 1078      | 33713 | 1078      | 33715 | 1078      | 33717 | 1078      | 33719 | 1079      |
| 33727 | 1079      | 33727 | 1079      | 33731 | 1079      | 33733 | 1079      | 33735 | 1080      |
| 33749 | 1080      | 33749 | 1080      | 33751 | 1080      | 33753 | 1080      | 33755 | 1081      |
| 33769 | 1081      | 33769 | 1081      | 33771 | 1081      | 33773 | 1081      | 33775 | 1082      |
| 33787 | 1082      | 33787 | 1082      | 33789 | 1082      | 33791 | 1082      | 33793 | 1083      |
| 33809 | 1083      | 33809 | 1083      | 33811 | 1083      | 33813 | 1083      | 33815 | 1084      |
| 33823 | 1084      | 33823 | 1084      | 33825 | 1084      | 33827 | 1084      | 33829 | 1085      |
| 33835 | 1085      | 33835 | 1085      | 33837 | 1085      | 33839 | 1085      | 33841 | 1086      |
| 33849 | 1086      | 33849 | 1086      | 33851 | 1086      | 33853 | 1086      | 33855 | 1087      |
| 33861 | 1087      | 33861 | 1087      | 33863 | 1087      | 33865 | 1087      | 33867 | 1088      |
| 33879 | 1088      | 33879 | 1088      | 33881 | 1088      | 33883 | 1088      | 33885 | 1089      |
| 33889 | 1089      | 33889 | 1089      | 33891 | 1089      | 33893 | 1089      | 33895 | 1090      |
| 33899 | 1090      | 33899 | 1090      | 33901 | 1090      | 33903 | 1090      | 33905 | 1091      |
| 33909 | 1091      | 33909 | 1091      | 33911 | 1091      | 33913 | 1091      | 33915 | 1092      |
| 33919 | 1092      | 33919 | 1092      | 33921 | 1092      | 33923 | 1092      | 33925 | 1093      |
| 33929 | 1093      | 33929 | 1093      | 33931 | 1093      | 33933 | 1093      | 33935 | 1094      |
| 33939 | 1094      | 33939 | 1094      | 33941 | 1094      | 33943 | 1094      | 33945 | 1095      |
| 33949 | 1095      | 33949 | 1095      | 33951 | 1095      | 33953 | 1095      | 33955 | 1096      |
| 33959 | 1096      | 33959 | 1096      | 33961 | 1096      | 33963 | 1096      | 33965 | 1097      |
| 33969 | 1097      | 33969 | 1097      | 33971 | 1097      | 33973 | 1097      | 33975 | 1098      |
| 33979 | 1098      | 33979 | 1098      | 33981 | 1098      | 33983 | 1098      | 33985 | 1099      |
| 33989 | 1099      | 33989 | 1099      | 33991 | 1099      | 33993 | 1099      | 33995 | 1100      |
| 33999 | 1100      | 33999 | 1100      | 34001 | 1100      | 34003 | 1100      | 34005 | 1101      |
| q  | $t_2^{S}$ | g  | $t_2^{S}$ | q  | $t_2^{S}$ | q  | $t_2^{S}$ | q  | $t_2^{S}$ |
|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| 35531 | 1103 | 35533 | 1102 | 35537 | 1104 | 35543 | 1100 | 35569 | 1097 | 35573 | 1106 |
| 35591 | 1098 | 35593 | 1104 | 35597 | 1101 | 35603 | 1097 | 35617 | 1098 | 35671 | 1095 |
| 35677 | 1093 | 35729 | 1101 | 35731 | 1100 | 35747 | 1098 | 35753 | 1099 | 35759 | 1106 |
| 35771 | 1109 | 35797 | 1101 | 35801 | 1099 | 35803 | 1111 | 35809 | 1095 | 35831 | 1107 |
| 35837 | 1107 | 35839 | 1105 | 35851 | 1105 | 35863 | 1104 | 35869 | 1101 | 35879 | 1106 |
| 35897 | 1098 | 35899 | 1104 | 35911 | 1106 | 35923 | 1106 | 35933 | 1105 | 35951 | 1108 |
| 35963 | 1109 | 35969 | 1108 | 35977 | 1102 | 35983 | 1104 | 35993 | 1102 | 35999 | 1106 |
| 36007 | 1102 | 36011 | 1106 | 36013 | 1101 | 36017 | 1108 | 36037 | 1105 | 36061 | 1100 |
| 36067 | 1108 | 36073 | 1108 | 36083 | 1109 | 36097 | 1117 | 36107 | 1105 | 36109 | 1113 |
| 36131 | 1111 | 36137 | 1109 | 36151 | 1113 | 36161 | 1110 | 36187 | 1114 | 36191 | 1104 |
| 36209 | 1109 | 36217 | 1110 | 36229 | 1108 | 36241 | 1114 | 36251 | 1111 | 36263 | 1116 |
| 36269 | 1115 | 36277 | 1111 | 36293 | 1115 | 36299 | 1116 | 36307 | 1116 | 36313 | 1122 |
| 36319 | 1111 | 36341 | 1107 | 36343 | 1113 | 36353 | 1117 | 36373 | 1114 | 36383 | 1114 |
| 36389 | 1116 | 36433 | 1111 | 36451 | 1120 | 36457 | 1113 | 36467 | 1115 | 36469 | 1113 |
| 36473 | 1116 | 36479 | 1115 | 36493 | 1111 | 36497 | 1119 | 36523 | 1120 | 36527 | 1120 |
| 36529 | 1105 | 36541 | 1112 | 36551 | 1114 | 36559 | 1119 | 36563 | 1116 | 36571 | 1114 |
| 36583 | 1113 | 36587 | 1113 | 36599 | 1113 | 36607 | 1114 | 36629 | 1118 | 36637 | 1117 |
| 36643 | 1115 | 36653 | 1118 | 36671 | 1117 | 36677 | 1111 | 36683 | 1112 | 36691 | 1113 |
| 36697 | 1115 | 36709 | 1120 | 36713 | 1123 | 36721 | 1118 | 36739 | 1122 | 36749 | 1116 |
| 36761 | 1122 | 36767 | 1124 | 36779 | 1117 | 36781 | 1106 | 36787 | 1124 | 36791 | 1125 |
| 36793 | 1118 | 36809 | 1120 | 36821 | 1122 | 36833 | 1123 | 36847 | 1120 | 36857 | 1123 |
| 36871 | 1124 | 36877 | 1127 | 36887 | 1117 | 36899 | 1123 | 36901 | 1123 | 36913 | 1122 |
| 36919 | 1113 | 36923 | 1131 | 36929 | 1123 | 36931 | 1122 | 36943 | 1118 | 36947 | 1128 |
| 36973 | 1123 | 36979 | 1122 | 36997 | 1119 | 37003 | 1120 | 37013 | 1123 | 37019 | 1117 |
| 37021 | 1115 | 37039 | 1125 | 37049 | 1124 | 37057 | 1119 | 37061 | 1122 | 37087 | 1127 |
| 37097 | 1127 | 37117 | 1124 | 37123 | 1129 | 37139 | 1126 | 37159 | 1137 | 37171 | 1132 |
| 37181 | 1128 | 37189 | 1123 | 37199 | 1133 | 37201 | 1128 | 37217 | 1127 | 37223 | 1133 |
| 37243 | 1127 | 37253 | 1136 | 37273 | 1125 | 37277 | 1129 | 37307 | 1134 | 37309 | 1127 |
| 37313 | 1127 | 37321 | 1126 | 37337 | 1119 | 37339 | 1128 | 37357 | 1131 | 37361 | 1126 |
| 37363 | 1125 | 37369 | 1131 | 37379 | 1122 | 37397 | 1121 | 37409 | 1134 | 37423 | 1131 |
| 37441 | 1129 | 37447 | 1139 | 37463 | 1128 | 37483 | 1134 | 37489 | 1143 | 37493 | 1130 |
| 37501 | 1139 | 37507 | 1133 | 37511 | 1127 | 37517 | 1134 | 37529 | 1126 | 37537 | 1122 |
| 37547 | 1132 | 37549 | 1123 | 37561 | 1133 | 37567 | 1142 | 37571 | 1131 | 37573 | 1131 |
| 37579 | 1130 | 37589 | 1128 | 37591 | 1138 | 37607 | 1137 | 37619 | 1138 | 37633 | 1137 |
| 37643 | 1133 | 37649 | 1131 | 37657 | 1128 | 37663 | 1127 | 37691 | 1135 | 37693 | 1139 |
| \(q\) | \(t_2^S\) | \(q\) | \(t_2^S\) | \(q\) | \(t_2^S\) | \(q\) | \(t_2^S\) | \(q\) | \(t_2^S\) | \(q\) | \(t_2^S\) |
|------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|
| 37699 | 1130 | 37717 | 1133 | 37747 | 1139 | 37781 | 1143 | 37783 | 1136 | 37799 | 1142 |
| 37811 | 1138 | 37831 | 1140 | 37847 | 1137 | 37853 | 1141 | 37861 | 1142 | 37993 | 1135 |
| 37871 | 1136 | 37879 | 1137 | 37889 | 1138 | 37897 | 1140 | 37907 | 1145 | 37951 | 1141 |
| 37957 | 1139 | 37963 | 1140 | 37967 | 1144 | 37987 | 1143 | 37991 | 1140 | 37993 | 1135 |
| 37997 | 1142 | 38011 | 1131 | 38039 | 1137 | 38047 | 1140 | 38053 | 1137 | 38069 | 1140 |
| 38083 | 1143 | 38113 | 1141 | 38119 | 1139 | 38149 | 1140 | 38153 | 1141 | 38167 | 1139 |
| 38177 | 1146 | 38183 | 1137 | 38189 | 1148 | 38197 | 1143 | 38201 | 1140 | 38219 | 1143 |
| 38231 | 1146 | 38237 | 1146 | 38239 | 1139 | 38261 | 1140 | 38273 | 1137 | 38281 | 1145 |
| 38287 | 1142 | 38299 | 1151 | 38303 | 1141 | 38317 | 1147 | 38321 | 1146 | 38327 | 1146 |
| 38329 | 1149 | 38333 | 1149 | 38351 | 1143 | 38371 | 1151 | 38377 | 1143 | 38393 | 1145 |
| 38431 | 1148 | 38447 | 1152 | 38449 | 1145 | 38453 | 1147 | 38459 | 1151 | 38461 | 1149 |
| 38501 | 1147 | 38543 | 1149 | 38557 | 1156 | 38561 | 1145 | 38567 | 1147 | 38569 | 1146 |
| 38593 | 1150 | 38603 | 1150 | 38609 | 1151 | 38611 | 1157 | 38629 | 1147 | 38639 | 1156 |
| 38651 | 1145 | 38653 | 1152 | 38669 | 1155 | 38671 | 1155 | 38677 | 1152 | 38693 | 1145 |
| 38699 | 1144 | 38707 | 1153 | 38711 | 1159 | 38713 | 1148 | 38723 | 1148 | 38729 | 1148 |
| 38737 | 1150 | 38747 | 1146 | 38749 | 1147 | 38767 | 1155 | 38783 | 1150 | 38791 | 1152 |
| 38803 | 1151 | 38821 | 1162 | 38833 | 1155 | 38839 | 1157 | 38851 | 1154 | 38861 | 1155 |
| 38867 | 1151 | 38873 | 1150 | 38891 | 1149 | 38903 | 1150 | 38917 | 1152 | 38921 | 1153 |
| 38923 | 1157 | 38933 | 1154 | 38953 | 1153 | 38959 | 1160 | 38971 | 1159 | 38977 | 1151 |
| 38993 | 1153 | 39019 | 1153 | 39023 | 1156 | 39041 | 1157 | 39043 | 1150 | 39047 | 1157 |
| 39079 | 1162 | 39089 | 1158 | 39097 | 1159 | 39103 | 1161 | 39107 | 1152 | 39113 | 1165 |
| 39119 | 1153 | 39133 | 1156 | 39139 | 1160 | 39157 | 1161 | 39161 | 1158 | 39163 | 1157 |
| 39181 | 1160 | 39191 | 1153 | 39199 | 1157 | 39209 | 1161 | 39217 | 1165 | 39227 | 1151 |
| 39229 | 1162 | 39233 | 1158 | 39239 | 1158 | 39241 | 1161 | 39251 | 1155 | 39293 | 1162 |
| 39301 | 1155 | 39313 | 1159 | 39317 | 1167 | 39323 | 1161 | 39341 | 1163 | 39343 | 1162 |
| 39359 | 1164 | 39367 | 1162 | 39371 | 1156 | 39373 | 1162 | 39383 | 1166 | 39397 | 1159 |
| 39409 | 1164 | 39419 | 1162 | 39439 | 1170 | 39443 | 1160 | 39451 | 1168 | 39461 | 1169 |
| 39499 | 1158 | 39503 | 1175 | 39509 | 1165 | 39511 | 1164 | 39521 | 1161 | 39541 | 1169 |
| 39551 | 1169 | 39563 | 1162 | 39569 | 1165 | 39581 | 1173 | 39607 | 1169 | 39619 | 1158 |
| 39623 | 1166 | 39631 | 1167 | 39659 | 1167 | 39667 | 1166 | 39671 | 1171 | 39679 | 1163 |
| 39703 | 1167 | 39709 | 1171 | 39719 | 1169 | 39727 | 1169 | 39733 | 1167 | 39749 | 1173 |
| 39761 | 1169 | 39769 | 1167 | 39779 | 1173 | 39791 | 1173 | 39799 | 1162 | 39821 | 1176 |
| 39827 | 1171 | 39829 | 1171 | 39839 | 1174 | 39841 | 1162 | 39847 | 1170 | 39857 | 1175 |
| 39863 | 1175 | 39869 | 1176 | 39877 | 1172 | 39883 | 1167 | 39887 | 1172 | 39901 | 1175 |
| 39929 | 1169 | 39937 | 1171 | 39953 | 1172 | 39971 | 1176 | 39979 | 1163 | 39983 | 1175 |
| 39989 | 1178 | 40009 | 1175 |
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