# Edward Sang's steps for the construction of the logarithms of the primes (K1-K3)

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# 1 Introduction

Edward Sang (1805–1890) was probably the greatest calculator of logarithms of the 19th century [3, 11, 12, 13, 22, 27]. Sang spent 40 years computing tables of logarithms and trigonometric functions, with the assistance from his daughters Flora (1838-1925) and Jane (1834-1878). The result fills about 50 manuscript volumes, plus a number of transfer duplicates, which are kept at Edinburgh University Library and at the National Library of Scotland, Edinburgh. I have reconstructed a number of these tables and an overview of the tables and reconstructions can be found in a separate guide [34].

Sang's purpose was in particular to provide fundamental tables, including for the decimal division of the quadrant. In 1890 [3, p. 189], he wrote that

> In addition to the results being accurate to a degree far beyond what can ever be needed in practical matters, [the collection of computations] contains what no work of the kind has contained before, a complete and clear record of all the steps by which those results were reached. Thus we are enabled at once to verify, or if necessary, to correct the record, so making it a standard for all time.
>
> For these reasons it is proposed that the entire collection be acquired by, and preserved in, some official library, so as to be accessible to all interested in such matters; so that future computers may be enabled to extend the work without the need of recomputing what has been already done; and also so that those extracts which are judged to be expedient may be published.

The present document describes volumes K1, K2 and K3 which contain the steps used for the construction of the logarithms of the primes.[1] The three volumes have a continuous page numbering.

# 2 Volume 1 (K1)

Volume 1 (up to page 240) gives the logarithms of the primes up to 2000, as well as a few others. It starts with an introductory notice by Sang.

[1]**Important note to future researchers:** This document, as well as others related to the reconstruction of Sang's tables, contains some shortcomings, some of which can easily be completed by others. Known shortcomings are marked in the margins with the sign "✻". Please, let me know of your work so that I can improve mine.

## 2.1 Sang's introduction

I reproduce here Sang's notice as it appears at the beginning of volume 1 (K1, Acc 10780/16). This introduction covers pages 3-11 and 13. There is no page 12 and it is not missing.

Notice.

> The following calculations were undertaken with the ultimate view of forming a nine place table of the logarithms of all numbers under a million: a table which is desired by a gradually increasing number of computers
>
> The ordinary seven place tables suffice perfectly for all the ordinary work of geodetical and astronomical calculation; and, with management, for a great part of the more delicate computations; but few who have ever engaged in the toil of computing original tables have failed to become sensible of the facilities which a more extended logarithmic canon would afford them.
>
> The rapidly increasing exactitude of astronomical data, the delicacy of modern instruments and the improvements in all branches of applicate mathematics, promise soon to render such tables not merely desirable but absolutely requisite to original computers. At the same time we must admit that for many, very many, years the demand for such an extensive work must fall sadly short of repaying the labour and expense attending its construction.
>
> In order to obtain the last digits true it is necessary to carry the manuscript calculations several places further, and afterwards to cut off the additional places augmenting the last retained figure whenever those rejected exceed 50000.... Here however it may happen that we have to do with 4999...998 or 5000...002 and as there must always be an uncertainty of two or three units in the last computed place, it follows that there is then an uncertainty in the last retained one. Now among a million numbers the probability is that if we carry the entire figures to six places, each of these may occur once:[2] so that if we make the manuscript calculation to fifteen places we may anticipate five or six cases of uncertainty. Were we to carry the work to one or two places more the chance

[2]Sang means that each of the sequences 499998, 499999, 500000, 500001, and 500002 has a probability of occuring once among a million random decimal numbers. If the computations are extended to seven places, then the probability of one of the 7-digit sequences 4999998, 4999999, etc., occuring, is 0.1.

of having an uncertainty would be almost nothing: but for each such place we shall have a million of figures in the logarithms and another couple of millions in the first and second differences — the mere writing out of which implies time and toil. Hence it will be more economical to rest at the fifteenth place, and to make a special calculation for each doubt that arises.

To reduce the probability of error to two or three units in the last place, that is in the fifteenth we must carry the logarithms of the smaller primes a few steps further, since by repeated additions their defects or excesses are multiplied: on this account I determined to compute as far as ten thousand to twenty-five places; up to one-hundred thousand to twenty places, and latterly to restrict the million table to fifteen. In projecting such a mass of work, more than any single man can hope to accomplish, it was natural to turn to the 60 place table printed in Callet's Tables Portatives,[3] and in the earlier editions of Hutton. But it at once appeared that no sufficient account of the computation of this table is given and that errors may have existed in it without any likelyhood of detection: while these errors would become excessively entangled in any after-work founded upon them, I therefore rejected the idea of trusting to the sixty place table and resolved to commence at the very beginning. However I judged it sufficient to compute the logarithms of the primes given by Callet only once, accepting the coincidence as sufficient proof of accuracy: and here I gladly bear testimony to the value of Callet's table in this far that to twenty-seven places I have found it exact; in the twenty-eighth place, which is the limit of the following manuscript work, small and to-be-looked-for deviations occurred: the figures in Callet were then adopted in preference to my own.

After passing 1100 it became necessary to compute the logarithm of each prime by two independent methods and to ferret out the source of any discrepancy: nor was ever any uncertainty left except that unavoidable in the last place.

Having given this short account of the general object and management of the work, I may now proceed to describe more in detail the actual mode of procedure.

[3]In fact, Callet's tables [10] (published in 1795) contain a table giving the 11th to 61st decimals of the logarithms of primes up to 1097. This table may have been copied from Hutton [20], but both tables actually were first published by Sharp in 1706 [70].

Throughout the whole operation our object is to obtain the greatest number of useful results from a given amount of labour: and it is in this respect alone that any particular notice has to be taken of our procedure since the general principles of the calculation are simple and perfectly well known to every algebraist.

Merely for the sake of completeness the first pages are devoted to the computation of the neperian logarithm of 10, and this is accomplished by means of the single divisor 9, thus

$$\begin{aligned}
3\,\text{nep. log}\,\frac{1+\frac{1}{3}}{1-\frac{1}{3}} &= \text{nep. log}\,8 &&= 2\left\{1+\frac{1}{3}\cdot\frac{1}{9}+\frac{1}{5}\cdot\frac{1}{9^2}+\frac{1}{7}\cdot\frac{1}{9^3}+\text{etc.}\right\}\\
\text{nep. log}\,\frac{1+\frac{1}{9}}{1-\frac{1}{9}} &= \text{nep. log}\,\frac{10}{8} &&= 2\left\{\qquad\frac{1}{9}+\qquad\qquad\frac{1}{3}\cdot\frac{1}{9^3}+\text{etc.}\right\}
\end{aligned}$$

whence

$$\text{nep. log}\,10 = 2+\frac{2}{9}\left(1+\frac{1}{3}\right)+\frac{2}{9^2}\left(\frac{1}{5}\right)+\frac{2}{9^3}\left(\frac{1}{3}+\frac{1}{7}\right)+\frac{2}{9^4}\left(\frac{1}{9}\right)+\text{etc.}$$

whence the well known values of nep. log 10 and of $M$ at once result.

The basis being thus laid, the calculation thereafter proceeds much in the usual way, the computation of $\log\overline{n+1}$ and $\log\overline{n-1}$ being generally combined in the earlier part: but in the more advanced part of the work where the divisors of that one with which our immediate business does not lie, are of difficult discovery, that computation is omitted. A list, however, of all divisors that have been used was regularly kept so that it might readily recurred to: a precaution which the numerous "see p. so and so" sufficiently show to be advantageous.

From the arrangement of the earlier part of the work, it necessarily happened that the logarithms thus found belonged to primes out of order, and sometimes even beyond the intended range of the table: in the latter case a list was kept of the extra primes thus found. Sometimes also it occurred that the number whose logarithm was found was a composite number none of whose factors had yet been happened upon: of these also a list was kept that they might be employed as occasion required.

The great matter at all times was to obtain some multiple of the prime in hand which might differ by unit from some large number whose logarithm is already known; at the same time that the division by this number is easily performed. Now when any number is terminated by a succession of cyphers the division by it is so much facilitated, hence it is desirable to find those multiples of the prime which end in ... 999 or in ... 001. The operation for this purpose will be best understood from a specimen.

Suppose that we wish to compute the logarithm of the prime number 1619. Of this the first multiple ends in 9: now its penult is 1 wherefore if we add that multiple which ends in 80, that is the twentieth, we shall have a multiple ending in 99; in fact $21 \times 1619 = 33999$. As the antepenult is also 9, the third figure of the multiplier must be 0 while to bring the next figure 3 up to 9 we must add the fourth multiple. The work is arranged as under

$$
\begin{array}{r@{\qquad\qquad}r}
1 & 1\ 619 \\
2\phantom{1} & 32\ 38\phantom{9} \\
\hline
21 & 33\ 999 \\
4\ 0\phantom{21} & 6\ 476\phantom{\ 999} \\
\hline
4\ 021 & 6\ 509\ 999 \\
1\phantom{4\ 021} & 16\ 19\phantom{9\ 999} \\
7\phantom{14\ 021} & 1\ 133\ 3\phantom{99\ 999} \\
6\phantom{\ 714\ 021} & 9\ 714\phantom{\ 999\ 999} \\
7\phantom{6\ 714\ 021} & 113\ 33\phantom{9\ 999\ 999} \\
\hline
76\ 714\ 021 & 124\ 199\ 999\ 999
\end{array}
$$

In a way exactly similar those multiples which end in ... 001 may be found, but it is manifest that the two sets of multipliers are complementary to each other[4] whence we conclude that $23\ 285\ 979 \times 1619 = 37\ 700\ 000\ 001$.

From the very nature of the operation it follows that the number preceding the cyphers or the nines is less than the proposed prime,[5] so that its logarithm may be assumed as known: there is then no trouble on this score: but it remains for us to decompose the multiplier.

[4] We have $100\ 000\ 000 - 76\ 714\ 021 = 23\ 285\ 979$.

[5] In the above example, 1241 is smaller than 1619, because the product of 1619 by a 8-digit integer necessarily is smaller than $1619 \times 10^8$. And since $377 = 1619 - 1241 - 1$, the number preceding the 0s is also smaller than the proposed prime.

For effecting this decomposition I have had habitual recourse to Burckhardt's Table des Diviseurs which goes a little above three millions.[6]

The number 76 714 021 is however far beyond the limits of Burckhardt. I therefore content myself with trying it by the easy primes 3, 7, 11, 13, 37, and as none of these are divisors I strike off the 7, and would try 6 714 021; but for the sake of obtaining as large numbers as possible I take first the complement 23 285 979 and on trial at once find it divisible by 9, the quotient being 2 587 331 which is within the range of Burckhardt: on turning to that work we find the divisor 167 but the quotient 15493 is prime: this multiple then will not suit us. Taking up the above 6 714 021 we find it resolved into $3 \cdot 1493 \cdot 1499$; so that in all $10\,869\,999\,999 = 3 \cdot 1493 \cdot 1499 \cdot 1619$.

Since we require two independent computations we must seek for another multiple. The next multiplier 3 285 979 is just beyond the table of divisors; it refuses the tests for 3, 7, 11, 13, 37; the labour of an independent examination for its factors might exceed the whole trouble of computing the logarithm and therefore I leave it to take up 714 021; this at once yields to division by 3, and gives $1\,155\,999\,999 = 3 \cdot 7 \cdot 11 \cdot 11 \cdot 281 \cdot 1619$. We have now obtained two numbers sufficiently large, from each of which we may deduce $\log 1619$; but on referring to the number 1499 we find that its two multiples are 2 249 999 and 748 001, the latter of which particularly is small;[7] hence it would be preferable if we can find another convenient multiple of 1619, to compute the logarithm of that number previous to 1499. Now 285 979 is a prime number but $85\,979 = 127 \cdot 677$; whence $139\,200\,001 = 127 \cdot 677 \cdot 1619$.

I therefore decide on computing (as is done in p. 179)[8] the logarithm of 1619 from the two equations[9]

$$1\,155\,999\,999 = 3 \cdot 7 \cdot 121 \cdot 281 \cdot 1619$$
$$139\,200\,001 = 127 \cdot 677 \cdot 1619$$

[6] See [8].

[7] Here, Sang does not want to use the equation $748\,001 = 499 \cdot 1499$ for computing $\log 1499$, because 748 001 is too small. Instead, he prefers to compute $\log 1619$ from other primes, and compute $\log 1499$ from $\log 1619$.

[8] Sang did not give the page number, and only left a blank space to be filled. Page 179 does indeed contain this computation.

[9] In the second equation, Sang, or whoever copied the values, mistakenly wrote 139 000 000 instead of 139 200 001.

and thereafter[10] that of 1499 from

$$10\,869\,999\,999 = 3 \cdot 1493 \cdot 1619 \cdot 1499$$
$$2\,249\,999 = 19 \cdot 79 \cdot 1499$$

Although the description of this process be somewhat prolix, the actual work is by no means tedious; the less so when a great number of products are prepared at once.

Sometimes it is impossible to find very large multiples, but in general when the multiple falls under one million I have tried, by changing the order of the primes to find a better: thus for 1669 we find[11] $106\,099\,999 = 151 \cdot 421 \cdot 1669$ and $952\,999 = 571 \cdot 1669$; but among those rejected there was one[12] containing the factor 8609, wherefore for the purpose of obtaining $\log 1669$ I seek the decomposable multiples of 8609: these are $8\,336\,000\,001 = 3 \cdot 343 \cdot 941 \cdot 8609$ and $587\,900\,001 = 3 \cdot 13 \cdot 17 \cdot 103 \cdot 8609$; but here it is to be remarked that 5879 is a prime whose logarithm is not yet found; wherefore we must yet farther derange the order. On trial we obtain $69\,300\,000\,001 = 31 \cdot 37 \cdot 43 \cdot 239 \cdot 5879$ and $48\,279\,999\,999 = 3 \cdot 7 \cdot 11 \cdot 73 \cdot 487 \cdot 5879$ both of which are unobjectionable;[13] whence, after having computed $\log 5879$, we readily obtain 8609, and thence again from the equation $272\,999\,999 = 19 \cdot 8609 \cdot 1669$, we get $\log 1669$.

These examples will serve to give an idea of those considerations which have influenced the choice of the particular order in which the primes have been taken: the general progress has been onwards in the order of magnitude, the deviations having been made for the sake of obtaining large divisors. The search for these little ameliorations proves a grateful variety in the midst of what otherwise would be a dreary monotony.

The logarithms of the primes were inserted in a table previously arranged solely for the prime numbers; and also in a complete table prepared up to 10 000: at the same time the logarithms of

[10] Pages 179–180.

[11] Sang's manuscript wrote 106 999 999 instead of 106 099 999 and 951 999 instead of 952 999.

[12] This was the equation $272\,999\,999 = 19 \cdot 8609 \cdot 1669$ given below, and it was rejected because $\log 8609$ had not yet been computed.

[13] By that, Sang means that the left-hand values are sufficiently large, and that the computation of $\log 5879$ would not involve yet uncomputed logarithms.

their multiples were found by help of a few slips of paper on the edges of which the logarithms of the earlier natural numbers were written.

March 1854

This introduction is followed by a page indicating that

> This work was begun in December 1848 at Constantinople on separate paper, from which such of it as had been done was copied, being revised at the same time, on the pages (afterwards bound into the present volume) in 1850. 1851, 1852, being often laid aside on account of other occupations, particularly the heavy calculations connected with the Theory of Wheel Teeth.[14] The computation of the logarithms of all primes up to 2000, at the end of July 1865, was completed, and the pages bound together.
>
> Edward Sang
> 26 January 1875

## 2.2 The need for special computations

In his introductory notice, Sang alludes to the logarithms which may be in doubt. The uncertainties on the logarithms to 15 places from 100000 to one million requiring special computations are in fact the following ones, where the figures ranging from 499995 to 500005 are marked in bold:

| $n$ | $\log n$ |
|---|---|
| 152037 | 5.181949291**499996**0645... |
| 194854 | 5.289709325**500004**6387... |
| 401819 | 5.604030468**499997**5625... |
| 436059 | 5.639545254**500001**3023... |
| 457585 | 5.660471779**499999**9770... |
| 627943 | 5.797920223**499995**1054... |
| 722523 | 5.858851676**499999**0265... |
| 766146 | 5.884311538**499996**2014... |
| 770450 | 5.886744459**500003**7970... |
| 972218 | 5.987763657**500000**0360... |

[14] See [52].

For these values of $n$, the uncertainties on the 15th place digits may cause the 9th place digits to be computed erroneously. In fact, Sang would have only considered those logarithms whose last six figures, on 15 places, lie between 499998 and 500002, and there are only four such cases, which is nearly the amount anticipated by Sang. Given that Sang only pushed his calculations up to 370000, it is possible that he didn't meet any of these uncertainties. On the other hand, a computation such as that of $\log 152037$ may have been off by two units in the 15th place, leading Sang to do a special computation. Assuming that the 15th place found by Sang is off by at most 3 units with respect to the exact figure, any one of the above cases may have triggered a recomputation, as any value between 499995 and 500005, assuming a $\pm 3$ uncertainty, can fall in the range [499998–500002].

If on the other hand Sang had pushed the computation one digit further, he would only have had to consider at most two uncertainties, namely

| $n$ | $\log n$ |
|---|---|
| 457585 | 5.660471779**4999999**770... |
| 972218 | 5.987763657**5000000**360... |

but locating these two cases would have cost him the writing out of three million digits, and probably years of computations.

## 2.3 The first computations in volume 1

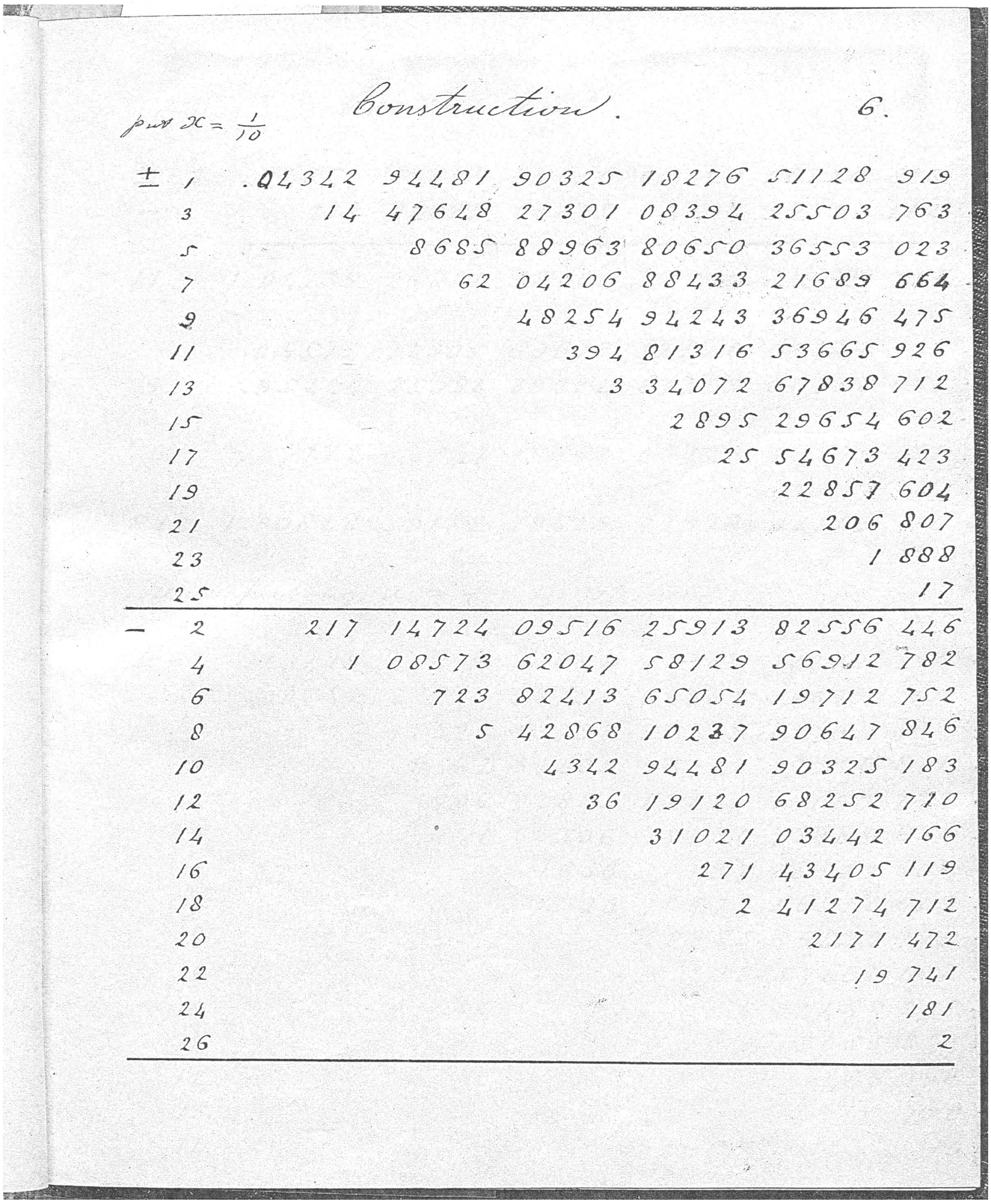
Figures 1 to 5 illustrate the computations in volume 1. For instance, page K1/6 (figure 1) starts with the computation of the expansion of $\log(1+x)$ with $x = 1/10$. The sums of the odd and even terms $P(x)$ and $N(x)$ are computed separately so that $\log(1+x) = P(x) - N(x)$. $P(x)$ is computed up to $Mx^{25}/25$ and $N(x)$ up to $Mx^{26}/26$, with $M = 1/\ln 10$. Consequently, Sang obtains $\log(11)$.

Then Sang computes $P(x) + N(x) = 1 - \log 9$, from which he deduces $\log(9)$, and then $\log 3 = \log 9/2$, as well as $\log(81) = 2\log 9$.

Sang continues by considering $x = 1/80$ and using the value just computed of $\log 81$, he obtains $\log 80$. $P(x) + N(x)$ gives him $\log 79$.

From $\log 80$, Sang obtains $\log 2$. And from $\log 10$ and $\log 2$, Sang derives $\log 5$.

Then Sang can compute $\log 2400$, and taking $x = 1/2400$, he derives $\log 2399$ and $\log 2401 = \log(7^4)$, which leads to $\log 7$. And so on.

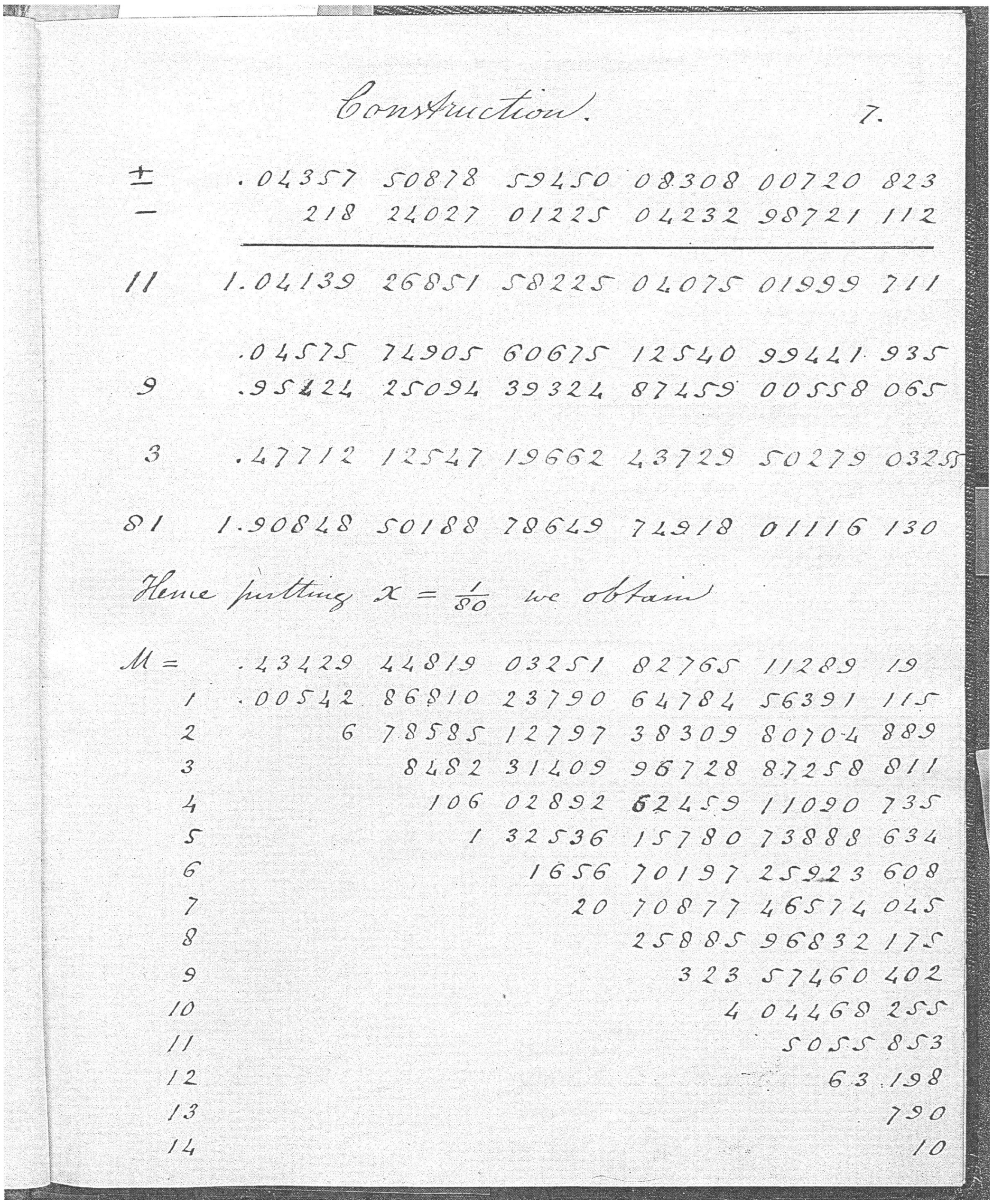


Construction. 6.

put $x = \frac{1}{10}$

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ± | 1 | .04342 | 94481 | 90325 | 18276 | 51128 | 919 |
| | 3 | 14 | 47648 | 27301 | 08394 | 25503 | 763 |
| | 5 | | 8685 | 88963 | 80650 | 36553 | 023 |
| | 7 | | 62 | 04206 | 88433 | 21689 | 664 |
| | 9 | | | 48254 | 94243 | 36946 | 475 |
| | 11 | | | 394 | 81316 | 53665 | 926 |
| | 13 | | | 3 | 34072 | 67838 | 712 |
| | 15 | | | | 2895 | 29654 | 602 |
| | 17 | | | | 25 | 54673 | 423 |
| | 19 | | | | | 22857 | 604 |
| | 21 | | | | | 206 | 807 |
| | 23 | | | | | 1 | 888 |
| | 25 | | | | | | 17 |
| − | 2 | 217 | 14724 | 09516 | 25913 | 82556 | 446 |
| | 4 | 1 | 08573 | 62047 | 58129 | 56912 | 782 |
| | 6 | | 723 | 82413 | 65054 | 19712 | 752 |
| | 8 | | 5 | 42868 | 10237 | 90647 | 846 |
| | 10 | | | 4342 | 94481 | 90325 | 183 |
| | 12 | | | 36 | 19120 | 68252 | 710 |
| | 14 | | | | 31021 | 03442 | 166 |
| | 16 | | | | 271 | 43405 | 119 |
| | 18 | | | | 2 | 41274 | 712 |
| | 20 | | | | | 2171 | 472 |
| | 22 | | | | | 19 | 741 |
| | 24 | | | | | | 181 |
| | 26 | | | | | | 2 |

Figure 1: An excerpt from volume K1. The upper part gives the 28-place values of $Mx^n/n$ for $x = 1/10$ and odd values of $n$. The lower part gives the values of $Mx^n/n$ for the even values of $n$.



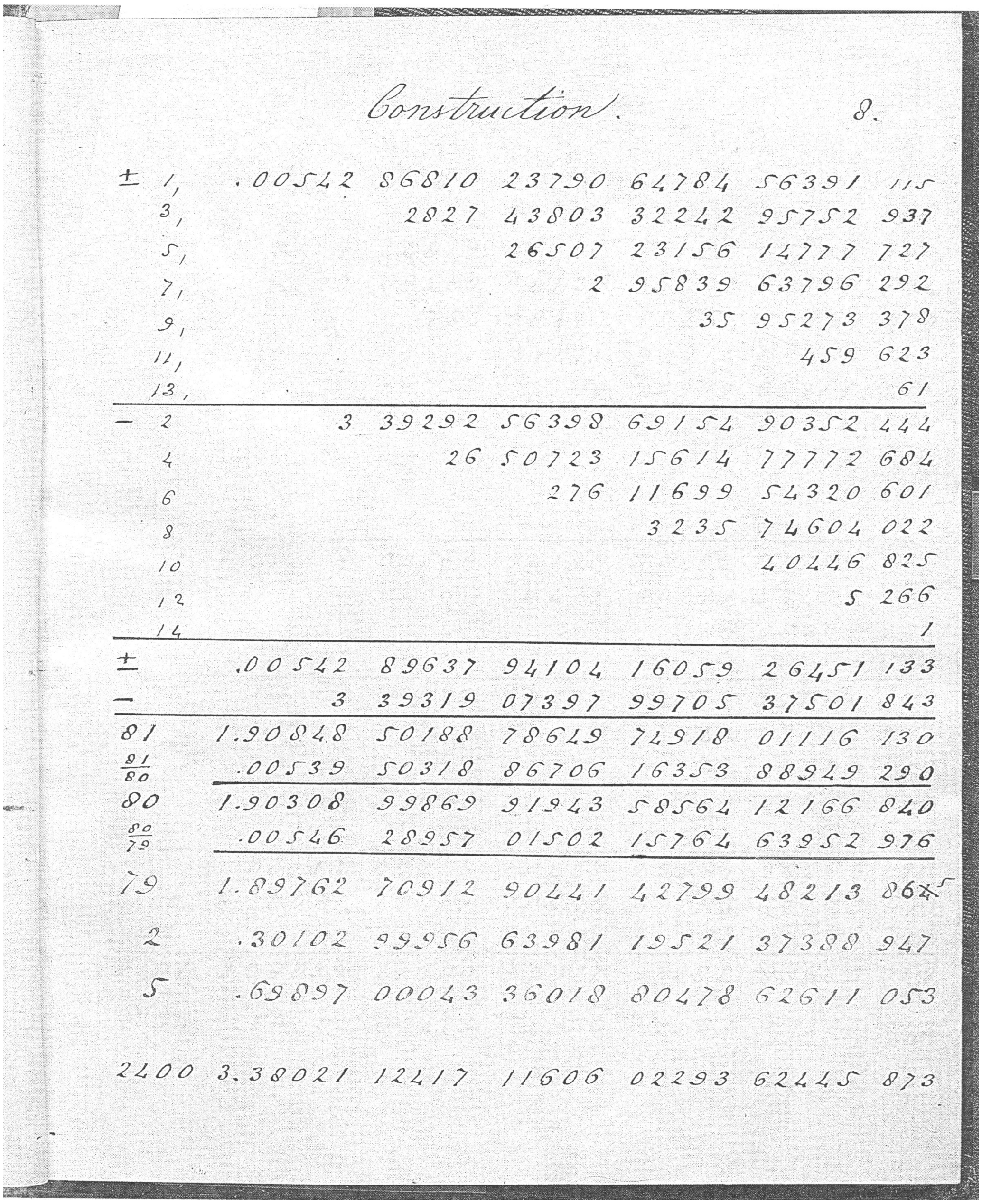
Construction. 7.

| | |
|---|---|
| ± | .04357 50878 59450 08308 00720 823 |
| − | 218 24027 01225 04232 98721 112 |
| 11 | 1.04139 26851 58225 04075 01999 711 |
| | .04575 74905 60675 12540 99441 935 |
| 9 | .95424 25094 39324 87459 00558 065 |
| 3 | .47712 12547 19662 43729 50279 0325 |
| 81 | 1.90848 50188 78649 74918 01116 130 |

Hence putting $x = \frac{1}{80}$ we obtain

| | |
|---|---|
| M = | .43429 44819 03251 82765 11289 19 |
| 1 | .00542 86810 23790 64784 56391 115 |
| 2 | 6 78585 12797 38309 80704 889 |
| 3 | 8482 31409 96728 87258 811 |
| 4 | 106 02892 62459 11090 735 |
| 5 | 1 32536 15780 73888 634 |
| 6 | 1656 70197 25923 608 |
| 7 | 20 70877 46574 045 |
| 8 | 25885 96832 175 |
| 9 | 323 57460 402 |
| 10 | 4 04468 255 |
| 11 | 5055 853 |
| 12 | 63 198 |
| 13 | 790 |
| 14 | 10 |

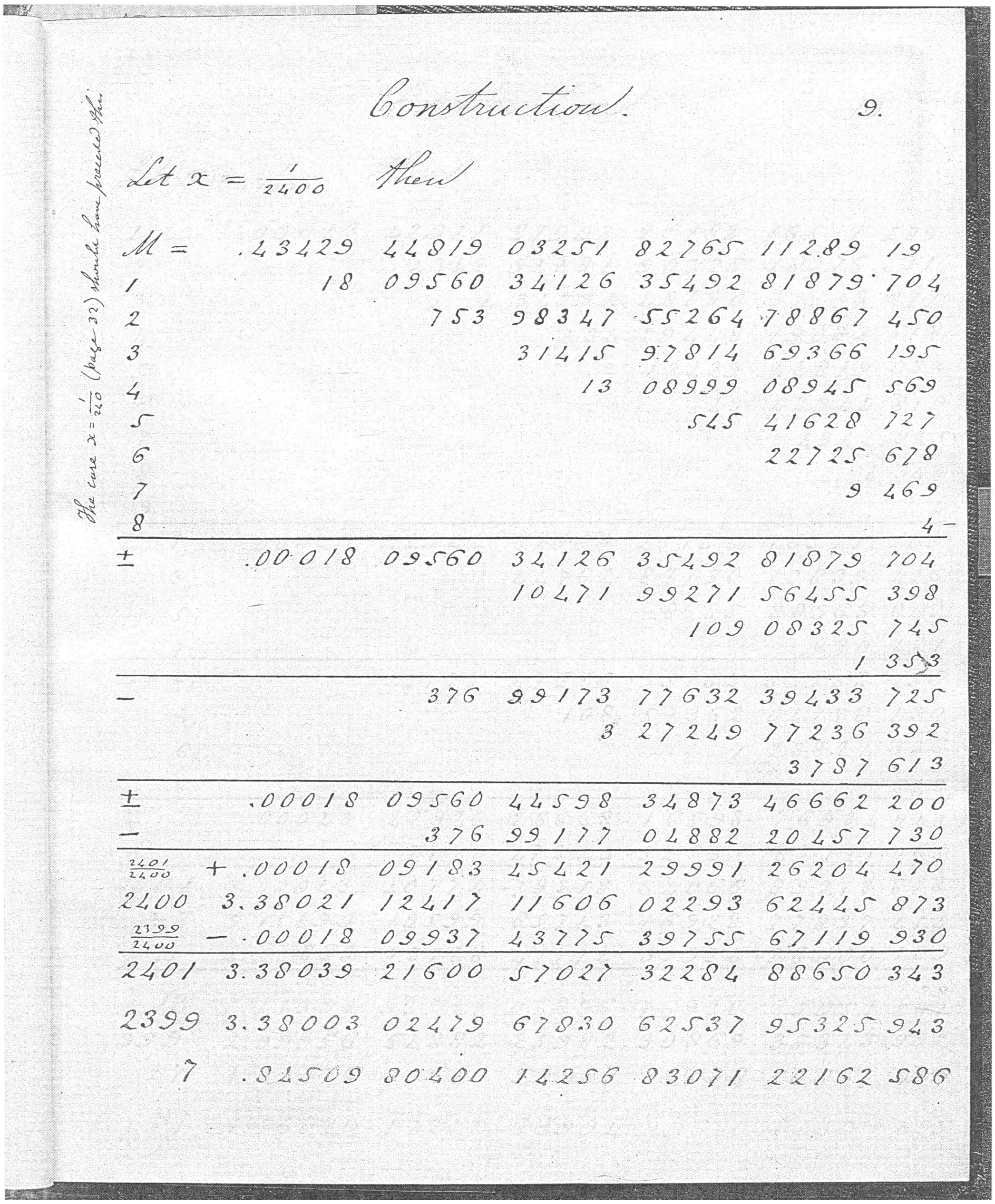
Figure 2: An excerpt from volume K1 (cont'd). At the top, using $x = 1/10$, are the values of $P(x)$ and $N(x)$ and below $P(x) - N(x) + 1 = \log 11$. Below Sang gives the value of $P(x) + N(x)$ and then $\log 9$, $\log 3$ and $\log 81$. The values of $Mx^n$ for $x = 1/80$ follow.



Construction. 8.

| | | | | | | |
|---|---|---|---|---|---|---|
| ± 1, | .00542 | 86810 | 23790 | 64784 | 56391 | 115 |
| 3, | | 2827 | 43803 | 32242 | 95752 | 937 |
| 5, | | | 26507 | 23156 | 14777 | 727 |
| 7, | | | 2 | 95839 | 63796 | 292 |
| 9, | | | | 35 | 95273 | 378 |
| 11, | | | | | 459 | 623 |
| 13, | | | | | | 61 |
| − 2 | 3 | 39292 | 56398 | 69154 | 90352 | 444 |
| 4 | | 26 | 50723 | 15614 | 77772 | 684 |
| 6 | | | 276 | 11699 | 54320 | 601 |
| 8 | | | | 3235 | 74604 | 022 |
| 10 | | | | | 40446 | 825 |
| 12 | | | | | 5 | 266 |
| 14 | | | | | | 1 |
| ± | .00542 | 89637 | 94104 | 16059 | 26451 | 133 |
| − | 3 | 39319 | 07397 | 99705 | 37501 | 843 |
| 81 | 1.90848 | 50188 | 78649 | 74918 | 01116 | 130 |
| $\frac{81}{80}$ | .00539 | 50318 | 86706 | 16353 | 88949 | 290 |
| 80 | 1.90308 | 99869 | 91943 | 58564 | 12166 | 840 |
| $\frac{80}{79}$ | .00546 | 28957 | 01502 | 15764 | 63952 | 976 |
| 79 | 1.89762 | 70912 | 90441 | 42799 | 48213 | 86~~4~~5 |
| 2 | .30102 | 99956 | 63981 | 19521 | 37388 | 947 |
| 5 | .69897 | 00043 | 36018 | 80478 | 62611 | 053 |
| 2400 | 3.38021 | 12417 | 11606 | 02293 | 62445 | 873 |

Figure 3: An excerpt from volume K1 (cont'd). At the top are the values of $Mx^n/n$ for $x = 1/80$ and odd and even values of $n$. There follows $\log 81$, $P(x)$, $N(x)$ and their difference $\log(81/80)$, then $\log 80$, $P(x) + N(x) = \log(80/79)$, $\log 79$, $\log 2$, $\log 5$ and $\log 2400$.



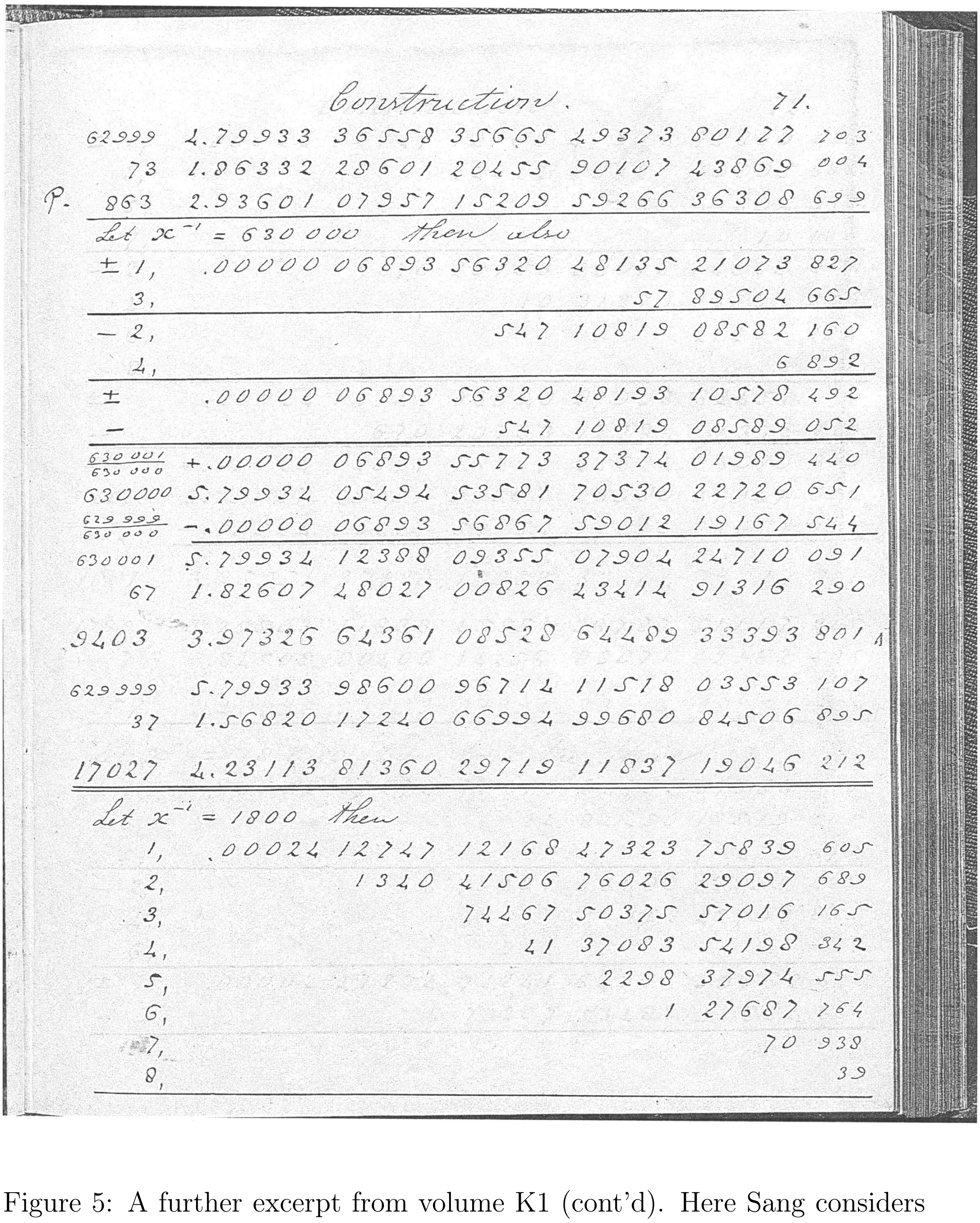
Construction. 9.

Let $x = \frac{1}{2400}$ then

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| M = | .43429 | 44819 | 03251 | 82765 | 11289 | 19 | |
| 1 | | 18 | 09560 | 34126 | 35492 | 81879· | 704 |
| 2 | | | 753 | 98347 | 55264 | 78867 | 450 |
| 3 | | | | 31415 | 97814 | 69366 | 195 |
| 4 | | | | 13 | 08999 | 08945 | 569 |
| 5 | | | | | 545 | 41628 | 727 |
| 6 | | | | | | 22725 | 678 |
| 7 | | | | | | 9 | 469 |
| 8 | | | | | | | 4 − |
| ± | .00018 | 09560 | 34126 | 35492 | 81879 | 704 | |
| | | | 10471 | 99271 | 56455 | 398 | |
| | | | | 109 | 08325 | 745 | |
| | | | | | 1 | 353 | |
| − | | 376 | 99173 | 77632 | 39433 | 725 | |
| | | | 3 | 27249 | 77236 | 392 | |
| | | | | | 3787 | 613 | |
| ± | .00018 | 09560 | 44598 | 34873 | 46662 | 200 | |
| − | | 376 | 99177 | 04882 | 20457 | 730 | |
| $\frac{2401}{2400}$ | + .00018 | 09183 | 45421 | 29991 | 26204 | 470 | |
| 2400 | 3.38021 | 12417 | 11606 | 02293 | 62445 | 873 | |
| $\frac{2399}{2400}$ | − .00018 | 09937 | 43775 | 39755 | 67119 | 930 | |
| 2401 | 3.38039 | 21600 | 57027 | 32284 | 88650 | 343 | |
| 2399 | 3.38003 | 02479 | 67830 | 62537 | 95325 | 943 | |
| 7 | .84509 | 80400 | 14256 | 83071 | 22162 | 586 | |

The case $x = \frac{1}{240}$ (page 32) should have preceded this

Figure 4: An excerpt from volume K1 (cont'd). Now, Sang considers $x = 1/2400$ and gives the first values of $Mx^n$, then computes $P(x)$, $N(x)$ and their sum and difference. From this he obtains $\log 2401$ and $\log 2399$, as well as $\log 7$. In the margin, Sang remarks that he should first have considered $x = 1/240$.



Construction. 71.

| | |
|---|---|
| 62999 | 4.79933 36558 35665 49373 80127 703 |
| 73 | 1.86332 28601 20455 90107 43869 004 |
| P. 863 | 2.93601 07957 15209 59266 36308 699 |

Let $x^{-1} = 630\,000$ then also

| | |
|---|---|
| $\pm$ 1, | .00000 06893 56320 48135 21073 827 |
| 3, | 57 89504 665 |
| $-$ 2, | 547 10819 08582 160 |
| 4, | 6 892 |
| $\pm$ | .00000 06893 56320 48193 10578 492 |
| $-$ | 547 10819 08589 052 |
| $\frac{630\,001}{630\,000}$ | +.00000 06893 55773 37374 01989 440 |
| 630000 | 5.79934 05494 53581 70530 22720 651 |
| $\frac{629\,999}{630\,000}$ | −.00000 06893 56867 59012 19167 544 |
| 630001 | 5.79934 12388 09355 07904 24710 091 |
| 67 | 1.82607 48027 00826 43414 91316 290 |
| 9403 | 3.97326 64361 08528 64489 33393 801 |
| 629999 | 5.79933 98600 96714 11518 03553 107 |
| 37 | 1.56820 17240 66994 99680 84506 895 |
| 17027 | 4.23113 81360 29719 11837 19046 212 |

Let $x^{-1} = 1800$ then

| | |
|---|---|
| 1, | .00024 12747 12168 47323 75839 605 |
| 2, | 1340 41506 76026 29097 689 |
| 3, | 74467 50375 57016 165 |
| 4, | 41 37083 54198 342 |
| 5, | 2298 37974 555 |
| 6, | 1 27687 764 |
| 7, | 70 938 |
| 8, | 39 |

Figure 5: A further excerpt from volume K1 (cont'd). Here Sang considers the value $x = 1/630000$ from which he derives $\log 9403$ and $\log 17027$.

## 2.4 Lists of divisors and primes

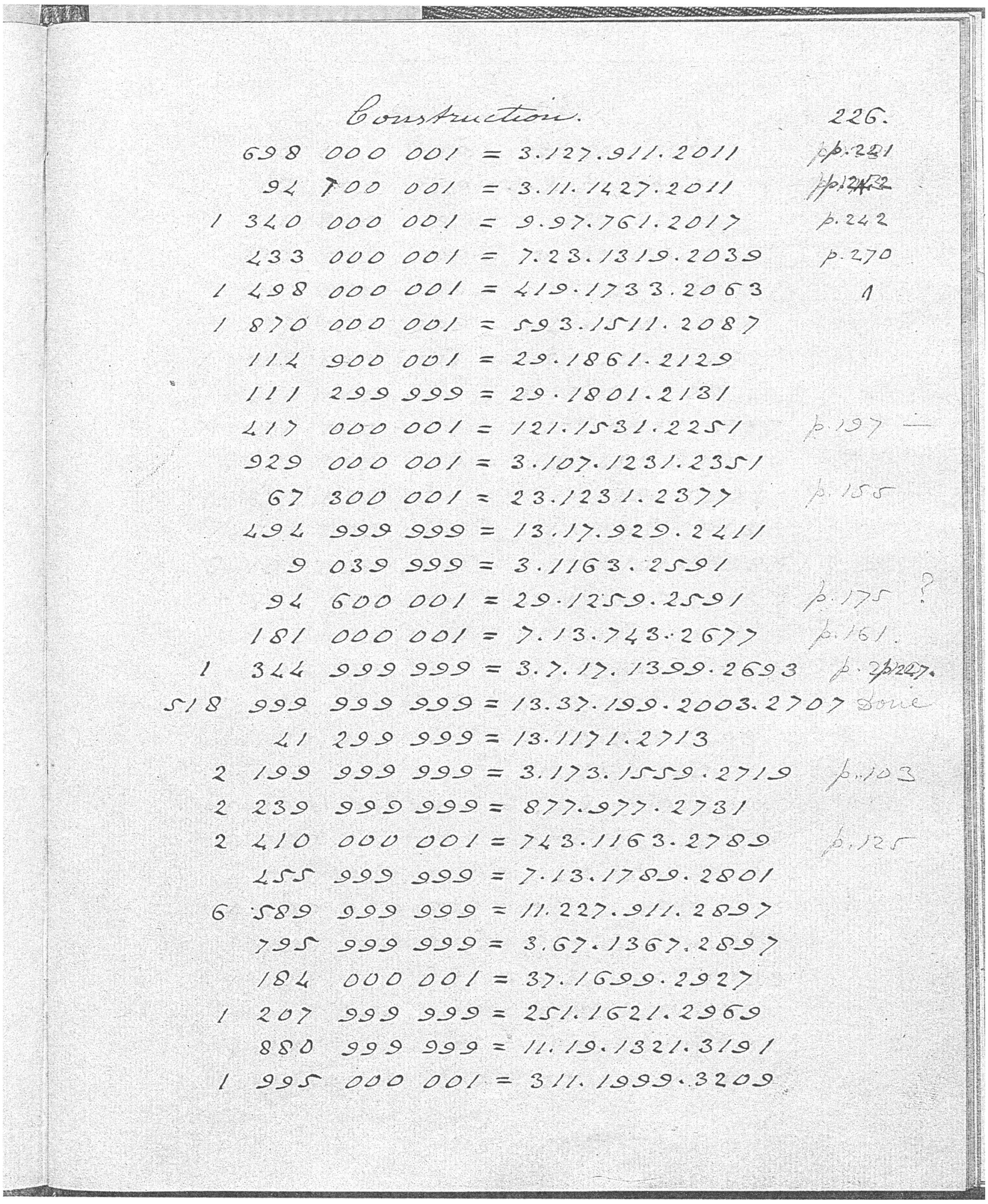
On pages 226-229 of volume 1 (figure 6), Sang lists a number of "divisors" and their decompositions. What Sang calls "divisors" are those large values that will be decomposed into primes, although the divisions will actually be made with off-by-one such divisors. For instance, on page 226, the first "divisor" is 698 000 001 when in fact there will be a division by 698 000 000.

The "divisors" on these four pages seem to be those enabling the computation of logarithms of primes between 2000 and 10000, and they are given in the order of these primes. However, not all primes between 2000 and 10000 had their logarithms computed here.

Some of the divisors have references to the pages where they appear, but some of these references appear to be incorrect. For instance, for 2 199 999 999 a penciled note refers to page 103, but on page 103 one finds the decomposition of 21999. 2 199 999 999 actually appears on page 302. Some of these references may have been added later, perhaps by Knott.

On pages 229–230 (figure 7), Sang gives the list of large primes (beyond 10000) for which logarithms have been computed so far. The first prime in the list is 11579 whose logarithm was computed on page 104. The prime 17027 had its logarithm computed on page 71, as we saw earlier (figure 5). The last one in the list is 2 999 999 whose logarithm was computed on page 41. The pages 231-240 give a few more divisors. *

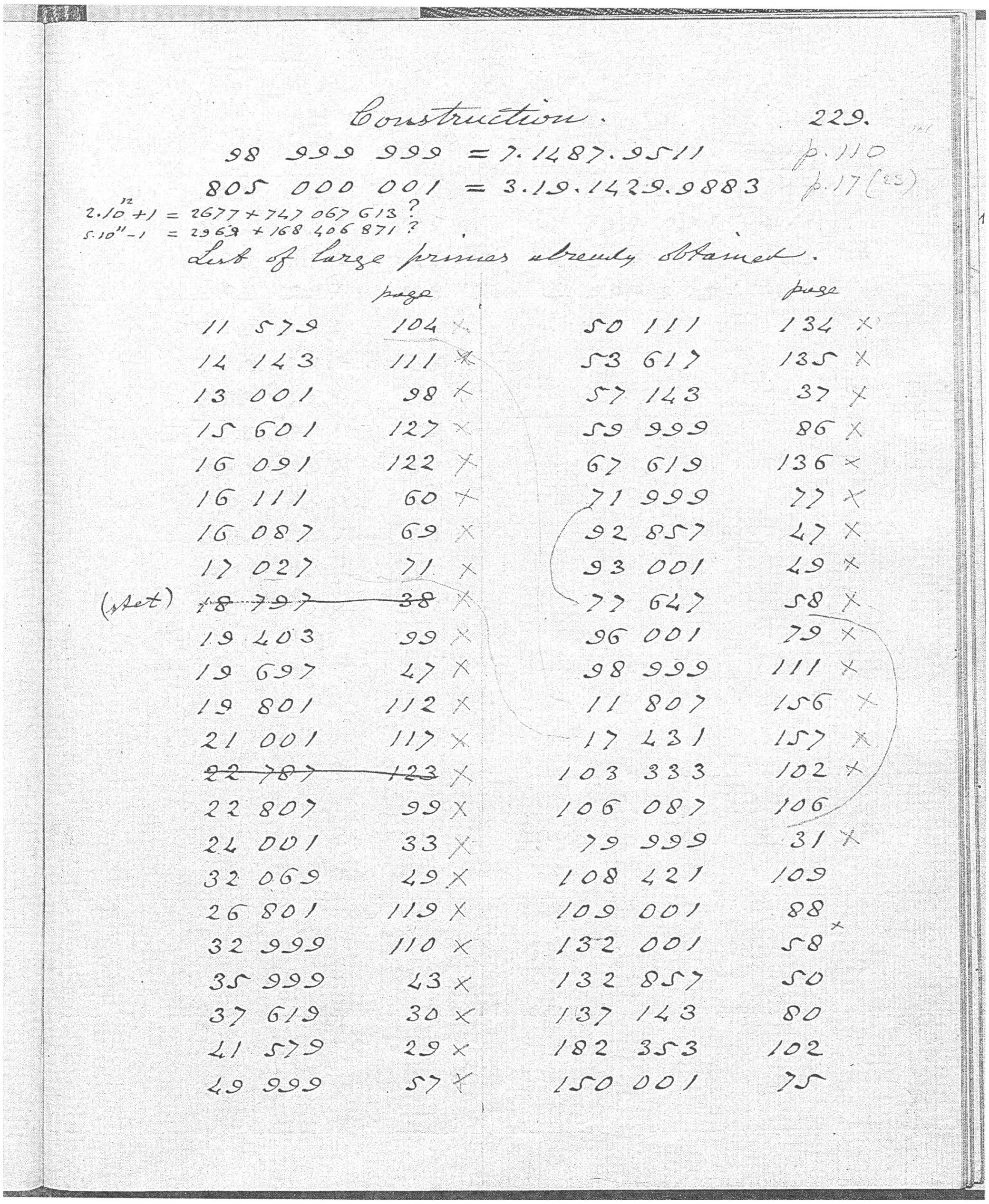
At the end of volume 1 (figure 8), Sang lists on 48 pages the primes from 2 to 10627 and gives the logarithms to 28 places for the primes 2 to 10037, as well as for 10091, 10333, 10393, 10559 and 10601.



Construction. 226.

| | | |
|---|---|---|
| 698 000 001 | = 3.127.911.2011 | p. 221 |
| 94 700 001 | = 3.11.1427.2011 | p. 242 |
| 1 340 000 001 | = 9.97.761.2017 | p. 242 |
| 433 000 001 | = 7.23.1319.2039 | p. 270 |
| 1 498 000 001 | = 419.1733.2063 | 1 |
| 1 870 000 001 | = 593.1511.2087 | |
| 114 900 001 | = 29.1861.2129 | |
| 111 299 999 | = 29.1801.2131 | |
| 417 000 001 | = 121.1531.2251 | p. 197 — |
| 929 000 001 | = 3.107.1231.2351 | |
| 67 300 001 | = 23.1231.2377 | p. 155 |
| 494 999 999 | = 13.17.929.2411 | |
| 9 039 999 | = 3.1163.2591 | |
| 94 600 001 | = 29.1259.2591 | p. 175 ? |
| 181 000 001 | = 7.13.743.2677 | p. 161. |
| 1 344 999 999 | = 3.7.17.1399.2693 | p. 247. |
| 518 999 999 999 | = 13.37.199.2003.2707 | Done |
| 41 299 999 | = 13.1171.2713 | |
| 2 199 999 999 | = 3.173.1559.2719 | p. 103 |
| 2 239 999 999 | = 877.977.2731 | |
| 2 410 000 001 | = 743.1163.2789 | p. 125 |
| 455 999 999 | = 7.13.1789.2801 | |
| 6 589 999 999 | = 11.227.911.2897 | |
| 795 999 999 | = 3.67.1367.2897 | |
| 184 000 001 | = 37.1699.2927 | |
| 1 207 999 999 | = 251.1621.2969 | |
| 880 999 999 | = 11.19.1321.3191 | |
| 1 995 000 001 | = 311.1999.3209 | |

Figure 6: Equations that were used for computing the logarithms of primes above 2000.



Construction. 229.

98 999 999 = 7.1487.9511 p.110

805 000 001 = 3.19.1429.9883 p.17 (25)

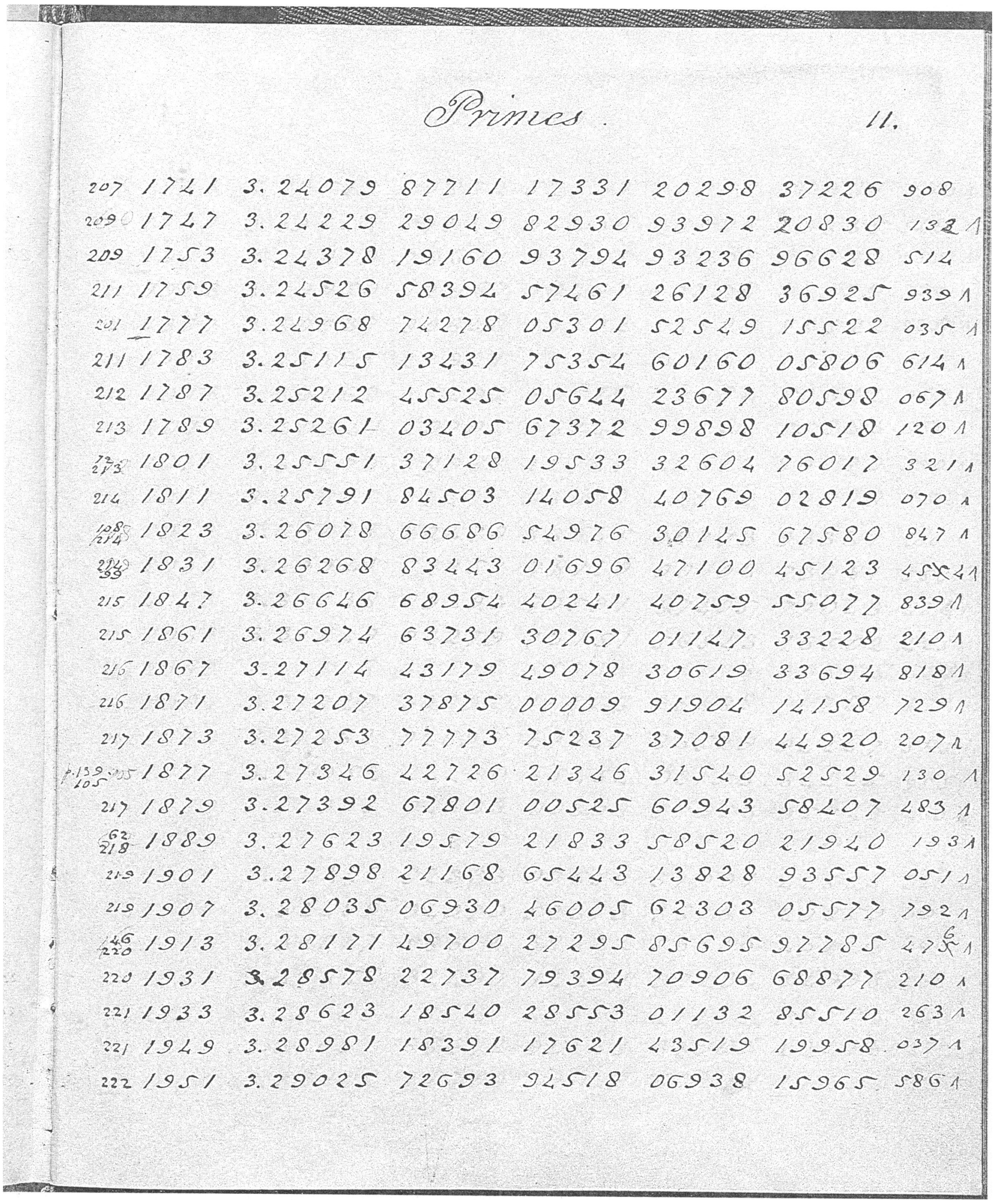
$2.10^{12}+1$ = 2677 + 747 067 613 ?

$5.10^{11}-1$ = 2963 + 168 406 871 ?

List of large primes already obtained.

| | | page | | page |
|---|---|---|---|---|
| | 11 579 | 104 × | 50 111 | 134 × |
| | 14 143 | 111 × | 53 617 | 135 × |
| | 13 001 | 98 × | 57 143 | 37 × |
| | 15 601 | 127 × | 59 999 | 86 × |
| | 16 091 | 122 × | 67 619 | 136 × |
| | 16 111 | 60 × | 71 999 | 77 × |
| | 16 087 | 69 × | 92 857 | 47 × |
| | 17 027 | 71 × | 93 001 | 49 × |
| (stet) | ~~18 797~~ | ~~38~~ × | 77 647 | 58 × |
| | 19 403 | 99 × | 96 001 | 79 × |
| | 19 697 | 47 × | 98 999 | 111 × |
| | 19 801 | 112 × | 11 807 | 156 × |
| | 21 001 | 117 × | 17 431 | 157 × |
| | ~~22 787~~ | ~~123~~ × | 103 333 | 102 × |
| | 22 807 | 99 × | 106 087 | 106 |
| | 24 001 | 33 × | 79 999 | 31 × |
| | 32 069 | 49 × | 108 421 | 109 |
| | 26 801 | 119 × | 109 001 | 88 |
| | 32 999 | 110 × | 132 001 | 58 |
| | 35 999 | 43 × | 132 857 | 50 |
| | 37 619 | 30 × | 137 143 | 80 |
| | 41 579 | 29 × | 182 353 | 102 |
| | 49 999 | 57 × | 150 001 | 75 |

Figure 7: Primes greater than 10000 whose logarithms have been obtained.



# Primes. 11.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 207 | 1741 | 3.24079 | 87711 | 17331 | 20298 | 37226 | 908 |
| 209 | 1747 | 3.24229 | 29049 | 82930 | 93972 | 20830 | 132 Λ |
| 209 | 1753 | 3.24378 | 19160 | 93794 | 93236 | 96628 | 514 |
| 211 | 1759 | 3.24526 | 58394 | 57461 | 26128 | 36925 | 939 Λ |
| 201 | 1777 | 3.24968 | 74278 | 05301 | 52549 | 15522 | 035 Λ |
| 211 | 1783 | 3.25115 | 13431 | 75354 | 60160 | 05806 | 614 Λ |
| 212 | 1787 | 3.25212 | 45525 | 05644 | 23677 | 80598 | 067 Λ |
| 213 | 1789 | 3.25261 | 03405 | 67372 | 99898 | 10518 | 120 Λ |
| 72/213 | 1801 | 3.25551 | 37128 | 19533 | 32604 | 76017 | 321 Λ |
| 214 | 1811 | 3.25791 | 84503 | 14058 | 40769 | 02819 | 070 Λ |
| 108/214 | 1823 | 3.26078 | 66686 | 54976 | 30125 | 67580 | 847 Λ |
| 214/33 | 1831 | 3.26268 | 83443 | 01696 | 47100 | 45123 | 45~~5~~41 Λ |
| 215 | 1847 | 3.26646 | 68954 | 40241 | 40759 | 55077 | 839 Λ |
| 215 | 1861 | 3.26974 | 63731 | 30767 | 01147 | 33228 | 210 Λ |
| 216 | 1867 | 3.27114 | 43179 | 49078 | 30619 | 33694 | 818 Λ |
| 216 | 1871 | 3.27207 | 37875 | 00009 | 91904 | 14158 | 729 Λ |
| 217 | 1873 | 3.27253 | 77773 | 75237 | 37081 | 44920 | 207 Λ |
| p.139 205/105 | 1877 | 3.27346 | 42726 | 21346 | 31540 | 52529 | 130 Λ |
| 217 | 1879 | 3.27392 | 67801 | 00525 | 60943 | 58407 | 483 Λ |
| 62/218 | 1889 | 3.27623 | 19579 | 21833 | 58520 | 21940 | 193 Λ |
| 219 | 1901 | 3.27898 | 21168 | 65443 | 13828 | 93557 | 051 Λ |
| 219 | 1907 | 3.28035 | 06930 | 46005 | 62303 | 05577 | 792 Λ |
| 146/220 | 1913 | 3.28171 | 49700 | 27295 | 85695 | 97785 | 47~~5~~6 Λ |
| 220 | 1931 | 3.28578 | 22737 | 79394 | 70906 | 68877 | 210 Λ |
| 221 | 1933 | 3.28623 | 18540 | 28553 | 01132 | 85510 | 263 Λ |
| 221 | 1949 | 3.28981 | 18391 | 17621 | 43519 | 19958 | 037 Λ |
| 222 | 1951 | 3.29025 | 72693 | 92518 | 06938 | 15965 | 586 Λ |

Figure 8: The primes from 1741 to 1951 and their logarithms.

# 3 Volume 2 (K2)

This volume spans from page 241 to 536. It contains the computations of the logarithms of all the primes between 2000 and 10000 not computed in volume 1.

For example, page K2/242 (figure 9) shows a computation of $\log 2011$ and two computations of $\log 2017$. For the first computation of $\log 2017$, Sang considers $n = 1\ 340\ 000\ 000$ and writes $\frac{n+1}{9 \cdot 97 \cdot 761} = 2017$.

Sang gives a reference to page 189, which contains the decomposition for $n = 670\ 000\ 000$ which could be reused here.

Then, Sang computes the development of $\log\left(\frac{n+1}{n}\right) = \log\left(1 + \frac{1}{n}\right)$:

$$\frac{1}{n} \cdot M = .00000\ 00003\ 24100\ 35962\ 92924\ 087$$
$$\frac{1}{2n^2} \cdot M = .00000\ 00000\ 00000\ 00012\ 09329\ 700$$
$$\frac{1}{3n^3} \cdot M = .00000\ 00000\ 00000\ 00000\ 00000\ 001$$

all values beeing rounded to the 28th decimal place. Incidentally, this shows just how important it is for $n$ to be as large as possible.

Adding the value of $\log n$, which is obtained from that of $\log 67$ known since page 19, Sang obtains

$$\log(n + 1) = 9.12710\ 47986\ 88907\ 98887\ 12299\ 627$$

for which he does not write the characteristic 9. Sang's value is correctly rounded to the 28th decimal place.

Subtracting the logarithms of 873 ($9 \times 97$) and 761, Sang obtains

$$\log 2017 = 3.30470\ 58982\ 12765\ 43612\ 80880\ 089$$

which is off by one unit of the 28th place.

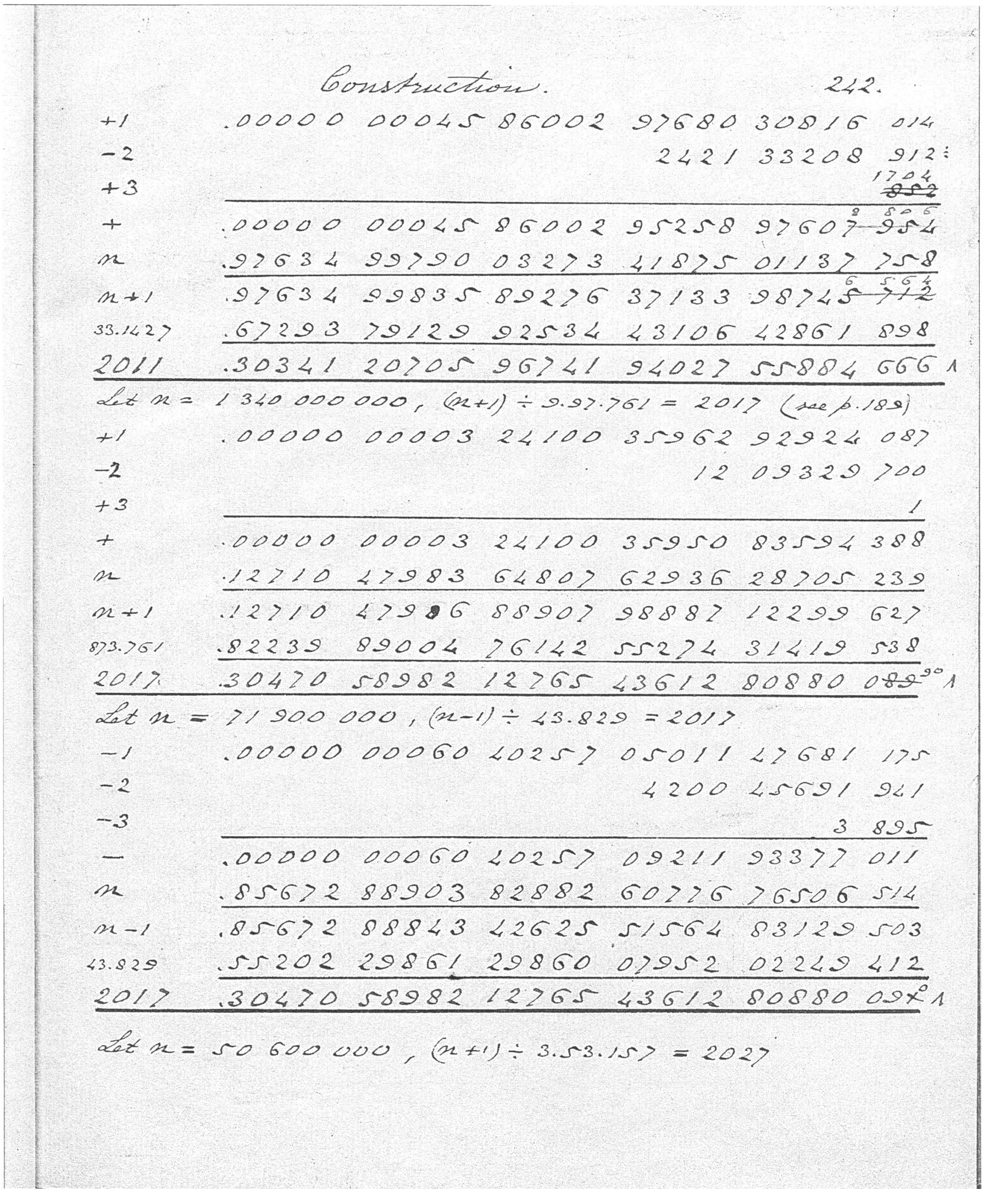
Another computation is then performed using $n = 71\ 900\ 000$ and considering $\log(n - 1)$, from which Sang derives

$$\log 2017 = 3.30470\ 58982\ 12765\ 43612\ 80880\ 091$$

and Sang then averages both values, obtaining the value

$$\log 2017 = 3.30470\ 58982\ 12765\ 43612\ 80880\ 090$$

which is correctly rounded to the 28th place.



Construction. 242.

| | |
|---|---|
| +1 | .00000 00045 86002 97680 30816 014 |
| −2 | 2421 33208 912 |
| +3 | $\overset{1704}{\cancel{852}}$ |
| + | .00000 00045 86002 95258 9760$\overset{8}{\cancel{7}}$ $\overset{806}{\cancel{954}}$ |
| n | .97634 99790 03273 41875 01137 758 |
| n+1 | .97634 99835 89276 37133 9874$\overset{6}{\cancel{5}}$ $\overset{564}{\cancel{712}}$ |
| 33.1427 | .67293 79129 92534 43106 42861 898 |
| 2011 | .30341 20705 96741 94027 55884 666 Λ |

Let n = 1 340 000 000, (n+1) ÷ 9.97.761 = 2017 (see p. 189)

| | |
|---|---|
| +1 | .00000 00003 24100 35962 92924 087 |
| −2 | 12 09329 700 |
| +3 | 1 |
| + | .00000 00003 24100 35950 83594 388 |
| n | .12710 47983 64807 62936 28705 239 |
| n+1 | .12710 47986 88907 98887 12299 627 |
| 873.761 | .82239 89004 76142 55274 31419 538 |
| 2017 | .30470 58982 12765 43612 80880 0$\overset{90}{\cancel{89}}$ Λ |

Let n = 71 900 000, (n−1) ÷ 43.829 = 2017

| | |
|---|---|
| −1 | .00000 00060 40257 05011 47681 175 |
| −2 | 4200 45691 941 |
| −3 | 3 895 |
| − | .00000 00060 40257 09211 93377 011 |
| n | .85672 88903 82882 60776 76506 514 |
| n−1 | .85672 88843 42625 51564 83129 503 |
| 43.829 | .55202 29861 29860 07952 02249 412 |
| 2017 | .30470 58982 12765 43612 80880 09$\overset{0}{\cancel{4}}$ Λ |

Let n = 50 600 000, (n+1) ÷ 3.53.157 = 2027

Figure 9: An excerpt from volume K2, with the computations of log 2011 and log 2017.

# 4 Volume 3 (K3)

This volume spans from page 537 to 770. It provides other computations of already known logarithms from page 537 to page 637, as volumes 1 and 2 have already given the logarithms of all primes up to 10000. After page 637, there are two indices.

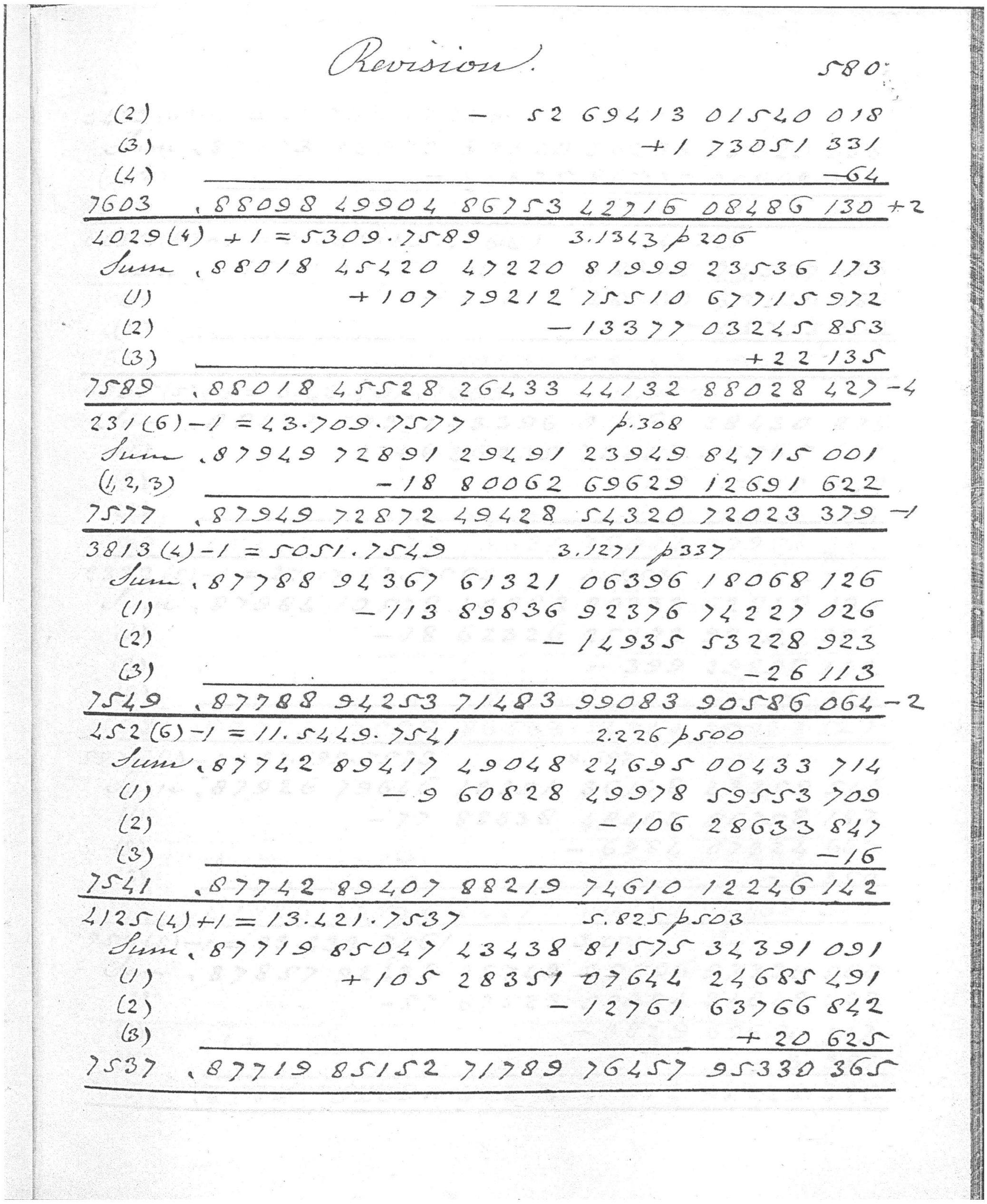
## 4.1 An example in volume 3

Page K3/580 (figure 10) starts with the end of the computation of $\log 7603$. Then Sang considers $n = 4029 \cdot 10^4$ which he writes 4029(4). We have $4029 \cdot 10^4 = 5309 \cdot 7589$ and Sang refers to page 206 where $\log 1343$ had been used, which is reused here for the computation of $\log 4029 = \log(3 \times 1343)$.

$\log 5309$ had been computed on page 401, and Sang can therefore derive a value for $\log 7589$. In this case,

$$\begin{aligned}
\log 7589 &= \log\left(\frac{n+1}{n}\right) + \log n - \log 5309 \\
&= \log\left(1 + \frac{1}{n}\right) + \log 3 + \log 1343 + 4 \times \log 10 - \log 5309 \\
&= (\log 3 + \log 1343 + 4 \times \log 10 - \log 5309) + \frac{1}{n} - \frac{1}{2n^2} + \frac{1}{3n^3} + \cdots
\end{aligned}$$

yielding the four terms given by Sang. In that case, Sang's final result is off by 4 places, because the value computed for $\frac{1}{2n^2}$ was off by 3 units of the 28th place. The value of $\log 7589$ was probably compared with those obtained on page 479, and Sang concluded that the present value was off by 4 places, which is written in the margin.



Revision. 580

| | | |
|---|---|---|
| (2) | − 52 69413 01540 018 | |
| (3) | +1 73051 331 | |
| (4) | −64 | |
| 7603 | .88098 49904 86753 42716 08486 130 | +2 |
| 4029(4) +1 = 5309.7589 | 3.1343 p206 | |
| Sum | .88018 45420 47220 81999 23536 173 | |
| (1) | +107 79212 75510 67715 972 | |
| (2) | −13377 03245 853 | |
| (3) | +22 135 | |
| 7589 | .88018 45528 26433 44132 88028 427 | −4 |
| 231(6)−1 = 43.709.7577 | p.308 | |
| Sum | .87949 72891 29491 23949 84715 001 | |
| (1,2,3) | −18 80062 69629 12691 622 | |
| 7577 | .87949 72872 49428 54320 72023 379 | −1 |
| 3813(4)−1 = 5051.7549 | 3.1271 p337 | |
| Sum | .87788 94367 61321 06396 18068 126 | |
| (1) | −113 89836 92376 74227 026 | |
| (2) | −14935 53228 923 | |
| (3) | −26 113 | |
| 7549 | .87788 94253 71483 99083 90586 064 | −2 |
| 452(6)−1 = 11.5449.7541 | 2.226 p500 | |
| Sum | .87742 89417 49048 24695 00433 714 | |
| (1) | −9 60828 49978 59553 709 | |
| (2) | −106 28633 847 | |
| (3) | −16 | |
| 7541 | .87742 89407 88219 74610 12246 142 | |
| 4125(4)+1 = 13.421.7537 | 5.825 p503 | |
| Sum | .87719 85047 43438 81575 34391 091 | |
| (1) | +105 28351 07644 24685 491 | |
| (2) | −12761 63766 842 | |
| (3) | +20 625 | |
| 7537 | .87719 85152 71789 76457 95330 365 | |

Figure 10: An excerpt of the computations in volume K3.

## 4.2 The indices to divisors and primes

Volume K3 ends with two indices, one to divisors (pages 638–728), and one to primes (pages 729–770) involved in the various computations of the first three volumes K1, K2 and K3. These indices have not been reconstructed, but my reconstruction of (most of) the computation steps should for the moment suffice to analyze Sang's construction.

### 4.2.1 The index to divisors

This index lists the values of $n$ used in computing logarithms. For instance, page 697 (figure 11) lists the value 3767 and shows that $n = 3767 \cdot 10^6$ was used on page 554. The entry "$-$" indicates that the decomposition of $n - 1$ was used and is equal to $7 \cdot 7 \cdot 31 \cdot 271 \cdot 9151$. This decomposition was used to compute $\log 9151$.

The value 3785, for instance was used on page 393 in the decomposition $3785 \cdot 10^7 + 1 = 3 \cdot 11 \cdot 37 \cdot 5081 \cdot 6101$, from which $\log 5081$ was obtained. Moreover, $3785 = 5 \cdot 757$. The factor 5081 is underlined because its logarithm is derived and it is not the greatest factor. In general, the decompositions are used to derive the logarithms of the greatest factors.

### 4.2.2 The index to primes

The index to divisors is followed by an index to primes. For each prime, Sang lists the divisors which have been used to compute it. For instance, on page 761 (figure 12), the prime 7349 was obtained by three different computations, one involving $n = 6211 \cdot 10^6$ (page 461), a second one involving $n = 1138 \cdot 10^6$ (also page 461), and a third one involving $n = 3318 \cdot 10^5$ (page 583). The index to divisors can be used to locate the computations. Most primes have been computed by three independent decompositions, but some, such as 7351, have been computed four times, or rather, have been involved in four independent computations. 7351, for instance, was computed three times using $n = 111 \cdot 10^4$ (page 54), $n = 5594 \cdot 10^7$ (page 260), and $n = 4483 \cdot 10^6$ (page 581), but it was also involved as a divisor $n = 7351 \cdot 10^6$ (page 404) for the computation of $\log 9007$.

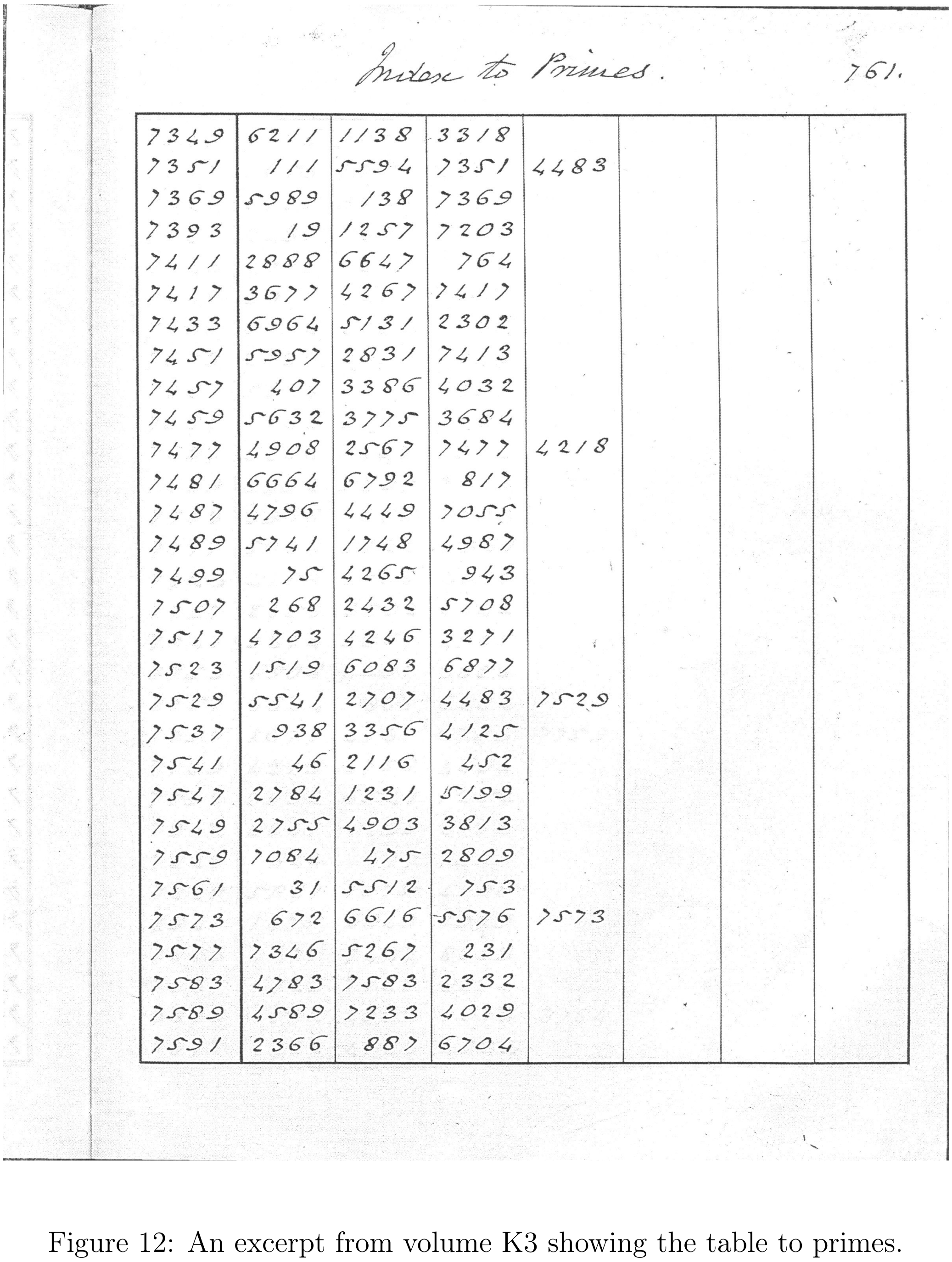
Some of the primes have actually only been computed twice, for instance 9007 ($n = 7351 \cdot 10^6$ on page 404, $n = 1656 \cdot 10^6$ on page 556), but this prime also appears in the decompositions of $n = 1967 \cdot 10^7$ (page 405) and $n = 5533 \cdot 10^4$ (page 600). It is possible that the index to primes gives these references, but I have not checked it.

Index to Divisors. 697.

| | | | | | |
|---|---|---|---|---|---|
| 3767 | 3767 | 6 | − | 7.7.31.271.9151 | 554 |
| 3775 | 5.5.151 | 4 | − | 3.7.241.7459 | 472 |
| 3784 | 2.2.2.11.43 | 5 | − | 3.37.433.7873 | 575 |
| 3785 | 5.757 | 7 | + | 3.11.37.5081.6101 | 393 |
| 3786 | 2.3.631 | 5 | − | 139.277.9833 | 542 |
| 3793 | 3793 | 5 | + | 233.271.6007 | 426 |
| 3803 | 3803 | 5 | + | 3.149.157.5419 | 610 |
| 3805 | 5.761 | 4 | − | 3.13.139.7019 | 460 |
| | | 5 | − | 3.11.1327.8689 | 562 |
| 3812 | 2.2.953 | 6 | + | 3.19.47.251.5669 | 415 |
| 3813 | 3.31.41 | 4 | − | 5051.7549 | 580 |
| 3817 | 11.347 | 5 | − | 3.3.3.2437.5801 | 605 |
| | | 7 | + | 7.577.1373.6883 | 324 |
| 3818 | 2.23.83 | 5 | − | 7.31.389.4523 | 620 |
| 3833 | 3833 | 5 | + | 3.3.7.7.107.8123 | 493 |
| 3835 | 5.13.59 | 4 | + | 5881.6521 | 593 |
| 3836 | 2.2.7.137 | 4 | + | 3.2153.5939 | 603 |
| | | 6 | − | 13.71.439.9467 | 523 |
| 3838 | 2.19.101 | 5 | + | 13.37.131.6091 | 429 |
| 3846 | 2.3.641 | 5 | + | 29.2683.4943 | 389 |
| 3859 | 17.227 | 4 | + | 37.211.4943 | 615 |
| 3861 | 3.3.3.11.13 | 6 | + | 311.2111.5881 | 384 |
| 3865 | 5.773 | 7 | − | 3.13.53.3733.5009 | 391 |
| 3872 | $2^5$.11.11 | 7 | + | 3.223.6661.8689 | 449 |
| 3889 | 3889 | 4 | + | 61.109.5849 | 604 |
| 3894 | 2.3.11.59 | 6 | + | 67.89.113.5779 | 418 |
| 3896 | 2.2.2.487 | 6 | − | 47.73.149.7621 | 479 |
| 3905 | 5.11.71 | 5 | + | 3.3.3.3209.4507 | 617 |
| 3907 | 3907 | 6 | + | 19.59.797.4373 | 266 |
| 3918 | 2.3.653 | 6 | − | 191.2663.7703 | 476 |

29.

Figure 11: An excerpt from volume K3 showing the table to divisors.



Index to Primes. 761.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 7349 | 6211 | 1138 | 3318 | | | | |
| 7351 | 111 | 5594 | 7351 | 4483 | | | |
| 7369 | 5989 | 138 | 7369 | | | | |
| 7393 | 19 | 1257 | 7203 | | | | |
| 7411 | 2888 | 6647 | 764 | | | | |
| 7417 | 3677 | 4267 | 7417 | | | | |
| 7433 | 6964 | 5131 | 2302 | | | | |
| 7451 | 5957 | 2831 | 7413 | | | | |
| 7457 | 407 | 3386 | 4032 | | | | |
| 7459 | 5632 | 3775 | 3684 | | | | |
| 7477 | 4908 | 2567 | 7477 | 4218 | | | |
| 7481 | 6664 | 6792 | 817 | | | | |
| 7487 | 4796 | 4449 | 7055 | | | | |
| 7489 | 5741 | 1748 | 4987 | | | | |
| 7499 | 75 | 4265 | 943 | | | | |
| 7507 | 268 | 2432 | 5708 | | | | |
| 7517 | 4703 | 4246 | 3271 | | | | |
| 7523 | 1519 | 6083 | 6877 | | | | |
| 7529 | 5541 | 2707 | 4483 | 7529 | | | |
| 7537 | 938 | 3356 | 4125 | | | | |
| 7541 | 46 | 2116 | 452 | | | | |
| 7547 | 2784 | 1231 | 5199 | | | | |
| 7549 | 2755 | 4903 | 3813 | | | | |
| 7559 | 7084 | 475 | 2809 | | | | |
| 7561 | 31 | 5512 | 753 | | | | |
| 7573 | 672 | 6616 | 5576 | 7573 | | | |
| 7577 | 7346 | 5267 | 231 | | | | |
| 7583 | 4783 | 7583 | 2332 | | | | |
| 7589 | 4589 | 7233 | 4029 | | | | |
| 7591 | 2366 | 887 | 6704 | | | | |

Figure 12: An excerpt from volume K3 showing the table to primes.

# 5 Timeline

Throughout Sang's volumes, there are several recapitulations on the progress of the computations.

As mentioned earlier, Sang states at the end of the introductory notice in volume K1 that his work was begun in December 1848 and that the logarithms of all the primes up to 2000 were completed at the end of July 1865.

On page 146 of volume K1, after the computation of $\log 1097$, there is also a note dated September 20, 1853: "This completes the revision (to 25 places) of Callet's table to 61 places. Thus far no error has been found. Henceforth each prime must have its logarithm computed twice."

On page 208, there is the date "8 sept. 1854." On page 209, "4 april 1859." On pages 210 and 211, "5 april 1859." On page 212, "6 april 1859." On page 225, "31 July 1865."

In volume K2, Sang has a note dated 26 January 1875 stating that the computations were begun in August 1865 and completed in September 1874.

On page 274 of that volume, there is the date "26 May 1871." And on page 276, "3 June 1871." On page 279, "4 June 1871."

We also know from the specimens Sang published in 1872 [58] that he had by then computed the logarithms of all primes up to 2600, which is here around page 300.

Next on page 326, we find the date "2 April 1874." On page 390, after the computation of $\log 4973$, Sang writes "This completes the prime numbers up to 5000, 8 June 1874." Indeed, the logarithms of the primes 4987, 4993, 4999 had been computed earlier.

On page 425, there is the date "5 July 1874."

This volume ends with the date "21 September 1874." There is also the note "Index 21 October 1874" which may refer to the index in volume K3.

In volume K3, Sang writes that the computations were begun in October 1874 and that this volume was completed on the 9th of January 1875.

On page 586, Sang mentions that on that day there was a transit of Venus (9 December 1874).

On page 636, Sang has the note "This completes three combinations, at the least, for each prime number under ten thousand. 29 December 1874."

And on page 637, the final date is "30 December 1874."

# 6 The computation order of the primes

All prime numbers up to 10037, as well as a few others greater than 10037, appear in the construction volumes K1, K2 and K3.

If one considers the order of the first appearances of the logarithms of the primes under 10000 in the first two construction volumes (K1 and K2), one obtains the following list of primes:

3, 11, 79, 2, 5, 2399, 7, 37, 13, 19, 401, 2423, 17, 23, 43, 29, 31, 53, 41, 109, 211, 61, 67, 47, 89, 59, 277, 347, 281, 1439, 71, 73, 107, 83, 163, 97, 197, 101, 137, 263, 113, 2633, 7901, 1549, 103, 421, 127, 2963, 863, 239, 241, 233, 2243, 6469, 271, 9091, 4649, 199, 181, 641, 1087, 2999, 3001, 1579, 2521, 491, 3253, 8999, 9001, 139, 269, 631, 7541, 1913, 4889, 311, 461, 547, 131, 229, 823, 811, 149, 8111, 1973, 1423, 887, 883, 2753, 151, 157, 7351, 2293, 293, 499, 167, 4999, 1667, 2381, 173, 179, 853, 3517, 1747, 2207, 191, 1889, 4363, 3089, 6911, 3617, 1453, 797, 647, 193, 1019, 317, 991, 457, 1069, 223, 967, 617, 1381, 4111, 227, 839, 6299, 6301, 251, 9403, 257, 1801, 439, 383, 8867, 283, 2143, 2459, 7109, 307, 313, 379, 809, 1409, 1033, 331, 9601, 5647, 9199, 3067, 467, 337, 1181, 7499, 577, 359, 2027, 419, 349, 857, 353, 2069, 1373, 367, 431, 503, 6037, 373, 3499, 389, 1129, 3889, 2477, 3533, 397, 2267, 2711, 409, 643, 1493, 2647, 4091, 3719, 5689, 1307, 433, 1301, 619, 2549, 1831, 443, 1693, 7561, 3433, 7333, 449, 683, 5641, 1877, 1291, 463, 751, 479, 1823, 487, 5323, 3299, 3301, 541, 9901, 521, 1523, 613, 509, 4637, 2777, 523, 1283, 1193, 7283, 557, 2693, 2099, 563, 1123, 8933, 569, 947, 7507, 1609, 571, 673, 587, 3011, 661, 593, 4241, 829, 601, 599, 821, 607, 2137, 1249, 653, 659, 677, 691, 701, 709, 1021, 719, 727, 733, 739, 743, 3607, 1187, 757, 761, 769, 773, 787, 1753, 9679, 827, 859, 877, 881, 907, 911, 919, 929, 1697, 937, 941, 953, 971, 977, 983, 997, 1009, 1013, 1031, 1039, 1049, 1051, 1061, 1063, 1091, 1093, 1097, 1103, 2309, 1109, 4153, 1117, 2617, 2179, 1151, 1153, 1163, 1171, 8861, 1201, 4273, 1213, 3121, 1217, 1223, 1229, 2741, 1231, 1237, 1259, 1277, 1279, 6311, 1289, 1297, 2089, 1303, 1319, 2591, 1321, 1789, 7307, 1327, 1361, 1367, 9689, 1399, 2383, 1427, 1429, 1433, 1447, 1451, 1459, 1471, 6961, 1993, 1481, 1483, 1487, 1489, 1619, 1499, 1511, 1531, 3947, 1543, 3163, 1553, 2791, 4243, 9871, 5791, 1559, 1567, 1571, 1583, 6343, 6217, 1597, 1601, 1607, 1613, 1621, 1627, 1637, 1657, 1663, 5879, 8609, 1669, 1699, 1777, 1709, 1721, 1723, 1733, 3251, 5749, 7079, 4327, 4957, 1741, 2707, 2287, 5501, 1759, 2237, 1783, 5147, 1787, 1811, 3571, 1847, 5273, 1861, 1867, 5119, 1871, 9883, 1873, 1879, 3389, 1901, 1907, 1931, 1933, 1949, 1951, 1979, 1987, 1997, 1999, 2003, 2011, 2017, 3881, 9319, 2203, 4639, 2957, 3769, 3203, 8447, 2851, 3511, 8389, 3229, 3691, 2797, 2971, 3701, 2749, 2377, 7643, 3793, 2579, 2081, 9619, 8297, 7523, 3907, 9461, 3187, 4357, 4621, 4373, 6263, 7027, 4127, 6967, 3821, 2029, 6659, 2039, 3557, 2053, 2239, 2063, 2083, 3851, 2087, 4177, 2111, 7591, 2113, 2129, 2131, 2141, 4657, 3373, 2153, 5087, 2161, 2503, 2213, 8423, 2221, 2251, 2699, 2269, 2273, 6619, 4703, 3671, 7517, 5279, 2281, 2297, 2729, 4349, 3347, 2311, 2333, 4463, 5657, 6451, 2339, 2341, 2347, 2351, 5039, 2357, 2371, 3491, 2389, 4211, 2393, 9811, 2411, 4547, 2417, 3331, 2437, 4931, 6551, 2441, 2447, 2473, 2833, 2467, 8461, 2531, 4813, 3209, 2539, 9059, 2543, 2551, 2557, 4099, 2593, 7253, 2609, 5743, 2621, 2657, 4679, 2663, 2659, 2803, 2671, 2677, 2683, 2687, 4139, 2689, 2713, 2719, 2731, 6029, 2767, 2789, 9623, 2801, 3019, 8233, 4987, 3583, 4591, 2819, 7127, 9803, 2837, 9293, 2843, 2857, 2861, 2879, 2887, 2897, 5209, 6359, 2903, 2909, 2917, 2927, 8231, 2939, 2953, 2969, 3853, 3023, 3037, 9829, 3041, 4567, 4129, 8191, 3049, 3061, 8783, 3079, 4597, 5417, 3083, 3643, 3109, 8161, 8839, 9857, 4871, 3119, 3137, 3167, 3169, 6883, 3181, 3191, 3217, 5281, 3221, 3257, 7963, 3259, 3271, 6833, 3307, 3911, 3313, 3319, 3343, 3323, 5519, 5197, 3329, 3359, 3361, 9733, 3371, 6173, 4507, 3391, 3407, 8779, 4093, 4271, 3413, 3449, 3457, 3461, 3463, 3467, 3469, 3527, 5059, 3529, 3539, 5939, 3541, 3547, 3559, 3581, 3593, 3613, 3623, 5527, 9221, 3727, 6983, 3631, 4409, 3637, 3659, 4297, 3673, 3677, 3697, 3709, 3733, 3739, 3761, 3767, 5021, 3779, 3797, 5179, 5717, 6869, 3803, 3823, 9157, 3833, 4951, 6229, 3847, 5171, 3863, 3877, 7451, 3917, 3919, 3923, 3929, 6871, 3931, 3943, 3967, 3989, 4001, 4003, 4007, 4013, 6581, 5659, 4019, 4021, 4027, 4049, 6959, 4051, 4057, 4073, 4079, 4133, 4157, 4159, 4721, 6781, 4201, 8677, 4217, 7393, 4219, 4229, 8629, 4231, 9277, 4253, 4259, 7789, 4261, 4283, 9439, 4289, 4337, 4339, 5023, 4391, 4397, 4421, 4423, 4483, 4993, 4441, 4447, 4451, 8219, 4457, 4481, 4493, 4513, 4517, 4519, 5167, 4523, 7949, 4549, 4561, 4583, 8363, 7187, 4603, 7681, 7757, 4643, 4651, 4663, 4673, 4691, 4723, 9941, 4729, 5861, 4733, 8221, 4751, 4759, 4783, 5927, 4787, 4789, 9787, 4793, 4799, 9257, 4801, 4817, 5881, 4831, 8243, 9587, 6247, 4861, 4877, 4903, 4909, 4919, 5399, 6089, 4933, 4937, 4943, 4967, 4969, 4973, 5003, 5009, 5011, 5051, 6337, 5077, 5783, 5477, 6211, 8951, 6101, 5081, 9013, 5099, 5101, 8101, 5107, 7477, 6737, 5113, 5153, 5189, 9551, 5227, 5231, 5233, 5237, 5261, 5297, 5303, 5309, 5333, 5347, 5351, 5381, 5387, 5393, 5407, 5413, 9007, 5419, 5843, 5431, 5437, 9739, 5441, 7129, 5443, 5449, 5471, 5479, 8167, 5483, 6673, 5503, 5507, 5521, 5531, 5557, 6689, 8209, 5563, 5569, 5573, 5581, 5591, 5623, 5639, 5651, 5653, 5669, 5683, 5693, 5701, 5711, 5737, 5741, 5779, 5801, 6997, 5807, 6703, 5813, 5821, 5827, 5839, 5849, 5851, 9323, 5857, 5867, 5869, 8887, 5897, 5903, 5923, 5953, 6733, 5981, 5987, 6857, 6007, 6011, 6043, 6047, 9283, 6053, 6067, 6073, 6079, 6091, 7669, 6113, 6269, 6121, 6131, 6133, 6143, 6151, 6163, 8467, 6197, 6199, 6203, 9721, 6221, 6257, 6271, 6277, 6287, 6367, 6317, 6323, 8641, 6329, 6353, 7537, 6361, 6373, 7219, 6379, 7547, 6389, 6397, 6421, 6427, 6449, 6473, 6481, 6491, 6521, 6529, 6547, 6553, 6563, 6569, 6571, 8513, 6577, 6599, 6607, 6637, 6653, 8689, 6661, 6679, 6691, 6701, 6709, 6719, 6761, 6763, 6779, 6791, 6793, 6803, 7247, 6823, 8543, 6827, 6829, 6841, 6863, 6899, 6907, 6917, 7877, 6947, 6949, 6971, 6977, 6991, 7001, 7013, 7019, 7039, 7349, 7043, 7057, 7069, 7103, 7121, 9649, 7151, 7159, 8761, 7177, 7193, 7207, 7211, 7213, 7229, 7237, 7243, 7297, 7309, 7321, 9133, 7331, 7369, 7411, 7417, 7433, 7457, 7459, 7481, 7487, 7489, 7529, 7549, 7559, 7573, 7687, 7607, 7703, 7759, 7817, 7823, 7873, 7577, 7583, 7589, 7603, 7621, 7639, 7649, 7673, 7691, 7699, 7717, 7907, 7723, 7727, 7741, 7793, 7829, 7841, 7753, 7853, 9203, 7867, 7879, 7883, 7919, 7933, 7951, 7993, 8069, 7927, 7937, 8011, 8053, 8009, 8017, 8039, 8059, 8081, 8087, 8093, 8179, 8273, 8311, 8329, 8089, 8117, 8123, 8147, 8171, 8269, 8287, 8291, 8293, 8317, 8353, 8369, 8377, 8419, 8429, 8431, 8237, 8263, 8387, 8443, 8501, 8521, 9521, 8527, 8537, 8539, 8581, 8623, 8647, 8699, 8563, 8573, 8597, 8599, 8627, 8663, 8669, 8681, 8693, 8707, 8807, 8819, 8863, 9067, 9161, 9281, 8821, 8719, 8713, 8731, 8737, 8741, 8747, 9029, 8753, 8803, 9463, 8831, 8837, 8893, 8923, 8929, 8941, 8969, 8971, 8963, 8849, 9011, 9041, 9043, 9049, 9103, 9109, 9127, 9151, 9173, 9181, 9137, 9473, 9187, 9209, 9227, 9239, 9241, 9337, 9311, 9341, 9343, 9349, 9371, 9377, 9391, 9397, 9413, 9421, 9431, 9433, 9419, 9437, 9467, 9491, 9479, 9497, 9511, 9533, 9539, 9547, 9613, 9629, 9631, 9643, 9661, 9677, 9697, 9719, 9743, 9749, 9767, 9769, 9781, 9791, 9817, 9833, 9839, 9851, 9859, 9887, 9907, 9949, 9967, 9973, 9931, 9923, 9929

This sequence is represented graphically in figure 13. The abscissa ranges from 1 to 1229, as there are 1229 primes from 2 to 9973. The highlighted value corresponds to the 43rd computed logarithm, which is $\log 7901$. What this figure shows is that the logarithms were mostly computed in quasi-ascending order, with occasional computations of higher values. Sang has tried as much

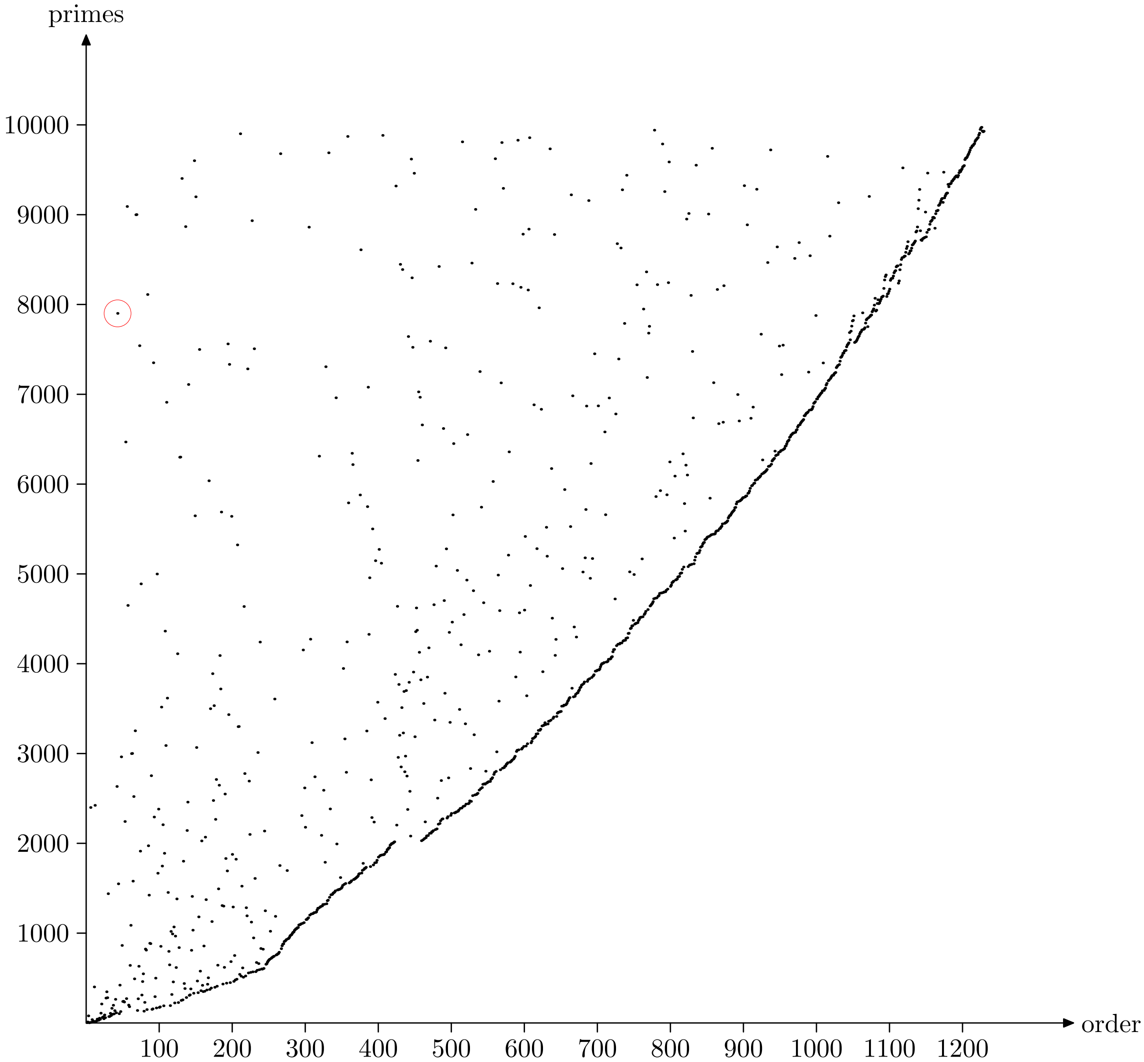



Figure 13: Graphical representation of the first appearance of a prime. The circled point is the prime number 7901, which is the 43rd logarithm of a prime computed. These logarithms were computed between 1848 and 1874.

as possible to avoid gaps. However, we can see a strange gap between the computation of $\log 2017$ (422nd value computed) and $\log 2029$ (459th value computed). Between these two computations, which occured on pages 242 and 268, Sang computed the logarithms or 36 other primes, all greater than 2017. The first of these primes was 3881. It remains to see why Sang felt the need to introduce this break. It is possible that a number of divisors had been computed separately and were shuffled in at this stage. *

# 7 The encoding of the computation steps

## 7.1 Recording the steps

In order to give a good account of Sang's steps for the computation of the logarithms of primes, I have made extensive recordings of the original volumes. For instance, for pages 66 to 73 in volume K1, I took a number of compact notes (figure 14).

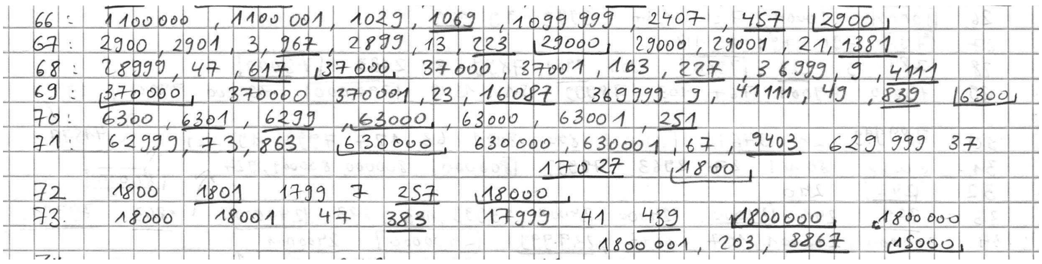

66 : 1100000 , 1100001 , 1029 , 1069 , 1099999 , 2407 , 457 , 2900 ,
67 : 2900 , 2901 , 3 , 967 , 2899 , 13 , 223 , 29000 , 29000 , 29001 , 21 , 1381
68 : 28999 , 47 , 617 , 37000 , 37000 , 37001 , 163 , 227 , 36999 , 9 , 4111
69 : 370000 , 370000 370001 , 23 , 16087 369999 9 , 41111 , 49 , 839 16300 ,
70 : 6300 , 6301 , 6299 , 63000 , 63000 , 63001 , 251
71 : 62999 , 73 , 863 630000 , 630000 , 630001 , 67 , 9403 629999 37
17027 1800
72 1800 1801 1799 7 257 18000 ,
73. 18000 18001 47 383 17999 41 439 1800000 , 1800000
1800001 , 203 , 8867 15000 ,

Figure 14: A first excerpt from my notes for volume K1.

I took in fact a total of 36 pages of handwritten notes and these notes were then standardised in a mere text file. For instance, for page 71 (figure 5), we have the following lines (the text file actually had one value per line, but I give here a compacted version):

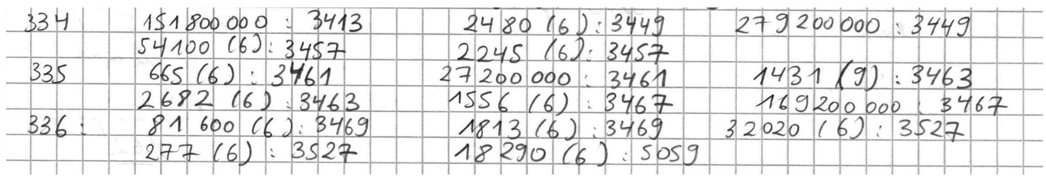
```
71
  62999 73 863 D630000 630000 630001 67 9403 629999 37 17027 D1800
```

This reads as follows: on page 71, the logarithms of 62999, 73, 863, etc., are given. Values starting with "D" correspond to divisors, so that $n = 630000$ and $n = 1800$ are used on that page. In the above excerpt, divisors are underlined by square brackets, whereas newly found logarithms of primes are underlined with straight lines. These steps have been recorded until page 218, when, for lack of time, a less complete procedure was devised. *

After page 218, I have only recorded the divisors and the primes directly derived from them. For instance, for page 334, I only took the following notes (figure 15):

```
334
  1518(5):3413 248(7):3449 2792(5):3449 541(8):3457 2245(6):3457
```

This means that on page 334 the value $n = 1518 \cdot 10^5$ is considered, and either $n + 1$ or $n - 1$ contains the factor 3413, and similarly for the other cases.



| | | | |
|---|---|---|---|
| 334 | 151 800 000 : 3413 | 2480 (6) : 3449 | 279 200 000 : 3449 |
| | 54100 (6) : 3457 | 2245 (6) : 3457 | |
| 335 | 665 (6) : 3461 | 27 200 000 : 3461 | 1431 (9) : 3463 |
| | 2682 (6) : 3463 | 1556 (6) : 3467 | 169 200 000 : 3467 |
| 336 | 81 600 (6) : 3469 | 1813 (6) : 3469 | 32020 (6) : 3527 |
| | 277 (6) : 3527 | 18290 (6) : 5059 | |

Figure 15: A second excerpt from my notes for volume K1.

Finally, in order to trace the steps of the computation, I have kept track of which logarithms had already been computed, and hence which ones were known and which ones were obtained by a given divisor. However, in a few instances my recording was not sufficient, and I have therefore “forced” some logarithms to be known. For example, my typed recording of the first pages reads:

```
6
  D10
7
  11 9 3 81 D80
8
  81 79 *2 *5 2400
9
  D2400 2401 2399 7
```

This means that on page 6, $n = 10$ is considered, on page 11 the logarithms of 11, 9, 3 and 81 are given, and then Sang considered $n = 80$. On page 8, Sang gave the logarithms of 81, 80 (which I did not record), 79, 2, 5, and 2400. I have “forced” the logarithms of 2 and 5 to be known, so that the later steps can take them into account. This was encoded by asterisks. This was necessary because the initial step involves using the logarithm of 10, which is not prime. Most likely, $\log 2$ was then computed from $\log 80$ and $\log 10$, and $\log 5$ was computed from $\log 10$ and $\log 2$. Such “tweaking” was used in a few other instances.

This encoding then was used to produce a “readable” version of my notes. For page 8, this readable version reads:

```
page 8:
    log(81)=log(3^4) [log(3) known]
    log(79)=log(79) [log(79) known]
    log(2)   (assumed to be known now)
    log(5)   (assumed to be known now)
    log(2400)=log(2^5 × 3 × 5^2) [log(2) log(3) log(5) known]
```

This means that page 8 gives the logarithm of 81 (computed using the logarithm of 3), the logarithm of 79 (which is computed here and then considered known), the logarithms of 2 and 5 (which are forced to be known), and finally the logarithm of 2400 which is obtained from three other known logarithms. In all these transcriptions, whenever a number appears on the right-hand side of an equation, it is decomposed into its factors. Hence, `log(79)=log(79)` means that 79 is a prime number.

For page 71, the "readable" transcription is:

```
page 71:
    log(62999)=log(73 × 863) [log(73) log(863) known]
    log(73)=log(73) [log(73) known]
    log(863)=log(863) [log(863) known]
  decomposition(630000)
      630000-1=37 × 17027
      630000+1=67 × 9403
         → allows the comp. of log(9403)
    log(630000)=log(2^4 × 3^2 × 5^4 × 7) [log(2) log(3) log(5) log(7) known]
    log(630001)=log(67 × 9403) [log(67) log(9403) known]
    log(67)=log(67) [log(67) known]
    log(9403)=log(9403) [log(9403) known]
    log(629999)=log(37 × 17027) [log(37) known]
    log(37)=log(37) [log(37) known]
    log(17027)=log(17027)
  decomposition(1800)
      1800-1=7 × 257
         → allows the comp. of log(257)
      1800+1=1801
         → allows the comp. of log(1801)
```

Here, the logarithm of 62999 is computed from the logarithm of 73, known since page 23, and the logarithm of 863 also known. These two logarithms are then given, then $n = 630000$ is considered and $n-1$ and $n+1$ are decomposed, which allows for the computation of the logarithms of 17027 and 9403. Only logarithms smaller than 10000 are recorded in my procedure, which explains that I did not highlight the derivation of the logarithm of 17027. This also explains why for instance the logarithm of 629999 is given, but that I only stress that the logarithm of 37 is known.

Although not perfect, I believe that this readable version will make it much easier to go through Sang's construction.

After page 218, my readable version is simpler, since I only record the divisors and the primes obtained from them, for instance here for page 334 (figure 15):

```
page 334:
```

$\Rightarrow$ $1518 \times 10^5 + 1 = 79 \times 563 \times 3413$

$\longrightarrow$ `This equation enables the computation of log(3413)`

$\Rightarrow$ $248 \times 10^7 + 1 = 3 \times 17 \times 23 \times 613 \times 3449$

$\longrightarrow$ `This equation enables the computation of log(3449)`

$\Rightarrow$ $2792 \times 10^5 - 1 = 13^2 \times 479 \times 3449$

$\longrightarrow$ `This equation enables the computation of log(3449)`

$\Rightarrow$ $541 \times 10^8 - 1 = 3^2 \times 19 \times 23^2 \times 173 \times 3457$

$\longrightarrow$ `This equation enables the computation of log(3457)`

$\Rightarrow$ $2245 \times 10^6 - 1 = 3 \times 11^2 \times 1789 \times 3457$

$\longrightarrow$ `This equation enables the computation of log(3457)`

## 7.2 Special derivations

As alluded above, a number of logarithms have been derived in such a way as to make it difficult to guess how they were derived by merely looking at the notes I took. The problem does not always lie in my incomplete notes, but may be due to Sang not detailing everything. For instance, on page 87 Sang gives $\log 367$ which has been computed using $\log 108999$ and $\log 297$, but he nowhere gives the value of $\log 108999$.

Since the knowledge of the order of the logarithms is important for later guesses, a number of logarithms have been "forced" to be known in my procedure. The corresponding cases up to page 218 are the following, with uncertainties marked:

- page 8: $\log 2$ was probably computed with $\log 2 = (\log 80 - \log 10)/3$, then $\log 5 = 1 - \log 2$; *
- page 13: $\log 17$ was computed from $\log 2499$;
- page 18: $\log 109$ was perhaps obtained from $\log 31501$; *
- page 18: $\log 211$ is probably obtained from $\log 22999$; *
- page 18: $\log 61$ was computed from $\log 2501$;
- page 19: $\log 67$ was computed from $\log 27001$;
- page 48: $\log 229$ was probably obtained from $\log 29999$; *

- page 53: $\log 151$ was obtained from $\log 133333$;
- page 55: $\log 293$ was computed from $\log 46001$;
- page 55: $\log 2293$ was computed from $\log 360001$;
- page 59: $\log 3517$ was computed from $\log 3000001$;
- page 62: $\log 4363$ was computed from $\log 833333$;
- page 62: $\log 3089$ was computed from $\log 589999$;
- page 62: $\log 6911$ was computed from $\log 1320001$;
- page 64: $\log 1019$ was computed from $\log 196667$;
- page 83: $\log 359$ was computed from $\log 207143$, which was itself obtained from $\log 1450001 = \log(7 \times 207143)$ (page 61);
- page 87: $\log 367$ was computed from $\log(109000 - 1) = \log(297 \times 367)$;
- page 93: $\log 2267$ was computed from $\log 899999$;
- page 94: $\log 1493$ was computed from $\log 959999$;
- page 100: $\log 1693$ was computed from $\log 749999$;
- page 103: $\log 683$ was computed from $\log 306667$;
- page 104: $\log 5641$ was computed from $\log(220000-1) = \log(39 \times 5641)$;
- page 110: $\log 9901$ was directly computed;
- page 111: $\log 521$ was computed from $\log(9900 - 1) = \log(19 \times 521)$;
- page 116: $\log 2693$ was computed from $\log 1500001$;
- page 126: $\log 599$ was computed from $\log 359999$;
- page 134: $\log 3607$ was computed from $\log 2680001$;
- page 138: $\log 877$ was computed from $\log(59800000 - 1) = \log(21 \times 877 \times 3247)$ (did I forget to record 59800000?); *
- page 140: $\log 941$ was computed from $\log(269000000 + 1)$;
- page 143: $\log 1009$ was computed from $\log 3736327$, which was computed from $\log(6490000000 - 1) = \log(1737 \times 3736327)$;

- page 145: $\log 1063$ was computed from $\log(2280000000 - 1)$;
- page 145: $\log 1091$ was computed from $\log(4220000000 + 1)$;
- page 148: $\log 1117$ was computed from $\log(237 \cdot 10^8 - 1)$;
- page 151: $\log 1153$ was computed from $\log(186 \cdot 10^7 - 1)$;
- page 161: $\log 1277$ was computed from $\log(82 \cdot 10^6 + 1)$;
- page 162: $\log 1289$ was probably computed from $\log(7230000 + 1)$; $\ast$
- page 166: $\log 1327$ was computed from $\log(382 \cdot 10^8 - 1)$;
- page 177: $\log 1487$ was computed from $\log(343 \cdot 10^8 - 1)$;
- page 180: $\log 1499$ was computed from $\log(1087 \cdot 10^7 - 1)$;
- page 184: $\log 2791$ was computed from $\log(2645 \cdot 10^6 - 1)$;
- page 188: $\log 1571$ was probably computed from $\log(309 \cdot 10^5 - 1)$; $\ast$
- page 194: $\log 1627$ was computed from $\log(373 \cdot 10^7 + 1)$;
- page 201: $\log 1777$ was computed from $\log(1132 \cdot 10^7 - 1)$;
- page 206: $\log 4327$ was computed from $\log(3056 \cdot 10^6 + 1)$;
- page 211: $\log 1783$ was computed from $\log(1202 \cdot 10^7 + 1)$;
- page 213: $\log 1811$ was computed from $\log(789 \cdot 10^7 - 1)$;
- page 216: $\log 1871$ was computed from $\log(412 \cdot 10^7 + 1)$.

Further uncertainties have not been recorded but should be recorded in the future. $\ast$

# 8 What remains to be done

1. As mentioned above, I have not made a detailed record of all the steps from pages 219 to 637 (volumes K2 and K3), but I only wrote down the divisors considered by Sang and the primes he derived from them. Sang may have given the logarithms of other numbers in the course of these derivations, and these values should be recorded. This should now be very easy, as one merely has to take my reconstruction and add the missing informations at the corresponding places. In the future, a more accurate reconstruction can then be provided.

2. Other than that, a few derivations should again be examined carefully (see the ✻ marks for pages 8, 18, 48, 138, 162 and 188).

3. Page ranges should also be checked for each volume.

4. During the analysis of the notes I took of Acc 10780/16, 17 and 18, I also found some typos, and I have recorded some of those concerning Acc 10780/17 (K2) and 18 (K3). Some of these typos are probably typos in the original volumes, and this should be checked. For each of these typos, I have copied a large number $n$ and a prime $p$, the logarithm of the prime being obtained either from that of $n-1$ or $n+1$ and from other logarithms. The table below gives the correct values of $n$ and the primes $p$, with possible uncertainties underlined. For instance, $7\underline{3}5(7)$ represents $735 \cdot 10^7$, but Sang's manuscript may have another digit instead of 3. There may also be typos in the number of zeros, that is, in the power of 10. When nothing is underlined, both values should be checked.

| Page | $n$ | $p$ | Page | $n$ | $p$ |
|---|---|---|---|---|---|
| 256 | 2516(8) | 9199 | 416 | $\underline{2}94(7)$ | 5701 |
| 318 | 82(8) | 3083 | 467 | $5155(\underline{4})$ | 7229 |
| 358 | 2683(7) | 6959 | 510 | $4\underline{8}72(7)$ | 8831 |
| 365 | $\underline{3}033(6)$ | 4259 | 520 | $2003(\underline{9})$ | 9371 |
| 375 | $7\underline{3}5(7)$ | 4583 | 569 | $3976(\underline{4})$ | 8237 |
| 381 | 3311(5) | 5927 | 577 | $1\underline{2}52(6)$ | 7793 |
| 397 | $4\underline{8}83(7)$ | 5189 | 596 | $7\underline{5}55(4)$ | 6577 |
| 413 | $495(\underline{7})$ | 5623 | 603 | $3\underline{83}6(4)$ | 5939 |
| 414 | 5293(6) | $56\underline{5}3$ | 604 | 2463(5) | $\underline{5897}$ |
| 415 | 4071(6) | $\underline{5683}$ | 629 | $9855(\underline{6})$ | 3331 |

5. The indices of divisors and primes should also be reconstructed, although they are not indispensable with the search tools of the digital reconstruction.

# 9 References

The following list covers the most important references[15] related to Sang's table. Not all items of this list are mentioned in the text, and the sources which have not been seen are marked so. I have added notes about the contents of the articles in certain cases.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[6] Johann Karl Burckhardt. *Table des diviseurs pour tous les nombres du deuxième million, ou plus exactement, depuis 1020000 à 2028000, avec*


[15] **Note on the titles of the works:** Original titles come with many idiosyncrasies and features (line splitting, size, fonts, etc.) which can often not be reproduced in a list of references. It has therefore seemed pointless to capitalize works according to conventions which not only have no relation with the original work, but also do not restore the title entirely. In the following list of references, most title words (except in German) will therefore be left uncapitalized. The names of the authors have also been homogenized and initials expanded, as much as possible.

The reader should keep in mind that this list is not meant as a facsimile of the original works. The original style information could no doubt have been added as a note, but I have not done it here.

*les nombres premiers qui s'y trouvent.* Paris: Veuve Courcier, 1814. [also published in [8] together with [9] and [7]; reconstructed in [32]]

[7] Johann Karl Burckhardt. *Table des diviseurs pour tous les nombres du troisième million, ou plus exactement, depuis 2028000 à 3036000, avec les nombres premiers qui s'y trouvent.* Paris: Veuve Courcier, 1816. [also published in [8] together with [9] and [6]; reconstructed in [33]]

[8] Johann Karl Burckhardt. *Table des diviseurs pour tous les nombres des 1^er^, 2^e^ et 3^e^ million, ou plus exactement, depuis 1 à 3036000, avec les nombres premiers qui s'y trouvent.* Paris: Veuve Courcier, 1817. [each part was also published separately as [9], [6], and [7]]

[9] Johann Karl Burckhardt. *Table des diviseurs pour tous les nombres du premier million, ou plus exactement, depuis 1 à 1020000, avec les nombres premiers qui s'y trouvent.* Paris: Veuve Courcier, 1817. [also published in [8] together with [6] and [7]; reconstructed in [31]]

[10] Jean-François Callet. *Tables portatives de logarithmes, etc.* Paris: Firmin Didot, 1795. [There have been numerous later printings of these tables.]

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[20] Charles Hutton. *Mathematical tables: containing common, hyperbolic, and logistic logarithms, also sines, tangents, secants, and versed-sines, etc.* London: G. G. J., J. Robinson, and R. Baldwin, 1785.

[21] Cargill Gilston Knott. Edward Sang and his logarithmic calculations. [22], pages 261–268.

[22] Cargill Gilston Knott, editor. *Napier Tercentenary Memorial Volume.* London: Longmans, Green and company, 1915.

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## 10 Record of the construction steps

The construction steps have been recorded in great detail from page 6 to page 218 (almost all of volume K1) and only partially until page 637.

```
page 6:
  decomposition(10)
      10-1=3^2
         → allows the comp. of log(3)
      10+1=11
         → allows the comp. of log(11)
page 7:
    log(11)=log(11) [log(11) known]
    log(9)=log(3^2) [log(3) known]
    log(3)=log(3) [log(3) known]
    log(81)=log(3^4) [log(3) known]
  decomposition(80)
      80-1=79
         → allows the comp. of log(79)
      80+1=3^4
page 8:
    log(81)=log(3^4) [log(3) known]
    log(79)=log(79) [log(79) known]
    log(2)   (assumed to be known now)
    log(5)   (assumed to be known now)
    log(2400)=log(2^5 × 3 × 5^2) [log(2) log(3) log(5) known]
page 9:
  decomposition(2400)
      2400-1=2399
         → allows the comp. of log(2399)
      2400+1=7^4
         → allows the comp. of log(7)
    log(2401)=log(7^4) [log(7) known]
    log(2399)=log(2399) [log(2399) known]
    log(7)=log(7) [log(7) known]
page 10:
  decomposition(1000)
      1000-1=3^3 × 37
         → allows the comp. of log(37)
      1000+1=7 × 11 × 13
         → allows the comp. of log(13)
```

```
    log(1001)=log(7 × 11 × 13) [log(7) log(11) log(13) known]
    log(13)=log(13) [log(13) known]
    log(999)=log(3^3 × 37) [log(3) log(37) known]
    log(27)=log(3^3) [log(3) known]
    log(37)=log(37) [log(37) known]
page 11:
  decomposition(400)
      400-1=3 × 7 × 19
         → allows the comp. of log(19)
      400+1=401
         → allows the comp. of log(401)
    log(400)=log(2^4 × 5^2) [log(2) log(5) known]
page 12:
    log(401)=log(401) [log(401) known]
    log(399)=log(3 × 7 × 19) [log(3) log(7) log(19) known]
    log(133)=log(7 × 19) [log(7) log(19) known]
    log(19)=log(19) [log(19) known]
  decomposition(31500)
      31500-1=13 × 2423
         → allows the comp. of log(2423)
      31500+1=17^2 × 109
    log(31500)=log(2^2 × 3^2 × 5^3 × 7) [log(2) log(3) log(5) log(7) known]
page 13:
  decomposition(2500)
      2500-1=3 × 7^2 × 17
         → allows the comp. of log(17)
      2500+1=41 × 61
    log(2500)=log(2^2 × 5^4) [log(2) log(5) known]
    log(2499)=log(3 × 7^2 × 17) [log(3) log(7) log(17) known]
    log(17)=log(17) [log(17) known]
page 14:
  decomposition(300)
      300-1=13 × 23
         → allows the comp. of log(23)
      300+1=7 × 43
         → allows the comp. of log(43)
    log(300)=log(2^2 × 3 × 5^2) [log(2) log(3) log(5) known]
page 15:
    log(301)=log(7 × 43) [log(7) log(43) known]
    log(7)=log(7) [log(7) known]
    log(43)=log(43) [log(43) known]
```

log(299)=log(13 $\times$ 23) [log(13) log(23) known]
log(13)=log(13) [log(13) known]
log(23)=log(23) [log(23) known]
decomposition(27000)
27000-1=$7^2$ $\times$ 19 $\times$ 29
$\rightarrow$ allows the comp. of log(29)
27000+1=13 $\times$ 31 $\times$ 67
log(27000)=log($2^3$ $\times$ $3^3$ $\times$ $5^3$) [log(2) log(3) log(5) known]
page 16:
log(26999)=log($7^2$ $\times$ 19 $\times$ 29) [log(7) log(19) log(29) known]
log(931)=log($7^2$ $\times$ 19) [log(7) log(19) known]
log(29)=log(29) [log(29) known]
decomposition(900)
900-1=29 $\times$ 31
$\rightarrow$ allows the comp. of log(31)
900+1=17 $\times$ 53
$\rightarrow$ allows the comp. of log(53)
page 17:
log(900)=log($2^2$ $\times$ $3^2$ $\times$ $5^2$) [log(2) log(3) log(5) known]
log(901)=log(17 $\times$ 53) [log(17) log(53) known]
log(17)=log(17) [log(17) known]
log(53)=log(53) [log(53) known]
log(899)=log(29 $\times$ 31) [log(29) log(31) known]
log(29)=log(29) [log(29) known]
log(31)=log(31) [log(31) known]
decomposition(23000)
23000-1=109 $\times$ 211
23000+1=3 $\times$ 11 $\times$ 17 $\times$ 41
$\rightarrow$ allows the comp. of log(41)
page 18:
log(23000)=log($2^3$ $\times$ $5^3$ $\times$ 23) [log(2) log(5) log(23) known]
log(23001)=log(3 $\times$ 11 $\times$ 17 $\times$ 41) [log(3) log(11) log(17) log(41) known]
log(561)=log(3 $\times$ 11 $\times$ 17) [log(3) log(11) log(17) known]
log(41)=log(41) [log(41) known]
log(22999)=log(109 $\times$ 211)
log(31501)=log($17^2$ $\times$ 109) [log(17) known]
log(289)=log($17^2$) [log(17) known]
log(109) (assumed to be known now)
log(22999)=log(109 $\times$ 211) [log(109) known]
log(211) (assumed to be known now)
log(31499)=log(13 $\times$ 2423) [log(13) log(2423) known]

log(13)=log(13) [log(13) known]
log(2501)=log(41 $\times$ 61) [log(41) known]
log(41)=log(41) [log(41) known]
log(61) (assumed to be known now)
log(27001)=log(13 $\times$ 31 $\times$ 67) [log(13) log(31) known]
log(403)=log(13 $\times$ 31) [log(13) log(31) known]
page 19:
log(67) (assumed to be known now)
decomposition(800)
800-1=17 $\times$ 47
$\rightarrow$ allows the comp. of log(47)
800+1=$3^2$ $\times$ 89
$\rightarrow$ allows the comp. of log(89)
log(800)=log($2^5$ $\times$ $5^2$) [log(2) log(5) known]
log(801)=log($3^2$ $\times$ 89) [log(3) log(89) known]
page 20:
log(89)=log(89) [log(89) known]
log(799)=log(17 $\times$ 47) [log(17) log(47) known]
log(17)=log(17) [log(17) known]
log(47)=log(47) [log(47) known]
decomposition(3600)
3600-1=59 $\times$ 61
$\rightarrow$ allows the comp. of log(59)
3600+1=13 $\times$ 277
$\rightarrow$ allows the comp. of log(277)
log(3600)=log($2^4$ $\times$ $3^2$ $\times$ $5^2$) [log(2) log(3) log(5) known]
log(3601)=log(13 $\times$ 277) [log(13) log(277) known]
log(13)=log(13) [log(13) known]
page 21:
log(277)=log(277) [log(277) known]
log(3599)=log(59 $\times$ 61) [log(59) log(61) known]
log(61)=log(61) [log(61) known]
log(59)=log(59) [log(59) known]
decomposition(5900)
5900-1=17 $\times$ 347
$\rightarrow$ allows the comp. of log(347)
5900+1=3 $\times$ 7 $\times$ 281
$\rightarrow$ allows the comp. of log(281)
log(5900)=log($2^2$ $\times$ $5^2$ $\times$ 59) [log(2) log(5) log(59) known]
log(5901)=log(3 $\times$ 7 $\times$ 281) [log(3) log(7) log(281) known]
log(21)=log(3 $\times$ 7) [log(3) log(7) known]

```
page 22:
    log(281)=log(281) [log(281) known]
    log(5899)=log(17 × 347) [log(17) log(347) known]
    log(17)=log(17) [log(17) known]
    log(347)=log(347) [log(347) known]
  decomposition(59000)
      59000-1=41 × 1439
         → allows the comp. of log(1439)
      59000+1=3 × 71 × 277
         → allows the comp. of log(71)
    log(59000)=log(2^3 × 5^3 × 59) [log(2) log(5) log(59) known]
    log(59001)=log(3 × 71 × 277) [log(3) log(71) log(277) known]
    log(277)=log(277) [log(277) known]
    log(213)=log(3 × 71) [log(3) log(71) known]
    log(3)=log(3) [log(3) known]
    log(71)=log(71) [log(71) known]
    log(58999)=log(41 × 1439) [log(41) log(1439) known]
    log(41)=log(41) [log(41) known]
    log(1439)=log(1439) [log(1439) known]
page 23:
  decomposition(4600)
      4600-1=3^2 × 7 × 73
         → allows the comp. of log(73)
      4600+1=43 × 107
         → allows the comp. of log(107)
    log(4600)=log(2^3 × 5^2 × 23) [log(2) log(5) log(23) known]
    log(4601)=log(43 × 107) [log(43) log(107) known]
    log(43)=log(43) [log(43) known]
    log(107)=log(107) [log(107) known]
    log(4599)=log(3^2 × 7 × 73) [log(3) log(7) log(73) known]
    log(63)=log(3^2 × 7) [log(3) log(7) known]
    log(73)=log(73) [log(73) known]
page 24:
  decomposition(4400)
      4400-1=53 × 83
         → allows the comp. of log(83)
      4400+1=3^3 × 163
         → allows the comp. of log(163)
    log(4400)=log(2^4 × 5^2 × 11) [log(2) log(5) log(11) known]
    log(4401)=log(3^3 × 163) [log(3) log(163) known]
    log(27)=log(3^3) [log(3) known]
```

```
    log(163)=log(163) [log(163) known]
    log(4399)=log(53 × 83) [log(53) log(83) known]
    log(53)=log(53) [log(53) known]
    log(83)=log(83) [log(83) known]
page 25:
  decomposition(6500)
      6500-1=67 × 97
         → allows the comp. of log(97)
      6500+1=3 × 11 × 197
         → allows the comp. of log(197)
    log(6500)=log(2^2 × 5^3 × 13) [log(2) log(5) log(13) known]
    log(6501)=log(3 × 11 × 197) [log(3) log(11) log(197) known]
    log(33)=log(3 × 11) [log(3) log(11) known]
    log(197)=log(197) [log(197) known]
    log(6499)=log(67 × 97) [log(67) log(97) known]
    log(67)=log(67) [log(67) known]
    log(97)=log(97) [log(97) known]
page 26:
  decomposition(10000)
      10000-1=3^2 × 11 × 101
         → allows the comp. of log(101)
      10000+1=73 × 137
         → allows the comp. of log(137)
    log(10001)=log(73 × 137) [log(73) log(137) known]
    log(73)=log(73) [log(73) known]
    log(137)=log(137) [log(137) known]
    log(9999)=log(3^2 × 11 × 101) [log(3) log(11) log(101) known]
    log(99)=log(3^2 × 11) [log(3) log(11) known]
    log(101)=log(101) [log(101) known]
page 27:
  decomposition(790)
      790-1=3 × 263
         → allows the comp. of log(263)
      790+1=7 × 113
         → allows the comp. of log(113)
    log(790)=log(2 × 5 × 79) [log(2) log(5) log(79) known]
    log(791)=log(7 × 113) [log(7) log(113) known]
    log(7)=log(7) [log(7) known]
    log(113)=log(113) [log(113) known]
page 28:
    log(789)=log(3 × 263) [log(3) log(263) known]
```

```
    log(3)=log(3) [log(3) known]
    log(263)=log(263) [log(263) known]
  decomposition(7900)
      7900-1=3 × 2633
         → allows the comp. of log(2633)
      7900+1=7901
         → allows the comp. of log(7901)
    log(7900)=log(2^2 × 5^2 × 79) [log(2) log(5) log(79) known]
    log(7901)=log(7901) [log(7901) known]
    log(7899)=log(3 × 2633) [log(3) log(2633) known]
    log(3)=log(3) [log(3) known]
    log(2633)=log(2633) [log(2633) known]
  decomposition(79000)
      79000-1=3 × 17 × 1549
         → allows the comp. of log(1549)
      79000+1=13 × 59 × 103
         → allows the comp. of log(103)
page 29:
    log(79000)=log(2^3 × 5^3 × 79) [log(2) log(5) log(79) known]
    log(79001)=log(13 × 59 × 103) [log(13) log(59) log(103) known]
    log(767)=log(13 × 59) [log(13) log(59) known]
    log(103)=log(103) [log(103) known]
    log(78999)=log(3 × 17 × 1549) [log(3) log(17) log(1549) known]
    log(51)=log(3 × 17) [log(3) log(17) known]
    log(1549)=log(1549) [log(1549) known]
  decomposition(790000)
      790000-1=3 × 7 × 37619
      790000+1=19 × 41579
    log(790000)=log(2^4 × 5^4 × 79) [log(2) log(5) log(79) known]
    log(790001)=log(19 × 41579) [log(19) known]
    log(19)=log(19) [log(19) known]
    log(41579)=log(41579)
page 30:
    log(789999)=log(3 × 7 × 37619) [log(3) log(7) known]
    log(21)=log(3 × 7) [log(3) log(7) known]
    log(37619)=log(37619)
  decomposition(8000)
      8000-1=19 × 421
         → allows the comp. of log(421)
      8000+1=3^2 × 7 × 127
         → allows the comp. of log(127)
```

```
    log(8000)=log(2^6 × 5^3) [log(2) log(5) known]
    log(8001)=log(3^2 × 7 × 127) [log(3) log(7) log(127) known]
    log(63)=log(3^2 × 7) [log(3) log(7) known]
    log(127)=log(127) [log(127) known]
    log(7999)=log(19 × 421) [log(19) log(421) known]
    log(19)=log(19) [log(19) known]
    log(421)=log(421) [log(421) known]
  decomposition(80000)
      80000-1=79999
      80000+1=3^3 × 2963
         → allows the comp. of log(2963)
page 31:
    log(80000)=log(2^7 × 5^4) [log(2) log(5) known]
    log(80001)=log(3^3 × 2963) [log(3) log(2963) known]
    log(27)=log(3^3) [log(3) known]
    log(2963)=log(2963) [log(2963) known]
    log(79999)=log(79999)
  decomposition(800000)
      800000-1=799999
      800000+1=3^2 × 103 × 863
         → allows the comp. of log(863)
    log(800000)=log(2^8 × 5^5) [log(2) log(5) known]
    log(800001)=log(3^2 × 103 × 863) [log(3) log(103) log(863) known]
    log(927)=log(3^2 × 103) [log(3) log(103) known]
    log(863)=log(863) [log(863) known]
    log(799999)=log(799999)
page 32:
  decomposition(240)
      240-1=239
         → allows the comp. of log(239)
      240+1=241
         → allows the comp. of log(241)
    log(240)=log(2^4 × 3 × 5) [log(2) log(3) log(5) known]
page 33:
    log(239)=log(239) [log(239) known]
    log(241)=log(241) [log(241) known]
  decomposition(24000)
      24000-1=103 × 233
         → allows the comp. of log(233)
      24000+1=24001
    log(24000)=log(2^6 × 3 × 5^3) [log(2) log(3) log(5) known]
```

```
    log(24001)=log(24001)
    log(23999)=log(103 × 233) [log(103) log(233) known]
    log(103)=log(103) [log(103) known]
    log(233)=log(233) [log(233) known]
  decomposition(240000)
      240000-1=239999
      240000+1=107 × 2243
         → allows the comp. of log(2243)
page 34:
    log(240000)=log(2^7 × 3 × 5^4) [log(2) log(3) log(5) known]
    log(240001)=log(107 × 2243) [log(107) log(2243) known]
    log(107)=log(107) [log(107) known]
    log(2243)=log(2243) [log(2243) known]
    log(239999)=log(239999)
  decomposition(2400000)
      2400000-1=7 × 53 × 6469
         → allows the comp. of log(6469)
      2400000+1=2400001
    log(2400001)=log(2400001)
    log(2399999)=log(7 × 53 × 6469) [log(7) log(53) log(6469) known]
    log(371)=log(7 × 53) [log(7) log(53) known]
    log(6469)=log(6469) [log(6469) known]
page 35:
  decomposition(100000)
      100000-1=3^2 × 41 × 271
         → allows the comp. of log(271)
      100000+1=11 × 9091
         → allows the comp. of log(9091)
    log(100001)=log(11 × 9091) [log(11) log(9091) known]
    log(11)=log(11) [log(11) known]
    log(9091)=log(9091) [log(9091) known]
    log(99999)=log(3^2 × 41 × 271) [log(3) log(41) log(271) known]
    log(369)=log(3^2 × 41) [log(3) log(41) known]
    log(271)=log(271) [log(271) known]
  decomposition(10000000)
      10000000-1=3^2 × 239 × 4649
         → allows the comp. of log(4649)
      10000000+1=11 × 909091
    log(10000001)=log(11 × 909091) [log(11) known]
    log(11)=log(11) [log(11) known]
    log(909091)=log(909091)
```

log(9999999)=log($3^2 \times 239 \times 4649$) [log(3) log(239) log(4649) known]
log(4649)=log(4649) [log(4649) known]
page 36:
decomposition(40000)
40000-1=$3 \times 67 \times 199$
$\rightarrow$ allows the comp. of log(199)
40000+1=$13 \times 17 \times 181$
$\rightarrow$ allows the comp. of log(181)
log(40000)=log($2^6 \times 5^4$) [log(2) log(5) known]
log(40001)=log($13 \times 17 \times 181$) [log(13) log(17) log(181) known]
log(221)=log($13 \times 17$) [log(13) log(17) known]
log(181)=log(181) [log(181) known]
log(39999)=log($3 \times 67 \times 199$) [log(3) log(67) log(199) known]
log(201)=log($3 \times 67$) [log(3) log(67) known]
log(199)=log(199) [log(199) known]
decomposition(400000)
400000-1=$3 \times 151 \times 883$
400000+1=$7 \times 57143$
page 37:
log(400000)=log($2^7 \times 5^5$) [log(2) log(5) known]
log(400001)=log($7 \times 57143$) [log(7) known]
log(7)=log(7) [log(7) known]
log(57143)=log(57143)
log(399999)=log($3 \times 151 \times 883$) [log(3) known]
log(3)=log(3) [log(3) known]
log(133333)=log($151 \times 883$)
decomposition(25000)
25000-1=$3 \times 13 \times 641$
$\rightarrow$ allows the comp. of log(641)
25000+1=$23 \times 1087$
$\rightarrow$ allows the comp. of log(1087)
log(25000)=log($2^3 \times 5^5$) [log(2) log(5) known]
log(25001)=log($23 \times 1087$) [log(23) log(1087) known]
log(23)=log(23) [log(23) known]
log(1087)=log(1087) [log(1087) known]
page 38:
log(24999)=log($3 \times 13 \times 641$) [log(3) log(13) log(641) known]
log(39)=log($3 \times 13$) [log(3) log(13) known]
log(641)=log(641) [log(641) known]
decomposition(2500000)
2500000-1=$3 \times 191 \times 4363$

```
      2500000+1=7 × 19 × 18797
    log(2500000)=log(2^5 × 5^7) [log(2) log(5) known]
    log(2500001)=log(7 × 19 × 18797) [log(7) log(19) known]
    log(133)=log(7 × 19) [log(7) log(19) known]
    log(18797)=log(18797)
    log(2499999)=log(3 × 191 × 4363) [log(3) known]
    log(3)=log(3) [log(3) known]
    log(833333)=log(191 × 4363)
  decomposition(3000)
      3000-1=2999
         → allows the comp. of log(2999)
      3000+1=3001
         → allows the comp. of log(3001)
page 39:
    log(3000)=log(2^3 × 3 × 5^3) [log(2) log(3) log(5) known]
    log(3001)=log(3001) [log(3001) known]
    log(2999)=log(2999) [log(2999) known]
  decomposition(30000)
      30000-1=131 × 229
      30000+1=19 × 1579
         → allows the comp. of log(1579)
    log(30000)=log(2^4 × 3 × 5^4) [log(2) log(3) log(5) known]
    log(30001)=log(19 × 1579) [log(19) log(1579) known]
    log(19)=log(19) [log(19) known]
    log(1579)=log(1579) [log(1579) known]
    log(29999)=log(131 × 229)
page 40:
  decomposition(300000)
      300000-1=7 × 17 × 2521
         → allows the comp. of log(2521)
      300000+1=13 × 47 × 491
         → allows the comp. of log(491)
    log(300000)=log(2^5 × 3 × 5^5) [log(2) log(3) log(5) known]
    log(300001)=log(13 × 47 × 491) [log(13) log(47) log(491) known]
    log(611)=log(13 × 47) [log(13) log(47) known]
    log(491)=log(491) [log(491) known]
    log(299999)=log(7 × 17 × 2521) [log(7) log(17) log(2521) known]
    log(119)=log(7 × 17) [log(7) log(17) known]
    log(2521)=log(2521) [log(2521) known]
  decomposition(3000000)
      3000000-1=2999999
```

```
      3000000+1=853 × 3517
    log(3000000)=log(2^6 × 3 × 5^6) [log(2) log(3) log(5) known]
page 41:
    log(3000001)=log(853 × 3517)
    log(2999999)=log(2999999)
  decomposition(270000)
      270000-1=83 × 3253
         → allows the comp. of log(3253)
      270000+1=270001
    log(270000)=log(2^4 × 3^3 × 5^4) [log(2) log(3) log(5) known]
    log(270001)=log(270001)
    log(269999)=log(83 × 3253) [log(83) log(3253) known]
    log(83)=log(83) [log(83) known]
    log(3253)=log(3253) [log(3253) known]
  decomposition(9000)
      9000-1=8999
         → allows the comp. of log(8999)
      9000+1=9001
         → allows the comp. of log(9001)
page 42:
    log(9000)=log(2^3 × 3^2 × 5^3) [log(2) log(3) log(5) known]
    log(9001)=log(9001) [log(9001) known]
    log(8999)=log(8999) [log(8999) known]
  decomposition(900000)
      900000-1=397 × 2267
      900000+1=900001
    log(900000)=log(2^5 × 3^2 × 5^5) [log(2) log(3) log(5) known]
    log(900001)=log(900001)
    log(899999)=log(397 × 2267)
  decomposition(36000)
      36000-1=35999
      36000+1=7 × 37 × 139
         → allows the comp. of log(139)
page 43:
    log(36000)=log(2^5 × 3^2 × 5^3) [log(2) log(3) log(5) known]
    log(36001)=log(7 × 37 × 139) [log(7) log(37) log(139) known]
    log(259)=log(7 × 37) [log(7) log(37) known]
    log(139)=log(139) [log(139) known]
    log(35999)=log(35999)
  decomposition(360000)
      360000-1=599 × 601
```

      360000+1=157 $\times$ 2293
    log(360000)=log($2^6$ $\times$ $3^2$ $\times$ $5^4$) [log(2) log(3) log(5) known]
    log(360001)=log(157 $\times$ 2293)
    log(359999)=log(599 $\times$ 601)
  decomposition(590000)
      590000-1=191 $\times$ 3089
      590000+1=3 $\times$ 193 $\times$ 1019
page 44:
    log(590000)=log($2^4$ $\times$ $5^4$ $\times$ 59) [log(2) log(5) log(59) known]
    log(590001)=log(3 $\times$ 193 $\times$ 1019) [log(3) known]
    log(3)=log(3) [log(3) known]
    log(196667)=log(193 $\times$ 1019)
    log(589999)=log(191 $\times$ 3089)
  decomposition(46000)
      46000-1=$3^2$ $\times$ 19 $\times$ 269
         $\rightarrow$ allows the comp. of log(269)
      46000+1=157 $\times$ 293
    log(46000)=log($2^4$ $\times$ $5^3$ $\times$ 23) [log(2) log(5) log(23) known]
    log(46001)=log(157 $\times$ 293)
    log(45999)=log($3^2$ $\times$ 19 $\times$ 269) [log(3) log(19) log(269) known]
    log(171)=log($3^2$ $\times$ 19) [log(3) log(19) known]
    log(269)=log(269) [log(269) known]
page 45:
  decomposition(460000)
      460000-1=$3^6$ $\times$ 631
         $\rightarrow$ allows the comp. of log(631)
      460000+1=61 $\times$ 7541
         $\rightarrow$ allows the comp. of log(7541)
    log(460000)=log($2^5$ $\times$ $5^4$ $\times$ 23) [log(2) log(5) log(23) known]
    log(460001)=log(61 $\times$ 7541) [log(61) log(7541) known]
    log(61)=log(61) [log(61) known]
    log(7541)=log(7541) [log(7541) known]
    log(459999)=log($3^6$ $\times$ 631) [log(3) log(631) known]
    log(729)=log($3^6$) [log(3) known]
    log(631)=log(631) [log(631) known]
  decomposition(44000)
      44000-1=23 $\times$ 1913
         $\rightarrow$ allows the comp. of log(1913)
      44000+1=$3^2$ $\times$ 4889
         $\rightarrow$ allows the comp. of log(4889)
page 46:

```
    log(44000)=log(2^5 × 5^3 × 11) [log(2) log(5) log(11) known]
    log(44001)=log(3^2 × 4889) [log(3) log(4889) known]
    log(9)=log(3^2) [log(3) known]
    log(4889)=log(4889) [log(4889) known]
    log(43999)=log(23 × 1913) [log(23) log(1913) known]
    log(23)=log(23) [log(23) known]
    log(1913)=log(1913) [log(1913) known]
  decomposition(65000)
      65000-1=11 × 19 × 311
         → allows the comp. of log(311)
      65000+1=3 × 47 × 461
         → allows the comp. of log(461)
    log(65000)=log(2^3 × 5^4 × 13) [log(2) log(5) log(13) known]
    log(65001)=log(3 × 47 × 461) [log(3) log(47) log(461) known]
    log(141)=log(3 × 47) [log(3) log(47) known]
    log(461)=log(461) [log(461) known]
    log(64999)=log(11 × 19 × 311) [log(11) log(19) log(311) known]
    log(209)=log(11 × 19) [log(11) log(19) known]
page 47:
    log(311)=log(311) [log(311) known]
  decomposition(650000)
      650000-1=7 × 92857
      650000+1=3 × 11 × 19697
    log(650000)=log(2^4 × 5^5 × 13) [log(2) log(5) log(13) known]
    log(650001)=log(3 × 11 × 19697) [log(3) log(11) known]
    log(33)=log(3 × 11) [log(3) log(11) known]
    log(19697)=log(19697)
    log(649999)=log(7 × 92857) [log(7) known]
    log(7)=log(7) [log(7) known]
    log(92857)=log(92857)
  decomposition(9300)
      9300-1=17 × 547
         → allows the comp. of log(547)
      9300+1=71 × 131
         → allows the comp. of log(131)
page 48:
    log(9300)=log(2^2 × 3 × 5^2 × 31) [log(2) log(3) log(5) log(31) known]
    log(9301)=log(71 × 131) [log(71) log(131) known]
    log(71)=log(71) [log(71) known]
    log(131)=log(131) [log(131) known]
    log(29999)=log(131 × 229) [log(131) known]
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    log(229)   (assumed to be known now)
    log(9299)=log(17 × 547) [log(17) log(547) known]
    log(17)=log(17) [log(17) known]
    log(547)=log(547) [log(547) known]
  decomposition(93000)
      93000-1=113 × 823
         → allows the comp. of log(823)
      93000+1=93001
page 49:
    log(93000)=log(2^3 × 3 × 5^3 × 31) [log(2) log(3) log(5) log(31) known]
    log(93001)=log(93001)
    log(92999)=log(113 × 823) [log(113) log(823) known]
    log(113)=log(113) [log(113) known]
    log(823)=log(823) [log(823) known]
  decomposition(930000)
      930000-1=7 × 132857
      930000+1=29 × 32069
    log(930000)=log(2^4 × 3 × 5^4 × 31) [log(2) log(3) log(5) log(31) known]
    log(930001)=log(29 × 32069) [log(29) known]
    log(29)=log(29) [log(29) known]
    log(32069)=log(32069)
page 50:
    log(929999)=log(7 × 132857) [log(7) known]
    log(7)=log(7) [log(7) known]
    log(132857)=log(132857)
  decomposition(7300)
      7300-1=3^2 × 811
         → allows the comp. of log(811)
      7300+1=7^2 × 149
         → allows the comp. of log(149)
    log(7300)=log(2^2 × 5^2 × 73) [log(2) log(5) log(73) known]
    log(7301)=log(7^2 × 149) [log(7) log(149) known]
    log(49)=log(7^2) [log(7) known]
    log(149)=log(149) [log(149) known]
page 51:
    log(7299)=log(3^2 × 811) [log(3) log(811) known]
    log(9)=log(3^2) [log(3) known]
    log(811)=log(811) [log(811) known]
  decomposition(73000)
      73000-1=3^2 × 8111
         → allows the comp. of log(8111)
```

```
      73000+1=37 × 1973
         → allows the comp. of log(1973)
    log(73000)=log(2^3 × 5^3 × 73) [log(2) log(5) log(73) known]
    log(73001)=log(37 × 1973) [log(37) log(1973) known]
    log(37)=log(37) [log(37) known]
    log(1973)=log(1973) [log(1973) known]
    log(72999)=log(3^2 × 8111) [log(3) log(8111) known]
    log(9)=log(3^2) [log(3) known]
    log(8111)=log(8111) [log(8111) known]
  decomposition(730000)
      730000-1=3^3 × 19 × 1423
         → allows the comp. of log(1423)
      730000+1=823 × 887
         → allows the comp. of log(887)
page 52:
    log(730000)=log(2^4 × 5^4 × 73) [log(2) log(5) log(73) known]
    log(730001)=log(823 × 887) [log(823) log(887) known]
    log(823)=log(823) [log(823) known]
    log(887)=log(887) [log(887) known]
    log(729999)=log(3^3 × 19 × 1423) [log(3) log(19) log(1423) known]
    log(513)=log(3^3 × 19) [log(3) log(19) known]
    log(1423)=log(1423) [log(1423) known]
  decomposition(46800)
      46800-1=53 × 883
         → allows the comp. of log(883)
      46800+1=17 × 2753
         → allows the comp. of log(2753)
page 53:
    log(46800)=log(2^4 × 3^2 × 5^2 × 13) [log(2) log(3) log(5) log(13) known]
    log(46801)=log(17 × 2753) [log(17) log(2753) known]
    log(17)=log(17) [log(17) known]
    log(2753)=log(2753) [log(2753) known]
    log(46799)=log(53 × 883) [log(53) log(883) known]
    log(53)=log(53) [log(53) known]
    log(883)=log(883) [log(883) known]
    log(133333)=log(151 × 883) [log(883) known]
    log(151)   (assumed to be known now)
  decomposition(111000)
      111000-1=7 × 101 × 157
         → allows the comp. of log(157)
      111000+1=11 × 10091
```

page 54:
log(111000)=log($2^3 \times 3 \times 5^3 \times 37$) [log(2) log(3) log(5) log(37) known]
log(111001)=log($11 \times 10091$) [log(11) known]
log(11)=log(11) [log(11) known]
log(10091)=log(10091)
log(110999)=log($7 \times 101 \times 157$) [log(7) log(101) log(157) known]
log(707)=log($7 \times 101$) [log(7) log(101) known]
log(157)=log(157) [log(157) known]
decomposition(1110000)
1110000-1=$11 \times 19 \times 47 \times 113$
1110000+1=$151 \times 7351$
$\rightarrow$ allows the comp. of log(7351)
log(1110000)=log($2^4 \times 3 \times 5^4 \times 37$) [log(2) log(3) log(5) log(37) known]
log(1110001)=log($151 \times 7351$) [log(151) log(7351) known]
log(151)=log(151) [log(151) known]
log(7351)=log(7351) [log(7351) known]
page 55:
log(1109999)=log($11 \times 19 \times 47 \times 113$) [log(11) log(19) log(47) log(113) known]
log(360001)=log($157 \times 2293$) [log(157) known]
log(157)=log(157) [log(157) known]
log(46001)=log($157 \times 293$) [log(157) known]
log(2293) (assumed to be known now)
log(293) (assumed to be known now)
page 56:
decomposition(500)
500-1=499
$\rightarrow$ allows the comp. of log(499)
500+1=$3 \times 167$
$\rightarrow$ allows the comp. of log(167)
log(500)=log($2^2 \times 5^3$) [log(2) log(5) known]
log(501)=log($3 \times 167$) [log(3) log(167) known]
log(3)=log(3) [log(3) known]
log(167)=log(167) [log(167) known]
log(499)=log(499) [log(499) known]
decomposition(5000)
5000-1=4999
$\rightarrow$ allows the comp. of log(4999)
5000+1=$3 \times 1667$
$\rightarrow$ allows the comp. of log(1667)
log(5000)=log($2^3 \times 5^4$) [log(2) log(5) known]
log(5001)=log($3 \times 1667$) [log(3) log(1667) known]

```
    log(3)=log(3) [log(3) known]
    log(1667)=log(1667) [log(1667) known]
    log(4999)=log(4999) [log(4999) known]
page 57:
  decomposition(50000)
      50000-1=49999
      50000+1=3 × 7 × 2381
         → allows the comp. of log(2381)
    log(50000)=log(2^4 × 5^5) [log(2) log(5) known]
    log(50001)=log(3 × 7 × 2381) [log(3) log(7) log(2381) known]
    log(3)=log(3) [log(3) known]
    log(16667)=log(7 × 2381) [log(7) log(2381) known]
    log(7)=log(7) [log(7) known]
    log(2381)=log(2381) [log(2381) known]
    log(49999)=log(49999)
  decomposition(132000)
      132000-1=7 × 109 × 173
         → allows the comp. of log(173)
      132000+1=132001
page 58:
    log(132000)=log(2^5 × 3 × 5^3 × 11) [log(2) log(3) log(5) log(11) known]
    log(132001)=log(132001)
    log(131999)=log(7 × 109 × 173) [log(7) log(109) log(173) known]
    log(763)=log(7 × 109) [log(7) log(109) known]
    log(173)=log(173) [log(173) known]
  decomposition(1320000)
      1320000-1=17 × 77647
      1320000+1=191 × 6911
    log(1320000)=log(2^6 × 3 × 5^4 × 11) [log(2) log(3) log(5) log(11) known]
    log(1320001)=log(191 × 6911)
    log(1319999)=log(17 × 77647) [log(17) known]
    log(17)=log(17) [log(17) known]
    log(77647)=log(77647)
page 59:
  decomposition(14500)
      14500-1=3^4 × 179
         → allows the comp. of log(179)
      14500+1=17 × 853
         → allows the comp. of log(853)
    log(14500)=log(2^2 × 5^3 × 29) [log(2) log(5) log(29) known]
    log(14501)=log(17 × 853) [log(17) log(853) known]
```

```
    log(17)=log(17) [log(17) known]
    log(3000001)=log(853 × 3517) [log(853) known]
    log(853)=log(853) [log(853) known]
    log(14499)=log(3^4 × 179) [log(3) log(179) known]
    log(81)=log(3^4) [log(3) known]
    log(179)=log(179) [log(179) known]
    log(3517)   (assumed to be known now)
page 60:
  decomposition(145000)
      145000-1=3^2 × 16111
      145000+1=83 × 1747
         → allows the comp. of log(1747)
    log(145000)=log(2^3 × 5^4 × 29) [log(2) log(5) log(29) known]
    log(145001)=log(83 × 1747) [log(83) log(1747) known]
    log(83)=log(83) [log(83) known]
    log(1747)=log(1747) [log(1747) known]
    log(144999)=log(3^2 × 16111) [log(3) known]
    log(9)=log(3^2) [log(3) known]
    log(16111)=log(16111)
  decomposition(1450000)
      1450000-1=3^2 × 73 × 2207
         → allows the comp. of log(2207)
      1450000+1=7 × 359 × 577
page 61:
    log(1450000)=log(2^4 × 5^5 × 29) [log(2) log(5) log(29) known]
    log(1450001)=log(7 × 359 × 577) [log(7) known]
    log(7)=log(7) [log(7) known]
    log(207143)=log(359 × 577)
    log(1449999)=log(3^2 × 73 × 2207) [log(3) log(73) log(2207) known]
    log(657)=log(3^2 × 73) [log(3) log(73) known]
    log(2207)=log(2207) [log(2207) known]
  decomposition(17000)
      17000-1=89 × 191
         → allows the comp. of log(191)
      17000+1=3^2 × 1889
         → allows the comp. of log(1889)
    log(17000)=log(2^3 × 5^3 × 17) [log(2) log(5) log(17) known]
page 62:
    log(17001)=log(3^2 × 1889) [log(3) log(1889) known]
    log(9)=log(3^2) [log(3) known]
    log(1889)=log(1889) [log(1889) known]
```

```
    log(16999)=log(89 × 191) [log(89) log(191) known]
    log(89)=log(89) [log(89) known]
    log(191)=log(191) [log(191) known]
    log(833333)=log(191 × 4363) [log(191) known]
    log(589999)=log(191 × 3089) [log(191) known]
    log(1320001)=log(191 × 6911) [log(191) known]
    log(4363)   (assumed to be known now)
    log(3089)   (assumed to be known now)
    log(6911)   (assumed to be known now)
  decomposition(170000)
      170000-1=47 × 3617
         → allows the comp. of log(3617)
      170000+1=3^2 × 13 × 1453
         → allows the comp. of log(1453)
    log(170000)=log(2^4 × 5^4 × 17) [log(2) log(5) log(17) known]
page 63:
    log(170001)=log(3^2 × 13 × 1453) [log(3) log(13) log(1453) known]
    log(9)=log(3^2) [log(3) known]
    log(18889)=log(13 × 1453) [log(13) log(1453) known]
    log(13)=log(13) [log(13) known]
    log(1453)=log(1453) [log(1453) known]
    log(169999)=log(47 × 3617) [log(47) log(3617) known]
    log(47)=log(47) [log(47) known]
    log(3617)=log(3617) [log(3617) known]
  decomposition(1700000)
      1700000-1=7 × 23 × 10559
      1700000+1=3^3 × 79 × 797
         → allows the comp. of log(797)
    log(1700000)=log(2^5 × 5^5 × 17) [log(2) log(5) log(17) known]
    log(1700001)=log(3^3 × 79 × 797) [log(3) log(79) log(797) known]
    log(27)=log(3^3) [log(3) known]
    log(62963)=log(79 × 797) [log(79) log(797) known]
    log(79)=log(79) [log(79) known]
    log(797)=log(797) [log(797) known]
    log(1699999)=log(7 × 23 × 10559) [log(7) log(23) known]
    log(161)=log(7 × 23) [log(7) log(23) known]
page 64:
    log(10559)=log(10559)
  decomposition(11000)
      11000-1=17 × 647
         → allows the comp. of log(647)
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      11000+1=3 × 19 × 193
         → allows the comp. of log(193)
    log(11000)=log(2^3 × 5^3 × 11) [log(2) log(5) log(11) known]
    log(11001)=log(3 × 19 × 193) [log(3) log(19) log(193) known]
    log(57)=log(3 × 19) [log(3) log(19) known]
    log(193)=log(193) [log(193) known]
    log(196667)=log(193 × 1019) [log(193) known]
    log(1019)   (assumed to be known now)
    log(10999)=log(17 × 647) [log(17) log(647) known]
    log(17)=log(17) [log(17) known]
page 65:
    log(647)=log(647) [log(647) known]
  decomposition(110000)
      110000-1=317 × 347
         → allows the comp. of log(317)
      110000+1=3 × 37 × 991
         → allows the comp. of log(991)
    log(110000)=log(2^4 × 5^4 × 11) [log(2) log(5) log(11) known]
    log(110001)=log(3 × 37 × 991) [log(3) log(37) log(991) known]
    log(111)=log(3 × 37) [log(3) log(37) known]
    log(991)=log(991) [log(991) known]
    log(109999)=log(317 × 347) [log(317) log(347) known]
    log(347)=log(347) [log(347) known]
    log(317)=log(317) [log(317) known]
  decomposition(1100000)
      1100000-1=29 × 83 × 457
         → allows the comp. of log(457)
      1100000+1=3 × 7^3 × 1069
         → allows the comp. of log(1069)
page 66:
    log(1100000)=log(2^5 × 5^5 × 11) [log(2) log(5) log(11) known]
    log(1100001)=log(3 × 7^3 × 1069) [log(3) log(7) log(1069) known]
    log(1029)=log(3 × 7^3) [log(3) log(7) known]
    log(1069)=log(1069) [log(1069) known]
    log(1099999)=log(29 × 83 × 457) [log(29) log(83) log(457) known]
    log(2407)=log(29 × 83) [log(29) log(83) known]
    log(457)=log(457) [log(457) known]
  decomposition(2900)
      2900-1=13 × 223
         → allows the comp. of log(223)
      2900+1=3 × 967
```

```
        → allows the comp. of log(967)
page 67:
    log(2900)=log(2^2 × 5^2 × 29) [log(2) log(5) log(29) known]
    log(2901)=log(3 × 967) [log(3) log(967) known]
    log(3)=log(3) [log(3) known]
    log(967)=log(967) [log(967) known]
    log(2899)=log(13 × 223) [log(13) log(223) known]
    log(13)=log(13) [log(13) known]
    log(223)=log(223) [log(223) known]
  decomposition(29000)
      29000-1=47 × 617
        → allows the comp. of log(617)
      29000+1=3 × 7 × 1381
        → allows the comp. of log(1381)
    log(29000)=log(2^3 × 5^3 × 29) [log(2) log(5) log(29) known]
    log(29001)=log(3 × 7 × 1381) [log(3) log(7) log(1381) known]
    log(21)=log(3 × 7) [log(3) log(7) known]
    log(1381)=log(1381) [log(1381) known]
page 68:
    log(28999)=log(47 × 617) [log(47) log(617) known]
    log(47)=log(47) [log(47) known]
    log(617)=log(617) [log(617) known]
  decomposition(37000)
      37000-1=3^2 × 4111
        → allows the comp. of log(4111)
      37000+1=163 × 227
        → allows the comp. of log(227)
    log(37000)=log(2^3 × 5^3 × 37) [log(2) log(5) log(37) known]
    log(37001)=log(163 × 227) [log(163) log(227) known]
    log(163)=log(163) [log(163) known]
    log(227)=log(227) [log(227) known]
    log(36999)=log(3^2 × 4111) [log(3) log(4111) known]
    log(9)=log(3^2) [log(3) known]
    log(4111)=log(4111) [log(4111) known]
page 69:
  decomposition(370000)
      370000-1=3^2 × 7^2 × 839
        → allows the comp. of log(839)
      370000+1=23 × 16087
    log(370000)=log(2^4 × 5^4 × 37) [log(2) log(5) log(37) known]
    log(370001)=log(23 × 16087) [log(23) known]
```

log(23)=log($23$) [log(23) known]
log(16087)=log($16087$)
log(369999)=log($3^2 \times 7^2 \times 839$) [log(3) log(7) log(839) known]
log(9)=log($3^2$) [log(3) known]
log(41111)=log($7^2 \times 839$) [log(7) log(839) known]
log(49)=log($7^2$) [log(7) known]
log(839)=log($839$) [log(839) known]
decomposition(6300)
6300-1=6299
$\rightarrow$ allows the comp. of log(6299)
6300+1=6301
$\rightarrow$ allows the comp. of log(6301)
page 70:
log(6300)=log($2^2 \times 3^2 \times 5^2 \times 7$) [log(2) log(3) log(5) log(7) known]
log(6301)=log($6301$) [log(6301) known]
log(6299)=log($6299$) [log(6299) known]
decomposition(63000)
63000-1=$73 \times 863$
63000+1=$251^2$
$\rightarrow$ allows the comp. of log(251)
log(63000)=log($2^3 \times 3^2 \times 5^3 \times 7$) [log(2) log(3) log(5) log(7) known]
log(63001)=log($251^2$) [log(251) known]
log(251)=log($251$) [log(251) known]
page 71:
log(62999)=log($73 \times 863$) [log(73) log(863) known]
log(73)=log($73$) [log(73) known]
log(863)=log($863$) [log(863) known]
decomposition(630000)
630000-1=$37 \times 17027$
630000+1=$67 \times 9403$
$\rightarrow$ allows the comp. of log(9403)
log(630000)=log($2^4 \times 3^2 \times 5^4 \times 7$) [log(2) log(3) log(5) log(7) known]
log(630001)=log($67 \times 9403$) [log(67) log(9403) known]
log(67)=log($67$) [log(67) known]
log(9403)=log($9403$) [log(9403) known]
log(629999)=log($37 \times 17027$) [log(37) known]
log(37)=log($37$) [log(37) known]
log(17027)=log($17027$)
decomposition(1800)
1800-1=$7 \times 257$
$\rightarrow$ allows the comp. of log(257)

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      1800+1=1801
         → allows the comp. of log(1801)
page 72:
    log(1800)=log(2^3 × 3^2 × 5^2) [log(2) log(3) log(5) known]
    log(1801)=log(1801) [log(1801) known]
    log(1799)=log(7 × 257) [log(7) log(257) known]
    log(7)=log(7) [log(7) known]
    log(257)=log(257) [log(257) known]
  decomposition(18000)
      18000-1=41 × 439
         → allows the comp. of log(439)
      18000+1=47 × 383
         → allows the comp. of log(383)
page 73:
    log(18000)=log(2^4 × 3^2 × 5^3) [log(2) log(3) log(5) known]
    log(18001)=log(47 × 383) [log(47) log(383) known]
    log(47)=log(47) [log(47) known]
    log(383)=log(383) [log(383) known]
    log(17999)=log(41 × 439) [log(41) log(439) known]
    log(41)=log(41) [log(41) known]
    log(439)=log(439) [log(439) known]
  decomposition(1800000)
      1800000-1=1799999
      1800000+1=7 × 29 × 8867
         → allows the comp. of log(8867)
    log(1800000)=log(2^6 × 3^2 × 5^5) [log(2) log(3) log(5) known]
    log(1800001)=log(7 × 29 × 8867) [log(7) log(29) log(8867) known]
    log(203)=log(7 × 29) [log(7) log(29) known]
    log(8867)=log(8867) [log(8867) known]
  decomposition(15000)
      15000-1=53 × 283
         → allows the comp. of log(283)
      15000+1=7 × 2143
         → allows the comp. of log(2143)
page 74:
    log(15000)=log(2^3 × 3 × 5^4) [log(2) log(3) log(5) known]
    log(15001)=log(7 × 2143) [log(7) log(2143) known]
    log(7)=log(7) [log(7) known]
    log(2143)=log(2143) [log(2143) known]
    log(14999)=log(53 × 283) [log(53) log(283) known]
    log(53)=log(53) [log(53) known]
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    log(283)=log(283) [log(283) known]
  decomposition(150000)
      150000-1=61 × 2459
         → allows the comp. of log(2459)
      150000+1=150001
page 75:
    log(150000)=log(2^4 × 3 × 5^5) [log(2) log(3) log(5) known]
    log(150001)=log(150001)
    log(149999)=log(61 × 2459) [log(61) log(2459) known]
    log(61)=log(61) [log(61) known]
    log(2459)=log(2459) [log(2459) known]
  decomposition(1500000)
      1500000-1=211 × 7109
         → allows the comp. of log(7109)
      1500000+1=557 × 2693
    log(1500000)=log(2^5 × 3 × 5^6) [log(2) log(3) log(5) known]
    log(1500001)=log(557 × 2693)
    log(1499999)=log(211 × 7109) [log(211) log(7109) known]
    log(211)=log(211) [log(211) known]
    log(7109)=log(7109) [log(7109) known]
  decomposition(2320000)
      2320000-1=3 × 11 × 229 × 307
         → allows the comp. of log(307)
      2320000+1=2320001
page 76:
    log(2320000)=log(2^7 × 5^4 × 29) [log(2) log(5) log(29) known]
    log(2319999)=log(3 × 11 × 229 × 307) [log(3) log(11) log(229) log(307) known]
    log(307)=log(307) [log(307) known]
  decomposition(7200)
      7200-1=23 × 313
         → allows the comp. of log(313)
      7200+1=19 × 379
         → allows the comp. of log(379)
page 77:
    log(7201)=log(19 × 379) [log(19) log(379) known]
    log(7200)=log(2^5 × 3^2 × 5^2) [log(2) log(3) log(5) known]
    log(7199)=log(23 × 313) [log(23) log(313) known]
    log(7201)=log(19 × 379) [log(19) log(379) known]
    log(19)=log(19) [log(19) known]
    log(379)=log(379) [log(379) known]
    log(7199)=log(23 × 313) [log(23) log(313) known]
```

```
    log(23)=log(23) [log(23) known]
    log(313)=log(313) [log(313) known]
  decomposition(72000)
      72000-1=71999
      72000+1=89 × 809
         → allows the comp. of log(809)
    log(72001)=log(89 × 809) [log(89) log(809) known]
    log(72000)=log(2^6 × 3^2 × 5^3) [log(2) log(3) log(5) known]
    log(71999)=log(71999)
    log(89)=log(89) [log(89) known]
    log(809)=log(809) [log(809) known]
    log(71999)=log(71999)
page 78:
  decomposition(720000)
      720000-1=7 × 73 × 1409
         → allows the comp. of log(1409)
      720000+1=17 × 41 × 1033
         → allows the comp. of log(1033)
    log(720001)=log(17 × 41 × 1033) [log(17) log(41) log(1033) known]
    log(720000)=log(2^7 × 3^2 × 5^4) [log(2) log(3) log(5) known]
    log(719999)=log(7 × 73 × 1409) [log(7) log(73) log(1409) known]
    log(697)=log(17 × 41) [log(17) log(41) known]
    log(1033)=log(1033) [log(1033) known]
    log(719999)=log(7 × 73 × 1409) [log(7) log(73) log(1409) known]
    log(511)=log(7 × 73) [log(7) log(73) known]
    log(1409)=log(1409) [log(1409) known]
  decomposition(9600)
      9600-1=29 × 331
         → allows the comp. of log(331)
      9600+1=9601
         → allows the comp. of log(9601)
page 79:
    log(9601)=log(9601) [log(9601) known]
    log(9600)=log(2^7 × 3 × 5^2) [log(2) log(3) log(5) known]
    log(9599)=log(29 × 331) [log(29) log(331) known]
    log(9601)=log(9601) [log(9601) known]
    log(9599)=log(29 × 331) [log(29) log(331) known]
    log(29)=log(29) [log(29) known]
    log(331)=log(331) [log(331) known]
  decomposition(96000)
      96000-1=17 × 5647
```

```
        → allows the comp. of log(5647)
      96000+1=96001
    log(96001)=log(96001)
    log(96000)=log(2^8 × 3 × 5^3) [log(2) log(3) log(5) known]
    log(95999)=log(17 × 5647) [log(17) log(5647) known]
    log(96001)=log(96001)
    log(95999)=log(17 × 5647) [log(17) log(5647) known]
    log(17)=log(17) [log(17) known]
page 80:
    log(5647)=log(5647) [log(5647) known]
  decomposition(960000)
      960000-1=643 × 1493
      960000+1=7 × 137143
    log(960001)=log(7 × 137143) [log(7) known]
    log(960000)=log(2^9 × 3 × 5^4) [log(2) log(3) log(5) known]
    log(959999)=log(643 × 1493)
    log(7)=log(7) [log(7) known]
    log(137143)=log(137143)
  decomposition(9200)
      9200-1=9199
        → allows the comp. of log(9199)
      9200+1=3 × 3067
        → allows the comp. of log(3067)
page 81:
    log(9201)=log(3 × 3067) [log(3) log(3067) known]
    log(9200)=log(2^4 × 5^2 × 23) [log(2) log(5) log(23) known]
    log(9199)=log(9199) [log(9199) known]
    log(3)=log(3) [log(3) known]
    log(3067)=log(3067) [log(3067) known]
    log(9199)=log(9199) [log(9199) known]
  decomposition(92000)
      92000-1=197 × 467
        → allows the comp. of log(467)
      92000+1=3 × 7 × 13 × 337
        → allows the comp. of log(337)
    log(92001)=log(3 × 7 × 13 × 337) [log(3) log(7) log(13) log(337) known]
    log(92000)=log(2^5 × 5^3 × 23) [log(2) log(5) log(23) known]
    log(91999)=log(197 × 467) [log(197) log(467) known]
    log(273)=log(3 × 7 × 13) [log(3) log(7) log(13) known]
    log(337)=log(337) [log(337) known]
page 82:
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```
    log(91999)=log(197 × 467) [log(197) log(467) known]
    log(197)=log(197) [log(197) known]
    log(467)=log(467) [log(467) known]
  decomposition(920000)
      920000-1=19 × 41 × 1181
         → allows the comp. of log(1181)
      920000+1=3 × 449 × 683
    log(920001)=log(3 × 449 × 683) [log(3) known]
    log(920000)=log(2^6 × 5^4 × 23) [log(2) log(5) log(23) known]
    log(919999)=log(19 × 41 × 1181) [log(19) log(41) log(1181) known]
    log(3)=log(3) [log(3) known]
    log(306667)=log(449 × 683)
    log(919999)=log(19 × 41 × 1181) [log(19) log(41) log(1181) known]
    log(779)=log(19 × 41) [log(19) log(41) known]
    log(1181)=log(1181) [log(1181) known]
  decomposition(7500)
      7500-1=7499
         → allows the comp. of log(7499)
      7500+1=13 × 577
         → allows the comp. of log(577)
page 83:
    log(7501)=log(13 × 577) [log(13) log(577) known]
    log(7500)=log(2^2 × 3 × 5^4) [log(2) log(3) log(5) known]
    log(7499)=log(7499) [log(7499) known]
    log(13)=log(13) [log(13) known]
    log(577)=log(577) [log(577) known]
    log(207143)=log(359 × 577) [log(577) known]
    log(359)   (assumed to be known now)
    log(7499)=log(7499) [log(7499) known]
  decomposition(75000)
      75000-1=37 × 2027
         → allows the comp. of log(2027)
      75000+1=179 × 419
         → allows the comp. of log(419)
page 84:
    log(75001)=log(179 × 419) [log(179) log(419) known]
    log(75000)=log(2^3 × 3 × 5^5) [log(2) log(3) log(5) known]
    log(74999)=log(37 × 2027) [log(37) log(2027) known]
    log(179)=log(179) [log(179) known]
    log(419)=log(419) [log(419) known]
    log(37)=log(37) [log(37) known]
```

```
    log(2027)=log(2027) [log(2027) known]
  decomposition(750000)
      750000-1=443 × 1693
      750000+1=7 × 307 × 349
         → allows the comp. of log(349)
    log(750001)=log(7 × 307 × 349) [log(7) log(307) log(349) known]
    log(750000)=log(2^4 × 3 × 5^6) [log(2) log(3) log(5) known]
    log(749999)=log(443 × 1693)
    log(7)=log(7) [log(7) known]
    log(107143)=log(307 × 349) [log(307) log(349) known]
    log(307)=log(307) [log(307) known]
    log(349)=log(349) [log(349) known]
    log(749999)=log(443 × 1693)
page 85:
  decomposition(6000)
      6000-1=7 × 857
         → allows the comp. of log(857)
      6000+1=17 × 353
         → allows the comp. of log(353)
    log(6001)=log(17 × 353) [log(17) log(353) known]
    log(6000)=log(2^4 × 3 × 5^3) [log(2) log(3) log(5) known]
    log(5999)=log(7 × 857) [log(7) log(857) known]
    log(17)=log(17) [log(17) known]
    log(353)=log(353) [log(353) known]
    log(5999)=log(7 × 857) [log(7) log(857) known]
    log(7)=log(7) [log(7) known]
    log(857)=log(857) [log(857) known]
page 86:
  decomposition(60000)
      60000-1=59999
      60000+1=29 × 2069
         → allows the comp. of log(2069)
    log(60001)=log(29 × 2069) [log(29) log(2069) known]
    log(60000)=log(2^5 × 3 × 5^4) [log(2) log(3) log(5) known]
    log(59999)=log(59999)
    log(29)=log(29) [log(29) known]
    log(2069)=log(2069) [log(2069) known]
    log(59999)=log(59999)
  decomposition(600000)
      600000-1=599999
      600000+1=19 × 23 × 1373
```

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      → allows the comp. of log(1373)
    log(600001)=log(19 × 23 × 1373) [log(19) log(23) log(1373) known]
    log(600000)=log(2^6 × 3 × 5^5) [log(2) log(3) log(5) known]
    log(599999)=log(599999)
    log(437)=log(19 × 23) [log(19) log(23) known]
page 87:
    log(1373)=log(1373) [log(1373) known]
    log(599999)=log(599999)
    log(109000)=log(2^3 × 5^3 × 109) [log(2) log(5) log(109) known]
    log(297)=log(3^3 × 11) [log(3) log(11) known]
    log(367)   (assumed to be known now)
    log(109001)=log(109001)
  decomposition(1090000)
     1090000-1=3^2 × 281 × 431
      → allows the comp. of log(431)
     1090000+1=11 × 197 × 503
      → allows the comp. of log(503)
page 88:
    log(2167)=log(11 × 197) [log(11) log(197) known]
    log(503)=log(503) [log(503) known]
    log(2529)=log(3^2 × 281) [log(3) log(281) known]
    log(431)=log(431) [log(431) known]
  decomposition(163000)
     163000-1=3^3 × 6037
      → allows the comp. of log(6037)
     163000+1=19 × 23 × 373
      → allows the comp. of log(373)
page 89:
    log(437)=log(19 × 23) [log(19) log(23) known]
    log(373)=log(373) [log(373) known]
    log(27)=log(3^3) [log(3) known]
    log(6037)=log(6037) [log(6037) known]
  decomposition(3500)
     3500-1=3499
      → allows the comp. of log(3499)
     3500+1=3^2 × 389
      → allows the comp. of log(389)
page 90:
    log(9)=log(3^2) [log(3) known]
    log(389)=log(389) [log(389) known]
    log(3499)=log(3499) [log(3499) known]
```

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  decomposition(35000)
      35000-1=31 × 1129
         → allows the comp. of log(1129)
      35000+1=3^2 × 3889
         → allows the comp. of log(3889)
    log(3889)=log(3889) [log(3889) known]
    log(31)=log(31) [log(31) known]
    log(1129)=log(1129) [log(1129) known]
  decomposition(350000)
      350000-1=13^2 × 19 × 109
      350000+1=3^4 × 29 × 149
page 91:
  decomposition(3500000)
      3500000-1=3499999
      3500000+1=3^2 × 157 × 2477
         → allows the comp. of log(2477)
    log(388889)=log(157 × 2477) [log(157) log(2477) known]
    log(157)=log(157) [log(157) known]
    log(2477)=log(2477) [log(2477) known]
  decomposition(10600)
      10600-1=3 × 3533
         → allows the comp. of log(3533)
      10600+1=10601
page 92:
    log(10601)=log(10601)
    log(3)=log(3) [log(3) known]
    log(3533)=log(3533) [log(3533) known]
  decomposition(106000)
      106000-1=3 × 89 × 397
         → allows the comp. of log(397)
      106000+1=7 × 19 × 797
page 93:
    log(133)=log(7 × 19) [log(7) log(19) known]
    log(797)=log(797) [log(797) known]
    log(267)=log(3 × 89) [log(3) log(89) known]
    log(397)=log(397) [log(397) known]
    log(899999)=log(397 × 2267) [log(397) known]
    log(2267)   (assumed to be known now)
  decomposition(1060000)
      1060000-1=3 × 353333
      1060000+1=17 × 23 × 2711
```

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        → allows the comp. of log(2711)
    log(391)=log(17 × 23) [log(17) log(23) known]
    log(2711)=log(2711) [log(2711) known]
page 94:
    log(353333)=log(353333)
  decomposition(4500)
      4500-1=11 × 409
        → allows the comp. of log(409)
      4500+1=7 × 643
        → allows the comp. of log(643)
    log(7)=log(7) [log(7) known]
    log(643)=log(643) [log(643) known]
    log(959999)=log(643 × 1493) [log(643) known]
    log(1493)   (assumed to be known now)
page 95:
    log(4499)=log(11 × 409) [log(11) log(409) known]
    log(11)=log(11) [log(11) known]
    log(409)=log(409) [log(409) known]
  decomposition(45000)
      45000-1=17 × 2647
        → allows the comp. of log(2647)
      45000+1=11 × 4091
        → allows the comp. of log(4091)
    log(4091)=log(4091) [log(4091) known]
    log(17)=log(17) [log(17) known]
    log(2647)=log(2647) [log(2647) known]
  decomposition(450000)
      450000-1=11^2 × 3719
        → allows the comp. of log(3719)
      450000+1=450001
page 96:
    log(450001)=log(450001)
    log(121)=log(11^2) [log(11) known]
    log(3719)=log(3719) [log(3719) known]
  decomposition(4500000)
      4500000-1=7 × 113 × 5689
        → allows the comp. of log(5689)
      4500000+1=11 × 313 × 1307
        → allows the comp. of log(1307)
    log(3443)=log(11 × 313) [log(11) log(313) known]
    log(1307)=log(1307) [log(1307) known]
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    log(791)=log(7 × 113) [log(7) log(113) known]
    log(5689)=log(5689) [log(5689) known]
page 97:
  decomposition(1300)
      1300-1=3 × 433
         → allows the comp. of log(433)
      1300+1=1301
         → allows the comp. of log(1301)
    log(1301)=log(1301) [log(1301) known]
    log(3)=log(3) [log(3) known]
    log(433)=log(433) [log(433) known]
page 98:
  decomposition(13000)
      13000-1=3 × 7 × 619
         → allows the comp. of log(619)
      13000+1=13001
    log(13001)=log(13001)
    log(21)=log(3 × 7) [log(3) log(7) known]
    log(619)=log(619) [log(619) known]
  decomposition(130000)
      130000-1=3 × 17 × 2549
         → allows the comp. of log(2549)
      130000+1=71 × 1831
         → allows the comp. of log(1831)
page 99:
    log(71)=log(71) [log(71) known]
    log(1831)=log(1831) [log(1831) known]
    log(51)=log(3 × 17) [log(3) log(17) known]
    log(2549)=log(2549) [log(2549) known]
  decomposition(1300000)
      1300000-1=3 × 19 × 22807
      1300000+1=67 × 19403
    log(67)=log(67) [log(67) known]
    log(19403)=log(19403)
    log(57)=log(3 × 19) [log(3) log(19) known]
    log(22807)=log(22807)
page 100:
  decomposition(3100)
      3100-1=3 × 1033
      3100+1=7 × 443
         → allows the comp. of log(443)
```

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    log(7)=log(7) [log(7) known]
    log(443)=log(443) [log(443) known]
    log(749999)=log(443 × 1693) [log(443) known]
    log(1693)   (assumed to be known now)
    log(3099)=log(3 × 1033) [log(3) log(1033) known]
    log(3)=log(3) [log(3) known]
page 101:
    log(1033)=log(1033) [log(1033) known]
  decomposition(31000)
      31000-1=3 × 10333
      31000+1=29 × 1069
    log(29)=log(29) [log(29) known]
    log(1069)=log(1069) [log(1069) known]
    log(3)=log(3) [log(3) known]
    log(10333)=log(10333)
  decomposition(310000)
      310000-1=3 × 103333
      310000+1=41 × 7561
         → allows the comp. of log(7561)
page 102:
    log(41)=log(41) [log(41) known]
    log(7561)=log(7561) [log(7561) known]
    log(3)=log(3) [log(3) known]
    log(103333)=log(103333)
  decomposition(3100000)
      3100000-1=3 × 7 × 43 × 3433
         → allows the comp. of log(3433)
      3100000+1=17 × 182353
    log(17)=log(17) [log(17) known]
    log(182353)=log(182353)
    log(903)=log(3 × 7 × 43) [log(3) log(7) log(43) known]
    log(3433)=log(3433) [log(3433) known]
page 103:
  decomposition(22000)
      22000-1=3 × 7333
         → allows the comp. of log(7333)
      22000+1=7² × 449
         → allows the comp. of log(449)
    log(49)=log(7²) [log(7) known]
    log(449)=log(449) [log(449) known]
    log(306667)=log(449 × 683) [log(449) known]
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    log(683)   (assumed to be known now)
    log(21999)=log(3 × 7333) [log(3) log(7333) known]
    log(3)=log(3) [log(3) known]
    log(7333)=log(7333) [log(7333) known]
page 104:
    log(220000)=log(2^5 × 5^4 × 11) [log(2) log(5) log(11) known]
    log(19)=log(19) [log(19) known]
    log(11579)=log(11579)
    log(39)=log(3 × 13) [log(3) log(13) known]
    log(5641)   (assumed to be known now)
  decomposition(24400)
      24400-1=3^2 × 2711
      24400+1=13 × 1877
         → allows the comp. of log(1877)
page 105:
    log(13)=log(13) [log(13) known]
    log(1877)=log(1877) [log(1877) known]
    log(9)=log(3^2) [log(3) known]
    log(2711)=log(2711) [log(2711) known]
  decomposition(244000)
      244000-1=3^3 × 7 × 1291
         → allows the comp. of log(1291)
      244000+1=17 × 31 × 463
         → allows the comp. of log(463)
page 106:
    log(527)=log(17 × 31) [log(17) log(31) known]
    log(463)=log(463) [log(463) known]
    log(27)=log(3^3) [log(3) known]
    log(9037)=log(7 × 1291) [log(7) log(1291) known]
    log(7)=log(7) [log(7) known]
    log(1291)=log(1291) [log(1291) known]
  decomposition(2440000)
      2440000-1=3^2 × 19^2 × 751
         → allows the comp. of log(751)
      2440000+1=23 × 106087
    log(23)=log(23) [log(23) known]
    log(106087)=log(106087)
    log(3249)=log(3^2 × 19^2) [log(3) log(19) known]
page 107:
    log(751)=log(751) [log(751) known]
  decomposition(82810000)
```

82810000-1=$3^3 \times 19 \times 337 \times 479$
→ allows the comp. of log(479)
82810000+1=$61 \times 101 \times 13441$
log(9099)=log($3^3 \times 337$) [log(3) log(337) known]
log(9101)=log($19 \times 479$) [log(19) log(479) known]
log(19)=log($19$) [log(19) known]
log(479)=log($479$) [log(479) known]
decomposition(206000)
206000-1=$113 \times 1823$
→ allows the comp. of log(1823)
206000+1=$3^2 \times 47 \times 487$
→ allows the comp. of log(487)
page 108:
log(483)=log($3 \times 7 \times 23$) [log(3) log(7) log(23) known]
log(487)=log($487$) [log(487) known]
log(113)=log($113$) [log(113) known]
log(1823)=log($1823$) [log(1823) known]
decomposition(2060000)
2060000-1=$19 \times 108421$
2060000+1=$3^2 \times 43 \times 5323$
→ allows the comp. of log(5323)
log(387)=log($3^2 \times 43$) [log(3) log(43) known]
decomposition(5323)
5323-1=$2 \times 3 \times 887$
5323+1=$2^2 \times 11^3$
page 109:
log(19)=log($19$) [log(19) known]
log(108421)=log($108421$)
decomposition(3300)
3300-1=3299
→ allows the comp. of log(3299)
3300+1=3301
→ allows the comp. of log(3301)
log(3301)=log($3301$) [log(3301) known]
log(3299)=log($3299$) [log(3299) known]
decomposition(33000)
33000-1=32999
33000+1=$61 \times 541$
→ allows the comp. of log(541)
page 110:
log(61)=log($61$) [log(61) known]

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    log(541)=log(541) [log(541) known]
    log(32999)=log(32999)
    log(9900)=log(2^2 × 3^2 × 5^2 × 11) [log(2) log(3) log(5) log(11) known]
    log(9901)   (assumed to be known now)
page 111:
    log(19)=log(19) [log(19) known]
    log(521)   (assumed to be known now)
    log(99000)=log(2^3 × 3^2 × 5^3 × 11) [log(2) log(3) log(5) log(11) known]
    log(7)=log(7) [log(7) known]
    log(17143)=log(7 × 31 × 79) [log(7) log(31) log(79) known]
    log(98999)=log(98999)
  decomposition(19800)
      19800-1=13 × 1523
         → allows the comp. of log(1523)
      19800+1=19801
page 112:
    log(19801)=log(19801)
    log(13)=log(13) [log(13) known]
    log(1523)=log(1523) [log(1523) known]
  decomposition(198000)
      198000-1=17 × 19 × 613
         → allows the comp. of log(613)
      198000+1=389 × 509
         → allows the comp. of log(509)
    log(389)=log(389) [log(389) known]
    log(509)=log(509) [log(509) known]
    log(323)=log(17 × 19) [log(17) log(19) known]
    log(613)=log(613) [log(613) known]
page 113:
  decomposition(1980000)
      1980000-1=7 × 61 × 4637
         → allows the comp. of log(4637)
      1980000+1=23 × 31 × 2777
         → allows the comp. of log(2777)
    log(713)=log(23 × 31) [log(23) log(31) known]
    log(2777)=log(2777) [log(2777) known]
    log(427)=log(7 × 61) [log(7) log(61) known]
    log(4637)=log(4637) [log(4637) known]
  decomposition(6800)
      6800-1=13 × 523
         → allows the comp. of log(523)
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      6800+1=3 × 2267
page 114:
    log(3)=log(3) [log(3) known]
    log(2267)=log(2267) [log(2267) known]
    log(13)=log(13) [log(13) known]
    log(523)=log(523) [log(523) known]
  decomposition(68000)
      68000-1=53 × 1283
         → allows the comp. of log(1283)
      68000+1=3 × 19 × 1193
         → allows the comp. of log(1193)
page 115:
    log(57)=log(3 × 19) [log(3) log(19) known]
    log(1193)=log(1193) [log(1193) known]
    log(53)=log(53) [log(53) known]
    log(1283)=log(1283) [log(1283) known]
  decomposition(386000)
      386000-1=53 × 7283
         → allows the comp. of log(7283)
      386000+1=3^2 × 7 × 11 × 557
         → allows the comp. of log(557)
    log(53)=log(53) [log(53) known]
    log(7283)=log(7283) [log(7283) known]
page 116:
    log(693)=log(3^2 × 7 × 11) [log(3) log(7) log(11) known]
    log(557)=log(557) [log(557) known]
    log(1500001)=log(557 × 2693) [log(557) known]
    log(2693)   (assumed to be known now)
  decomposition(2100)
      2100-1=2099
         → allows the comp. of log(2099)
      2100+1=11 × 191
page 117:
    log(2099)=log(2099) [log(2099) known]
  decomposition(21000)
      21000-1=11 × 23 × 83
      21000+1=21001
    log(11)=log(11) [log(11) known]
    log(1909)=log(23 × 83) [log(23) log(83) known]
    log(21001)=log(21001)
  decomposition(210000)
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      210000-1=373 × 563
         → allows the comp. of log(563)
      210000+1=11 × 17 × 1123
         → allows the comp. of log(1123)
page 118:
    log(373)=log(373) [log(373) known]
    log(563)=log(563) [log(563) known]
    log(187)=log(11 × 17) [log(11) log(17) known]
    log(1123)=log(1123) [log(1123) known]
  decomposition(2100000)
      2100000-1=11 × 190909
      2100000+1=2100001
    log(11)=log(11) [log(11) known]
    log(190909)=log(190909)
    log(2100001)=log(2100001)
  decomposition(26800)
      26800-1=3 × 8933
         → allows the comp. of log(8933)
      26800+1=26801
page 119:
    log(3)=log(3) [log(3) known]
    log(8933)=log(8933) [log(8933) known]
    log(26801)=log(26801)
  decomposition(268000)
      268000-1=3 × 157 × 569
         → allows the comp. of log(569)
      268000+1=283 × 947
         → allows the comp. of log(947)
page 120:
    log(471)=log(3 × 157) [log(3) log(157) known]
    log(569)=log(569) [log(569) known]
    log(283)=log(283) [log(283) known]
    log(947)=log(947) [log(947) known]
  decomposition(2680000)
      2680000-1=3 × 7 × 17 × 7507
         → allows the comp. of log(7507)
      2680000+1=743 × 3607
    log(357)=log(3 × 7 × 17) [log(3) log(7) log(17) known]
    log(7507)=log(7507) [log(7507) known]
page 121:
  decomposition(17700)
```

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      17700-1=11 × 1609
         → allows the comp. of log(1609)
      17700+1=31 × 571
         → allows the comp. of log(571)
    log(11)=log(11) [log(11) known]
    log(1609)=log(1609) [log(1609) known]
    log(17701)=log(31 × 571) [log(31) log(571) known]
    log(31)=log(31) [log(31) known]
    log(571)=log(571) [log(571) known]
  decomposition(177000)
      177000-1=263 × 673
         → allows the comp. of log(673)
      177000+1=11 × 16091
page 122:
    log(263)=log(263) [log(263) known]
    log(673)=log(673) [log(673) known]
    log(11)=log(11) [log(11) known]
    log(16091)=log(16091)
  decomposition(1770000)
      1770000-1=7 × 11 × 127 × 181
      1770000+1=1770001
    log(77)=log(7 × 11) [log(7) log(11) known]
page 123:
    log(22987)=log(127 × 181) [log(127) log(181) known]
    log(1770001)=log(1770001)
  decomposition(280000)
      280000-1=3^2 × 53 × 587
         → allows the comp. of log(587)
      280000+1=280001
    log(477)=log(3^2 × 53) [log(3) log(53) known]
    log(587)=log(587) [log(587) known]
    log(280001)=log(280001)
  decomposition(27100)
      27100-1=3^2 × 3011
         → allows the comp. of log(3011)
      27100+1=41 × 661
         → allows the comp. of log(661)
page 124:
    log(9)=log(3^2) [log(3) known]
    log(41)=log(41) [log(41) known]
    log(3011)=log(3011) [log(3011) known]
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    log(661)=log(661) [log(661) known]
  decomposition(271000)
      271000-1=3^3 × 10037
      271000+1=457 × 593
         → allows the comp. of log(593)
page 125:
    log(27)=log(3^3) [log(3) known]
    log(457)=log(457) [log(457) known]
    log(10037)=log(10037)
    log(593)=log(593) [log(593) known]
  decomposition(2710000)
      2710000-1=3^2 × 71 × 4241
         → allows the comp. of log(4241)
      2710000+1=7 × 467 × 829
         → allows the comp. of log(829)
    log(639)=log(3^2 × 71) [log(3) log(71) known]
    log(3269)=log(7 × 467) [log(7) log(467) known]
    log(4241)=log(4241) [log(4241) known]
    log(829)=log(829) [log(829) known]
  decomposition(241000)
      241000-1=3 × 11 × 67 × 109
      241000+1=401 × 601
         → allows the comp. of log(601)
page 126:
    log(2211)=log(3 × 11 × 67) [log(3) log(11) log(67) known]
    log(401)=log(401) [log(401) known]
    log(109)=log(109) [log(109) known]
    log(601)=log(601) [log(601) known]
    log(359999)=log(599 × 601) [log(601) known]
    log(599)   (assumed to be known now)
  decomposition(15600)
      15600-1=19 × 821
         → allows the comp. of log(821)
      15600+1=15601
page 127:
    log(19)=log(19) [log(19) known]
    log(821)=log(821) [log(821) known]
    log(15601)=log(15601)
  decomposition(156000)
      156000-1=257 × 607
         → allows the comp. of log(607)
```

```
      156000+1=73 × 2137
         → allows the comp. of log(2137)
page 128:
    log(257)=log(257) [log(257) known]
    log(73)=log(73) [log(73) known]
    log(607)=log(607) [log(607) known]
    log(2137)=log(2137) [log(2137) known]
  decomposition(1560000)
      1560000-1=7 × 222857
      1560000+1=1249^2
         → allows the comp. of log(1249)
    log(222857)=log(222857)
    log(1249)=log(1249) [log(1249) known]
  decomposition(249000000)
      249000000-1=239 × 1041841
      249000000+1=23 × 59 × 281 × 653
         → allows the comp. of log(653)
page 129:
    log(1357)=log(23 × 59) [log(23) log(59) known]
    log(281)=log(281) [log(281) known]
    log(653)=log(653) [log(653) known]
  decomposition(60800000)
      60800000-1=13 × 47 × 151 × 659
         → allows the comp. of log(659)
      60800000+1=3 × 1669 × 12143
    log(7097)=log(47 × 151) [log(47) log(151) known]
    log(8567)=log(13 × 659) [log(13) log(659) known]
    log(13)=log(13) [log(13) known]
    log(659)=log(659) [log(659) known]
page 130:
  decomposition(410000000)
      410000000-1=17 × 29 × 831643
      410000000+1=3 × 23 × 67 × 131 × 677
         → allows the comp. of log(677)
    log(69)=log(3 × 23) [log(3) log(23) known]
    log(8777)=log(67 × 131) [log(67) log(131) known]
    log(677)=log(677) [log(677) known]
  decomposition(191000000)
      191000000-1=127 × 1503937
      191000000+1=3 × 199 × 463 × 691
         → allows the comp. of log(691)
```

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    log(1389)=log(3 × 463) [log(3) log(463) known]
    log(199)=log(199) [log(199) known]
    log(691)=log(691) [log(691) known]
  decomposition(1760000000)
      1760000000-1=61 × 79 × 521 × 701
         → allows the comp. of log(701)
      1760000000+1=3 × 19 × 109 × 283277
page 131:
    log(521)=log(521) [log(521) known]
    log(4819)=log(61 × 79) [log(61) log(79) known]
    log(701)=log(701) [log(701) known]
  decomposition(18300000)
      18300000-1=53 × 487 × 709
         → allows the comp. of log(709)
      18300000+1=18300001
    log(709)=log(709) [log(709) known]
  decomposition(632000)
      632000-1=619 × 1021
         → allows the comp. of log(1021)
      632000+1=3 × 293 × 719
         → allows the comp. of log(719)
page 132:
    log(619)=log(619) [log(619) known]
    log(879)=log(3 × 293) [log(3) log(293) known]
    log(1021)=log(1021) [log(1021) known]
    log(719)=log(719) [log(719) known]
  decomposition(47500000)
      47500000-1=3 × 29 × 727 × 751
         → allows the comp. of log(727)
      47500000+1=47500001
    log(87)=log(3 × 29) [log(3) log(29) known]
    log(751)=log(751) [log(751) known]
    log(727)=log(727) [log(727) known]
  decomposition(19500000)
      19500000-1=37 × 719 × 733
         → allows the comp. of log(733)
      19500000+1=107 × 182243
page 133:
    log(733)=log(733) [log(733) known]
  decomposition(252000)
      252000-1=11 × 31 × 739
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        → allows the comp. of log(739)
      252000+1=252001
    log(341)=log(11 × 31) [log(11) log(31) known]
    log(739)=log(739) [log(739) known]
    log(252001)=log(252001)
  decomposition(451000)
      451000-1=3^2 × 50111
      451000+1=607 × 743
        → allows the comp. of log(743)
page 134:
    log(9)=log(3^2) [log(3) known]
    log(607)=log(607) [log(607) known]
    log(50111)=log(50111)
    log(743)=log(743) [log(743) known]
    log(2680001)=log(743 × 3607) [log(743) known]
    log(3607)   (assumed to be known now)
  decomposition(2520000)
      2520000-1=47 × 53617
      2520000+1=11 × 193 × 1187
        → allows the comp. of log(1187)
page 135:
    log(47)=log(47) [log(47) known]
    log(2123)=log(11 × 193) [log(11) log(193) known]
    log(53617)=log(53617)
    log(1187)=log(1187) [log(1187) known]
  decomposition(252000000)
      252000000-1=251999999
      252000000+1=11 × 53 × 571 × 757
        → allows the comp. of log(757)
    log(583)=log(11 × 53) [log(11) log(53) known]
    log(571)=log(571) [log(571) known]
    log(757)=log(757) [log(757) known]
  decomposition(29800000)
      29800000-1=3^2 × 19 × 229 × 761
        → allows the comp. of log(761)
      29800000+1=7 × 11^2 × 151 × 233
    log(2563)=log(11 × 233) [log(11) log(233) known]
    log(2519)=log(11 × 229) [log(11) log(229) known]
    log(2869)=log(19 × 151) [log(19) log(151) known]
    log(63)=log(3^2 × 7) [log(3) log(7) known]
    log(761)=log(761) [log(761) known]
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page 136:
  decomposition(1720000000)
      1720000000-1=3^2 × 257 × 769 × 967
         → allows the comp. of log(769)
      1720000000+1=31 × 131 × 423541
    log(967)=log(967) [log(967) known]
    log(2313)=log(3^2 × 257) [log(3) log(257) known]
    log(769)=log(769) [log(769) known]
  decomposition(1420000)
      1420000-1=3 × 7 × 67619
      1420000+1=11 × 167 × 773
         → allows the comp. of log(773)
    log(21)=log(3 × 7) [log(3) log(7) known]
    log(1837)=log(11 × 167) [log(11) log(167) known]
    log(67619)=log(67619)
    log(773)=log(773) [log(773) known]
  decomposition(304000000)
      304000000-1=3 × 331 × 389 × 787
         → allows the comp. of log(787)
      304000000+1=17 × 101^2 × 1753
         → allows the comp. of log(1753)
page 137:
    log(389)=log(389) [log(389) known]
    log(993)=log(3 × 331) [log(3) log(331) known]
    log(787)=log(787) [log(787) known]
  decomposition(39500000)
      39500000-1=7 × 11 × 53 × 9679
         → allows the comp. of log(9679)
      39500000+1=3^3 × 29 × 61 × 827
         → allows the comp. of log(827)
    log(1769)=log(29 × 61) [log(29) log(61) known]
    log(27)=log(3^3) [log(3) known]
    log(827)=log(827) [log(827) known]
  decomposition(48500000)
      48500000-1=131 × 431 × 859
         → allows the comp. of log(859)
      48500000+1=3^2 × 11 × 43 × 11393
    log(131)=log(131) [log(131) known]
    log(431)=log(431) [log(431) known]
    log(859)=log(859) [log(859) known]
page 138:
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    log(3247)=log(17 × 191) [log(17) log(191) known]
    log(21)=log(3 × 7) [log(3) log(7) known]
    log(877)   (assumed to be known now)
  decomposition(33900000)
      33900000-1=7 × 23 × 239 × 881
         → allows the comp. of log(881)
      33900000+1=1123 × 30187
    log(161)=log(7 × 23) [log(7) log(23) known]
    log(239)=log(239) [log(239) known]
    log(881)=log(881) [log(881) known]
  decomposition(69800000)
      69800000-1=41 × 907 × 1877
         → allows the comp. of log(907)
      69800000+1=3 × 23266667
page 139:
    log(1877)=log(1877) [log(1877) known]
    log(41)=log(41) [log(41) known]
    log(907)=log(907) [log(907) known]
  decomposition(5640000)
      5640000-1=61 × 92459
      5640000+1=41 × 151 × 911
         → allows the comp. of log(911)
    log(6191)=log(41 × 151) [log(41) log(151) known]
    log(911)=log(911) [log(911) known]
  decomposition(280000000)
      280000000-1=3^2 × 23 × 1352657
      280000000+1=547 × 557 × 919
         → allows the comp. of log(919)
    log(547)=log(547) [log(547) known]
    log(557)=log(557) [log(557) known]
    log(919)=log(919) [log(919) known]
  decomposition(6660000)
      6660000-1=41 × 162439
      6660000+1=67 × 107 × 929
         → allows the comp. of log(929)
page 140:
    log(67)=log(67) [log(67) known]
    log(107)=log(107) [log(107) known]
    log(929)=log(929) [log(929) known]
  decomposition(81400000)
      81400000-1=3 × 59 × 271 × 1697
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        → allows the comp. of log(1697)
      81400000+1=109 × 797 × 937
        → allows the comp. of log(937)
    log(109)=log(109) [log(109) known]
    log(797)=log(797) [log(797) known]
    log(937)=log(937) [log(937) known]
  decomposition(2690000000)
      2690000000-1=2689999999
      2690000000+1=3^2 × 13 × 53 × 461 × 941
    log(4149)=log(3^2 × 461) [log(3) log(461) known]
    log(689)=log(13 × 53) [log(13) log(53) known]
    log(941)   (assumed to be known now)
  decomposition(4400000)
      4400000-1=47 × 179 × 523
      4400000+1=3^5 × 19 × 953
        → allows the comp. of log(953)
page 141:
    log(4617)=log(3^5 × 19) [log(3) log(19) known]
    log(953)=log(953) [log(953) known]
  decomposition(605000000)
      605000000-1=31 × 101 × 199 × 971
        → allows the comp. of log(971)
      605000000+1=3 × 29 × 6954023
    log(6169)=log(31 × 199) [log(31) log(199) known]
    log(101)=log(101) [log(101) known]
    log(971)=log(971) [log(971) known]
  decomposition(386000000)
      386000000-1=7^2 × 11 × 733 × 977
        → allows the comp. of log(977)
      386000000+1=3^2 × 42888889
    log(733)=log(733) [log(733) known]
    log(539)=log(7^2 × 11) [log(7) log(11) known]
    log(977)=log(977) [log(977) known]
page 142:
  decomposition(89800000)
      89800000-1=3 × 37 × 823 × 983
        → allows the comp. of log(983)
      89800000+1=17 × 73 × 269^2
    log(111)=log(3 × 37) [log(3) log(37) known]
    log(823)=log(823) [log(823) known]
    log(983)=log(983) [log(983) known]
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  decomposition(554000000)
      554000000-1=7 × 163 × 487 × 997
         → allows the comp. of log(997)
      554000000+1=3 × 37 × 439 × 11369
    log(1141)=log(7 × 163) [log(7) log(163) known]
    log(487)=log(487) [log(487) known]
    log(997)=log(997) [log(997) known]
  decomposition(6490000000)
      6490000000-1=3^2 × 7 × 23^2 × 193 × 1009
      6490000000+1=6490000001
    log(1737)=log(3^2 × 193) [log(3) log(193) known]
page 143:
    log(3736327)=log(7 × 23^2 × 1009) [log(7) log(23) known]
    log(1009)   (assumed to be known now)
  decomposition(2020000000)
      2020000000-1=3 × 5881 × 114493
      2020000000+1=23 × 181 × 479 × 1013
         → allows the comp. of log(1013)
    log(4163)=log(23 × 181) [log(23) log(181) known]
    log(479)=log(479) [log(479) known]
    log(1013)=log(1013) [log(1013) known]
  decomposition(58900000)
      58900000-1=3 × 137 × 139 × 1031
         → allows the comp. of log(1031)
      58900000+1=58900001
    log(411)=log(3 × 137) [log(3) log(137) known]
    log(139)=log(139) [log(139) known]
    log(1031)=log(1031) [log(1031) known]
  decomposition(6900000)
      6900000-1=29 × 229 × 1039
         → allows the comp. of log(1039)
      6900000+1=6900001
page 144:
    log(6641)=log(29 × 229) [log(29) log(229) known]
    log(1039)=log(1039) [log(1039) known]
  decomposition(502000000)
      502000000-1=3 × 269 × 593 × 1049
         → allows the comp. of log(1049)
      502000000+1=23 × 21826087
    log(807)=log(3 × 269) [log(3) log(269) known]
    log(593)=log(593) [log(593) known]
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    log(1049)=log(1049) [log(1049) known]
  decomposition(77300000)
      77300000-1=7^2 × 19 × 79 × 1051
         → allows the comp. of log(1051)
      77300000+1=3^5 × 318107
    log(931)=log(7^2 × 19) [log(7) log(19) known]
    log(79)=log(79) [log(79) known]
    log(1051)=log(1051) [log(1051) known]
page 145:
  decomposition(35500000)
      35500000-1=3 × 19 × 587 × 1061
         → allows the comp. of log(1061)
      35500000+1=3371 × 10531
    log(57)=log(3 × 19) [log(3) log(19) known]
    log(587)=log(587) [log(587) known]
    log(1061)=log(1061) [log(1061) known]
  decomposition(2280000000)
      2280000000-1=17 × 281 × 449 × 1063
      2280000000+1=157 × 14522293
    log(4777)=log(17 × 281) [log(17) log(281) known]
    log(449)=log(449) [log(449) known]
    log(1063)   (assumed to be known now)
  decomposition(4220000000)
      4220000000-1=251 × 16812749
      4220000000+1=3^2 × 7^4 × 179 × 1091
    log(2401)=log(7^4) [log(7) known]
    log(1611)=log(3^2 × 179) [log(3) log(179) known]
    log(1091)   (assumed to be known now)
page 146:
  decomposition(1070000000)
      1070000000-1=31 × 34516129
      1070000000+1=3^2 × 7 × 41 × 379 × 1093
         → allows the comp. of log(1093)
    log(2653)=log(7 × 379) [log(7) log(379) known]
    log(369)=log(3^2 × 41) [log(3) log(41) known]
    log(1093)=log(1093) [log(1093) known]
  decomposition(740000000)
      740000000-1=23 × 139 × 211 × 1097
         → allows the comp. of log(1097)
      740000000+1=3 × 13 × 3779 × 5021
    log(3197)=log(23 × 139) [log(23) log(139) known]
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    log(211)=log(211) [log(211) known]
    log(1097)=log(1097) [log(1097) known]
page 147:
  decomposition(1360000)
      1360000-1=3^2 × 137 × 1103
         → allows the comp. of log(1103)
      1360000+1=19 × 31 × 2309
         → allows the comp. of log(2309)
    log(1233)=log(3^2 × 137) [log(3) log(137) known]
    log(1103)=log(1103) [log(1103) known]
  decomposition(131000000)
      131000000-1=13 × 2393 × 4211
      131000000+1=3 × 11 × 59 × 61 × 1103
    log(183)=log(3 × 61) [log(3) log(61) known]
    log(649)=log(11 × 59) [log(11) log(59) known]
    log(1103)=log(1103) [log(1103) known]
  decomposition(82300000)
      82300000-1=3 × 29 × 853 × 1109
         → allows the comp. of log(1109)
      82300000+1=7 × 19 × 149 × 4153
         → allows the comp. of log(4153)
page 148:
    log(87)=log(3 × 29) [log(3) log(29) known]
    log(853)=log(853) [log(853) known]
    log(1109)=log(1109) [log(1109) known]
  decomposition(28600000)
      28600000-1=3 × 9533333
      28600000+1=17 × 37 × 41 × 1109
    log(41)=log(41) [log(41) known]
    log(629)=log(17 × 37) [log(17) log(37) known]
    log(1109)=log(1109) [log(1109) known]
  decomposition(23700000000)
      23700000000-1=13 × 17 × 19 × 31 × 163 × 1117
      23700000000+1=397 × 59697733
    log(5053)=log(31 × 163) [log(31) log(163) known]
    log(4199)=log(13 × 17 × 19) [log(13) log(17) log(19) known]
    log(1117)   (assumed to be known now)
  decomposition(2740000)
      2740000-1=3 × 349 × 2617
         → allows the comp. of log(2617)
      2740000+1=11 × 223 × 1117
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page 149:
    log(2453)=log(11 × 223) [log(11) log(223) known]
    log(1117)=log(1117) [log(1117) known]
  decomposition(913000)
      913000-1=3 × 271 × 1123
      913000+1=419 × 2179
         → allows the comp. of log(2179)
    log(813)=log(3 × 271) [log(3) log(271) known]
    log(1123)=log(1123) [log(1123) known]
page 150:
    log(7969)=log(13 × 613) [log(13) log(613) known]
    log(3001)=log(3001) [log(3001) known]
    log(1129)=log(1129) [log(1129) known]
  decomposition(925000000)
      925000000-1=3 × 7^3 × 11 × 71 × 1151
         → allows the comp. of log(1151)
      925000000+1=925000001
    log(781)=log(11 × 71) [log(11) log(71) known]
    log(1029)=log(3 × 7^3) [log(3) log(7) known]
    log(1151)=log(1151) [log(1151) known]
  decomposition(7310000)
      7310000-1=661 × 11059
      7310000+1=3 × 29 × 73 × 1151
    log(6351)=log(3 × 29 × 73) [log(3) log(29) log(73) known]
    log(1151)=log(1151) [log(1151) known]
  decomposition(21200000000)
      21200000000-1=21199999999
      21200000000+1=3 × 37 × 151 × 1097 × 1153
page 151:
    log(3291)=log(3 × 1097) [log(3) log(1097) known]
    log(5587)=log(37 × 151) [log(37) log(151) known]
    log(1153)   (assumed to be known now)
  decomposition(1860000000)
      1860000000-1=11 × 13 × 29 × 389 × 1153
      1860000000+1=113 × 16460177
    log(4279)=log(11 × 389) [log(11) log(389) known]
    log(377)=log(13 × 29) [log(13) log(29) known]
    log(1153)=log(1153) [log(1153) known]
  decomposition(2590000)
      2590000-1=3 × 61 × 14153
      2590000+1=17 × 131 × 1163
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        → allows the comp. of log(1163)
    log(2227)=log(17 × 131) [log(17) log(131) known]
    log(1163)=log(1163) [log(1163) known]
  decomposition(899000)
      899000-1=773 × 1163
      899000+1=3² × 23 × 43 × 101
page 152:
    log(773)=log(773) [log(773) known]
    log(1163)=log(1163) [log(1163) known]
  decomposition(6170000)
      6170000-1=11 × 479 × 1171
        → allows the comp. of log(1171)
      6170000+1=3 × 2056667
    log(5269)=log(11 × 479) [log(11) log(479) known]
    log(1171)=log(1171) [log(1171) known]
  decomposition(5540000)
      5540000-1=5539999
      5540000+1=3 × 19 × 83 × 1171
    log(4731)=log(3 × 19 × 83) [log(3) log(19) log(83) known]
    log(1171)=log(1171) [log(1171) known]
page 153:
  decomposition(804000000)
      804000000-1=11 × 199 × 311 × 1181
      804000000+1=7 × 47 × 83 × 29443
    log(311)=log(311) [log(311) known]
    log(2189)=log(11 × 199) [log(11) log(199) known]
    log(1181)=log(1181) [log(1181) known]
  decomposition(50000000)
      50000000-1=7 × 23 × 310559
      50000000+1=3 × 19 × 739 × 1187
    log(19)=log(19) [log(19) known]
    log(2217)=log(3 × 739) [log(3) log(739) known]
    log(1187)=log(1187) [log(1187) known]
  decomposition(148000000)
      148000000-1=3 × 7 × 7047619
      148000000+1=131 × 947 × 1193
    log(131)=log(131) [log(131) known]
    log(947)=log(947) [log(947) known]
    log(1193)=log(1193) [log(1193) known]
page 154:
  decomposition(46600000)
```

```
      46600000-1=3 × 1753 × 8861
         → allows the comp. of log(8861)
      46600000+1=7 × 23 × 241 × 1201
         → allows the comp. of log(1201)
    log(161)=log(7 × 23) [log(7) log(23) known]
    log(241)=log(241) [log(241) known]
    log(1201)=log(1201) [log(1201) known]
  decomposition(1440000)
      1440000-1=11 × 109 × 1201
      1440000+1=337 × 4273
         → allows the comp. of log(4273)
    log(1201)=log(1201) [log(1201) known]
  decomposition(10040000)
      10040000-1=19 × 47 × 11243
      10040000+1=3 × 31 × 89 × 1213
         → allows the comp. of log(1213)
page 155:
    log(8277)=log(3 × 31 × 89) [log(3) log(31) log(89) known]
    log(1213)=log(1213) [log(1213) known]
  decomposition(877000)
      877000-1=3 × 241 × 1213
      877000+1=281 × 3121
         → allows the comp. of log(3121)
    log(723)=log(3 × 241) [log(3) log(241) known]
    log(1213)=log(1213) [log(1213) known]
  decomposition(38400000)
      38400000-1=11 × 113 × 30893
      38400000+1=139 × 227 × 1217
         → allows the comp. of log(1217)
    log(139)=log(139) [log(139) known]
    log(227)=log(227) [log(227) known]
    log(1217)=log(1217) [log(1217) known]
  decomposition(673000)
      673000-1=3 × 19 × 11807
      673000+1=7 × 79 × 1217
page 156:
    log(553)=log(7 × 79) [log(7) log(79) known]
    log(1217)=log(1217) [log(1217) known]
    log(57)=log(3 × 19) [log(3) log(19) known]
    log(11807)=log(11807)
  decomposition(8200000)
```

```
      8200000-1=3^2 × 911111
      8200000+1=17 × 19 × 53 × 479
  decomposition(8210000)
      8210000-1=7^2 × 137 × 1223
         → allows the comp. of log(1223)
      8210000+1=3 × 157 × 17431
    log(471)=log(3 × 157) [log(3) log(157) known]
    log(6713)=log(7^2 × 137) [log(7) log(137) known]
page 157:
    log(17431)=log(17431)
    log(1223)=log(1223) [log(1223) known]
  decomposition(4020000)
      4020000-1=199 × 20201
      4020000+1=19 × 173 × 1223
    log(3287)=log(19 × 173) [log(19) log(173) known]
    log(1223)=log(1223) [log(1223) known]
  decomposition(1117000000)
      1117000000-1=3^2 × 124111111
      1117000000+1=13 × 151 × 463 × 1229
         → allows the comp. of log(1229)
    log(463)=log(463) [log(463) known]
    log(1963)=log(13 × 151) [log(13) log(151) known]
    log(1229)=log(1229) [log(1229) known]
  decomposition(112000000)
      112000000-1=3 × 37 × 821 × 1229
      112000000+1=29 × 1409 × 2741
         → allows the comp. of log(2741)
page 158:
    log(111)=log(3 × 37) [log(3) log(37) known]
    log(821)=log(821) [log(821) known]
    log(1229)=log(1229) [log(1229) known]
  decomposition(302000000)
      302000000-1=7 × 101 × 347 × 1231
         → allows the comp. of log(1231)
      302000000+1=3 × 673 × 149579
    log(707)=log(7 × 101) [log(7) log(101) known]
    log(347)=log(347) [log(347) known]
    log(1231)=log(1231) [log(1231) known]
  decomposition(6560000)
      6560000-1=73^2 × 1231
      6560000+1=3^3 × 7 × 61 × 569
```

```
    log(5329)=log(73^2) [log(73) known]
    log(1231)=log(1231) [log(1231) known]
  decomposition(87800000000)
      87800000000-1=87799999999
      87800000000+1=3 × 7 × 37 × 167 × 547 × 1237
         → allows the comp. of log(1237)
page 159:
    log(3829)=log(7 × 547) [log(7) log(547) known]
    log(167)=log(167) [log(167) known]
    log(111)=log(3 × 37) [log(3) log(37) known]
    log(1237)=log(1237) [log(1237) known]
  decomposition(27000000)
      27000000-1=13 × 23 × 73 × 1237
      27000000+1=7 × 43 × 271 × 331
    log(299)=log(13 × 23) [log(13) log(23) known]
    log(73)=log(73) [log(73) known]
    log(1237)=log(1237) [log(1237) known]
  decomposition(701000000)
      701000000-1=7 × 100142857
      701000000+1=3^4 × 13^2 × 41 × 1249
    log(1053)=log(3^4 × 13) [log(3) log(13) known]
    log(533)=log(13 × 41) [log(13) log(41) known]
    log(1249)=log(1249) [log(1249) known]
page 160:
  decomposition(850000000)
      850000000-1=3 × 853 × 332161
      850000000+1=37 × 71 × 257 × 1259
         → allows the comp. of log(1259)
    log(2627)=log(37 × 71) [log(37) log(71) known]
    log(257)=log(257) [log(257) known]
    log(1259)=log(1259) [log(1259) known]
  decomposition(6470000)
      6470000-1=59 × 109661
      6470000+1=3^2 × 571 × 1259
    log(5139)=log(3^2 × 571) [log(3) log(571) known]
    log(1259)=log(1259) [log(1259) known]
  decomposition(7580000000)
      7580000000-1=11 × 13^2 × 31 × 103 × 1277
      7580000000+1=3 × 7 × 17 × 21232493
    log(1859)=log(11 × 13^2) [log(11) log(13) known]
    log(3193)=log(31 × 103) [log(31) log(103) known]
```

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page 161:
    log(1277)   (assumed to be known now)
  decomposition(82000000)
      82000000-1=3^3 × 223 × 13619
      82000000+1=157 × 409 × 1277
    log(409)=log(409) [log(409) known]
    log(157)=log(157) [log(157) known]
    log(1277)=log(1277) [log(1277) known]
  decomposition(18100000000)
      18100000000-1=3^2 × 29 × 59 × 919 × 1279
         → allows the comp. of log(1279)
      18100000000+1=19 × 47 × 20268757
    log(8271)=log(3^2 × 919) [log(3) log(919) known]
    log(1711)=log(29 × 59) [log(29) log(59) known]
    log(1279)=log(1279) [log(1279) known]
  decomposition(66100000)
      66100000-1=3 × 7 × 23 × 107 × 1279
      66100000+1=11^2 × 47 × 59 × 197
    log(483)=log(3 × 7 × 23) [log(3) log(7) log(23) known]
    log(107)=log(107) [log(107) known]
    log(1279)=log(1279) [log(1279) known]
page 162:
  decomposition(7630000)
      7630000-1=3 × 13 × 31 × 6311
         → allows the comp. of log(6311)
      7630000+1=19 × 313 × 1283
    log(5947)=log(19 × 313) [log(19) log(313) known]
    log(1283)=log(1283) [log(1283) known]
    log(6731)=log(53 × 127) [log(53) log(127) known]
    log(139)=log(139) [log(139) known]
    log(1289)   (assumed to be known now)
  decomposition(7230000)
      7230000-1=7^2 × 147551
      7230000+1=71 × 79 × 1289
    log(5609)=log(71 × 79) [log(71) log(79) known]
    log(1289)=log(1289) [log(1289) known]
page 163:
  decomposition(108200000)
      108200000-1=7103 × 15233
      108200000+1=3 × 7 × 13 × 307 × 1291
    log(3991)=log(13 × 307) [log(13) log(307) known]
```

log(21)=log($3 \times 7$) [log(3) log(7) known]
log(1291)=log($1291$) [log(1291) known]
decomposition(898000000)
898000000-1=$3 \times 13 \times 41 \times 433 \times 1297$
$\rightarrow$ allows the comp. of log(1297)
898000000+1=$47 \times 59 \times 323837$
log(5629)=log($13 \times 433$) [log(13) log(433) known]
log(123)=log($3 \times 41$) [log(3) log(41) known]
log(1297)=log($1297$) [log(1297) known]
decomposition(119800000)
119800000-1=$3^3 \times 11 \times 311 \times 1297$
119800000+1=$113 \times 1060177$
log(8397)=log($3^3 \times 311$) [log(3) log(311) known]
log(11)=log($11$) [log(11) known]
log(1297)=log($1297$) [log(1297) known]
page 164:
decomposition(1690000)
1690000-1=$3 \times 433 \times 1301$
1690000+1=$809 \times 2089$
$\rightarrow$ allows the comp. of log(2089)
log(1299)=log($3 \times 433$) [log(3) log(433) known]
log(1301)=log($1301$) [log(1301) known]
decomposition(757000000)
757000000-1=$3^4 \times 7 \times 73 \times 18289$
757000000+1=$47^2 \times 263 \times 1303$
$\rightarrow$ allows the comp. of log(1303)
log(2209)=log($47^2$) [log(47) known]
log(263)=log($263$) [log(263) known]
log(1303)=log($1303$) [log(1303) known]
decomposition(546000000)
546000000-1=$17 \times 157^2 \times 1303$
546000000+1=546000001
log(2669)=log($17 \times 157$) [log(17) log(157) known]
log(157)=log($157$) [log(157) known]
log(1303)=log($1303$) [log(1303) known]
page 165:
decomposition(122200000000)
122200000000-1=$3 \times 7^2 \times 11 \times 67 \times 863 \times 1307$
122200000000+1=$103 \times 1186407767$
log(9493)=log($11 \times 863$) [log(11) log(863) known]
log(9849)=log($3 \times 7^2 \times 67$) [log(3) log(7) log(67) known]

```
    log(1307)=log(1307) [log(1307) known]
  decomposition(94600000)
      94600000-1=3^2 × 13 × 613 × 1319
         → allows the comp. of log(1319)
      94600000+1=29 × 1259 × 2591
         → allows the comp. of log(2591)
    log(7969)=log(13 × 613) [log(13) log(613) known]
    log(9)=log(3^2) [log(3) known]
    log(1319)=log(1319) [log(1319) known]
  decomposition(10920000)
      10920000-1=10919999
      10920000+1=17 × 487 × 1319
    log(8279)=log(17 × 487) [log(17) log(487) known]
    log(1319)=log(1319) [log(1319) known]
page 166:
  decomposition(9140000)
      9140000-1=11 × 17 × 37 × 1321
         → allows the comp. of log(1321)
      9140000+1=3 × 13 × 131 × 1789
         → allows the comp. of log(1789)
    log(6919)=log(11 × 17 × 37) [log(11) log(17) log(37) known]
    log(1321)=log(1321) [log(1321) known]
  decomposition(4070000)
      4070000-1=557 × 7307
         → allows the comp. of log(7307)
      4070000+1=3 × 13 × 79 × 1321
    log(3081)=log(3 × 13 × 79) [log(3) log(13) log(79) known]
    log(1321)=log(1321) [log(1321) known]
  decomposition(38200000000)
      38200000000-1=3 × 7 × 43 × 71 × 449 × 1327
      38200000000+1=53 × 97 × 199 × 37339
    log(3053)=log(43 × 71) [log(43) log(71) known]
    log(9429)=log(3 × 7 × 449) [log(3) log(7) log(449) known]
    log(1327)   (assumed to be known now)
page 167:
  decomposition(1044000000)
      1044000000-1=7 × 167 × 673 × 1327
      1044000000+1=11 × 701 × 135391
    log(167)=log(167) [log(167) known]
    log(4711)=log(7 × 673) [log(7) log(673) known]
    log(1327)=log(1327) [log(1327) known]
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  decomposition(71100000)
      71100000-1=4133 × 17203
      71100000+1=7 × 17 × 439 × 1361
         → allows the comp. of log(1361)
    log(119)=log(7 × 17) [log(7) log(17) known]
    log(439)=log(439) [log(439) known]
    log(1361)=log(1361) [log(1361) known]
  decomposition(65000000)
      65000000-1=163 × 293 × 1361
      65000000+1=3 × 11 × 23 × 85639
    log(163)=log(163) [log(163) known]
    log(293)=log(293) [log(293) known]
page 168:
    log(1361)=log(1361) [log(1361) known]
  decomposition(17200000000)
      17200000000-1=3^5 × 7 × 13 × 569 × 1367
         → allows the comp. of log(1367)
      17200000000+1=23 × 79 × 977 × 9689
         → allows the comp. of log(9689)
    log(7397)=log(13 × 569) [log(13) log(569) known]
    log(1701)=log(3^5 × 7) [log(3) log(7) known]
    log(1367)=log(1367) [log(1367) known]
  decomposition(571000000)
      571000000-1=3 × 190333333
      571000000+1=11 × 13 × 23 × 127 × 1367
    log(2921)=log(23 × 127) [log(23) log(127) known]
    log(143)=log(11 × 13) [log(11) log(13) known]
    log(1367)=log(1367) [log(1367) known]
  decomposition(274000000)
      274000000-1=3 × 7 × 13 × 17 × 43 × 1373
      274000000+1=11 × 24909091
    log(1039)=log(1039) [log(1039) known]
    log(2117)=log(29 × 73) [log(29) log(73) known]
page 169:
    log(9503)=log(13 × 17 × 43) [log(13) log(17) log(43) known]
    log(21)=log(3 × 7) [log(3) log(7) known]
    log(1373)=log(1373) [log(1373) known]
  decomposition(3020000000)
      3020000000-1=29 × 73 × 1039 × 1373
      3020000000+1=3 × 1006666667
    log(1373)=log(1373) [log(1373) known]
```

decomposition(841000000)
841000000-1=3 $\times$ 7 $\times$ 47 $\times$ 617 $\times$ 1381
841000000+1=841000001
log(4319)=log(7 $\times$ 617) [log(7) log(617) known]
log(141)=log(3 $\times$ 47) [log(3) log(47) known]
log(1381)=log(1381) [log(1381) known]
decomposition(85900000)
85900000-1=3 $\times$ 97 $\times$ 211 $\times$ 1399
$\rightarrow$ allows the comp. of log(1399)
85900000+1=11 $\times$ 29 $\times$ 113 $\times$ 2383
$\rightarrow$ allows the comp. of log(2383)
page 170:
log(291)=log(3 $\times$ 97) [log(3) log(97) known]
log(211)=log(211) [log(211) known]
log(1399)=log(1399) [log(1399) known]
decomposition(54000000)
54000000-1=317 $\times$ 170347
54000000+1=$11^3$ $\times$ 29 $\times$ 1399
log(121)=log($11^2$) [log(11) known]
log(319)=log(11 $\times$ 29) [log(11) log(29) known]
log(1399)=log(1399) [log(1399) known]
decomposition(1297000000)
1297000000-1=$3^3$ $\times$ 103 $\times$ 331 $\times$ 1409
1297000000+1=11 $\times$ 117909091
log(2781)=log($3^3$ $\times$ 103) [log(3) log(103) known]
log(331)=log(331) [log(331) known]
log(1409)=log(1409) [log(1409) known]
decomposition(128800000)
128800000-1=$3^2$ $\times$ 89 $\times$ 113 $\times$ 1423
128800000+1=11 $\times$ 467 $\times$ 25073
page 171:
log(1017)=log($3^2$ $\times$ 113) [log(3) log(113) known]
log(89)=log(89) [log(89) known]
log(1423)=log(1423) [log(1423) known]
decomposition(5660000000)
5660000000-1=173 $\times$ 32716763
5660000000+1=$3^2$ $\times$ 37 $\times$ 43 $\times$ 277 $\times$ 1427
$\rightarrow$ allows the comp. of log(1427)
log(2493)=log($3^2$ $\times$ 277) [log(3) log(277) known]
log(1591)=log(37 $\times$ 43) [log(37) log(43) known]
log(1427)=log(1427) [log(1427) known]

decomposition(9080000)
9080000-1=2819 $\times$ 3221
9080000+1=$3^2$ $\times$ 7 $\times$ 101 $\times$ 1427
log(6363)=log($3^2$ $\times$ 7 $\times$ 101) [log(3) log(7) log(101) known]
log(1427)=log(1427) [log(1427) known]
decomposition(52400000)
52400000-1=227 $\times$ 359 $\times$ 643
52400000+1=3 $\times$ 17 $\times$ 719 $\times$ 1429
$\rightarrow$ allows the comp. of log(1429)
page 172:
log(51)=log(3 $\times$ 17) [log(3) log(17) known]
log(719)=log(719) [log(719) known]
log(1429)=log(1429) [log(1429) known]
decomposition(9530000)
9530000-1=41 $\times$ 232439
9530000+1=$3^3$ $\times$ 13 $\times$ 19 $\times$ 1429
log(6669)=log($3^3$ $\times$ 13 $\times$ 19) [log(3) log(13) log(19) known]
log(1429)=log(1429) [log(1429) known]
decomposition(741000000)
741000000-1=$37^2$ $\times$ 541271
741000000+1=$7^2$ $\times$ 61 $\times$ 173 $\times$ 1433
$\rightarrow$ allows the comp. of log(1433)
log(8477)=log($7^2$ $\times$ 173) [log(7) log(173) known]
log(61)=log(61) [log(61) known]
log(1433)=log(1433) [log(1433) known]
decomposition(24500000)
24500000-1=193 $\times$ 126943
24500000+1=3 $\times$ 41 $\times$ 139 $\times$ 1433
page 173:
log(123)=log(3 $\times$ 41) [log(3) log(41) known]
log(139)=log(139) [log(139) known]
log(1433)=log(1433) [log(1433) known]
decomposition(9470000000)
9470000000-1=9469999999
9470000000+1=3 $\times$ 7 $\times$ 11 $\times$ 31 $\times$ 919 $\times$ 1439
log(6433)=log(7 $\times$ 919) [log(7) log(919) known]
log(1023)=log(3 $\times$ 11 $\times$ 31) [log(3) log(11) log(31) known]
log(1439)=log(1439) [log(1439) known]
decomposition(1247000000)
1247000000-1=7 $\times$ 659 $\times$ 270323
1247000000+1=3 $\times$ 13 $\times$ 19 $\times$ 1163 $\times$ 1447

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        → allows the comp. of log(1447)
    log(3489)=log(3 × 1163) [log(3) log(1163) known]
    log(247)=log(13 × 19) [log(13) log(19) known]
    log(1447)=log(1447) [log(1447) known]
  decomposition(11890000)
      11890000-1=3^2 × 11 × 83 × 1447
      11890000+1=11890001
    log(8217)=log(3^2 × 11 × 83) [log(3) log(11) log(83) known]
    log(1447)=log(1447) [log(1447) known]
page 174:
  decomposition(1123000000)
      1123000000-1=3 × 11 × 47 × 499 × 1451
        → allows the comp. of log(1451)
      1123000000+1=23 × 661 × 73867
    log(5489)=log(11 × 499) [log(11) log(499) known]
    log(141)=log(3 × 47) [log(3) log(47) known]
    log(1451)=log(1451) [log(1451) known]
  decomposition(328000000)
      328000000-1=3 × 109333333
      328000000+1=7 × 43 × 751 × 1451
    log(301)=log(7 × 43) [log(7) log(43) known]
    log(751)=log(751) [log(751) known]
    log(1451)=log(1451) [log(1451) known]
  decomposition(28900000000)
      28900000000-1=3^2 × 13 × 47 × 1453 × 3617
      28900000000+1=77237 × 374173
    log(5499)=log(3^2 × 13 × 47) [log(3) log(13) log(47) known]
    log(3617)=log(3617) [log(3617) known]
    log(1453)=log(1453) [log(1453) known]
page 175:
  decomposition(13220000)
      13220000-1=13 × 17 × 41 × 1459
        → allows the comp. of log(1459)
      13220000+1=3^2 × 1468889
    log(9061)=log(13 × 17 × 41) [log(13) log(17) log(41) known]
    log(1459)=log(1459) [log(1459) known]
  decomposition(1370000)
      1370000-1=37 × 61 × 607
      1370000+1=3 × 313 × 1459
    log(939)=log(3 × 313) [log(3) log(313) known]
    log(1459)=log(1459) [log(1459) known]
```

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  decomposition(68300000)
      68300000-1=17 × 4017647
      68300000+1=3^2 × 7 × 11 × 67 × 1471
         → allows the comp. of log(1471)
    log(693)=log(3^2 × 7 × 11) [log(3) log(7) log(11) known]
    log(67)=log(67) [log(67) known]
    log(1471)=log(1471) [log(1471) known]
  decomposition(9460000)
      9460000-1=3^2 × 151 × 6961
         → allows the comp. of log(6961)
      9460000+1=59 × 109 × 1471
page 176:
    log(6431)=log(59 × 109) [log(59) log(109) known]
    log(1471)=log(1471) [log(1471) known]
  decomposition(10250000)
      10250000-1=37 × 139 × 1993
         → allows the comp. of log(1993)
      10250000+1=3^2 × 769 × 1481
         → allows the comp. of log(1481)
    log(6921)=log(3^2 × 769) [log(3) log(769) known]
    log(1481)=log(1481) [log(1481) known]
  decomposition(1364000)
      1364000-1=7 × 13^2 × 1153
      1364000+1=3 × 307 × 1481
    log(921)=log(3 × 307) [log(3) log(307) known]
    log(1481)=log(1481) [log(1481) known]
  decomposition(1415000000)
      1415000000-1=7^2 × 647 × 44633
      1415000000+1=3 × 47 × 67 × 101 × 1483
         → allows the comp. of log(1483)
page 177:
    log(6767)=log(67 × 101) [log(67) log(101) known]
    log(141)=log(3 × 47) [log(3) log(47) known]
    log(1483)=log(1483) [log(1483) known]
  decomposition(6150000)
      6150000-1=587 × 10477
      6150000+1=11 × 13 × 29 × 1483
    log(4147)=log(11 × 13 × 29) [log(11) log(13) log(29) known]
    log(1483)=log(1483) [log(1483) known]
  decomposition(34300000000)
      34300000000-1=3^2 × 37 × 113 × 613 × 1487
```

```
      34300000000+1=1229 × 27908869
    log(4181)=log(37 × 113) [log(37) log(113) known]
    log(5517)=log(3^2 × 613) [log(3) log(613) known]
    log(1487)   (assumed to be known now)
  decomposition(49700000)
      49700000-1=113 × 439823
      49700000+1=3 × 13 × 857 × 1487
page 178:
    log(39)=log(3 × 13) [log(3) log(13) known]
    log(857)=log(857) [log(857) known]
    log(1487)=log(1487) [log(1487) known]
  decomposition(1074000000)
      1074000000-1=37 × 109 × 283 × 941
      1074000000+1=811 × 887 × 1493
    log(811)=log(811) [log(811) known]
    log(887)=log(887) [log(887) known]
    log(1493)=log(1493) [log(1493) known]
  decomposition(120000000)
      120000000-1=7 × 29 × 397 × 1489
         → allows the comp. of log(1489)
      120000000+1=11 × 277 × 39383
    log(203)=log(7 × 29) [log(7) log(29) known]
    log(397)=log(397) [log(397) known]
    log(1489)=log(1489) [log(1489) known]
  decomposition(28900000)
      28900000-1=3^2 × 43 × 53 × 1409
      28900000+1=13 × 1489 × 1493
page 179:
    log(13)=log(13) [log(13) known]
    log(1493)=log(1493) [log(1493) known]
    log(1489)=log(1489) [log(1489) known]
  decomposition(1156000000)
      1156000000-1=3 × 7 × 11^2 × 281 × 1619
         → allows the comp. of log(1619)
      1156000000+1=13 × 29 × 1613 × 1901
    log(847)=log(7 × 11^2) [log(7) log(11) known]
    log(843)=log(3 × 281) [log(3) log(281) known]
    log(1619)=log(1619) [log(1619) known]
  decomposition(139200000)
      139200000-1=139199999
      139200000+1=127 × 677 × 1619
```

```
    log(127)=log(127) [log(127) known]
    log(677)=log(677) [log(677) known]
    log(1619)=log(1619) [log(1619) known]
  decomposition(10870000000)
      10870000000-1=3 × 1493 × 1499 × 1619
      10870000000+1=7 × 607 × 2558249
page 180:
    log(4479)=log(3 × 1493) [log(3) log(1493) known]
    log(1619)=log(1619) [log(1619) known]
    log(1499)   (assumed to be known now)
  decomposition(2250000)
      2250000-1=19 × 79 × 1499
      2250000+1=13 × 17 × 10181
    log(1501)=log(19 × 79) [log(19) log(79) known]
    log(1499)=log(1499) [log(1499) known]
  decomposition(94300000)
      94300000-1=3 × 71 × 293 × 1511
         → allows the comp. of log(1511)
      94300000+1=47^2 × 42689
    log(213)=log(3 × 71) [log(3) log(71) known]
    log(293)=log(293) [log(293) known]
    log(1511)=log(1511) [log(1511) known]
  decomposition(3640000)
      3640000-1=3 × 11 × 73 × 1511
      3640000+1=19 × 191579
page 181:
    log(2409)=log(3 × 11 × 73) [log(3) log(11) log(73) known]
    log(1511)=log(1511) [log(1511) known]
  decomposition(11290000)
      11290000-1=3 × 7 × 353 × 1523
      11290000+1=523 × 21587
    log(7413)=log(3 × 7 × 353) [log(3) log(7) log(353) known]
    log(1523)=log(1523) [log(1523) known]
  decomposition(10300000000)
      10300000000-1=3 × 61 × 97 × 379 × 1531
         → allows the comp. of log(1531)
      10300000000+1=17 × 23 × 26342711
    log(5917)=log(61 × 97) [log(61) log(97) known]
    log(1137)=log(3 × 379) [log(3) log(379) known]
    log(1531)=log(1531) [log(1531) known]
  decomposition(42300000)
```

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      42300000-1=7 × 1531 × 3947
         → allows the comp. of log(3947)
      42300000+1=42300001
page 182:
  decomposition(110800000)
      110800000-1=3^2 × 17^2 × 41 × 1039
      110800000+1=13 × 19 × 293 × 1531
    log(293)=log(293) [log(293) known]
    log(247)=log(13 × 19) [log(13) log(19) known]
    log(1531)=log(1531) [log(1531) known]
    log(7)=log(7) [log(7) known]
    log(3947)=log(3947) [log(3947) known]
  decomposition(919000000)
      919000000-1=3^6 × 19 × 43 × 1543
         → allows the comp. of log(1543)
      919000000+1=919000001
    log(729)=log(3^6) [log(3) known]
    log(817)=log(19 × 43) [log(19) log(43) known]
    log(1543)=log(1543) [log(1543) known]
page 183:
  decomposition(624000000)
      624000000-1=7 × 499 × 178643
      624000000+1=283 × 1429 × 1543
    log(283)=log(283) [log(283) known]
    log(1429)=log(1429) [log(1429) known]
    log(1543)=log(1543) [log(1543) known]
  decomposition(45000000)
      45000000-1=11 × 19 × 139 × 1549
      45000000+1=41 × 347 × 3163
         → allows the comp. of log(3163)
    log(139)=log(139) [log(139) known]
    log(209)=log(11 × 19) [log(11) log(19) known]
    log(1549)=log(1549) [log(1549) known]
  decomposition(200000000)
      200000000-1=89 × 1447 × 1553
         → allows the comp. of log(1553)
      200000000+1=3 × 66666667
page 184:
    log(89)=log(89) [log(89) known]
    log(1447)=log(1447) [log(1447) known]
    log(1553)=log(1553) [log(1553) known]
```

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  decomposition(110600000)
      110600000-1=43 × 2572093
      110600000+1=3^2 × 41 × 193 × 1553
    log(193)=log(193) [log(193) known]
    log(369)=log(3^2 × 41) [log(3) log(41) known]
    log(1553)=log(1553) [log(1553) known]
  decomposition(2645000000)
      2645000000-1=619 × 1531 × 2791
      2645000000+1=3^4 × 7 × 1049 × 4447
    log(619)=log(619) [log(619) known]
    log(1531)=log(1531) [log(1531) known]
    log(2791)   (assumed to be known now)
  decomposition(146000000)
      146000000-1=145999999
      146000000+1=3 × 7 × 47 × 53 × 2791
page 185:
    log(159)=log(3 × 53) [log(3) log(53) known]
    log(329)=log(7 × 47) [log(7) log(47) known]
    log(2791)=log(2791) [log(2791) known]
  decomposition(27910000000)
      27910000000-1=3^2 × 7 × 263 × 397 × 4243
         → allows the comp. of log(4243)
      27910000000+1=13^2 × 165147929
    log(2367)=log(3^2 × 263) [log(3) log(263) known]
    log(2779)=log(7 × 397) [log(7) log(397) known]
    log(4243)=log(4243) [log(4243) known]
  decomposition(1791000000)
      1791000000-1=3881 × 461479
      1791000000+1=7 × 47 × 1283 × 4243
    log(329)=log(7 × 47) [log(7) log(47) known]
    log(1283)=log(1283) [log(1283) known]
    log(4243)=log(4243) [log(4243) known]
  decomposition(848600000)
      848600000-1=13 × 17 × 389 × 9871
         → allows the comp. of log(9871)
      848600000+1=3^2 × 29 × 41 × 79301
    log(221)=log(13 × 17) [log(13) log(17) known]
page 186:
    log(389)=log(389) [log(389) known]
    log(9871)=log(9871) [log(9871) known]
  decomposition(58920000)
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      58920000-1=47 × 127 × 9871
      58920000+1=7^2 × 67 × 131 × 137
    log(5969)=log(47 × 127) [log(47) log(127) known]
    log(9871)=log(9871) [log(9871) known]
  decomposition(517200000)
      517200000-1=2957 × 174907
      517200000+1=31 × 43 × 67 × 5791
         → allows the comp. of log(5791)
    log(67)=log(67) [log(67) known]
    log(1333)=log(31 × 43) [log(31) log(43) known]
    log(5791)=log(5791) [log(5791) known]
  decomposition(61900000)
      61900000-1=3 × 7 × 509 × 5791
      61900000+1=37 × 71 × 23563
    log(21)=log(3 × 7) [log(3) log(7) known]
page 187:
    log(509)=log(509) [log(509) known]
    log(5791)=log(5791) [log(5791) known]
  decomposition(641000000)
      641000000-1=71 × 1559 × 5791
         → allows the comp. of log(1559)
      641000000+1=3 × 613 × 348559
    log(71)=log(71) [log(71) known]
    log(5791)=log(5791) [log(5791) known]
    log(1559)=log(1559) [log(1559) known]
  decomposition(138500000)
      138500000-1=11 × 331 × 38039
      138500000+1=3^2 × 1559 × 9871
    log(9)=log(3^2) [log(3) known]
    log(9871)=log(9871) [log(9871) known]
    log(1559)=log(1559) [log(1559) known]
  decomposition(401000000)
      401000000-1=400999999
      401000000+1=3 × 197 × 433 × 1567
         → allows the comp. of log(1567)
page 188:
    log(433)=log(433) [log(433) known]
    log(591)=log(3 × 197) [log(3) log(197) known]
    log(1567)=log(1567) [log(1567) known]
  decomposition(6420000)
      6420000-1=17 × 241 × 1567
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      6420000+1=7 × 827 × 1109
    log(4097)=log(17 × 241) [log(17) log(241) known]
    log(1567)=log(1567) [log(1567) known]
    log(188000000)=log(2^8 × 5^6 × 47) [log(2) log(5) log(47) known]
    log(253)=log(11 × 23) [log(11) log(23) known]
    log(473)=log(11 × 43) [log(11) log(43) known]
    log(1571)   (assumed to be known now)
  decomposition(30900000)
      30900000-1=13 × 17 × 89 × 1571
      30900000+1=11 × 2809091
page 189:
    log(89)=log(89) [log(89) known]
    log(221)=log(13 × 17) [log(13) log(17) known]
    log(1571)=log(1571) [log(1571) known]
  decomposition(900000000)
      900000000-1=19 × 131 × 229 × 1579
      900000000+1=409 × 2200489
    log(229)=log(229) [log(229) known]
    log(2489)=log(19 × 131) [log(19) log(131) known]
    log(1579)=log(1579) [log(1579) known]
  decomposition(670000000)
      670000000-1=3 × 223333333
      670000000+1=11 × 109 × 353 × 1583
         → allows the comp. of log(1583)
    log(353)=log(353) [log(353) known]
    log(1199)=log(11 × 109) [log(11) log(109) known]
    log(1583)=log(1583) [log(1583) known]
  decomposition(36800000)
      36800000-1=4517 × 8147
      36800000+1=3^4 × 7 × 41 × 1583
page 190:
    log(41)=log(41) [log(41) known]
    log(567)=log(3^4 × 7) [log(3) log(7) known]
    log(1583)=log(1583) [log(1583) known]
  decomposition(563200000000)
      563200000000-1=3 × 7^2 × 13 × 97 × 479 × 6343
         → allows the comp. of log(6343)
      563200000000+1=8009 × 70320889
    log(291)=log(3 × 97) [log(3) log(97) known]
    log(479)=log(479) [log(479) known]
    log(637)=log(7^2 × 13) [log(7) log(13) known]
```

log(6343)=log($6343$) [log(6343) known]
decomposition(58400000)
58400000-1=$7 \times 8342857$
58400000+1=$3^3 \times 11 \times 31 \times 6343$
log(9207)=log($3^3 \times 11 \times 31$) [log(3) log(11) log(31) known]
log(6343)=log($6343$) [log(6343) known]
decomposition(1327000000)
1327000000-1=$3 \times 13^2 \times 421 \times 6217$
$\rightarrow$ allows the comp. of log(6217)
1327000000+1=$131 \times 1597 \times 6343$
$\rightarrow$ allows the comp. of log(1597)
log(6343)=log($6343$) [log(6343) known]
log(131)=log($131$) [log(131) known]
page 191:
log(1597)=log($1597$) [log(1597) known]
decomposition(49400000)
49400000-1=$11 \times 109 \times 41201$
49400000+1=$3^2 \times 7 \times 491 \times 1597$
log(63)=log($3^2 \times 7$) [log(3) log(7) known]
log(491)=log($491$) [log(491) known]
log(1597)=log($1597$) [log(1597) known]
decomposition(707000000)
707000000-1=$383 \times 1153 \times 1601$
$\rightarrow$ allows the comp. of log(1601)
707000000+1=$3 \times 239 \times 986053$
log(383)=log($383$) [log(383) known]
log(1153)=log($1153$) [log(1153) known]
log(1601)=log($1601$) [log(1601) known]
decomposition(93500000)
93500000-1=$31 \times 37 \times 81517$
93500000+1=$3^4 \times 7 \times 103 \times 1601$
log(81)=log($3^4$) [log(3) known]
log(721)=log($7 \times 103$) [log(7) log(103) known]
log(1601)=log($1601$) [log(1601) known]
page 192:
decomposition(94400000)
94400000-1=$19 \times 41 \times 121181$
94400000+1=$3^2 \times 61 \times 107 \times 1607$
$\rightarrow$ allows the comp. of log(1607)
log(963)=log($3^2 \times 107$) [log(3) log(107) known]
log(61)=log($61$) [log(61) known]

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    log(1607)=log(1607) [log(1607) known]
  decomposition(14050000)
      14050000-1=3^2 × 1561111
      14050000+1=7 × 1249 × 1607
    log(8743)=log(7 × 1249) [log(7) log(1249) known]
    log(1607)=log(1607) [log(1607) known]
  decomposition(136300000)
      136300000-1=3 × 11 × 17 × 151 × 1609
      136300000+1=23 × 5926087
    log(453)=log(3 × 151) [log(3) log(151) known]
    log(187)=log(11 × 17) [log(11) log(17) known]
    log(1609)=log(1609) [log(1609) known]
  decomposition(134400000)
      134400000-1=97 × 859 × 1613
         → allows the comp. of log(1613)
      134400000+1=134400001
page 193:
    log(859)=log(859) [log(859) known]
    log(97)=log(97) [log(97) known]
    log(1613)=log(1613) [log(1613) known]
  decomposition(26900000)
      26900000-1=7 × 37 × 283 × 367
      26900000+1=3^2 × 17 × 109 × 1613
    log(153)=log(3^2 × 17) [log(3) log(17) known]
    log(109)=log(109) [log(109) known]
    log(1613)=log(1613) [log(1613) known]
  decomposition(8460000)
      8460000-1=17 × 307 × 1621
         → allows the comp. of log(1621)
      8460000+1=11 × 769091
    log(5219)=log(17 × 307) [log(17) log(307) known]
    log(1621)=log(1621) [log(1621) known]
page 194:
  decomposition(7750000)
      7750000-1=3^6 × 10631
      7750000+1=7 × 683 × 1621
    log(4781)=log(7 × 683) [log(7) log(683) known]
    log(1621)=log(1621) [log(1621) known]
  decomposition(3730000000)
      3730000000-1=3 × 11 × 23 × 269 × 18269
      3730000000+1=7^2 × 13 × 59 × 61 × 1627
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    log(793)=log(13 × 61) [log(13) log(61) known]
    log(2891)=log(7^2 × 59) [log(7) log(59) known]
    log(1627)   (assumed to be known now)
  decomposition(150600000)
      150600000-1=11 × 197 × 69497
      150600000+1=151 × 613 × 1627
    log(151)=log(151) [log(151) known]
    log(613)=log(613) [log(613) known]
    log(1627)=log(1627) [log(1627) known]
  decomposition(122000000000)
      122000000000-1=121999999999
      122000000000+1=3 × 11 × 31 × 263 × 277 × 1637
         → allows the comp. of log(1637)
page 195:
    log(8153)=log(31 × 263) [log(31) log(263) known]
    log(9141)=log(3 × 11 × 277) [log(3) log(11) log(277) known]
    log(1637)=log(1637) [log(1637) known]
  decomposition(775000000)
      775000000-1=3^2 × 41 × 1283 × 1637
      775000000+1=775000001
    log(369)=log(3^2 × 41) [log(3) log(41) known]
    log(1283)=log(1283) [log(1283) known]
    log(1637)=log(1637) [log(1637) known]
  decomposition(2000000)
      2000000-1=17 × 71 × 1657
         → allows the comp. of log(1657)
      2000000+1=3 × 666667
    log(1207)=log(17 × 71) [log(17) log(71) known]
    log(1657)=log(1657) [log(1657) known]
page 196:
  decomposition(14570000)
      14570000-1=14569999
      14570000+1=3^2 × 977 × 1657
    log(8793)=log(3^2 × 977) [log(3) log(977) known]
    log(1657)=log(1657) [log(1657) known]
  decomposition(70300000)
      70300000-1=3^2 × 7 × 11 × 61 × 1663
         → allows the comp. of log(1663)
      70300000+1=70300001
    log(63)=log(3^2 × 7) [log(3) log(7) known]
    log(671)=log(11 × 61) [log(11) log(61) known]
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    log(1663)=log(1663) [log(1663) known]
  decomposition(1209000)
      1209000-1=11 × 131 × 839
      1209000+1=727 × 1663
    log(727)=log(727) [log(727) known]
    log(1663)=log(1663) [log(1663) known]
page 197:
  decomposition(41700000000)
      41700000000-1=7 × 37 × 59 × 1637 × 1667
      41700000000+1=11
    log(59)=log(59) [log(59) known]
    log(259)=log(7 × 37) [log(7) log(37) known]
    log(1637)=log(1637) [log(1637) known]
    log(1667)=log(1667) [log(1667) known]
  decomposition(69300000000)
      69300000000-1=19^2 × 11833 × 16223
      69300000000+1=31 × 37 × 43 × 239 × 5879
         → allows the comp. of log(5879)
    log(1591)=log(37 × 43) [log(37) log(43) known]
    log(7409)=log(31 × 239) [log(31) log(239) known]
    log(5879)=log(5879) [log(5879) known]
  decomposition(48280000000)
      48280000000-1=3 × 7 × 11 × 73 × 487 × 5879
      48280000000+1=83 × 293 × 1985279
    log(1533)=log(3 × 7 × 73) [log(3) log(7) log(73) known]
    log(5357)=log(11 × 487) [log(11) log(487) known]
    log(5879)=log(5879) [log(5879) known]
page 198:
  decomposition(587900000)
      587900000-1=43 × 929 × 14717
      587900000+1=3 × 13 × 17 × 103 × 8609
         → allows the comp. of log(8609)
    log(39)=log(3 × 13) [log(3) log(13) known]
    log(1751)=log(17 × 103) [log(17) log(103) known]
    log(8609)=log(8609) [log(8609) known]
  decomposition(8336000000)
      8336000000-1=211 × 39507109
      8336000000+1=3 × 7^3 × 941 × 8609
    log(1029)=log(3 × 7^3) [log(3) log(7) known]
    log(941)=log(941) [log(941) known]
    log(8609)=log(8609) [log(8609) known]
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  decomposition(106100000)
      106100000-1=151 × 421 × 1669
         → allows the comp. of log(1669)
      106100000+1=3^2 × 7 × 1684127
    log(151)=log(151) [log(151) known]
    log(421)=log(421) [log(421) known]
    log(1669)=log(1669) [log(1669) known]
page 199:
  decomposition(273000000)
      273000000-1=19 × 1669 × 8609
      273000000+1=97 × 2814433
    log(19)=log(19) [log(19) known]
    log(8609)=log(8609) [log(8609) known]
    log(1669)=log(1669) [log(1669) known]
  decomposition(3810000000)
      3810000000-1=13 × 17^2 × 599 × 1693
      3810000000+1=37 × 1753 × 58741
    log(289)=log(17^2) [log(17) known]
    log(7787)=log(13 × 599) [log(13) log(599) known]
    log(1693)=log(1693) [log(1693) known]
  decomposition(258000000)
      258000000-1=15643 × 16493
      258000000+1=7 × 37 × 587 × 1697
    log(259)=log(7 × 37) [log(7) log(37) known]
    log(587)=log(587) [log(587) known]
    log(1697)=log(1697) [log(1697) known]
page 200:
  decomposition(81400000)
      81400000-1=3 × 59 × 271 × 1697
      81400000+1=109 × 797 × 937
    log(177)=log(3 × 59) [log(3) log(59) known]
    log(271)=log(271) [log(271) known]
    log(1697)=log(1697) [log(1697) known]
  decomposition(27000000000)
      27000000000-1=7 × 757 × 1699 × 2999
         → allows the comp. of log(1699)
      27000000000+1=13 × 613 × 1129 × 3001
    log(2999)=log(2999) [log(2999) known]
    log(5299)=log(7 × 757) [log(7) log(757) known]
    log(1699)=log(1699) [log(1699) known]
  decomposition(155800000)
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155800000-1=$3^2 \times 23 \times 443 \times 1699$
155800000+1=$7 \times 1423 \times 15641$
log(207)=log($3^2 \times 23$) [log(3) log(23) known]
log(443)=log(443) [log(443) known]
log(1699)=log(1699) [log(1699) known]
decomposition(11320000000)
11320000000-1=$3 \times 7 \times 11^2 \times 23 \times 109 \times 1777$
11320000000+1=$17 \times 41 \times 1867 \times 8699$
page 201:
log(2507)=log($23 \times 109$) [log(23) log(109) known]
log(2541)=log($3 \times 7 \times 11^2$) [log(3) log(7) log(11) known]
log(1777) (assumed to be known now)
decomposition(52800000)
52800000-1=$7^2 \times 37 \times 29123$
52800000+1=$43 \times 691 \times 1777$
log(1777)=log(1777) [log(1777) known]
decomposition(1504000000000)
1504000000000-1=$3^2 \times 7^2 \times 1123 \times 1709 \times 1777$
$\rightarrow$ allows the comp. of log(1709)
1504000000000+1=1504000000001
page 202:
log(441)=log($3^2 \times 7^2$) [log(3) log(7) known]
log(1123)=log(1123) [log(1123) known]
log(1777)=log(1777) [log(1777) known]
log(1709)=log(1709) [log(1709) known]
decomposition(34100000000)
34100000000-1=$13 \times 127 \times 139^2 \times 1069$
34100000000+1=$3^3 \times 17 \times 29 \times 1499 \times 1709$
log(4437)=log($3^2 \times 17 \times 29$) [log(3) log(17) log(29) known]
log(4497)=log($3 \times 1499$) [log(3) log(1499) known]
log(1709)=log(1709) [log(1709) known]
decomposition(10100000000)
10100000000-1=$17 \times 47 \times 179 \times 70619$
10100000000+1=$3 \times 7^2 \times 13 \times 37 \times 83 \times 1721$
$\rightarrow$ allows the comp. of log(1721)
log(1911)=log($3 \times 7^2 \times 13$) [log(3) log(7) log(13) known]
log(3071)=log($37 \times 83$) [log(37) log(83) known]
log(1721)=log(1721) [log(1721) known]
decomposition(1495000000)
1495000000-1=$3^2 \times 166111111$
1495000000+1=$11 \times 157 \times 503 \times 1721$

```
page 203:
    log(157)=log(157) [log(157) known]
    log(5533)=log(11 × 503) [log(11) log(503) known]
    log(1721)=log(1721) [log(1721) known]
  decomposition(295000000)
      295000000-1=3 × 7 × 31 × 263 × 1723
         → allows the comp. of log(1723)
      295000000+1=23 × 37 × 346651
    log(263)=log(263) [log(263) known]
    log(651)=log(3 × 7 × 31) [log(3) log(7) log(31) known]
  decomposition(122700000)
      122700000-1=17 × 59 × 71 × 1723
      122700000+1=122700001
    log(59)=log(59) [log(59) known]
    log(1207)=log(17 × 71) [log(17) log(71) known]
    log(1723)=log(1723) [log(1723) known]
  decomposition(235000000)
      235000000-1=3^2 × 13 × 19 × 61 × 1733
         → allows the comp. of log(1733)
      235000000+1=235000001
page 204:
    log(117)=log(3^2 × 13) [log(3) log(13) known]
    log(1159)=log(19 × 61) [log(19) log(61) known]
    log(1733)=log(1733) [log(1733) known]
  decomposition(111600000)
      111600000-1=7^2 × 2277551
      111600000+1=71 × 907 × 1733
    log(71)=log(71) [log(71) known]
    log(907)=log(907) [log(907) known]
    log(1733)=log(1733) [log(1733) known]
  decomposition(273900000)
      273900000-1=273899999
      273900000+1=173 × 487 × 3251
         → allows the comp. of log(3251)
    log(173)=log(173) [log(173) known]
    log(487)=log(487) [log(487) known]
    log(3251)=log(3251) [log(3251) known]
  decomposition(3850000000)
      3850000000-1=3 × 41 × 31300813
      3850000000+1=19 × 157 × 397 × 3251
page 205:
```

```
    log(397)=log(397) [log(397) known]
    log(2983)=log(19 × 157) [log(19) log(157) known]
    log(3251)=log(3251) [log(3251) known]
  decomposition(18690000)
      18690000-1=3251 × 5749
         → allows the comp. of log(5749)
      18690000+1=11 × 1699091
    log(3251)=log(3251) [log(3251) known]
    log(5749)=log(5749) [log(5749) known]
  decomposition(38800000)
      38800000-1=3^3 × 7 × 29 × 7079
         → allows the comp. of log(7079)
      38800000+1=17 × 397 × 5749
    log(17)=log(17) [log(17) known]
    log(397)=log(397) [log(397) known]
    log(5749)=log(5749) [log(5749) known]
  decomposition(3056000000)
      3056000000-1=13 × 235076923
      3056000000+1=3 × 397 × 593 × 4327
    log(593)=log(593) [log(593) known]
    log(1191)=log(3 × 397) [log(3) log(397) known]
page 206:
    log(4327)   (assumed to be known now)
  decomposition(31560000000)
      31560000000-1=11 × 23 × 127 × 227 × 4327
      31560000000+1=37 × 103 × 8281291
    log(2497)=log(11 × 227) [log(11) log(227) known]
    log(2921)=log(23 × 127) [log(23) log(127) known]
    log(4327)=log(4327) [log(4327) known]
  decomposition(4327000000)
      4327000000-1=3 × 7 × 197 × 211 × 4957
         → allows the comp. of log(4957)
      4327000000+1=43 × 2411 × 41737
    log(591)=log(3 × 197) [log(3) log(197) known]
    log(1477)=log(7 × 211) [log(7) log(211) known]
    log(4957)=log(4957) [log(4957) known]
  decomposition(134300000)
      134300000-1=19 × 7068421
      134300000+1=3 × 11 × 821 × 4957
    log(83)=log(83) [log(83) known]
    log(821)=log(821) [log(821) known]
```

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    log(4957)=log(4957) [log(4957) known]
page 207:
  decomposition(630000000)
      630000000-1=37 × 17027027
      630000000+1=73 × 1741 × 4957
         → allows the comp. of log(1741)
    log(73)=log(73) [log(73) known]
    log(4957)=log(4957) [log(4957) known]
    log(1741)=log(1741) [log(1741) known]
  decomposition(1111000000)
      1111000000-1=3 × 37 × 1741 × 5749
      1111000000+1=41 × 271 × 99991
    log(111)=log(3 × 37) [log(3) log(37) known]
    log(5749)=log(5749) [log(5749) known]
    log(1741)=log(1741) [log(1741) known]
  decomposition(13960000)
      13960000-1=3^3 × 191 × 2707
         → allows the comp. of log(2707)
      13960000+1=11 × 1269091
    log(5157)=log(3^3 × 191) [log(3) log(191) known]
    log(2707)=log(2707) [log(2707) known]
  decomposition(1963000000)
      1963000000-1=3^2 × 197 × 409 × 2707
      1963000000+1=1963000001
page 208:
    log(197)=log(197) [log(197) known]
    log(3681)=log(3^2 × 409) [log(3) log(409) known]
    log(2707)=log(2707) [log(2707) known]
  decomposition(68100000)
      68100000-1=11 × 2287 × 2707
         → allows the comp. of log(2287)
      68100000+1=3167 × 21503
    log(2707)=log(2707) [log(2707) known]
    log(11)=log(11) [log(11) known]
    log(2287)=log(2287) [log(2287) known]
  decomposition(8530000000)
      8530000000-1=3 × 29 × 43 × 997 × 2287
      8530000000+1=8530000001
    log(1247)=log(29 × 43) [log(29) log(43) known]
    log(2991)=log(3 × 997) [log(3) log(997) known]
    log(2287)=log(2287) [log(2287) known]
```

page 209:
  decomposition(110000000000)
      110000000000-1=919 $\times$ 119695321
      110000000000+1=3 $\times$ 37 $\times$ 599 $\times$ 947 $\times$ 1747
    log(111)=log(3 $\times$ 37) [log(3) log(37) known]
    log(599)=log(599) [log(599) known]
    log(947)=log(947) [log(947) known]
    log(1747)=log(1747) [log(1747) known]
  decomposition(407000000000)
      407000000000-1=53 $\times$ 131 $\times$ 1237 $\times$ 47389
      407000000000+1=3 $\times$ $7^2$ $\times$ 1087 $\times$ 1453 $\times$ 1753
    log(147)=log(3 $\times$ $7^2$) [log(3) log(7) known]
    log(1087)=log(1087) [log(1087) known]
    log(1453)=log(1453) [log(1453) known]
    log(1753)=log(1753) [log(1753) known]
  decomposition(118900000000)
      118900000000-1=$3^2$ $\times$ 11 $\times$ 17 $\times$ 191 $\times$ 211 $\times$ 1753
      118900000000+1=31 $\times$ 173 $\times$ 22170427
    log(17)=log(17) [log(17) known]
    log(1899)=log($3^2$ $\times$ 211) [log(3) log(211) known]
    log(2101)=log(11 $\times$ 191) [log(11) log(191) known]
    log(1753)=log(1753) [log(1753) known]
page 210:
  decomposition(26160000000)
      26160000000-1=$7^2$ $\times$ 37 $\times$ 43 $\times$ 61 $\times$ 5501
        $\rightarrow$ allows the comp. of log(5501)
      26160000000+1=101 $\times$ 821 $\times$ 315481
    log(1813)=log($7^2$ $\times$ 37) [log(7) log(37) known]
    log(2623)=log(43 $\times$ 61) [log(43) log(61) known]
    log(5501)=log(5501) [log(5501) known]
  decomposition(305300000)
      305300000-1=19 $\times$ 23 $\times$ 127 $\times$ 5501
      305300000+1=3 $\times$ 1453 $\times$ 70039
    log(437)=log(19 $\times$ 23) [log(19) log(23) known]
    log(127)=log(127) [log(127) known]
    log(5501)=log(5501) [log(5501) known]
  decomposition(1345000000)
      1345000000-1=3 $\times$ 7 $\times$ 17 $\times$ 1399 $\times$ 2693
      1345000000+1=139 $\times$ 1759 $\times$ 5501
        $\rightarrow$ allows the comp. of log(1759)
    log(139)=log(139) [log(139) known]

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    log(5501)=log(5501) [log(5501) known]
    log(1759)=log(1759) [log(1759) known]
page 211:
  decomposition(113700000)
      113700000-1=7 × 53 × 137 × 2237
         → allows the comp. of log(2237)
      113700000+1=37 × 1747 × 1759
    log(37)=log(37) [log(37) known]
    log(1747)=log(1747) [log(1747) known]
    log(1759)=log(1759) [log(1759) known]
  decomposition(12020000000)
      12020000000-1=7 × 151 × 11371807
      12020000000+1=3 × 19 × 101 × 1171 × 1783
    log(5757)=log(3 × 19 × 101) [log(3) log(19) log(101) known]
    log(1171)=log(1171) [log(1171) known]
    log(1783)   (assumed to be known now)
  decomposition(461000000)
      461000000-1=17 × 67 × 227 × 1783
      461000000+1=3 × 7 × 11 × 179 × 11149
    log(1139)=log(17 × 67) [log(17) log(67) known]
    log(227)=log(227) [log(227) known]
    log(1783)=log(1783) [log(1783) known]
  decomposition(14090000000)
      14090000000-1=31 × 233 × 379 × 5147
         → allows the comp. of log(5147)
      14090000000+1=3 × 7 × 11^2 × 29 × 107 × 1787
         → allows the comp. of log(1787)
page 212:
    log(8239)=log(7 × 11 × 107) [log(7) log(11) log(107) known]
    log(957)=log(3 × 11 × 29) [log(3) log(11) log(29) known]
    log(1787)=log(1787) [log(1787) known]
  decomposition(1581000000)
      1581000000-1=1580999999
      1581000000+1=7 × 211 × 599 × 1787
    log(1477)=log(7 × 211) [log(7) log(211) known]
    log(599)=log(599) [log(599) known]
    log(1787)=log(1787) [log(1787) known]
  decomposition(98200000)
      98200000-1=3^3 × 19 × 107 × 1789
      98200000+1=98200001
    log(513)=log(3^3 × 19) [log(3) log(19) known]
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    log(107)=log(107) [log(107) known]
    log(1789)=log(1789) [log(1789) known]
  decomposition(80700000)
      80700000-1=5009 × 16111
      80700000+1=79 × 571 × 1789
page 213:
    log(79)=log(79) [log(79) known]
    log(571)=log(571) [log(571) known]
    log(1789)=log(1789) [log(1789) known]
  decomposition(1372000000)
      1372000000-1=3 × 197 × 1289 × 1801
      1372000000+1=499 × 2749499
    log(591)=log(3 × 197) [log(3) log(197) known]
    log(1289)=log(1289) [log(1289) known]
    log(1801)=log(1801) [log(1801) known]
  decomposition(7890000000)
      7890000000-1=7 × 17 × 31 × 1181 × 1811
      7890000000+1=13 × 1049 × 578573
    log(1181)=log(1181) [log(1181) known]
    log(3689)=log(7 × 17 × 31) [log(7) log(17) log(31) known]
    log(1811)   (assumed to be known now)
  decomposition(5960000)
      5960000-1=1669 × 3571
         → allows the comp. of log(3571)
      5960000+1=3 × 1097 × 1811
page 214:
    log(3291)=log(3 × 1097) [log(3) log(1097) known]
    log(1811)=log(1811) [log(1811) known]
  decomposition(507000000)
      507000000-1=11 × 131 × 193 × 1823
      507000000+1=507000001
    log(11)=log(11) [log(11) known]
    log(131)=log(131) [log(131) known]
    log(139)=log(139) [log(139) known]
    log(1823)=log(1823) [log(1823) known]
  decomposition(54800000)
      54800000-1=173^2 × 1831
      54800000+1=3^2 × 71 × 191 × 449
    log(29929)=log(173^2) [log(173) known]
    log(1831)=log(1831) [log(1831) known]
  decomposition(11420000)
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      11420000-1=11419999
      11420000+1=3^3 × 229 × 1847
         → allows the comp. of log(1847)
page 215:
    log(6183)=log(3^3 × 229) [log(3) log(229) known]
    log(1847)=log(1847) [log(1847) known]
  decomposition(7050000)
      7050000-1=11 × 347 × 1847
      7050000+1=7 × 191 × 5273
         → allows the comp. of log(5273)
    log(3817)=log(11 × 347) [log(11) log(347) known]
    log(1847)=log(1847) [log(1847) known]
  decomposition(71200000)
      71200000-1=3^3 × 13 × 109 × 1861
         → allows the comp. of log(1861)
      71200000+1=71200001
    log(27)=log(3^3) [log(3) known]
    log(13)=log(13) [log(13) known]
    log(109)=log(109) [log(109) known]
    log(1861)=log(1861) [log(1861) known]
  decomposition(15370000)
      15370000-1=3 × 1861 × 2753
      15370000+1=67 × 229403
    log(3)=log(3) [log(3) known]
    log(2753)=log(2753) [log(2753) known]
    log(1861)=log(1861) [log(1861) known]
page 216:
  decomposition(68700000)
      68700000-1=31 × 1187 × 1867
         → allows the comp. of log(1867)
      68700000+1=68700001
    log(31)=log(31) [log(31) known]
    log(1187)=log(1187) [log(1187) known]
    log(1867)=log(1867) [log(1867) known]
  decomposition(12690000)
      12690000-1=7 × 971 × 1867
      12690000+1=37 × 67 × 5119
         → allows the comp. of log(5119)
    log(6797)=log(7 × 971) [log(7) log(971) known]
    log(1867)=log(1867) [log(1867) known]
  decomposition(4120000000)
```

4120000000-1=3 $\times$ 71 $\times$ 19342723
4120000000+1=13 $\times$ 113 $\times$ 1499 $\times$ 1871
log(1469)=log(13 $\times$ 113) [log(13) log(113) known]
log(1499)=log(1499) [log(1499) known]
log(1871)   (assumed to be known now)
decomposition(183300000)
183300000-1=$313^2$ $\times$ 1871
183300000+1=17 $\times$ 1091 $\times$ 9883
$\rightarrow$ allows the comp. of log(9883)
page 217:
log(97969)=log($313^2$) [log(313) known]
log(1871)=log(1871) [log(1871) known]
decomposition(813000000)
813000000-1=7 $\times$ 59 $\times$ 1051 $\times$ 1873
$\rightarrow$ allows the comp. of log(1873)
813000000+1=11 $\times$ 37 $\times$ 1997543
log(413)=log(7 $\times$ 59) [log(7) log(59) known]
log(1051)=log(1051) [log(1051) known]
log(1873)=log(1873) [log(1873) known]
decomposition(123500000)
123500000-1=7 $\times$ 43 $\times$ 410299
123500000+1=3 $\times$ 31 $\times$ 709 $\times$ 1873
log(93)=log(3 $\times$ 31) [log(3) log(31) known]
log(709)=log(709) [log(709) known]
log(1873)=log(1873) [log(1873) known]
decomposition(4450000000)
4450000000-1=3 $\times$ 487 $\times$ 1621 $\times$ 1879
$\rightarrow$ allows the comp. of log(1879)
4450000000+1=4450000001
log(1461)=log(3 $\times$ 487) [log(3) log(487) known]
log(1621)=log(1621) [log(1621) known]
log(1879)=log(1879) [log(1879) known]
page 218:
decomposition(1187000000)
1187000000-1=1186999999
1187000000+1=$3^4$ $\times$ 11 $\times$ 709 $\times$ 1879
log(891)=log($3^4$ $\times$ 11) [log(3) log(11) known]
log(709)=log(709) [log(709) known]
log(1879)=log(1879) [log(1879) known]
$\Rightarrow$ $1873 \times 10^8 - 1 = 3^5 \times 7 \times 71 \times 821 \times 1889$
$\longrightarrow$ This equation enables the computation of log(1889)

$\Rightarrow$ $1592 \times 10^8 + 1 = 3^2 \times 7 \times 31 \times 67 \times 359 \times 3389$
$\longrightarrow$ This equation enables the computation of log(3389)
$\Rightarrow$ $83 \times 10^6 - 1 = 19 \times 1289 \times 3389$
$\longrightarrow$ This equation enables the computation of log(3389)
page 219:
$\Rightarrow$ $1156 \times 10^6 + 1 = 13 \times 29 \times 1613 \times 1901$
$\longrightarrow$ This equation enables the computation of log(1901)
$\Rightarrow$ $1025 \times 10^7 - 1 = 37 \times 43 \times 3389 \times 1901$
$\longrightarrow$ This equation enables the computation of log(1901)
$\Rightarrow$ $1003 \times 10^6 - 1 = 3 \times 199 \times 881 \times 1907$
$\longrightarrow$ This equation enables the computation of log(1907)
$\Rightarrow$ $1412 \times 10^5 + 1 = 3^2 \times 19 \times 433 \times 1907$
$\longrightarrow$ This equation enables the computation of log(1907)
page 220:
$\Rightarrow$ $23 \times 10^6 - 1 = 11 \times 1093 \times 1913$
$\longrightarrow$ This equation enables the computation of log(1913)
$\Rightarrow$ $845 \times 10^7 + 1 = 3^3 \times 41 \times 59 \times 67 \times 1931$
$\longrightarrow$ This equation enables the computation of log(1931)
$\Rightarrow$ $1205 \times 10^6 - 1 = 7 \times 239 \times 373 \times 1931$
$\longrightarrow$ This equation enables the computation of log(1931)
page 221:
$\Rightarrow$ $1341 \times 10^7 - 1 = 11 \times 607 \times 1039 \times 1933$
$\longrightarrow$ This equation enables the computation of log(1933)
$\Rightarrow$ $1812 \times 10^6 - 1 = 19 \times 103 \times 479 \times 1933$
$\longrightarrow$ This equation enables the computation of log(1933)
$\Rightarrow$ $501 \times 10^7 + 1 = 23 \times 73 \times 1531 \times 1949$
$\longrightarrow$ This equation enables the computation of log(1949)
$\Rightarrow$ $1112 \times 10^6 + 1 = 3 \times 7 \times 101 \times 269 \times 1949$
$\longrightarrow$ This equation enables the computation of log(1949)
page 222:
$\Rightarrow$ $1474 \times 10^5 + 1 = 7 \times 43 \times 251 \times 1951$
$\longrightarrow$ This equation enables the computation of log(1951)
$\Rightarrow$ $477 \times 10^5 - 1 = 23 \times 1063 \times 1951$
$\longrightarrow$ This equation enables the computation of log(1951)
$\Rightarrow$ $1954 \times 10^5 + 1 = 97 \times 1021 \times 1973$
$\longrightarrow$ This equation enables the computation of log(1973)
$\Rightarrow$ $543 \times 10^6 - 1 = 31 \times 53 \times 167 \times 1979$
$\longrightarrow$ This equation enables the computation of log(1979)
page 223:
$\Rightarrow$ $507 \times 10^5 + 1 = 11 \times 17 \times 137 \times 1979$
$\longrightarrow$ This equation enables the computation of log(1979)

$\Rightarrow \quad 95 \times 10^8 - 1 = 7^3 \times 53 \times 263 \times 1987$
⟶ `This equation enables the computation of log(1987)`
$\Rightarrow \quad 376 \times 10^5 + 1 = 127 \times 149 \times 1987$
⟶ `This equation enables the computation of log(1987)`

`page 224:`
$\Rightarrow \quad 1099 \times 10^5 - 1 = 3^2 \times 11 \times 557 \times 1993$
⟶ `This equation enables the computation of log(1993)`
$\Rightarrow \quad 894 \times 10^5 + 1 = 31 \times 1447 \times 1993$
⟶ `This equation enables the computation of log(1993)`
$\Rightarrow \quad 892 \times 10^5 - 1 = 3^2 \times 7 \times 709 \times 1997$
⟶ `This equation enables the computation of log(1997)`
$\Rightarrow \quad 932 \times 10^4 - 1 = 13 \times 359 \times 1997$
⟶ `This equation enables the computation of log(1997)`

`page 225:`
$\Rightarrow \quad 1199 \times 10^7 + 1 = 3 \times 7 \times 47 \times 59 \times 103 \times 1999$
⟶ `This equation enables the computation of log(1999)`
$\Rightarrow \quad 1959 \times 10^5 + 1 = 11 \times 59 \times 151 \times 1999$
⟶ `This equation enables the computation of log(1999)`

`page 241:`
$\Rightarrow \quad 223 \times 10^6 - 1 = 3 \times 17 \times 37 \times 59 \times 2003$
⟶ `This equation enables the computation of log(2003)`
$\Rightarrow \quad 178 \times 10^7 + 1 = 13 \times 197 \times 347 \times 2003$
⟶ `This equation enables the computation of log(2003)`
$\Rightarrow \quad 698 \times 10^6 + 1 = 3 \times 127 \times 911 \times 2011$
⟶ `This equation enables the computation of log(2011)`
$\Rightarrow \quad 947 \times 10^5 + 1 = 3 \times 11 \times 1427 \times 2011$
⟶ `This equation enables the computation of log(2011)`

`page 242:`
$\Rightarrow \quad 134 \times 10^7 + 1 = 3^2 \times 97 \times 761 \times 2017$
⟶ `This equation enables the computation of log(2017)`
$\Rightarrow \quad 719 \times 10^5 - 1 = 43 \times 829 \times 2017$
⟶ `This equation enables the computation of log(2017)`
$\Rightarrow \quad 506 \times 10^5 + 1 = 3 \times 53 \times 157 \times 2027$
⟶ `This equation enables the computation of log(2027)`

`page 243:`
$\Rightarrow \quad 538 \times 10^6 + 1 = 7 \times 11^2 \times 307 \times 2069$
⟶ `This equation enables the computation of log(2069)`
$\Rightarrow \quad 1845 \times 10^5 + 1 = 7 \times 29 \times 433 \times 2099$
⟶ `This equation enables the computation of log(2099)`

`page 244:`
$\Rightarrow \quad 1879 \times 10^5 - 1 = 3 \times 7 \times 53 \times 79 \times 2137$

$\longrightarrow$ `This equation enables the computation of log(2137)`
$\Rightarrow$ $1049 \times 10^7 + 1 = 3 \times 13 \times 313 \times 401 \times 2143$
$\longrightarrow$ `This equation enables the computation of log(2143)`
$\Rightarrow$ $1118 \times 10^5 - 1 = 179 \times 283 \times 2207$
$\longrightarrow$ `This equation enables the computation of log(2207)`
$\Rightarrow$ $1792 \times 10^5 - 1 = 3^3 \times 11 \times 269 \times 2243$
$\longrightarrow$ `This equation enables the computation of log(2243)`
`page 245:`
$\Rightarrow$ $1838 \times 10^5 + 1 = 3 \times 7 \times 11 \times 347 \times 2293$
$\longrightarrow$ `This equation enables the computation of log(2293)`
$\Rightarrow$ $119 \times 10^6 - 1 = 23 \times 41 \times 53 \times 2381$
$\longrightarrow$ `This equation enables the computation of log(2381)`
$\Rightarrow$ $902 \times 10^5 + 1 = 3 \times 83 \times 151 \times 2399$
$\longrightarrow$ `This equation enables the computation of log(2399)`
`page 246:`
$\Rightarrow$ $825 \times 10^6 + 1 = 7 \times 127 \times 383 \times 2423$
$\longrightarrow$ `This equation enables the computation of log(2423)`
$\Rightarrow$ $409 \times 10^8 + 1 = 7 \times 17 \times 19 \times 59 \times 79 \times 3881$
$\longrightarrow$ `This equation enables the computation of log(3881)`
$\Rightarrow$ $209 \times 10^7 + 1 = 3 \times 73 \times 3881 \times 2459$
$\longrightarrow$ `This equation enables the computation of log(2459)`
$\Rightarrow$ $1115 \times 10^7 + 1 = 3^4 \times 7 \times 17 \times 467 \times 2477$
$\longrightarrow$ `This equation enables the computation of log(2477)`
$\Rightarrow$ $1084 \times 10^7 + 1 = 37 \times 251 \times 463 \times 2521$
$\longrightarrow$ `This equation enables the computation of log(2521)`
`page 247:`
$\Rightarrow$ $1965 \times 10^6 + 1 = 571 \times 1307 \times 2633$
$\longrightarrow$ `This equation enables the computation of log(2633)`
$\Rightarrow$ $2025 \times 10^6 - 1 = 11 \times 17 \times 4091 \times 2647$
$\longrightarrow$ `This equation enables the computation of log(2647)`
$\Rightarrow$ $1345 \times 10^6 - 1 = 3 \times 7 \times 17 \times 1399 \times 2693$
$\longrightarrow$ `This equation enables the computation of log(2693)`
$\Rightarrow$ $483 \times 10^7 - 1 = 11 \times 17 \times 71 \times 131 \times 2777$
$\longrightarrow$ `This equation enables the computation of log(2777)`
`page 248:`
$\Rightarrow$ $199 \times 10^6 + 1 = 29 \times 43 \times 53 \times 3011$
$\longrightarrow$ `This equation enables the computation of log(3011)`
$\Rightarrow$ $5032 \times 10^7 - 1 = 3^2 \times 541 \times 1109 \times 9319$
$\longrightarrow$ `This equation enables the computation of log(9319)`
$\Rightarrow$ $26 \times 10^5 + 1 = 3^2 \times 31 \times 9319$
$\longrightarrow$ `This equation enables the computation of log(9319)`

⇒ $33 \times 10^7 - 1 = 7 \times 19 \times 809 \times 3067$
⟶ `This equation enables the computation of log(3067)`
`page 249:`
⇒ $831 \times 10^7 - 1 = 7 \times 19 \times 113 \times 179 \times 3089$
⟶ `This equation enables the computation of log(3089)`
⇒ $59 \times 10^4 - 1 = 191 \times 3089$
⟶ `This equation enables the computation of log(3089)`
⇒ $1919 \times 10^6 + 1 = 3 \times 17 \times 43 \times 269 \times 3253$
⟶ `This equation enables the computation of log(3253)`
`page 250:`
⇒ $221 \times 10^5 + 1 = 3 \times 7 \times 11 \times 29 \times 3299$
⟶ `This equation enables the computation of log(3299)`
⇒ $1283 \times 10^7 + 1 = 3 \times 7 \times 13 \times 23 \times 619 \times 3301$
⟶ `This equation enables the computation of log(3301)`
⇒ $31 \times 10^5 - 1 = 3 \times 7 \times 43 \times 3433$
⟶ `This equation enables the computation of log(3433)`
⇒ $2274 \times 10^4 + 1 = 67 \times 97 \times 3499$
⟶ `This equation enables the computation of log(3499)`
`page 251:`
⇒ $3 \times 10^6 + 1 = 853 \times 3517$
⟶ `This equation enables the computation of log(3517)`
⇒ $1727 \times 10^7 + 1 = 3^2 \times 17 \times 43 \times 743 \times 3533$
⟶ `This equation enables the computation of log(3533)`
⇒ $447 \times 10^7 - 1 = 29 \times 151 \times 283 \times 3607$
⟶ `This equation enables the computation of log(3607)`
⇒ $2045 \times 10^6 + 1 = 3 \times 11 \times 19 \times 877 \times 3719$
⟶ `This equation enables the computation of log(3719)`
⇒ $2067 \times 10^7 - 1 = 11 \times 61 \times 89^2 \times 3889$
⟶ `This equation enables the computation of log(3889)`
`page 252:`
⇒ $169 \times 10^4 + 1 = 809 \times 2089$
⟶ `This equation enables the computation of log(2089)`
⇒ $437 \times 10^6 - 1 = 53 \times 2089 \times 3947$
⟶ `This equation enables the computation of log(3947)`
⇒ $3563 \times 10^7 + 1 = 3^2 \times 17 \times 37 \times 1531 \times 4111$
⟶ `This equation enables the computation of log(4111)`
⇒ $1418 \times 10^8 - 1 = 7^2 \times 419 \times 1583 \times 4363$
⟶ `This equation enables the computation of log(4363)`
`page 253:`
⇒ $717 \times 10^7 - 1 = 19 \times 101 \times 881 \times 4241$
⟶ `This equation enables the computation of log(4241)`

$\Rightarrow$ $1523 \times 10^5 - 1 = 257 \times 269 \times 2203$
$\longrightarrow$ `This equation enables the computation of log(2203)`
$\Rightarrow$ $2135 \times 10^6 - 1 = 11 \times 19 \times 2203 \times 4637$
$\longrightarrow$ `This equation enables the computation of log(4637)`
$\Rightarrow$ $2606 \times 10^6 + 1 = 3 \times 11 \times 29 \times 587 \times 4639$
$\longrightarrow$ `This equation enables the computation of log(4639)`
`page 254:`
$\Rightarrow$ $4639 \times 10^6 + 1 = 17 \times 79 \times 743 \times 4649$
$\longrightarrow$ `This equation enables the computation of log(4649)`
$\Rightarrow$ $2215 \times 10^5 - 1 = 3^2 \times 7 \times 29 \times 41 \times 2957$
$\longrightarrow$ `This equation enables the computation of log(2957)`
$\Rightarrow$ $3127 \times 10^7 - 1 = 3 \times 7 \times 103 \times 2957 \times 4889$
$\longrightarrow$ `This equation enables the computation of log(4889)`
$\Rightarrow$ $3617 \times 10^6 - 1 = 19 \times 53 \times 953 \times 3769$
$\longrightarrow$ `This equation enables the computation of log(3769)`
$\Rightarrow$ $2108 \times 10^6 - 1 = 7 \times 149 \times 631 \times 3203$
$\longrightarrow$ `This equation enables the computation of log(3203)`
`page 255:`
$\Rightarrow$ $7538 \times 10^8 + 1 = 3 \times 37 \times 251 \times 3203 \times 8447$
$\longrightarrow$ `This equation enables the computation of log(8447)`
$\Rightarrow$ $643 \times 10^7 - 1 = 3 \times 89 \times 8447 \times 2851$
$\longrightarrow$ `This equation enables the computation of log(2851)`
$\Rightarrow$ $4974 \times 10^6 + 1 = 349 \times 2851 \times 4999$
$\longrightarrow$ `This equation enables the computation of log(4999)`
$\Rightarrow$ $1044 \times 10^5 - 1 = 11 \times 1783 \times 5323$
$\longrightarrow$ `This equation enables the computation of log(5323)`
`page 256:`
$\Rightarrow$ $1 \times 10^{12} - 1 = 3^3 \times 7 \times 11 \times 13 \times 37 \times 101 \times 9901$
$\longrightarrow$ `This equation enables the computation of log(9901)`
$\Rightarrow$ $4762 \times 10^5 - 1 = 3^3 \times 11 \times 167 \times 9601$
$\longrightarrow$ `This equation enables the computation of log(9601)`
$\Rightarrow$ $1974 \times 10^6 - 1 = 17 \times 53 \times 233 \times 9403$
$\longrightarrow$ `This equation enables the computation of log(9403)`
$\Rightarrow$ $2516 \times 10^8 + 1 = 3 \times 7 \times 29 \times 97 \times 463 \times 9199$
$\longrightarrow$ `This equation enables the computation of log(9199)`
`page 257:`
$\Rightarrow$ $1711 \times 10^8 - 1 = 3^4 \times 331 \times 709 \times 9001$
$\longrightarrow$ `This equation enables the computation of log(9001)`
$\Rightarrow$ $465 \times 10^7 - 1 = 23 \times 89 \times 647 \times 3511$
$\longrightarrow$ `This equation enables the computation of log(3511)`
$\Rightarrow$ $1709 \times 10^8 + 1 = 3^2 \times 601 \times 3511 \times 8999$

$\longrightarrow$ `This equation enables the computation of log(8999)`

$\Rightarrow\quad 1783 \times 10^6 + 1 = 17 \times 59 \times 199 \times 8933$

$\longrightarrow$ `This equation enables the computation of log(8933)`

$\Rightarrow\quad 3545 \times 10^6 - 1 = 401 \times 997 \times 8867$

$\longrightarrow$ `This equation enables the computation of log(8867)`

`page 258:`

$\Rightarrow\quad 6767 \times 10^7 + 1 = 3^2 \times 257 \times 3607 \times 8111$

$\longrightarrow$ `This equation enables the computation of log(8111)`

$\Rightarrow\quad 3177 \times 10^6 + 1 = 7 \times 17 \times 31 \times 109 \times 7901$

$\longrightarrow$ `This equation enables the computation of log(7901)`

$\Rightarrow\quad 2877 \times 10^7 - 1 = 13 \times 331 \times 797 \times 8389$

$\longrightarrow$ `This equation enables the computation of log(8389)`

$\Rightarrow\quad 5512 \times 10^7 + 1 = 11 \times 79 \times 8389 \times 7561$

$\longrightarrow$ `This equation enables the computation of log(7561)`

`page 259:`

$\Rightarrow\quad 2116 \times 10^8 - 1 = 3^6 \times 61 \times 631 \times 7541$

$\longrightarrow$ `This equation enables the computation of log(7541)`

$\Rightarrow\quad 2432 \times 10^7 + 1 = 3 \times 11 \times 127 \times 773 \times 7507$

$\longrightarrow$ `This equation enables the computation of log(7507)`

$\Rightarrow\quad 1334 \times 10^6 - 1 = 127 \times 3253 \times 3229$

$\longrightarrow$ `This equation enables the computation of log(3229)`

$\Rightarrow\quad 1895 \times 10^6 + 1 = 3 \times 53 \times 3229 \times 3691$

$\longrightarrow$ `This equation enables the computation of log(3691)`

$\Rightarrow\quad 4265 \times 10^9 + 1 = 3^3 \times 13 \times 439 \times 3691 \times 7499$

$\longrightarrow$ `This equation enables the computation of log(7499)`

`page 260:`

$\Rightarrow\quad 5594 \times 10^7 - 1 = 13 \times 23 \times 31 \times 821 \times 7351$

$\longrightarrow$ `This equation enables the computation of log(7351)`

$\Rightarrow\quad 2091 \times 10^7 - 1 = 7 \times 31 \times 47 \times 733 \times 2797$

$\longrightarrow$ `This equation enables the computation of log(2797)`

$\Rightarrow\quad 4018 \times 10^9 + 1 = 13^3 \times 461 \times 541 \times 7333$

$\longrightarrow$ `This equation enables the computation of log(7333)`

$\Rightarrow\quad 3947 \times 10^6 + 1 = 3 \times 7 \times 131 \times 197 \times 7283$

$\longrightarrow$ `This equation enables the computation of log(7283)`

$\Rightarrow\quad 1632 \times 10^5 + 1 = 163 \times 337 \times 2971$

$\longrightarrow$ `This equation enables the computation of log(2971)`

`page 261:`

$\Rightarrow\quad 254 \times 10^7 + 1 = 3 \times 7 \times 11 \times 2971 \times 3701$

$\longrightarrow$ `This equation enables the computation of log(3701)`

$\Rightarrow\quad 3194 \times 10^5 + 1 = 3^2 \times 43 \times 223 \times 3701$

$\longrightarrow$ `This equation enables the computation of log(3701)`

$\Rightarrow\ 5975 \times 10^5 + 1 = 3^2 \times 7 \times 1571 \times 6037$
⟶ `This equation enables the computation of log(6037)`
$\Rightarrow\ 877 \times 10^7 - 1 = 3 \times 37 \times 41 \times 701 \times 2749$
⟶ `This equation enables the computation of log(2749)`

`page 262:`
$\Rightarrow\ 3272 \times 10^6 - 1 = 211 \times 2749 \times 5641$
⟶ `This equation enables the computation of log(5641)`
$\Rightarrow\ 305 \times 10^6 + 1 = 3^2 \times 53 \times 269 \times 2377$
⟶ `This equation enables the computation of log(2377)`
$\Rightarrow\ 3596 \times 10^7 + 1 = 3 \times 19 \times 47 \times 2377 \times 5647$
⟶ `This equation enables the computation of log(5647)`
$\Rightarrow\ 4773 \times 10^6 - 1 = 727 \times 859 \times 7643$
⟶ `This equation enables the computation of log(7643)`

`page 263:`
$\Rightarrow\ 287 \times 10^7 + 1 = 3^2 \times 11 \times 7643 \times 3793$
⟶ `This equation enables the computation of log(3793)`
$\Rightarrow\ 3385 \times 10^8 - 1 = 3^3 \times 7 \times 83 \times 3793 \times 5689$
⟶ `This equation enables the computation of log(5689)`
$\Rightarrow\ 799 \times 10^5 - 1 = 3 \times 23 \times 449 \times 2579$
⟶ `This equation enables the computation of log(2579)`
$\Rightarrow\ 89 \times 10^7 - 1 = 7 \times 107 \times 571 \times 2081$
⟶ `This equation enables the computation of log(2081)`

`page 264:`
$\Rightarrow\ 2081 \times 10^7 + 1 = 3 \times 7 \times 61 \times 2579 \times 6299$
⟶ `This equation enables the computation of log(6299)`
$\Rightarrow\ 8488 \times 10^8 - 1 = 3^3 \times 7 \times 421 \times 1109 \times 9619$
⟶ `This equation enables the computation of log(9619)`
$\Rightarrow\ 1691 \times 10^7 + 1 = 3^2 \times 31 \times 9619 \times 6301$
⟶ `This equation enables the computation of log(6301)`
$\Rightarrow\ 4276 \times 10^6 - 1 = 3^2 \times 173 \times 331 \times 8297$
⟶ `This equation enables the computation of log(8297)`
$\Rightarrow\ 621 \times 10^8 + 1 = 13 \times 89 \times 8297 \times 6469$
⟶ `This equation enables the computation of log(6469)`

`page 265:`
$\Rightarrow\ 1519 \times 10^8 - 1 = 3 \times 11 \times 653 \times 937 \times 7523$
⟶ `This equation enables the computation of log(7523)`
$\Rightarrow\ 6083 \times 10^6 + 1 = 3^2 \times 13 \times 7523 \times 6911$
⟶ `This equation enables the computation of log(6911)`
$\Rightarrow\ 3032 \times 10^6 + 1 = 3^2 \times 23^2 \times 163 \times 3907$
⟶ `This equation enables the computation of log(3907)`
$\Rightarrow\ 888 \times 10^6 - 1 = 47 \times 1997 \times 9461$

$\longrightarrow$ `This equation enables the computation of log(9461)`
$\Rightarrow$ $1981 \times 10^7 - 1 = 3^2 \times 73 \times 9461 \times 3187$
$\longrightarrow$ `This equation enables the computation of log(3187)`
`page 266:`
$\Rightarrow$ $8873 \times 10^6 + 1 = 3^2 \times 71 \times 3187 \times 4357$
$\longrightarrow$ `This equation enables the computation of log(4357)`
$\Rightarrow$ $1718 \times 10^6 + 1 = 3^2 \times 101 \times 409 \times 4621$
$\longrightarrow$ `This equation enables the computation of log(4621)`
$\Rightarrow$ $3907 \times 10^6 + 1 = 19 \times 59 \times 797 \times 4373$
$\longrightarrow$ `This equation enables the computation of log(4373)`
$\Rightarrow$ $5201 \times 10^7 + 1 = 3^2 \times 211 \times 4373 \times 6263$
$\longrightarrow$ `This equation enables the computation of log(6263)`
`page 267:`
$\Rightarrow$ $4357 \times 10^6 - 1 = 3^2 \times 11 \times 6263 \times 7027$
$\longrightarrow$ `This equation enables the computation of log(7027)`
$\Rightarrow$ $676 \times 10^8 - 1 = 3^2 \times 7 \times 37 \times 7027 \times 4127$
$\longrightarrow$ `This equation enables the computation of log(4127)`
$\Rightarrow$ $2559 \times 10^6 + 1 = 89 \times 4127 \times 6967$
$\longrightarrow$ `This equation enables the computation of log(6967)`
$\Rightarrow$ $4621 \times 10^7 - 1 = 3 \times 311 \times 6967 \times 7109$
$\longrightarrow$ `This equation enables the computation of log(7109)`
`page 268:`
$\Rightarrow$ $1369 \times 10^5 - 1 = 3^2 \times 31 \times 71 \times 6911$
$\longrightarrow$ `This equation enables the computation of log(6911)`
$\Rightarrow$ $6877 \times 10^5 - 1 = 3^2 \times 7 \times 1451 \times 7523$
$\longrightarrow$ `This equation enables the computation of log(7523)`
$\Rightarrow$ $222 \times 10^4 + 1 = 7 \times 83 \times 3821$
$\longrightarrow$ `This equation enables the computation of log(3821)`
$\Rightarrow$ $69 \times 10^7 + 1 = 89 \times 3821 \times 2029$
$\longrightarrow$ `This equation enables the computation of log(2029)`
`page 269:`
$\Rightarrow$ $45 \times 10^6 + 1 = 41 \times 347 \times 3163$
$\longrightarrow$ `This equation enables the computation of log(3163)`
$\Rightarrow$ $1586 \times 10^7 + 1 = 3 \times 251 \times 3163 \times 6659$
$\longrightarrow$ `This equation enables the computation of log(6659)`
$\Rightarrow$ $1216 \times 10^5 - 1 = 3^2 \times 6659 \times 2029$
$\longrightarrow$ `This equation enables the computation of log(2029)`
$\Rightarrow$ $169 \times 10^8 - 1 = 3 \times 17 \times 71 \times 1831 \times 2549$
$\longrightarrow$ `This equation enables the computation of log(2549)`
`page 270:`
$\Rightarrow$ $1606 \times 10^6 - 1 = 3 \times 103 \times 2549 \times 2039$

$\longrightarrow$ This equation enables the computation of log(2039)
$\Rightarrow$ $433 \times 10^6 + 1 = 7 \times 23 \times 1319 \times 2039$
$\longrightarrow$ This equation enables the computation of log(2039)
$\Rightarrow$ $1154 \times 10^7 - 1 = 11 \times 19^3 \times 43 \times 3557$
$\longrightarrow$ This equation enables the computation of log(3557)
page 271:
$\Rightarrow$ $869 \times 10^6 - 1 = 7 \times 17 \times 3557 \times 2053$
$\longrightarrow$ This equation enables the computation of log(2053)
$\Rightarrow$ $887 \times 10^6 + 1 = 3 \times 37 \times 43 \times 83 \times 2239$
$\longrightarrow$ This equation enables the computation of log(2239)
$\Rightarrow$ $1379 \times 10^4 + 1 = 3 \times 2239 \times 2053$
$\longrightarrow$ This equation enables the computation of log(2053)
$\Rightarrow$ $1754 \times 10^6 + 1 = 3^5 \times 13 \times 233 \times 2383$
$\longrightarrow$ This equation enables the computation of log(2383)
$\Rightarrow$ $1524 \times 10^5 - 1 = 31 \times 2383 \times 2063$
$\longrightarrow$ This equation enables the computation of log(2063)
page 272:
$\Rightarrow$ $1498 \times 10^6 + 1 = 419 \times 1733 \times 2063$
$\longrightarrow$ This equation enables the computation of log(2063)
$\Rightarrow$ $1432 \times 10^5 + 1 = 7^2 \times 23 \times 61 \times 2083$
$\longrightarrow$ This equation enables the computation of log(2083)
$\Rightarrow$ $69 \times 10^7 - 1 = 13 \times 83 \times 307 \times 2083$
$\longrightarrow$ This equation enables the computation of log(2083)
$\Rightarrow$ $2674 \times 10^7 + 1 = 11 \times 13 \times 59 \times 823 \times 3851$
$\longrightarrow$ This equation enables the computation of log(3851)
page 273:
$\Rightarrow$ $217 \times 10^6 - 1 = 3^3 \times 3851 \times 2087$
$\longrightarrow$ This equation enables the computation of log(2087)
$\Rightarrow$ $187 \times 10^7 + 1 = 593 \times 1511 \times 2087$
$\longrightarrow$ This equation enables the computation of log(2087)
$\Rightarrow$ $558 \times 10^7 - 1 = 7^2 \times 137 \times 199 \times 4177$
$\longrightarrow$ This equation enables the computation of log(4177)
$\Rightarrow$ $1499 \times 10^5 - 1 = 17 \times 4177 \times 2111$
$\longrightarrow$ This equation enables the computation of log(2111)
page 274:
$\Rightarrow$ $612 \times 10^5 + 1 = 53 \times 547 \times 2111$
$\longrightarrow$ This equation enables the computation of log(2111)
$\Rightarrow$ $2366 \times 10^8 - 1 = 11 \times 1409 \times 2011 \times 7591$
$\longrightarrow$ This equation enables the computation of log(7591)
$\Rightarrow$ $887 \times 10^7 - 1 = 7 \times 79 \times 7591 \times 2113$
$\longrightarrow$ This equation enables the computation of log(2113)

$\Rightarrow \quad 1226 \times 10^7 + 1 = 3 \times 31 \times 89 \times 701 \times 2113$

$\longrightarrow$ `This equation enables the computation of log(2113)`

`page 275:`

$\Rightarrow \quad 1149 \times 10^5 + 1 = 29 \times 1861 \times 2129$

$\longrightarrow$ `This equation enables the computation of log(2129)`

$\Rightarrow \quad 98 \times 10^6 - 1 = 191 \times 241 \times 2129$

$\longrightarrow$ `This equation enables the computation of log(2129)`

$\Rightarrow \quad 1113 \times 10^5 - 1 = 29 \times 1801 \times 2131$

$\longrightarrow$ `This equation enables the computation of log(2131)`

$\Rightarrow \quad 1603 \times 10^6 - 1 = 3^2 \times 19 \times 53 \times 83 \times 2131$

$\longrightarrow$ `This equation enables the computation of log(2131)`

$\Rightarrow \quad 14 \times 10^6 - 1 = 13 \times 503 \times 2141$

$\longrightarrow$ `This equation enables the computation of log(2141)`

`page 276:`

$\Rightarrow \quad 2127 \times 10^6 + 1 = 7 \times 347 \times 409 \times 2141$

$\longrightarrow$ `This equation enables the computation of log(2141)`

$\Rightarrow \quad 3936 \times 10^7 + 1 = 7 \times 1049 \times 1151 \times 4657$

$\longrightarrow$ `This equation enables the computation of log(4657)`

$\Rightarrow \quad 721 \times 10^7 - 1 = 3^3 \times 17 \times 4657 \times 3373$

$\longrightarrow$ `This equation enables the computation of log(3373)`

$\Rightarrow \quad 2106 \times 10^5 + 1 = 29 \times 3373 \times 2153$

$\longrightarrow$ `This equation enables the computation of log(2153)`

$\Rightarrow \quad 47 \times 10^5 - 1 = 37 \times 59 \times 2153$

$\longrightarrow$ `This equation enables the computation of log(2153)`

`page 277:`

$\Rightarrow \quad 459 \times 10^5 + 1 = 7 \times 1289 \times 5087$

$\longrightarrow$ `This equation enables the computation of log(5087)`

$\Rightarrow \quad 1572 \times 10^6 + 1 = 11 \times 13 \times 5087 \times 2161$

$\longrightarrow$ `This equation enables the computation of log(2161)`

$\Rightarrow \quad 1108 \times 10^8 - 1 = 3^2 \times 13 \times 593 \times 739 \times 2161$

$\longrightarrow$ `This equation enables the computation of log(2161)`

$\Rightarrow \quad 1842 \times 10^7 + 1 = 13 \times 757 \times 859 \times 2179$

$\longrightarrow$ `This equation enables the computation of log(2179)`

$\Rightarrow \quad 337 \times 10^7 - 1 = 3 \times 19 \times 43 \times 631 \times 2179$

$\longrightarrow$ `This equation enables the computation of log(2179)`

$\Rightarrow \quad 146 \times 10^5 - 1 = 19 \times 307 \times 2503$

$\longrightarrow$ `This equation enables the computation of log(2503)`

`page 278:`

$\Rightarrow \quad 956 \times 10^8 + 1 = 3 \times 11 \times 523 \times 2503 \times 2213$

$\longrightarrow$ `This equation enables the computation of log(2213)`

$\Rightarrow \quad 16 \times 10^5 - 1 = 3 \times 241 \times 2213$

$\longrightarrow$ This equation enables the computation of log(2213)
$\Rightarrow$ $6192 \times 10^5 - 1 = 11 \times 41 \times 163 \times 8423$
$\longrightarrow$ This equation enables the computation of log(8423)
$\Rightarrow$ $275 \times 10^7 + 1 = 3 \times 7^2 \times 8423 \times 2221$
$\longrightarrow$ This equation enables the computation of log(2221)
page 279:
$\Rightarrow$ $1946 \times 10^7 - 1 = 11 \times 523 \times 1523 \times 2221$
$\longrightarrow$ This equation enables the computation of log(2221)
$\Rightarrow$ $11 \times 10^7 + 1 = 3 \times 37 \times 443 \times 2237$
$\longrightarrow$ This equation enables the computation of log(2237)
$\Rightarrow$ $1137 \times 10^5 - 1 = 7 \times 53 \times 137 \times 2237$
$\longrightarrow$ This equation enables the computation of log(2237)
$\Rightarrow$ $417 \times 10^6 + 1 = 11^2 \times 1531 \times 2251$
$\longrightarrow$ This equation enables the computation of log(2251)
$\Rightarrow$ $1834 \times 10^6 - 1 = 3 \times 13^2 \times 1607 \times 2251$
$\longrightarrow$ This equation enables the computation of log(2251)
page 280:
$\Rightarrow$ $2502 \times 10^5 - 1 = 7 \times 17 \times 19 \times 41 \times 2699$
$\longrightarrow$ This equation enables the computation of log(2699)
$\Rightarrow$ $79 \times 10^7 - 1 = 3 \times 43 \times 2699 \times 2269$
$\longrightarrow$ This equation enables the computation of log(2269)
$\Rightarrow$ $1479 \times 10^6 + 1 = 37 \times 79 \times 223 \times 2269$
$\longrightarrow$ This equation enables the computation of log(2269)
$\Rightarrow$ $1951 \times 10^6 + 1 = 23 \times 67 \times 557 \times 2273$
$\longrightarrow$ This equation enables the computation of log(2273)
$\Rightarrow$ $1396 \times 10^7 - 1 = 3^4 \times 11 \times 61 \times 113 \times 2273$
$\longrightarrow$ This equation enables the computation of log(2273)
page 281:
$\Rightarrow$ $1259 \times 10^5 - 1 = 23 \times 827 \times 6619$
$\longrightarrow$ This equation enables the computation of log(6619)
$\Rightarrow$ $4025 \times 10^7 + 1 = 3 \times 431 \times 6619 \times 4703$
$\longrightarrow$ This equation enables the computation of log(4703)
$\Rightarrow$ $3222 \times 10^5 - 1 = 11 \times 79 \times 101 \times 3671$
$\longrightarrow$ This equation enables the computation of log(3671)
$\Rightarrow$ $4703 \times 10^8 + 1 = 3 \times 13 \times 19 \times 23 \times 3671 \times 7517$
$\longrightarrow$ This equation enables the computation of log(7517)
$\Rightarrow$ $4246 \times 10^6 + 1 = 107 \times 7517 \times 5279$
$\longrightarrow$ This equation enables the computation of log(5279)
$\Rightarrow$ $1687 \times 10^7 - 1 = 3 \times 467 \times 5279 \times 2281$
$\longrightarrow$ This equation enables the computation of log(2281)
page 282:

$\Rightarrow$ $594 \times 10^7 + 1 = 13^2 \times 19 \times 811 \times 2281$
$\longrightarrow$ `This equation enables the computation of log(2281)`
$\Rightarrow$ $876 \times 10^6 - 1 = 7^2 \times 43 \times 181 \times 2297$
$\longrightarrow$ `This equation enables the computation of log(2297)`
$\Rightarrow$ $2122 \times 10^8 - 1 = 3 \times 13 \times 47 \times 101 \times 499 \times 2297$
$\longrightarrow$ `This equation enables the computation of log(2297)`
$\Rightarrow$ $257 \times 10^8 + 1 = 3 \times 13 \times 19 \times 71 \times 179 \times 2729$
$\longrightarrow$ `This equation enables the computation of log(2729)`
$\Rightarrow$ $2255 \times 10^5 - 1 = 19 \times 2729 \times 4349$
$\longrightarrow$ `This equation enables the computation of log(4349)`

`page 283:`

$\Rightarrow$ $24 \times 10^8 - 1 = 239 \times 4349 \times 2309$
$\longrightarrow$ `This equation enables the computation of log(2309)`
$\Rightarrow$ $1129 \times 10^6 - 1 = 3 \times 229 \times 491 \times 3347$
$\longrightarrow$ `This equation enables the computation of log(3347)`
$\Rightarrow$ $2218 \times 10^6 + 1 = 7 \times 41 \times 3347 \times 2309$
$\longrightarrow$ `This equation enables the computation of log(2309)`
$\Rightarrow$ $483 \times 10^7 - 1 = 11 \times 17 \times 71 \times 131 \times 2777$
$\longrightarrow$ `This equation enables the computation of log(2777)`
$\Rightarrow$ $1091 \times 10^5 - 1 = 17 \times 2777 \times 2311$
$\longrightarrow$ `This equation enables the computation of log(2311)`

`page 284:`

$\Rightarrow$ $1666 \times 10^4 - 1 = 3^4 \times 89 \times 2311$
$\longrightarrow$ `This equation enables the computation of log(2311)`
$\Rightarrow$ $695 \times 10^7 + 1 = 3 \times 7 \times 43 \times 3299 \times 2333$
$\longrightarrow$ `This equation enables the computation of log(2333)`
$\Rightarrow$ $1843 \times 10^5 + 1 = 197 \times 401 \times 2333$
$\longrightarrow$ `This equation enables the computation of log(2333)`
$\Rightarrow$ $2216 \times 10^6 + 1 = 3 \times 19 \times 31 \times 281 \times 4463$
$\longrightarrow$ `This equation enables the computation of log(4463)`
$\Rightarrow$ $2247 \times 10^6 - 1 = 89 \times 4463 \times 5657$
$\longrightarrow$ `This equation enables the computation of log(5657)`
$\Rightarrow$ $1663 \times 10^8 - 1 = 3 \times 7^2 \times 31 \times 5657 \times 6451$
$\longrightarrow$ `This equation enables the computation of log(6451)`

`page 285:`

$\Rightarrow$ $1358 \times 10^5 + 1 = 3^2 \times 6451 \times 2339$
$\longrightarrow$ `This equation enables the computation of log(2339)`
$\Rightarrow$ $1838 \times 10^7 + 1 = 3 \times 11 \times 227 \times 1049 \times 2339$
$\longrightarrow$ `This equation enables the computation of log(2339)`
$\Rightarrow$ $504 \times 10^8 + 1 = 13 \times 19 \times 101 \times 863 \times 2341$
$\longrightarrow$ `This equation enables the computation of log(2341)`

$\Rightarrow$ $1239 \times 10^6 + 1 = 17 \times 163 \times 191 \times 2341$
$\longrightarrow$ `This equation enables the computation of log(2341)`
$\Rightarrow$ $1991 \times 10^6 - 1 = 17 \times 139 \times 359 \times 2347$
$\longrightarrow$ `This equation enables the computation of log(2347)`
`page 286:`
$\Rightarrow$ $356 \times 10^6 + 1 = 3 \times 7 \times 31 \times 233 \times 2347$
$\longrightarrow$ `This equation enables the computation of log(2347)`
$\Rightarrow$ $929 \times 10^6 + 1 = 3 \times 107 \times 1231 \times 2351$
$\longrightarrow$ `This equation enables the computation of log(2351)`
$\Rightarrow$ $328 \times 10^7 + 1 = 19 \times 97 \times 757 \times 2351$
$\longrightarrow$ `This equation enables the computation of log(2351)`
$\Rightarrow$ $217 \times 10^7 - 1 = 3^2 \times 59 \times 811 \times 5039$
$\longrightarrow$ `This equation enables the computation of log(5039)`
$\Rightarrow$ $1544 \times 10^5 - 1 = 13 \times 5039 \times 2357$
$\longrightarrow$ `This equation enables the computation of log(2357)`
`page 287:`
$\Rightarrow$ $813 \times 10^5 + 1 = 17 \times 2029 \times 2357$
$\longrightarrow$ `This equation enables the computation of log(2357)`
$\Rightarrow$ $1696 \times 10^5 + 1 = 233 \times 307 \times 2371$
$\longrightarrow$ `This equation enables the computation of log(2371)`
$\Rightarrow$ $675 \times 10^5 - 1 = 7^3 \times 83 \times 2371$
$\longrightarrow$ `This equation enables the computation of log(2371)`
$\Rightarrow$ $916 \times 10^6 - 1 = 3 \times 149 \times 587 \times 3491$
$\longrightarrow$ `This equation enables the computation of log(3491)`
$\Rightarrow$ $834 \times 10^4 - 1 = 3491 \times 2389$
$\longrightarrow$ `This equation enables the computation of log(2389)`
`page 288:`
$\Rightarrow$ $1555 \times 10^4 + 1 = 23 \times 283 \times 2389$
$\longrightarrow$ `This equation enables the computation of log(2389)`
$\Rightarrow$ $3744 \times 10^4 + 1 = 17 \times 523 \times 4211$
$\longrightarrow$ `This equation enables the computation of log(4211)`
$\Rightarrow$ $131 \times 10^6 - 1 = 13 \times 4211 \times 2393$
$\longrightarrow$ `This equation enables the computation of log(2393)`
$\Rightarrow$ $2262 \times 10^6 + 1 = 397 \times 2381 \times 2393$
$\longrightarrow$ `This equation enables the computation of log(2393)`
$\Rightarrow$ $5191 \times 10^4 + 1 = 11 \times 13 \times 37 \times 9811$
$\longrightarrow$ `This equation enables the computation of log(9811)`
`page 289:`
$\Rightarrow$ $1916 \times 10^6 + 1 = 3^4 \times 9811 \times 2411$
$\longrightarrow$ `This equation enables the computation of log(2411)`
$\Rightarrow$ $495 \times 10^6 - 1 = 13 \times 17 \times 929 \times 2411$

$\longrightarrow$ This equation enables the computation of log(2411)

$\Rightarrow\ 2006 \times 10^5 - 1 = 157 \times 281 \times 4547$

$\longrightarrow$ This equation enables the computation of log(4547)

$\Rightarrow\ 111 \times 10^7 - 1 = 101 \times 4547 \times 2417$

$\longrightarrow$ This equation enables the computation of log(2417)

$\Rightarrow\ 1307 \times 10^6 + 1 = 3 \times 17 \times 23 \times 461 \times 2417$

$\longrightarrow$ This equation enables the computation of log(2417)

page 290:

$\Rightarrow\ 3193 \times 10^6 + 1 = 23 \times 71 \times 587 \times 3331$

$\longrightarrow$ This equation enables the computation of log(3331)

$\Rightarrow\ 138 \times 10^6 - 1 = 17 \times 3331 \times 2437$

$\longrightarrow$ This equation enables the computation of log(2437)

$\Rightarrow\ 1615 \times 10^4 - 1 = 3 \times 47^2 \times 2437$

$\longrightarrow$ This equation enables the computation of log(2437)

$\Rightarrow\ 2319 \times 10^5 - 1 = 131 \times 359 \times 4931$

$\longrightarrow$ This equation enables the computation of log(4931)

$\Rightarrow\ 4931 \times 10^8 + 1 = 3^5 \times 7 \times 17 \times 19 \times 137 \times 6551$

$\longrightarrow$ This equation enables the computation of log(6551)

$\Rightarrow\ 1775 \times 10^6 + 1 = 3 \times 37 \times 6551 \times 2441$

$\longrightarrow$ This equation enables the computation of log(2441)

page 291:

$\Rightarrow\ 1778 \times 10^5 - 1 = 13^2 \times 431 \times 2441$

$\longrightarrow$ This equation enables the computation of log(2441)

$\Rightarrow\ 1891 \times 10^6 + 1 = 11 \times 163 \times 431 \times 2447$

$\longrightarrow$ This equation enables the computation of log(2447)

$\Rightarrow\ 556 \times 10^6 - 1 = 3 \times 23 \times 37 \times 89 \times 2447$

$\longrightarrow$ This equation enables the computation of log(2447)

$\Rightarrow\ 1351 \times 10^4 - 1 = 3^2 \times 607 \times 2473$

$\longrightarrow$ This equation enables the computation of log(2473)

$\Rightarrow\ 26 \times 10^{10} - 1 = 17 \times 37 \times 59 \times 2473 \times 2833$

$\longrightarrow$ This equation enables the computation of log(2833)

page 292:

$\Rightarrow\ 636 \times 10^6 + 1 = 7 \times 13 \times 2833 \times 2467$

$\longrightarrow$ This equation enables the computation of log(2467)

$\Rightarrow\ 1831 \times 10^6 - 1 = 3 \times 19 \times 29 \times 449 \times 2467$

$\longrightarrow$ This equation enables the computation of log(2467)

$\Rightarrow\ 7795 \times 10^7 - 1 = 3^5 \times 31 \times 1223 \times 8461$

$\longrightarrow$ This equation enables the computation of log(8461)

$\Rightarrow\ 666 \times 10^7 + 1 = 311 \times 8461 \times 2531$

$\longrightarrow$ This equation enables the computation of log(2531)

$\Rightarrow\ 933 \times 10^6 - 1 = 449 \times 821 \times 2531$

$\longrightarrow$ `This equation enables the computation of log(2531)`

`page 293:`

$\Rightarrow\ 3928 \times 10^6 - 1 = 3 \times 7 \times 11 \times 3533 \times 4813$

$\longrightarrow$ `This equation enables the computation of log(4813)`

$\Rightarrow\ 4037 \times 10^5 + 1 = 3 \times 73 \times 383 \times 4813$

$\longrightarrow$ `This equation enables the computation of log(4813)`

$\Rightarrow\ 1995 \times 10^6 + 1 = 311 \times 1999 \times 3209$

$\longrightarrow$ `This equation enables the computation of log(3209)`

$\Rightarrow\ 1214 \times 10^6 - 1 = 149 \times 3209 \times 2539$

$\longrightarrow$ `This equation enables the computation of log(2539)`

$\Rightarrow\ 1984 \times 10^5 - 1 = 3 \times 7 \times 61^2 \times 2539$

$\longrightarrow$ `This equation enables the computation of log(2539)`

`page 294:`

$\Rightarrow\ 7185 \times 10^7 + 1 = 13^2 \times 71 \times 661 \times 9059$

$\longrightarrow$ `This equation enables the computation of log(9059)`

$\Rightarrow\ 622 \times 10^6 - 1 = 3^3 \times 9059 \times 2543$

$\longrightarrow$ `This equation enables the computation of log(2543)`

$\Rightarrow\ 1921 \times 10^6 + 1 = 547 \times 1381 \times 2543$

$\longrightarrow$ `This equation enables the computation of log(2543)`

$\Rightarrow\ 1367 \times 10^8 + 1 = 3^4 \times 769 \times 863 \times 2543$

$\longrightarrow$ `This equation enables the computation of log(2543)`

$\Rightarrow\ 2232 \times 10^6 + 1 = 7 \times 11^2 \times 1033 \times 2551$

$\longrightarrow$ `This equation enables the computation of log(2551)`

$\Rightarrow\ 319 \times 10^6 - 1 = 3 \times 73 \times 571 \times 2551$

$\longrightarrow$ `This equation enables the computation of log(2551)`

`page 295:`

$\Rightarrow\ 12 \times 10^6 + 1 = 13 \times 19^2 \times 2557$

$\longrightarrow$ `This equation enables the computation of log(2557)`

$\Rightarrow\ 1357 \times 10^4 - 1 = 3 \times 29 \times 61 \times 2557$

$\longrightarrow$ `This equation enables the computation of log(2557)`

$\Rightarrow\ 946 \times 10^5 + 1 = 29 \times 1259 \times 2591$

$\longrightarrow$ `This equation enables the computation of log(2591)`

$\Rightarrow\ 904 \times 10^4 - 1 = 3 \times 1163 \times 2591$

$\longrightarrow$ `This equation enables the computation of log(2591)`

`page 296:`

$\Rightarrow\ 3521 \times 10^5 + 1 = 3 \times 11 \times 19 \times 137 \times 4099$

$\longrightarrow$ `This equation enables the computation of log(4099)`

$\Rightarrow\ 896 \times 10^7 + 1 = 3 \times 281 \times 4099 \times 2593$

$\longrightarrow$ `This equation enables the computation of log(2593)`

$\Rightarrow\ 1181 \times 10^6 + 1 = 3 \times 157 \times 967 \times 2593$

$\longrightarrow$ `This equation enables the computation of log(2593)`

$\Rightarrow \quad 1426 \times 10^7 - 1 = 3 \times 7 \times 251 \times 373 \times 7253$
$\longrightarrow$ `This equation enables the computation of log(7253)`
$\Rightarrow \quad 246 \times 10^6 + 1 = 13 \times 7253 \times 2609$
$\longrightarrow$ `This equation enables the computation of log(2609)`
`page 297:`
$\Rightarrow \quad 2363 \times 10^6 - 1 = 19 \times 73 \times 653 \times 2609$
$\longrightarrow$ `This equation enables the computation of log(2609)`
$\Rightarrow \quad 5735 \times 10^6 + 1 = 3 \times 367 \times 907 \times 5743$
$\longrightarrow$ `This equation enables the computation of log(5743)`
$\Rightarrow \quad 2298 \times 10^7 - 1 = 11 \times 139 \times 5743 \times 2617$
$\longrightarrow$ `This equation enables the computation of log(2617)`
$\Rightarrow \quad 573 \times 10^6 + 1 = 7 \times 31 \times 1009 \times 2617$
$\longrightarrow$ `This equation enables the computation of log(2617)`
$\Rightarrow \quad 2458 \times 10^5 + 1 = 191 \times 491 \times 2621$
$\longrightarrow$ `This equation enables the computation of log(2621)`
$\Rightarrow \quad 163 \times 10^5 - 1 = 3^2 \times 691 \times 2621$
$\longrightarrow$ `This equation enables the computation of log(2621)`
`page 298:`
$\Rightarrow \quad 1634 \times 10^7 + 1 = 3 \times 13 \times 137 \times 1151 \times 2657$
$\longrightarrow$ `This equation enables the computation of log(2657)`
$\Rightarrow \quad 398 \times 10^6 + 1 = 3 \times 7^2 \times 1019 \times 2657$
$\longrightarrow$ `This equation enables the computation of log(2657)`
$\Rightarrow \quad 795 \times 10^7 - 1 = 29 \times 41 \times 1429 \times 4679$
$\longrightarrow$ `This equation enables the computation of log(4679)`
$\Rightarrow \quad 1408 \times 10^6 + 1 = 113 \times 4679 \times 2663$
$\longrightarrow$ `This equation enables the computation of log(2663)`
$\Rightarrow \quad 1206 \times 10^7 + 1 = 7^2 \times 29 \times 3187 \times 2663$
$\longrightarrow$ `This equation enables the computation of log(2663)`
`page 299:`
$\Rightarrow \quad 357 \times 10^6 - 1 = 31 \times 61 \times 71 \times 2659$
$\longrightarrow$ `This equation enables the computation of log(2659)`
$\Rightarrow \quad 1748 \times 10^5 + 1 = 3 \times 17 \times 1289 \times 2659$
$\longrightarrow$ `This equation enables the computation of log(2659)`
$\Rightarrow \quad 1955 \times 10^6 + 1 = 3 \times 137 \times 1697 \times 2803$
$\longrightarrow$ `This equation enables the computation of log(2803)`
$\Rightarrow \quad 44 \times 10^9 + 1 = 3^2 \times 653 \times 2803 \times 2671$
$\longrightarrow$ `This equation enables the computation of log(2671)`
$\Rightarrow \quad 1407 \times 10^6 - 1 = 23 \times 37 \times 619 \times 2671$
$\longrightarrow$ `This equation enables the computation of log(2671)`
`page 300:`
$\Rightarrow \quad 181 \times 10^6 + 1 = 7 \times 13 \times 743 \times 2677$

$\longrightarrow$ This equation enables the computation of log(2677)
$\Rightarrow$ $2531 \times 10^6 + 1 = 3 \times 17 \times 53 \times 349 \times 2683$
$\longrightarrow$ This equation enables the computation of log(2683)
$\Rightarrow$ $152 \times 10^6 - 1 = 181 \times 313 \times 2683$
$\longrightarrow$ This equation enables the computation of log(2683)
$\Rightarrow$ $2432 \times 10^9 + 1 = 3 \times 11 \times 13 \times 683 \times 3089 \times 2687$
$\longrightarrow$ This equation enables the computation of log(2687)
$\Rightarrow$ $137 \times 10^8 + 1 = 3 \times 17 \times 257 \times 389 \times 2687$
$\longrightarrow$ This equation enables the computation of log(2687)
page 301:
$\Rightarrow$ $2573 \times 10^9 - 1 = 11 \times 13^3 \times 29 \times 887 \times 4139$
$\longrightarrow$ This equation enables the computation of log(4139)
$\Rightarrow$ $1458 \times 10^6 + 1 = 131 \times 4139 \times 2689$
$\longrightarrow$ This equation enables the computation of log(2689)
$\Rightarrow$ $2095 \times 10^4 - 1 = 3 \times 7^2 \times 53 \times 2689$
$\longrightarrow$ This equation enables the computation of log(2689)
$\Rightarrow$ $23 \times 10^7 + 1 = 3 \times 7 \times 11 \times 367 \times 2713$
$\longrightarrow$ This equation enables the computation of log(2713)
$\Rightarrow$ $413 \times 10^5 - 1 = 13 \times 1171 \times 2713$
$\longrightarrow$ This equation enables the computation of log(2713)
page 302:
$\Rightarrow$ $22 \times 10^8 - 1 = 3 \times 173 \times 1559 \times 2719$
$\longrightarrow$ This equation enables the computation of log(2719)
$\Rightarrow$ $248 \times 10^5 - 1 = 7 \times 1303 \times 2719$
$\longrightarrow$ This equation enables the computation of log(2719)
$\Rightarrow$ $234 \times 10^7 - 1 = 877 \times 977 \times 2731$
$\longrightarrow$ This equation enables the computation of log(2731)
$\Rightarrow$ $391 \times 10^6 + 1 = 7 \times 113 \times 181 \times 2731$
$\longrightarrow$ This equation enables the computation of log(2731)
$\Rightarrow$ $2629 \times 10^6 - 1 = 3^2 \times 19 \times 71 \times 79 \times 2741$
$\longrightarrow$ This equation enables the computation of log(2741)
page 303:
$\Rightarrow$ $112 \times 10^6 + 1 = 29 \times 1409 \times 2741$
$\longrightarrow$ This equation enables the computation of log(2741)
$\Rightarrow$ $5792 \times 10^5 + 1 = 3 \times 31 \times 1033 \times 6029$
$\longrightarrow$ This equation enables the computation of log(6029)
$\Rightarrow$ $1785 \times 10^6 + 1 = 107 \times 6029 \times 2767$
$\longrightarrow$ This equation enables the computation of log(2767)
$\Rightarrow$ $982 \times 10^6 - 1 = 3^2 \times 47 \times 839 \times 2767$
$\longrightarrow$ This equation enables the computation of log(2767)
$\Rightarrow$ $241 \times 10^7 + 1 = 743 \times 1163 \times 2789$

$\longrightarrow$ `This equation enables the computation of log(2789)`

`page 304:`

$\Rightarrow$ $379 \times 10^6 - 1 = 3^3 \times 7 \times 719 \times 2789$

$\longrightarrow$ `This equation enables the computation of log(2789)`

$\Rightarrow$ $142 \times 10^9 - 1 = 3 \times 11^2 \times 13 \times 53 \times 59 \times 9623$

$\longrightarrow$ `This equation enables the computation of log(9623)`

$\Rightarrow$ $2345 \times 10^6 + 1 = 3 \times 29 \times 9623 \times 2801$

$\longrightarrow$ `This equation enables the computation of log(2801)`

$\Rightarrow$ $456 \times 10^6 - 1 = 7 \times 13 \times 1789 \times 2801$

$\longrightarrow$ `This equation enables the computation of log(2801)`

$\Rightarrow$ $1839 \times 10^7 - 1 = 7 \times 29 \times 37 \times 811 \times 3019$

$\longrightarrow$ `This equation enables the computation of log(3019)`

`page 305:`

$\Rightarrow$ $2743 \times 10^6 + 1 = 7 \times 31 \times 53 \times 79 \times 3019$

$\longrightarrow$ `This equation enables the computation of log(3019)`

$\Rightarrow$ $1652 \times 10^9 + 1 = 3 \times 13^2 \times 151 \times 2621 \times 8233$

$\longrightarrow$ `This equation enables the computation of log(8233)`

$\Rightarrow$ $2833 \times 10^6 - 1 = 3 \times 23 \times 8233 \times 4987$

$\longrightarrow$ `This equation enables the computation of log(4987)`

$\Rightarrow$ $3395 \times 10^5 - 1 = 19 \times 4987 \times 3583$

$\longrightarrow$ `This equation enables the computation of log(3583)`

$\Rightarrow$ $1288 \times 10^7 - 1 = 3^3 \times 29 \times 3583 \times 4591$

$\longrightarrow$ `This equation enables the computation of log(4591)`

$\Rightarrow$ $893 \times 10^6 + 1 = 3 \times 23 \times 4591 \times 2819$

$\longrightarrow$ `This equation enables the computation of log(2819)`

`page 306:`

$\Rightarrow$ $1926 \times 10^6 - 1 = 7 \times 11 \times 19 \times 467 \times 2819$

$\longrightarrow$ `This equation enables the computation of log(2819)`

$\Rightarrow$ $1509 \times 10^7 + 1 = 577 \times 1303 \times 20071$

$\longrightarrow$ `This equation enables the computation of log(20071)`

$\Rightarrow$ $17255 \times 10^5 + 1 = 3 \times 43 \times 587 \times 22787$

$\longrightarrow$ `This equation enables the computation of log(22787)`

$\Rightarrow$ $5532 \times 10^5 - 1 = 11 \times 2207 \times 22787$

$\longrightarrow$ `This equation enables the computation of log(22787)`

$\Rightarrow$ $2474 \times 10^8 + 1 = 3^3 \times 7 \times 11 \times 59 \times 283 \times 7127$

$\longrightarrow$ `This equation enables the computation of log(7127)`

`page 307:`

$\Rightarrow$ $2045 \times 10^6 - 1 = 7 \times 179 \times 229 \times 7127$

$\longrightarrow$ `This equation enables the computation of log(7127)`

$\Rightarrow$ $973 \times 10^8 - 1 = 3^2 \times 1009 \times 1093 \times 9803$

$\longrightarrow$ `This equation enables the computation of log(9803)`

$\Rightarrow \quad 2503 \times 10^5 - 1 = 3^2 \times 9803 \times 2837$
⟶ `This equation enables the computation of log(2837)`
$\Rightarrow \quad 334 \times 10^5 + 1 = 61 \times 193 \times 2837$
⟶ `This equation enables the computation of log(2837)`
$\Rightarrow \quad 584 \times 10^6 - 1 = 11 \times 29 \times 197 \times 9293$
⟶ `This equation enables the computation of log(9293)`

`page 308:`

$\Rightarrow \quad 2642 \times 10^4 - 1 = 9293 \times 2843$
⟶ `This equation enables the computation of log(2843)`
$\Rightarrow \quad 197 \times 10^6 - 1 = 7 \times 19 \times 521 \times 2843$
⟶ `This equation enables the computation of log(2843)`
$\Rightarrow \quad 2817 \times 10^7 + 1 = 11 \times 13 \times 19^2 \times 191 \times 2857$
⟶ `This equation enables the computation of log(2857)`
$\Rightarrow \quad 2457 \times 10^6 + 1 = 23 \times 139 \times 269 \times 2857$
⟶ `This equation enables the computation of log(2857)`
$\Rightarrow \quad 263 \times 10^7 - 1 = 11 \times 193 \times 433 \times 2861$
⟶ `This equation enables the computation of log(2861)`
$\Rightarrow \quad 231 \times 10^6 + 1 = 263 \times 307 \times 2861$
⟶ `This equation enables the computation of log(2861)`

`page 309:`

$\Rightarrow \quad 481 \times 10^7 + 1 = 29 \times 53 \times 1087 \times 2879$
⟶ `This equation enables the computation of log(2879)`
$\Rightarrow \quad 1931 \times 10^6 + 1 = 3 \times 7 \times 19 \times 41^2 \times 2879$
⟶ `This equation enables the computation of log(2879)`
$\Rightarrow \quad 737 \times 10^7 + 1 = 3^3 \times 7 \times 13 \times 1039 \times 2887$
⟶ `This equation enables the computation of log(2887)`
$\Rightarrow \quad 1596 \times 10^6 + 1 = 17 \times 31 \times 1049 \times 2887$
⟶ `This equation enables the computation of log(2887)`
$\Rightarrow \quad 659 \times 10^7 - 1 = 11 \times 227 \times 911 \times 2897$
⟶ `This equation enables the computation of log(2897)`

`page 310:`

$\Rightarrow \quad 796 \times 10^6 - 1 = 3 \times 67 \times 1367 \times 2897$
⟶ `This equation enables the computation of log(2897)`
$\Rightarrow \quad 199 \times 10^8 - 1 = 3^3 \times 11 \times 19 \times 677 \times 5209$
⟶ `This equation enables the computation of log(5209)`
$\Rightarrow \quad 1195 \times 10^6 - 1 = 3 \times 73 \times 1277 \times 4273$
⟶ `This equation enables the computation of log(4273)`
$\Rightarrow \quad 4273 \times 10^6 - 1 = 3 \times 43 \times 5209 \times 6359$
⟶ `This equation enables the computation of log(6359)`
$\Rightarrow \quad 2086 \times 10^6 + 1 = 113 \times 6359 \times 2903$
⟶ `This equation enables the computation of log(2903)`

page 311:

$\Rightarrow$ $1124 \times 10^8 + 1 = 3^4 \times 29 \times 53 \times 311 \times 2903$
$\longrightarrow$ This equation enables the computation of log(2903)
$\Rightarrow$ $1885 \times 10^6 + 1 = 17 \times 47 \times 811 \times 2909$
$\longrightarrow$ This equation enables the computation of log(2909)
$\Rightarrow$ $1396 \times 10^5 + 1 = 37 \times 1297 \times 2909$
$\longrightarrow$ This equation enables the computation of log(2909)
$\Rightarrow$ $1542 \times 10^7 + 1 = 7 \times 41 \times 113 \times 163 \times 2917$
$\longrightarrow$ This equation enables the computation of log(2917)
$\Rightarrow$ $835 \times 10^6 + 1 = 11 \times 53 \times 491 \times 2917$
$\longrightarrow$ This equation enables the computation of log(2917)
$\Rightarrow$ $2743 \times 10^6 - 1 = 3 \times 19 \times 41 \times 401 \times 2927$
$\longrightarrow$ This equation enables the computation of log(2927)

page 312:

$\Rightarrow$ $184 \times 10^6 + 1 = 37 \times 1699 \times 2927$
$\longrightarrow$ This equation enables the computation of log(2927)
$\Rightarrow$ $6148 \times 10^9 - 1 = 3^2 \times 11 \times 13 \times 547 \times 1061 \times 8231$
$\longrightarrow$ This equation enables the computation of log(8231)
$\Rightarrow$ $2661 \times 10^5 - 1 = 11 \times 8231 \times 2939$
$\longrightarrow$ This equation enables the computation of log(2939)
$\Rightarrow$ $278 \times 10^5 + 1 = 3^2 \times 1051 \times 2939$
$\longrightarrow$ This equation enables the computation of log(2939)
$\Rightarrow$ $2441 \times 10^6 + 1 = 3 \times 11 \times 37 \times 677 \times 2953$
$\longrightarrow$ This equation enables the computation of log(2953)

page 313:

$\Rightarrow$ $512 \times 10^6 - 1 = 7 \times 17 \times 31 \times 47 \times 2953$
$\longrightarrow$ This equation enables the computation of log(2953)
$\Rightarrow$ $1761 \times 10^6 + 1 = 449 \times 1321 \times 2969$
$\longrightarrow$ This equation enables the computation of log(2969)
$\Rightarrow$ $1208 \times 10^6 - 1 = 251 \times 1621 \times 2969$
$\longrightarrow$ This equation enables the computation of log(2969)
$\Rightarrow$ $718 \times 10^7 - 1 = 3 \times 23 \times 113 \times 239 \times 3853$
$\longrightarrow$ This equation enables the computation of log(3853)
$\Rightarrow$ $2446 \times 10^5 - 1 = 3 \times 7 \times 3853 \times 3023$
$\longrightarrow$ This equation enables the computation of log(3023)

page 314:

$\Rightarrow$ $2663 \times 10^6 - 1 = 11 \times 53 \times 1511 \times 3023$
$\longrightarrow$ This equation enables the computation of log(3023)
$\Rightarrow$ $2611 \times 10^5 + 1 = 149 \times 577 \times 3037$
$\longrightarrow$ This equation enables the computation of log(3037)
$\Rightarrow$ $426 \times 10^5 - 1 = 13^2 \times 83 \times 3037$

$\longrightarrow$ This equation enables the computation of log(3037)
$\Rightarrow$ $7512 \times 10^6 + 1 = 11 \times 17 \times 61 \times 67 \times 9829$
$\longrightarrow$ This equation enables the computation of log(9829)
$\Rightarrow$ $2717 \times 10^7 + 1 = 3^2 \times 101 \times 9829 \times 3041$
$\longrightarrow$ This equation enables the computation of log(3041)
page 315:
$\Rightarrow$ $199 \times 10^6 - 1 = 3^2 \times 11 \times 661 \times 3041$
$\longrightarrow$ This equation enables the computation of log(3041)
$\Rightarrow$ $2727 \times 10^7 - 1 = 11 \times 17 \times 37 \times 863 \times 4567$
$\longrightarrow$ This equation enables the computation of log(4567)
$\Rightarrow$ $132 \times 10^6 + 1 = 7 \times 4567 \times 4129$
$\longrightarrow$ This equation enables the computation of log(4129)
$\Rightarrow$ $3997 \times 10^6 - 1 = 3^4 \times 17 \times 19 \times 37 \times 4129$
$\longrightarrow$ This equation enables the computation of log(4129)
$\Rightarrow$ $8723 \times 10^6 + 1 = 3 \times 337 \times 827 \times 10433$
$\longrightarrow$ This equation enables the computation of log(10433)
$\Rightarrow$ $171 \times 10^7 - 1 = 251 \times 653 \times 10433$
$\longrightarrow$ This equation enables the computation of log(10433)
page 316:
$\Rightarrow$ $2105 \times 10^9 + 1 = 3^4 \times 151 \times 7523 \times 22877$
$\longrightarrow$ This equation enables the computation of log(22877)
$\Rightarrow$ $1827 \times 10^8 - 1 = 11 \times 277 \times 2621 \times 22877$
$\longrightarrow$ This equation enables the computation of log(22877)
$\Rightarrow$ $7217 \times 10^6 - 1 = 11 \times 173 \times 463 \times 8191$
$\longrightarrow$ This equation enables the computation of log(8191)
$\Rightarrow$ $974 \times 10^6 + 1 = 3 \times 13 \times 8191 \times 3049$
$\longrightarrow$ This equation enables the computation of log(3049)
$\Rightarrow$ $2075 \times 10^6 - 1 = 617 \times 1103 \times 3049$
$\longrightarrow$ This equation enables the computation of log(3049)
page 317:
$\Rightarrow$ $2922 \times 10^5 - 1 = 7 \times 13 \times 1049 \times 3061$
$\longrightarrow$ This equation enables the computation of log(3061)
$\Rightarrow$ $1671 \times 10^4 - 1 = 53 \times 103 \times 3061$
$\longrightarrow$ This equation enables the computation of log(3061)
$\Rightarrow$ $7283 \times 10^8 - 1 = 11 \times 13 \times 491 \times 1181 \times 8783$
$\longrightarrow$ This equation enables the computation of log(8783)
$\Rightarrow$ $1893 \times 10^5 - 1 = 7 \times 8783 \times 3079$
$\longrightarrow$ This equation enables the computation of log(3079)
$\Rightarrow$ $1966 \times 10^6 + 1 = 7^2 \times 83 \times 157 \times 3079$
$\longrightarrow$ This equation enables the computation of log(3079)
page 318:

$\Rightarrow$ $397 \times 10^8 - 1 = 3^2 \times 11 \times 83 \times 1051 \times 4597$
$\longrightarrow$ This equation enables the computation of log(4597)
$\Rightarrow$ $4597 \times 10^7 - 1 = 3 \times 7 \times 11 \times 17 \times 2161 \times 5417$
$\longrightarrow$ This equation enables the computation of log(5417)
$\Rightarrow$ $82 \times 10^8 + 1 = 491 \times 5417 \times 3083$
$\longrightarrow$ This equation enables the computation of log(3083)
$\Rightarrow$ $2034 \times 10^6 + 1 = 11 \times 37 \times 1621 \times 3083$
$\longrightarrow$ This equation enables the computation of log(3083)
$\Rightarrow$ $2082 \times 10^6 + 1 = 353 \times 1619 \times 3643$
$\longrightarrow$ This equation enables the computation of log(3643)
$\Rightarrow$ $2605 \times 10^5 + 1 = 23 \times 3643 \times 3109$
$\longrightarrow$ This equation enables the computation of log(3109)

page 319:

$\Rightarrow$ $4779 \times 10^5 - 1 = 31 \times 1889 \times 8161$
$\longrightarrow$ This equation enables the computation of log(8161)
$\Rightarrow$ $1294 \times 10^6 - 1 = 3 \times 17 \times 8161 \times 3109$
$\longrightarrow$ This equation enables the computation of log(3109)
$\Rightarrow$ $18283 \times 10^7 + 1 = 11 \times 19 \times 157 \times 211 \times 26407$
$\longrightarrow$ This equation enables the computation of log(26407)
$\Rightarrow$ $2019 \times 10^6 - 1 = 101 \times 757 \times 26407$
$\longrightarrow$ This equation enables the computation of log(26407)
$\Rightarrow$ $8676 \times 10^6 + 1 = 19^2 \times 2719 \times 8839$
$\longrightarrow$ This equation enables the computation of log(8839)

page 320:

$\Rightarrow$ $163 \times 10^6 - 1 = 3^3 \times 683 \times 8839$
$\longrightarrow$ This equation enables the computation of log(8839)
$\Rightarrow$ $8182 \times 10^5 - 1 = 3^2 \times 23 \times 401 \times 9857$
$\longrightarrow$ This equation enables the computation of log(9857)
$\Rightarrow$ $24475 \times 10^6 - 1 = 3 \times 31 \times 9857 \times 26699$
$\longrightarrow$ This equation enables the computation of log(26699)
$\Rightarrow$ $4459 \times 10^5 - 1 = 3 \times 19 \times 293 \times 26699$
$\longrightarrow$ This equation enables the computation of log(26699)
$\Rightarrow$ $21232 \times 10^4 - 1 = 3^2 \times 883 \times 26717$
$\longrightarrow$ This equation enables the computation of log(26717)

page 321:

$\Rightarrow$ $5485 \times 10^4 + 1 = 2053 \times 26717$
$\longrightarrow$ This equation enables the computation of log(26717)
$\Rightarrow$ $967 \times 10^6 - 1 = 3 \times 7 \times 53 \times 61 \times 14243$
$\longrightarrow$ This equation enables the computation of log(14243)
$\Rightarrow$ $4573 \times 10^5 + 1 = 97 \times 331 \times 14243$
$\longrightarrow$ This equation enables the computation of log(14243)

$\Rightarrow$ $3317 \times 10^6 - 1 = 17 \times 41 \times 977 \times 4871$
$\longrightarrow$ This equation enables the computation of log(4871)
$\Rightarrow$ $3944 \times 10^5 - 1 = 7 \times 43 \times 269 \times 4871$
$\longrightarrow$ This equation enables the computation of log(4871)
page 322:
$\Rightarrow$ $468 \times 10^6 + 1 = 7 \times 19 \times 239 \times 14723$
$\longrightarrow$ This equation enables the computation of log(14723)
$\Rightarrow$ $12092 \times 10^4 - 1 = 43 \times 191 \times 14723$
$\longrightarrow$ This equation enables the computation of log(14723)
$\Rightarrow$ $885 \times 10^8 + 1 = 7^2 \times 17 \times 23 \times 1481 \times 3119$
$\longrightarrow$ This equation enables the computation of log(3119)
$\Rightarrow$ $1951 \times 10^6 - 1 = 3 \times 13 \times 43 \times 373 \times 3119$
$\longrightarrow$ This equation enables the computation of log(3119)
$\Rightarrow$ $8 \times 10^9 + 1 = 3^2 \times 7 \times 23 \times 29 \times 61 \times 3121$
$\longrightarrow$ This equation enables the computation of log(3121)
$\Rightarrow$ $1363 \times 10^6 - 1 = 3 \times 149 \times 977 \times 3121$
$\longrightarrow$ This equation enables the computation of log(3121)
page 323:
$\Rightarrow$ $2249 \times 10^6 - 1 = 19 \times 97 \times 389 \times 3137$
$\longrightarrow$ This equation enables the computation of log(3137)
$\Rightarrow$ $888 \times 10^6 + 1 = 7^2 \times 53 \times 109 \times 3137$
$\longrightarrow$ This equation enables the computation of log(3137)
$\Rightarrow$ $2691 \times 10^4 - 1 = 29 \times 293 \times 3167$
$\longrightarrow$ This equation enables the computation of log(3167)
$\Rightarrow$ $476 \times 10^4 + 1 = 3^2 \times 167 \times 3167$
$\longrightarrow$ This equation enables the computation of log(3167)
$\Rightarrow$ $2379 \times 10^5 - 1 = 41 \times 1831 \times 3169$
$\longrightarrow$ This equation enables the computation of log(3169)
page 324:
$\Rightarrow$ $79 \times 10^6 + 1 = 97 \times 257 \times 3169$
$\longrightarrow$ This equation enables the computation of log(3169)
$\Rightarrow$ $3817 \times 10^7 + 1 = 7 \times 577 \times 1373 \times 6883$
$\longrightarrow$ This equation enables the computation of log(6883)
$\Rightarrow$ $107 \times 10^9 + 1 = 3^3 \times 181 \times 6883 \times 3181$
$\longrightarrow$ This equation enables the computation of log(3181)
$\Rightarrow$ $2024 \times 10^7 - 1 = 37 \times 383 \times 449 \times 3181$
$\longrightarrow$ This equation enables the computation of log(3181)
$\Rightarrow$ $231 \times 10^7 + 1 = 17 \times 97 \times 439 \times 3191$
$\longrightarrow$ This equation enables the computation of log(3191)
$\Rightarrow$ $881 \times 10^6 - 1 = 11 \times 19 \times 1321 \times 3191$
$\longrightarrow$ This equation enables the computation of log(3191)

page 325:

$\Rightarrow$ $287 \times 10^9 + 1 = 3^2 \times 11 \times 13 \times 103 \times 673 \times 3217$

$\longrightarrow$ This equation enables the computation of log(3217)

$\Rightarrow$ $2781 \times 10^5 - 1 = 137 \times 631 \times 3217$

$\longrightarrow$ This equation enables the computation of log(3217)

$\Rightarrow$ $3337 \times 10^7 - 1 = 3 \times 7 \times 41^2 \times 179 \times 5281$

$\longrightarrow$ This equation enables the computation of log(5281)

$\Rightarrow$ $1684 \times 10^6 - 1 = 3^2 \times 11 \times 5281 \times 3221$

$\longrightarrow$ This equation enables the computation of log(3221)

$\Rightarrow$ $735 \times 10^5 - 1 = 19 \times 1201 \times 3221$

$\longrightarrow$ This equation enables the computation of log(3221)

page 326:

$\Rightarrow$ $2267 \times 10^7 + 1 = 3^2 \times 11 \times 167 \times 421 \times 3257$

$\longrightarrow$ This equation enables the computation of log(3257)

$\Rightarrow$ $3128 \times 10^6 + 1 = 3 \times 7 \times 19 \times 29 \times 83 \times 3257$

$\longrightarrow$ This equation enables the computation of log(3257)

$\Rightarrow$ $551 \times 10^9 + 1 = 3 \times 11 \times 859 \times 2441 \times 7963$

$\longrightarrow$ This equation enables the computation of log(7963)

$\Rightarrow$ $641 \times 10^7 - 1 = 13 \times 19 \times 7963 \times 3259$

$\longrightarrow$ This equation enables the computation of log(3259)

$\Rightarrow$ $3151 \times 10^6 - 1 = 3^2 \times 7 \times 103 \times 149 \times 3259$

$\longrightarrow$ This equation enables the computation of log(3259)

page 327:

$\Rightarrow$ $2017 \times 10^6 + 1 = 73 \times 8447 \times 3271$

$\longrightarrow$ This equation enables the computation of log(3271)

$\Rightarrow$ $2727 \times 10^5 - 1 = 11^2 \times 13 \times 53 \times 3271$

$\longrightarrow$ This equation enables the computation of log(3271)

$\Rightarrow$ $5545 \times 10^6 - 1 = 3^2 \times 7 \times 11 \times 1171 \times 6833$

$\longrightarrow$ This equation enables the computation of log(6833)

$\Rightarrow$ $2447 \times 10^8 - 1 = 7^2 \times 13 \times 17 \times 6833 \times 3307$

$\longrightarrow$ This equation enables the computation of log(3307)

$\Rightarrow$ $1321 \times 10^7 - 1 = 3 \times 7 \times 37 \times 53 \times 97 \times 3307$

$\longrightarrow$ This equation enables the computation of log(3307)

page 328:

$\Rightarrow$ $2473 \times 10^7 + 1 = 7 \times 463 \times 1951 \times 3911$

$\longrightarrow$ This equation enables the computation of log(3911)

$\Rightarrow$ $907 \times 10^5 + 1 = 7 \times 3911 \times 3313$

$\longrightarrow$ This equation enables the computation of log(3313)

$\Rightarrow$ $2444 \times 10^4 + 1 = 3 \times 2459 \times 3313$

$\longrightarrow$ This equation enables the computation of log(3313)

$\Rightarrow$ $1874 \times 10^7 + 1 = 3 \times 1019 \times 1847 \times 3319$

$\longrightarrow$ `This equation enables the computation of log(3319)`

$\Rightarrow$ $1174 \times 10^6 - 1 = 3 \times 157 \times 751 \times 3319$

$\longrightarrow$ `This equation enables the computation of log(3319)`

`page 329:`

$\Rightarrow$ $2528 \times 10^6 + 1 = 3^2 \times 73 \times 1151 \times 3343$

$\longrightarrow$ `This equation enables the computation of log(3343)`

$\Rightarrow$ $2075 \times 10^4 + 1 = 3 \times 2069 \times 3343$

$\longrightarrow$ `This equation enables the computation of log(3343)`

$\Rightarrow$ $2712 \times 10^5 - 1 = 7 \times 89 \times 131 \times 3323$

$\longrightarrow$ `This equation enables the computation of log(3323)`

$\Rightarrow$ $611 \times 10^5 + 1 = 3^4 \times 227 \times 3323$

$\longrightarrow$ `This equation enables the computation of log(3323)`

$\Rightarrow$ $3095 \times 10^5 + 1 = 3^3 \times 31 \times 67 \times 5519$

$\longrightarrow$ `This equation enables the computation of log(5519)`

`page 330:`

$\Rightarrow$ $3069 \times 10^6 + 1 = 107 \times 5519 \times 5197$

$\longrightarrow$ `This equation enables the computation of log(5197)`

$\Rightarrow$ $2128 \times 10^6 - 1 = 3 \times 41 \times 5197 \times 3329$

$\longrightarrow$ `This equation enables the computation of log(3329)`

$\Rightarrow$ $2023 \times 10^5 + 1 = 67 \times 907 \times 3329$

$\longrightarrow$ `This equation enables the computation of log(3329)`

$\Rightarrow$ $2993 \times 10^6 + 1 = 3 \times 229 \times 1297 \times 3359$

$\longrightarrow$ `This equation enables the computation of log(3359)`

$\Rightarrow$ $301 \times 10^5 - 1 = 3 \times 29 \times 103 \times 3359$

$\longrightarrow$ `This equation enables the computation of log(3359)`

`page 331:`

$\Rightarrow$ $3033 \times 10^5 + 1 = 31 \times 41 \times 71 \times 3361$

$\longrightarrow$ `This equation enables the computation of log(3361)`

$\Rightarrow$ $328 \times 10^5 - 1 = 3 \times 3253 \times 3361$

$\longrightarrow$ `This equation enables the computation of log(3361)`

$\Rightarrow$ $7779 \times 10^7 + 1 = 7 \times 17 \times 47 \times 1429 \times 9733$

$\longrightarrow$ `This equation enables the computation of log(9733)`

$\Rightarrow$ $9733 \times 10^6 + 1 = 457 \times 1871 \times 11383$

$\longrightarrow$ `This equation enables the computation of log(11383)`

$\Rightarrow$ $165 \times 10^7 - 1 = 43 \times 11383 \times 3371$

$\longrightarrow$ `This equation enables the computation of log(3371)`

$\Rightarrow$ $1721 \times 10^6 + 1 = 3 \times 7^2 \times 23 \times 151 \times 3371$

$\longrightarrow$ `This equation enables the computation of log(3371)`

`page 332:`

$\Rightarrow$ $4511 \times 10^6 - 1 = 11 \times 31 \times 2143 \times 6173$

$\longrightarrow$ `This equation enables the computation of log(6173)`

$\Rightarrow$ $387 \times 10^8 + 1 = 13 \times 107 \times 6173 \times 4507$
$\longrightarrow$ This equation enables the computation of log(4507)
$\Rightarrow$ $2644 \times 10^6 + 1 = 173 \times 4507 \times 3391$
$\longrightarrow$ This equation enables the computation of log(3391)
$\Rightarrow$ $747 \times 10^6 - 1 = 43 \times 47 \times 109 \times 3391$
$\longrightarrow$ This equation enables the computation of log(3391)
$\Rightarrow$ $1535 \times 10^6 + 1 = 3 \times 179 \times 839 \times 3407$
$\longrightarrow$ This equation enables the computation of log(3407)
page 333:
$\Rightarrow$ $1685 \times 10^5 - 1 = 19^2 \times 137 \times 3407$
$\longrightarrow$ This equation enables the computation of log(3407)
$\Rightarrow$ $1221 \times 10^7 + 1 = 19 \times 71 \times 1031 \times 8779$
$\longrightarrow$ This equation enables the computation of log(8779)
$\Rightarrow$ $1 \times 10^{11} + 1 = 11^2 \times 23 \times 8779 \times 4093$
$\longrightarrow$ This equation enables the computation of log(4093)
$\Rightarrow$ $2325 \times 10^6 - 1 = 7 \times 19 \times 4093 \times 4271$
$\longrightarrow$ This equation enables the computation of log(4271)
$\Rightarrow$ $1895 \times 10^5 - 1 = 13 \times 4271 \times 3413$
$\longrightarrow$ This equation enables the computation of log(3413)
page 334:
$\Rightarrow$ $1518 \times 10^5 + 1 = 79 \times 563 \times 3413$
$\longrightarrow$ This equation enables the computation of log(3413)
$\Rightarrow$ $248 \times 10^7 + 1 = 3 \times 17 \times 23 \times 613 \times 3449$
$\longrightarrow$ This equation enables the computation of log(3449)
$\Rightarrow$ $2792 \times 10^5 - 1 = 13^2 \times 479 \times 3449$
$\longrightarrow$ This equation enables the computation of log(3449)
$\Rightarrow$ $541 \times 10^8 - 1 = 3^2 \times 19 \times 23^2 \times 173 \times 3457$
$\longrightarrow$ This equation enables the computation of log(3457)
$\Rightarrow$ $2245 \times 10^6 - 1 = 3 \times 11^2 \times 1789 \times 3457$
$\longrightarrow$ This equation enables the computation of log(3457)
page 335:
$\Rightarrow$ $665 \times 10^6 + 1 = 3^2 \times 37 \times 577 \times 3461$
$\longrightarrow$ This equation enables the computation of log(3461)
$\Rightarrow$ $272 \times 10^5 - 1 = 29 \times 271 \times 3461$
$\longrightarrow$ This equation enables the computation of log(3461)
$\Rightarrow$ $1431 \times 10^9 + 1 = 11^2 \times 13 \times 443 \times 593 \times 3463$
$\longrightarrow$ This equation enables the computation of log(3463)
$\Rightarrow$ $2682 \times 10^6 - 1 = 7 \times 31 \times 43 \times 83 \times 3463$
$\longrightarrow$ This equation enables the computation of log(3463)
$\Rightarrow$ $1556 \times 10^6 + 1 = 3^2 \times 47 \times 1061 \times 3467$
$\longrightarrow$ This equation enables the computation of log(3467)

$\Rightarrow$ $1692 \times 10^5 + 1 = 37 \times 1319 \times 3467$
$\longrightarrow$ This equation enables the computation of log(3467)
page 336:
$\Rightarrow$ $816 \times 10^8 + 1 = 13 \times 23 \times 151 \times 521 \times 3469$
$\longrightarrow$ This equation enables the computation of log(3469)
$\Rightarrow$ $1813 \times 10^6 + 1 = 23 \times 31 \times 733 \times 3469$
$\longrightarrow$ This equation enables the computation of log(3469)
$\Rightarrow$ $3202 \times 10^7 - 1 = 3 \times 13 \times 23 \times 29 \times 349 \times 3527$
$\longrightarrow$ This equation enables the computation of log(3527)
$\Rightarrow$ $277 \times 10^6 - 1 = 3 \times 47 \times 557 \times 3527$
$\longrightarrow$ This equation enables the computation of log(3527)
$\Rightarrow$ $1829 \times 10^7 + 1 = 3 \times 7 \times 13 \times 17 \times 19 \times 41 \times 5059$
$\longrightarrow$ This equation enables the computation of log(5059)
page 337:
$\Rightarrow$ $1946 \times 10^6 - 1 = 109 \times 5059 \times 3529$
$\longrightarrow$ This equation enables the computation of log(3529)
$\Rightarrow$ $1583 \times 10^6 + 1 = 3^2 \times 11 \times 23 \times 197 \times 3529$
$\longrightarrow$ This equation enables the computation of log(3529)
$\Rightarrow$ $481 \times 10^7 - 1 = 3 \times 7 \times 61 \times 1061 \times 3539$
$\longrightarrow$ This equation enables the computation of log(3539)
$\Rightarrow$ $1271 \times 10^6 - 1 = 83 \times 4327 \times 3539$
$\longrightarrow$ This equation enables the computation of log(3539)
$\Rightarrow$ $1643 \times 10^7 + 1 = 3 \times 317 \times 2909 \times 5939$
$\longrightarrow$ This equation enables the computation of log(5939)
page 338:
$\Rightarrow$ $2103 \times 10^4 - 1 = 5939 \times 3541$
$\longrightarrow$ This equation enables the computation of log(3541)
$\Rightarrow$ $2689 \times 10^5 - 1 = 3 \times 17 \times 1489 \times 3541$
$\longrightarrow$ This equation enables the computation of log(3541)
$\Rightarrow$ $1969 \times 10^6 - 1 = 3 \times 31 \times 47 \times 127 \times 3547$
$\longrightarrow$ This equation enables the computation of log(3547)
$\Rightarrow$ $1592 \times 10^5 + 1 = 3^2 \times 4987 \times 3547$
$\longrightarrow$ This equation enables the computation of log(3547)
$\Rightarrow$ $446 \times 10^7 - 1 = 7 \times 13 \times 47 \times 293 \times 3559$
$\longrightarrow$ This equation enables the computation of log(3559)
page 339:
$\Rightarrow$ $901 \times 10^6 - 1 = 3^2 \times 23 \times 1223 \times 3559$
$\longrightarrow$ This equation enables the computation of log(3559)
$\Rightarrow$ $863 \times 10^6 - 1 = 67 \times 3607 \times 3571$
$\longrightarrow$ This equation enables the computation of log(3571)
$\Rightarrow$ $2083 \times 10^5 + 1 = 7 \times 13 \times 641 \times 3571$

$\longrightarrow$ `This equation enables the computation of log(3571)`
$\Rightarrow$ $1339 \times 10^7 - 1 = 3 \times 23 \times 47 \times 1153 \times 3581$
$\longrightarrow$ `This equation enables the computation of log(3581)`
$\Rightarrow$ $2647 \times 10^6 - 1 = 3^3 \times 7 \times 3911 \times 3581$
$\longrightarrow$ `This equation enables the computation of log(3581)`
`page 340:`
$\Rightarrow$ $2179 \times 10^6 + 1 = 139 \times 4363 \times 3593$
$\longrightarrow$ `This equation enables the computation of log(3593)`
$\Rightarrow$ $1414 \times 10^6 - 1 = 3^2 \times 73 \times 599 \times 3593$
$\longrightarrow$ `This equation enables the computation of log(3593)`
$\Rightarrow$ $865 \times 10^8 - 1 = 3^2 \times 7 \times 293 \times 1297 \times 3613$
$\longrightarrow$ `This equation enables the computation of log(3613)`
$\Rightarrow$ $1493 \times 10^5 - 1 = 31^2 \times 43 \times 3613$
$\longrightarrow$ `This equation enables the computation of log(3613)`
$\Rightarrow$ $1066 \times 10^7 - 1 = 3 \times 11 \times 163 \times 547 \times 3623$
$\longrightarrow$ `This equation enables the computation of log(3623)`
`page 341:`
$\Rightarrow$ $209 \times 10^6 + 1 = 3 \times 7 \times 41 \times 67 \times 3623$
$\longrightarrow$ `This equation enables the computation of log(3623)`
$\Rightarrow$ $4613 \times 10^5 + 1 = 3 \times 43 \times 647 \times 5527$
$\longrightarrow$ `This equation enables the computation of log(5527)`
$\Rightarrow$ $1004 \times 10^7 - 1 = 197 \times 5527 \times 9221$
$\longrightarrow$ `This equation enables the computation of log(9221)`
$\Rightarrow$ $1031 \times 10^5 + 1 = 3 \times 9221 \times 3727$
$\longrightarrow$ `This equation enables the computation of log(3727)`
$\Rightarrow$ $1015 \times 10^6 - 1 = 3 \times 13 \times 3727 \times 6983$
$\longrightarrow$ `This equation enables the computation of log(6983)`
`page 342:`
$\Rightarrow$ $339 \times 10^8 + 1 = 7 \times 191 \times 6983 \times 3631$
$\longrightarrow$ `This equation enables the computation of log(3631)`
$\Rightarrow$ $2314 \times 10^5 - 1 = 3^2 \times 73 \times 97 \times 3631$
$\longrightarrow$ `This equation enables the computation of log(3631)`
$\Rightarrow$ $3682 \times 10^5 - 1 = 3^4 \times 1031 \times 4409$
$\longrightarrow$ `This equation enables the computation of log(4409)`
$\Rightarrow$ $3159 \times 10^6 + 1 = 197 \times 4409 \times 3637$
$\longrightarrow$ `This equation enables the computation of log(3637)`
$\Rightarrow$ $223 \times 10^8 - 1 = 3 \times 41 \times 79 \times 631 \times 3637$
$\longrightarrow$ `This equation enables the computation of log(3637)`
`page 343:`
$\Rightarrow$ $2102 \times 10^7 + 1 = 3 \times 7 \times 11 \times 13 \times 1913 \times 3659$
$\longrightarrow$ `This equation enables the computation of log(3659)`

$\Rightarrow$ $2022 \times 10^5 - 1 = 73 \times 757 \times 3659$
⟶ `This equation enables the computation of log(3659)`
$\Rightarrow$ $935 \times 10^8 - 1 = 7 \times 29 \times 37 \times 2897 \times 4297$
⟶ `This equation enables the computation of log(4297)`
$\Rightarrow$ $756 \times 10^7 - 1 = 479 \times 4297 \times 3673$
⟶ `This equation enables the computation of log(3673)`
$\Rightarrow$ $638 \times 10^4 + 1 = 3^2 \times 193 \times 3673$
⟶ `This equation enables the computation of log(3673)`

`page 344:`

$\Rightarrow$ $967 \times 10^8 + 1 = 11 \times 71 \times 151 \times 223 \times 3677$
⟶ `This equation enables the computation of log(3677)`
$\Rightarrow$ $1098 \times 10^6 + 1 = 7 \times 29 \times 1471 \times 3677$
⟶ `This equation enables the computation of log(3677)`
$\Rightarrow$ $2737 \times 10^5 + 1 = 101 \times 733 \times 3697$
⟶ `This equation enables the computation of log(3697)`
$\Rightarrow$ $96 \times 10^6 - 1 = 23 \times 1129 \times 3697$
⟶ `This equation enables the computation of log(3697)`
$\Rightarrow$ $1896 \times 10^6 + 1 = 7 \times 103 \times 709 \times 3709$
⟶ `This equation enables the computation of log(3709)`

`page 345:`

$\Rightarrow$ $415 \times 10^5 + 1 = 67 \times 167 \times 3709$
⟶ `This equation enables the computation of log(3709)`
$\Rightarrow$ $2001 \times 10^5 - 1 = 11^2 \times 443 \times 3733$
⟶ `This equation enables the computation of log(3733)`
$\Rightarrow$ $1732 \times 10^5 + 1 = 13 \times 43 \times 83 \times 3733$
⟶ `This equation enables the computation of log(3733)`
$\Rightarrow$ $2899 \times 10^6 - 1 = 3^2 \times 7 \times 31 \times 397 \times 3739$
⟶ `This equation enables the computation of log(3739)`
$\Rightarrow$ $84 \times 10^7 + 1 = 271 \times 829 \times 3739$
⟶ `This equation enables the computation of log(3739)`

`page 346:`

$\Rightarrow$ $309 \times 10^6 - 1 = 7 \times 11^2 \times 97 \times 3761$
⟶ `This equation enables the computation of log(3761)`
$\Rightarrow$ $671 \times 10^5 + 1 = 3 \times 19 \times 313 \times 3761$
⟶ `This equation enables the computation of log(3761)`
$\Rightarrow$ $767 \times 10^7 + 1 = 3 \times 107 \times 6343 \times 3767$
⟶ `This equation enables the computation of log(3767)`
$\Rightarrow$ $2407 \times 10^5 - 1 = 3 \times 19^2 \times 59 \times 3767$
⟶ `This equation enables the computation of log(3767)`
$\Rightarrow$ $4947 \times 10^7 - 1 = 7 \times 37 \times 109 \times 349 \times 5021$
⟶ `This equation enables the computation of log(5021)`

page 347:

$\Rightarrow$ $74 \times 10^7 + 1 = 3 \times 13 \times 5021 \times 3779$

$\longrightarrow$ This equation enables the computation of log(3779)

$\Rightarrow$ $2199 \times 10^4 + 1 = 11 \times 23^2 \times 3779$

$\longrightarrow$ This equation enables the computation of log(3779)

$\Rightarrow$ $3171 \times 10^6 + 1 = 13 \times 227 \times 283 \times 3797$

$\longrightarrow$ This equation enables the computation of log(3797)

$\Rightarrow$ $626 \times 10^6 - 1 = 113 \times 1459 \times 3797$

$\longrightarrow$ This equation enables the computation of log(3797)

$\Rightarrow$ $1189 \times 10^6 - 1 = 3^3 \times 11 \times 773 \times 5179$

$\longrightarrow$ This equation enables the computation of log(5179)

page 348:

$\Rightarrow$ $5179 \times 10^7 - 1 = 3 \times 1291 \times 2339 \times 5717$

$\longrightarrow$ This equation enables the computation of log(5717)

$\Rightarrow$ $538 \times 10^7 + 1 = 137 \times 5717 \times 6869$

$\longrightarrow$ This equation enables the computation of log(6869)

$\Rightarrow$ $1489 \times 10^6 - 1 = 3 \times 19 \times 6869 \times 3803$

$\longrightarrow$ This equation enables the computation of log(3803)

$\Rightarrow$ $3481 \times 10^5 - 1 = 3 \times 13 \times 2347 \times 3803$

$\longrightarrow$ This equation enables the computation of log(3803)

$\Rightarrow$ $703 \times 10^6 + 1 = 11 \times 73 \times 229 \times 3823$

$\longrightarrow$ This equation enables the computation of log(3823)

page 349:

$\Rightarrow$ $3207 \times 10^5 + 1 = 149 \times 563 \times 3823$

$\longrightarrow$ This equation enables the computation of log(3823)

$\Rightarrow$ $1713 \times 10^5 - 1 = 13 \times 1439 \times 9157$

$\longrightarrow$ This equation enables the computation of log(9157)

$\Rightarrow$ $835 \times 10^8 - 1 = 3 \times 13 \times 61 \times 9157 \times 3833$

$\longrightarrow$ This equation enables the computation of log(3833)

$\Rightarrow$ $3007 \times 10^6 - 1 = 3^2 \times 67 \times 1301 \times 3833$

$\longrightarrow$ This equation enables the computation of log(3833)

$\Rightarrow$ $432 \times 10^7 + 1 = 23 \times 59 \times 643 \times 4951$

$\longrightarrow$ This equation enables the computation of log(4951)

page 350:

$\Rightarrow$ $5582 \times 10^6 - 1 = 181 \times 4951 \times 6229$

$\longrightarrow$ This equation enables the computation of log(6229)

$\Rightarrow$ $647 \times 10^6 + 1 = 3^3 \times 6229 \times 3847$

$\longrightarrow$ This equation enables the computation of log(3847)

$\Rightarrow$ $4244 \times 10^6 + 1 = 3 \times 79 \times 3463 \times 5171$

$\longrightarrow$ This equation enables the computation of log(5171)

$\Rightarrow$ $3527 \times 10^7 + 1 = 3^2 \times 197 \times 5171 \times 3847$

$\longrightarrow$ This equation enables the computation of log(3847)
$\Rightarrow$ $1599 \times 10^6 + 1 = 359 \times 1153 \times 3863$
$\longrightarrow$ This equation enables the computation of log(3863)
$\Rightarrow$ $999 \times 10^7 - 1 = 7^2 \times 89 \times 593 \times 3863$
$\longrightarrow$ This equation enables the computation of log(3863)
page 351:
$\Rightarrow$ $223 \times 10^7 - 1 = 3 \times 19 \times 10091 \times 3877$
$\longrightarrow$ This equation enables the computation of log(3877)
$\Rightarrow$ $2915 \times 10^5 - 1 = 7 \times 23 \times 467 \times 3877$
$\longrightarrow$ This equation enables the computation of log(3877)
$\Rightarrow$ $5957 \times 10^5 - 1 = 31 \times 2579 \times 7451$
$\longrightarrow$ This equation enables the computation of log(7451)
$\Rightarrow$ $2831 \times 10^6 - 1 = 97 \times 7451 \times 3917$
$\longrightarrow$ This equation enables the computation of log(3917)
$\Rightarrow$ $892 \times 10^7 + 1 = 11 \times 23 \times 9001 \times 3917$
$\longrightarrow$ This equation enables the computation of log(3917)
page 352:
$\Rightarrow$ $2045 \times 10^8 + 1 = 3 \times 11 \times 89 \times 109 \times 163 \times 3919$
$\longrightarrow$ This equation enables the computation of log(3919)
$\Rightarrow$ $855 \times 10^7 + 1 = 1019 \times 2141 \times 3919$
$\longrightarrow$ This equation enables the computation of log(3919)
$\Rightarrow$ $536 \times 10^8 - 1 = 7^2 \times 13 \times 89 \times 241 \times 3923$
$\longrightarrow$ This equation enables the computation of log(3923)
$\Rightarrow$ $1322 \times 10^6 + 1 = 3^3 \times 7 \times 1783 \times 3923$
$\longrightarrow$ This equation enables the computation of log(3923)
$\Rightarrow$ $848 \times 10^6 - 1 = 7 \times 11 \times 2803 \times 3929$
$\longrightarrow$ This equation enables the computation of log(3929)
page 353:
$\Rightarrow$ $3307 \times 10^5 + 1 = 73 \times 1153 \times 3929$
$\longrightarrow$ This equation enables the computation of log(3929)
$\Rightarrow$ $1647 \times 10^7 + 1 = 7^2 \times 13 \times 53 \times 71 \times 6871$
$\longrightarrow$ This equation enables the computation of log(6871)
$\Rightarrow$ $2728 \times 10^6 + 1 = 101 \times 6871 \times 3931$
$\longrightarrow$ This equation enables the computation of log(3931)
$\Rightarrow$ $443 \times 10^9 + 1 = 3 \times 13 \times 29 \times 37 \times 2693 \times 3931$
$\longrightarrow$ This equation enables the computation of log(3931)
$\Rightarrow$ $5 \times 10^8 + 1 = 3 \times 43 \times 983 \times 3943$
$\longrightarrow$ This equation enables the computation of log(3943)
page 354:
$\Rightarrow$ $3443 \times 10^6 - 1 = 373 \times 2341 \times 3943$
$\longrightarrow$ This equation enables the computation of log(3943)

$\Rightarrow \quad 3092 \times 10^7 + 1 = 3 \times 11 \times 251 \times 941 \times 3967$
$\longrightarrow$ This equation enables the computation of log(3967)
$\Rightarrow \quad 875 \times 10^7 - 1 = 13 \times 383 \times 443 \times 3967$
$\longrightarrow$ This equation enables the computation of log(3967)
$\Rightarrow \quad 48 \times 10^9 - 1 = 7 \times 83 \times 139 \times 149 \times 3989$
$\longrightarrow$ This equation enables the computation of log(3989)
$\Rightarrow \quad 811 \times 10^7 - 1 = 3^2 \times 223 \times 1013 \times 3989$
$\longrightarrow$ This equation enables the computation of log(3989)
page 355:
$\Rightarrow \quad 2399 \times 10^7 + 1 = 3 \times 11 \times 19 \times 73 \times 131 \times 4001$
$\longrightarrow$ This equation enables the computation of log(4001)
$\Rightarrow \quad 2401 \times 10^4 + 1 = 17 \times 353 \times 4001$
$\longrightarrow$ This equation enables the computation of log(4001)
$\Rightarrow \quad 443 \times 10^6 + 1 = 3 \times 37 \times 997 \times 4003$
$\longrightarrow$ This equation enables the computation of log(4003)
$\Rightarrow \quad 3576 \times 10^5 - 1 = 157 \times 569 \times 4003$
$\longrightarrow$ This equation enables the computation of log(4003)
$\Rightarrow \quad 245 \times 10^6 + 1 = 3 \times 89 \times 229 \times 4007$
$\longrightarrow$ This equation enables the computation of log(4007)
page 356:
$\Rightarrow \quad 1979 \times 10^7 - 1 = 7^4 \times 11^2 \times 17 \times 4007$
$\longrightarrow$ This equation enables the computation of log(4007)
$\Rightarrow \quad 53 \times 10^9 + 1 = 3^3 \times 13 \times 191 \times 197 \times 4013$
$\longrightarrow$ This equation enables the computation of log(4013)
$\Rightarrow \quad 831 \times 10^6 + 1 = 13 \times 17 \times 937 \times 4013$
$\longrightarrow$ This equation enables the computation of log(4013)
$\Rightarrow \quad 3182 \times 10^6 - 1 = 79 \times 4013 \times 10037$
$\longrightarrow$ This equation enables the computation of log(10037)
$\Rightarrow \quad 907 \times 10^6 + 1 = 283 \times 487 \times 6581$
$\longrightarrow$ This equation enables the computation of log(6581)
page 357:
$\Rightarrow \quad 3084 \times 10^8 - 1 = 7^2 \times 13^2 \times 6581 \times 5659$
$\longrightarrow$ This equation enables the computation of log(5659)
$\Rightarrow \quad 2545 \times 10^7 - 1 = 3 \times 373 \times 5659 \times 4019$
$\longrightarrow$ This equation enables the computation of log(4019)
$\Rightarrow \quad 1303 \times 10^5 - 1 = 3 \times 101 \times 107 \times 4019$
$\longrightarrow$ This equation enables the computation of log(4019)
$\Rightarrow \quad 2781 \times 10^6 - 1 = 19 \times 89 \times 409 \times 4021$
$\longrightarrow$ This equation enables the computation of log(4021)
$\Rightarrow \quad 124 \times 10^7 + 1 = 359 \times 859 \times 4021$
$\longrightarrow$ This equation enables the computation of log(4021)

page 358:

$\Rightarrow$ $1712 \times 10^8 - 1 = 7^2 \times 37 \times 131 \times 179 \times 4027$
$\longrightarrow$ This equation enables the computation of log(4027)
$\Rightarrow$ $1961 \times 10^6 + 1 = 3^2 \times 61 \times 887 \times 4027$
$\longrightarrow$ This equation enables the computation of log(4027)
$\Rightarrow$ $3935 \times 10^7 + 1 = 3 \times 13 \times 211 \times 1181 \times 4049$
$\longrightarrow$ This equation enables the computation of log(4049)
$\Rightarrow$ $2909 \times 10^6 + 1 = 3 \times 71 \times 3373 \times 4049$
$\longrightarrow$ This equation enables the computation of log(4049)
$\Rightarrow$ $2683 \times 10^7 + 1 = 7 \times 31 \times 109 \times 163 \times 6959$
$\longrightarrow$ This equation enables the computation of log(6959)
$\Rightarrow$ $3101 \times 10^5 - 1 = 11 \times 6959 \times 4051$
$\longrightarrow$ This equation enables the computation of log(4051)

page 359:

$\Rightarrow$ $3956 \times 10^6 - 1 = 7 \times 61 \times 2287 \times 4051$
$\longrightarrow$ This equation enables the computation of log(4051)
$\Rightarrow$ $3007 \times 10^8 - 1 = 3^4 \times 7 \times 37 \times 3533 \times 4057$
$\longrightarrow$ This equation enables the computation of log(4057)
$\Rightarrow$ $105 \times 10^9 + 1 = 13 \times 1031 \times 1931 \times 4057$
$\longrightarrow$ This equation enables the computation of log(4057)
$\Rightarrow$ $1816 \times 10^6 - 1 = 3 \times 11 \times 59 \times 229 \times 4073$
$\longrightarrow$ This equation enables the computation of log(4073)
$\Rightarrow$ $2205 \times 10^5 + 1 = 43 \times 1259 \times 4073$
$\longrightarrow$ This equation enables the computation of log(4073)

page 360:

$\Rightarrow$ $2947 \times 10^6 - 1 = 3 \times 73 \times 3299 \times 4079$
$\longrightarrow$ This equation enables the computation of log(4079)
$\Rightarrow$ $3162 \times 10^5 + 1 = 13 \times 67 \times 89 \times 4079$
$\longrightarrow$ This equation enables the computation of log(4079)
$\Rightarrow$ $2822 \times 10^6 + 1 = 3 \times 43 \times 67 \times 79 \times 4133$
$\longrightarrow$ This equation enables the computation of log(4133)
$\Rightarrow$ $1311 \times 10^6 - 1 = 17 \times 47 \times 397 \times 4133$
$\longrightarrow$ This equation enables the computation of log(4133)
$\Rightarrow$ $333 \times 10^6 - 1 = 181 \times 443 \times 4153$
$\longrightarrow$ This equation enables the computation of log(4153)

page 361:

$\Rightarrow$ $823 \times 10^5 + 1 = 7 \times 19 \times 149 \times 4153$
$\longrightarrow$ This equation enables the computation of log(4153)
$\Rightarrow$ $525 \times 10^6 + 1 = 17^2 \times 19 \times 23 \times 4157$
$\longrightarrow$ This equation enables the computation of log(4157)
$\Rightarrow$ $3064 \times 10^5 - 1 = 3 \times 79 \times 311 \times 4157$

$\longrightarrow$ `This equation enables the computation of log(4157)`
$\Rightarrow\ 2353 \times 10^6 - 1 = 3 \times 7 \times 29 \times 929 \times 4159$
$\longrightarrow$ `This equation enables the computation of log(4159)`
$\Rightarrow\ 1424 \times 10^5 + 1 = 3 \times 101 \times 113 \times 4159$
$\longrightarrow$ `This equation enables the computation of log(4159)`
`page 362:`
$\Rightarrow\ 2084 \times 10^7 - 1 = 7 \times 13 \times 179 \times 271 \times 4721$
$\longrightarrow$ `This equation enables the computation of log(4721)`
$\Rightarrow\ 4721 \times 10^5 + 1 = 3 \times 23 \times 1009 \times 6781$
$\longrightarrow$ `This equation enables the computation of log(6781)`
$\Rightarrow\ 4048 \times 10^7 + 1 = 7^2 \times 29 \times 6781 \times 4201$
$\longrightarrow$ `This equation enables the computation of log(4201)`
$\Rightarrow\ 153 \times 10^7 - 1 = 11 \times 113 \times 293 \times 4201$
$\longrightarrow$ `This equation enables the computation of log(4201)`
$\Rightarrow\ 3936 \times 10^6 + 1 = 479 \times 947 \times 8677$
$\longrightarrow$ `This equation enables the computation of log(8677)`
`page 363:`
$\Rightarrow\ 4025 \times 10^5 - 1 = 11 \times 8677 \times 4217$
$\longrightarrow$ `This equation enables the computation of log(4217)`
$\Rightarrow\ 1014 \times 10^7 + 1 = 1367 \times 1759 \times 4217$
$\longrightarrow$ `This equation enables the computation of log(4217)`
$\Rightarrow\ 19 \times 10^5 + 1 = 257 \times 7393$
$\longrightarrow$ `This equation enables the computation of log(7393)`
$\Rightarrow\ 1257 \times 10^7 + 1 = 13 \times 31 \times 7393 \times 4219$
$\longrightarrow$ `This equation enables the computation of log(4219)`
$\Rightarrow\ 87 \times 10^6 - 1 = 17 \times 1213 \times 4219$
$\longrightarrow$ `This equation enables the computation of log(4219)`
`page 364:`
$\Rightarrow\ 603 \times 10^7 + 1 = 37 \times 89 \times 433 \times 4229$
$\longrightarrow$ `This equation enables the computation of log(4229)`
$\Rightarrow\ 2428 \times 10^6 - 1 = 3 \times 211 \times 907 \times 4229$
$\longrightarrow$ `This equation enables the computation of log(4229)`
$\Rightarrow\ 8262 \times 10^6 + 1 = 409 \times 2341 \times 8629$
$\longrightarrow$ `This equation enables the computation of log(8629)`
$\Rightarrow\ 2552 \times 10^7 + 1 = 3 \times 233 \times 8629 \times 4231$
$\longrightarrow$ `This equation enables the computation of log(4231)`
$\Rightarrow\ 134 \times 10^6 + 1 = 3^4 \times 17 \times 23 \times 4231$
$\longrightarrow$ `This equation enables the computation of log(4231)`
`page 365:`
$\Rightarrow\ 6226 \times 10^8 + 1 = 7^2 \times 809 \times 1693 \times 9277$
$\longrightarrow$ `This equation enables the computation of log(9277)`

$\Rightarrow$ $2679 \times 10^7 - 1 = 7 \times 97 \times 9277 \times 4253$
$\longrightarrow$ `This equation enables the computation of log(4253)`
$\Rightarrow$ $1574 \times 10^7 + 1 = 3^3 \times 11 \times 17 \times 733 \times 4253$
$\longrightarrow$ `This equation enables the computation of log(4253)`
$\Rightarrow$ $3033 \times 10^6 + 1 = 19 \times 37 \times 1013 \times 4259$
$\longrightarrow$ `This equation enables the computation of log(4259)`
$\Rightarrow$ $1226 \times 10^6 - 1 = 7 \times 17 \times 41 \times 59 \times 4259$
$\longrightarrow$ `This equation enables the computation of log(4259)`
$\Rightarrow$ $4213 \times 10^6 - 1 = 3^3 \times 13 \times 23 \times 67 \times 7789$
$\longrightarrow$ `This equation enables the computation of log(7789)`

`page 366:`

$\Rightarrow$ $2758 \times 10^7 - 1 = 3 \times 277 \times 7789 \times 4261$
$\longrightarrow$ `This equation enables the computation of log(4261)`
$\Rightarrow$ $3096 \times 10^5 - 1 = 113 \times 643 \times 4261$
$\longrightarrow$ `This equation enables the computation of log(4261)`
$\Rightarrow$ $415 \times 10^7 + 1 = 7 \times 149 \times 929 \times 4283$
$\longrightarrow$ `This equation enables the computation of log(4283)`
$\Rightarrow$ $133 \times 10^6 - 1 = 3 \times 11 \times 941 \times 4283$
$\longrightarrow$ `This equation enables the computation of log(4283)`
$\Rightarrow$ $5204 \times 10^8 + 1 = 3 \times 7 \times 61 \times 193 \times 223 \times 9439$
$\longrightarrow$ `This equation enables the computation of log(9439)`

`page 367:`

$\Rightarrow$ $1255 \times 10^6 + 1 = 31 \times 9439 \times 4289$
$\longrightarrow$ `This equation enables the computation of log(4289)`
$\Rightarrow$ $3034 \times 10^6 - 1 = 3^2 \times 53 \times 1483 \times 4289$
$\longrightarrow$ `This equation enables the computation of log(4289)`
$\Rightarrow$ $2755 \times 10^9 - 1 = 3^4 \times 13 \times 733 \times 823 \times 4337$
$\longrightarrow$ `This equation enables the computation of log(4337)`
$\Rightarrow$ $3332 \times 10^6 + 1 = 3 \times 11 \times 31 \times 751 \times 4337$
$\longrightarrow$ `This equation enables the computation of log(4337)`
$\Rightarrow$ $479 \times 10^7 - 1 = 31 \times 149 \times 239 \times 4339$
$\longrightarrow$ `This equation enables the computation of log(4339)`

`page 368:`

$\Rightarrow$ $2629 \times 10^4 + 1 = 73 \times 83 \times 4339$
$\longrightarrow$ `This equation enables the computation of log(4339)`
$\Rightarrow$ $1331 \times 10^9 + 1 = 3^2 \times 7 \times 19 \times 31 \times 37 \times 193 \times 5023$
$\longrightarrow$ `This equation enables the computation of log(5023)`
$\Rightarrow$ $2521 \times 10^7 - 1 = 3^2 \times 127 \times 5023 \times 4391$
$\longrightarrow$ `This equation enables the computation of log(4391)`
$\Rightarrow$ $3255 \times 10^6 - 1 = 719 \times 1031 \times 4391$
$\longrightarrow$ `This equation enables the computation of log(4391)`

$\Rightarrow$ $2382 \times 10^6 + 1 = 41 \times 73 \times 181 \times 4397$
$\longrightarrow$ `This equation enables the computation of log(4397)`
$\Rightarrow$ $2015 \times 10^6 - 1 = 487 \times 941 \times 4397$
$\longrightarrow$ `This equation enables the computation of log(4397)`
`page 369:`
$\Rightarrow$ $4245 \times 10^5 - 1 = 7 \times 11 \times 29 \times 43 \times 4421$
$\longrightarrow$ `This equation enables the computation of log(4421)`
$\Rightarrow$ $2661 \times 10^4 - 1 = 13 \times 463 \times 4421$
$\longrightarrow$ `This equation enables the computation of log(4421)`
$\Rightarrow$ $4412 \times 10^6 - 1 = 11 \times 29 \times 53 \times 59 \times 4423$
$\longrightarrow$ `This equation enables the computation of log(4423)`
$\Rightarrow$ $4313 \times 10^5 - 1 = 13^2 \times 577 \times 4423$
$\longrightarrow$ `This equation enables the computation of log(4423)`
$\Rightarrow$ $57 \times 10^7 + 1 = 53 \times 2399 \times 4483$
$\longrightarrow$ `This equation enables the computation of log(4483)`
`page 370:`
$\Rightarrow$ $4483 \times 10^6 + 1 = 311 \times 2887 \times 4993$
$\longrightarrow$ `This equation enables the computation of log(4993)`
$\Rightarrow$ $51 \times 10^7 - 1 = 23 \times 4993 \times 4441$
$\longrightarrow$ `This equation enables the computation of log(4441)`
$\Rightarrow$ $659 \times 10^5 - 1 = 11 \times 19 \times 71 \times 4441$
$\longrightarrow$ `This equation enables the computation of log(4441)`
$\Rightarrow$ $2645 \times 10^6 + 1 = 3^4 \times 7 \times 1049 \times 4447$
$\longrightarrow$ `This equation enables the computation of log(4447)`
$\Rightarrow$ $1802 \times 10^6 - 1 = 29 \times 89 \times 157 \times 4447$
$\longrightarrow$ `This equation enables the computation of log(4447)`
`page 371:`
$\Rightarrow$ $3304 \times 10^7 + 1 = 37 \times 439 \times 457 \times 4451$
$\longrightarrow$ `This equation enables the computation of log(4451)`
$\Rightarrow$ $1147 \times 10^7 - 1 = 3 \times 431 \times 1993 \times 4451$
$\longrightarrow$ `This equation enables the computation of log(4451)`
$\Rightarrow$ $776 \times 10^9 + 1 = 3 \times 37 \times 739 \times 1151 \times 8219$
$\longrightarrow$ `This equation enables the computation of log(8219)`
$\Rightarrow$ $459 \times 10^8 - 1 = 7 \times 179 \times 8219 \times 4457$
$\longrightarrow$ `This equation enables the computation of log(4457)`
$\Rightarrow$ $3747 \times 10^4 - 1 = 7 \times 1201 \times 4457$
$\longrightarrow$ `This equation enables the computation of log(4457)`
`page 372:`
$\Rightarrow$ $4329 \times 10^6 - 1 = 677 \times 1427 \times 4481$
$\longrightarrow$ `This equation enables the computation of log(4481)`
$\Rightarrow$ $2961 \times 10^5 - 1 = 13^2 \times 17 \times 23 \times 4481$

$\longrightarrow$ This equation enables the computation of log(4481)
$\Rightarrow$ $1673 \times 10^6 + 1 = 3^4 \times 4597 \times 4493$
$\longrightarrow$ This equation enables the computation of log(4493)
$\Rightarrow$ $3251 \times 10^5 + 1 = 3 \times 89 \times 271 \times 4493$
$\longrightarrow$ This equation enables the computation of log(4493)
$\Rightarrow$ $3182 \times 10^8 - 1 = 7^3 \times 19 \times 31 \times 349 \times 4513$
$\longrightarrow$ This equation enables the computation of log(4513)
page 373:
$\Rightarrow$ $229 \times 10^7 - 1 = 3 \times 7 \times 73 \times 331 \times 4513$
$\longrightarrow$ This equation enables the computation of log(4513)
$\Rightarrow$ $177 \times 10^7 + 1 = 7^2 \times 11 \times 727 \times 4517$
$\longrightarrow$ This equation enables the computation of log(4517)
$\Rightarrow$ $4149 \times 10^5 + 1 = 31 \times 2963 \times 4517$
$\longrightarrow$ This equation enables the computation of log(4517)
$\Rightarrow$ $1934 \times 10^8 + 1 = 3^4 \times 13 \times 97 \times 419 \times 4519$
$\longrightarrow$ This equation enables the computation of log(4519)
$\Rightarrow$ $4387 \times 10^5 + 1 = 193 \times 503 \times 4519$
$\longrightarrow$ This equation enables the computation of log(4519)
page 374:
$\Rightarrow$ $1532 \times 10^6 - 1 = 17 \times 107 \times 163 \times 5167$
$\longrightarrow$ This equation enables the computation of log(5167)
$\Rightarrow$ $2947 \times 10^7 + 1 = 13 \times 97 \times 5167 \times 4523$
$\longrightarrow$ This equation enables the computation of log(4523)
$\Rightarrow$ $1576 \times 10^7 - 1 = 3^2 \times 191 \times 2027 \times 4523$
$\longrightarrow$ This equation enables the computation of log(4523)
$\Rightarrow$ $1459 \times 10^7 - 1 = 3^2 \times 109 \times 1871 \times 7949$
$\longrightarrow$ This equation enables the computation of log(7949)
$\Rightarrow$ $3616 \times 10^4 + 1 = 7949 \times 4549$
$\longrightarrow$ This equation enables the computation of log(4549)
$\Rightarrow$ $3091 \times 10^5 + 1 = 7 \times 17 \times 571 \times 4549$
$\longrightarrow$ This equation enables the computation of log(4549)
page 375:
$\Rightarrow$ $1507 \times 10^5 + 1 = 19 \times 37 \times 47 \times 4561$
$\longrightarrow$ This equation enables the computation of log(4561)
$\Rightarrow$ $3174 \times 10^4 - 1 = 6959 \times 4561$
$\longrightarrow$ This equation enables the computation of log(4561)
$\Rightarrow$ $735 \times 10^7 - 1 = 859 \times 1867 \times 4583$
$\longrightarrow$ This equation enables the computation of log(4583)
$\Rightarrow$ $4411 \times 10^5 + 1 = 109 \times 883 \times 4583$
$\longrightarrow$ This equation enables the computation of log(4583)
page 376:

⇒ $1534 \times 10^6 + 1 = 31 \times 61 \times 97 \times 8363$
⟶ `This equation enables the computation of log(8363)`
⇒ $149 \times 10^9 - 1 = 37 \times 67 \times 8363 \times 7187$
⟶ `This equation enables the computation of log(7187)`
⇒ $526 \times 10^7 - 1 = 3 \times 53 \times 7187 \times 4603$
⟶ `This equation enables the computation of log(4603)`
⇒ $5292 \times 10^8 - 1 = 11^2 \times 179 \times 3181 \times 7681$
⟶ `This equation enables the computation of log(7681)`
⇒ $6834 \times 10^7 - 1 = 31 \times 37 \times 7681 \times 7757$
⟶ `This equation enables the computation of log(7757)`
⇒ $868 \times 10^8 + 1 = 11 \times 13 \times 17 \times 7757 \times 4603$
⟶ `This equation enables the computation of log(4603)`

`page 377:`
⇒ $3957 \times 10^7 + 1 = 7 \times 19 \times 139 \times 461 \times 4643$
⟶ `This equation enables the computation of log(4643)`
⇒ $686 \times 10^7 - 1 = 257 \times 5749 \times 4643$
⟶ `This equation enables the computation of log(4643)`
⇒ $3455 \times 10^6 + 1 = 3^6 \times 1019 \times 4651$
⟶ `This equation enables the computation of log(4651)`
⇒ $1196 \times 10^6 - 1 = 137 \times 1877 \times 4651$
⟶ `This equation enables the computation of log(4651)`
⇒ $2195 \times 10^6 + 1 = 3^2 \times 193 \times 271 \times 4663$
⟶ `This equation enables the computation of log(4663)`

`page 378:`
⇒ $3298 \times 10^5 + 1 = 107 \times 661 \times 4663$
⟶ `This equation enables the computation of log(4663)`
⇒ $291 \times 10^8 - 1 = 7^2 \times 167 \times 761 \times 4673$
⟶ `This equation enables the computation of log(4673)`
⇒ $1763 \times 10^7 + 1 = 3^4 \times 47 \times 991 \times 4673$
⟶ `This equation enables the computation of log(4673)`
⇒ $2779 \times 10^6 + 1 = 23 \times 43 \times 599 \times 4691$
⟶ `This equation enables the computation of log(4691)`
⇒ $1912 \times 10^6 - 1 = 3 \times 7 \times 13 \times 1493 \times 4691$
⟶ `This equation enables the computation of log(4691)`
⇒ $3647 \times 10^7 + 1 = 3 \times 643 \times 4003 \times 4723$
⟶ `This equation enables the computation of log(4723)`

`page 379:`
⇒ $3694 \times 10^5 - 1 = 3 \times 29^2 \times 31 \times 4723$
⟶ `This equation enables the computation of log(4723)`
⇒ $7525 \times 10^7 + 1 = 11 \times 137 \times 5023 \times 9941$
⟶ `This equation enables the computation of log(9941)`

$\Rightarrow$ $4278 \times 10^6 - 1 = 7 \times 13 \times 9941 \times 4729$
$\longrightarrow$ This equation enables the computation of log(4729)
$\Rightarrow$ $518 \times 10^7 + 1 = 3 \times 11 \times 19 \times 1747 \times 4729$
$\longrightarrow$ This equation enables the computation of log(4729)
$\Rightarrow$ $951 \times 10^6 - 1 = 211 \times 769 \times 5861$
$\longrightarrow$ This equation enables the computation of log(5861)
page 380:
$\Rightarrow$ $491 \times 10^7 + 1 = 3 \times 59 \times 5861 \times 4733$
$\longrightarrow$ This equation enables the computation of log(4733)
$\Rightarrow$ $1273 \times 10^9 - 1 = 3 \times 7 \times 13 \times 31 \times 61 \times 521 \times 4733$
$\longrightarrow$ This equation enables the computation of log(4733)
$\Rightarrow$ $5934 \times 10^5 + 1 = 19 \times 29 \times 131 \times 8221$
$\longrightarrow$ This equation enables the computation of log(8221)
$\Rightarrow$ $2695 \times 10^6 - 1 = 3 \times 23 \times 8221 \times 4751$
$\longrightarrow$ This equation enables the computation of log(4751)
$\Rightarrow$ $3195 \times 10^5 - 1 = 7 \times 13 \times 739 \times 4751$
$\longrightarrow$ This equation enables the computation of log(4751)
page 381:
$\Rightarrow$ $944 \times 10^6 - 1 = 293 \times 677 \times 4759$
$\longrightarrow$ This equation enables the computation of log(4759)
$\Rightarrow$ $4681 \times 10^5 - 1 = 3^3 \times 3643 \times 4759$
$\longrightarrow$ This equation enables the computation of log(4759)
$\Rightarrow$ $3676 \times 10^7 - 1 = 3 \times 1009 \times 2539 \times 4783$
$\longrightarrow$ This equation enables the computation of log(4783)
$\Rightarrow$ $1504 \times 10^6 + 1 = 7 \times 29 \times 1549 \times 4783$
$\longrightarrow$ This equation enables the computation of log(4783)
$\Rightarrow$ $3311 \times 10^5 + 1 = 3^3 \times 2069 \times 5927$
$\longrightarrow$ This equation enables the computation of log(5927)
page 382:
$\Rightarrow$ $1447 \times 10^6 - 1 = 3 \times 17 \times 5927 \times 4787$
$\longrightarrow$ This equation enables the computation of log(4787)
$\Rightarrow$ $334 \times 10^7 + 1 = 13 \times 191 \times 281 \times 4787$
$\longrightarrow$ This equation enables the computation of log(4787)
$\Rightarrow$ $489 \times 10^6 + 1 = 7 \times 29 \times 503 \times 4789$
$\longrightarrow$ This equation enables the computation of log(4789)
$\Rightarrow$ $43 \times 10^8 - 1 = 3 \times 191 \times 1567 \times 4789$
$\longrightarrow$ This equation enables the computation of log(4789)
$\Rightarrow$ $4627 \times 10^5 - 1 = 3^3 \times 17 \times 103 \times 9787$
$\longrightarrow$ This equation enables the computation of log(9787)
page 383:
$\Rightarrow$ $516 \times 10^6 + 1 = 11 \times 9787 \times 4793$

$\longrightarrow$ `This equation enables the computation of log(4793)`
$\Rightarrow$ $4277 \times 10^6 - 1 = 743 \times 1201 \times 4793$
$\longrightarrow$ `This equation enables the computation of log(4793)`
$\Rightarrow$ $2378 \times 10^7 + 1 = 3 \times 1009 \times 1637 \times 4799$
$\longrightarrow$ `This equation enables the computation of log(4799)`
$\Rightarrow$ $4584 \times 10^6 + 1 = 7 \times 61 \times 2237 \times 4799$
$\longrightarrow$ `This equation enables the computation of log(4799)`
$\Rightarrow$ $3493 \times 10^8 - 1 = 3^4 \times 223 \times 2089 \times 9257$
$\longrightarrow$ `This equation enables the computation of log(9257)`
$\Rightarrow$ $3111 \times 10^5 - 1 = 7 \times 9257 \times 4801$
$\longrightarrow$ `This equation enables the computation of log(4801)`
`page 384:`
$\Rightarrow$ $4632 \times 10^6 - 1 = 11 \times 139 \times 631 \times 4801$
$\longrightarrow$ `This equation enables the computation of log(4801)`
$\Rightarrow$ $1152 \times 10^6 + 1 = 19 \times 41 \times 307 \times 4817$
$\longrightarrow$ `This equation enables the computation of log(4817)`
$\Rightarrow$ $2931 \times 10^5 - 1 = 71 \times 857 \times 4817$
$\longrightarrow$ `This equation enables the computation of log(4817)`
$\Rightarrow$ $3861 \times 10^6 + 1 = 311 \times 2111 \times 5881$
$\longrightarrow$ `This equation enables the computation of log(5881)`
$\Rightarrow$ $2557 \times 10^5 - 1 = 3^2 \times 5881 \times 4831$
$\longrightarrow$ `This equation enables the computation of log(4831)`
`page 385:`
$\Rightarrow$ $3126 \times 10^6 + 1 = 17^2 \times 2239 \times 4831$
$\longrightarrow$ `This equation enables the computation of log(4831)`
$\Rightarrow$ $5161 \times 10^6 + 1 = 19 \times 31 \times 1063 \times 8243$
$\longrightarrow$ `This equation enables the computation of log(8243)`
$\Rightarrow$ $3082 \times 10^6 - 1 = 3 \times 13 \times 8243 \times 9587$
$\longrightarrow$ `This equation enables the computation of log(9587)`
$\Rightarrow$ $5444 \times 10^7 + 1 = 3^2 \times 101 \times 9587 \times 6247$
$\longrightarrow$ `This equation enables the computation of log(6247)`
$\Rightarrow$ $911 \times 10^5 + 1 = 3 \times 6247 \times 4861$
$\longrightarrow$ `This equation enables the computation of log(4861)`
`page 386:`
$\Rightarrow$ $395 \times 10^6 - 1 = 23 \times 3533 \times 4861$
$\longrightarrow$ `This equation enables the computation of log(4861)`
$\Rightarrow$ $71 \times 10^8 + 1 = 3^6 \times 1997 \times 4877$
$\longrightarrow$ `This equation enables the computation of log(4877)`
$\Rightarrow$ $2654 \times 10^6 - 1 = 7 \times 17^2 \times 269 \times 4877$
$\longrightarrow$ `This equation enables the computation of log(4877)`
$\Rightarrow$ $3631 \times 10^6 + 1 = 787 \times 941 \times 4903$

$\longrightarrow$ `This equation enables the computation of log(4903)`
$\Rightarrow$ $1272 \times 10^6 - 1 = 61 \times 4253 \times 4903$
$\longrightarrow$ `This equation enables the computation of log(4903)`
`page 387:`
$\Rightarrow$ $294 \times 10^5 + 1 = 53 \times 113 \times 4909$
$\longrightarrow$ `This equation enables the computation of log(4909)`
$\Rightarrow$ $1969 \times 10^4 - 1 = 3 \times 7 \times 191 \times 4909$
$\longrightarrow$ `This equation enables the computation of log(4909)`
$\Rightarrow$ $1053 \times 10^7 + 1 = 23 \times 163 \times 571 \times 4919$
$\longrightarrow$ `This equation enables the computation of log(4919)`
$\Rightarrow$ $692 \times 10^6 + 1 = 3^2 \times 7^2 \times 11 \times 29 \times 4919$
$\longrightarrow$ `This equation enables the computation of log(4919)`
$\Rightarrow$ $893 \times 10^6 - 1 = 193 \times 857 \times 5399$
$\longrightarrow$ `This equation enables the computation of log(5399)`
`page 388:`
$\Rightarrow$ $5399 \times 10^7 + 1 = 3^2 \times 7 \times 17^2 \times 487 \times 6089$
$\longrightarrow$ `This equation enables the computation of log(6089)`
$\Rightarrow$ $811 \times 10^6 - 1 = 3^3 \times 6089 \times 4933$
$\longrightarrow$ `This equation enables the computation of log(4933)`
$\Rightarrow$ $2761 \times 10^4 + 1 = 29 \times 193 \times 4933$
$\longrightarrow$ `This equation enables the computation of log(4933)`
$\Rightarrow$ $3106 \times 10^6 - 1 = 3^6 \times 863 \times 4937$
$\longrightarrow$ `This equation enables the computation of log(4937)`
$\Rightarrow$ $3499 \times 10^5 + 1 = 11 \times 17 \times 379 \times 4937$
$\longrightarrow$ `This equation enables the computation of log(4937)`
`page 389:`
$\Rightarrow$ $4339 \times 10^6 + 1 = 7 \times 89 \times 1409 \times 4943$
$\longrightarrow$ `This equation enables the computation of log(4943)`
$\Rightarrow$ $3846 \times 10^5 + 1 = 29 \times 2683 \times 4943$
$\longrightarrow$ `This equation enables the computation of log(4943)`
$\Rightarrow$ $4463 \times 10^7 + 1 = 3^3 \times 67 \times 4967 \times 4967$
$\longrightarrow$ `This equation enables the computation of log(4967)`
$\Rightarrow$ $4894 \times 10^6 + 1 = 11^2 \times 17 \times 479 \times 4967$
$\longrightarrow$ `This equation enables the computation of log(4967)`
$\Rightarrow$ $1546 \times 10^6 + 1 = 7 \times 13^2 \times 263 \times 4969$
$\longrightarrow$ `This equation enables the computation of log(4969)`
`page 390:`
$\Rightarrow$ $4416 \times 10^5 - 1 = 181 \times 491 \times 4969$
$\longrightarrow$ `This equation enables the computation of log(4969)`
$\Rightarrow$ $2582 \times 10^7 + 1 = 3^2 \times 281 \times 2053 \times 4973$
$\longrightarrow$ `This equation enables the computation of log(4973)`

$\Rightarrow$ $4577 \times 10^5 + 1 = 3 \times 11 \times 2789 \times 4973$
$\longrightarrow$ This equation enables the computation of log(4973)
$\Rightarrow$ $1109 \times 10^6 + 1 = 3 \times 37 \times 1997 \times 5003$
$\longrightarrow$ This equation enables the computation of log(5003)
$\Rightarrow$ $1084 \times 10^5 + 1 = 47 \times 461 \times 5003$
$\longrightarrow$ This equation enables the computation of log(5003)
page 391:
$\Rightarrow$ $3865 \times 10^7 - 1 = 3 \times 13 \times 53 \times 3733 \times 5009$
$\longrightarrow$ This equation enables the computation of log(5009)
$\Rightarrow$ $4202 \times 10^5 + 1 = 3^3 \times 13 \times 239 \times 5009$
$\longrightarrow$ This equation enables the computation of log(5009)
$\Rightarrow$ $1729 \times 10^8 + 1 = 37 \times 719 \times 1297 \times 5011$
$\longrightarrow$ This equation enables the computation of log(5011)
$\Rightarrow$ $2526 \times 10^6 + 1 = 7 \times 23 \times 31 \times 101 \times 5011$
$\longrightarrow$ This equation enables the computation of log(5011)
$\Rightarrow$ $3345 \times 10^7 + 1 = 11^2 \times 229 \times 239 \times 5051$
$\longrightarrow$ This equation enables the computation of log(5051)
page 392:
$\Rightarrow$ $1907 \times 10^6 - 1 = 19 \times 31 \times 641 \times 5051$
$\longrightarrow$ This equation enables the computation of log(5051)
$\Rightarrow$ $5686 \times 10^5 - 1 = 3 \times 11 \times 2719 \times 6337$
$\longrightarrow$ This equation enables the computation of log(6337)
$\Rightarrow$ $1451 \times 10^7 - 1 = 11 \times 41 \times 6337 \times 5077$
$\longrightarrow$ This equation enables the computation of log(5077)
$\Rightarrow$ $3626 \times 10^7 + 1 = 3^6 \times 97 \times 101 \times 5077$
$\longrightarrow$ This equation enables the computation of log(5077)
$\Rightarrow$ $5497 \times 10^7 + 1 = 7 \times 61 \times 113 \times 197 \times 5783$
$\longrightarrow$ This equation enables the computation of log(5783)
page 393:
$\Rightarrow$ $1126 \times 10^6 - 1 = 3^2 \times 53 \times 431 \times 5477$
$\longrightarrow$ This equation enables the computation of log(5477)
$\Rightarrow$ $5783 \times 10^5 - 1 = 17 \times 5477 \times 6211$
$\longrightarrow$ This equation enables the computation of log(6211)
$\Rightarrow$ $8372 \times 10^8 - 1 = 11 \times 37^2 \times 6211 \times 8951$
$\longrightarrow$ This equation enables the computation of log(8951)
$\Rightarrow$ $953 \times 10^9 + 1 = 3^2 \times 7 \times 277 \times 8951 \times 6101$
$\longrightarrow$ This equation enables the computation of log(6101)
$\Rightarrow$ $3785 \times 10^7 + 1 = 3 \times 11 \times 37 \times 6101 \times 5081$
$\longrightarrow$ This equation enables the computation of log(5081)
page 394:
$\Rightarrow$ $5066 \times 10^6 + 1 = 3^2 \times 19^2 \times 173 \times 9013$

$\longrightarrow$ `This equation enables the computation of log(9013)`
$\Rightarrow$ $1296 \times 10^7 - 1 = 283 \times 9013 \times 5081$
$\longrightarrow$ `This equation enables the computation of log(5081)`
$\Rightarrow$ $3577 \times 10^7 - 1 = 3 \times 17 \times 67 \times 2053 \times 5099$
$\longrightarrow$ `This equation enables the computation of log(5099)`
$\Rightarrow$ $4329 \times 10^5 + 1 = 73 \times 1163 \times 5099$
$\longrightarrow$ `This equation enables the computation of log(5099)`
$\Rightarrow$ $2548 \times 10^7 - 1 = 3^2 \times 199 \times 2789 \times 5101$
$\longrightarrow$ `This equation enables the computation of log(5101)`
$\Rightarrow$ $4851 \times 10^5 - 1 = 61 \times 1559 \times 5101$
$\longrightarrow$ `This equation enables the computation of log(5101)`

`page 395:`
$\Rightarrow$ $4876 \times 10^6 + 1 = 19 \times 79 \times 401 \times 8101$
$\longrightarrow$ `This equation enables the computation of log(8101)`
$\Rightarrow$ $4373 \times 10^7 - 1 = 7 \times 151 \times 8101 \times 5107$
$\longrightarrow$ `This equation enables the computation of log(5107)`
$\Rightarrow$ $2874 \times 10^6 - 1 = 13 \times 73 \times 593 \times 5107$
$\longrightarrow$ `This equation enables the computation of log(5107)`
$\Rightarrow$ $4908 \times 10^6 + 1 = 431 \times 1523 \times 7477$
$\longrightarrow$ `This equation enables the computation of log(7477)`
$\Rightarrow$ $2569 \times 10^6 - 1 = 3 \times 17 \times 7477 \times 6737$
$\longrightarrow$ `This equation enables the computation of log(6737)`

`page 396:`
$\Rightarrow$ $4168 \times 10^6 + 1 = 11^2 \times 6737 \times 5113$
$\longrightarrow$ `This equation enables the computation of log(5113)`
$\Rightarrow$ $4337 \times 10^5 - 1 = 271 \times 313 \times 5113$
$\longrightarrow$ `This equation enables the computation of log(5113)`
$\Rightarrow$ $764 \times 10^7 + 1 = 3^3 \times 167 \times 331 \times 5119$
$\longrightarrow$ `This equation enables the computation of log(5119)`
$\Rightarrow$ $2521 \times 10^6 + 1 = 13 \times 43 \times 881 \times 5119$
$\longrightarrow$ `This equation enables the computation of log(5119)`
$\Rightarrow$ $1409 \times 10^7 - 1 = 31 \times 233 \times 379 \times 5147$
$\longrightarrow$ `This equation enables the computation of log(5147)`
$\Rightarrow$ $1351 \times 10^6 + 1 = 13 \times 61 \times 331 \times 5147$
$\longrightarrow$ `This equation enables the computation of log(5147)`

`page 397:`
$\Rightarrow$ $2933 \times 10^6 - 1 = 19 \times 29 \times 1033 \times 5153$
$\longrightarrow$ `This equation enables the computation of log(5153)`
$\Rightarrow$ $222 \times 10^7 + 1 = 43^2 \times 233 \times 5153$
$\longrightarrow$ `This equation enables the computation of log(5153)`
$\Rightarrow$ $4883 \times 10^7 - 1 = 11^2 \times 83 \times 937 \times 5189$

$\longrightarrow$ This equation enables the computation of log(5189)
$\Rightarrow$ $4655 \times 10^5 + 1 = 3 \times 17 \times 1759 \times 5189$
$\longrightarrow$ This equation enables the computation of log(5189)
$\Rightarrow$ $3061 \times 10^5 - 1 = 3^3 \times 1187 \times 9551$
$\longrightarrow$ This equation enables the computation of log(9551)
page 398:
$\Rightarrow$ $649 \times 10^6 + 1 = 13 \times 9551 \times 5227$
$\longrightarrow$ This equation enables the computation of log(5227)
$\Rightarrow$ $686 \times 10^8 + 1 = 3 \times 13 \times 487 \times 691 \times 5227$
$\longrightarrow$ This equation enables the computation of log(5227)
$\Rightarrow$ $4136 \times 10^6 + 1 = 3 \times 7 \times 23 \times 1637 \times 5231$
$\longrightarrow$ This equation enables the computation of log(5231)
$\Rightarrow$ $1095 \times 10^6 - 1 = 353 \times 593 \times 5231$
$\longrightarrow$ This equation enables the computation of log(5231)
$\Rightarrow$ $776 \times 10^7 + 1 = 3 \times 13 \times 47 \times 809 \times 5233$
$\longrightarrow$ This equation enables the computation of log(5233)
page 399:
$\Rightarrow$ $2706 \times 10^6 - 1 = 367 \times 1409 \times 5233$
$\longrightarrow$ This equation enables the computation of log(5233)
$\Rightarrow$ $1373 \times 10^6 + 1 = 3 \times 281 \times 311 \times 5237$
$\longrightarrow$ This equation enables the computation of log(5237)
$\Rightarrow$ $3256 \times 10^5 + 1 = 79 \times 787 \times 5237$
$\longrightarrow$ This equation enables the computation of log(5237)
$\Rightarrow$ $1296 \times 10^6 + 1 = 181 \times 1361 \times 5261$
$\longrightarrow$ This equation enables the computation of log(5261)
$\Rightarrow$ $2823 \times 10^5 - 1 = 23 \times 2333 \times 5261$
$\longrightarrow$ This equation enables the computation of log(5261)
page 400:
$\Rightarrow$ $2189 \times 10^7 + 1 = 3 \times 383 \times 3613 \times 5273$
$\longrightarrow$ This equation enables the computation of log(5273)
$\Rightarrow$ $2707 \times 10^5 + 1 = 11 \times 13 \times 359 \times 5273$
$\longrightarrow$ This equation enables the computation of log(5273)
$\Rightarrow$ $3949 \times 10^8 + 1 = 13 \times 37^2 \times 59 \times 71 \times 5297$
$\longrightarrow$ This equation enables the computation of log(5297)
$\Rightarrow$ $2922 \times 10^6 + 1 = 17 \times 37 \times 877 \times 5297$
$\longrightarrow$ This equation enables the computation of log(5297)
$\Rightarrow$ $3671 \times 10^8 + 1 = 3^2 \times 7 \times 953 \times 1153 \times 5303$
$\longrightarrow$ This equation enables the computation of log(5303)
page 401:
$\Rightarrow$ $1193 \times 10^6 + 1 = 3 \times 31 \times 41 \times 59 \times 5303$
$\longrightarrow$ This equation enables the computation of log(5303)

$\Rightarrow\ 1049 \times 10^6 + 1 = 3 \times 7 \times 97^2 \times 5309$
⟶ This equation enables the computation of log(5309)
$\Rightarrow\ 5181 \times 10^5 + 1 = 23 \times 4243 \times 5309$
⟶ This equation enables the computation of log(5309)
$\Rightarrow\ 1704 \times 10^8 + 1 = 7 \times 11 \times 29 \times 41 \times 349 \times 5333$
⟶ This equation enables the computation of log(5333)
$\Rightarrow\ 2773 \times 10^5 + 1 = 11 \times 29 \times 163 \times 5333$
⟶ This equation enables the computation of log(5333)
page 402:
$\Rightarrow\ 4109 \times 10^7 + 1 = 3 \times 19 \times 31 \times 4349 \times 5347$
⟶ This equation enables the computation of log(5347)
$\Rightarrow\ 1686 \times 10^6 - 1 = 29 \times 83 \times 131 \times 5347$
⟶ This equation enables the computation of log(5347)
$\Rightarrow\ 5309 \times 10^6 + 1 = 3^2 \times 23 \times 4793 \times 5351$
⟶ This equation enables the computation of log(5351)
$\Rightarrow\ 42 \times 10^6 - 1 = 47 \times 167 \times 5351$
⟶ This equation enables the computation of log(5351)
$\Rightarrow\ 2872 \times 10^8 - 1 = 3^3 \times 11^2 \times 17 \times 31^2 \times 5381$
⟶ This equation enables the computation of log(5381)
page 403:
$\Rightarrow\ 3566 \times 10^7 + 1 = 3 \times 1187 \times 1861 \times 5381$
⟶ This equation enables the computation of log(5381)
$\Rightarrow\ 1088 \times 10^7 - 1 = 11 \times 89 \times 2063 \times 5387$
⟶ This equation enables the computation of log(5387)
$\Rightarrow\ 5281 \times 10^6 + 1 = 577 \times 1699 \times 5387$
⟶ This equation enables the computation of log(5387)
$\Rightarrow\ 4453 \times 10^4 + 1 = 23 \times 359 \times 5393$
⟶ This equation enables the computation of log(5393)
$\Rightarrow\ 94 \times 10^5 - 1 = 3 \times 7 \times 83 \times 5393$
⟶ This equation enables the computation of log(5393)
page 404:
$\Rightarrow\ 4069 \times 10^6 + 1 = 11 \times 37 \times 43^2 \times 5407$
⟶ This equation enables the computation of log(5407)
$\Rightarrow\ 1338 \times 10^6 - 1 = 7 \times 23 \times 29 \times 53 \times 5407$
⟶ This equation enables the computation of log(5407)
$\Rightarrow\ 2092 \times 10^6 + 1 = 7 \times 13 \times 31 \times 137 \times 5413$
⟶ This equation enables the computation of log(5413)
$\Rightarrow\ 3506 \times 10^4 + 1 = 3 \times 17 \times 127 \times 5413$
⟶ This equation enables the computation of log(5413)
$\Rightarrow\ 7351 \times 10^6 + 1 = 191 \times 4273 \times 9007$
⟶ This equation enables the computation of log(9007)

page 405:

$\Rightarrow$ $1967 \times 10^7 - 1 = 13 \times 31 \times 9007 \times 5419$

$\longrightarrow$ This equation enables the computation of log(5419)

$\Rightarrow$ $1429 \times 10^8 + 1 = 11 \times 17 \times 83 \times 1699 \times 5419$

$\longrightarrow$ This equation enables the computation of log(5419)

$\Rightarrow$ $373 \times 10^8 + 1 = 11 \times 499 \times 1163 \times 5843$

$\longrightarrow$ This equation enables the computation of log(5843)

$\Rightarrow$ $952 \times 10^5 - 1 = 3 \times 5843 \times 5431$

$\longrightarrow$ This equation enables the computation of log(5431)

$\Rightarrow$ $1342 \times 10^4 + 1 = 7 \times 353 \times 5431$

$\longrightarrow$ This equation enables the computation of log(5431)

page 406:

$\Rightarrow$ $2416 \times 10^7 - 1 = 3 \times 149 \times 9941 \times 5437$

$\longrightarrow$ This equation enables the computation of log(5437)

$\Rightarrow$ $2412 \times 10^6 - 1 = 271 \times 1637 \times 5437$

$\longrightarrow$ This equation enables the computation of log(5437)

$\Rightarrow$ $6368 \times 10^7 + 1 = 3 \times 17 \times 29 \times 4421 \times 9739$

$\longrightarrow$ This equation enables the computation of log(9739)

$\Rightarrow$ $5246 \times 10^6 + 1 = 3^2 \times 11 \times 9739 \times 5441$

$\longrightarrow$ This equation enables the computation of log(5441)

$\Rightarrow$ $1062 \times 10^6 + 1 = 311 \times 479 \times 7129$

$\longrightarrow$ This equation enables the computation of log(7129)

$\Rightarrow$ $3491 \times 10^5 + 1 = 3^2 \times 7129 \times 5441$

$\longrightarrow$ This equation enables the computation of log(5441)

page 407:

$\Rightarrow$ $5263 \times 10^5 - 1 = 3 \times 167 \times 193 \times 5443$

$\longrightarrow$ This equation enables the computation of log(5443)

$\Rightarrow$ $18 \times 10^6 + 1 = 3307 \times 5443$

$\longrightarrow$ This equation enables the computation of log(5443)

$\Rightarrow$ $4314 \times 10^7 + 1 = 7 \times 1031 \times 1097 \times 5449$

$\longrightarrow$ This equation enables the computation of log(5449)

$\Rightarrow$ $1135 \times 10^7 - 1 = 3^2 \times 13 \times 19 \times 937 \times 5449$

$\longrightarrow$ This equation enables the computation of log(5449)

$\Rightarrow$ $1628 \times 10^6 - 1 = 29 \times 31 \times 331 \times 5471$

$\longrightarrow$ This equation enables the computation of log(5471)

page 408:

$\Rightarrow$ $5338 \times 10^5 - 1 = 3^2 \times 37 \times 293 \times 5471$

$\longrightarrow$ This equation enables the computation of log(5471)

$\Rightarrow$ $2258 \times 10^6 + 1 = 3^2 \times 29 \times 1579 \times 5479$

$\longrightarrow$ This equation enables the computation of log(5479)

$\Rightarrow$ $4318 \times 10^4 - 1 = 3 \times 37 \times 71 \times 5479$

$\longrightarrow$ This equation enables the computation of log(5479)
$\Rightarrow$ $4636 \times 10^7 + 1 = 7^2 \times 31 \times 37 \times 101 \times 8167$
$\longrightarrow$ This equation enables the computation of log(8167)
$\Rightarrow$ $2642 \times 10^6 - 1 = 59 \times 8167 \times 5483$
$\longrightarrow$ This equation enables the computation of log(5483)
page 409:
$\Rightarrow$ $995 \times 10^5 + 1 = 3 \times 23 \times 263 \times 5483$
$\longrightarrow$ This equation enables the computation of log(5483)
$\Rightarrow$ $4381 \times 10^7 - 1 = 3 \times 67 \times 89 \times 367 \times 6673$
$\longrightarrow$ This equation enables the computation of log(6673)
$\Rightarrow$ $2901 \times 10^6 + 1 = 79 \times 6673 \times 5503$
$\longrightarrow$ This equation enables the computation of log(5503)
$\Rightarrow$ $2602 \times 10^6 - 1 = 3^2 \times 107 \times 491 \times 5503$
$\longrightarrow$ This equation enables the computation of log(5503)
$\Rightarrow$ $4749 \times 10^6 - 1 = 61 \times 67 \times 211 \times 5507$
$\longrightarrow$ This equation enables the computation of log(5507)
page 410:
$\Rightarrow$ $758 \times 10^6 + 1 = 3 \times 11 \times 43 \times 97 \times 5507$
$\longrightarrow$ This equation enables the computation of log(5507)
$\Rightarrow$ $451 \times 10^7 + 1 = 13 \times 31 \times 2027 \times 5521$
$\longrightarrow$ This equation enables the computation of log(5521)
$\Rightarrow$ $4589 \times 10^5 - 1 = 43 \times 1933 \times 5521$
$\longrightarrow$ This equation enables the computation of log(5521)
$\Rightarrow$ $463 \times 10^5 + 1 = 11 \times 761 \times 5531$
$\longrightarrow$ This equation enables the computation of log(5531)
$\Rightarrow$ $901 \times 10^4 - 1 = 3^2 \times 181 \times 5531$
$\longrightarrow$ This equation enables the computation of log(5531)
page 411:
$\Rightarrow$ $2366 \times 10^7 + 1 = 3^2 \times 11 \times 29 \times 1483 \times 5557$
$\longrightarrow$ This equation enables the computation of log(5557)
$\Rightarrow$ $1432 \times 10^6 + 1 = 439 \times 587 \times 5557$
$\longrightarrow$ This equation enables the computation of log(5557)
$\Rightarrow$ $4135 \times 10^7 - 1 = 3 \times 7^2 \times 11 \times 3823 \times 6689$
$\longrightarrow$ This equation enables the computation of log(6689)
$\Rightarrow$ $5491 \times 10^4 + 1 = 6689 \times 8209$
$\longrightarrow$ This equation enables the computation of log(8209)
$\Rightarrow$ $137 \times 10^6 + 1 = 3 \times 8209 \times 5563$
$\longrightarrow$ This equation enables the computation of log(5563)
page 412:
$\Rightarrow$ $4193 \times 10^5 - 1 = 19 \times 3967 \times 5563$
$\longrightarrow$ This equation enables the computation of log(5563)

$\Rightarrow$ $2469 \times 10^7 - 1 = 7^2 \times 173 \times 523 \times 5569$
$\longrightarrow$ `This equation enables the computation of log(5569)`
$\Rightarrow$ $1864 \times 10^5 - 1 = 3^2 \times 3719 \times 5569$
$\longrightarrow$ `This equation enables the computation of log(5569)`
$\Rightarrow$ $3626 \times 10^6 + 1 = 3^2 \times 13 \times 67 \times 83 \times 5573$
$\longrightarrow$ `This equation enables the computation of log(5573)`
$\Rightarrow$ $1947 \times 10^6 - 1 = 7 \times 29 \times 1721 \times 5573$
$\longrightarrow$ `This equation enables the computation of log(5573)`

`page 413:`

$\Rightarrow$ $998 \times 10^6 + 1 = 3^3 \times 37 \times 179 \times 5581$
$\longrightarrow$ `This equation enables the computation of log(5581)`
$\Rightarrow$ $4399 \times 10^5 + 1 = 23^2 \times 149 \times 5581$
$\longrightarrow$ `This equation enables the computation of log(5581)`
$\Rightarrow$ $4421 \times 10^8 + 1 = 3 \times 11 \times 17 \times 59 \times 2389 \times 5591$
$\longrightarrow$ `This equation enables the computation of log(5591)`
$\Rightarrow$ $411 \times 10^6 + 1 = 19 \times 53 \times 73 \times 5591$
$\longrightarrow$ `This equation enables the computation of log(5591)`
$\Rightarrow$ $495 \times 10^7 - 1 = 7 \times 67 \times 1877 \times 5623$
$\longrightarrow$ `This equation enables the computation of log(5623)`

`page 414:`

$\Rightarrow$ $4516 \times 10^5 - 1 = 3 \times 19 \times 1409 \times 5623$
$\longrightarrow$ `This equation enables the computation of log(5623)`
$\Rightarrow$ $835 \times 10^7 + 1 = 7 \times 199 \times 1063 \times 5639$
$\longrightarrow$ `This equation enables the computation of log(5639)`
$\Rightarrow$ $2928 \times 10^6 - 1 = 53 \times 97 \times 101 \times 5639$
$\longrightarrow$ `This equation enables the computation of log(5639)`
$\Rightarrow$ $824 \times 10^7 - 1 = 7 \times 11 \times 29 \times 653 \times 5651$
$\longrightarrow$ `This equation enables the computation of log(5651)`
$\Rightarrow$ $3286 \times 10^5 - 1 = 3^2 \times 7 \times 13 \times 71 \times 5651$
$\longrightarrow$ `This equation enables the computation of log(5651)`
$\Rightarrow$ $5293 \times 10^6 + 1 = 41^2 \times 557 \times 5653$
$\longrightarrow$ `This equation enables the computation of log(5653)`

`page 415:`

$\Rightarrow$ $36 \times 10^7 - 1 = 43 \times 1481 \times 5653$
$\longrightarrow$ `This equation enables the computation of log(5653)`
$\Rightarrow$ $3812 \times 10^6 + 1 = 3 \times 19 \times 47 \times 251 \times 5669$
$\longrightarrow$ `This equation enables the computation of log(5669)`
$\Rightarrow$ $4106 \times 10^5 + 1 = 3 \times 7 \times 3449 \times 5669$
$\longrightarrow$ `This equation enables the computation of log(5669)`
$\Rightarrow$ $4071 \times 10^6 + 1 = 269 \times 2663 \times 5683$
$\longrightarrow$ `This equation enables the computation of log(5683)`

$\Rightarrow$ $929 \times 10^5 + 1 = 3 \times 5449 \times 5683$
$\longrightarrow$ `This equation enables the computation of log(5683)`
`page 416:`
$\Rightarrow$ $429 \times 10^7 + 1 = 7 \times 83 \times 1297 \times 5693$
$\longrightarrow$ `This equation enables the computation of log(5693)`
$\Rightarrow$ $1403 \times 10^6 - 1 = 59 \times 4177 \times 5693$
$\longrightarrow$ `This equation enables the computation of log(5693)`
$\Rightarrow$ $294 \times 10^7 - 1 = 43 \times 67 \times 179 \times 5701$
$\longrightarrow$ `This equation enables the computation of log(5701)`
$\Rightarrow$ $895 \times 10^5 - 1 = 3 \times 5233 \times 5701$
$\longrightarrow$ `This equation enables the computation of log(5701)`
$\Rightarrow$ $1479 \times 10^8 + 1 = 13^2 \times 293 \times 523 \times 5711$
$\longrightarrow$ `This equation enables the computation of log(5711)`
`page 417:`
$\Rightarrow$ $5125 \times 10^6 + 1 = 11 \times 23 \times 3547 \times 5711$
$\longrightarrow$ `This equation enables the computation of log(5711)`
$\Rightarrow$ $2609 \times 10^7 + 1 = 3^2 \times 13 \times 47 \times 827 \times 5737$
$\longrightarrow$ `This equation enables the computation of log(5737)`
$\Rightarrow$ $2595 \times 10^6 - 1 = 199 \times 2273 \times 5737$
$\longrightarrow$ `This equation enables the computation of log(5737)`
$\Rightarrow$ $447 \times 10^6 + 1 = 7^3 \times 227 \times 5741$
$\longrightarrow$ `This equation enables the computation of log(5741)`
$\Rightarrow$ $4513 \times 10^4 + 1 = 7 \times 1123 \times 5741$
$\longrightarrow$ `This equation enables the computation of log(5741)`
`page 418:`
$\Rightarrow$ $3894 \times 10^6 + 1 = 67 \times 89 \times 113 \times 5779$
$\longrightarrow$ `This equation enables the computation of log(5779)`
$\Rightarrow$ $1513 \times 10^5 - 1 = 3^2 \times 2909 \times 5779$
$\longrightarrow$ `This equation enables the computation of log(5779)`
$\Rightarrow$ $4546 \times 10^8 - 1 = 3^5 \times 31 \times 101 \times 103 \times 5801$
$\longrightarrow$ `This equation enables the computation of log(5801)`
$\Rightarrow$ $3679 \times 10^6 + 1 = 19 \times 29 \times 1151 \times 5801$
$\longrightarrow$ `This equation enables the computation of log(5801)`
$\Rightarrow$ $4121 \times 10^7 - 1 = 7 \times 17 \times 43 \times 1151 \times 6997$
$\longrightarrow$ `This equation enables the computation of log(6997)`
`page 419:`
$\Rightarrow$ $772 \times 10^6 + 1 = 19 \times 6997 \times 5807$
$\longrightarrow$ `This equation enables the computation of log(5807)`
$\Rightarrow$ $3407 \times 10^7 - 1 = 7 \times 17 \times 47 \times 1049 \times 5807$
$\longrightarrow$ `This equation enables the computation of log(5807)`
$\Rightarrow$ $1209 \times 10^6 + 1 = 11 \times 19 \times 863 \times 6703$

$\longrightarrow$ `This equation enables the computation of log(6703)`
$\Rightarrow$ $5494 \times 10^6 - 1 = 3 \times 47 \times 6703 \times 5813$
$\longrightarrow$ `This equation enables the computation of log(5813)`
$\Rightarrow$ $2623 \times 10^5 - 1 = 3 \times 13^2 \times 89 \times 5813$
$\longrightarrow$ `This equation enables the computation of log(5813)`

`page 420:`

$\Rightarrow$ $5273 \times 10^7 + 1 = 3^3 \times 7^2 \times 41 \times 167 \times 5821$
$\longrightarrow$ `This equation enables the computation of log(5821)`
$\Rightarrow$ $548 \times 10^7 - 1 = 229 \times 4111 \times 5821$
$\longrightarrow$ `This equation enables the computation of log(5821)`
$\Rightarrow$ $915 \times 10^8 + 1 = 37 \times 389 \times 1091 \times 5827$
$\longrightarrow$ `This equation enables the computation of log(5827)`
$\Rightarrow$ $3323 \times 10^7 + 1 = 3 \times 11 \times 29 \times 59 \times 101 \times 5827$
$\longrightarrow$ `This equation enables the computation of log(5827)`
$\Rightarrow$ $1434 \times 10^5 + 1 = 41 \times 599 \times 5839$
$\longrightarrow$ `This equation enables the computation of log(5839)`
$\Rightarrow$ $3177 \times 10^4 - 1 = 5441 \times 5839$
$\longrightarrow$ `This equation enables the computation of log(5839)`

`page 421:`

$\Rightarrow$ $5617 \times 10^7 - 1 = 3^2 \times 17 \times 23 \times 2729 \times 5849$
$\longrightarrow$ `This equation enables the computation of log(5849)`
$\Rightarrow$ $3529 \times 10^6 - 1 = 3^2 \times 7 \times 61 \times 157 \times 5849$
$\longrightarrow$ `This equation enables the computation of log(5849)`
$\Rightarrow$ $1999 \times 10^6 + 1 = 31 \times 103 \times 107 \times 5851$
$\longrightarrow$ `This equation enables the computation of log(5851)`
$\Rightarrow$ $3414 \times 10^5 - 1 = 19 \times 37 \times 83 \times 5851$
$\longrightarrow$ `This equation enables the computation of log(5851)`
$\Rightarrow$ $6567 \times 10^6 + 1 = 19 \times 131 \times 283 \times 9323$
$\longrightarrow$ `This equation enables the computation of log(9323)`

`page 422:`

$\Rightarrow$ $1589 \times 10^7 + 1 = 3 \times 97 \times 9323 \times 5857$
$\longrightarrow$ `This equation enables the computation of log(5857)`
$\Rightarrow$ $4176 \times 10^6 + 1 = 263 \times 2711 \times 5857$
$\longrightarrow$ `This equation enables the computation of log(5857)`
$\Rightarrow$ $5147 \times 10^7 - 1 = 11 \times 601 \times 1327 \times 5867$
$\longrightarrow$ `This equation enables the computation of log(5867)`
$\Rightarrow$ $1333 \times 10^6 + 1 = 127 \times 1789 \times 5867$
$\longrightarrow$ `This equation enables the computation of log(5867)`
$\Rightarrow$ $3653 \times 10^7 + 1 = 3^3 \times 11 \times 19 \times 1103 \times 5869$
$\longrightarrow$ `This equation enables the computation of log(5869)`
$\Rightarrow$ $1316 \times 10^6 + 1 = 3 \times 41 \times 1823 \times 5869$

$\longrightarrow$ `This equation enables the computation of log(5869)`
`page 423:`
$\Rightarrow$ $5144 \times 10^6 + 1 = 3 \times 7 \times 43 \times 641 \times 8887$
$\longrightarrow$ `This equation enables the computation of log(8887)`
$\Rightarrow$ $1263 \times 10^7 - 1 = 241 \times 8887 \times 5897$
$\longrightarrow$ `This equation enables the computation of log(5897)`
$\Rightarrow$ $3434 \times 10^5 + 1 = 3 \times 7 \times 47 \times 59 \times 5897$
$\longrightarrow$ `This equation enables the computation of log(5897)`
$\Rightarrow$ $2859 \times 10^5 - 1 = 7 \times 11 \times 17 \times 37 \times 5903$
$\longrightarrow$ `This equation enables the computation of log(5903)`
$\Rightarrow$ $4418 \times 10^6 - 1 = 7 \times 31 \times 3449 \times 5903$
$\longrightarrow$ `This equation enables the computation of log(5903)`
`page 424:`
$\Rightarrow$ $5917 \times 10^6 + 1 = 11 \times 197 \times 461 \times 5923$
$\longrightarrow$ `This equation enables the computation of log(5923)`
$\Rightarrow$ $5863 \times 10^5 + 1 = 7 \times 79 \times 179 \times 5923$
$\longrightarrow$ `This equation enables the computation of log(5923)`
$\Rightarrow$ $1431 \times 10^6 - 1 = 11 \times 13 \times 41^2 \times 5953$
$\longrightarrow$ `This equation enables the computation of log(5953)`
$\Rightarrow$ $2404 \times 10^5 - 1 = 3^2 \times 7 \times 641 \times 5953$
$\longrightarrow$ `This equation enables the computation of log(5953)`
$\Rightarrow$ $1216 \times 10^6 - 1 = 3^3 \times 6689 \times 6733$
$\longrightarrow$ `This equation enables the computation of log(6733)`
`page 425:`
$\Rightarrow$ $5517 \times 10^6 + 1 = 137 \times 6733 \times 5981$
$\longrightarrow$ `This equation enables the computation of log(5981)`
$\Rightarrow$ $464 \times 10^6 - 1 = 23 \times 3373 \times 5981$
$\longrightarrow$ `This equation enables the computation of log(5981)`
$\Rightarrow$ $1495 \times 10^7 - 1 = 3^2 \times 11^2 \times 2293 \times 5987$
$\longrightarrow$ `This equation enables the computation of log(5987)`
$\Rightarrow$ $4237 \times 10^4 - 1 = 3 \times 7 \times 337 \times 5987$
$\longrightarrow$ `This equation enables the computation of log(5987)`
`page 426:`
$\Rightarrow$ $5716 \times 10^7 - 1 = 3^3 \times 89 \times 3469 \times 6857$
$\longrightarrow$ `This equation enables the computation of log(6857)`
$\Rightarrow$ $4119 \times 10^4 - 1 = 6857 \times 6007$
$\longrightarrow$ `This equation enables the computation of log(6007)`
$\Rightarrow$ $3793 \times 10^5 + 1 = 233 \times 271 \times 6007$
$\longrightarrow$ `This equation enables the computation of log(6007)`
$\Rightarrow$ $467 \times 10^7 - 1 = 7 \times 41 \times 2707 \times 6011$
$\longrightarrow$ `This equation enables the computation of log(6011)`

$\Rightarrow\quad 1341 \times 10^6 + 1 = 11 \times 17 \times 1193 \times 6011$
⟶ `This equation enables the computation of log(6011)`
$\Rightarrow\quad 4435 \times 10^6 + 1 = 17 \times 23 \times 1877 \times 6043$
⟶ `This equation enables the computation of log(6043)`

`page 427:`

$\Rightarrow\quad 2049 \times 10^5 + 1 = 41 \times 827 \times 6043$
⟶ `This equation enables the computation of log(6043)`
$\Rightarrow\quad 588 \times 10^7 + 1 = 17 \times 47 \times 1217 \times 6047$
⟶ `This equation enables the computation of log(6047)`
$\Rightarrow\quad 4606 \times 10^4 - 1 = 3 \times 2539 \times 6047$
⟶ `This equation enables the computation of log(6047)`
$\Rightarrow\quad 706 \times 10^6 - 1 = 3 \times 101 \times 251 \times 9283$
⟶ `This equation enables the computation of log(9283)`
$\Rightarrow\quad 5619 \times 10^4 - 1 = 9283 \times 6053$
⟶ `This equation enables the computation of log(6053)`

`page 428:`

$\Rightarrow\quad 713 \times 10^8 - 1 = 17 \times 37 \times 61 \times 307 \times 6053$
⟶ `This equation enables the computation of log(6053)`
$\Rightarrow\quad 5864 \times 10^7 + 1 = 3 \times 11 \times 229 \times 1279 \times 6067$
⟶ `This equation enables the computation of log(6067)`
$\Rightarrow\quad 4037 \times 10^6 + 1 = 3 \times 293 \times 757 \times 6067$
⟶ `This equation enables the computation of log(6067)`
$\Rightarrow\quad 5093 \times 10^5 - 1 = 13 \times 6451 \times 6073$
⟶ `This equation enables the computation of log(6073)`
$\Rightarrow\quad 98 \times 10^6 + 1 = 3^2 \times 11 \times 163 \times 6073$
⟶ `This equation enables the computation of log(6073)`

`page 429:`

$\Rightarrow\quad 1486 \times 10^7 - 1 = 3^2 \times 13 \times 17 \times 1229 \times 6079$
⟶ `This equation enables the computation of log(6079)`
$\Rightarrow\quad 3377 \times 10^6 + 1 = 3 \times 23 \times 83 \times 97 \times 6079$
⟶ `This equation enables the computation of log(6079)`
$\Rightarrow\quad 4489 \times 10^6 - 1 = 3 \times 11 \times 23 \times 971 \times 6091$
⟶ `This equation enables the computation of log(6091)`
$\Rightarrow\quad 3838 \times 10^5 + 1 = 13 \times 37 \times 131 \times 6091$
⟶ `This equation enables the computation of log(6091)`
$\Rightarrow\quad 6794 \times 10^8 + 1 = 3^4 \times 997 \times 1097 \times 7669$
⟶ `This equation enables the computation of log(7669)`

`page 430:`

$\Rightarrow\quad 3141 \times 10^6 - 1 = 67 \times 7669 \times 6113$
⟶ `This equation enables the computation of log(6113)`
$\Rightarrow\quad 5268 \times 10^5 + 1 = 7 \times 13 \times 947 \times 6113$

$\longrightarrow$ `This equation enables the computation of log(6113)`
$\Rightarrow$ $1685 \times 10^7 + 1 = 3 \times 751 \times 1193 \times 6269$
$\longrightarrow$ `This equation enables the computation of log(6269)`
$\Rightarrow$ $1957 \times 10^6 - 1 = 3 \times 17 \times 6269 \times 6121$
$\longrightarrow$ `This equation enables the computation of log(6121)`
$\Rightarrow$ $4164 \times 10^6 + 1 = 7 \times 157 \times 619 \times 6121$
$\longrightarrow$ `This equation enables the computation of log(6121)`
$\Rightarrow$ $2749 \times 10^7 + 1 = 37 \times 179 \times 677 \times 6131$
$\longrightarrow$ `This equation enables the computation of log(6131)`

`page 431:`
$\Rightarrow$ $3165 \times 10^6 - 1 = 7 \times 29 \times 2543 \times 6131$
$\longrightarrow$ `This equation enables the computation of log(6131)`
$\Rightarrow$ $4509 \times 10^6 - 1 = 7 \times 127 \times 827 \times 6133$
$\longrightarrow$ `This equation enables the computation of log(6133)`
$\Rightarrow$ $2159 \times 10^5 - 1 = 7 \times 47 \times 107 \times 6133$
$\longrightarrow$ `This equation enables the computation of log(6133)`
$\Rightarrow$ $1849 \times 10^6 - 1 = 3 \times 7 \times 11 \times 1303 \times 6143$
$\longrightarrow$ `This equation enables the computation of log(6143)`
$\Rightarrow$ $6082 \times 10^5 + 1 = 181 \times 547 \times 6143$
$\longrightarrow$ `This equation enables the computation of log(6143)`

`page 432:`
$\Rightarrow$ $4974 \times 10^6 - 1 = 449 \times 1801 \times 6151$
$\longrightarrow$ `This equation enables the computation of log(6151)`
$\Rightarrow$ $1177 \times 10^6 + 1 = 179 \times 1069 \times 6151$
$\longrightarrow$ `This equation enables the computation of log(6151)`
$\Rightarrow$ $4256 \times 10^9 - 1 = 11^2 \times 37 \times 73 \times 2113 \times 6163$
$\longrightarrow$ `This equation enables the computation of log(6163)`
$\Rightarrow$ $353 \times 10^7 - 1 = 419 \times 1367 \times 6163$
$\longrightarrow$ `This equation enables the computation of log(6163)`
$\Rightarrow$ $4792 \times 10^8 - 1 = 3 \times 7 \times 29 \times 199 \times 467 \times 8467$
$\longrightarrow$ `This equation enables the computation of log(8467)`

`page 433:`
$\Rightarrow$ $5247 \times 10^4 - 1 = 8467 \times 6197$
$\longrightarrow$ `This equation enables the computation of log(6197)`
$\Rightarrow$ $3108 \times 10^6 + 1 = 449 \times 1117 \times 6197$
$\longrightarrow$ `This equation enables the computation of log(6197)`
$\Rightarrow$ $3433 \times 10^6 + 1 = 317 \times 1747 \times 6199$
$\longrightarrow$ `This equation enables the computation of log(6199)`
$\Rightarrow$ $3335 \times 10^5 + 1 = 3 \times 79 \times 227 \times 6199$
$\longrightarrow$ `This equation enables the computation of log(6199)`
$\Rightarrow$ $3272 \times 10^7 + 1 = 3 \times 13 \times 31 \times 4363 \times 6203$

$\longrightarrow$ `This equation enables the computation of log(6203)`

`page 434:`

$\Rightarrow\quad 2931 \times 10^7 - 1 = 7 \times 17 \times 59 \times 673 \times 6203$

$\longrightarrow$ `This equation enables the computation of log(6203)`

$\Rightarrow\quad 2132 \times 10^6 - 1 = 71 \times 3089 \times 9721$

$\longrightarrow$ `This equation enables the computation of log(9721)`

$\Rightarrow\quad 4303 \times 10^8 - 1 = 3^6 \times 19^2 \times 263 \times 6217$

$\longrightarrow$ `This equation enables the computation of log(6217)`

$\Rightarrow\quad 1052 \times 10^9 - 1 = 13^2 \times 103 \times 9721 \times 6217$

$\longrightarrow$ `This equation enables the computation of log(6217)`

$\Rightarrow\quad 1365 \times 10^7 + 1 = 11 \times 151 \times 1321 \times 6221$

$\longrightarrow$ `This equation enables the computation of log(6221)`

$\Rightarrow\quad 1208 \times 10^6 + 1 = 3 \times 13^2 \times 383 \times 6221$

$\longrightarrow$ `This equation enables the computation of log(6221)`

`page 435:`

$\Rightarrow\quad 4168 \times 10^8 + 1 = 7^2 \times 11 \times 83 \times 1489 \times 6257$

$\longrightarrow$ `This equation enables the computation of log(6257)`

$\Rightarrow\quad 2419 \times 10^6 - 1 = 3 \times 13 \times 23 \times 431 \times 6257$

$\longrightarrow$ `This equation enables the computation of log(6257)`

$\Rightarrow\quad 1685 \times 10^7 + 1 = 3 \times 751 \times 1193 \times 6269$

$\longrightarrow$ `This equation enables the computation of log(6269)`

$\Rightarrow\quad 2109 \times 10^5 + 1 = 13^2 \times 199 \times 6271$

$\longrightarrow$ `This equation enables the computation of log(6271)`

$\Rightarrow\quad 3994 \times 10^4 - 1 = 3 \times 11 \times 193 \times 6271$

$\longrightarrow$ `This equation enables the computation of log(6271)`

`page 436:`

$\Rightarrow\quad 4901 \times 10^6 - 1 = 7 \times 71 \times 1571 \times 6277$

$\longrightarrow$ `This equation enables the computation of log(6277)`

$\Rightarrow\quad 1376 \times 10^6 + 1 = 3^3 \times 23 \times 353 \times 6277$

$\longrightarrow$ `This equation enables the computation of log(6277)`

$\Rightarrow\quad 406 \times 10^7 - 1 = 3^2 \times 11^2 \times 593 \times 6287$

$\longrightarrow$ `This equation enables the computation of log(6287)`

$\Rightarrow\quad 3409 \times 10^5 + 1 = 13 \times 43 \times 97 \times 6287$

$\longrightarrow$ `This equation enables the computation of log(6287)`

$\Rightarrow\quad 3363 \times 10^7 + 1 = 13 \times 293 \times 1399 \times 6311$

$\longrightarrow$ `This equation enables the computation of log(6311)`

`page 437:`

$\Rightarrow\quad 4236 \times 10^6 - 1 = 7 \times 11 \times 23 \times 379 \times 6311$

$\longrightarrow$ `This equation enables the computation of log(6311)`

$\Rightarrow\quad 4629 \times 10^5 + 1 = 23 \times 29 \times 109 \times 6367$

$\longrightarrow$ `This equation enables the computation of log(6367)`

$\Rightarrow$ $2373 \times 10^6 + 1 = 59 \times 6367 \times 6317$
$\longrightarrow$ This equation enables the computation of log(6317)
$\Rightarrow$ $1538 \times 10^5 - 1 = 97 \times 251 \times 6317$
$\longrightarrow$ This equation enables the computation of log(6317)
$\Rightarrow$ $6251 \times 10^6 - 1 = 43 \times 83 \times 277 \times 6323$
$\longrightarrow$ This equation enables the computation of log(6323)
$\Rightarrow$ $72 \times 10^6 + 1 = 59 \times 193 \times 6323$
$\longrightarrow$ This equation enables the computation of log(6323)
page 438:
$\Rightarrow$ $3719 \times 10^5 - 1 = 193 \times 223 \times 8641$
$\longrightarrow$ This equation enables the computation of log(8641)
$\Rightarrow$ $4922 \times 10^5 + 1 = 3^2 \times 8641 \times 6329$
$\longrightarrow$ This equation enables the computation of log(6329)
$\Rightarrow$ $1758 \times 10^6 + 1 = 89 \times 3121 \times 6329$
$\longrightarrow$ This equation enables the computation of log(6329)
$\Rightarrow$ $879 \times 10^8 - 1 = 7^2 \times 41 \times 71 \times 97 \times 6353$
$\longrightarrow$ This equation enables the computation of log(6353)
$\Rightarrow$ $2437 \times 10^7 - 1 = 3 \times 139 \times 9199 \times 6353$
$\longrightarrow$ This equation enables the computation of log(6353)
page 439:
$\Rightarrow$ $938 \times 10^7 - 1 = 853 \times 1459 \times 7537$
$\longrightarrow$ This equation enables the computation of log(7537)
$\Rightarrow$ $3356 \times 10^5 - 1 = 7 \times 7537 \times 6361$
$\longrightarrow$ This equation enables the computation of log(6361)
$\Rightarrow$ $3005 \times 10^5 + 1 = 3^2 \times 29 \times 181 \times 6361$
$\longrightarrow$ This equation enables the computation of log(6361)
$\Rightarrow$ $507 \times 10^8 + 1 = 7 \times 31 \times 61 \times 601 \times 6373$
$\longrightarrow$ This equation enables the computation of log(6373)
$\Rightarrow$ $3533 \times 10^5 + 1 = 3 \times 17 \times 1087 \times 6373$
$\longrightarrow$ This equation enables the computation of log(6373)
page 440:
$\Rightarrow$ $6812 \times 10^6 - 1 = 7 \times 23 \times 5861 \times 7219$
$\longrightarrow$ This equation enables the computation of log(7219)
$\Rightarrow$ $4605 \times 10^4 + 1 = 7219 \times 6379$
$\longrightarrow$ This equation enables the computation of log(6379)
$\Rightarrow$ $2729 \times 10^5 - 1 = 179 \times 239 \times 6379$
$\longrightarrow$ This equation enables the computation of log(6379)
$\Rightarrow$ $2784 \times 10^7 + 1 = 11 \times 491 \times 683 \times 7547$
$\longrightarrow$ This equation enables the computation of log(7547)
$\Rightarrow$ $1231 \times 10^8 - 1 = 3 \times 23 \times 37 \times 7547 \times 6389$
$\longrightarrow$ This equation enables the computation of log(6389)

page 441:

⇒ $5158 \times 10^8 + 1 = 11 \times 13 \times 199 \times 2837 \times 6389$

⟶ This equation enables the computation of log(6389)

⇒ $358 \times 10^9 + 1 = 7^2 \times 727 \times 1571 \times 6397$

⟶ This equation enables the computation of log(6397)

⇒ $6165 \times 10^6 + 1 = 823 \times 1171 \times 6397$

⟶ This equation enables the computation of log(6397)

⇒ $4379 \times 10^6 + 1 = 3 \times 59 \times 3853 \times 6421$

⟶ This equation enables the computation of log(6421)

⇒ $2042 \times 10^6 - 1 = 13 \times 17 \times 1439 \times 6421$

⟶ This equation enables the computation of log(6421)

page 442:

⇒ $78 \times 10^7 + 1 = 11^2 \times 17 \times 59 \times 6427$

⟶ This equation enables the computation of log(6427)

⇒ $5054 \times 10^5 - 1 = 13 \times 23 \times 263 \times 6427$

⟶ This equation enables the computation of log(6427)

⇒ $5492 \times 10^7 + 1 = 3 \times 23 \times 83 \times 1487 \times 6449$

⟶ This equation enables the computation of log(6449)

⇒ $957 \times 10^7 - 1 = 7 \times 239 \times 887 \times 6449$

⟶ This equation enables the computation of log(6449)

⇒ $359 \times 10^{10} - 1 = 7 \times 19 \times 37 \times 43 \times 2621 \times 6473$

⟶ This equation enables the computation of log(6473)

page 443:

⇒ $5731 \times 10^5 + 1 = 29 \times 43 \times 71 \times 6473$

⟶ This equation enables the computation of log(6473)

⇒ $3365 \times 10^5 + 1 = 3^4 \times 641 \times 6481$

⟶ This equation enables the computation of log(6481)

⇒ $5236 \times 10^4 - 1 = 3 \times 2693 \times 6481$

⟶ This equation enables the computation of log(6481)

⇒ $5028 \times 10^6 + 1 = 19 \times 59 \times 691 \times 6491$

⟶ This equation enables the computation of log(6491)

⇒ $1463 \times 10^6 - 1 = 257 \times 877 \times 6491$

⟶ This equation enables the computation of log(6491)

page 444:

⇒ $2244 \times 10^6 - 1 = 193 \times 1783 \times 6521$

⟶ This equation enables the computation of log(6521)

⇒ $3644 \times 10^5 + 1 = 3^2 \times 7 \times 887 \times 6521$

⟶ This equation enables the computation of log(6521)

⇒ $761 \times 10^7 + 1 = 3 \times 31 \times 83 \times 151 \times 6529$

⟶ This equation enables the computation of log(6529)

⇒ $4281 \times 10^5 + 1 = 7 \times 17 \times 19 \times 29 \times 6529$

$\longrightarrow$ `This equation enables the computation of log(6529)`
$\Rightarrow$ $1062 \times 10^7 - 1 = 7 \times 37 \times 6263 \times 6547$
$\longrightarrow$ `This equation enables the computation of log(6547)`
`page 445:`
$\Rightarrow$ $4073 \times 10^6 - 1 = 19 \times 137 \times 239 \times 6547$
$\longrightarrow$ `This equation enables the computation of log(6547)`
$\Rightarrow$ $376 \times 10^7 - 1 = 3 \times 7 \times 89 \times 307 \times 6553$
$\longrightarrow$ `This equation enables the computation of log(6553)`
$\Rightarrow$ $1718 \times 10^5 + 1 = 3^3 \times 971 \times 6553$
$\longrightarrow$ `This equation enables the computation of log(6553)`
$\Rightarrow$ $3213 \times 10^7 + 1 = 11 \times 599 \times 743 \times 6563$
$\longrightarrow$ `This equation enables the computation of log(6563)`
$\Rightarrow$ $6276 \times 10^5 + 1 = 7 \times 19 \times 719 \times 6563$
$\longrightarrow$ `This equation enables the computation of log(6563)`
$\Rightarrow$ $4418 \times 10^7 + 1 = 3^2 \times 461 \times 1621 \times 6569$
$\longrightarrow$ `This equation enables the computation of log(6569)`
`page 446:`
$\Rightarrow$ $1677 \times 10^5 + 1 = 7^2 \times 521 \times 6569$
$\longrightarrow$ `This equation enables the computation of log(6569)`
$\Rightarrow$ $3335 \times 10^7 + 1 = 3 \times 97 \times 107 \times 163 \times 6571$
$\longrightarrow$ `This equation enables the computation of log(6571)`
$\Rightarrow$ $6076 \times 10^6 - 1 = 3^3 \times 23 \times 1489 \times 6571$
$\longrightarrow$ `This equation enables the computation of log(6571)`
$\Rightarrow$ $4578 \times 10^8 + 1 = 37 \times 331 \times 4391 \times 8513$
$\longrightarrow$ `This equation enables the computation of log(8513)`
$\Rightarrow$ $5599 \times 10^4 + 1 = 8513 \times 6577$
$\longrightarrow$ `This equation enables the computation of log(6577)`
`page 447:`
$\Rightarrow$ $2533 \times 10^5 + 1 = 19 \times 2027 \times 6577$
$\longrightarrow$ `This equation enables the computation of log(6577)`
$\Rightarrow$ $2204 \times 10^5 + 1 = 3^3 \times 1237 \times 6599$
$\longrightarrow$ `This equation enables the computation of log(6599)`
$\Rightarrow$ $4356 \times 10^4 - 1 = 7 \times 23 \times 41 \times 6599$
$\longrightarrow$ `This equation enables the computation of log(6599)`
$\Rightarrow$ $908 \times 10^5 + 1 = 3^3 \times 509 \times 6607$
$\longrightarrow$ `This equation enables the computation of log(6607)`
$\Rightarrow$ $4134 \times 10^4 - 1 = 6257 \times 6607$
$\longrightarrow$ `This equation enables the computation of log(6607)`
`page 448:`
$\Rightarrow$ $5231 \times 10^7 + 1 = 3 \times 7 \times 89 \times 4217 \times 6637$
$\longrightarrow$ `This equation enables the computation of log(6637)`

$\Rightarrow$ $5851 \times 10^6 + 1 = 7 \times 11 \times 107^2 \times 6637$
$\longrightarrow$ This equation enables the computation of log(6637)
$\Rightarrow$ $3677 \times 10^6 - 1 = 67 \times 73 \times 113 \times 6653$
$\longrightarrow$ This equation enables the computation of log(6653)
$\Rightarrow$ $2976 \times 10^6 + 1 = 13 \times 19 \times 1811 \times 6653$
$\longrightarrow$ This equation enables the computation of log(6653)
$\Rightarrow$ $3964 \times 10^6 + 1 = 13 \times 19 \times 1847 \times 8689$
$\longrightarrow$ This equation enables the computation of log(8689)

page 449:

$\Rightarrow$ $3872 \times 10^7 + 1 = 3 \times 223 \times 8689 \times 6661$
$\longrightarrow$ This equation enables the computation of log(6661)
$\Rightarrow$ $5415 \times 10^6 + 1 = 827 \times 983 \times 6661$
$\longrightarrow$ This equation enables the computation of log(6661)
$\Rightarrow$ $1408 \times 10^5 - 1 = 3 \times 7027 \times 6679$
$\longrightarrow$ This equation enables the computation of log(6679)
$\Rightarrow$ $5957 \times 10^4 + 1 = 3^2 \times 991 \times 6679$
$\longrightarrow$ This equation enables the computation of log(6679)
$\Rightarrow$ $6524 \times 10^7 + 1 = 3^2 \times 11 \times 149 \times 661 \times 6691$
$\longrightarrow$ This equation enables the computation of log(6691)

page 450:

$\Rightarrow$ $3318 \times 10^5 - 1 = 17 \times 2917 \times 6691$
$\longrightarrow$ This equation enables the computation of log(6691)
$\Rightarrow$ $782 \times 10^6 - 1 = 11 \times 103^2 \times 6701$
$\longrightarrow$ This equation enables the computation of log(6701)
$\Rightarrow$ $4489 \times 10^4 - 1 = 3 \times 7 \times 11 \times 29 \times 6701$
$\longrightarrow$ This equation enables the computation of log(6701)
$\Rightarrow$ $2336 \times 10^6 + 1 = 3 \times 277 \times 419 \times 6709$
$\longrightarrow$ This equation enables the computation of log(6709)
$\Rightarrow$ $3476 \times 10^5 - 1 = 197 \times 263 \times 6709$
$\longrightarrow$ This equation enables the computation of log(6709)

page 451:

$\Rightarrow$ $4954 \times 10^7 - 1 = 3 \times 7 \times 17 \times 19 \times 1087 \times 6719$
$\longrightarrow$ This equation enables the computation of log(6719)
$\Rightarrow$ $2507 \times 10^6 - 1 = 7 \times 151 \times 353 \times 6719$
$\longrightarrow$ This equation enables the computation of log(6719)
$\Rightarrow$ $307 \times 10^{10} + 1 = 11 \times 37 \times 467 \times 2389 \times 6761$
$\longrightarrow$ This equation enables the computation of log(6761)
$\Rightarrow$ $506 \times 10^6 + 1 = 3 \times 13 \times 19 \times 101 \times 6761$
$\longrightarrow$ This equation enables the computation of log(6761)
$\Rightarrow$ $6075 \times 10^5 + 1 = 43 \times 2089 \times 6763$
$\longrightarrow$ This equation enables the computation of log(6763)

page 452:
⇒ $688 \times 10^5 - 1 = 3 \times 3391 \times 6763$
⟶ This equation enables the computation of log(6763)
⇒ $4819 \times 10^8 - 1 = 3 \times 11 \times 23 \times 73 \times 1283 \times 6779$
⟶ This equation enables the computation of log(6779)
⇒ $6042 \times 10^7 + 1 = 37 \times 139 \times 1733 \times 6779$
⟶ This equation enables the computation of log(6779)
⇒ $1143 \times 10^6 + 1 = 11^2 \times 13 \times 107 \times 6791$
⟶ This equation enables the computation of log(6791)
⇒ $2152 \times 10^5 - 1 = 3^2 \times 7 \times 503 \times 6791$
⟶ This equation enables the computation of log(6791)
page 453:
⇒ $1293 \times 10^6 - 1 = 131 \times 1453 \times 6793$
⟶ This equation enables the computation of log(6793)
⇒ $6137 \times 10^5 - 1 = 11 \times 43 \times 191 \times 6793$
⟶ This equation enables the computation of log(6793)
⇒ $448 \times 10^7 - 1 = 3 \times 31 \times 73 \times 97 \times 6803$
⟶ This equation enables the computation of log(6803)
⇒ $3982 \times 10^5 - 1 = 3 \times 109 \times 179 \times 6803$
⟶ This equation enables the computation of log(6803)
⇒ $1323 \times 10^7 + 1 = 419 \times 4357 \times 7247$
⟶ This equation enables the computation of log(7247)
page 454:
⇒ $5983 \times 10^6 + 1 = 11^2 \times 7247 \times 6823$
⟶ This equation enables the computation of log(6823)
⇒ $1184 \times 10^6 - 1 = 7 \times 13 \times 1523 \times 8543$
⟶ This equation enables the computation of log(8543)
⇒ $5246 \times 10^5 + 1 = 3^2 \times 8543 \times 6823$
⟶ This equation enables the computation of log(6823)
⇒ $4291 \times 10^9 + 1 = 11 \times 13 \times 37 \times 211 \times 563 \times 6827$
⟶ This equation enables the computation of log(6827)
⇒ $1001 \times 10^7 - 1 = 863 \times 1699 \times 6827$
⟶ This equation enables the computation of log(6827)
page 455:
⇒ $4676 \times 10^7 + 1 = 3 \times 11^2 \times 13 \times 1451 \times 6829$
⟶ This equation enables the computation of log(6829)
⇒ $5786 \times 10^6 + 1 = 3^2 \times 47 \times 2003 \times 6829$
⟶ This equation enables the computation of log(6829)
⇒ $2342 \times 10^8 + 1 = 3 \times 11 \times 29 \times 83 \times 431 \times 6841$
⟶ This equation enables the computation of log(6841)
⇒ $2897 \times 10^7 + 1 = 3^6 \times 37 \times 157 \times 6841$

⟶ `This equation enables the computation of log(6841)`
⇒ $6206 \times 10^8 + 1 = 3 \times 17 \times 37 \times 173 \times 277 \times 6863$
⟶ `This equation enables the computation of log(6863)`
⇒ $293 \times 10^7 + 1 = 3 \times 101 \times 1409 \times 6863$
⟶ `This equation enables the computation of log(6863)`
`page 456:`
⇒ $5733 \times 10^5 + 1 = 23 \times 3613 \times 6899$
⟶ `This equation enables the computation of log(6899)`
⇒ $4761 \times 10^4 - 1 = 67 \times 103 \times 6899$
⟶ `This equation enables the computation of log(6899)`
⇒ $2921 \times 10^7 + 1 = 3 \times 7^2 \times 13 \times 2213 \times 6907$
⟶ `This equation enables the computation of log(6907)`
⇒ $5325 \times 10^6 - 1 = 11 \times 109 \times 643 \times 6907$
⟶ `This equation enables the computation of log(6907)`
⇒ $1902 \times 10^7 - 1 = 7 \times 11 \times 13 \times 41 \times 67 \times 6917$
⟶ `This equation enables the computation of log(6917)`
`page 457:`
⇒ $3476 \times 10^5 + 1 = 3 \times 7 \times 2393 \times 6917$
⟶ `This equation enables the computation of log(6917)`
⇒ $122 \times 10^8 + 1 = 3 \times 7 \times 131 \times 563 \times 7877$
⟶ `This equation enables the computation of log(7877)`
⇒ $4323 \times 10^6 + 1 = 79 \times 7877 \times 6947$
⟶ `This equation enables the computation of log(6947)`
⇒ $5399 \times 10^5 - 1 = 23 \times 31 \times 109 \times 6947$
⟶ `This equation enables the computation of log(6947)`
⇒ $6556 \times 10^7 - 1 = 3 \times 13 \times 47 \times 5147 \times 6949$
⟶ `This equation enables the computation of log(6949)`
`page 458:`
⇒ $4555 \times 10^5 + 1 = 11 \times 59 \times 101 \times 6949$
⟶ `This equation enables the computation of log(6949)`
⇒ $4082 \times 10^5 + 1 = 3 \times 11 \times 1777 \times 6961$
⟶ `This equation enables the computation of log(6961)`
⇒ $2879 \times 10^5 - 1 = 59 \times 701 \times 6961$
⟶ `This equation enables the computation of log(6961)`
⇒ $1526 \times 10^7 - 1 = 827 \times 2647 \times 6971$
⟶ `This equation enables the computation of log(6971)`
⇒ $1318 \times 10^6 - 1 = 3 \times 19 \times 31 \times 107 \times 6971$
⟶ `This equation enables the computation of log(6971)`
`page 459:`
⇒ $6343 \times 10^5 + 1 = 229 \times 397 \times 6977$
⟶ `This equation enables the computation of log(6977)`

$\Rightarrow$ $634 \times 10^5 - 1 = 3 \times 13 \times 233 \times 6977$
⟶ `This equation enables the computation of log(6977)`
$\Rightarrow$ $6041 \times 10^6 + 1 = 3 \times 113 \times 2549 \times 6991$
⟶ `This equation enables the computation of log(6991)`
$\Rightarrow$ $4482 \times 10^5 + 1 = 61 \times 1051 \times 6991$
⟶ `This equation enables the computation of log(6991)`
$\Rightarrow$ $49 \times 10^6 - 1 = 3 \times 2333 \times 7001$
⟶ `This equation enables the computation of log(7001)`

`page 460:`
$\Rightarrow$ $2101 \times 10^4 + 1 = 3001 \times 7001$
⟶ `This equation enables the computation of log(7001)`
$\Rightarrow$ $2916 \times 10^8 - 1 = 7 \times 11 \times 19 \times 97 \times 293 \times 7013$
⟶ `This equation enables the computation of log(7013)`
$\Rightarrow$ $1108 \times 10^7 - 1 = 3^2 \times 349 \times 503 \times 7013$
⟶ `This equation enables the computation of log(7013)`
$\Rightarrow$ $389 \times 10^6 - 1 = 157 \times 353 \times 7019$
⟶ `This equation enables the computation of log(7019)`
$\Rightarrow$ $3805 \times 10^4 - 1 = 3 \times 13 \times 139 \times 7019$
⟶ `This equation enables the computation of log(7019)`

`page 461:`
$\Rightarrow$ $4359 \times 10^7 - 1 = 7 \times 13 \times 17 \times 4003 \times 7039$
⟶ `This equation enables the computation of log(7039)`
$\Rightarrow$ $518 \times 10^5 + 1 = 3 \times 11 \times 223 \times 7039$
⟶ `This equation enables the computation of log(7039)`
$\Rightarrow$ $6211 \times 10^6 + 1 = 733 \times 1153 \times 7349$
⟶ `This equation enables the computation of log(7349)`
$\Rightarrow$ $1138 \times 10^6 - 1 = 3 \times 71 \times 727 \times 7349$
⟶ `This equation enables the computation of log(7349)`
$\Rightarrow$ $6445 \times 10^6 - 1 = 3^2 \times 17 \times 5981 \times 7043$
⟶ `This equation enables the computation of log(7043)`

`page 462:`
$\Rightarrow$ $598 \times 10^6 + 1 = 197 \times 431 \times 7043$
⟶ `This equation enables the computation of log(7043)`
$\Rightarrow$ $947 \times 10^6 + 1 = 3 \times 41 \times 1091 \times 7057$
⟶ `This equation enables the computation of log(7057)`
$\Rightarrow$ $4644 \times 10^5 - 1 = 7^2 \times 17 \times 79 \times 7057$
⟶ `This equation enables the computation of log(7057)`
$\Rightarrow$ $668 \times 10^7 - 1 = 821 \times 1151 \times 7069$
⟶ `This equation enables the computation of log(7069)`
$\Rightarrow$ $389 \times 10^6 + 1 = 3 \times 13 \times 17 \times 83 \times 7069$
⟶ `This equation enables the computation of log(7069)`

page 463:

$\Rightarrow$ $5093 \times 10^7 + 1 = 3^2 \times 17 \times 59 \times 797 \times 7079$

$\longrightarrow$ This equation enables the computation of log(7079)

$\Rightarrow$ $1986 \times 10^7 - 1 = 7 \times 241 \times 1663 \times 7079$

$\longrightarrow$ This equation enables the computation of log(7079)

$\Rightarrow$ $6021 \times 10^5 + 1 = 29 \times 37 \times 79 \times 7103$

$\longrightarrow$ This equation enables the computation of log(7103)

$\Rightarrow$ $3717 \times 10^4 - 1 = 5233 \times 7103$

$\longrightarrow$ This equation enables the computation of log(7103)

$\Rightarrow$ $5788 \times 10^8 - 1 = 3^3 \times 13^2 \times 47 \times 379 \times 7121$

$\longrightarrow$ This equation enables the computation of log(7121)

page 464:

$\Rightarrow$ $912 \times 10^7 - 1 = 11 \times 173 \times 673 \times 7121$

$\longrightarrow$ This equation enables the computation of log(7121)

$\Rightarrow$ $958 \times 10^7 + 1 = 11 \times 13 \times 53 \times 131 \times 9649$

$\longrightarrow$ This equation enables the computation of log(9649)

$\Rightarrow$ $69 \times 10^6 - 1 = 9649 \times 7151$

$\longrightarrow$ This equation enables the computation of log(7151)

$\Rightarrow$ $1358 \times 10^8 + 1 = 3^2 \times 1103 \times 1913 \times 7151$

$\longrightarrow$ This equation enables the computation of log(7151)

$\Rightarrow$ $2059 \times 10^5 - 1 = 3 \times 9587 \times 7159$

$\longrightarrow$ This equation enables the computation of log(7159)

page 465:

$\Rightarrow$ $2179 \times 10^7 - 1 = 3^3 \times 251 \times 367 \times 8761$

$\longrightarrow$ This equation enables the computation of log(8761)

$\Rightarrow$ $6272 \times 10^4 - 1 = 8761 \times 7159$

$\longrightarrow$ This equation enables the computation of log(7159)

$\Rightarrow$ $974 \times 10^7 + 1 = 3 \times 19 \times 29 \times 821 \times 7177$

$\longrightarrow$ This equation enables the computation of log(7177)

$\Rightarrow$ $2563 \times 10^6 + 1 = 181 \times 1973 \times 7177$

$\longrightarrow$ This equation enables the computation of log(7177)

$\Rightarrow$ $2661 \times 10^6 - 1 = 7 \times 41 \times 1289 \times 7193$

$\longrightarrow$ This equation enables the computation of log(7193)

$\Rightarrow$ $5031 \times 10^5 - 1 = 23 \times 3041 \times 7193$

$\longrightarrow$ This equation enables the computation of log(7193)

page 466:

$\Rightarrow$ $4249 \times 10^7 - 1 = 3^2 \times 349 \times 1877 \times 7207$

$\longrightarrow$ This equation enables the computation of log(7207)

$\Rightarrow$ $6894 \times 10^5 - 1 = 23 \times 4159 \times 7207$

$\longrightarrow$ This equation enables the computation of log(7207)

$\Rightarrow$ $5344 \times 10^5 - 1 = 3 \times 7 \times 3529 \times 7211$

$\longrightarrow$ `This equation enables the computation of log(7211)`
$\Rightarrow$ $1867 \times 10^5 + 1 = 17 \times 1523 \times 7211$
$\longrightarrow$ `This equation enables the computation of log(7211)`
`page 467:`
$\Rightarrow$ $3215 \times 10^6 - 1 = 17 \times 157 \times 167 \times 7213$
$\longrightarrow$ `This equation enables the computation of log(7213)`
$\Rightarrow$ $3998 \times 10^6 + 1 = 3 \times 23 \times 29 \times 277 \times 7213$
$\longrightarrow$ `This equation enables the computation of log(7213)`
$\Rightarrow$ $3099 \times 10^5 + 1 = 163 \times 263 \times 7229$
$\longrightarrow$ `This equation enables the computation of log(7229)`
$\Rightarrow$ $5155 \times 10^4 - 1 = 3 \times 2377 \times 7229$
$\longrightarrow$ `This equation enables the computation of log(7229)`
$\Rightarrow$ $4312 \times 10^6 - 1 = 3^2 \times 239 \times 277 \times 7237$
$\longrightarrow$ `This equation enables the computation of log(7237)`
$\Rightarrow$ $2925 \times 10^6 + 1 = 7 \times 11 \times 29 \times 181 \times 7237$
$\longrightarrow$ `This equation enables the computation of log(7237)`
`page 468:`
$\Rightarrow$ $1503 \times 10^7 + 1 = 487 \times 4261 \times 7243$
$\longrightarrow$ `This equation enables the computation of log(7243)`
$\Rightarrow$ $6699 \times 10^6 - 1 = 179 \times 5167 \times 7243$
$\longrightarrow$ `This equation enables the computation of log(7243)`
$\Rightarrow$ $603 \times 10^7 - 1 = 19 \times 23 \times 31 \times 61 \times 7297$
$\longrightarrow$ `This equation enables the computation of log(7297)`
$\Rightarrow$ $1267 \times 10^6 + 1 = 401 \times 433 \times 7297$
$\longrightarrow$ `This equation enables the computation of log(7297)`
$\Rightarrow$ $7238 \times 10^6 - 1 = 647 \times 1531 \times 7307$
$\longrightarrow$ `This equation enables the computation of log(7307)`
`page 469:`
$\Rightarrow$ $6617 \times 10^5 - 1 = 137 \times 661 \times 7307$
$\longrightarrow$ `This equation enables the computation of log(7307)`
$\Rightarrow$ $2599 \times 10^6 + 1 = 13 \times 17 \times 1609 \times 7309$
$\longrightarrow$ `This equation enables the computation of log(7309)`
$\Rightarrow$ $3246 \times 10^5 - 1 = 89 \times 499 \times 7309$
$\longrightarrow$ `This equation enables the computation of log(7309)`
$\Rightarrow$ $708 \times 10^7 + 1 = 19 \times 23 \times 2213 \times 7321$
$\longrightarrow$ `This equation enables the computation of log(7321)`
$\Rightarrow$ $4911 \times 10^5 + 1 = 7^2 \times 37^2 \times 7321$
$\longrightarrow$ `This equation enables the computation of log(7321)`
`page 470:`
$\Rightarrow$ $5149 \times 10^7 + 1 = 11 \times 397 \times 1291 \times 9133$
$\longrightarrow$ `This equation enables the computation of log(9133)`

$\Rightarrow$ $5825 \times 10^6 + 1 = 3 \times 29 \times 9133 \times 7331$
$\longrightarrow$ This equation enables the computation of log(7331)
$\Rightarrow$ $6933 \times 10^5 + 1 = 17 \times 5563 \times 7331$
$\longrightarrow$ This equation enables the computation of log(7331)
$\Rightarrow$ $5989 \times 10^6 + 1 = 271 \times 2999 \times 7369$
$\longrightarrow$ This equation enables the computation of log(7369)
$\Rightarrow$ $138 \times 10^7 - 1 = 7 \times 31 \times 863 \times 7369$
$\longrightarrow$ This equation enables the computation of log(7369)
page 471:
$\Rightarrow$ $2888 \times 10^6 + 1 = 3^4 \times 17 \times 283 \times 7411$
$\longrightarrow$ This equation enables the computation of log(7411)
$\Rightarrow$ $6647 \times 10^5 + 1 = 3 \times 7 \times 4271 \times 7411$
$\longrightarrow$ This equation enables the computation of log(7411)
$\Rightarrow$ $3677 \times 10^6 + 1 = 3 \times 257 \times 643 \times 7417$
$\longrightarrow$ This equation enables the computation of log(7417)
$\Rightarrow$ $4267 \times 10^4 + 1 = 11 \times 523 \times 7417$
$\longrightarrow$ This equation enables the computation of log(7417)
$\Rightarrow$ $6964 \times 10^6 - 1 = 3 \times 11^2 \times 29 \times 89 \times 7433$
$\longrightarrow$ This equation enables the computation of log(7433)
$\Rightarrow$ $5131 \times 10^4 - 1 = 3^2 \times 13 \times 59 \times 7433$
$\longrightarrow$ This equation enables the computation of log(7433)
page 472:
$\Rightarrow$ $4071 \times 10^5 + 1 = 7 \times 11 \times 709 \times 7457$
$\longrightarrow$ This equation enables the computation of log(7457)
$\Rightarrow$ $3386 \times 10^5 - 1 = 17 \times 2671 \times 7457$
$\longrightarrow$ This equation enables the computation of log(7457)
$\Rightarrow$ $5632 \times 10^6 - 1 = 3 \times 293 \times 859 \times 7459$
$\longrightarrow$ This equation enables the computation of log(7459)
$\Rightarrow$ $3775 \times 10^4 - 1 = 3 \times 7 \times 241 \times 7459$
$\longrightarrow$ This equation enables the computation of log(7459)
$\Rightarrow$ $6664 \times 10^5 - 1 = 3 \times 23 \times 1291 \times 7481$
$\longrightarrow$ This equation enables the computation of log(7481)
page 473:
$\Rightarrow$ $6792 \times 10^4 - 1 = 7 \times 1297 \times 7481$
$\longrightarrow$ This equation enables the computation of log(7481)
$\Rightarrow$ $4796 \times 10^6 - 1 = 7^2 \times 17 \times 769 \times 7487$
$\longrightarrow$ This equation enables the computation of log(7487)
$\Rightarrow$ $4449 \times 10^5 + 1 = 7 \times 13 \times 653 \times 7487$
$\longrightarrow$ This equation enables the computation of log(7487)
$\Rightarrow$ $5741 \times 10^6 - 1 = 7 \times 97 \times 1129 \times 7489$
$\longrightarrow$ This equation enables the computation of log(7489)

$\Rightarrow$ $1748 \times 10^6 + 1 = 3 \times 11^2 \times 643 \times 7489$
$\longrightarrow$ This equation enables the computation of log(7489)

page 474:

$\Rightarrow$ $5541 \times 10^8 - 1 = 7 \times 13 \times 17 \times 113 \times 421 \times 7529$
$\longrightarrow$ This equation enables the computation of log(7529)
$\Rightarrow$ $2707 \times 10^7 - 1 = 3 \times 7 \times 313 \times 547 \times 7529$
$\longrightarrow$ This equation enables the computation of log(7529)
$\Rightarrow$ $2755 \times 10^6 + 1 = 13 \times 67 \times 419 \times 7549$
$\longrightarrow$ This equation enables the computation of log(7549)
$\Rightarrow$ $4903 \times 10^5 + 1 = 107 \times 607 \times 7549$
$\longrightarrow$ This equation enables the computation of log(7549)
$\Rightarrow$ $7084 \times 10^6 - 1 = 3^2 \times 31 \times 3359 \times 7559$
$\longrightarrow$ This equation enables the computation of log(7559)

page 475:

$\Rightarrow$ $475 \times 10^6 + 1 = 7 \times 47 \times 191 \times 7559$
$\longrightarrow$ This equation enables the computation of log(7559)
$\Rightarrow$ $672 \times 10^7 - 1 = 23 \times 41 \times 941 \times 7573$
$\longrightarrow$ This equation enables the computation of log(7573)
$\Rightarrow$ $6616 \times 10^5 - 1 = 3^2 \times 17 \times 571 \times 7573$
$\longrightarrow$ This equation enables the computation of log(7573)
$\Rightarrow$ $42 \times 10^8 - 1 = 13^2 \times 53 \times 61 \times 7687$
$\longrightarrow$ This equation enables the computation of log(7687)
$\Rightarrow$ $3565 \times 10^5 - 1 = 3^2 \times 5153 \times 7687$
$\longrightarrow$ This equation enables the computation of log(7687)

page 476:

$\Rightarrow$ $5656 \times 10^7 - 1 = 3 \times 31^2 \times 2579 \times 7607$
$\longrightarrow$ This equation enables the computation of log(7607)
$\Rightarrow$ $1951 \times 10^7 + 1 = 47 \times 197 \times 277 \times 7607$
$\longrightarrow$ This equation enables the computation of log(7607)
$\Rightarrow$ $3918 \times 10^6 - 1 = 191 \times 2663 \times 7703$
$\longrightarrow$ This equation enables the computation of log(7703)
$\Rightarrow$ $665 \times 10^5 - 1 = 89 \times 97 \times 7703$
$\longrightarrow$ This equation enables the computation of log(7703)
$\Rightarrow$ $1677 \times 10^7 - 1 = 79 \times 109 \times 251 \times 7759$
$\longrightarrow$ This equation enables the computation of log(7759)

page 477:

$\Rightarrow$ $4761 \times 10^5 - 1 = 43 \times 1427 \times 7759$
$\longrightarrow$ This equation enables the computation of log(7759)
$\Rightarrow$ $6867 \times 10^5 - 1 = 107 \times 821 \times 7817$
$\longrightarrow$ This equation enables the computation of log(7817)
$\Rightarrow$ $95 \times 10^6 + 1 = 3 \times 4051 \times 7817$

⟶ `This equation enables the computation of log(7817)`
$\Rightarrow$ $844 \times 10^6 + 1 = 13 \times 43 \times 193 \times 7823$
⟶ `This equation enables the computation of log(7823)`
$\Rightarrow$ $617 \times 10^5 + 1 = 3 \times 11 \times 239 \times 7823$
⟶ `This equation enables the computation of log(7823)`
`page 478:`
$\Rightarrow$ $592 \times 10^7 + 1 = 389 \times 1933 \times 7873$
⟶ `This equation enables the computation of log(7873)`
$\Rightarrow$ $4089 \times 10^5 + 1 = 167 \times 311 \times 7873$
⟶ `This equation enables the computation of log(7873)`
$\Rightarrow$ $7346 \times 10^6 + 1 = 3 \times 19 \times 73 \times 233 \times 7577$
⟶ `This equation enables the computation of log(7577)`
$\Rightarrow$ $5267 \times 10^5 + 1 = 3 \times 17 \times 29 \times 47 \times 7577$
⟶ `This equation enables the computation of log(7577)`
$\Rightarrow$ $7303 \times 10^7 - 1 = 3 \times 11^2 \times 43 \times 617 \times 7583$
⟶ `This equation enables the computation of log(7583)`
$\Rightarrow$ $4783 \times 10^6 - 1 = 3 \times 53 \times 3967 \times 7583$
⟶ `This equation enables the computation of log(7583)`
`page 479:`
$\Rightarrow$ $4589 \times 10^6 - 1 = 37 \times 59 \times 277 \times 7589$
⟶ `This equation enables the computation of log(7589)`
$\Rightarrow$ $7233 \times 10^5 + 1 = 191 \times 499 \times 7589$
⟶ `This equation enables the computation of log(7589)`
$\Rightarrow$ $74 \times 10^6 - 1 = 9733 \times 7603$
⟶ `This equation enables the computation of log(7603)`
$\Rightarrow$ $5573 \times 10^3 - 1 = 733 \times 7603$
⟶ `This equation enables the computation of log(7603)`
$\Rightarrow$ $3725 \times 10^6 + 1 = 3^3 \times 43 \times 421 \times 7621$
⟶ `This equation enables the computation of log(7621)`
$\Rightarrow$ $3896 \times 10^6 - 1 = 47 \times 73 \times 149 \times 7621$
⟶ `This equation enables the computation of log(7621)`
`page 480:`
$\Rightarrow$ $5204 \times 10^6 - 1 = 11 \times 17 \times 3643 \times 7639$
⟶ `This equation enables the computation of log(7639)`
$\Rightarrow$ $2435 \times 10^6 + 1 = 3 \times 7 \times 43 \times 353 \times 7639$
⟶ `This equation enables the computation of log(7639)`
$\Rightarrow$ $455 \times 10^7 + 1 = 3 \times 23 \times 37 \times 233 \times 7649$
⟶ `This equation enables the computation of log(7649)`
$\Rightarrow$ $3099 \times 10^6 - 1 = 379 \times 1069 \times 7649$
⟶ `This equation enables the computation of log(7649)`
$\Rightarrow$ $2098 \times 10^7 - 1 = 3^3 \times 7 \times 17 \times 23 \times 37 \times 7673$

$\longrightarrow$ This equation enables the computation of log(7673)

$\Rightarrow$ $2039 \times 10^6 + 1 = 3 \times 283 \times 313 \times 7673$

$\longrightarrow$ This equation enables the computation of log(7673)

$\Rightarrow$ $6284 \times 10^7 - 1 = 7 \times 19 \times 23 \times 2671 \times 7691$

$\longrightarrow$ This equation enables the computation of log(7691)

page 481:

$\Rightarrow$ $1407 \times 10^7 + 1 = 503 \times 3637 \times 7691$

$\longrightarrow$ This equation enables the computation of log(7691)

$\Rightarrow$ $5407 \times 10^6 + 1 = 13 \times 89 \times 607 \times 7699$

$\longrightarrow$ This equation enables the computation of log(7699)

$\Rightarrow$ $2292 \times 10^6 - 1 = 41 \times 53 \times 137 \times 7699$

$\longrightarrow$ This equation enables the computation of log(7699)

$\Rightarrow$ $5224 \times 10^6 - 1 = 3 \times 29 \times 31 \times 251 \times 7717$

$\longrightarrow$ This equation enables the computation of log(7717)

$\Rightarrow$ $5938 \times 10^5 - 1 = 3 \times 13 \times 1973 \times 7717$

$\longrightarrow$ This equation enables the computation of log(7717)

$\Rightarrow$ $4902 \times 10^6 - 1 = 13 \times 103 \times 463 \times 7907$

$\longrightarrow$ This equation enables the computation of log(7907)

page 482:

$\Rightarrow$ $1578 \times 10^5 - 1 = 7 \times 2851 \times 7907$

$\longrightarrow$ This equation enables the computation of log(7907)

$\Rightarrow$ $4159 \times 10^7 - 1 = 3^2 \times 29 \times 47 \times 439 \times 7723$

$\longrightarrow$ This equation enables the computation of log(7723)

$\Rightarrow$ $4748 \times 10^6 + 1 = 3 \times 101 \times 2029 \times 7723$

$\longrightarrow$ This equation enables the computation of log(7723)

$\Rightarrow$ $2353 \times 10^8 + 1 = 11 \times 419 \times 6607 \times 7727$

$\longrightarrow$ This equation enables the computation of log(7727)

$\Rightarrow$ $3992 \times 10^5 + 1 = 3 \times 17 \times 1013 \times 7727$

$\longrightarrow$ This equation enables the computation of log(7727)

$\Rightarrow$ $3374 \times 10^6 + 1 = 3^4 \times 5381 \times 7741$

$\longrightarrow$ This equation enables the computation of log(7741)

page 483:

$\Rightarrow$ $4367 \times 10^6 - 1 = 37 \times 79 \times 193 \times 7741$

$\longrightarrow$ This equation enables the computation of log(7741)

$\Rightarrow$ $2992 \times 10^7 - 1 = 3 \times 523 \times 2447 \times 7793$

$\longrightarrow$ This equation enables the computation of log(7793)

$\Rightarrow$ $6541 \times 10^6 - 1 = 3 \times 127 \times 2203 \times 7793$

$\longrightarrow$ This equation enables the computation of log(7793)

$\Rightarrow$ $5861 \times 10^7 + 1 = 3 \times 7^2 \times 127 \times 401 \times 7829$

$\longrightarrow$ This equation enables the computation of log(7829)

$\Rightarrow$ $1075 \times 10^5 - 1 = 3 \times 23 \times 199 \times 7829$

⟶ `This equation enables the computation of log(7829)`
⇒ $1475 \times 10^9 + 1 = 3^2 \times 11 \times 983 \times 1933 \times 7841$
⟶ `This equation enables the computation of log(7841)`
⇒ $6949 \times 10^6 - 1 = 3^2 \times 59 \times 1669 \times 7841$
⟶ `This equation enables the computation of log(7841)`
`page 484:`
⇒ $6508 \times 10^6 + 1 = 197 \times 4261 \times 7753$
⟶ `This equation enables the computation of log(7753)`
⇒ $4697 \times 10^5 - 1 = 47 \times 1289 \times 7753$
⟶ `This equation enables the computation of log(7753)`
⇒ $77 \times 10^8 + 1 = 3 \times 211 \times 1549 \times 7853$
⟶ `This equation enables the computation of log(7853)`
⇒ $7447 \times 10^4 - 1 = 3 \times 29 \times 109 \times 7853$
⟶ `This equation enables the computation of log(7853)`
⇒ $729 \times 10^7 - 1 = 37 \times 79 \times 271 \times 9203$
⟶ `This equation enables the computation of log(9203)`
⇒ $724 \times 10^5 + 1 = 9203 \times 7867$
⟶ `This equation enables the computation of log(7867)`
`page 485:`
⇒ $7143 \times 10^5 - 1 = 7^2 \times 17 \times 109 \times 7867$
⟶ `This equation enables the computation of log(7867)`
⇒ $6821 \times 10^6 + 1 = 3^2 \times 43 \times 2237 \times 7879$
⟶ `This equation enables the computation of log(7879)`
⇒ $2701 \times 10^5 - 1 = 3^2 \times 13 \times 293 \times 7879$
⟶ `This equation enables the computation of log(7879)`
⇒ $5002 \times 10^5 - 1 = 3 \times 13 \times 1627 \times 7883$
⟶ `This equation enables the computation of log(7883)`
⇒ $2881 \times 10^5 + 1 = 7 \times 23 \times 227 \times 7883$
⟶ `This equation enables the computation of log(7883)`
`page 486:`
⇒ $475 \times 10^9 - 1 = 3 \times 7^2 \times 23 \times 113 \times 157 \times 7919$
⟶ `This equation enables the computation of log(7919)`
⇒ $3169 \times 10^8 + 1 = 13^2 \times 107 \times 2213 \times 7919$
⟶ `This equation enables the computation of log(7919)`
⇒ $3656 \times 10^7 + 1 = 3 \times 7^2 \times 107 \times 293 \times 7933$
⟶ `This equation enables the computation of log(7933)`
⇒ $4828 \times 10^6 + 1 = 11 \times 61 \times 907 \times 7933$
⟶ `This equation enables the computation of log(7933)`
⇒ $5621 \times 10^7 + 1 = 3 \times 571 \times 4127 \times 7951$
⟶ `This equation enables the computation of log(7951)`
⇒ $7398 \times 10^6 - 1 = 13 \times 19 \times 3767 \times 7951$

$\longrightarrow$ `This equation enables the computation of log(7951)`
$\Rightarrow$ $4403 \times 10^6 + 1 = 3 \times 139 \times 1321 \times 7993$
$\longrightarrow$ `This equation enables the computation of log(7993)`
`page 487:`
$\Rightarrow$ $359 \times 10^7 - 1 = 37 \times 61 \times 199 \times 7993$
$\longrightarrow$ `This equation enables the computation of log(7993)`
$\Rightarrow$ $2248 \times 10^7 - 1 = 3 \times 227 \times 4091 \times 8069$
$\longrightarrow$ `This equation enables the computation of log(8069)`
$\Rightarrow$ $1727 \times 10^6 + 1 = 3^3 \times 8069 \times 7927$
$\longrightarrow$ `This equation enables the computation of log(7927)`
$\Rightarrow$ $4775 \times 10^7 - 1 = 13 \times 103 \times 4493 \times 7937$
$\longrightarrow$ `This equation enables the computation of log(7937)`
$\Rightarrow$ $4863 \times 10^4 - 1 = 11 \times 557 \times 7937$
$\longrightarrow$ `This equation enables the computation of log(7937)`
$\Rightarrow$ $6511 \times 10^5 - 1 = 3 \times 11 \times 19 \times 131 \times 7927$
$\longrightarrow$ `This equation enables the computation of log(7927)`
`page 488:`
$\Rightarrow$ $3117 \times 10^5 - 1 = 13 \times 41 \times 73 \times 8011$
$\longrightarrow$ `This equation enables the computation of log(8011)`
$\Rightarrow$ $7137 \times 10^4 - 1 = 59 \times 151 \times 8011$
$\longrightarrow$ `This equation enables the computation of log(8011)`
$\Rightarrow$ $344 \times 10^6 + 1 = 3 \times 29 \times 491 \times 8053$
$\longrightarrow$ `This equation enables the computation of log(8053)`
$\Rightarrow$ $5865 \times 10^4 - 1 = 7283 \times 8053$
$\longrightarrow$ `This equation enables the computation of log(8053)`
$\Rightarrow$ $2377 \times 10^8 - 1 = 3^2 \times 7 \times 11 \times 113 \times 379 \times 8009$
$\longrightarrow$ `This equation enables the computation of log(8009)`
$\Rightarrow$ $1673 \times 10^5 + 1 = 3^2 \times 11 \times 211 \times 8009$
$\longrightarrow$ `This equation enables the computation of log(8009)`
`page 489:`
$\Rightarrow$ $7207 \times 10^7 - 1 = 3 \times 79 \times 83 \times 457 \times 8017$
$\longrightarrow$ `This equation enables the computation of log(8017)`
$\Rightarrow$ $7187 \times 10^5 - 1 = 157 \times 571 \times 8017$
$\longrightarrow$ `This equation enables the computation of log(8017)`
$\Rightarrow$ $7447 \times 10^6 + 1 = 7 \times 59 \times 2243 \times 8039$
$\longrightarrow$ `This equation enables the computation of log(8039)`
$\Rightarrow$ $2119 \times 10^5 + 1 = 43 \times 613 \times 8039$
$\longrightarrow$ `This equation enables the computation of log(8039)`
$\Rightarrow$ $794 \times 10^8 + 1 = 3 \times 7 \times 179 \times 2621 \times 8059$
$\longrightarrow$ `This equation enables the computation of log(8059)`
$\Rightarrow$ $6869 \times 10^6 + 1 = 3 \times 29 \times 97 \times 101 \times 8059$

$\longrightarrow$ This equation enables the computation of log(8059)

page 490:

$\Rightarrow$ $4229 \times 10^9 + 1 = 3^2 \times 7^2 \times 1031 \times 1151 \times 8081$

$\longrightarrow$ This equation enables the computation of log(8081)

$\Rightarrow$ $5444 \times 10^6 - 1 = 163 \times 4133 \times 8081$

$\longrightarrow$ This equation enables the computation of log(8081)

$\Rightarrow$ $2248 \times 10^6 - 1 = 3 \times 7^2 \times 31 \times 61 \times 8087$

$\longrightarrow$ This equation enables the computation of log(8087)

$\Rightarrow$ $1781 \times 10^5 + 1 = 3^2 \times 2447 \times 8087$

$\longrightarrow$ This equation enables the computation of log(8087)

$\Rightarrow$ $1055 \times 10^8 + 1 = 3 \times 11 \times 17 \times 19 \times 1223 \times 8093$

$\longrightarrow$ This equation enables the computation of log(8093)

$\Rightarrow$ $291 \times 10^6 + 1 = 41 \times 877 \times 8093$

$\longrightarrow$ This equation enables the computation of log(8093)

page 491:

$\Rightarrow$ $715 \times 10^6 + 1 = 19 \times 43 \times 107 \times 8179$

$\longrightarrow$ This equation enables the computation of log(8179)

$\Rightarrow$ $1029 \times 10^5 - 1 = 23 \times 547 \times 8179$

$\longrightarrow$ This equation enables the computation of log(8179)

$\Rightarrow$ $2525 \times 10^7 + 1 = 3 \times 23^2 \times 1933 \times 8231$

$\longrightarrow$ This equation enables the computation of log(8231)

$\Rightarrow$ $956 \times 10^8 - 1 = 7 \times 613 \times 2693 \times 8273$

$\longrightarrow$ This equation enables the computation of log(8273)

$\Rightarrow$ $6986 \times 10^7 + 1 = 3 \times 11 \times 83 \times 3083 \times 8273$

$\longrightarrow$ This equation enables the computation of log(8273)

$\Rightarrow$ $1327 \times 10^8 + 1 = 17 \times 29 \times 139 \times 233 \times 8311$

$\longrightarrow$ This equation enables the computation of log(8311)

$\Rightarrow$ $276 \times 10^6 - 1 = 11 \times 3019 \times 8311$

$\longrightarrow$ This equation enables the computation of log(8311)

page 492:

$\Rightarrow$ $4645 \times 10^5 + 1 = 7 \times 31 \times 257 \times 8329$

$\longrightarrow$ This equation enables the computation of log(8329)

$\Rightarrow$ $3684 \times 10^5 - 1 = 11 \times 4021 \times 8329$

$\longrightarrow$ This equation enables the computation of log(8329)

$\Rightarrow$ $7319 \times 10^6 + 1 = 3 \times 109 \times 2767 \times 8089$

$\longrightarrow$ This equation enables the computation of log(8089)

$\Rightarrow$ $4199 \times 10^4 - 1 = 29 \times 179 \times 8089$

$\longrightarrow$ This equation enables the computation of log(8089)

$\Rightarrow$ $5103 \times 10^9 - 1 = 11^3 \times 331 \times 1427 \times 8117$

$\longrightarrow$ This equation enables the computation of log(8117)

$\Rightarrow$ $1071 \times 10^7 + 1 = 31^2 \times 1373 \times 8117$

$\longrightarrow$ `This equation enables the computation of log(8117)`

`page 493:`

$\Rightarrow\quad 2394 \times 10^7 + 1 = 809 \times 3643 \times 8123$

$\longrightarrow$ `This equation enables the computation of log(8123)`

$\Rightarrow\quad 3833 \times 10^5 + 1 = 3^2 \times 7^2 \times 107 \times 8123$

$\longrightarrow$ `This equation enables the computation of log(8123)`

$\Rightarrow\quad 3581 \times 10^7 + 1 = 3^2 \times 191 \times 2557 \times 8147$

$\longrightarrow$ `This equation enables the computation of log(8147)`

$\Rightarrow\quad 3222 \times 10^6 + 1 = 11 \times 157 \times 229 \times 8147$

$\longrightarrow$ `This equation enables the computation of log(8147)`

$\Rightarrow\quad 5934 \times 10^7 - 1 = 7 \times 353 \times 2939 \times 8171$

$\longrightarrow$ `This equation enables the computation of log(8171)`

$\Rightarrow\quad 2143 \times 10^6 - 1 = 3^2 \times 7 \times 23 \times 181 \times 8171$

$\longrightarrow$ `This equation enables the computation of log(8171)`

`page 494:`

$\Rightarrow\quad 6445 \times 10^7 - 1 = 3^3 \times 7 \times 11 \times 23 \times 163 \times 8269$

$\longrightarrow$ `This equation enables the computation of log(8269)`

$\Rightarrow\quad 1702 \times 10^6 + 1 = 13 \times 71 \times 223 \times 8269$

$\longrightarrow$ `This equation enables the computation of log(8269)`

$\Rightarrow\quad 86 \times 10^7 - 1 = 157 \times 661 \times 8287$

$\longrightarrow$ `This equation enables the computation of log(8287)`

$\Rightarrow\quad 5157 \times 10^4 + 1 = 7^2 \times 127 \times 8287$

$\longrightarrow$ `This equation enables the computation of log(8287)`

$\Rightarrow\quad 5939 \times 10^7 - 1 = 11 \times 23^2 \times 1231 \times 8291$

$\longrightarrow$ `This equation enables the computation of log(8291)`

$\Rightarrow\quad 2352 \times 10^7 + 1 = 79 \times 149 \times 241 \times 8291$

$\longrightarrow$ `This equation enables the computation of log(8291)`

$\Rightarrow\quad 6337 \times 10^8 - 1 = 3^2 \times 11 \times 23 \times 37 \times 907 \times 8293$

$\longrightarrow$ `This equation enables the computation of log(8293)`

`page 495:`

$\Rightarrow\quad 1956 \times 10^8 + 1 = 7 \times 17^2 \times 89 \times 131 \times 8293$

$\longrightarrow$ `This equation enables the computation of log(8293)`

$\Rightarrow\quad 2863 \times 10^7 - 1 = 3^2 \times 17 \times 149 \times 151 \times 8317$

$\longrightarrow$ `This equation enables the computation of log(8317)`

$\Rightarrow\quad 4638 \times 10^6 + 1 = 97 \times 5749 \times 8317$

$\longrightarrow$ `This equation enables the computation of log(8317)`

$\Rightarrow\quad 3687 \times 10^7 - 1 = 7 \times 389 \times 1621 \times 8353$

$\longrightarrow$ `This equation enables the computation of log(8353)`

$\Rightarrow\quad 4895 \times 10^6 + 1 = 3^2 \times 19 \times 23 \times 149 \times 8353$

$\longrightarrow$ `This equation enables the computation of log(8353)`

$\Rightarrow\quad 3111 \times 10^6 + 1 = 127 \times 2927 \times 8369$

⟶ This equation enables the computation of log(8369)
page 496:
⇒ $2366 \times 10^5 - 1 = 17 \times 1663 \times 8369$
⟶ This equation enables the computation of log(8369)
⇒ $1101 \times 10^7 + 1 = 7 \times 11 \times 13^2 \times 101 \times 8377$
⟶ This equation enables the computation of log(8377)
⇒ $5744 \times 10^6 - 1 = 139 \times 4933 \times 8377$
⟶ This equation enables the computation of log(8377)
⇒ $7369 \times 10^7 - 1 = 3 \times 7^2 \times 11 \times 5413 \times 8419$
⟶ This equation enables the computation of log(8419)
⇒ $105 \times 10^8 + 1 = 19 \times 41 \times 1601 \times 8419$
⟶ This equation enables the computation of log(8419)
⇒ $4296 \times 10^6 + 1 = 67 \times 7607 \times 8429$
⟶ This equation enables the computation of log(8429)
⇒ $7614 \times 10^5 - 1 = 103 \times 877 \times 8429$
⟶ This equation enables the computation of log(8429)
page 497:
⇒ $7875 \times 10^7 - 1 = 11 \times 719 \times 1181 \times 8431$
⟶ This equation enables the computation of log(8431)
⇒ $556 \times 10^7 + 1 = 19 \times 61 \times 569 \times 8431$
⟶ This equation enables the computation of log(8431)
⇒ $2045 \times 10^5 - 1 = 11 \times 37 \times 61 \times 8237$
⟶ This equation enables the computation of log(8237)
⇒ $4261 \times 10^4 + 1 = 7 \times 739 \times 8237$
⟶ This equation enables the computation of log(8237)
⇒ $3674 \times 10^7 + 1 = 3 \times 37 \times 41 \times 977 \times 8263$
⟶ This equation enables the computation of log(8263)
⇒ $5228 \times 10^4 + 1 = 3^2 \times 19 \times 37 \times 8263$
⟶ This equation enables the computation of log(8263)
page 498:
⇒ $1007 \times 10^8 - 1 = 59 \times 109 \times 1867 \times 8387$
⟶ This equation enables the computation of log(8387)
⇒ $6704 \times 10^7 + 1 = 3^4 \times 13 \times 7591 \times 8387$
⟶ This equation enables the computation of log(8387)
⇒ $1905 \times 10^7 + 1 = 19 \times 149 \times 797 \times 8443$
⟶ This equation enables the computation of log(8443)
⇒ $4754 \times 10^5 + 1 = 3 \times 137^2 \times 8443$
⟶ This equation enables the computation of log(8443)
⇒ $6448 \times 10^6 - 1 = 3 \times 7 \times 19 \times 1901 \times 8501$
⟶ This equation enables the computation of log(8501)
⇒ $2053 \times 10^6 + 1 = 13^2 \times 1429 \times 8501$

$\longrightarrow$ `This equation enables the computation of log(8501)`
`page 499:`
$\Rightarrow$ $3976 \times 10^7 - 1 = 3 \times 443 \times 3511 \times 8521$
$\longrightarrow$ `This equation enables the computation of log(8521)`
$\Rightarrow$ $2845 \times 10^6 + 1 = 59 \times 5659 \times 8521$
$\longrightarrow$ `This equation enables the computation of log(8521)`
$\Rightarrow$ $5548 \times 10^7 - 1 = 3 \times 23 \times 79 \times 1069 \times 9521$
$\longrightarrow$ `This equation enables the computation of log(9521)`
$\Rightarrow$ $7875 \times 10^6 - 1 = 97 \times 9521 \times 8527$
$\longrightarrow$ `This equation enables the computation of log(8527)`
$\Rightarrow$ $5511 \times 10^4 + 1 = 23 \times 281 \times 8527$
$\longrightarrow$ `This equation enables the computation of log(8527)`
$\Rightarrow$ $173 \times 10^8 + 1 = 3 \times 59 \times 107^2 \times 8537$
$\longrightarrow$ `This equation enables the computation of log(8537)`
`page 500:`
$\Rightarrow$ $226 \times 10^6 + 1 = 23 \times 1151 \times 8537$
$\longrightarrow$ `This equation enables the computation of log(8537)`
$\Rightarrow$ $6525 \times 10^6 - 1 = 7 \times 173 \times 631 \times 8539$
$\longrightarrow$ `This equation enables the computation of log(8539)`
$\Rightarrow$ $5477 \times 10^5 - 1 = 7^3 \times 11 \times 17 \times 8539$
$\longrightarrow$ `This equation enables the computation of log(8539)`
$\Rightarrow$ $906 \times 10^7 + 1 = 13 \times 241 \times 337 \times 8581$
$\longrightarrow$ `This equation enables the computation of log(8581)`
$\Rightarrow$ $479 \times 10^6 + 1 = 3 \times 23 \times 809 \times 8581$
$\longrightarrow$ `This equation enables the computation of log(8581)`
$\Rightarrow$ $6715 \times 10^7 - 1 = 3^3 \times 379 \times 761 \times 8623$
$\longrightarrow$ `This equation enables the computation of log(8623)`
`page 501:`
$\Rightarrow$ $1908 \times 10^7 + 1 = 31 \times 137 \times 521 \times 8623$
$\longrightarrow$ `This equation enables the computation of log(8623)`
$\Rightarrow$ $4315 \times 10^6 - 1 = 3 \times 181 \times 919 \times 8647$
$\longrightarrow$ `This equation enables the computation of log(8647)`
$\Rightarrow$ $7797 \times 10^4 - 1 = 71 \times 127 \times 8647$
$\longrightarrow$ `This equation enables the computation of log(8647)`
$\Rightarrow$ $1132 \times 10^7 + 1 = 17 \times 41 \times 1867 \times 8699$
$\longrightarrow$ `This equation enables the computation of log(8699)`
$\Rightarrow$ $8586 \times 10^5 - 1 = 89 \times 1109 \times 8699$
$\longrightarrow$ `This equation enables the computation of log(8699)`
$\Rightarrow$ $3103 \times 10^6 - 1 = 3 \times 11 \times 79 \times 139 \times 8563$
$\longrightarrow$ `This equation enables the computation of log(8563)`
$\Rightarrow$ $5341 \times 10^5 - 1 = 3 \times 17 \times 1223 \times 8563$

$\longrightarrow$ `This equation enables the computation of log(8563)`

`page 502:`

$\Rightarrow \quad 2946 \times 10^6 + 1 = 7^2 \times 7013 \times 8573$

$\longrightarrow$ `This equation enables the computation of log(8573)`

$\Rightarrow \quad 5627 \times 10^6 - 1 = 31^2 \times 683 \times 8573$

$\longrightarrow$ `This equation enables the computation of log(8573)`

$\Rightarrow \quad 509 \times 10^7 - 1 = 7^2 \times 43 \times 281 \times 8597$

$\longrightarrow$ `This equation enables the computation of log(8597)`

$\Rightarrow \quad 3507 \times 10^6 + 1 = 503 \times 811 \times 8597$

$\longrightarrow$ `This equation enables the computation of log(8597)`

$\Rightarrow \quad 2577 \times 10^8 - 1 = 13^2 \times 383 \times 463 \times 8599$

$\longrightarrow$ `This equation enables the computation of log(8599)`

$\Rightarrow \quad 5899 \times 10^5 - 1 = 3 \times 13 \times 1759 \times 8599$

$\longrightarrow$ `This equation enables the computation of log(8599)`

`page 503:`

$\Rightarrow \quad 825 \times 10^5 + 1 = 73 \times 131 \times 8627$

$\longrightarrow$ `This equation enables the computation of log(8627)`

$\Rightarrow \quad 4857 \times 10^3 + 1 = 563 \times 8627$

$\longrightarrow$ `This equation enables the computation of log(8627)`

$\Rightarrow \quad 2543 \times 10^8 + 1 = 3 \times 37 \times 373 \times 709 \times 8663$

$\longrightarrow$ `This equation enables the computation of log(8663)`

$\Rightarrow \quad 4568 \times 10^4 - 1 = 5273 \times 8663$

$\longrightarrow$ `This equation enables the computation of log(8663)`

$\Rightarrow \quad 3077 \times 10^7 + 1 = 3^2 \times 13 \times 23 \times 1319 \times 8669$

$\longrightarrow$ `This equation enables the computation of log(8669)`

$\Rightarrow \quad 4763 \times 10^6 + 1 = 3 \times 373 \times 491 \times 8669$

$\longrightarrow$ `This equation enables the computation of log(8669)`

`page 504:`

$\Rightarrow \quad 7172 \times 10^7 + 1 = 3^2 \times 13 \times 241 \times 293 \times 8681$

$\longrightarrow$ `This equation enables the computation of log(8681)`

$\Rightarrow \quad 5358 \times 10^5 + 1 = 11 \times 31 \times 181 \times 8681$

$\longrightarrow$ `This equation enables the computation of log(8681)`

$\Rightarrow \quad 8123 \times 10^5 - 1 = 7^2 \times 1907 \times 8693$

$\longrightarrow$ `This equation enables the computation of log(8693)`

$\Rightarrow \quad 57 \times 10^6 + 1 = 79 \times 83 \times 8693$

$\longrightarrow$ `This equation enables the computation of log(8693)`

$\Rightarrow \quad 6634 \times 10^7 - 1 = 3^3 \times 7^2 \times 13 \times 443 \times 8707$

$\longrightarrow$ `This equation enables the computation of log(8707)`

$\Rightarrow \quad 5391 \times 10^6 - 1 = 7 \times 11^2 \times 17 \times 43 \times 8707$

$\longrightarrow$ `This equation enables the computation of log(8707)`

`page 505:`

$\Rightarrow$ $5408 \times 10^6 - 1 = 17 \times 41 \times 881 \times 8807$
$\longrightarrow$ This equation enables the computation of log(8807)
$\Rightarrow$ $7569 \times 10^5 + 1 = 11 \times 13 \times 601 \times 8807$
$\longrightarrow$ This equation enables the computation of log(8807)
$\Rightarrow$ $7294 \times 10^7 + 1 = 11 \times 107 \times 7027 \times 8819$
$\longrightarrow$ This equation enables the computation of log(8819)
$\Rightarrow$ $1525 \times 10^7 - 1 = 3 \times 13 \times 101 \times 439 \times 8819$
$\longrightarrow$ This equation enables the computation of log(8819)
$\Rightarrow$ $2048 \times 10^6 - 1 = 311 \times 743 \times 8863$
$\longrightarrow$ This equation enables the computation of log(8863)
$\Rightarrow$ $2754 \times 10^5 - 1 = 7 \times 23 \times 193 \times 8863$
$\longrightarrow$ This equation enables the computation of log(8863)
page 506:
$\Rightarrow$ $4931 \times 10^7 + 1 = 3^2 \times 593 \times 1019 \times 9067$
$\longrightarrow$ This equation enables the computation of log(9067)
$\Rightarrow$ $5092 \times 10^6 - 1 = 3 \times 131 \times 1429 \times 9067$
$\longrightarrow$ This equation enables the computation of log(9067)
$\Rightarrow$ $1682 \times 10^8 + 1 = 3^2 \times 11 \times 19 \times 43 \times 227 \times 9161$
$\longrightarrow$ This equation enables the computation of log(9161)
$\Rightarrow$ $5859 \times 10^6 - 1 = 19 \times 41 \times 821 \times 9161$
$\longrightarrow$ This equation enables the computation of log(9161)
$\Rightarrow$ $6388 \times 10^7 - 1 = 3 \times 1033 \times 2221 \times 9281$
$\longrightarrow$ This equation enables the computation of log(9281)
$\Rightarrow$ $6786 \times 10^8 + 1 = 7 \times 11 \times 571 \times 1663 \times 9281$
$\longrightarrow$ This equation enables the computation of log(9281)
page 507:
$\Rightarrow$ $6667 \times 10^5 + 1 = 11 \times 6871 \times 8821$
$\longrightarrow$ This equation enables the computation of log(8821)
$\Rightarrow$ $2315 \times 10^7 - 1 = 7 \times 43 \times 8821 \times 8719$
$\longrightarrow$ This equation enables the computation of log(8719)
$\Rightarrow$ $4806 \times 10^5 - 1 = 11 \times 5011 \times 8719$
$\longrightarrow$ This equation enables the computation of log(8719)
$\Rightarrow$ $939 \times 10^5 + 1 = 13 \times 829 \times 8713$
$\longrightarrow$ This equation enables the computation of log(8713)
$\Rightarrow$ $8036 \times 10^4 - 1 = 23 \times 401 \times 8713$
$\longrightarrow$ This equation enables the computation of log(8713)
$\Rightarrow$ $6087 \times 10^6 + 1 = 149 \times 4679 \times 8731$
$\longrightarrow$ This equation enables the computation of log(8731)
page 508:
$\Rightarrow$ $6261 \times 10^4 + 1 = 71 \times 101 \times 8731$
$\longrightarrow$ This equation enables the computation of log(8731)

$\Rightarrow$ $6616 \times 10^9 - 1 = 3^3 \times 13 \times 23 \times 97 \times 967 \times 8737$
$\longrightarrow$ This equation enables the computation of log(8737)
$\Rightarrow$ $6325 \times 10^7 - 1 = 3 \times 433 \times 5573 \times 8737$
$\longrightarrow$ This equation enables the computation of log(8737)
$\Rightarrow$ $5345 \times 10^7 + 1 = 3^2 \times 659 \times 1031 \times 8741$
$\longrightarrow$ This equation enables the computation of log(8741)
$\Rightarrow$ $7442 \times 10^5 - 1 = 19 \times 4481 \times 8741$
$\longrightarrow$ This equation enables the computation of log(8741)
$\Rightarrow$ $6491 \times 10^6 + 1 = 3 \times 19 \times 47 \times 277 \times 8747$
$\longrightarrow$ This equation enables the computation of log(8747)

page 509:

$\Rightarrow$ $6925 \times 10^4 - 1 = 3 \times 7 \times 13 \times 29 \times 8747$
$\longrightarrow$ This equation enables the computation of log(8747)
$\Rightarrow$ $7235 \times 10^7 + 1 = 3^2 \times 17 \times 83 \times 631 \times 9029$
$\longrightarrow$ This equation enables the computation of log(9029)
$\Rightarrow$ $1794 \times 10^7 - 1 = 227 \times 9029 \times 8753$
$\longrightarrow$ This equation enables the computation of log(8753)
$\Rightarrow$ $6959 \times 10^7 + 1 = 3 \times 19 \times 101 \times 1381 \times 8753$
$\longrightarrow$ This equation enables the computation of log(8753)
$\Rightarrow$ $2497 \times 10^7 - 1 = 3 \times 7 \times 293 \times 461 \times 8803$
$\longrightarrow$ This equation enables the computation of log(8803)
$\Rightarrow$ $7364 \times 10^6 - 1 = 23 \times 37 \times 983 \times 8803$
$\longrightarrow$ This equation enables the computation of log(8803)
$\Rightarrow$ $1405 \times 10^6 - 1 = 3^5 \times 13 \times 47 \times 9463$
$\longrightarrow$ This equation enables the computation of log(9463)

page 510:

$\Rightarrow$ $4872 \times 10^7 - 1 = 11 \times 53 \times 9463 \times 8831$
$\longrightarrow$ This equation enables the computation of log(8831)
$\Rightarrow$ $1495 \times 10^5 - 1 = 3^4 \times 11 \times 19 \times 8831$
$\longrightarrow$ This equation enables the computation of log(8831)
$\Rightarrow$ $3293 \times 10^9 + 1 = 3^3 \times 17 \times 157 \times 5171 \times 8837$
$\longrightarrow$ This equation enables the computation of log(8837)
$\Rightarrow$ $5636 \times 10^6 + 1 = 3 \times 19 \times 67 \times 167 \times 8837$
$\longrightarrow$ This equation enables the computation of log(8837)
$\Rightarrow$ $527 \times 10^7 + 1 = 3 \times 7 \times 127 \times 223 \times 8861$
$\longrightarrow$ This equation enables the computation of log(8861)
$\Rightarrow$ $3591 \times 10^6 - 1 = 181 \times 2239 \times 8861$
$\longrightarrow$ This equation enables the computation of log(8861)

page 511:

$\Rightarrow$ $1669 \times 10^7 + 1 = 47 \times 73 \times 547 \times 8893$
$\longrightarrow$ This equation enables the computation of log(8893)

$\Rightarrow$ $7797 \times 10^6 + 1 = 7^2 \times 29 \times 617 \times 8893$
$\longrightarrow$ This equation enables the computation of log(8893)
$\Rightarrow$ $439 \times 10^7 + 1 = 373 \times 1319 \times 8923$
$\longrightarrow$ This equation enables the computation of log(8923)
$\Rightarrow$ $8208 \times 10^5 + 1 = 7 \times 17 \times 773 \times 8923$
$\longrightarrow$ This equation enables the computation of log(8923)
$\Rightarrow$ $8743 \times 10^6 + 1 = 577 \times 1697 \times 8929$
$\longrightarrow$ This equation enables the computation of log(8929)
$\Rightarrow$ $7069 \times 10^5 + 1 = 17 \times 4657 \times 8929$
$\longrightarrow$ This equation enables the computation of log(8929)

page 512:

$\Rightarrow$ $173 \times 10^{10} + 1 = 3 \times 7^2 \times 13 \times 19 \times 73^2 \times 8941$
$\longrightarrow$ This equation enables the computation of log(8941)
$\Rightarrow$ $3121 \times 10^7 + 1 = 17 \times 19 \times 101 \times 107 \times 8941$
$\longrightarrow$ This equation enables the computation of log(8941)
$\Rightarrow$ $7402 \times 10^7 - 1 = 3 \times 11 \times 17 \times 47 \times 313 \times 8969$
$\longrightarrow$ This equation enables the computation of log(8969)
$\Rightarrow$ $6701 \times 10^6 + 1 = 3 \times 337 \times 739 \times 8969$
$\longrightarrow$ This equation enables the computation of log(8969)
$\Rightarrow$ $7436 \times 10^7 + 1 = 3 \times 7 \times 73 \times 5407 \times 8971$
$\longrightarrow$ This equation enables the computation of log(8971)
$\Rightarrow$ $6379 \times 10^6 - 1 = 3 \times 421 \times 563 \times 8971$
$\longrightarrow$ This equation enables the computation of log(8971)
$\Rightarrow$ $7649 \times 10^7 - 1 = 7 \times 239 \times 5101 \times 8963$
$\longrightarrow$ This equation enables the computation of log(8963)

page 513:

$\Rightarrow$ $4786 \times 10^6 - 1 = 3 \times 11^2 \times 1471 \times 8963$
$\longrightarrow$ This equation enables the computation of log(8963)
$\Rightarrow$ $8287 \times 10^5 + 1 = 71 \times 1319 \times 8849$
$\longrightarrow$ This equation enables the computation of log(8849)
$\Rightarrow$ $562 \times 10^5 - 1 = 3 \times 29 \times 73 \times 8849$
$\longrightarrow$ This equation enables the computation of log(8849)
$\Rightarrow$ $6724 \times 10^8 - 1 = 3^2 \times 7 \times 13 \times 179 \times 509 \times 9011$
$\longrightarrow$ This equation enables the computation of log(9011)
$\Rightarrow$ $4163 \times 10^7 - 1 = 7 \times 163 \times 4049 \times 9011$
$\longrightarrow$ This equation enables the computation of log(9011)
$\Rightarrow$ $7783 \times 10^7 + 1 = 13 \times 191 \times 3467 \times 9041$
$\longrightarrow$ This equation enables the computation of log(9041)

page 514:

$\Rightarrow$ $1258 \times 10^7 - 1 = 3 \times 7 \times 173 \times 383 \times 9041$
$\longrightarrow$ This equation enables the computation of log(9041)

$\Rightarrow$ $1097 \times 10^7 - 1 = 7^2 \times 19 \times 1303 \times 9043$
$\longrightarrow$ This equation enables the computation of log(9043)
$\Rightarrow$ $7946 \times 10^7 + 1 = 3^3 \times 503 \times 647 \times 9043$
$\longrightarrow$ This equation enables the computation of log(9043)
$\Rightarrow$ $2974 \times 10^7 - 1 = 3 \times 67 \times 83 \times 197 \times 9049$
$\longrightarrow$ This equation enables the computation of log(9049)
$\Rightarrow$ $6456 \times 10^6 + 1 = 11 \times 79 \times 821 \times 9049$
$\longrightarrow$ This equation enables the computation of log(9049)
$\Rightarrow$ $2555 \times 10^7 + 1 = 3^2 \times 181 \times 1723 \times 9103$
$\longrightarrow$ This equation enables the computation of log(9103)
$\Rightarrow$ $7344 \times 10^6 + 1 = 13 \times 229 \times 271 \times 9103$
$\longrightarrow$ This equation enables the computation of log(9103)

page 515:

$\Rightarrow$ $8692 \times 10^7 - 1 = 3 \times 7^2 \times 139 \times 467 \times 9109$
$\longrightarrow$ This equation enables the computation of log(9109)
$\Rightarrow$ $4939 \times 10^6 - 1 = 3 \times 149 \times 1213 \times 9109$
$\longrightarrow$ This equation enables the computation of log(9109)
$\Rightarrow$ $8009 \times 10^7 + 1 = 3^2 \times 11 \times 151 \times 587 \times 9127$
$\longrightarrow$ This equation enables the computation of log(9127)
$\Rightarrow$ $2053 \times 10^6 - 1 = 3^4 \times 2777 \times 9127$
$\longrightarrow$ This equation enables the computation of log(9127)
$\Rightarrow$ $1982 \times 10^9 + 1 = 3 \times 7 \times 31 \times 59 \times 5639 \times 9151$
$\longrightarrow$ This equation enables the computation of log(9151)
$\Rightarrow$ $6029 \times 10^7 + 1 = 3^3 \times 7 \times 11 \times 3169 \times 9151$
$\longrightarrow$ This equation enables the computation of log(9151)

page 516:

$\Rightarrow$ $8876 \times 10^8 + 1 = 3 \times 11 \times 13 \times 47 \times 4799 \times 9173$
$\longrightarrow$ This equation enables the computation of log(9173)
$\Rightarrow$ $6992 \times 10^6 + 1 = 3^3 \times 7 \times 37 \times 109 \times 9173$
$\longrightarrow$ This equation enables the computation of log(9173)
$\Rightarrow$ $6802 \times 10^7 - 1 = 3 \times 7 \times 71 \times 4969 \times 9181$
$\longrightarrow$ This equation enables the computation of log(9181)
$\Rightarrow$ $2379 \times 10^7 + 1 = 37 \times 59 \times 1187 \times 9181$
$\longrightarrow$ This equation enables the computation of log(9181)
$\Rightarrow$ $7592 \times 10^7 + 1 = 3 \times 17 \times 191 \times 853 \times 9137$
$\longrightarrow$ This equation enables the computation of log(9137)
$\Rightarrow$ $829 \times 10^5 + 1 = 43 \times 211 \times 9137$
$\longrightarrow$ This equation enables the computation of log(9137)
$\Rightarrow$ $1693 \times 10^9 - 1 = 3^2 \times 7 \times 11 \times 463 \times 557 \times 9473$
$\longrightarrow$ This equation enables the computation of log(9473)

page 517:

$\Rightarrow$ $8259 \times 10^7 - 1 = 13 \times 73 \times 9473 \times 9187$
$\longrightarrow$ This equation enables the computation of log(9187)
$\Rightarrow$ $93 \times 10^6 + 1 = 53 \times 191 \times 9187$
$\longrightarrow$ This equation enables the computation of log(9187)
$\Rightarrow$ $3035 \times 10^7 + 1 = 3 \times 461 \times 2383 \times 9209$
$\longrightarrow$ This equation enables the computation of log(9209)
$\Rightarrow$ $6486 \times 10^6 - 1 = 19^2 \times 1951 \times 9209$
$\longrightarrow$ This equation enables the computation of log(9209)
$\Rightarrow$ $5799 \times 10^8 + 1 = 7 \times 37 \times 151 \times 1607 \times 9227$
$\longrightarrow$ This equation enables the computation of log(9227)
$\Rightarrow$ $6599 \times 10^7 - 1 = 7 \times 11 \times 293 \times 317 \times 9227$
$\longrightarrow$ This equation enables the computation of log(9227)
page 518:
$\Rightarrow$ $2694 \times 10^5 + 1 = 13 \times 2243 \times 9239$
$\longrightarrow$ This equation enables the computation of log(9239)
$\Rightarrow$ $8462 \times 10^4 + 1 = 3 \times 43 \times 71 \times 9239$
$\longrightarrow$ This equation enables the computation of log(9239)
$\Rightarrow$ $4778 \times 10^8 + 1 = 3^2 \times 17 \times 29 \times 43 \times 271 \times 9241$
$\longrightarrow$ This equation enables the computation of log(9241)
$\Rightarrow$ $6509 \times 10^6 + 1 = 3 \times 7 \times 17 \times 1973 \times 9241$
$\longrightarrow$ This equation enables the computation of log(9241)
$\Rightarrow$ $7164 \times 10^5 - 1 = 7 \times 97 \times 113 \times 9337$
$\longrightarrow$ This equation enables the computation of log(9337)
$\Rightarrow$ $2173 \times 10^5 + 1 = 17 \times 37^2 \times 9337$
$\longrightarrow$ This equation enables the computation of log(9337)
page 519:
$\Rightarrow$ $8646 \times 10^7 + 1 = 17 \times 83 \times 6581 \times 9311$
$\longrightarrow$ This equation enables the computation of log(9311)
$\Rightarrow$ $1323 \times 10^5 - 1 = 13 \times 1093 \times 9311$
$\longrightarrow$ This equation enables the computation of log(9311)
$\Rightarrow$ $2165 \times 10^7 - 1 = 1297 \times 1787 \times 9341$
$\longrightarrow$ This equation enables the computation of log(9341)
$\Rightarrow$ $6373 \times 10^6 + 1 = 17 \times 67 \times 599 \times 9341$
$\longrightarrow$ This equation enables the computation of log(9341)
$\Rightarrow$ $6187 \times 10^6 + 1 = 7 \times 13 \times 19 \times 383 \times 9343$
$\longrightarrow$ This equation enables the computation of log(9343)
$\Rightarrow$ $8564 \times 10^8 + 1 = 3 \times 7 \times 13 \times 71 \times 4729 \times 9343$
$\longrightarrow$ This equation enables the computation of log(9343)
page 520:
$\Rightarrow$ $613 \times 10^8 - 1 = 3^2 \times 7 \times 199 \times 523 \times 9349$
$\longrightarrow$ This equation enables the computation of log(9349)

$\Rightarrow$ $5206 \times 10^6 - 1 = 3 \times 419 \times 443 \times 9349$
$\longrightarrow$ `This equation enables the computation of log(9349)`
$\Rightarrow$ $2003 \times 10^9 + 1 = 3 \times 7 \times 11 \times 13 \times 109 \times 653 \times 9371$
$\longrightarrow$ `This equation enables the computation of log(9371)`
$\Rightarrow$ $3509 \times 10^7 + 1 = 3^2 \times 7^3 \times 1213 \times 9371$
$\longrightarrow$ `This equation enables the computation of log(9371)`
$\Rightarrow$ $595 \times 10^8 + 1 = 13 \times 479 \times 1019 \times 9377$
$\longrightarrow$ `This equation enables the computation of log(9377)`
$\Rightarrow$ $6139 \times 10^6 - 1 = 3^2 \times 11 \times 17 \times 389 \times 9377$
$\longrightarrow$ `This equation enables the computation of log(9377)`
$\Rightarrow$ $1553 \times 10^7 + 1 = 3 \times 59 \times 9343 \times 9391$
$\longrightarrow$ `This equation enables the computation of log(9391)`

`page 521:`

$\Rightarrow$ $5044 \times 10^5 + 1 = 7 \times 7673 \times 9391$
$\longrightarrow$ `This equation enables the computation of log(9391)`
$\Rightarrow$ $6487 \times 10^7 - 1 = 3 \times 7^2 \times 151 \times 311 \times 9397$
$\longrightarrow$ `This equation enables the computation of log(9397)`
$\Rightarrow$ $909 \times 10^6 + 1 = 7 \times 13 \times 1063 \times 9397$
$\longrightarrow$ `This equation enables the computation of log(9397)`
$\Rightarrow$ $6867 \times 10^6 - 1 = 31 \times 101 \times 233 \times 9413$
$\longrightarrow$ `This equation enables the computation of log(9413)`
$\Rightarrow$ $2546 \times 10^6 + 1 = 3^2 \times 41 \times 733 \times 9413$
$\longrightarrow$ `This equation enables the computation of log(9413)`
$\Rightarrow$ $8461 \times 10^4 + 1 = 7 \times 1283 \times 9421$
$\longrightarrow$ `This equation enables the computation of log(9421)`

`page 522:`

$\Rightarrow$ $7159 \times 10^7 + 1 = 13 \times 41 \times 53 \times 269 \times 9421$
$\longrightarrow$ `This equation enables the computation of log(9421)`
$\Rightarrow$ $1715 \times 10^7 + 1 = 3 \times 19 \times 61 \times 523 \times 9431$
$\longrightarrow$ `This equation enables the computation of log(9431)`
$\Rightarrow$ $7719 \times 10^6 + 1 = 383 \times 2137 \times 9431$
$\longrightarrow$ `This equation enables the computation of log(9431)`
$\Rightarrow$ $2312 \times 10^6 + 1 = 3^2 \times 113 \times 241 \times 9433$
$\longrightarrow$ `This equation enables the computation of log(9433)`
$\Rightarrow$ $4254 \times 10^5 + 1 = 13 \times 3469 \times 9433$
$\longrightarrow$ `This equation enables the computation of log(9433)`
$\Rightarrow$ $7477 \times 10^6 - 1 = 3 \times 7 \times 103 \times 367 \times 9419$
$\longrightarrow$ `This equation enables the computation of log(9419)`

`page 523:`

$\Rightarrow$ $8837 \times 10^5 - 1 = 7 \times 13 \times 1031 \times 9419$
$\longrightarrow$ `This equation enables the computation of log(9419)`

$\Rightarrow \quad 381 \times 10^6 + 1 = 47 \times 859 \times 9437$
⟶ This equation enables the computation of log(9437)
$\Rightarrow \quad 9085 \times 10^4 - 1 = 3 \times 3209 \times 9437$
⟶ This equation enables the computation of log(9437)
$\Rightarrow \quad 5631 \times 10^6 + 1 = 11 \times 23 \times 2351 \times 9467$
⟶ This equation enables the computation of log(9467)
$\Rightarrow \quad 3836 \times 10^6 - 1 = 13 \times 71 \times 439 \times 9467$
⟶ This equation enables the computation of log(9467)
$\Rightarrow \quad 7703 \times 10^6 + 1 = 3^2 \times 31 \times 2909 \times 9491$
⟶ This equation enables the computation of log(9491)

page 524:
$\Rightarrow \quad 8389 \times 10^5 - 1 = 3^2 \times 7 \times 23 \times 61 \times 9491$
⟶ This equation enables the computation of log(9491)
$\Rightarrow \quad 7803 \times 10^7 - 1 = 7 \times 347 \times 3389 \times 9479$
⟶ This equation enables the computation of log(9479)
$\Rightarrow \quad 1676 \times 10^7 + 1 = 3 \times 17 \times 37 \times 937 \times 9479$
⟶ This equation enables the computation of log(9479)
$\Rightarrow \quad 6517 \times 10^7 - 1 = 3^2 \times 13 \times 89 \times 659 \times 9497$
⟶ This equation enables the computation of log(9497)
$\Rightarrow \quad 8188 \times 10^6 - 1 = 3 \times 59 \times 4871 \times 9497$
⟶ This equation enables the computation of log(9497)
$\Rightarrow \quad 9122 \times 10^4 + 1 = 3 \times 23 \times 139 \times 9511$
⟶ This equation enables the computation of log(9511)
$\Rightarrow \quad 99 \times 10^6 - 1 = 7 \times 1487 \times 9511$
⟶ This equation enables the computation of log(9511)

page 525:
$\Rightarrow \quad 6273 \times 10^5 - 1 = 23 \times 2861 \times 9533$
⟶ This equation enables the computation of log(9533)
$\Rightarrow \quad 1874 \times 10^7 - 1 = 7 \times 31 \times 9059 \times 9533$
⟶ This equation enables the computation of log(9533)
$\Rightarrow \quad 3385 \times 10^6 + 1 = 233 \times 1523 \times 9539$
⟶ This equation enables the computation of log(9539)
$\Rightarrow \quad 8508 \times 10^5 - 1 = 7 \times 29 \times 439 \times 9547$
⟶ This equation enables the computation of log(9547)
$\Rightarrow \quad 6154 \times 10^6 - 1 = 3 \times 7 \times 31 \times 991 \times 9539$
⟶ This equation enables the computation of log(9539)
$\Rightarrow \quad 6579 \times 10^6 - 1 = 11 \times 13 \times 61 \times 79 \times 9547$
⟶ This equation enables the computation of log(9547)

page 526:
$\Rightarrow \quad 8799 \times 10^6 - 1 = 601 \times 1523 \times 9613$
⟶ This equation enables the computation of log(9613)

$\Rightarrow$ $7609 \times 10^7 - 1 = 3 \times 13 \times 31 \times 6547 \times 9613$
$\longrightarrow$ This equation enables the computation of log(9613)
$\Rightarrow$ $34 \times 10^6 - 1 = 3 \times 11 \times 107 \times 9629$
$\longrightarrow$ This equation enables the computation of log(9629)
$\Rightarrow$ $6229 \times 10^4 + 1 = 6469 \times 9629$
$\longrightarrow$ This equation enables the computation of log(9629)
$\Rightarrow$ $2983 \times 10^6 - 1 = 3 \times 7^4 \times 43 \times 9631$
$\longrightarrow$ This equation enables the computation of log(9631)
$\Rightarrow$ $937 \times 10^5 - 1 = 3^2 \times 23 \times 47 \times 9631$
$\longrightarrow$ This equation enables the computation of log(9631)
page 527:
$\Rightarrow$ $2676 \times 10^6 + 1 = 359 \times 773 \times 9643$
$\longrightarrow$ This equation enables the computation of log(9643)
$\Rightarrow$ $7982 \times 10^7 + 1 = 3^2 \times 7 \times 83 \times 1583 \times 9643$
$\longrightarrow$ This equation enables the computation of log(9643)
$\Rightarrow$ $9604 \times 10^4 + 1 = 9941 \times 9661$
$\longrightarrow$ This equation enables the computation of log(9661)
$\Rightarrow$ $3574 \times 10^6 + 1 = 11 \times 13^2 \times 199 \times 9661$
$\longrightarrow$ This equation enables the computation of log(9661)
$\Rightarrow$ $6625 \times 10^6 + 1 = 359 \times 1907 \times 9677$
$\longrightarrow$ This equation enables the computation of log(9677)
$\Rightarrow$ $8188 \times 10^5 + 1 = 191 \times 443 \times 9677$
$\longrightarrow$ This equation enables the computation of log(9677)
page 528:
$\Rightarrow$ $9199 \times 10^7 - 1 = 3^3 \times 83 \times 4241 \times 9679$
$\longrightarrow$ This equation enables the computation of log(9679)
$\Rightarrow$ $48 \times 10^8 + 1 = 19 \times 43 \times 607 \times 9679$
$\longrightarrow$ This equation enables the computation of log(9679)
$\Rightarrow$ $172 \times 10^8 + 1 = 23 \times 79 \times 977 \times 9689$
$\longrightarrow$ This equation enables the computation of log(9689)
$\Rightarrow$ $2178 \times 10^6 - 1 = 7 \times 17 \times 1889 \times 9689$
$\longrightarrow$ This equation enables the computation of log(9689)
$\Rightarrow$ $4267 \times 10^6 + 1 = 11 \times 109 \times 367 \times 9697$
$\longrightarrow$ This equation enables the computation of log(9697)
$\Rightarrow$ $5815 \times 10^5 - 1 = 3^3 \times 2221 \times 9697$
$\longrightarrow$ This equation enables the computation of log(9697)
page 529:
$\Rightarrow$ $1656 \times 10^7 + 1 = 761 \times 2239 \times 9719$
$\longrightarrow$ This equation enables the computation of log(9719)
$\Rightarrow$ $6841 \times 10^6 + 1 = 11 \times 61 \times 1049 \times 9719$
$\longrightarrow$ This equation enables the computation of log(9719)

$\Rightarrow \quad 7597 \times 10^7 - 1 = 3^2 \times 67^2 \times 193 \times 9743$
$\longrightarrow$ This equation enables the computation of log(9743)
$\Rightarrow \quad 7769 \times 10^6 - 1 = 199 \times 4007 \times 9743$
$\longrightarrow$ This equation enables the computation of log(9743)
$\Rightarrow \quad 7826 \times 10^6 + 1 = 3 \times 29 \times 9227 \times 9749$
$\longrightarrow$ This equation enables the computation of log(9749)
$\Rightarrow \quad 1923 \times 10^6 - 1 = 17 \times 41 \times 283 \times 9749$
$\longrightarrow$ This equation enables the computation of log(9749)
$\Rightarrow \quad 428 \times 10^8 + 1 = 3 \times 11 \times 19 \times 29 \times 241 \times 9767$
$\longrightarrow$ This equation enables the computation of log(9767)
page 530:
$\Rightarrow \quad 6035 \times 10^6 - 1 = 7 \times 103 \times 857 \times 9767$
$\longrightarrow$ This equation enables the computation of log(9767)
$\Rightarrow \quad 6442 \times 10^7 + 1 = 7 \times 167 \times 5641 \times 9769$
$\longrightarrow$ This equation enables the computation of log(9769)
$\Rightarrow \quad 3963 \times 10^6 - 1 = 7^2 \times 17 \times 487 \times 9769$
$\longrightarrow$ This equation enables the computation of log(9769)
$\Rightarrow \quad 9325 \times 10^6 - 1 = 3^2 \times 7 \times 37 \times 409 \times 9781$
$\longrightarrow$ This equation enables the computation of log(9781)
$\Rightarrow \quad 5221 \times 10^5 - 1 = 3^4 \times 659 \times 9781$
$\longrightarrow$ This equation enables the computation of log(9781)
$\Rightarrow \quad 7838 \times 10^7 + 1 = 3^4 \times 23 \times 4297 \times 9791$
$\longrightarrow$ This equation enables the computation of log(9791)
page 531:
$\Rightarrow \quad 1953 \times 10^7 - 1 = 577 \times 3457 \times 9791$
$\longrightarrow$ This equation enables the computation of log(9791)
$\Rightarrow \quad 3752 \times 10^9 + 1 = 3^3 \times 11 \times 17 \times 59 \times 1283 \times 9817$
$\longrightarrow$ This equation enables the computation of log(9817)
$\Rightarrow \quad 7911 \times 10^6 - 1 = 7 \times 19 \times 73 \times 83 \times 9817$
$\longrightarrow$ This equation enables the computation of log(9817)
$\Rightarrow \quad 8245 \times 10^6 - 1 = 3^2 \times 151 \times 617 \times 9833$
$\longrightarrow$ This equation enables the computation of log(9833)
$\Rightarrow \quad 6047 \times 10^5 + 1 = 3^2 \times 6833 \times 9833$
$\longrightarrow$ This equation enables the computation of log(9833)
$\Rightarrow \quad 9289 \times 10^4 - 1 = 3^2 \times 1049 \times 9839$
$\longrightarrow$ This equation enables the computation of log(9839)
$\Rightarrow \quad 9784 \times 10^5 - 1 = 3^3 \times 29 \times 127 \times 9839$
$\longrightarrow$ This equation enables the computation of log(9839)
page 532:
$\Rightarrow \quad 1356 \times 10^6 + 1 = 179 \times 769 \times 9851$
$\longrightarrow$ This equation enables the computation of log(9851)

$\Rightarrow$ $6142 \times 10^5 - 1 = 3 \times 7 \times 2969 \times 9851$
$\longrightarrow$ `This equation enables the computation of log(9851)`
$\Rightarrow$ $4482 \times 10^5 - 1 = 13^2 \times 269 \times 9859$
$\longrightarrow$ `This equation enables the computation of log(9859)`
$\Rightarrow$ $5384 \times 10^4 - 1 = 43 \times 127 \times 9859$
$\longrightarrow$ `This equation enables the computation of log(9859)`
$\Rightarrow$ $805 \times 10^6 - 1 = 3 \times 19 \times 1429 \times 9883$
$\longrightarrow$ `This equation enables the computation of log(9883)`

`page 533:`

$\Rightarrow$ $8447 \times 10^4 + 1 = 3 \times 7 \times 11 \times 37 \times 9883$
$\longrightarrow$ `This equation enables the computation of log(9883)`
$\Rightarrow$ $247 \times 10^7 + 1 = 7 \times 89 \times 401 \times 9887$
$\longrightarrow$ `This equation enables the computation of log(9887)`
$\Rightarrow$ $7417 \times 10^6 - 1 = 3^2 \times 19 \times 41 \times 107 \times 9887$
$\longrightarrow$ `This equation enables the computation of log(9887)`
$\Rightarrow$ $5452 \times 10^9 - 1 = 3 \times 7 \times 19 \times 59 \times 97 \times 241 \times 9907$
$\longrightarrow$ `This equation enables the computation of log(9907)`
$\Rightarrow$ $8128 \times 10^5 + 1 = 13 \times 6311 \times 9907$
$\longrightarrow$ `This equation enables the computation of log(9907)`
$\Rightarrow$ $7325 \times 10^7 + 1 = 3^3 \times 29 \times 9403 \times 9949$
$\longrightarrow$ `This equation enables the computation of log(9949)`
$\Rightarrow$ $6342 \times 10^6 - 1 = 79 \times 8069 \times 9949$
$\longrightarrow$ `This equation enables the computation of log(9949)`

`page 534:`

$\Rightarrow$ $4017 \times 10^5 + 1 = 41 \times 983 \times 9967$
$\longrightarrow$ `This equation enables the computation of log(9967)`
$\Rightarrow$ $595 \times 10^6 - 1 = 3^4 \times 11 \times 67 \times 9967$
$\longrightarrow$ `This equation enables the computation of log(9967)`
$\Rightarrow$ $3338 \times 10^7 + 1 = 3^2 \times 383 \times 971 \times 9973$
$\longrightarrow$ `This equation enables the computation of log(9973)`
$\Rightarrow$ $6512 \times 10^6 - 1 = 157 \times 4159 \times 9973$
$\longrightarrow$ `This equation enables the computation of log(9973)`
$\Rightarrow$ $5609 \times 10^7 + 1 = 3 \times 7 \times 449 \times 599 \times 9931$
$\longrightarrow$ `This equation enables the computation of log(9931)`
$\Rightarrow$ $4322 \times 10^7 - 1 = 11 \times 383 \times 1033 \times 9931$
$\longrightarrow$ `This equation enables the computation of log(9931)`

`page 535:`

$\Rightarrow$ $7642 \times 10^5 - 1 = 3^2 \times 43 \times 199 \times 9923$
$\longrightarrow$ `This equation enables the computation of log(9923)`
$\Rightarrow$ $2281 \times 10^5 + 1 = 127 \times 181 \times 9923$
$\longrightarrow$ `This equation enables the computation of log(9923)`

$\Rightarrow$ $5777 \times 10^6 - 1 = 23 \times 41 \times 617 \times 9929$
$\longrightarrow$ `This equation enables the computation of log(9929)`
$\Rightarrow$ $8111 \times 10^4 + 1 = 3 \times 7 \times 389 \times 9929$
$\longrightarrow$ `This equation enables the computation of log(9929)`

`page 537:`
$\Rightarrow$ $7018 \times 10^4 + 1 = 31 \times 227 \times 9973$
$\longrightarrow$ `This equation enables the computation of log(9973)`
$\Rightarrow$ $9665 \times 10^4 - 1 = 9697 \times 9967$
$\longrightarrow$ `This equation enables the computation of log(9967)`
$\Rightarrow$ $3607 \times 10^6 + 1 = 11 \times 23 \times 1433 \times 9949$
$\longrightarrow$ `This equation enables the computation of log(9949)`
$\Rightarrow$ $6435 \times 10^6 + 1 = 577 \times 1123 \times 9931$
$\longrightarrow$ `This equation enables the computation of log(9931)`

`page 538:`
$\Rightarrow$ $1818 \times 10^4 - 1 = 1831 \times 9929$
$\longrightarrow$ `This equation enables the computation of log(9929)`
$\Rightarrow$ $9712 \times 10^4 + 1 = 11 \times 19 \times 47 \times 9887$
$\longrightarrow$ `This equation enables the computation of log(9887)`
$\Rightarrow$ $99 \times 10^8 - 1 = 307 \times 3257 \times 9901$
$\longrightarrow$ `This equation enables the computation of log(9901)`
$\Rightarrow$ $6959 \times 10^4 - 1 = 7013 \times 9923$
$\longrightarrow$ `This equation enables the computation of log(9923)`
$\Rightarrow$ $7883 \times 10^4 - 1 = 73 \times 109 \times 9907$
$\longrightarrow$ `This equation enables the computation of log(9907)`

`page 539:`
$\Rightarrow$ $5437 \times 10^8 - 1 = 3^4 \times 13 \times 79 \times 653 \times 10009$
$\longrightarrow$ `This equation enables the computation of log(10009)`
$\Rightarrow$ $3214 \times 10^6 - 1 = 3^3 \times 7 \times 1699 \times 10009$
$\longrightarrow$ `This equation enables the computation of log(10009)`
$\Rightarrow$ $3288 \times 10^5 - 1 = 11 \times 29 \times 103 \times 10007$
$\longrightarrow$ `This equation enables the computation of log(10007)`
$\Rightarrow$ $7148 \times 10^4 + 1 = 3 \times 2381 \times 10007$
$\longrightarrow$ `This equation enables the computation of log(10007)`
$\Rightarrow$ $2964 \times 10^4 - 1 = 31 \times 97 \times 9857$
$\longrightarrow$ `This equation enables the computation of log(9857)`
$\Rightarrow$ $6893 \times 10^4 + 1 = 3^3 \times 7 \times 37 \times 9857$
$\longrightarrow$ `This equation enables the computation of log(9857)`

`page 540:`
$\Rightarrow$ $1 \times 10^6 + 1 = 101 \times 9901$
$\longrightarrow$ `This equation enables the computation of log(9901)`
$\Rightarrow$ $1 \times 10^{10} - 1 = 3^2 \times 11 \times 41 \times 271 \times 9091$

$\longrightarrow$ `This equation enables the computation of log(9091)`
$\Rightarrow$ $8182 \times 10^6 + 1 = 7 \times 19 \times 67 \times 101 \times 9091$
$\longrightarrow$ `This equation enables the computation of log(9091)`
$\Rightarrow$ $2011 \times 10^4 - 1 = 3 \times 7 \times 13 \times 19 \times 3877$
$\longrightarrow$ `This equation enables the computation of log(3877)`
$\Rightarrow$ $1866 \times 10^4 + 1 = 4813 \times 3877$
$\longrightarrow$ `This equation enables the computation of log(3877)`
$\Rightarrow$ $3192 \times 10^4 - 1 = 17 \times 557 \times 3371$
$\longrightarrow$ `This equation enables the computation of log(3371)`

`page 541:`

$\Rightarrow$ $3016 \times 10^5 - 1 = 3^2 \times 9941 \times 3371$
$\longrightarrow$ `This equation enables the computation of log(3371)`
$\Rightarrow$ $1436 \times 10^4 - 1 = 1453 \times 9883$
$\longrightarrow$ `This equation enables the computation of log(9883)`
$\Rightarrow$ $4475 \times 10^4 + 1 = 3 \times 17 \times 89 \times 9859$
$\longrightarrow$ `This equation enables the computation of log(9859)`
$\Rightarrow$ $3709 \times 10^5 + 1 = 23 \times 1637 \times 9851$
$\longrightarrow$ `This equation enables the computation of log(9851)`
$\Rightarrow$ $55 \times 10^5 + 1 = 13 \times 43 \times 9839$
$\longrightarrow$ `This equation enables the computation of log(9839)`

`page 542:`

$\Rightarrow$ $3786 \times 10^5 - 1 = 139 \times 277 \times 9833$
$\longrightarrow$ `This equation enables the computation of log(9833)`
$\Rightarrow$ $6317 \times 10^5 + 1 = 3^2 \times 37 \times 193 \times 9829$
$\longrightarrow$ `This equation enables the computation of log(9829)`
$\Rightarrow$ $1906 \times 10^6 + 1 = 31 \times 6263 \times 9817$
$\longrightarrow$ `This equation enables the computation of log(9817)`
$\Rightarrow$ $462 \times 10^5 - 1 = 17 \times 277 \times 9811$
$\longrightarrow$ `This equation enables the computation of log(9811)`
$\Rightarrow$ $73 \times 10^7 + 1 = 113 \times 659 \times 9803$
$\longrightarrow$ `This equation enables the computation of log(9803)`

`page 543:`

$\Rightarrow$ $7122 \times 10^4 - 1 = 19 \times 383 \times 9787$
$\longrightarrow$ `This equation enables the computation of log(9787)`
$\Rightarrow$ $456 \times 10^6 + 1 = 23 \times 2027 \times 9781$
$\longrightarrow$ `This equation enables the computation of log(9781)`
$\Rightarrow$ $9215 \times 10^5 + 1 = 3^2 \times 47 \times 223 \times 9769$
$\longrightarrow$ `This equation enables the computation of log(9769)`
$\Rightarrow$ $9739 \times 10^6 - 1 = 3^2 \times 79 \times 1399 \times 9791$
$\longrightarrow$ `This equation enables the computation of log(9791)`
$\Rightarrow$ $8019 \times 10^5 + 1 = 7 \times 37 \times 317 \times 9767$

$\longrightarrow$ `This equation enables the computation of log(9767)`
$\Rightarrow$ $9481 \times 10^5 - 1 = 3 \times 7 \times 11 \times 421 \times 9749$
$\longrightarrow$ `This equation enables the computation of log(9749)`
`page 544:`
$\Rightarrow$ $4493 \times 10^6 - 1 = 139 \times 3319 \times 9739$
$\longrightarrow$ `This equation enables the computation of log(9739)`
$\Rightarrow$ $9489 \times 10^5 - 1 = 17^2 \times 337 \times 9743$
$\longrightarrow$ `This equation enables the computation of log(9743)`
$\Rightarrow$ $2333 \times 10^4 + 1 = 3 \times 17 \times 47 \times 9733$
$\longrightarrow$ `This equation enables the computation of log(9733)`
$\Rightarrow$ $9342 \times 10^5 - 1 = 19 \times 5059 \times 9719$
$\longrightarrow$ `This equation enables the computation of log(9719)`
$\Rightarrow$ $395 \times 10^5 - 1 = 7 \times 11 \times 53 \times 9679$
$\longrightarrow$ `This equation enables the computation of log(9679)`
$\Rightarrow$ $9059 \times 10^4 - 1 = 9319 \times 9721$
$\longrightarrow$ `This equation enables the computation of log(9721)`
`page 545:`
$\Rightarrow$ $2402 \times 10^5 - 1 = 13 \times 1907 \times 9689$
$\longrightarrow$ `This equation enables the computation of log(9689)`
$\Rightarrow$ $1489 \times 10^5 - 1 = 3 \times 23 \times 223 \times 9677$
$\longrightarrow$ `This equation enables the computation of log(9677)`
$\Rightarrow$ $9718 \times 10^4 - 1 = 3 \times 7 \times 479 \times 9661$
$\longrightarrow$ `This equation enables the computation of log(9661)`
$\Rightarrow$ $2749 \times 10^4 + 1 = 7 \times 11 \times 37 \times 9649$
$\longrightarrow$ `This equation enables the computation of log(9649)`
$\Rightarrow$ $7474 \times 10^5 + 1 = 179 \times 433 \times 9643$
$\longrightarrow$ `This equation enables the computation of log(9643)`
$\Rightarrow$ $7021 \times 10^3 - 1 = 3^6 \times 9631$
$\longrightarrow$ `This equation enables the computation of log(9631)`
`page 546:`
$\Rightarrow$ $5113 \times 10^3 - 1 = 3^2 \times 59 \times 9629$
$\longrightarrow$ `This equation enables the computation of log(9629)`
$\Rightarrow$ $5577 \times 10^5 + 1 = 37 \times 1567 \times 9619$
$\longrightarrow$ `This equation enables the computation of log(9619)`
$\Rightarrow$ $814 \times 10^6 + 1 = 17^2 \times 293 \times 9613$
$\longrightarrow$ `This equation enables the computation of log(9613)`
$\Rightarrow$ $7278 \times 10^6 - 1 = 17^2 \times 2617 \times 9623$
$\longrightarrow$ `This equation enables the computation of log(9623)`
$\Rightarrow$ $1646 \times 10^6 + 1 = 3^3 \times 19 \times 337 \times 9521$
$\longrightarrow$ `This equation enables the computation of log(9521)`
`page 547:`

$\Rightarrow\quad 7594 \times 10^4 + 1 = 7951 \times 9551$
$\longrightarrow$ `This equation enables the computation of log(9551)`
$\Rightarrow\quad 8704 \times 10^4 - 1 = 3^2 \times 1013 \times 9547$
$\longrightarrow$ `This equation enables the computation of log(9547)`
$\Rightarrow\quad 4839 \times 10^5 + 1 = 13 \times 3877 \times 9601$
$\longrightarrow$ `This equation enables the computation of log(9601)`
$\Rightarrow\quad 5233 \times 10^5 + 1 = 7 \times 17 \times 461 \times 9539$
$\longrightarrow$ `This equation enables the computation of log(9539)`
$\Rightarrow\quad 5532 \times 10^4 - 1 = 7 \times 829 \times 9533$
$\longrightarrow$ `This equation enables the computation of log(9533)`
$\Rightarrow\quad 5621 \times 10^3 + 1 = 3 \times 197 \times 9511$
$\longrightarrow$ `This equation enables the computation of log(9511)`

`page 548:`

$\Rightarrow\quad 1309 \times 10^6 + 1 = 337 \times 409 \times 9497$
$\longrightarrow$ `This equation enables the computation of log(9497)`
$\Rightarrow\quad 6457 \times 10^5 + 1 = 17 \times 4007 \times 9479$
$\longrightarrow$ `This equation enables the computation of log(9479)`
$\Rightarrow\quad 1214 \times 10^7 + 1 = 3^2 \times 23 \times 41 \times 151 \times 9473$
$\longrightarrow$ `This equation enables the computation of log(9473)`
$\Rightarrow\quad 492 \times 10^5 - 1 = 5197 \times 9467$
$\longrightarrow$ `This equation enables the computation of log(9467)`
$\Rightarrow\quad 4876 \times 10^5 + 1 = 7 \times 17 \times 433 \times 9463$
$\longrightarrow$ `This equation enables the computation of log(9463)`

`page 549:`

$\Rightarrow\quad 581 \times 10^5 + 1 = 3 \times 23 \times 89 \times 9461$
$\longrightarrow$ `This equation enables the computation of log(9461)`
$\Rightarrow\quad 6328 \times 10^5 - 1 = 3^3 \times 13 \times 191 \times 9439$
$\longrightarrow$ `This equation enables the computation of log(9439)`
$\Rightarrow\quad 4625 \times 10^4 - 1 = 4903 \times 9433$
$\longrightarrow$ `This equation enables the computation of log(9433)`
$\Rightarrow\quad 1712 \times 10^6 - 1 = 167 \times 1087 \times 9431$
$\longrightarrow$ `This equation enables the computation of log(9431)`
$\Rightarrow\quad 96 \times 10^5 - 1 = 1019 \times 9421$
$\longrightarrow$ `This equation enables the computation of log(9421)`
$\Rightarrow\quad 582 \times 10^5 + 1 = 37 \times 167 \times 9419$
$\longrightarrow$ `This equation enables the computation of log(9419)`

`page 550:`

$\Rightarrow\quad 6634 \times 10^5 + 1 = 11 \times 43 \times 149 \times 9413$
$\longrightarrow$ `This equation enables the computation of log(9413)`
$\Rightarrow\quad 6327 \times 10^4 + 1 = 6733 \times 9397$
$\longrightarrow$ `This equation enables the computation of log(9397)`

$\Rightarrow$ $4347 \times 10^5 - 1 = 41 \times 1129 \times 9391$
$\longrightarrow$ `This equation enables the computation of log(9391)`
$\Rightarrow$ $9789 \times 10^4 + 1 = 11 \times 23 \times 41 \times 9437$
$\longrightarrow$ `This equation enables the computation of log(9437)`
$\Rightarrow$ $3238 \times 10^6 + 1 = 127 \times 2719 \times 9377$
$\longrightarrow$ `This equation enables the computation of log(9377)`

`page 551:`
$\Rightarrow$ $5125 \times 10^4 - 1 = 3 \times 1823 \times 9371$
$\longrightarrow$ `This equation enables the computation of log(9371)`
$\Rightarrow$ $4143 \times 10^6 + 1 = 7 \times 29 \times 37 \times 59 \times 9349$
$\longrightarrow$ `This equation enables the computation of log(9349)`
$\Rightarrow$ $6281 \times 10^4 - 1 = 7 \times 31^2 \times 9337$
$\longrightarrow$ `This equation enables the computation of log(9337)`
$\Rightarrow$ $5392 \times 10^4 + 1 = 5791 \times 9311$
$\longrightarrow$ `This equation enables the computation of log(9311)`
$\Rightarrow$ $6651 \times 10^4 + 1 = 17 \times 421 \times 9293$
$\longrightarrow$ `This equation enables the computation of log(9293)`
$\Rightarrow$ $8236 \times 10^6 - 1 = 3^3 \times 131 \times 251 \times 9277$
$\longrightarrow$ `This equation enables the computation of log(9277)`

`page 552:`
$\Rightarrow$ $3975 \times 10^6 + 1 = 7^2 \times 23 \times 389 \times 9067$
$\longrightarrow$ `This equation enables the computation of log(9067)`
$\Rightarrow$ $3664 \times 10^4 + 1 = 3947 \times 9283$
$\longrightarrow$ `This equation enables the computation of log(9283)`
$\Rightarrow$ $8914 \times 10^5 - 1 = 3 \times 7 \times 29 \times 157 \times 9323$
$\longrightarrow$ `This equation enables the computation of log(9323)`
$\Rightarrow$ $1657 \times 10^5 - 1 = 3^5 \times 73 \times 9341$
$\longrightarrow$ `This equation enables the computation of log(9341)`
$\Rightarrow$ $2893 \times 10^7 + 1 = 7 \times 19 \times 23 \times 1019 \times 9281$
$\longrightarrow$ `This equation enables the computation of log(9281)`
$\Rightarrow$ $5918 \times 10^4 + 1 = 3 \times 2131 \times 9257$
$\longrightarrow$ `This equation enables the computation of log(9257)`

`page 553:`
$\Rightarrow$ $2732 \times 10^6 - 1 = 229 \times 1291 \times 9241$
$\longrightarrow$ `This equation enables the computation of log(9241)`
$\Rightarrow$ $777 \times 10^4 - 1 = 29^2 \times 9239$
$\longrightarrow$ `This equation enables the computation of log(9239)`
$\Rightarrow$ $8132 \times 10^4 - 1 = 8819 \times 9221$
$\longrightarrow$ `This equation enables the computation of log(9221)`
$\Rightarrow$ $1963 \times 10^4 - 1 = 3^3 \times 79 \times 9203$
$\longrightarrow$ `This equation enables the computation of log(9203)`

$\Rightarrow\quad 9074 \times 10^4 - 1 = 7 \times 17 \times 83 \times 9187$
$\longrightarrow$ `This equation enables the computation of log(9187)`
$\Rightarrow\quad 8812 \times 10^5 + 1 = 11 \times 8699 \times 9209$
$\longrightarrow$ `This equation enables the computation of log(9209)`

`page 554:`

$\Rightarrow\quad 5428 \times 10^6 + 1 = 593 \times 997 \times 9181$
$\longrightarrow$ `This equation enables the computation of log(9181)`
$\Rightarrow\quad 5709 \times 10^5 + 1 = 7 \times 17 \times 523 \times 9173$
$\longrightarrow$ `This equation enables the computation of log(9173)`
$\Rightarrow\quad 3302 \times 10^6 + 1 = 3^2 \times 29 \times 1381 \times 9161$
$\longrightarrow$ `This equation enables the computation of log(9161)`
$\Rightarrow\quad 7973 \times 10^4 - 1 = 8707 \times 9157$
$\longrightarrow$ `This equation enables the computation of log(9157)`
$\Rightarrow\quad 3767 \times 10^6 - 1 = 7^2 \times 31 \times 271 \times 9151$
$\longrightarrow$ `This equation enables the computation of log(9151)`
$\Rightarrow\quad 9984 \times 10^4 - 1 = 7^2 \times 223 \times 9137$
$\longrightarrow$ `This equation enables the computation of log(9137)`

`page 555:`

$\Rightarrow\quad 5264 \times 10^5 + 1 = 3^2 \times 6421 \times 9109$
$\longrightarrow$ `This equation enables the computation of log(9109)`
$\Rightarrow\quad 5681 \times 10^5 - 1 = 17 \times 3659 \times 9133$
$\longrightarrow$ `This equation enables the computation of log(9133)`
$\Rightarrow\quad 6851 \times 10^5 + 1 = 3 \times 131 \times 191 \times 9127$
$\longrightarrow$ `This equation enables the computation of log(9127)`
$\Rightarrow\quad 1759 \times 10^6 - 1 = 3 \times 41 \times 1571 \times 9103$
$\longrightarrow$ `This equation enables the computation of log(9103)`
$\Rightarrow\quad 7832 \times 10^5 - 1 = 41 \times 2111 \times 9049$
$\longrightarrow$ `This equation enables the computation of log(9049)`

`page 556:`

$\Rightarrow\quad 7859 \times 10^5 + 1 = 3 \times 59 \times 491 \times 9043$
$\longrightarrow$ `This equation enables the computation of log(9043)`
$\Rightarrow\quad 5502 \times 10^6 + 1 = 31 \times 67 \times 293 \times 9041$
$\longrightarrow$ `This equation enables the computation of log(9041)`
$\Rightarrow\quad 8911 \times 10^6 - 1 = 3^3 \times 11 \times 3323 \times 9029$
$\longrightarrow$ `This equation enables the computation of log(9029)`
$\Rightarrow\quad 5595 \times 10^5 + 1 = 23 \times 2699 \times 9013$
$\longrightarrow$ `This equation enables the computation of log(9013)`
$\Rightarrow\quad 3425 \times 10^6 + 1 = 3 \times 31 \times 61 \times 67 \times 9011$
$\longrightarrow$ `This equation enables the computation of log(9011)`
$\Rightarrow\quad 1656 \times 10^6 - 1 = 53 \times 3469 \times 9007$
$\longrightarrow$ `This equation enables the computation of log(9007)`

page 557:

$\Rightarrow$ $1711 \times 10^8 - 1 = 3^4 \times 331 \times 709 \times 9001$

$\longrightarrow$ This equation enables the computation of log(9001)

$\Rightarrow$ $908 \times 10^7 - 1 = 7 \times 17 \times 61 \times 139 \times 8999$

$\longrightarrow$ This equation enables the computation of log(8999)

$\Rightarrow$ $5918 \times 10^5 + 1 = 3 \times 13 \times 1693 \times 8963$

$\longrightarrow$ This equation enables the computation of log(8963)

$\Rightarrow$ $8106 \times 10^5 + 1 = 17 \times 5333 \times 8941$

$\longrightarrow$ This equation enables the computation of log(8941)

$\Rightarrow$ $715 \times 10^5 - 1 = 3 \times 2671 \times 8923$

$\longrightarrow$ This equation enables the computation of log(8923)

$\Rightarrow$ $2067 \times 10^5 - 1 = 11 \times 2113 \times 8893$

$\longrightarrow$ This equation enables the computation of log(8893)

page 558:

$\Rightarrow$ $7978 \times 10^5 + 1 = 113 \times 787 \times 8971$

$\longrightarrow$ This equation enables the computation of log(8971)

$\Rightarrow$ $4742 \times 10^5 - 1 = 7^2 \times 13 \times 83 \times 8969$

$\longrightarrow$ This equation enables the computation of log(8969)

$\Rightarrow$ $4757 \times 10^6 - 1 = 19 \times 83 \times 337 \times 8951$

$\longrightarrow$ This equation enables the computation of log(8951)

$\Rightarrow$ $8573 \times 10^4 + 1 = 3 \times 7 \times 457 \times 8933$

$\longrightarrow$ This equation enables the computation of log(8933)

$\Rightarrow$ $8187 \times 10^4 + 1 = 53 \times 173 \times 8929$

$\longrightarrow$ This equation enables the computation of log(8929)

$\Rightarrow$ $1882 \times 10^5 - 1 = 3^2 \times 13 \times 181 \times 8887$

$\longrightarrow$ This equation enables the computation of log(8887)

page 559:

$\Rightarrow$ $8849 \times 10^5 - 1 = 23 \times 4339 \times 8867$

$\longrightarrow$ This equation enables the computation of log(8867)

$\Rightarrow$ $7912 \times 10^4 + 1 = 79 \times 113 \times 8863$

$\longrightarrow$ This equation enables the computation of log(8863)

$\Rightarrow$ $8395 \times 10^5 + 1 = 17 \times 5573 \times 8861$

$\longrightarrow$ This equation enables the computation of log(8861)

$\Rightarrow$ $3229 \times 10^4 + 1 = 41 \times 89 \times 8849$

$\longrightarrow$ This equation enables the computation of log(8849)

$\Rightarrow$ $6119 \times 10^4 - 1 = 13^2 \times 41 \times 8831$

$\longrightarrow$ This equation enables the computation of log(8831)

page 560:

$\Rightarrow$ $4923 \times 10^4 + 1 = 5581 \times 8821$

$\longrightarrow$ This equation enables the computation of log(8821)

$\Rightarrow$ $5234 \times 10^4 + 1 = 3 \times 7 \times 283 \times 8807$

$\longrightarrow$ This equation enables the computation of log(8807)
$\Rightarrow$ $1439 \times 10^6 + 1 = 3^2 \times 41 \times 443 \times 8803$
$\longrightarrow$ This equation enables the computation of log(8803)
$\Rightarrow$ $689 \times 10^6 + 1 = 3 \times 79 \times 331 \times 8783$
$\longrightarrow$ This equation enables the computation of log(8783)
$\Rightarrow$ $5348 \times 10^6 - 1 = 31 \times 43 \times 457 \times 8779$
$\longrightarrow$ This equation enables the computation of log(8779)
$\Rightarrow$ $2489 \times 10^4 + 1 = 3 \times 947 \times 8761$
$\longrightarrow$ This equation enables the computation of log(8761)
page 561:
$\Rightarrow$ $8319 \times 10^6 + 1 = 13 \times 29 \times 2521 \times 8753$
$\longrightarrow$ This equation enables the computation of log(8753)
$\Rightarrow$ $1822 \times 10^4 + 1 = 2083 \times 8747$
$\longrightarrow$ This equation enables the computation of log(8747)
$\Rightarrow$ $1299 \times 10^5 + 1 = 7 \times 11 \times 193 \times 8741$
$\longrightarrow$ This equation enables the computation of log(8741)
$\Rightarrow$ $5301 \times 10^5 + 1 = 17 \times 43 \times 83 \times 8737$
$\longrightarrow$ This equation enables the computation of log(8737)
$\Rightarrow$ $247 \times 10^5 - 1 = 3 \times 23 \times 41 \times 8731$
$\longrightarrow$ This equation enables the computation of log(8731)
$\Rightarrow$ $7461 \times 10^4 - 1 = 23 \times 367 \times 8839$
$\longrightarrow$ This equation enables the computation of log(8839)
page 562:
$\Rightarrow$ $2993 \times 10^4 - 1 = 11 \times 313 \times 8693$
$\longrightarrow$ This equation enables the computation of log(8693)
$\Rightarrow$ $3805 \times 10^5 - 1 = 3 \times 11 \times 1327 \times 8689$
$\longrightarrow$ This equation enables the computation of log(8689)
$\Rightarrow$ $3323 \times 10^5 - 1 = 101 \times 379 \times 8681$
$\longrightarrow$ This equation enables the computation of log(8681)
$\Rightarrow$ $4384 \times 10^5 - 1 = 3^3 \times 1873 \times 8669$
$\longrightarrow$ This equation enables the computation of log(8669)
$\Rightarrow$ $677 \times 10^4 + 1 = 3 \times 7 \times 37 \times 8713$
$\longrightarrow$ This equation enables the computation of log(8713)
page 563:
$\Rightarrow$ $4465 \times 10^4 - 1 = 3^2 \times 569 \times 8719$
$\longrightarrow$ This equation enables the computation of log(8719)
$\Rightarrow$ $4652 \times 10^5 + 1 = 3^2 \times 7 \times 23 \times 37 \times 8677$
$\longrightarrow$ This equation enables the computation of log(8677)
$\Rightarrow$ $4095 \times 10^4 + 1 = 29 \times 163 \times 8663$
$\longrightarrow$ This equation enables the computation of log(8663)
$\Rightarrow$ $85 \times 10^5 + 1 = 983 \times 8647$

$\longrightarrow$ `This equation enables the computation of log(8647)`
$\Rightarrow$ $6015 \times 10^4 + 1 = 6961 \times 8641$
$\longrightarrow$ `This equation enables the computation of log(8641)`
$\Rightarrow$ $4959 \times 10^5 + 1 = 101 \times 569 \times 8629$
$\longrightarrow$ `This equation enables the computation of log(8629)`
`page 564:`
$\Rightarrow$ $27 \times 10^7 + 1 = 17 \times 1847 \times 8599$
$\longrightarrow$ `This equation enables the computation of log(8599)`
$\Rightarrow$ $682 \times 10^5 + 1 = 7933 \times 8597$
$\longrightarrow$ `This equation enables the computation of log(8597)`
$\Rightarrow$ $4995 \times 10^4 + 1 = 5821 \times 8581$
$\longrightarrow$ `This equation enables the computation of log(8581)`
$\Rightarrow$ $4832 \times 10^5 - 1 = 157 \times 359 \times 8573$
$\longrightarrow$ `This equation enables the computation of log(8573)`
$\Rightarrow$ $3222 \times 10^5 + 1 = 191 \times 197 \times 8563$
$\longrightarrow$ `This equation enables the computation of log(8563)`
$\Rightarrow$ $7341 \times 10^4 - 1 = 13 \times 661 \times 8543$
$\longrightarrow$ `This equation enables the computation of log(8543)`
`page 565:`
$\Rightarrow$ $5526 \times 10^4 + 1 = 6473 \times 8537$
$\longrightarrow$ `This equation enables the computation of log(8537)`
$\Rightarrow$ $3016 \times 10^4 - 1 = 3^3 \times 131 \times 8527$
$\longrightarrow$ `This equation enables the computation of log(8527)`
$\Rightarrow$ $5634 \times 10^5 - 1 = 37 \times 1787 \times 8521$
$\longrightarrow$ `This equation enables the computation of log(8521)`
$\Rightarrow$ $1094 \times 10^5 + 1 = 3 \times 4229 \times 8623$
$\longrightarrow$ `This equation enables the computation of log(8623)`
$\Rightarrow$ $5003 \times 10^4 + 1 = 3^3 \times 7 \times 31 \times 8539$
$\longrightarrow$ `This equation enables the computation of log(8539)`
`page 566:`
$\Rightarrow$ $2914 \times 10^4 - 1 = 3 \times 7 \times 163 \times 8513$
$\longrightarrow$ `This equation enables the computation of log(8513)`
$\Rightarrow$ $4973 \times 10^5 - 1 = 7 \times 61 \times 137 \times 8501$
$\longrightarrow$ `This equation enables the computation of log(8501)`
$\Rightarrow$ $322 \times 10^5 + 1 = 3803 \times 8467$
$\longrightarrow$ `This equation enables the computation of log(8467)`
$\Rightarrow$ $9004 \times 10^4 - 1 = 3 \times 7^2 \times 71 \times 8627$
$\longrightarrow$ `This equation enables the computation of log(8627)`
$\Rightarrow$ $3689 \times 10^5 - 1 = 13 \times 3361 \times 8443$
$\longrightarrow$ `This equation enables the computation of log(8443)`
$\Rightarrow$ $4447 \times 10^5 - 1 = 3^2 \times 5869 \times 8419$

$\longrightarrow$ `This equation enables the computation of log(8419)`

`page 567:`

$\Rightarrow$ $7985 \times 10^4 + 1 = 3 \times 7 \times 11 \times 41 \times 8431$

$\longrightarrow$ `This equation enables the computation of log(8431)`

$\Rightarrow$ $815 \times 10^5 + 1 = 3 \times 11 \times 293 \times 8429$

$\longrightarrow$ `This equation enables the computation of log(8429)`

$\Rightarrow$ $2231 \times 10^5 + 1 = 3^5 \times 109 \times 8423$

$\longrightarrow$ `This equation enables the computation of log(8423)`

$\Rightarrow$ $5497 \times 10^4 - 1 = 3 \times 7 \times 313 \times 8363$

$\longrightarrow$ `This equation enables the computation of log(8363)`

$\Rightarrow$ $3458 \times 10^6 - 1 = 53 \times 73 \times 107 \times 8353$

$\longrightarrow$ `This equation enables the computation of log(8353)`

`page 568:`

$\Rightarrow$ $3522 \times 10^5 - 1 = 17 \times 47 \times 53 \times 8317$

$\longrightarrow$ `This equation enables the computation of log(8317)`

$\Rightarrow$ $5644 \times 10^4 + 1 = 6791 \times 8311$

$\longrightarrow$ `This equation enables the computation of log(8311)`

$\Rightarrow$ $56 \times 10^6 - 1 = 11 \times 607 \times 8387$

$\longrightarrow$ `This equation enables the computation of log(8387)`

$\Rightarrow$ $2633 \times 10^6 + 1 = 3 \times 17 \times 6163 \times 8377$

$\longrightarrow$ `This equation enables the computation of log(8377)`

$\Rightarrow$ $6922 \times 10^4 - 1 = 3^2 \times 919 \times 8369$

$\longrightarrow$ `This equation enables the computation of log(8369)`

$\Rightarrow$ $4805 \times 10^4 + 1 = 3^2 \times 641 \times 8329$

$\longrightarrow$ `This equation enables the computation of log(8329)`

`page 569:`

$\Rightarrow$ $5239 \times 10^5 - 1 = 3^2 \times 7 \times 17 \times 59 \times 8291$

$\longrightarrow$ `This equation enables the computation of log(8291)`

$\Rightarrow$ $1287 \times 10^7 - 1 = 19 \times 41 \times 1997 \times 8273$

$\longrightarrow$ `This equation enables the computation of log(8273)`

$\Rightarrow$ $4861 \times 10^6 + 1 = 11 \times 13 \times 4099 \times 8293$

$\longrightarrow$ `This equation enables the computation of log(8293)`

$\Rightarrow$ $7787 \times 10^5 - 1 = 7 \times 11 \times 1223 \times 8269$

$\longrightarrow$ `This equation enables the computation of log(8269)`

$\Rightarrow$ $4021 \times 10^6 + 1 = 19 \times 23 \times 1109 \times 8297$

$\longrightarrow$ `This equation enables the computation of log(8297)`

$\Rightarrow$ $3976 \times 10^4 - 1 = 3 \times 1609 \times 8237$

$\longrightarrow$ `This equation enables the computation of log(8237)`

`page 570:`

$\Rightarrow$ $3631 \times 10^5 - 1 = 3 \times 61 \times 241 \times 8233$

$\longrightarrow$ `This equation enables the computation of log(8233)`

$\Rightarrow$ $3035 \times 10^4 - 1 = 3673 \times 8263$
$\longrightarrow$ This equation enables the computation of log(8263)
$\Rightarrow$ $5034 \times 10^4 + 1 = 31 \times 197 \times 8243$
$\longrightarrow$ This equation enables the computation of log(8243)
$\Rightarrow$ $2287 \times 10^5 - 1 = 3^2 \times 11 \times 281 \times 8221$
$\longrightarrow$ This equation enables the computation of log(8221)
$\Rightarrow$ $3629 \times 10^7 + 1 = 3 \times 23 \times 89 \times 719 \times 8219$
$\longrightarrow$ This equation enables the computation of log(8219)
page 571:
$\Rightarrow$ $2718 \times 10^4 - 1 = 7 \times 11 \times 43 \times 8209$
$\longrightarrow$ This equation enables the computation of log(8209)
$\Rightarrow$ $6642 \times 10^5 - 1 = 131 \times 619 \times 8191$
$\longrightarrow$ This equation enables the computation of log(8191)
$\Rightarrow$ $6068 \times 10^4 + 1 = 3 \times 2473 \times 8179$
$\longrightarrow$ This equation enables the computation of log(8179)
$\Rightarrow$ $5088 \times 10^5 - 1 = 73 \times 853 \times 8171$
$\longrightarrow$ This equation enables the computation of log(8171)
$\Rightarrow$ $5311 \times 10^4 + 1 = 7 \times 929 \times 8167$
$\longrightarrow$ This equation enables the computation of log(8167)
$\Rightarrow$ $6985 \times 10^4 - 1 = 3^3 \times 317 \times 8161$
$\longrightarrow$ This equation enables the computation of log(8161)
page 572:
$\Rightarrow$ $368 \times 10^5 - 1 = 4517 \times 8147$
$\longrightarrow$ This equation enables the computation of log(8147)
$\Rightarrow$ $5524 \times 10^6 - 1 = 3 \times 7 \times 23 \times 1409 \times 8117$
$\longrightarrow$ This equation enables the computation of log(8117)
$\Rightarrow$ $3225 \times 10^6 - 1 = 13 \times 113 \times 271 \times 8101$
$\longrightarrow$ This equation enables the computation of log(8101)
$\Rightarrow$ $4821 \times 10^4 + 1 = 7 \times 23 \times 37 \times 8093$
$\longrightarrow$ This equation enables the computation of log(8093)
$\Rightarrow$ $389 \times 10^5 + 1 = 3 \times 7 \times 229 \times 8089$
$\longrightarrow$ This equation enables the computation of log(8089)
$\Rightarrow$ $6451 \times 10^4 - 1 = 3 \times 2659 \times 8087$
$\longrightarrow$ This equation enables the computation of log(8087)
page 573:
$\Rightarrow$ $2637 \times 10^6 + 1 = 47 \times 53 \times 131 \times 8081$
$\longrightarrow$ This equation enables the computation of log(8081)
$\Rightarrow$ $4218 \times 10^5 + 1 = 7 \times 7477 \times 8059$
$\longrightarrow$ This equation enables the computation of log(8059)
$\Rightarrow$ $2188 \times 10^4 + 1 = 11 \times 13 \times 19 \times 8053$
$\longrightarrow$ This equation enables the computation of log(8053)

$\Rightarrow$ $5112 \times 10^4 + 1 = 6359 \times 8039$
⟶ This equation enables the computation of log(8039)
$\Rightarrow$ $83 \times 10^6 + 1 = 3 \times 7 \times 17 \times 29 \times 8017$
⟶ This equation enables the computation of log(8017)
$\Rightarrow$ $874 \times 10^4 + 1 = 1091 \times 8011$
⟶ This equation enables the computation of log(8011)
page 574:
$\Rightarrow$ $7308 \times 10^4 - 1 = 41 \times 223 \times 7993$
⟶ This equation enables the computation of log(7993)
$\Rightarrow$ $4003 \times 10^4 + 1 = 11 \times 457 \times 7963$
⟶ This equation enables the computation of log(7963)
$\Rightarrow$ $4333 \times 10^4 - 1 = 3 \times 23 \times 79 \times 7949$
⟶ This equation enables the computation of log(7949)
$\Rightarrow$ $3074 \times 10^4 + 1 = 3 \times 1291 \times 7937$
⟶ This equation enables the computation of log(7937)
$\Rightarrow$ $6233 \times 10^4 + 1 = 3 \times 2621 \times 7927$
⟶ This equation enables the computation of log(7927)
page 575:
$\Rightarrow$ $6519 \times 10^5 - 1 = 191 \times 431 \times 7919$
⟶ This equation enables the computation of log(7919)
$\Rightarrow$ $7873 \times 10^4 - 1 = 3 \times 3319 \times 7907$
⟶ This equation enables the computation of log(7907)
$\Rightarrow$ $6241 \times 10^4 - 1 = 3 \times 2633 \times 7901$
⟶ This equation enables the computation of log(7901)
$\Rightarrow$ $4506 \times 10^4 + 1 = 7 \times 19 \times 43 \times 7879$
⟶ This equation enables the computation of log(7879)
$\Rightarrow$ $4032 \times 10^5 - 1 = 17 \times 3011 \times 7877$
⟶ This equation enables the computation of log(7877)
$\Rightarrow$ $3784 \times 10^5 - 1 = 3 \times 37 \times 433 \times 7873$
⟶ This equation enables the computation of log(7873)
page 576:
$\Rightarrow$ $8494 \times 10^4 - 1 = 3 \times 59 \times 61 \times 7867$
⟶ This equation enables the computation of log(7867)
$\Rightarrow$ $8259 \times 10^4 + 1 = 13 \times 809 \times 7853$
⟶ This equation enables the computation of log(7853)
$\Rightarrow$ $1079 \times 10^5 + 1 = 3^2 \times 11 \times 139 \times 7841$
⟶ This equation enables the computation of log(7841)
$\Rightarrow$ $4908 \times 10^4 + 1 = 6269 \times 7829$
⟶ This equation enables the computation of log(7829)
$\Rightarrow$ $1653 \times 10^4 - 1 = 2113 \times 7823$
⟶ This equation enables the computation of log(7823)

page 577:

$\Rightarrow$ $6134 \times 10^4 - 1 = 7 \times 19 \times 59 \times 7817$

$\longrightarrow$ This equation enables the computation of log(7817)

$\Rightarrow$ $1252 \times 10^6 + 1 = 7 \times 59 \times 389 \times 7793$

$\longrightarrow$ This equation enables the computation of log(7793)

$\Rightarrow$ $4604 \times 10^5 + 1 = 3 \times 17 \times 19 \times 61 \times 7789$

$\longrightarrow$ This equation enables the computation of log(7789)

$\Rightarrow$ $6703 \times 10^4 + 1 = 53 \times 163 \times 7759$

$\longrightarrow$ This equation enables the computation of log(7759)

$\Rightarrow$ $6284 \times 10^6 - 1 = 547 \times 1481 \times 7757$

$\longrightarrow$ This equation enables the computation of log(7757)

$\Rightarrow$ $3056 \times 10^5 + 1 = 3 \times 7 \times 1877 \times 7753$

$\longrightarrow$ This equation enables the computation of log(7753)

page 578:

$\Rightarrow$ $4965 \times 10^5 - 1 = 31 \times 2069 \times 7741$

$\longrightarrow$ This equation enables the computation of log(7741)

$\Rightarrow$ $6442 \times 10^4 - 1 = 3 \times 7 \times 397 \times 7727$

$\longrightarrow$ This equation enables the computation of log(7727)

$\Rightarrow$ $4026 \times 10^4 - 1 = 13 \times 401 \times 7723$

$\longrightarrow$ This equation enables the computation of log(7723)

$\Rightarrow$ $5361 \times 10^4 - 1 = 6947 \times 7717$

$\longrightarrow$ This equation enables the computation of log(7717)

$\Rightarrow$ $7522 \times 10^5 - 1 = 3 \times 29 \times 1123 \times 7699$

$\longrightarrow$ This equation enables the computation of log(7699)

page 579:

$\Rightarrow$ $1312 \times 10^6 - 1 = 3 \times 101 \times 563 \times 7691$

$\longrightarrow$ This equation enables the computation of log(7691)

$\Rightarrow$ $4902 \times 10^4 - 1 = 7 \times 911 \times 7687$

$\longrightarrow$ This equation enables the computation of log(7687)

$\Rightarrow$ $1872 \times 10^5 - 1 = 7 \times 3499 \times 7643$

$\longrightarrow$ This equation enables the computation of log(7643)

$\Rightarrow$ $6206 \times 10^5 - 1 = 137 \times 593 \times 7639$

$\longrightarrow$ This equation enables the computation of log(7639)

$\Rightarrow$ $6766 \times 10^5 + 1 = 7 \times 11 \times 1153 \times 7621$

$\longrightarrow$ This equation enables the computation of log(7621)

$\Rightarrow$ $203 \times 10^4 + 1 = 3 \times 89 \times 7603$

$\longrightarrow$ This equation enables the computation of log(7603)

page 580:

$\Rightarrow$ $4029 \times 10^4 + 1 = 5309 \times 7589$

$\longrightarrow$ This equation enables the computation of log(7589)

$\Rightarrow$ $231 \times 10^6 - 1 = 43 \times 709 \times 7577$

$\longrightarrow$ `This equation enables the computation of log(7577)`

$\Rightarrow$ $3813 \times 10^4 - 1 = 5051 \times 7549$

$\longrightarrow$ `This equation enables the computation of log(7549)`

$\Rightarrow$ $452 \times 10^6 - 1 = 11 \times 5449 \times 7541$

$\longrightarrow$ `This equation enables the computation of log(7541)`

$\Rightarrow$ $4125 \times 10^4 + 1 = 13 \times 421 \times 7537$

$\longrightarrow$ `This equation enables the computation of log(7537)`

`page 581:`

$\Rightarrow$ $4483 \times 10^6 - 1 = 3^4 \times 7351 \times 7529$

$\longrightarrow$ `This equation enables the computation of log(7529)`

$\Rightarrow$ $6892 \times 10^6 - 1 = 3 \times 349 \times 857 \times 7681$

$\longrightarrow$ `This equation enables the computation of log(7681)`

$\Rightarrow$ $6935 \times 10^5 + 1 = 3 \times 43 \times 701 \times 7669$

$\longrightarrow$ `This equation enables the computation of log(7669)`

$\Rightarrow$ $2332 \times 10^5 - 1 = 3^3 \times 17 \times 67 \times 7583$

$\longrightarrow$ `This equation enables the computation of log(7583)`

$\Rightarrow$ $5576 \times 10^4 - 1 = 37 \times 199 \times 7573$

$\longrightarrow$ `This equation enables the computation of log(7573)`

$\Rightarrow$ $753 \times 10^5 - 1 = 23 \times 433 \times 7561$

$\longrightarrow$ `This equation enables the computation of log(7561)`

`page 582:`

$\Rightarrow$ $2809 \times 10^5 - 1 = 3^2 \times 4129 \times 7559$

$\longrightarrow$ `This equation enables the computation of log(7559)`

$\Rightarrow$ $5199 \times 10^6 + 1 = 13 \times 19 \times 2789 \times 7547$

$\longrightarrow$ `This equation enables the computation of log(7547)`

$\Rightarrow$ $3271 \times 10^6 - 1 = 3 \times 31 \times 4679 \times 7517$

$\longrightarrow$ `This equation enables the computation of log(7517)`

$\Rightarrow$ $5708 \times 10^6 - 1 = 13 \times 23 \times 2543 \times 7507$

$\longrightarrow$ `This equation enables the computation of log(7507)`

$\Rightarrow$ $943 \times 10^7 - 1 = 3 \times 7 \times 233 \times 257 \times 7499$

$\longrightarrow$ `This equation enables the computation of log(7499)`

$\Rightarrow$ $3684 \times 10^4 + 1 = 11 \times 449 \times 7459$

$\longrightarrow$ `This equation enables the computation of log(7459)`

`page 583:`

$\Rightarrow$ $4032 \times 10^4 - 1 = 5407 \times 7457$

$\longrightarrow$ `This equation enables the computation of log(7457)`

$\Rightarrow$ $7413 \times 10^4 - 1 = 9949 \times 7451$

$\longrightarrow$ `This equation enables the computation of log(7451)`

$\Rightarrow$ $764 \times 10^5 - 1 = 13^2 \times 61 \times 7411$

$\longrightarrow$ `This equation enables the computation of log(7411)`

$\Rightarrow$ $7203 \times 10^4 - 1 = 9743 \times 7393$

$\longrightarrow$ This equation enables the computation of log(7393)
$\Rightarrow$ $3318 \times 10^5 + 1 = 13 \times 23 \times 151 \times 7349$
$\longrightarrow$ This equation enables the computation of log(7349)
$\Rightarrow$ $398 \times 10^5 - 1 = 61 \times 89 \times 7331$
$\longrightarrow$ This equation enables the computation of log(7331)
page 584:
$\Rightarrow$ $5184 \times 10^4 + 1 = 73 \times 97 \times 7321$
$\longrightarrow$ This equation enables the computation of log(7321)
$\Rightarrow$ $69 \times 10^6 + 1 = 7 \times 19 \times 71 \times 7307$
$\longrightarrow$ This equation enables the computation of log(7307)
$\Rightarrow$ $5373 \times 10^5 + 1 = 7 \times 67 \times 157 \times 7297$
$\longrightarrow$ This equation enables the computation of log(7297)
$\Rightarrow$ $4412 \times 10^4 - 1 = 7 \times 11 \times 79 \times 7253$
$\longrightarrow$ This equation enables the computation of log(7253)
$\Rightarrow$ $1264 \times 10^6 - 1 = 3 \times 47 \times 1237 \times 7247$
$\longrightarrow$ This equation enables the computation of log(7247)
$\Rightarrow$ $3699 \times 10^4 + 1 = 5107 \times 7243$
$\longrightarrow$ This equation enables the computation of log(7243)
page 585:
$\Rightarrow$ $4987 \times 10^5 - 1 = 3^2 \times 7^2 \times 151 \times 7489$
$\longrightarrow$ This equation enables the computation of log(7489)
$\Rightarrow$ $7055 \times 10^4 + 1 = 3^3 \times 349 \times 7487$
$\longrightarrow$ This equation enables the computation of log(7487)
$\Rightarrow$ $817 \times 10^5 + 1 = 67 \times 163 \times 7481$
$\longrightarrow$ This equation enables the computation of log(7481)
$\Rightarrow$ $2302 \times 10^4 + 1 = 19 \times 163 \times 7433$
$\longrightarrow$ This equation enables the computation of log(7433)
$\Rightarrow$ $484 \times 10^6 - 1 = 3 \times 7^2 \times 449 \times 7333$
$\longrightarrow$ This equation enables the computation of log(7333)
page 586:
$\Rightarrow$ $4085 \times 10^4 + 1 = 3^5 \times 23 \times 7309$
$\longrightarrow$ This equation enables the computation of log(7309)
$\Rightarrow$ $6935 \times 10^5 - 1 = 79 \times 1213 \times 7237$
$\longrightarrow$ This equation enables the computation of log(7237)
$\Rightarrow$ $2074 \times 10^4 + 1 = 19 \times 151 \times 7229$
$\longrightarrow$ This equation enables the computation of log(7229)
$\Rightarrow$ $2614 \times 10^4 - 1 = 3 \times 17 \times 71 \times 7219$
$\longrightarrow$ This equation enables the computation of log(7219)
$\Rightarrow$ $4128 \times 10^4 - 1 = 59 \times 97 \times 7213$
$\longrightarrow$ This equation enables the computation of log(7213)
$\Rightarrow$ $4248 \times 10^4 + 1 = 43 \times 137 \times 7211$

$\longrightarrow$ `This equation enables the computation of log(7211)`

`page 587:`

$\Rightarrow \quad 2162 \times 10^5 + 1 = 3 \times 43 \times 233 \times 7193$

$\longrightarrow$ `This equation enables the computation of log(7193)`

$\Rightarrow \quad 4099 \times 10^5 + 1 = 7 \times 41 \times 199 \times 7177$

$\longrightarrow$ `This equation enables the computation of log(7177)`

$\Rightarrow \quad 7402 \times 10^4 + 1 = 11 \times 941 \times 7151$

$\longrightarrow$ `This equation enables the computation of log(7151)`

$\Rightarrow \quad 1999 \times 10^6 - 1 = 3^3 \times 37 \times 281 \times 7121$

$\longrightarrow$ `This equation enables the computation of log(7121)`

$\Rightarrow \quad 6394 \times 10^4 + 1 = 8969 \times 7129$

$\longrightarrow$ `This equation enables the computation of log(7129)`

$\Rightarrow \quad 4944 \times 10^4 - 1 = 7 \times 991 \times 7127$

$\longrightarrow$ `This equation enables the computation of log(7127)`

`page 588:`

$\Rightarrow \quad 6959 \times 10^4 + 1 = 3 \times 13 \times 251 \times 7109$

$\longrightarrow$ `This equation enables the computation of log(7109)`

$\Rightarrow \quad 1859 \times 10^4 - 1 = 19 \times 139 \times 7039$

$\longrightarrow$ `This equation enables the computation of log(7039)`

$\Rightarrow \quad 3214 \times 10^4 + 1 = 19 \times 241 \times 7019$

$\longrightarrow$ `This equation enables the computation of log(7019)`

$\Rightarrow \quad 5702 \times 10^6 - 1 = 233 \times 3457 \times 7079$

$\longrightarrow$ `This equation enables the computation of log(7079)`

$\Rightarrow \quad 2413 \times 10^5 + 1 = 31 \times 1103 \times 7057$

$\longrightarrow$ `This equation enables the computation of log(7057)`

$\Rightarrow \quad 1063 \times 10^5 - 1 = 3^3 \times 13 \times 43 \times 7043$

$\longrightarrow$ `This equation enables the computation of log(7043)`

`page 589:`

$\Rightarrow \quad 6994 \times 10^3 - 1 = 3^3 \times 37 \times 7001$

$\longrightarrow$ `This equation enables the computation of log(7001)`

$\Rightarrow \quad 6274 \times 10^5 - 1 = 3^7 \times 41 \times 6997$

$\longrightarrow$ `This equation enables the computation of log(6997)`

$\Rightarrow \quad 2509 \times 10^5 - 1 = 3 \times 7 \times 1709 \times 6991$

$\longrightarrow$ `This equation enables the computation of log(6991)`

$\Rightarrow \quad 3167 \times 10^5 - 1 = 7 \times 11 \times 19 \times 31 \times 6983$

$\longrightarrow$ `This equation enables the computation of log(6983)`

$\Rightarrow \quad 7614 \times 10^4 + 1 = 7 \times 1559 \times 6977$

$\longrightarrow$ `This equation enables the computation of log(6977)`

`page 590:`

$\Rightarrow \quad 762 \times 10^5 + 1 = 17 \times 643 \times 6971$

$\longrightarrow$ `This equation enables the computation of log(6971)`

$\Rightarrow$ $4689 \times 10^5 + 1 = 17 \times 37 \times 107 \times 6967$
$\longrightarrow$ This equation enables the computation of log(6967)
$\Rightarrow$ $6742 \times 10^4 - 1 = 3^3 \times 19^2 \times 6917$
$\longrightarrow$ This equation enables the computation of log(6917)
$\Rightarrow$ $1582 \times 10^6 + 1 = 227 \times 1009 \times 6907$
$\longrightarrow$ This equation enables the computation of log(6907)
$\Rightarrow$ $2138 \times 10^4 + 1 = 3 \times 1033 \times 6899$
$\longrightarrow$ This equation enables the computation of log(6899)
$\Rightarrow$ $3755 \times 10^6 + 1 = 3 \times 17 \times 19 \times 563 \times 6883$
$\longrightarrow$ This equation enables the computation of log(6883)

page 591:
$\Rightarrow$ $3933 \times 10^6 - 1 = 197 \times 2909 \times 6863$
$\longrightarrow$ This equation enables the computation of log(6863)
$\Rightarrow$ $2738 \times 10^4 + 1 = 3 \times 11^3 \times 6857$
$\longrightarrow$ This equation enables the computation of log(6857)
$\Rightarrow$ $1043 \times 10^6 - 1 = 163 \times 937 \times 6829$
$\longrightarrow$ This equation enables the computation of log(6829)
$\Rightarrow$ $3644 \times 10^6 + 1 = 3^3 \times 53 \times 373 \times 6827$
$\longrightarrow$ This equation enables the computation of log(6827)
$\Rightarrow$ $1577 \times 10^5 - 1 = 29 \times 797 \times 6823$
$\longrightarrow$ This equation enables the computation of log(6823)
$\Rightarrow$ $1709 \times 10^6 - 1 = 7^2 \times 53 \times 103 \times 6389$
$\longrightarrow$ This equation enables the computation of log(6389)

page 592:
$\Rightarrow$ $495 \times 10^6 + 1 = 71 \times 1061 \times 6571$
$\longrightarrow$ This equation enables the computation of log(6571)
$\Rightarrow$ $4074 \times 10^4 + 1 = 6217 \times 6553$
$\longrightarrow$ This equation enables the computation of log(6553)
$\Rightarrow$ $2248 \times 10^5 - 1 = 3 \times 23 \times 499 \times 6529$
$\longrightarrow$ This equation enables the computation of log(6529)
$\Rightarrow$ $5414 \times 10^5 - 1 = 7 \times 67 \times 179 \times 6449$
$\longrightarrow$ This equation enables the computation of log(6449)
$\Rightarrow$ $1738 \times 10^5 - 1 = 3^4 \times 337 \times 6367$
$\longrightarrow$ This equation enables the computation of log(6367)
$\Rightarrow$ $5805 \times 10^4 - 1 = 7 \times 23 \times 53 \times 6803$
$\longrightarrow$ This equation enables the computation of log(6803)

page 593:
$\Rightarrow$ $1373 \times 10^5 + 1 = 3 \times 7121 \times 6427$
$\longrightarrow$ This equation enables the computation of log(6427)
$\Rightarrow$ $1903 \times 10^5 - 1 = 3 \times 23 \times 421 \times 6551$
$\longrightarrow$ This equation enables the computation of log(6551)

⇒ $3835 \times 10^4 + 1 = 5881 \times 6521$
⟶ `This equation enables the computation of log(6521)`
⇒ $5494 \times 10^4 + 1 = 19 \times 431 \times 6709$
⟶ `This equation enables the computation of log(6709)`
⇒ $6646 \times 10^4 + 1 = 31 \times 317 \times 6763$
⟶ `This equation enables the computation of log(6763)`
`page 594:`
⇒ $206 \times 10^6 - 1 = 17 \times 1787 \times 6781$
⟶ `This equation enables the computation of log(6781)`
⇒ $656 \times 10^5 + 1 = 3^2 \times 29 \times 37 \times 6793$
⟶ `This equation enables the computation of log(6793)`
⇒ $3505 \times 10^5 - 1 = 3 \times 17 \times 1033 \times 6653$
⟶ `This equation enables the computation of log(6653)`
⇒ $5971 \times 10^4 - 1 = 3 \times 31 \times 97 \times 6619$
⟶ `This equation enables the computation of log(6619)`
⇒ $3632 \times 10^4 + 1 = 3 \times 19 \times 97 \times 6569$
⟶ `This equation enables the computation of log(6569)`
⇒ $4355 \times 10^5 - 1 = 11 \times 17 \times 349 \times 6673$
⟶ `This equation enables the computation of log(6673)`
`page 595:`
⇒ $1246 \times 10^6 - 1 = 3 \times 23 \times 2711 \times 6661$
⟶ `This equation enables the computation of log(6661)`
⇒ $3693 \times 10^4 + 1 = 17 \times 331 \times 6563$
⟶ `This equation enables the computation of log(6563)`
⇒ $4077 \times 10^5 + 1 = 17 \times 23 \times 163 \times 6397$
⟶ `This equation enables the computation of log(6397)`
⇒ $7726 \times 10^4 + 1 = 7 \times 13 \times 131 \times 6481$
⟶ `This equation enables the computation of log(6481)`
⇒ $5311 \times 10^6 - 1 = 3^2 \times 29 \times 3203 \times 6353$
⟶ `This equation enables the computation of log(6353)`
`page 596:`
⇒ $5501 \times 10^4 - 1 = 11 \times 751 \times 6659$
⟶ `This equation enables the computation of log(6659)`
⇒ $786 \times 10^6 - 1 = 19 \times 23 \times 271 \times 6637$
⟶ `This equation enables the computation of log(6637)`
⇒ $7555 \times 10^4 - 1 = 3 \times 7 \times 547 \times 6577$
⟶ `This equation enables the computation of log(6577)`
⇒ $7401 \times 10^4 - 1 = 7 \times 1583 \times 6679$
⟶ `This equation enables the computation of log(6679)`
⇒ $4606 \times 10^4 + 1 = 13 \times 557 \times 6361$
⟶ `This equation enables the computation of log(6361)`

$\Rightarrow \quad 6188 \times 10^6 + 1 = 3 \times 53 \times 5741 \times 6779$
$\longrightarrow$ This equation enables the computation of log(6779)

page 597:

$\Rightarrow \quad 1701 \times 10^5 - 1 = 139 \times 181 \times 6761$
$\longrightarrow$ This equation enables the computation of log(6761)
$\Rightarrow \quad 4622 \times 10^4 + 1 = 3 \times 2293 \times 6719$
$\longrightarrow$ This equation enables the computation of log(6719)
$\Rightarrow \quad 6416 \times 10^4 - 1 = 43 \times 223 \times 6691$
$\longrightarrow$ This equation enables the computation of log(6691)
$\Rightarrow \quad 1407 \times 10^5 - 1 = 11 \times 43 \times 47 \times 6329$
$\longrightarrow$ This equation enables the computation of log(6329)
$\Rightarrow \quad 5446 \times 10^4 - 1 = 3^3 \times 11 \times 29 \times 6323$
$\longrightarrow$ This equation enables the computation of log(6323)

page 598:

$\Rightarrow \quad 4386 \times 10^6 - 1 = 199 \times 3499 \times 6299$
$\longrightarrow$ This equation enables the computation of log(6299)
$\Rightarrow \quad 9919 \times 10^4 - 1 = 3^2 \times 1753 \times 6287$
$\longrightarrow$ This equation enables the computation of log(6287)
$\Rightarrow \quad 5071 \times 10^5 - 1 = 3 \times 7 \times 3847 \times 6277$
$\longrightarrow$ This equation enables the computation of log(6277)
$\Rightarrow \quad 2863 \times 10^4 + 1 = 4583 \times 6247$
$\longrightarrow$ This equation enables the computation of log(6247)
$\Rightarrow \quad 5859 \times 10^5 + 1 = 53 \times 1777 \times 6221$
$\longrightarrow$ This equation enables the computation of log(6221)
$\Rightarrow \quad 4644 \times 10^5 + 1 = 13^2 \times 443 \times 6203$
$\longrightarrow$ This equation enables the computation of log(6203)

page 599:

$\Rightarrow \quad 2864 \times 10^5 - 1 = 47 \times 983 \times 6199$
$\longrightarrow$ This equation enables the computation of log(6199)
$\Rightarrow \quad 5843 \times 10^4 + 1 = 3 \times 7^2 \times 59 \times 6737$
$\longrightarrow$ This equation enables the computation of log(6737)
$\Rightarrow \quad 95 \times 10^5 + 1 = 3 \times 7 \times 73 \times 6197$
$\longrightarrow$ This equation enables the computation of log(6197)
$\Rightarrow \quad 5619 \times 10^5 + 1 = 13 \times 7027 \times 6151$
$\longrightarrow$ This equation enables the computation of log(6151)
$\Rightarrow \quad 1993 \times 10^6 - 1 = 3 \times 59 \times 1787 \times 6301$
$\longrightarrow$ This equation enables the computation of log(6301)
$\Rightarrow \quad 2277 \times 10^4 + 1 = 3631 \times 6271$
$\longrightarrow$ This equation enables the computation of log(6271)

page 600:

$\Rightarrow \quad 4274 \times 10^5 + 1 = 3^2 \times 7^2 \times 157 \times 6173$

$\longrightarrow$ `This equation enables the computation of log(6173)`
$\Rightarrow$ $4914 \times 10^5 + 1 = 43 \times 1867 \times 6121$
$\longrightarrow$ `This equation enables the computation of log(6121)`
$\Rightarrow$ $845 \times 10^5 - 1 = 23 \times 601 \times 6113$
$\longrightarrow$ `This equation enables the computation of log(6113)`
$\Rightarrow$ $5863 \times 10^5 - 1 = 3 \times 103 \times 311 \times 6101$
$\longrightarrow$ `This equation enables the computation of log(6101)`
$\Rightarrow$ $5533 \times 10^4 + 1 = 9007 \times 6143$
$\longrightarrow$ `This equation enables the computation of log(6143)`
$\Rightarrow$ $3191 \times 10^4 - 1 = 11^2 \times 43 \times 6133$
$\longrightarrow$ `This equation enables the computation of log(6133)`
`page 601:`
$\Rightarrow$ $2966 \times 10^6 + 1 = 3 \times 47^2 \times 73 \times 6131$
$\longrightarrow$ `This equation enables the computation of log(6131)`
$\Rightarrow$ $2253 \times 10^5 - 1 = 47 \times 787 \times 6091$
$\longrightarrow$ `This equation enables the computation of log(6091)`
$\Rightarrow$ $4146 \times 10^4 + 1 = 11 \times 619 \times 6089$
$\longrightarrow$ `This equation enables the computation of log(6089)`
$\Rightarrow$ $2702 \times 10^6 - 1 = 37 \times 41 \times 293 \times 6079$
$\longrightarrow$ `This equation enables the computation of log(6079)`
$\Rightarrow$ $3727 \times 10^4 + 1 = 17 \times 19^2 \times 6073$
$\longrightarrow$ `This equation enables the computation of log(6073)`
$\Rightarrow$ $203 \times 10^7 - 1 = 313 \times 1069 \times 6067$
$\longrightarrow$ `This equation enables the computation of log(6067)`
`page 602:`
$\Rightarrow$ $6487 \times 10^4 + 1 = 7 \times 1531 \times 6053$
$\longrightarrow$ `This equation enables the computation of log(6053)`
$\Rightarrow$ $9725 \times 10^4 - 1 = 7 \times 11^2 \times 19 \times 6043$
$\longrightarrow$ `This equation enables the computation of log(6043)`
$\Rightarrow$ $5417 \times 10^4 + 1 = 3^2 \times 997 \times 6037$
$\longrightarrow$ `This equation enables the computation of log(6037)`
$\Rightarrow$ $1388 \times 10^5 + 1 = 3 \times 43 \times 179 \times 6011$
$\longrightarrow$ `This equation enables the computation of log(6011)`
$\Rightarrow$ $7895 \times 10^4 + 1 = 3 \times 13 \times 337 \times 6007$
$\longrightarrow$ `This equation enables the computation of log(6007)`
`page 603:`
$\Rightarrow$ $5725 \times 10^4 + 1 = 59 \times 163 \times 5953$
$\longrightarrow$ `This equation enables the computation of log(5953)`
$\Rightarrow$ $6162 \times 10^5 + 1 = 19 \times 5417 \times 5987$
$\longrightarrow$ `This equation enables the computation of log(5987)`
$\Rightarrow$ $3836 \times 10^4 + 1 = 3 \times 2153 \times 5939$

$\longrightarrow$ `This equation enables the computation of log(5939)`
$\Rightarrow$ $2616 \times 10^5 - 1 = 19 \times 23 \times 101 \times 5927$
$\longrightarrow$ `This equation enables the computation of log(5927)`
$\Rightarrow$ $5323 \times 10^4 + 1 = 11 \times 19 \times 43 \times 5923$
$\longrightarrow$ `This equation enables the computation of log(5923)`
$\Rightarrow$ $4978 \times 10^4 - 1 = 3^2 \times 937 \times 5903$
$\longrightarrow$ `This equation enables the computation of log(5903)`
`page 604:`
$\Rightarrow$ $2463 \times 10^5 - 1 = 11 \times 3797 \times 5897$
$\longrightarrow$ `This equation enables the computation of log(5897)`
$\Rightarrow$ $1596 \times 10^5 + 1 = 11 \times 2473 \times 5867$
$\longrightarrow$ `This equation enables the computation of log(5867)`
$\Rightarrow$ $1681 \times 10^6 - 1 = 3 \times 7 \times 79 \times 173 \times 5857$
$\longrightarrow$ `This equation enables the computation of log(5857)`
$\Rightarrow$ $3889 \times 10^4 + 1 = 61 \times 109 \times 5849$
$\longrightarrow$ `This equation enables the computation of log(5849)`
$\Rightarrow$ $4095 \times 10^6 + 1 = 17 \times 67 \times 617 \times 5827$
$\longrightarrow$ `This equation enables the computation of log(5827)`
$\Rightarrow$ $2978 \times 10^4 - 1 = 47 \times 109 \times 5813$
$\longrightarrow$ `This equation enables the computation of log(5813)`
`page 605:`
$\Rightarrow$ $3817 \times 10^5 - 1 = 3^3 \times 2437 \times 5801$
$\longrightarrow$ `This equation enables the computation of log(5801)`
$\Rightarrow$ $286 \times 10^7 - 1 = 3 \times 353 \times 467 \times 5783$
$\longrightarrow$ `This equation enables the computation of log(5783)`
$\Rightarrow$ $3572 \times 10^4 - 1 = 7 \times 883 \times 5779$
$\longrightarrow$ `This equation enables the computation of log(5779)`
$\Rightarrow$ $8 \times 10^6 - 1 = 7 \times 199 \times 5743$
$\longrightarrow$ `This equation enables the computation of log(5743)`
$\Rightarrow$ $2735 \times 10^5 + 1 = 3^2 \times 5297 \times 5737$
$\longrightarrow$ `This equation enables the computation of log(5737)`
`page 606:`
$\Rightarrow$ $337 \times 10^6 - 1 = 3 \times 7^2 \times 401 \times 5717$
$\longrightarrow$ `This equation enables the computation of log(5717)`
$\Rightarrow$ $586 \times 10^6 - 1 = 3^2 \times 13 \times 877 \times 5711$
$\longrightarrow$ `This equation enables the computation of log(5711)`
$\Rightarrow$ $1913 \times 10^5 + 1 = 3 \times 79 \times 139 \times 5807$
$\longrightarrow$ `This equation enables the computation of log(5807)`
$\Rightarrow$ $8153 \times 10^4 + 1 = 3^2 \times 7 \times 227 \times 5701$
$\longrightarrow$ `This equation enables the computation of log(5701)`
$\Rightarrow$ $3049 \times 10^5 + 1 = 7^2 \times 1093 \times 5693$

$\longrightarrow$ `This equation enables the computation of log(5693)`
$\Rightarrow$ $5644 \times 10^5 + 1 = 11 \times 29 \times 311 \times 5689$
$\longrightarrow$ `This equation enables the computation of log(5689)`
`page 607:`
$\Rightarrow$ $1563 \times 10^5 - 1 = 79 \times 349 \times 5669$
$\longrightarrow$ `This equation enables the computation of log(5669)`
$\Rightarrow$ $7759 \times 10^4 - 1 = 3^2 \times 37 \times 41 \times 5683$
$\longrightarrow$ `This equation enables the computation of log(5683)`
$\Rightarrow$ $5499 \times 10^5 - 1 = 11 \times 8837 \times 5657$
$\longrightarrow$ `This equation enables the computation of log(5657)`
$\Rightarrow$ $2053 \times 10^5 + 1 = 23 \times 1579 \times 5653$
$\longrightarrow$ `This equation enables the computation of log(5653)`
$\Rightarrow$ $4605 \times 10^4 - 1 = 29 \times 281 \times 5651$
$\longrightarrow$ `This equation enables the computation of log(5651)`
$\Rightarrow$ $2078 \times 10^6 + 1 = 3^4 \times 7 \times 11 \times 59 \times 5647$
$\longrightarrow$ `This equation enables the computation of log(5647)`
`page 608:`
$\Rightarrow$ $5447 \times 10^4 + 1 = 3 \times 3229 \times 5623$
$\longrightarrow$ `This equation enables the computation of log(5623)`
$\Rightarrow$ $3636 \times 10^4 + 1 = 6529 \times 5569$
$\longrightarrow$ `This equation enables the computation of log(5569)`
$\Rightarrow$ $9832 \times 10^4 + 1 = 13 \times 1361 \times 5557$
$\longrightarrow$ `This equation enables the computation of log(5557)`
$\Rightarrow$ $6432 \times 10^4 - 1 = 29 \times 401 \times 5531$
$\longrightarrow$ `This equation enables the computation of log(5531)`
$\Rightarrow$ $914 \times 10^5 - 1 = 23 \times 719 \times 5527$
$\longrightarrow$ `This equation enables the computation of log(5527)`
`page 609:`
$\Rightarrow$ $932 \times 10^5 + 1 = 3 \times 17 \times 331 \times 5521$
$\longrightarrow$ `This equation enables the computation of log(5521)`
$\Rightarrow$ $7943 \times 10^5 - 1 = 43 \times 3347 \times 5519$
$\longrightarrow$ `This equation enables the computation of log(5519)`
$\Rightarrow$ $3434 \times 10^5 - 1 = 127 \times 491 \times 5507$
$\longrightarrow$ `This equation enables the computation of log(5507)`
$\Rightarrow$ $4008 \times 10^5 - 1 = 173 \times 421 \times 5503$
$\longrightarrow$ `This equation enables the computation of log(5503)`
$\Rightarrow$ $6499 \times 10^4 - 1 = 3^3 \times 439 \times 5483$
$\longrightarrow$ `This equation enables the computation of log(5483)`
$\Rightarrow$ $7072 \times 10^5 - 1 = 3 \times 11 \times 3833 \times 5591$
$\longrightarrow$ `This equation enables the computation of log(5591)`
`page 610:`

$\Rightarrow \quad 6801 \times 10^4 + 1 = 31 \times 401 \times 5471$
⟶ `This equation enables the computation of log(5471)`
$\Rightarrow \quad 7243 \times 10^4 + 1 = 7 \times 1901 \times 5443$
⟶ `This equation enables the computation of log(5443)`
$\Rightarrow \quad 3065 \times 10^5 + 1 = 3 \times 19 \times 23 \times 43 \times 5437$
⟶ `This equation enables the computation of log(5437)`
$\Rightarrow \quad 6773 \times 10^4 + 1 = 3 \times 4157 \times 5431$
⟶ `This equation enables the computation of log(5431)`
$\Rightarrow \quad 3803 \times 10^5 + 1 = 3 \times 149 \times 157 \times 5419$
⟶ `This equation enables the computation of log(5419)`
$\Rightarrow \quad 1161 \times 10^4 + 1 = 13 \times 163 \times 5479$
⟶ `This equation enables the computation of log(5479)`

`page 611:`

$\Rightarrow \quad 1868 \times 10^5 + 1 = 3 \times 19 \times 607 \times 5399$
⟶ `This equation enables the computation of log(5399)`
$\Rightarrow \quad 5487 \times 10^5 - 1 = 71 \times 1433 \times 5393$
⟶ `This equation enables the computation of log(5393)`
$\Rightarrow \quad 4327 \times 10^5 + 1 = 47 \times 1709 \times 5387$
⟶ `This equation enables the computation of log(5387)`
$\Rightarrow \quad 5771 \times 10^5 - 1 = 7^2 \times 31 \times 71 \times 5351$
⟶ `This equation enables the computation of log(5351)`
$\Rightarrow \quad 9282 \times 10^5 - 1 = 101 \times 1733 \times 5303$
⟶ `This equation enables the computation of log(5303)`

`page 612:`

$\Rightarrow \quad 4528 \times 10^5 + 1 = 19 \times 4457 \times 5347$
⟶ `This equation enables the computation of log(5347)`
$\Rightarrow \quad 8032 \times 10^5 + 1 = 53 \times 2861 \times 5297$
⟶ `This equation enables the computation of log(5297)`
$\Rightarrow \quad 1033 \times 10^6 - 1 = 3 \times 19 \times 3433 \times 5279$
⟶ `This equation enables the computation of log(5279)`
$\Rightarrow \quad 2438 \times 10^5 + 1 = 3^2 \times 19 \times 271 \times 5261$
⟶ `This equation enables the computation of log(5261)`
$\Rightarrow \quad 1981 \times 10^5 - 1 = 3^4 \times 467 \times 5237$
⟶ `This equation enables the computation of log(5237)`
$\Rightarrow \quad 3964 \times 10^5 - 1 = 3 \times 17 \times 1487 \times 5227$
⟶ `This equation enables the computation of log(5227)`

`page 613:`

$\Rightarrow \quad 4151 \times 10^5 + 1 = 3 \times 101 \times 263 \times 5209$
⟶ `This equation enables the computation of log(5209)`
$\Rightarrow \quad 5038 \times 10^4 + 1 = 7 \times 19 \times 73 \times 5189$
⟶ `This equation enables the computation of log(5189)`

$\Rightarrow$ $4962 \times 10^4 - 1 = 11 \times 13 \times 67 \times 5179$
$\longrightarrow$ This equation enables the computation of log(5179)
$\Rightarrow$ $5504 \times 10^5 - 1 = 19 \times 5659 \times 5119$
$\longrightarrow$ This equation enables the computation of log(5119)
$\Rightarrow$ $7597 \times 10^4 + 1 = 47 \times 317 \times 5099$
$\longrightarrow$ This equation enables the computation of log(5099)
page 614:
$\Rightarrow$ $5584 \times 10^4 - 1 = 3 \times 3659 \times 5087$
$\longrightarrow$ This equation enables the computation of log(5087)
$\Rightarrow$ $2575 \times 10^5 - 1 = 3^3 \times 1877 \times 5081$
$\longrightarrow$ This equation enables the computation of log(5081)
$\Rightarrow$ $2944 \times 10^5 - 1 = 3^2 \times 17 \times 379 \times 5077$
$\longrightarrow$ This equation enables the computation of log(5077)
$\Rightarrow$ $5362 \times 10^4 - 1 = 3 \times 3547 \times 5039$
$\longrightarrow$ This equation enables the computation of log(5039)
$\Rightarrow$ $8727 \times 10^4 + 1 = 7 \times 13 \times 191 \times 5021$
$\longrightarrow$ This equation enables the computation of log(5021)
$\Rightarrow$ $6957 \times 10^4 + 1 = 17 \times 19 \times 43 \times 5009$
$\longrightarrow$ This equation enables the computation of log(5009)
page 615:
$\Rightarrow$ $25 \times 10^6 - 1 = 3 \times 1667 \times 4999$
$\longrightarrow$ This equation enables the computation of log(4999)
$\Rightarrow$ $4886 \times 10^5 + 1 = 3^2 \times 83 \times 131 \times 4993$
$\longrightarrow$ This equation enables the computation of log(4993)
$\Rightarrow$ $73 \times 10^6 - 1 = 3^2 \times 23 \times 71 \times 4967$
$\longrightarrow$ This equation enables the computation of log(4967)
$\Rightarrow$ $631 \times 10^6 - 1 = 3^2 \times 7^2 \times 17^2 \times 4951$
$\longrightarrow$ This equation enables the computation of log(4951)
$\Rightarrow$ $3859 \times 10^4 + 1 = 37 \times 211 \times 4943$
$\longrightarrow$ This equation enables the computation of log(4943)
page 616:
$\Rightarrow$ $1438 \times 10^5 - 1 = 3 \times 7 \times 19 \times 73 \times 4937$
$\longrightarrow$ This equation enables the computation of log(4937)
$\Rightarrow$ $3466 \times 10^4 - 1 = 3^2 \times 11 \times 71 \times 4931$
$\longrightarrow$ This equation enables the computation of log(4931)
$\Rightarrow$ $2918 \times 10^5 - 1 = 137 \times 433 \times 4919$
$\longrightarrow$ This equation enables the computation of log(4919)
$\Rightarrow$ $7849 \times 10^4 + 1 = 59 \times 271 \times 4909$
$\longrightarrow$ This equation enables the computation of log(4909)
$\Rightarrow$ $1936 \times 10^6 - 1 = 3^2 \times 23 \times 1913 \times 4889$
$\longrightarrow$ This equation enables the computation of log(4889)

$\Rightarrow \quad 2223 \times 10^6 + 1 = 101 \times 4513 \times 4877$
$\longrightarrow$ `This equation enables the computation of log(4877)`

`page 617:`

$\Rightarrow \quad 3905 \times 10^5 + 1 = 3^3 \times 3209 \times 4507$
$\longrightarrow$ `This equation enables the computation of log(4507)`

$\Rightarrow \quad 3266 \times 10^5 - 1 = 11 \times 37 \times 179 \times 4483$
$\longrightarrow$ `This equation enables the computation of log(4483)`

$\Rightarrow \quad 2541 \times 10^5 + 1 = 29 \times 41 \times 47 \times 4547$
$\longrightarrow$ `This equation enables the computation of log(4547)`

$\Rightarrow \quad 1883 \times 10^6 + 1 = 3 \times 83 \times 1699 \times 4451$
$\longrightarrow$ `This equation enables the computation of log(4451)`

$\Rightarrow \quad 2292 \times 10^4 + 1 = 13 \times 397 \times 4441$
$\longrightarrow$ `This equation enables the computation of log(4441)`

$\Rightarrow \quad 11 \times 10^6 + 1 = 3 \times 829 \times 4423$
$\longrightarrow$ `This equation enables the computation of log(4423)`

`page 618:`

$\Rightarrow \quad 4335 \times 10^5 + 1 = 11 \times 31 \times 271 \times 4691$
$\longrightarrow$ `This equation enables the computation of log(4691)`

$\Rightarrow \quad 7504 \times 10^5 + 1 = 13 \times 23 \times 541 \times 4639$
$\longrightarrow$ `This equation enables the computation of log(4639)`

$\Rightarrow \quad 3611 \times 10^6 + 1 = 3 \times 7 \times 31 \times 1187 \times 4673$
$\longrightarrow$ `This equation enables the computation of log(4673)`

$\Rightarrow \quad 1365 \times 10^5 - 1 = 73 \times 401 \times 4663$
$\longrightarrow$ `This equation enables the computation of log(4663)`

$\Rightarrow \quad 7309 \times 10^5 - 1 = 3^2 \times 19 \times 919 \times 4651$
$\longrightarrow$ `This equation enables the computation of log(4651)`

`page 619:`

$\Rightarrow \quad 8298 \times 10^4 + 1 = 13 \times 1373 \times 4649$
$\longrightarrow$ `This equation enables the computation of log(4649)`

$\Rightarrow \quad 7069 \times 10^6 + 1 = 7 \times 263 \times 827 \times 4643$
$\longrightarrow$ `This equation enables the computation of log(4643)`

$\Rightarrow \quad 9076 \times 10^4 + 1 = 23^2 \times 37 \times 4637$
$\longrightarrow$ `This equation enables the computation of log(4637)`

$\Rightarrow \quad 7239 \times 10^5 + 1 = 11 \times 17 \times 29^2 \times 4603$
$\longrightarrow$ `This equation enables the computation of log(4603)`

$\Rightarrow \quad 8633 \times 10^4 + 1 = 3 \times 6301 \times 4567$
$\longrightarrow$ `This equation enables the computation of log(4567)`

$\Rightarrow \quad 8165 \times 10^4 + 1 = 3 \times 31 \times 193 \times 4549$
$\longrightarrow$ `This equation enables the computation of log(4549)`

`page 620:`

$\Rightarrow \quad 3818 \times 10^5 - 1 = 7 \times 31 \times 389 \times 4523$

$\longrightarrow$ `This equation enables the computation of log(4523)`
$\Rightarrow$ $4651 \times 10^5 - 1 = 3 \times 7 \times 13^2 \times 29 \times 4519$
$\longrightarrow$ `This equation enables the computation of log(4519)`
$\Rightarrow$ $7105 \times 10^5 + 1 = 61 \times 2411 \times 4831$
$\longrightarrow$ `This equation enables the computation of log(4831)`
$\Rightarrow$ $6703 \times 10^5 + 1 = 7 \times 103 \times 193 \times 4817$
$\longrightarrow$ `This equation enables the computation of log(4817)`
$\Rightarrow$ $6491 \times 10^5 + 1 = 3 \times 11 \times 17 \times 241 \times 4801$
$\longrightarrow$ `This equation enables the computation of log(4801)`

`page 621:`
$\Rightarrow$ $4688 \times 10^5 - 1 = 53 \times 1847 \times 4789$
$\longrightarrow$ `This equation enables the computation of log(4789)`
$\Rightarrow$ $9465 \times 10^5 + 1 = 149 \times 1327 \times 4787$
$\longrightarrow$ `This equation enables the computation of log(4787)`
$\Rightarrow$ $4837 \times 10^5 + 1 = 37 \times 41 \times 67 \times 4759$
$\longrightarrow$ `This equation enables the computation of log(4759)`
$\Rightarrow$ $8195 \times 10^4 - 1 = 47 \times 367 \times 4751$
$\longrightarrow$ `This equation enables the computation of log(4751)`
$\Rightarrow$ $7696 \times 10^5 - 1 = 3^2 \times 7 \times 29 \times 89 \times 4733$
$\longrightarrow$ `This equation enables the computation of log(4733)`
$\Rightarrow$ $8602 \times 10^4 - 1 = 3 \times 13 \times 467 \times 4723$
$\longrightarrow$ `This equation enables the computation of log(4723)`

`page 622:`
$\Rightarrow$ $2765 \times 10^6 + 1 = 3 \times 197 \times 991 \times 4721$
$\longrightarrow$ `This equation enables the computation of log(4721)`
$\Rightarrow$ $7448 \times 10^5 + 1 = 3 \times 11 \times 4799 \times 4703$
$\longrightarrow$ `This equation enables the computation of log(4703)`
$\Rightarrow$ $7938 \times 10^5 + 1 = 283 \times 607 \times 4621$
$\longrightarrow$ `This equation enables the computation of log(4621)`
$\Rightarrow$ $3698 \times 10^6 - 1 = 607 \times 1327 \times 4591$
$\longrightarrow$ `This equation enables the computation of log(4591)`
$\Rightarrow$ $727 \times 10^5 + 1 = 11 \times 1499 \times 4409$
$\longrightarrow$ `This equation enables the computation of log(4409)`
$\Rightarrow$ $6959 \times 10^5 - 1 = 101 \times 1567 \times 4397$
$\longrightarrow$ `This equation enables the computation of log(4397)`

`page 623:`
$\Rightarrow$ $3972 \times 10^5 + 1 = 11 \times 8419 \times 4289$
$\longrightarrow$ `This equation enables the computation of log(4289)`
$\Rightarrow$ $7236 \times 10^5 + 1 = 43 \times 3929 \times 4283$
$\longrightarrow$ `This equation enables the computation of log(4283)`
$\Rightarrow$ $9429 \times 10^4 + 1 = 13^2 \times 131 \times 4259$

$\longrightarrow$ `This equation enables the computation of log(4259)`
$\Rightarrow$ $7568 \times 10^5 + 1 = 3^2 \times 19 \times 1049 \times 4219$
$\longrightarrow$ `This equation enables the computation of log(4219)`
$\Rightarrow$ $7955 \times 10^4 + 1 = 3^2 \times 2099 \times 4211$
$\longrightarrow$ `This equation enables the computation of log(4211)`
`page 624:`
$\Rightarrow$ $5731 \times 10^6 - 1 = 3 \times 17 \times 23 \times 1163 \times 4201$
$\longrightarrow$ `This equation enables the computation of log(4201)`
$\Rightarrow$ $4229 \times 10^4 - 1 = 17 \times 599 \times 4153$
$\longrightarrow$ `This equation enables the computation of log(4153)`
$\Rightarrow$ $6115 \times 10^5 - 1 = 3 \times 11^3 \times 37 \times 4139$
$\longrightarrow$ `This equation enables the computation of log(4139)`
$\Rightarrow$ $9494 \times 10^5 + 1 = 3^3 \times 11^2 \times 71 \times 4093$
$\longrightarrow$ `This equation enables the computation of log(4093)`
$\Rightarrow$ $7241 \times 10^5 + 1 = 3 \times 47 \times 1259 \times 4079$
$\longrightarrow$ `This equation enables the computation of log(4079)`
$\Rightarrow$ $7529 \times 10^5 + 1 = 3 \times 7 \times 29 \times 307 \times 4027$
$\longrightarrow$ `This equation enables the computation of log(4027)`
`page 625:`
$\Rightarrow$ $9011 \times 10^4 - 1 = 7 \times 3203 \times 4019$
$\longrightarrow$ `This equation enables the computation of log(4019)`
$\Rightarrow$ $1671 \times 10^7 - 1 = 7 \times 11 \times 149 \times 359 \times 4057$
$\longrightarrow$ `This equation enables the computation of log(4057)`
$\Rightarrow$ $3729 \times 10^5 - 1 = 43 \times 2161 \times 4013$
$\longrightarrow$ `This equation enables the computation of log(4013)`
$\Rightarrow$ $4017 \times 10^6 - 1 = 61 \times 109 \times 151 \times 4001$
$\longrightarrow$ `This equation enables the computation of log(4001)`
$\Rightarrow$ $2886 \times 10^5 - 1 = 53 \times 1381 \times 3943$
$\longrightarrow$ `This equation enables the computation of log(3943)`
$\Rightarrow$ $7625 \times 10^5 + 1 = 3 \times 19 \times 41 \times 83 \times 3931$
$\longrightarrow$ `This equation enables the computation of log(3931)`
`page 626:`
$\Rightarrow$ $6395 \times 10^5 - 1 = 17 \times 43 \times 223 \times 3923$
$\longrightarrow$ `This equation enables the computation of log(3923)`
$\Rightarrow$ $1086 \times 10^6 + 1 = 17 \times 47 \times 347 \times 3917$
$\longrightarrow$ `This equation enables the computation of log(3917)`
$\Rightarrow$ $875 \times 10^6 - 1 = 281 \times 797 \times 3907$
$\longrightarrow$ `This equation enables the computation of log(3907)`
$\Rightarrow$ $9553 \times 10^6 - 1 = 3 \times 53 \times 113 \times 137 \times 3881$
$\longrightarrow$ `This equation enables the computation of log(3881)`
$\Rightarrow$ $9108 \times 10^4 + 1 = 67 \times 353 \times 3851$

$\longrightarrow$ This equation enables the computation of log(3851)
page 627:
$\Rightarrow$ $5978 \times 10^4 + 1 = 3 \times 5273 \times 3779$
$\longrightarrow$ This equation enables the computation of log(3779)
$\Rightarrow$ $7354 \times 10^5 + 1 = 7 \times 109 \times 269 \times 3583$
$\longrightarrow$ This equation enables the computation of log(3583)
$\Rightarrow$ $4339 \times 10^5 + 1 = 29 \times 4591 \times 3259$
$\longrightarrow$ This equation enables the computation of log(3259)
$\Rightarrow$ $7386 \times 10^6 - 1 = 7 \times 71 \times 3943 \times 3769$
$\longrightarrow$ This equation enables the computation of log(3769)
$\Rightarrow$ $8354 \times 10^5 - 1 = 7 \times 19 \times 1699 \times 3697$
$\longrightarrow$ This equation enables the computation of log(3697)
$\Rightarrow$ $9277 \times 10^6 + 1 = 941 \times 2671 \times 3691$
$\longrightarrow$ This equation enables the computation of log(3691)
page 628:
$\Rightarrow$ $7037 \times 10^6 - 1 = 19 \times 151 \times 677 \times 3623$
$\longrightarrow$ This equation enables the computation of log(3623)
$\Rightarrow$ $9365 \times 10^6 + 1 = 3 \times 7^3 \times 17 \times 149 \times 3593$
$\longrightarrow$ This equation enables the computation of log(3593)
$\Rightarrow$ $7983 \times 10^6 - 1 = 13 \times 31 \times 5569 \times 3557$
$\longrightarrow$ This equation enables the computation of log(3557)
$\Rightarrow$ $6638 \times 10^6 - 1 = 19 \times 41 \times 43 \times 53 \times 3739$
$\longrightarrow$ This equation enables the computation of log(3739)
$\Rightarrow$ $4434 \times 10^6 - 1 = 11 \times 13 \times 19 \times 457 \times 3571$
$\longrightarrow$ This equation enables the computation of log(3571)
$\Rightarrow$ $6217 \times 10^6 + 1 = 409 \times 4271 \times 3559$
$\longrightarrow$ This equation enables the computation of log(3559)
$\Rightarrow$ $4393 \times 10^5 + 1 = 7 \times 37 \times 479 \times 3541$
$\longrightarrow$ This equation enables the computation of log(3541)
page 629:
$\Rightarrow$ $9346 \times 10^6 + 1 = 13 \times 31 \times 6553 \times 3539$
$\longrightarrow$ This equation enables the computation of log(3539)
$\Rightarrow$ $7064 \times 10^5 + 1 = 3^3 \times 43 \times 173 \times 3517$
$\longrightarrow$ This equation enables the computation of log(3517)
$\Rightarrow$ $7031 \times 10^6 - 1 = 37 \times 71 \times 761 \times 3517$
$\longrightarrow$ This equation enables the computation of log(3517)
$\Rightarrow$ $8344 \times 10^5 + 1 = 17 \times 73 \times 197 \times 3413$
$\longrightarrow$ This equation enables the computation of log(3413)
$\Rightarrow$ $7501 \times 10^6 - 1 = 3 \times 821 \times 911 \times 3343$
$\longrightarrow$ This equation enables the computation of log(3343)
$\Rightarrow$ $9855 \times 10^6 + 1 = 7^2 \times 11^2 \times 499 \times 3331$

⟶ `This equation enables the computation of log(3331)`

`page 630:`

$\Rightarrow\quad 8786 \times 10^6 - 1 = 7 \times 101 \times 3733 \times 3329$

⟶ `This equation enables the computation of log(3329)`

$\Rightarrow\quad 9517 \times 10^6 - 1 = 3 \times 13 \times 73 \times 1009 \times 3313$

⟶ `This equation enables the computation of log(3313)`

$\Rightarrow\quad 9464 \times 10^5 + 1 = 3 \times 227 \times 421 \times 3301$

⟶ `This equation enables the computation of log(3301)`

$\Rightarrow\quad 5747 \times 10^6 - 1 = 13 \times 131 \times 1049 \times 3217$

⟶ `This equation enables the computation of log(3217)`

$\Rightarrow\quad 5452 \times 10^6 + 1 = 7 \times 83 \times 3167 \times 2963$

⟶ `This equation enables the computation of log(2963)`

$\Rightarrow\quad 7171 \times 10^6 + 1 = 11 \times 113 \times 1951 \times 2957$

⟶ `This equation enables the computation of log(2957)`

`page 631:`

$\Rightarrow\quad 7271 \times 10^6 - 1 = 101 \times 103 \times 227 \times 3079$

⟶ `This equation enables the computation of log(3079)`

$\Rightarrow\quad 6724 \times 10^6 - 1 = 3^3 \times 43 \times 1907 \times 3037$

⟶ `This equation enables the computation of log(3037)`

$\Rightarrow\quad 5686 \times 10^6 - 1 = 3 \times 383 \times 1637 \times 3023$

⟶ `This equation enables the computation of log(3023)`

$\Rightarrow\quad 8347 \times 10^6 + 1 = 1319 \times 2143 \times 2953$

⟶ `This equation enables the computation of log(2953)`

$\Rightarrow\quad 6058 \times 10^6 - 1 = 3^2 \times 47 \times 5113 \times 2801$

⟶ `This equation enables the computation of log(2801)`

$\Rightarrow\quad 1331 \times 10^6 - 1 = 7 \times 157 \times 433 \times 2797$

⟶ `This equation enables the computation of log(2797)`

$\Rightarrow\quad 5594 \times 10^6 + 1 = 3 \times 73 \times 9319 \times 2741$

⟶ `This equation enables the computation of log(2741)`

`page 632:`

$\Rightarrow\quad 7909 \times 10^6 - 1 = 3 \times 41 \times 137 \times 173 \times 2713$

⟶ `This equation enables the computation of log(2713)`

$\Rightarrow\quad 7406 \times 10^6 + 1 = 3^2 \times 193 \times 1367 \times 3119$

⟶ `This equation enables the computation of log(3119)`

$\Rightarrow\quad 8033 \times 10^6 + 1 = 3 \times 13 \times 97 \times 683 \times 3109$

⟶ `This equation enables the computation of log(3109)`

$\Rightarrow\quad 8482 \times 10^6 + 1 = 1447 \times 1973 \times 2971$

⟶ `This equation enables the computation of log(2971)`

$\Rightarrow\quad 5535 \times 10^6 + 1 = 29 \times 83 \times 859 \times 2677$

⟶ `This equation enables the computation of log(2677)`

$\Rightarrow\quad 7892 \times 10^6 + 1 = 3^2 \times 379 \times 797 \times 2903$

$\longrightarrow$ `This equation enables the computation of log(2903)`

`page 633:`

$\Rightarrow$ $3257 \times 10^6 - 1 = 11 \times 37 \times 2857 \times 2801$

$\longrightarrow$ `This equation enables the computation of log(2801)`

$\Rightarrow$ $6531 \times 10^6 + 1 = 83 \times 103 \times 271 \times 2819$

$\longrightarrow$ `This equation enables the computation of log(2819)`

$\Rightarrow$ $7802 \times 10^6 - 1 = 353 \times 8093 \times 2731$

$\longrightarrow$ `This equation enables the computation of log(2731)`

$\Rightarrow$ $7796 \times 10^6 - 1 = 887 \times 3271 \times 2687$

$\longrightarrow$ `This equation enables the computation of log(2687)`

$\Rightarrow$ $7573 \times 10^6 - 1 = 3 \times 29 \times 181^2 \times 2657$

$\longrightarrow$ `This equation enables the computation of log(2657)`

$\Rightarrow$ $4051 \times 10^6 - 1 = 3^3 \times 79 \times 733 \times 2591$

$\longrightarrow$ `This equation enables the computation of log(2591)`

$\Rightarrow$ $4783 \times 10^6 + 1 = 13 \times 233 \times 619 \times 2551$

$\longrightarrow$ `This equation enables the computation of log(2551)`

`page 634:`

$\Rightarrow$ $9943 \times 10^5 + 1 = 19 \times 37 \times 571 \times 2477$

$\longrightarrow$ `This equation enables the computation of log(2477)`

$\Rightarrow$ $8827 \times 10^5 + 1 = 43 \times 53 \times 157 \times 2467$

$\longrightarrow$ `This equation enables the computation of log(2467)`

$\Rightarrow$ $3248 \times 10^6 + 1 = 3^2 \times 47 \times 3169 \times 2423$

$\longrightarrow$ `This equation enables the computation of log(2423)`

$\Rightarrow$ $5944 \times 10^6 - 1 = 3 \times 7 \times 181 \times 647 \times 2417$

$\longrightarrow$ `This equation enables the computation of log(2417)`

$\Rightarrow$ $6754 \times 10^6 - 1 = 3 \times 463 \times 2063 \times 2357$

$\longrightarrow$ `This equation enables the computation of log(2357)`

$\Rightarrow$ $6836 \times 10^6 + 1 = 3 \times 367 \times 2689 \times 2309$

$\longrightarrow$ `This equation enables the computation of log(2309)`

`page 635:`

$\Rightarrow$ $3173 \times 10^6 - 1 = 13 \times 59 \times 1801 \times 2297$

$\longrightarrow$ `This equation enables the computation of log(2297)`

$\Rightarrow$ $2978 \times 10^6 + 1 = 3^2 \times 313 \times 479 \times 2207$

$\longrightarrow$ `This equation enables the computation of log(2207)`

$\Rightarrow$ $6289 \times 10^6 + 1 = 29 \times 37 \times 2753 \times 2129$

$\longrightarrow$ `This equation enables the computation of log(2129)`

$\Rightarrow$ $5353 \times 10^6 + 1 = 17 \times 337 \times 449 \times 2081$

$\longrightarrow$ `This equation enables the computation of log(2081)`

$\Rightarrow$ $3539 \times 10^6 - 1 = 197 \times 9041 \times 1987$

$\longrightarrow$ `This equation enables the computation of log(1987)`

$\Rightarrow$ $7222 \times 10^5 + 1 = 17 \times 71 \times 307 \times 1949$

$\longrightarrow$ `This equation enables the computation of log(1949)`

`page 636:`

$\Rightarrow \quad 135 \times 10^5 + 1 = 53 \times 179 \times 1423$

$\longrightarrow$ `This equation enables the computation of log(1423)`

$\Rightarrow \quad 425 \times 10^7 + 1 = 3 \times 13^2 \times 89 \times 97 \times 971$

$\longrightarrow$ `This equation enables the computation of log(971)`

$\Rightarrow \quad 8129 \times 10^5 - 1 = 17 \times 103 \times 157 \times 2957$

$\longrightarrow$ `This equation enables the computation of log(2957)`

$\Rightarrow \quad 4892 \times 10^6 + 1 = 3 \times 7 \times 151 \times 1511 \times 1021$

$\longrightarrow$ `This equation enables the computation of log(1021)`

$\Rightarrow \quad 808 \times 10^6 + 1 = 29^2 \times 941 \times 1021$

$\longrightarrow$ `This equation enables the computation of log(1021)`

`page 637:`

$\Rightarrow \quad 5342 \times 10^6 + 1 = 3 \times 13 \times 149 \times 823 \times 1117$

$\longrightarrow$ `This equation enables the computation of log(1117)`

$\Rightarrow \quad 2639 \times 10^6 - 1 = 43 \times 211 \times 239 \times 1217$

$\longrightarrow$ `This equation enables the computation of log(1217)`

$\Rightarrow \quad 2229 \times 10^6 + 1 = 29 \times 137 \times 461 \times 1217$

$\longrightarrow$ `This equation enables the computation of log(1217)`