

QA
55
C8

UC-NRLF

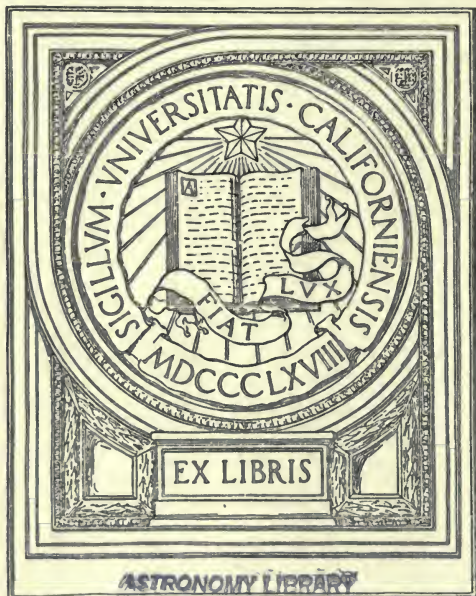


\$B 111 483

YC102260

Florence L. Baldwin 1909
15 Cottage Street.

GIFT OF
the estate of
Professor William F. Meyer



EX LIBRIS

ASTRONOMY LIBRARY



Digitized by the Internet Archive
in 2007 with funding from
Microsoft Corporation

TABLES OF LOGARITHMS

TO

FIVE PLACES OF DECIMALS,

WITH AUXILIARY TABLES.

EDITED BY

EDWIN S. CRAWLEY, Ph.D.,

THOMAS A. SCOTT PROFESSOR OF MATHEMATICS IN THE UNIVERSITY OF PENNSYLVANIA.



E. S. CRAWLEY,
UNIVERSITY OF PENNSYLVANIA,
PHILADELPHIA,

1905.

Astronomy
Add to lib

COPYRIGHT, 1890,
BY
EDWIN S. CRAWLEY.

Meyer gift

ELECTROTYPED AND PRINTED BY J. B. LIPPINCOTT COMPANY, PHILADELPHIA, U. S. A.

QA55
C8
Astron
lib

EDITOR'S NOTE.

THIS collection of logarithmic tables has been prepared to accompany the editor's *Elements of Trigonometry*, in response to the demand of a number of teachers using the latter, who prefer a text bound with tables. In commending the tables to the use of educational institutions and the mathematical public in general, the editor wishes to state that great care has been taken to secure accuracy. The proof has been compared twice, number by number, with different standard tables (Vega's seven-place Tables, the 74th edition, edited by W. L. F. Fischer; and Gauss's five-place Tables, the 20th edition), and the method of differences was applied as a further check. Besides these, other tests were applied to parts of the tables, as in the case of Table III., where the log tan column was checked by taking the difference of log sin and log cos, and the log cot column was checked by taking the arithmetical complement of log tan.

Should any errors be discovered, the editor will be glad to be informed of them.

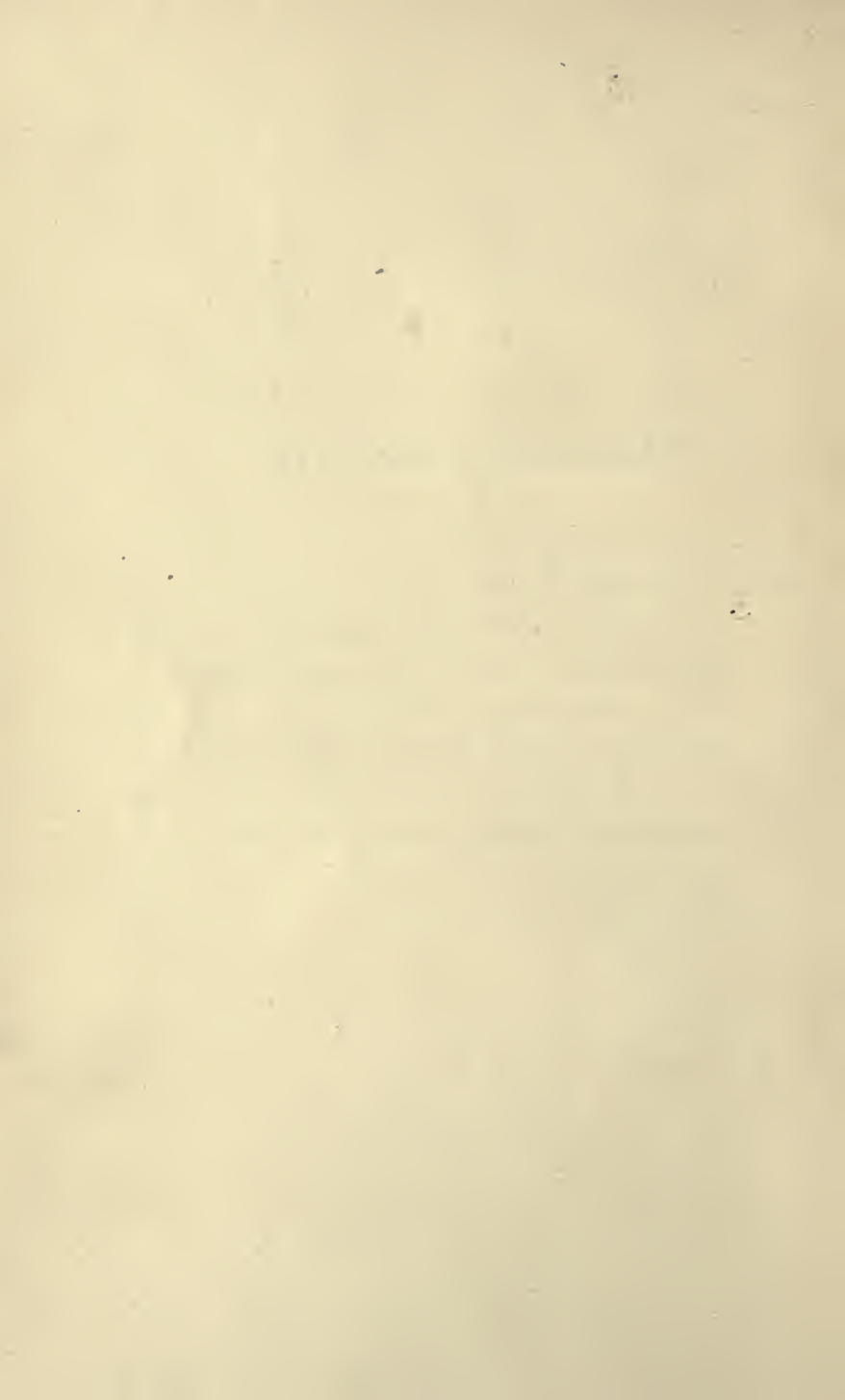
EDWIN S. CRAWLEY.

UNIVERSITY OF PENNSYLVANIA,
January, 1899.

577188

TABLE OF CONTENTS.

| | |
|---|-----|
| EXPLANATION OF THE TABLES | vii |
| TABLE I.—Logarithms of Numbers | 1 |
| “ II.—Important Constants and their Logarithms | 20 |
| “ III.—Logarithms of the Sine, Cosine, Tangent, Cotangent for every Minute of the Quadrant | 21 |
| “ IV.—Table for Computing the Log Sin and Log Tan of Small Angles | 67 |
| “ V.—Natural Sines, Cosines, Tangents, and Cotangents . . | 69 |
| “ VI.—Circular Arcs, expressed in Radians | 74 |
| “ VII.—Napierian Logarithms of Numbers | 75 |



EXPLANATION OF THE TABLES.

1. Definitions and Rules. If three numbers n , a , x have such values that the equation

$$n = a^x \tag{1}$$

is true, then x is called the *logarithm* of n to the base a . If, without changing a , we give to n and x all possible values, consistent with this equation, the values of x thus obtained form a *system of logarithms* to the base a .

Hence:—*The logarithm of a number to a given base is the exponent of the power to which the base must be raised to produce the number.*

Suppose 9 is taken for the base, then

| | | |
|-----------------------|---------|------------------------|
| log 81 = 2, | because | $9^2 = 81$ |
| “ 729 = 3, | “ | $9^3 = 729$ |
| “ $\frac{1}{9} = -1,$ | “ | $9^{-1} = \frac{1}{9}$ |
| “ $3 = \frac{1}{2},$ | “ | $9^{\frac{1}{2}} = 3$ |
| “ $9 = 1,$ | “ | $9^1 = 9$ |
| “ $1 = 0,$ | “ | $9^0 = 1$ |

In every system the logarithm of the base is 1, and the logarithm of 1 is 0. This follows directly from the definition, or from (1); for if $n = a$, x must be 1; and if $n = 1$, x must be 0, without respect to the value of a .

It is plain, since any number will serve as the base of a system of logarithms, that the number of such systems is indefinite.

The systems of logarithms commonly used are :

- (1.) The common or Briggian* system, with the base 10.
- (2.) The natural or Napierian† system with the base

$$e = 2.7182818285 \dots$$

defined by the convergent infinite series

$$e = 1 + 1 + \frac{1}{1 \cdot 2} + \frac{1}{1 \cdot 2 \cdot 3} + \frac{1}{1 \cdot 2 \cdot 3 \cdot 4} + \dots$$

Of these two systems, the first is used for all purposes of numerical computation, and the second for purely analytical purposes.

The logarithms of these tables (except in Table VII.) are common or Briggian logarithms.

The corresponding logarithms of any two systems are in a constant ratio to each other. Thus the relation between common and Napierian logarithms is

$$\log_{10} n = \frac{1}{\log_e 10} \log_e n.$$

(This equation is read: "Logarithm of n to the base 10 equals the reciprocal of the logarithm of 10 to the base e , multiplied by the logarithm of n to the base e .") The factor $\frac{1}{\log_e 10}$ is called the *modulus* of the common system. It is represented by M , and its value to ten places is 0.4342944819.

The rules governing the use of logarithms in computation are the following:—

I. *To multiply numbers, find the logarithm of each factor, and add them; the sum is the logarithm of the product.*

II. *To divide one number by another, subtract the logarithm of the divisor from the logarithm of the dividend; the difference is the logarithm of the quotient.*

III. *To raise a number to any power multiply the logarithm of the number by the exponent of the power; the product is the logarithm of the required power of the number.*

* Named for Henry Briggs (1556–1631), who first suggested the use of the base 10.

† Named for John Napier, Baron of Merchiston, in Scotland (1550–1617), the inventor of logarithms.

IV. To extract any root of a number, divide the logarithm of the number by the index of the root; the quotient is the logarithm of the required root of the number.

These statements and rules are given without proof, as the purpose here is simply to familiarize the student with the mechanism and use of the tables. The theory of logarithms is set forth in text-books on algebra, to which the student is referred. In the same place will be found an explanation of how logarithms are computed.

TABLE I. *Common Logarithms of Numbers.* (Pages 1-19.)

2. Characteristic and Mantissa. A logarithm consists, usually, of two parts: a whole number, called the *characteristic*, and an incommensurable decimal fraction, called the *mantissa*. The table gives only the mantissa; the characteristic, which may be positive, negative, or zero, must be supplied in every case by the computer. The mantissa is always positive, except in the logarithms of exact powers of 10, when it is zero.

Since 10 is the base we have:

$$\left. \begin{array}{l} \log 1000 = 3, \text{ because } 10^3 = 1000 \\ \log 100 = 2, \quad \text{ " } \quad 10^2 = 100 \\ \log 10 = 1, \quad \text{ " } \quad 10^1 = 10 \\ \log 1 = 0, \quad \text{ " } \quad 10^0 = 1 \\ \log \sqrt{1} = -1, \quad \text{ " } \quad 10^{-1} = .1 \\ \log .01 = -2, \quad \text{ " } \quad 10^{-2} = .01 \\ \log .001 = -3, \quad \text{ " } \quad 10^{-3} = .001 \end{array} \right\} (a)$$

This series of equations can be extended indefinitely in both directions.

Let us now consider two numbers which contain the same sequence of figures, with different positions of the decimal point, say 72.936 and .72936. Now $72.936 = 100 \times .72936$. Hence, by Rule I, § 1 $\log 72.936 = \log 100 + \log .72936$, or, by (a) $= 2 + \log .72936$.

Hence, since any change in the position of the decimal

point in a number is equivalent to multiplication or division by a power of 10, the effect produced upon the logarithm of the number by a change of this kind is to increase it or diminish it by a whole number; that is, the characteristic is affected by such a change, but not the mantissa. We have, therefore, the following important fact:

I. *The mantissa of the logarithm of a number depends only upon the sequence of figures in the number.*

Referring again to (a), we note that for all numbers greater than 1 and less than 10 (all numbers with one significant figure before the decimal point) the logarithm is greater than 0 and less than 1, that is, its characteristic is 0; for all numbers greater than 10 and less than 100 (all numbers with two significant figures before the decimal point) the logarithm is greater than 1 and less than 2, that is, its characteristic is 1; for all numbers greater than 100 and less than 1000 (all numbers with three significant figures before the decimal point) the logarithm is greater than 2 and less than 3, that is, its characteristic is 2; and so on. Hence, we have the following rule:

II. *The characteristic of the logarithm of a number greater than unity is one less than the number of significant figures preceding the decimal point.*

Again, from (a) it will be seen that if a number is greater than .1 and less than 1, its logarithm is between 0 and -1 ; that is, using a positive mantissa, which we always do, it is $-1 +$ the mantissa, hence the characteristic is -1 ; if the number is greater than .01 and less than .1, the logarithm is between -1 and -2 , which is written $-2 +$ the mantissa, that is, the characteristic is -2 ; if the number is greater than .001 and less than .01, the logarithm is between -2 and -3 , which is written $-3 +$ the mantissa, that is, the characteristic is -3 , and so on. Hence, we have the following rule:

III. *The characteristic of the logarithm of a number less than unity is negative, and is numerically one greater than the number of ciphers between the decimal point and the first significant figure.*

Verify the following statements :

| | | |
|-----------------------|----------|-------------|
| characteristic of log | 763.92 = | 2 |
| “ | “ log | 1.9841 = 0 |
| “ | “ log | .07296 = -2 |
| “ | “ log | 26 = 1 |
| “ | “ log | 400000 = 5 |
| “ | “ log | .9426 = -1 |
| “ | “ log | 3869 = 3 |
| “ | “ log | .00042 = -4 |
| “ | “ log | .005 = -3 |
| “ | “ log | 62893 = 4 |

3. To Find the Logarithm of a Number of Four Figures or Less.

If the number has less than four figures add ciphers on the right until it has four figures, and then proceed in the manner described below.

If the number has four figures, enter the table in the left hand column of the page, the column marked *N*, with the first three figures (the first three significant figures if the number is a decimal fraction) and with the fourth figure in the line running across the page at the extreme top or bottom. Go across the page, in the line containing the first three figures, until the column marked by the fourth figure is reached. The three figures found at this point are the *last three figures of the mantissa*. The first two figures of the mantissa are printed only in the first column of the body of the table, and if they are not found in the same line with the last three figures they will be found a few lines above.

Suppose the number is 48.65. We find 486 in the *N* column on page 9; and the column marked 5 at the top and bottom is the one to the right of the heavy line down the middle of the page. The three figures in this column and on the same line with 486 are 708, which are the last three figures of the mantissa; the first two figures are 68. Hence, mantissa of log 48.65 is .68708. By II. § 2 characteristic of log 48.65 is 1. Hence, $\log 48.65 = 1.68708$.

Find log 6.2. Annexing two ciphers, this becomes 6.200.

Proceeding then as above, we find that the mantissa is 79239. Hence, $\log 6.2 = 0.79239$.

Find $\log 431$. Annexing one cipher this becomes 431.0. Hence, the mantissa is 63448; and $\log 431. = 2.63448$.

An important exception in one point of the usual procedure is exemplified below. Find $\log .07416$. Entering the table on page 14, line 741, we find in the column marked 6, the figures *017. The asterisk is inserted to indicate that the first two figures of the mantissa are to be taken from the line below, instead of from above. Hence, the mantissa of $\log .07416$ is .87017; and by III. § 2 $\log .07416 = \bar{2}.87017$. The negative sign is written over the characteristic, instead of before it, as it applies to the characteristic only, the mantissa being positive.

The reason for placing this asterisk in the table is easily seen. The last logarithm that begins with 86 is 86999. The next one in order is 87005, but as this comes in the middle of the page there is not room to print 87 in the same column with 005, so the asterisk is inserted to call the computer's attention to this fact and bid him take the first two figures from below.

Verify the following statements:

| | |
|-------------------------|-------------------------|
| $\log 863.2 = 2.93611$ | $\log 3 = 0.47712$ |
| $\log 1.29 = 0.11059$ | $\log 2758 = 3.44059$ |
| $\log 18000 = 4.25527$ | $\log 64.58 = 1.81010$ |
| $\log .92 = 1.96379$ | $\log .00006 = 5.77815$ |
| $\log .04312 = 2.63468$ | $\log .00183 = 3.26245$ |

It is proper at this point to explain that in practical computation negative characteristics are very rarely used. Their use is avoided by adding 10 to the characteristic and writing -10 after the logarithm. In this way the true value of the logarithm is not changed. With this modification the four logarithms above with negative characteristics become

| | |
|------------------------------|------------------------------|
| $\log .92 = 9.96379 - 10$ | $\log .00006 = 5.77815 - 10$ |
| $\log .04312 = 8.63468 - 10$ | $\log .00183 = 7.26245 - 10$ |

This method will be used exclusively in the examples which follow. After a little practice the -10 's written after the logarithm may be omitted without danger of error in the final

result. Rule III. § 2 can be changed, therefore, to the following :

The characteristic of the logarithm of a number less than unity is formed by subtracting from 9 the number of ciphers between the decimal point and the first significant figure, and writing -10 after the logarithm.

Verify the following statements :

$$\log .3628 = 9.55967 - 10$$

$$\log .0026 = 7.41497 - 10$$

$$\log .0796 = 8.90091 - 10$$

$$\log .007 = 7.84510 - 10$$

4. To Find the Number to Four Figures which Corresponds to a Given Logarithm.

The method is best explained by an example. Given $\log x = 1.79683$, to find x . Disregarding the characteristic for the moment, we enter the table with the first two figures of the mantissa, 79, looking for them in the column headed with 0. We find them on page 12. We then look in that part of the body of the table which contains the logarithms beginning with 79, for the number nearest to 683; we find 685.

The logarithm in the table nearest to our given logarithm is now located. The first three figures of the corresponding number are taken from the column N , on the same line with 685. They are 626. The fourth figure of the number is that which stands at the top of the column containing 685. It is 4. Hence, the number is 6264. To insert the decimal point we note that the characteristic of the given logarithm is 1; hence, we must have two figures before the decimal point. We have, therefore, $x = 62.64$.

Given $\log x = 7.14168 - 10$ find x . The nearest logarithm in the table is .14176, on page 2 (notice the asterisk). The corresponding number is 1386. The real value of the characteristic is $7 - 10 = -3$. Hence by III. § 2 there must be two ciphers between the decimal point and the first significant figure. We can also obtain the number of ciphers by subtracting the augmented characteristic 7, from 9, according to the rule above. The result is, therefore, $x = .001386$.

Verify the following statements:

| | | | |
|--------------------------|--------------|--------------------------|---------------|
| $\log x = 1.73682,$ | $x = 54.55$ | $\log x = 9.74464 - 10,$ | $x = .5554$ |
| $\log x = 5.41621,$ | $x = 260700$ | $\log x = 4.48493,$ | $x = 30540$ |
| $\log x = 8.91929 - 10,$ | $x = .08304$ | $\log x = 3.14139,$ | $x = 1385$ |
| $\log x = 2.43625,$ | $x = 273.1$ | $\log x = 7.79012 - 10,$ | $x = .006168$ |
| $\log x = .64443,$ | $x = 4.41$ | $\log x = 6.56822 - 10,$ | $x = .00037$ |

5. Exercises and Examples.

1. Compute the value of $(1.789)^5$.

By III. § 1, we have $\log (1.789)^5 = 5 \times \log 1.789$.

$$\log 1.789 = .25261$$

$$\log (1.789)^5 = \frac{5}{1.26305} \quad \therefore (1.789)^5 = 18.33$$

2. Compute the value of $728 \times 63.86 \times .4792$

$$\log 728 = 2.86213$$

$$\log 63.86 = 1.80523$$

$$\log .4792 = \frac{9.68052 - 10}{10}$$

$$\therefore \text{by I. § 1, } \log (728 \times 63.86 \times .4792) = \begin{cases} 14.34788 - 10 \\ \text{or } 4.34788. \end{cases}$$

$$\text{Hence} \quad 728 \times 63.86 \times .4792 = 22280.$$

3. Compute the value of $\sqrt[3]{73}$.

$$\log 73 = 1.86332.$$

$$\text{By IV. § 1,} \quad \log \sqrt[3]{73} = \frac{1}{3} \log 73 = .62111,$$

$$\therefore \sqrt[3]{73} = 4.179$$

In dividing $\log 73$ by 3, the division is not exact. Such cases arise with great frequency in logarithmic work; and the student must carefully observe the two following rules:

(1.) *Never carry the work beyond the number of decimal places given in the table, that is with this table, five places.*

(2.) *When the division is not exact, always take in the last place the figure that is nearest to the true result.*

Thus, in the case just above, where we divide 1.86332 by 3, the last step of the division is 2 divided by 3. Now 3 goes into 2 more nearly once than no times; hence, we take 1 for the last figure. Sometimes, when the divisor is an even number, the result falls just half way between two integers in the last place. We then take at pleasure either the larger or smaller of these two figures for the last figure. The following example illustrates this:

$$4. \text{ Find } \sqrt{4711}. \quad \log 4711 = 3.67311,$$

$$\therefore \log \sqrt{4711} = \frac{1}{2} \log 4711 = 1.83655 \text{ or } 1.83656.$$

Both of these logarithms give 66.44 as the result to four figures.

5. Find $\sqrt[7]{.06398}$.

$$\log .06398 = 8.80604 - 10.$$

We cannot divide this logarithm by 7 without getting an awkward result. But if we add and subtract 60, we have

$$\log .06398 = 68.80604 - 70,$$

where the number subtracted from the logarithm is now ten times the number by which we must divide; and hence, after the division, it will be reduced to 10. This is the best practice for such cases. Performing the division, we have

$$\log \sqrt[7]{.06398} = 9.82943 - 10, \quad \therefore \sqrt[7]{.06398} = .6752$$

6. $x = \frac{\sqrt{27}}{(9.261)^{\frac{2}{3}}}$, find x .

$$\log \sqrt{27} = \frac{1}{2} \log 27 = \frac{1}{2} \times 1.43136 = .71568$$

$$\log (9.261)^{\frac{2}{3}} = \frac{2}{3} \log 9.261 = \frac{2}{3} \times 0.96666 = .64444$$

$$\text{By II. } \frac{1}{2} 1$$

$$\log x = .30140$$

\therefore

$$x = 2.002.$$

7. $x = \frac{68.96 \times \sqrt[3]{.4228}}{39 \times (8.642)^{\frac{5}{3}} \times (.96)^2}$, find x .

$$\log 68.96 = 1.83860$$

$$\log \sqrt[3]{.4228} = \frac{1}{3} \log (.4228) = \frac{1}{3} \times 29.62613 - 30 = \frac{9.87538}{3} - 10$$

$$\log \text{ of numerator} = \frac{11.71398}{3} - 10$$

$$\log 39 = 1.59106$$

$$\log (8.642)^{\frac{5}{3}} = \frac{5}{3} \log 8.642 = \frac{5}{3} \times 0.93661 = 1.56102$$

$$\log (.96)^2 = 2 \log (.96) = 2 \times 9.98227 - 10 = \frac{19.96454}{2} - 20$$

$$\log \text{ of denominator} = \begin{cases} 23.11662 - 20 \\ \text{or } 3.11662 \end{cases}$$

$$\log x = \log \text{ of numerator} - \log \text{ of denominator} = 8.59736 - 10.$$

Hence

$$x = .03957.$$

In order to explain clearly each step in working this example, the amount of written work set down is much greater than is allowable in ordinary practice. The work for the same example is arranged below in more concise form, and at the same time the -10 's are omitted from the logarithms with negative characteristics.

| | |
|--|---|
| $\log 39 = 1.59106$ | $\log 68.96 = 1.83860$ |
| $\log (8.642)^{\frac{5}{3}} = 1.56102$ | $\log \sqrt[3]{.4228} = \frac{9.87538}{3}$ |
| $\log (.96)^2 = 9.96454$ | $\log \text{ of num.} = \frac{11.71398}{3}$ |
| $\log \text{ of denom.} = 3.11662$ | <u>3.11662</u> |
| $x = .03957$ | $\log x = 8.59736$ |

EXAMPLES.

Find the values of the following numerical expressions, and give the results to four significant figures :

- | | |
|--|---|
| 1. $839.6 \times \sqrt{6129}$. <i>Ans.</i> 65730 | 5. $\frac{21.38 \times 6.296 \times .412}{7 \times \sqrt[3]{41290}}$. <i>Ans.</i> .2292 |
| 2. $19.63 \times \sqrt[3]{689.2}$. <i>Ans.</i> 173.4 | 6. $\frac{4.19 \times 6.2 \times \sqrt[3]{.067}}{(3.339)^3 \times 142.9}$. <i>Ans.</i> .001983 |
| 3. $2 \times \frac{3.641}{(2.962)^{\frac{3}{2}}}$. <i>Ans.</i> 3.796 | 7. $\frac{298.7 \times 563 \times \sqrt{11}}{(2.96)^4}$. <i>Ans.</i> 7266 |
| 4. $\frac{\sqrt{.04968}}{\sqrt[3]{12} \times \sqrt[4]{17}}$. <i>Ans.</i> .04795 | 8. $\frac{(9.8)^3 \times \sqrt[5]{.4621} \times 18}{\sqrt{41.63} \times (2.649)^5}$. <i>Ans.</i> 197.0 |

6. The **Arithmetical Complement of the Logarithm or Co-logarithm**. To compute the value of $\frac{a}{b}$ by logarithms, we may take either $\log a - \log b$, or $\log a + \log \frac{1}{b}$.

$\log \frac{1}{b} = \log 1 - \log b = 0 - \log b$ is called the *co-logarithm* of

b. We have, therefore, the following rule :

To form the co-logarithm of a given number subtract the logarithm of the number from 0.

It is customary in practice to subtract the logarithm from 10 instead of from 0, and then to write -10 after the result; that is, the logarithm is subtracted from 0, written in the form 10.00000 -10 . If the logarithm is one which has been itself augmented by 10, the two -10 's, that in the subtrahend and that in the minuend, cancel each other.

Ex. Find $\text{colog } 729.6$. $\log 729.6 = 2.86308$. Subtracting this from 10.00000 -10 , the result is $\text{colog } 729.6 = 7.13692 - 10$.

Ex. Find $\text{colog } .0641$. $\log .0641 = 8.80686 - 10$. Subtracting this from 10.00000 -10 , the result is $\text{colog } .0641 = 1.19314$.

Verify the following statements :

| | |
|----------------------------------|----------------------------------|
| $\text{colog } 9986 = 6.00061,$ | $\text{colog } 3.9 = 9.40894,$ |
| $\text{colog } 7.298 = 9.13680,$ | $\text{colog } 380.6 = 7.41953,$ |
| $\text{colog } .4682 = .32957,$ | $\text{colog } .005 = 2.30103.$ |

With a little practice the student can write down the colog directly from the table, as readily as the log itself. The practical rule is to subtract each figure of the logarithm, beginning at the left, from 9, except the last or right-hand figure, which must be subtracted from 10. When the characteristic of the logarithm is 0, care must be taken not to forget to subtract this from 9, just as any other characteristic would be subtracted.

The practical advantage of using cologs consists in the fact that thereby the number of separate operations required to obtain the log of the result is reduced. For example, suppose we wish to calculate $\log \frac{a \times b \times c}{d \times e \times f}$. Without using co = logs three operations are required:

- (1.) to find $\log a + \log b + \log c$,
- (2.) " $\log d + \log e + \log f$,
- (3.) to subtract (2) from (1).

If, on the other hand, cologs are used, these three operations are reduced to one, viz.: to find $\log a + \log b + \log c + \text{colog } d + \text{colog } e + \text{colog } f$.

Ex. By using cologs the work of *Ex.* 7, p. xv., may be arranged in the following concise form:

| | |
|---------------------------------------|-------------|
| $\log 68.96$ | $= 1.83860$ |
| $\log \sqrt[3]{.4228}$ | $= 9.87538$ |
| $\text{colog } 39$ | $= 8.40894$ |
| $\text{colog } (8.642)^{\frac{1}{2}}$ | $= 8.43898$ |
| $\text{colog } (.96)^2$ | $= 0.03546$ |
| $\log x$ | $= 8.59736$ |

7. To Find the Logarithm of a Number which Consists of Five Figures.

This is accomplished by the aid of the operation known as *interpolation*. Let the given number be 31.687. The table gives $\log 31.68 = 1.50079$ and $\log 31.69 = 1.50092$. To find $\log 31.687$ a small correction must either be added to $\log 31.68$ or subtracted from $\log 31.69$.

The whole difference between two consecutive logarithms in

the table is called the *tabular difference*. In this case the tabular difference is 13. That is, the logarithm increases by 13 for a change of unity in the fourth place in the number. Hence, for 7 in the fifth place the proportional change in the logarithm will be seven-tenths of 13, or 9.1, the nearest integer to which is 9; hence, 9 is the correction to be added to $\log 31.68$ to obtain 31.687. Therefore,

$$\log 31.687 = 1.50079 + .00009 = 1.50088$$

This method of determining the correction for the fifth figure is not theoretically correct, for it assumes that logarithms vary proportionally with the corresponding numbers; but while this is not true, it is applied here for such a small interval that no appreciable error arises from its use.

The work of computing corrections for the fifth figure is performed in the little auxiliary tables in the column headed Prop. Pts. (Proportional Parts). On the same page with $\log 31.68$ we find one of these tables headed by the tabular difference 13. In this table we look in the column to the left of the vertical line for the fifth figure, 7, of the given number. The corresponding number to the right of the vertical line, which is 9.1, is the required correction, the nearest integer to which must be added to the logarithm corresponding to the first four figures of the given number.

The student should accustom himself to apply the correction for the fifth figure mentally, and to write nothing on the paper except the corrected logarithm.

Verify the following statements:

| | |
|--------------------------|--------------------------|
| $\log 414.23 = 2.61724,$ | $\log 69.426 = 1.84152,$ |
| $\log 3.8642 = 0.58706,$ | $\log 1418.1 = 3.15171,$ |
| $\log .43007 = 9.63354,$ | $\log 85672. = 4.93284.$ |

8. To Find the Number to Five Figures Corresponding to any Logarithm.

Let $\log x = 2.38647$. Look in the table for the nearest mantissa that is *less* than 38647, not for that which is absolutely

nearest, as when only four figures are required. This is found to be 38632, which corresponds to the natural number 2434. These are the first four figures of x . Next find the tabular difference, which is 18. Then subtract the mantissa taken from the table (38632) from the mantissa of the given logarithm (38647); the difference is 15. Hence, we have the problem: If a difference of 18 in the mantissæ makes a change of a unit in the fourth figure of the number, what change will be made by a difference of 15 in the mantissæ? Evidently we have the proportion

$$18 : 1 = 15 : \text{difference required}$$

$$\text{or} \quad \text{difference} = \frac{15}{18} = \frac{5}{6} = .8;$$

that is, the correction is .8 of a unit in the fourth place, or 8 units in the fifth place. Hence, the figures in the number x are 24348, and inserting the point after the 3, because the characteristic is 2, we have $x = 243.48$.

The work of determining the fifth figure is performed in the marginal tables of Prop. Pts. Find the one corresponding to the tabular difference 18, and look on the right of the vertical column for the number nearest to 15, the difference between the given log and the next smaller one in the table. We find 14.4 and the corresponding number on the left of the vertical line, which is 8, is the required fifth figure.

Verify the following statements :

| | | | |
|--------------------------|--------------|--------------------------|----------------|
| $\log x = 3.28642,$ | $x = 1933.8$ | $\log x = 7.63419 - 10,$ | $x = .0043072$ |
| $\log x = 1.46010,$ | $x = 28.847$ | $\log x = 2.31419,$ | $x = 206.15$ |
| $\log x = 9.38642 - 10,$ | $x = .24346$ | $\log x = .76787,$ | $x = 5.8596$ |

9. Exercises and Examples.

$$x = \frac{(36.842)^{\frac{1}{3}} \times (1.6272)^2 \times 87}{\sqrt{.062416} \times 72.983 \times \sqrt[3]{189}}, \text{ find } x.$$

| | | |
|--------------------------------|----------------------------------|-------------|
| $\log (36.842)^{\frac{1}{3}}$ | $= 1.56634 \times \frac{1}{3} =$ | $.52211$ |
| $\log (1.6272)^2$ | $= .21144 \times 2 =$ | $.42288$ |
| $\log 87$ | | $= 1.93952$ |
| $\text{colog } \sqrt{.062416}$ | $= 1.20471 \div 2 =$ | $.60235$ |
| $\text{colog } 72.983$ | | $= 8.13678$ |
| $\text{colog } \sqrt[3]{189}$ | $= 7.72354 \div 3 =$ | 9.24118 |
| $x = 7.3252$ | $\log x =$ | $.86482$ |

EXAMPLES.

In working these examples use cologs wherever necessary, and arrange the work as on preceding page.

$$1. \frac{67.284 \times .10003}{\sqrt[3]{742.99} \times 6.7843} \quad \text{Ans. .10953}$$

$$2. \frac{63.842 \times \sqrt[4]{.064}}{(42.32)^4 \times (.02478)^3 \div \sqrt{2}} \quad \text{Ans. .93038}$$

$$3. \frac{(7.2843)^3 \times \sqrt[4]{.00067894}}{(620.01)^3 \times 489.62} \quad \text{Ans. 306.49}$$

$$4. \frac{1986.1 \times \sqrt[3]{92.836}}{\sqrt{11} \times \sqrt[3]{22} \times \sqrt[4]{33}} \quad \text{Ans. 403.75}$$

$$5. .064219 \times \sqrt[3]{\frac{.98612 \times 14.612}{28 \div 39.6}} \quad \text{Ans. .17541}$$

$$6. \frac{(57.643)^3 \times \frac{79.631}{\sqrt[3]{124.37}}}{\sqrt[4]{1000000}} \quad \text{Ans. 25.243}$$

$$7. \sqrt{10} \times \sqrt[3]{100} \times \sqrt[4]{1000} \quad \text{Ans. 82.542}$$

10. Numbers with Six Figures. As a general rule, we cannot work to six figures in natural numbers with a table of five-place logarithms, for when the correction for the sixth figure is applied it will usually be too small to make any difference in the logarithm. On the first page or two of the table, however, where the logarithms vary rapidly, it can be done with approximate accuracy.

The correction for the sixth figure is always one-tenth of the correction for the same figure in the fifth place.

Ex. To find $\log 13.9647$.

$$\log 13.96 = 1.14489$$

$$\text{correction for fifth figure} = 12.4$$

$$\text{“ “ sixth “} = \frac{2.17}{10}$$

$$\text{total correction} = 14.57, \text{ nearest integer} = 15$$

$$\log 13.9647 = 1.14504$$

Ex. Find x , given $\log x = 2.21647$,
 nearest log in table = $\frac{.21643}{4}$, corresponding to 1646
 difference = $\frac{4}{4}$

nearest smaller prop. }
 pt. under tab. diff. 26 } = $\frac{2.6}{1.4}$ { corresponding to 1
 difference remaining } { for the fifth fig.

1.4×10 (because sixth figure is required) = 14, corresponding to 5 for the sixth figure. Hence, $x = 164.615$.

Verify the following :

| | |
|------------------------|-------------------------------------|
| log 1219.35 = 3.08613. | log $x = 3.12964$, $x = 1347.84$. |
| log 10.7642 = 1.03198. | log $x = 0.06432$, $x = 1.15963$. |

TABLE II. *Constants and Their Logarithms.* (Page 20.)

11. No description of this table is necessary. The logarithms are given to seven places, instead of five, in case a greater degree of accuracy should be required. If only the first five places are used, the fifth figure must be increased by 1, if the sixth figure is 5, or more.

TABLE III. *Logarithmic Sines, Cosines, Tangents and Cotangents.* (Pages 21-66.)

12. The logarithms of the trigonometric functions are used in computation much more frequently than the functions themselves, which are called natural functions. For this reason this table is given more prominence than that of the natural functions. The table gives the logarithms of the functions for each minute from 0° to 90° . The functions of angles not expressed evenly in minutes can be found by interpolation, as explained below.

Since sec and csc are the reciprocals of cos and sin respectively, their logs can always be found by taking the cologs of the latter.

The sin and cos of all angles and the tan of angles less than 45° are less than unity; hence, their logarithms have negative characteristics. For this reason the characteristics of all these logarithms are increased by 10 in the tables.

13. To Find the Logarithmic Function of an Angle Less than 90° .

Enter the table with the given number of degrees, which will be found at the top of the page, if it is 44° or less, but at the bottom of the page, if it is greater than 44° . The function required is read at the top or bottom of the page, according as the number of degrees is at the top or bottom, and the required logarithm is taken from the corresponding column. The minutes are read in the left hand column of the page, if the degrees are read at the top, but in the extreme right hand column of the body of the table if the degrees are read at the bottom.

EXERCISES.

1. Find $\log \sin 24^\circ 38'$. 24° is at the top of page 46, and the $\log \sin$ column for 24° is the first column of logarithms on the page. Running down the page until we come to $38'$, we find $\log \sin 24^\circ 38' = 9.61994$.

2. Find $\log \tan 57^\circ 16'$. 57° is at the bottom of page 54. Running up the page in the column marked at the bottom $\log \tan$, until we come to the line with $16'$ on the right, we find $\log \tan 57^\circ 16' = 0.19192$.

Verify the following statements:

| | |
|-------------------------------------|-------------------------------------|
| $\log \sin 39^\circ 16' = 9.80136,$ | $\log \cos 8^\circ 19' = 9.99541,$ |
| $\log \tan 63^\circ 24' = 0.30037,$ | $\log \cot 54^\circ 9' = 9.85887,$ |
| $\log \cos 41^\circ 31' = 9.87434,$ | $\log \tan 82^\circ 56' = 0.90670,$ |
| $\log \cot 26^\circ 12' = 0.30798,$ | $\log \cot 7^\circ = 0.91086,$ |
| $\log \cos 31^\circ = 9.93307,$ | $\log \sin 19^\circ 12' = 9.51702.$ |

14. Interpolating for Seconds.

Find the logarithmic functions for the degrees and minutes as before; then apply a correction for the seconds, as explained below. This correction must be added if the function is \sin or \tan , and subtracted if the function is \cos or \cot .

Find $\log \sin 16^\circ 28' 35''$.

$\log \sin 16^\circ 28' = 9.45249$, and the tabular difference is 43; that is, the $\log \sin$ increases by 43, while the angle increases by $1'$. Hence, the proportional increase for $1''$ is $\frac{43}{60}$, and for $35''$ it is $\frac{43}{60} \times 35 = \frac{301}{12} = 25.08 \dots$, the nearest integer to which is the required correction. Hence,

$$\log \sin 16^\circ 28' 35'' = 9.45249 + .00025 = 9.45274.$$

In a case of this kind it is, perhaps, just as easy to compute the correction without using the auxiliary tables.

On pages 22 to 24 the Prop. Pt. is given for one second for each tabular difference for log sin, log tan, and log cot. Log cos varies so slowly in this part of the table that no auxiliary tables are necessary.

Find log sin $1^{\circ} 48' 53''$.

$$\begin{aligned} \log \sin 1^{\circ} 48' &= 8.49708, \text{ tab. diff.} = 400 \\ \text{Prop. pt. for } 1'' \text{ (tab. diff. 400)} &= 6.67 \\ \text{" " } 53'' &= 6.67 \times 53 = 353.51 \\ \therefore \text{ correction to be added} &= 354. \\ \text{and } \log \sin 1^{\circ} 48' 53'' &= 8.49708 + .00354 = 8.50062 \end{aligned}$$

On account of the very rapid variation in the log sin and log tan at the beginning of the table, the theory that the variation of the log is proportional to that of the angle, leads to results which are sometimes appreciably in error. For this reason, when great precision is required, Table IV., pp. 67, 68, should be used in finding the log sin and log tan of angles less than 4° . An explanation of this table is given below, § 19.

Verify the following statements :

$$\begin{array}{ll} \log \cos 17^{\circ} 38' 42'' = 9.97907, & \log \tan 5^{\circ} 38' 5'' = 8.99416, \\ \log \tan 84^{\circ} 9' 13'' = 0.98972, & \log \sin 1^{\circ} 12' 38'' = 8.32482, \\ \log \sin 61^{\circ} 41' 31'' = 9.94469, & \log \cos 26^{\circ} 28' 37'' = 9.95188, \\ \log \cos 87^{\circ} 6' 14'' = 8.70351, & \log \cot 9^{\circ} 1' 43'' = 0.79889, \\ \log \cot 86^{\circ} 53' 34'' = 8.73467, & \log \sin 45^{\circ} 43' 28'' = 9.85491. \end{array}$$

15. To Find the Logarithmic Function of an Angle $> 90^{\circ}$.

According to the theorems demonstrated in Elements of Trigonometry §§ 28–31, and the rules on page 40, summarizing the results, the functions of any angle can be found if those of all angles less than 90° are known. These results are given here in the form of the following rules:

I. *To find the function of an angle between 90° and 180° subtract the angle from 180° and look for the same function of the difference, or subtract 90° from the angle and look for the co-function of the difference.*

II. *To find a function of an angle between 180° and 270° subtract the angle from 270° and look for the co-function of the differ-*

ence, or subtract 180° from the angle and look for the same function of the difference.

III. To find a function of an angle between 270° and 360° subtract the angle from 360° and look for the same function of the difference, or subtract 270° from the angle and look for the co-function of the difference.

The second alternative in each of these rules is better if the angle has minutes and seconds, for there is less danger of making a mistake in taking the difference.

EXERCISES.

1. Find $\log \cos 117^\circ 19' 35''$.

By rule I. $\log \cos 117^\circ 19' 35'' = \log (-\sin 27^\circ 19' 35'')$.

NOTE.—In taking the logarithm of a negative quantity we proceed as if the quantity were positive. To the logarithm when found, we prefix the symbol (—) or annex the symbol *n*. Neither of these signs affect the operations to which the logarithm may be subjected, but are used merely to remind the computer that the corresponding numbers are negative.

$$\begin{aligned} \log \sin 27^\circ 19' 35'' &= 9.66187, \\ \therefore \log \cos 117^\circ 19' 35'' &= (-) 9.66187. \end{aligned}$$

2. Find $\log \tan 242^\circ 20' 17''$.

By rule II. $\log \tan 242^\circ 20' 17'' = \log \tan 62^\circ 20' 17'' = 0.28054$.

Verify the following statements :

$$\begin{array}{ll} \log \sin 300^\circ 24' &= (-) 9.93577 & \log \cot 200^\circ 30' 30'' &= 0.42707 \\ \log \cos 216^\circ 14' 33'' &= (-) 9.90662 & \log \sin 138^\circ 48' 6'' &= 9.81867 \\ \log \tan 101^\circ 6' 52'' &= (-) 0.70674 & \log \cos 342^\circ 38' 15'' &= 9.97975 \end{array}$$

16. To Find an Angle Given one of its Logarithmic Functions.

A further glance at the general constitution of the table is first necessary. Upon each page of the table are four columns of logarithms, the first and fourth are logarithmic sines and cosines, the second and third are logarithmic tangents and cotangents. The logarithms increase, going toward the back of the table in the first and second columns, and then passing into the fourth and third columns respectively, they increase, going toward the front of the table. Remembering this, the place of any given logarithm in the table can be found readily.

The rules for finding an angle from its logarithmic function are as follows:

If the given function is log sin or log cos look for the nearest smaller logarithm in the first or fourth column; if it is log tan or log cot, look in the second or third column.

Read the degrees at the top or bottom of the page, according as the name of the given function is at the top or bottom of the column in which the given logarithm is located.

Read the minutes on the left or right according as the degrees are read at the top or bottom of the page, and in the same line with the nearest logarithm smaller than the given one.

Determine the number of seconds by proportion and add them to the degrees and minutes found, if the given function is log sin or log tan, but subtract them if it is log cos or log cot.

EXERCISES.

1. Given $\log \sin \theta = 9.86592$, what is θ ?

In the fourth column on p. 64 we find 9.86589, and log sin is read at the bottom. Hence, the degrees and minutes are $47^\circ 15'$. The tabular difference is 11 and the difference between the given log and log sin $47^\circ 15'$ is 3. Hence, θ exceeds $47^\circ 15'$ by $\frac{3}{11}$ of one minute. This fraction reduced to seconds is $\frac{3}{11} \times 60 = 16''$. Hence, $\theta = 47^\circ 15' 16''$.

To use the auxiliary table to find the number of seconds, we arrange the work as follows, using table for tabular difference 11.

| | | |
|---------------------------|---|---|
| whole difference | = | 3 |
| nearest smaller prop. pt. | = | $\frac{1.8}{11}$, corresponding to $10''$ |
| difference remaining | = | 1.2 " " $6''$ |
| whole number of seconds | = | $\frac{16''}{11}$ |

NOTE.—The number of seconds corresponding to 1.2 under tabular difference 11 is, according to the table, either $6''$ or $7''$; but $6''$ is really a little nearer than $7''$, as we found above.

2. Given $\log \cot \theta = 0.72654$, find θ .

On p. 32, in the third column, we find 0.72643, and log cot is read at the top; hence, the degrees and minutes are $10^\circ 38'$. The tabular difference is 70, and the difference between log cot θ and 0.72643 is 11. Hence, using table of proportional parts, we have

| | | |
|---------------------------|---|--|
| whole difference | = | 11 |
| nearest smaller prop. pt. | = | $\frac{10.5}{70}$, corresponding to $9''$ |
| difference remaining | = | .5, |

as this is less than half the prop. pt. for $1''$ (1.17), the entire correction is $9''$, which is subtracted from $10^\circ 38'$, giving $\theta = 10^\circ 37' 51''$.

3. Given $\log \tan \theta = 8.61246$, find θ .

On page 24, $\log \tan 2^\circ 20' = 8.61009$.

difference = 237, tab. diff. = 310, prop. pt. for $1'' = 5.17$,

no. of seconds = $\frac{237}{5.17} = 46''$. $\therefore \theta = 2^\circ 20' 46''$.

In these three exercises the results are incomplete, because we know from Trigonometry that there are always two angles less than 360° corresponding to any given trigonometric function. The complete answers are as follows: 1. $\theta = 47^\circ 15' 16''$ and $180^\circ - 47^\circ 15' 16'' = 132^\circ 44' 44''$, because $\sin \theta$ is positive in the first and second quadrants. 2. $\theta = 10^\circ 37' 51''$ and $180^\circ + 10^\circ 37' 51'' = 190^\circ 37' 51''$. 3. $\theta = 2^\circ 20' 46''$ and $180^\circ + 2^\circ 20' 46'' = 182^\circ 20' 46''$, because $\tan \theta$ and $\cot \theta$ are positive in the first and third quadrants.

4. Given $\log \cos \theta = (-) 9.62983$, find θ .

Assume that $\cos \theta$ is positive and find the angle corresponding to it in the first quadrant. We find on p. 47 $\log \cos 64^\circ 46' = 9.62972$.

whole difference = 11

nearest smaller prop. pt. = 9.0, corresponding to $20''$.

difference remaining = 2.0 " " $\frac{4''}{24''}$

number of seconds to be subtracted,

Hence, $\log \cos 64^\circ 45' 36'' = 9.62983$.

Since the \cos is negative in the second and third quadrants, we have $\theta = \begin{cases} 180^\circ - 64^\circ 45' 36'' = 115^\circ 14' 24'' \\ 180^\circ + 64^\circ 45' 36'' = 244^\circ 45' 36'' \end{cases}$.

When one or both values of the required angle are not in the first quadrant, the following rules are to be followed:

To find an angle in the second quadrant, subtract the angle taken from the table from 180° .

To find an angle in the third quadrant, add the angle taken from the table to 180° .

To find an angle in the fourth quadrant, subtract the angle taken from the table from 360° .

Verify the following statements:

$\log \sin \theta = 9.28642$, $\theta = 11^\circ 9' 1''$ and $168^\circ 50' 59''$.

$\log \cos \theta = 8.46321$, $\theta = 88^\circ 20' 6''$ " $271^\circ 39' 54''$.

$\log \tan \theta = 0.12983$, $\theta = 53^\circ 26' 22''$ " $233^\circ 26' 22''$.

$\log \cot \theta = 9.62412$, $\theta = 67^\circ 10' 36''$ " $247^\circ 10' 36''$.

$\log \sin \theta = (-) 9.96419$, $\theta = 247^\circ 3' 0''$ " $292^\circ 57' 0''$.

$\log \cos \theta = (-) 9.78416$, $\theta = 127^\circ 28' 15''$ " $232^\circ 31' 45''$.

$\log \tan \theta = (-) 9.42317$, $\theta = 165^\circ 9' 36''$ " $345^\circ 9' 36''$.

$\log \cot \theta = (-) 8.76432$, $\theta = 93^\circ 19' 35''$ " $273^\circ 19' 35''$.

17. Functions of Negative Angles. To find the logarithmic functions of negative angles, follow the formulæ given in § 31, Elements of Trigonometry.

18. General Remarks. In using a five-place table of logarithmic functions the computer should remember that the seconds in his results will be, in general, only approximately correct. Nevertheless, angles can be determined in most parts of the table more closely than to tenths of a minute; so that it seems preferable to give tables of proportional parts for seconds, rather than for tenths of a minute.

Attention is here called to the fact that throughout all the tables a final five is sometimes marked with a small dash over it, thus $\bar{5}$, and sometimes it is not so marked. This mark is used to indicate that if, for any reason, the computer wishes to use a smaller number of decimal places than are given in the table, the 5 is to be dropped without increasing the preceding figure by unity. If the 5 is not marked in this way the preceding figure must be increased by unity if the 5 is dropped.

The student may vary somewhat the procedure in the matter of interpolation as he becomes accustomed to using the tables. For example: in finding $\log 18769$ he may take $\log 1877$ from the tables and subtract the correction for 1, instead of taking $\log 1876$ and adding the correction for 9. Again, in finding $\log \cos 78^\circ 38' 56''$ he may take $\log \cos 78^\circ 39'$ and add the correction for $4''$ instead of taking $\log \cos 78^\circ 38'$ and subtracting the correction for $56''$. Numerous points of this kind, which in many cases will shorten the work, will suggest themselves, and need not be specified here.

EXAMPLES.

Find θ in each of the following examples:

$$1. \tan \theta = \frac{6.2984 \sin^2 63^\circ 18' 20''}{7.5692 \cot 116^\circ 36' 12''} \quad \theta = \begin{cases} 127^\circ 1' 7'' \\ 307^\circ 1' 7'' \end{cases}$$

$$2. \cos \theta = -\frac{2.93 \tan 48^\circ 6' 38''}{14.12 \sin 26^\circ 13' 42''} \quad \theta = \begin{cases} 121^\circ 34' 3'' \\ 238^\circ 25' 57'' \end{cases}$$

$$3. \sin \theta = \sqrt{\frac{\sin^3 146^\circ 12' 19'' \times \tan 78^\circ 12' 32''}{\cot^3 12^\circ 14' 6'' \times \cos 64^\circ 4' 55''}} \theta = \begin{cases} 7^\circ 58' 17'' \\ 172^\circ 1' 43'' \\ 187^\circ 58' 17'' \\ 352^\circ 1' 43'' \end{cases}$$

$$4. \cot \theta = \frac{.93862 \cos^2 312^\circ 38' 40''}{.86471 \tan^3 214^\circ 26' 31''} \theta = \begin{cases} 32^\circ 55' 19'' \\ 212^\circ 55' 19'' \end{cases}$$

TABLE IV. (Pages 67 and 68.)

19. **Sine and Tangent of Small Angles.** This table derives its usefulness from the fact that when an angle (a) is small the ratios $\frac{\sin a}{a}$ and $\frac{\tan a}{a}$ vary but slowly. The quantities S and T in the table are the logarithms (increased by 10) of these ratios, where the angle is expressed in seconds. Hence, to find $\log \sin$ and $\log \tan$ of a small angle we have the formulæ

$$\log \sin a = \log a'' + S$$

$$\log \tan a = \log a'' + T$$

and to find a small angle from its $\log \sin$ or $\log \tan$ we have

$$\log a'' = \log \sin a - S$$

$$\log a'' = \log \tan a - T$$

Ex. Find $\log \tan 0^\circ 26' 51''$.

$$0^\circ 26' 51'' = 1611'' \quad \log 1611 = 3.20710$$

$$T \text{ (for } 0^\circ 27') = 4.68558$$

$$\therefore \log \tan 0^\circ 26' 51'' = 7.89268$$

(the same calculated from Table III. is 7.89264, which is thus shewn to be in error four units in the fifth place).

Ex. Given $\log \sin a = 8.36892$, find a .

From Table III. we find that $a = 1^\circ 20'$ approximately; hence, the proper value of S (from Table IV) is 4.68554. We have, therefore,

$$\log \sin a - S = 3.68338 = \log a''$$

$$\therefore a = 4824'' = 1^\circ 20' 24''.$$

Verify the following statements, by means of Table IV :

$$\log \sin 0^\circ 57' 36'' = 8.22412.$$

$$\log \tan a = 8.19632, a = 0^\circ 54' 1''.$$

To find the cosine or cotangent of an angle nearly 90° use the same table, taking the sine or tangent, as the case may be, of the complement of the given angle.

TABLE V. *Natural Functions.* (Pages 69-73.)

20. By the terms *natural sine, cosine, etc.*, are meant the actual values of these functions. The table is used comparatively seldom, and for that reason the functions are given for every five minutes only. To find the functions for intermediate minutes the process of interpolation by simple proportion is used. Thus, to find $\sin 51^\circ 18'$, we have

$$\begin{aligned} \sin 51^\circ 20' &= .78079 \\ \sin 51^\circ 15' &= .77988 \\ \text{difference for } 5' &= \underline{91} \\ \text{hence, correction for } 3' &= \frac{3}{5} \text{ of } 91 = 55, \\ \text{and } \sin 51^\circ 18' &= .77988 + .00055 = .78043. \end{aligned}$$

The rules given above, for adding and subtracting corrections and for finding functions of angles greater than 90° , apply here the same as in the case of Table III.

The results of interpolating minutes in that part of the table which gives the cot of angles less than 15° and the tangents of angles between 75° and 90° will, in general, not be correct in the last place. Hence, when considerable precision is required in these cases the function should be found by taking the natural number corresponding to the logarithm found in Table III.

TABLE VI. *Circular Arcs Expressed in Radians.* (Page 74.)

This table gives to seven decimal places the number of radians for every degree up to 180° , with auxiliary tables for minutes and seconds.

EXERCISES.

1. How many radians in $126^\circ 38' 19''$? From the table we have

$$\begin{array}{rcl} \text{number of radians in} & 126^\circ & = 2.1991149 \\ \text{"} & \text{"} & 38' = .0110538 \\ \text{"} & \text{"} & 19'' = \underline{.0000921} \\ \text{"} & \text{"} & 126^\circ 38' 19'' = 2.2102608 \end{array}$$

2. How many degrees, minutes and seconds in 4.6832964 radians? As this number of radians exceeds 180, we subtract the number of

radians in 180° and find the degrees, minutes and seconds in the remainder. This last added to 180° is the result :

| | | |
|-------------------------------|---|-----------|
| Given number of radians | = | 4.6832964 |
| Radians in 180° | = | 3.1415927 |
| Difference | = | 1.5417037 |
| Radians in 88° | = | 1.5358897 |
| | | .0058140 |
| Radians in $19'$ | = | .0055269 |
| | | .0002871 |
| Radians in $59''$ | = | 2860 |
| Result = $268^\circ 19' 59''$ | = | .0000011 |

The last difference, .0000011, corresponds to less than half a second.

TABLE VII. *Napierian Logarithms of Numbers.* (Pages 75, 76.)

Although these logarithms are not used for purposes of practical computation, their values are sometimes required in calculating values of transcendental functions, and for other purposes. The table gives the logarithm of each number from 1 to 1000. As the value of the characteristic does not depend upon the position of the decimal point, nor the value of the mantissa solely upon the sequence of figures in the corresponding number, we cannot use the table just as we do a table of common logarithms. If $\log 363.8$ is required we can find it by interpolating between $\log 363$ and $\log 364$; but if $\log 3638$ is required we must find $\log 363.8$ in the manner just indicated, and then add $\log 10$. The work is as follows :

| | | |
|--|---|-----------------------|
| $\log 363$ | = | 5.89440 |
| $\log 364$ | = | 5.89715 |
| difference | = | 275 |
| .8 of difference | = | 220 |
| adding this to $\log 363$ gives $\log 363.8 = 5.89660$ | | |
| | | $\log 10 = 2.30259$ |
| | | $\log 3638 = 8.19919$ |

To find the number corresponding to a given Napierian logarithm we first subtract as many times $\log 10$ as may be necessary to bring the logarithm within the limits of the

table. Then find the number corresponding to this difference and multiply it by the power of 10, whose logarithm was subtracted at the beginning. Thus, to find the number whose Napierian logarithm is 9.62983:

$$\log 100 = 2 \log 10 = 4.60517$$

$$9.62983 - 4.60517 = 5.02466$$

5.02466 is the logarithm of some number between 152 and 153.

$$\text{Given log} \quad = 5.02466$$

$$\log 152 \quad = \underline{5.02388}$$

$$\text{difference} \quad = \quad 78$$

$$\text{tabular difference} = \quad 656$$

$$78 \div 656 = .12.$$

\therefore 5.02466 is the logarithm of 152.12.

Hence, 9.62983 is the logarithm of $152.12 \times 100 = 15212$.

TABLE I.

COMMON LOGARITHMS
OF NUMBERS.

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. | | | |
|------------|--------|------|------|------|------|------|------|------|------|------|------------|------|------|------|
| 100 | 00 000 | 043 | 087 | 130 | 173 | 217 | 260 | 303 | 346 | 389 | | | | |
| 01 | 432 | 475 | 518 | 561 | 604 | 647 | 689 | 732 | 775 | 817 | | 44 | 43 | 42 |
| 02 | 860 | 903 | 945 | 988 | *030 | *072 | *115 | *157 | *199 | *242 | 1 | 4.4 | 4.3 | 4.2 |
| 03 | 01 284 | 326 | 368 | 410 | 452 | 494 | 536 | 578 | 620 | 662 | 2 | 8.8 | 8.6 | 8.4 |
| 04 | 703 | 745 | 787 | 828 | 870 | 912 | 953 | 995 | *036 | *078 | 3 | 13.2 | 12.9 | 12.6 |
| 05 | 02 119 | 160 | 202 | 243 | 284 | 325 | 366 | 407 | 449 | 490 | 4 | 17.6 | 17.2 | 16.8 |
| 06 | 531 | 572 | 612 | 653 | 694 | 735 | 776 | 816 | 857 | 898 | 5 | 22.0 | 21.5 | 21.0 |
| 07 | 938 | 979 | *019 | *060 | *100 | *141 | *181 | *222 | *262 | *302 | 6 | 26.4 | 25.8 | 25.2 |
| 08 | 03 342 | 383 | 423 | 463 | 503 | 543 | 583 | 623 | 663 | 703 | 7 | 30.8 | 30.1 | 29.4 |
| 09 | 743 | 782 | 822 | 862 | 902 | 941 | 981 | *021 | *060 | *100 | 8 | 35.2 | 34.4 | 33.6 |
| | | | | | | | | | | | 9 | 39.6 | 38.7 | 37.8 |
| 110 | 04 139 | 179 | 218 | 258 | 297 | 336 | 376 | 415 | 454 | 493 | | | | |
| 11 | 532 | 571 | 610 | 650 | 689 | 727 | 766 | 805 | 844 | 883 | | 41 | 40 | 39 |
| 12 | 922 | 961 | 999 | *038 | *077 | *115 | *154 | *192 | *231 | *269 | 1 | 4.1 | 4.0 | 3.9 |
| 13 | 05 308 | 346 | 385 | 423 | 461 | 500 | 538 | 576 | 614 | 652 | 2 | 8.2 | 8.0 | 7.8 |
| 14 | 690 | 729 | 767 | 805 | 843 | 881 | 918 | 956 | 994 | *032 | 3 | 12.3 | 12.0 | 11.7 |
| 15 | 06 070 | 108 | 145 | 183 | 221 | 258 | 296 | 333 | 371 | 408 | 4 | 16.4 | 16.0 | 15.6 |
| 16 | 446 | 483 | 521 | 558 | 595 | 633 | 670 | 707 | 744 | 781 | 5 | 20.5 | 20.0 | 19.5 |
| 17 | 819 | 856 | 893 | 930 | 967 | *004 | *041 | *078 | *115 | *151 | 6 | 24.6 | 24.0 | 23.4 |
| 18 | 07 188 | 225 | 262 | 298 | 335 | 372 | 408 | 445 | 482 | 518 | 7 | 28.7 | 28.0 | 27.3 |
| 19 | 555 | 591 | 628 | 664 | 700 | 737 | 773 | 809 | 846 | 882 | 8 | 32.8 | 32.0 | 31.2 |
| | | | | | | | | | | | 9 | 36.9 | 36.0 | 35.1 |
| 120 | 918 | 954 | 990 | *027 | *063 | *099 | *135 | *171 | *207 | *243 | | | | |
| 21 | 08 279 | 314 | 350 | 386 | 422 | 458 | 493 | 529 | 565 | 600 | | 38 | 37 | 36 |
| 22 | 636 | 672 | 707 | 743 | 778 | 814 | 849 | 884 | 920 | 955 | 1 | 3.8 | 3.7 | 3.6 |
| 23 | 991 | *026 | *061 | *096 | *132 | *167 | *202 | *237 | *272 | *307 | 2 | 7.6 | 7.4 | 7.2 |
| 24 | 09 342 | 377 | 412 | 447 | 482 | 517 | 552 | 587 | 621 | 656 | 3 | 11.4 | 11.1 | 10.8 |
| 25 | 691 | 726 | 760 | 795 | 830 | 864 | 899 | 934 | 968 | *003 | 4 | 15.2 | 14.8 | 14.4 |
| 26 | 10 037 | 072 | 106 | 140 | 175 | 209 | 243 | 278 | 312 | 346 | 5 | 19.0 | 18.5 | 18.0 |
| 27 | 380 | 415 | 449 | 483 | 517 | 551 | 585 | 619 | 653 | 687 | 6 | 22.8 | 22.2 | 21.6 |
| 28 | 721 | 755 | 789 | 823 | 857 | 890 | 924 | 958 | 992 | *025 | 7 | 26.6 | 25.9 | 25.2 |
| 29 | 11 059 | 093 | 126 | 160 | 193 | 227 | 261 | 294 | 327 | 361 | 8 | 30.4 | 29.6 | 28.8 |
| | | | | | | | | | | | 9 | 34.2 | 33.3 | 32.4 |
| 130 | 394 | 428 | 461 | 494 | 528 | 561 | 594 | 628 | 661 | 694 | | | | |
| 31 | 727 | 760 | 793 | 826 | 860 | 893 | 926 | 959 | 992 | *024 | | 35 | 34 | 33 |
| 32 | 12 057 | 090 | 123 | 156 | 189 | 222 | 254 | 287 | 320 | 352 | 1 | 3.5 | 3.4 | 3.3 |
| 33 | 385 | 418 | 450 | 483 | 516 | 548 | 581 | 613 | 646 | 678 | 2 | 7.0 | 6.8 | 6.6 |
| 34 | 710 | 743 | 775 | 808 | 840 | 872 | 905 | 937 | 969 | *001 | 3 | 10.5 | 10.2 | 9.9 |
| 35 | 13 033 | 066 | 098 | 130 | 162 | 194 | 226 | 258 | 290 | 322 | 4 | 14.0 | 13.6 | 13.2 |
| 36 | 354 | 386 | 418 | 450 | 481 | 513 | 545 | 577 | 609 | 640 | 5 | 17.5 | 17.0 | 16.5 |
| 37 | 672 | 704 | 735 | 767 | 799 | 830 | 862 | 893 | 925 | 956 | 6 | 21.0 | 20.4 | 19.8 |
| 38 | 988 | *019 | *051 | *082 | *114 | *145 | *176 | *208 | *239 | *270 | 7 | 24.5 | 23.8 | 23.1 |
| 39 | 14 301 | 333 | 364 | 395 | 426 | 457 | 489 | 520 | 551 | 582 | 8 | 28.0 | 27.2 | 26.4 |
| | | | | | | | | | | | 9 | 31.5 | 30.6 | 29.7 |
| 140 | 613 | 644 | 675 | 706 | 737 | 768 | 799 | 829 | 860 | 891 | | | | |
| 41 | 922 | 953 | 983 | *014 | *045 | *076 | *106 | *137 | *168 | *198 | | 32 | 31 | 30 |
| 42 | 15 229 | 259 | 290 | 320 | 351 | 381 | 412 | 442 | 473 | 503 | 1 | 3.2 | 3.1 | 3.0 |
| 43 | 534 | 564 | 594 | 625 | 655 | 685 | 715 | 746 | 776 | 806 | 2 | 6.4 | 6.2 | 6.0 |
| 44 | 836 | 866 | 897 | 927 | 957 | 987 | *017 | *047 | *077 | *107 | 3 | 9.6 | 9.3 | 9.0 |
| 45 | 16 137 | 167 | 197 | 227 | 256 | 286 | 316 | 346 | 376 | 406 | 4 | 12.8 | 12.4 | 12.0 |
| 46 | 435 | 465 | 495 | 524 | 554 | 584 | 613 | 643 | 673 | 702 | 5 | 16.0 | 15.5 | 15.0 |
| 47 | 732 | 761 | 791 | 820 | 850 | 879 | 909 | 938 | 967 | 997 | 6 | 19.2 | 18.6 | 18.0 |
| 48 | 17 026 | 056 | 085 | 114 | 143 | 173 | 202 | 231 | 260 | 289 | 7 | 22.4 | 21.7 | 21.0 |
| 49 | 319 | 348 | 377 | 406 | 435 | 464 | 493 | 522 | 551 | 580 | 8 | 25.6 | 24.8 | 24.0 |
| | | | | | | | | | | | 9 | 28.8 | 27.9 | 27.0 |
| 150 | 609 | 638 | 667 | 696 | 725 | 754 | 782 | 811 | 840 | 869 | | | | |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. | | |
|----|---|---|---|---|---|---|---|---|---|---|------------|--|--|
|----|---|---|---|---|---|---|---|---|---|---|------------|--|--|

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. | | |
|------------|--------|-----|------|------|------|------|------|------|------|------|------------|------|------|
| 150 | 17 609 | 638 | 667 | 696 | 725 | 754 | 782 | 811 | 840 | 869 | | | |
| 51 | 898 | 926 | 955 | 984 | *013 | *041 | *070 | *099 | *127 | *156 | | | |
| 52 | 18 184 | 213 | 241 | 270 | 298 | 327 | 355 | 384 | 412 | 441 | I | 2.9 | 2.8 |
| 53 | 469 | 498 | 526 | 554 | 583 | 611 | 639 | 667 | 696 | 724 | 2 | 5.8 | 5.6 |
| 54 | 752 | 780 | 808 | 837 | 865 | 893 | 921 | 949 | 977 | *005 | 3 | 8.7 | 8.4 |
| 55 | 19 033 | 061 | 089 | 117 | 145 | 173 | 201 | 229 | 257 | 285 | 4 | 11.6 | 11.2 |
| 56 | 312 | 340 | 368 | 396 | 424 | 451 | 479 | 507 | 535 | 562 | 5 | 14.5 | 14.0 |
| 57 | 590 | 618 | 645 | 673 | 700 | 728 | 756 | 783 | 811 | 838 | 6 | 17.4 | 16.8 |
| 58 | 866 | 893 | 921 | 948 | 976 | *003 | *030 | *058 | *085 | *112 | 7 | 20.3 | 19.6 |
| 59 | 20 140 | 167 | 194 | 222 | 249 | 276 | 303 | 330 | 358 | 385 | 8 | 23.2 | 22.4 |
| | | | | | | | | | | | 9 | 26.1 | 25.2 |
| 160 | 412 | 439 | 466 | 493 | 520 | 548 | 575 | 602 | 629 | 656 | | | |
| 61 | 683 | 710 | 737 | 763 | 790 | 817 | 844 | 871 | 898 | 925 | | | |
| 62 | 952 | 978 | *005 | *032 | *059 | *085 | *112 | *139 | *165 | *192 | I | 2.7 | 2.6 |
| 63 | 21 219 | 245 | 272 | 299 | 325 | 352 | 378 | 405 | 431 | 458 | 2 | 5.4 | 5.2 |
| 64 | 484 | 511 | 537 | 564 | 590 | 617 | 643 | 669 | 696 | 722 | 3 | 8.1 | 7.8 |
| 65 | 748 | 775 | 801 | 827 | 854 | 880 | 906 | 932 | 958 | 985 | 4 | 10.8 | 10.4 |
| 66 | 22 011 | 037 | 063 | 089 | 115 | 141 | 167 | 194 | 220 | 246 | 5 | 13.5 | 13.0 |
| 67 | 272 | 298 | 324 | 350 | 376 | 401 | 427 | 453 | 479 | 505 | 6 | 16.2 | 15.6 |
| 68 | 531 | 557 | 583 | 608 | 634 | 660 | 686 | 712 | 737 | 763 | 7 | 18.9 | 18.2 |
| 69 | 789 | 814 | 840 | 866 | 891 | 917 | 943 | 968 | 994 | *019 | 8 | 21.6 | 20.8 |
| | | | | | | | | | | | 9 | 24.3 | 23.4 |
| 170 | 23 045 | 070 | 096 | 121 | 147 | 172 | 198 | 223 | 249 | 274 | | | |
| 71 | 300 | 325 | 350 | 376 | 401 | 426 | 452 | 477 | 502 | 528 | | | |
| 72 | 553 | 578 | 603 | 629 | 654 | 679 | 704 | 729 | 754 | 779 | I | 2.5 | |
| 73 | -805 | 830 | 855 | 880 | 905 | 930 | 955 | 980 | *005 | *030 | 2 | 5.0 | |
| 74 | 24 055 | 080 | 105 | 130 | 155 | 180 | 204 | 229 | 254 | 279 | 3 | 7.5 | |
| 75 | 304 | 329 | 353 | 378 | 403 | 428 | 452 | 477 | 502 | 527 | 4 | 10.0 | |
| 76 | 551 | 576 | 601 | 625 | 650 | 674 | 699 | 724 | 748 | 773 | 5 | 12.5 | |
| 77 | 797 | 822 | 846 | 871 | 895 | 920 | 944 | 969 | 993 | *018 | 6 | 15.0 | |
| 78 | 25 042 | 066 | 091 | 115 | 139 | 164 | 188 | 212 | 237 | 261 | 7 | 17.5 | |
| 79 | 285 | 310 | 334 | 358 | 382 | 406 | 431 | 455 | 479 | 503 | 8 | 20.0 | |
| | | | | | | | | | | | 9 | 22.5 | |
| 180 | 527 | 551 | 575 | 600 | 624 | 648 | 672 | 696 | 720 | 744 | | | |
| 81 | 768 | 792 | 816 | 840 | 864 | 888 | 912 | 935 | 959 | 983 | | | |
| 82 | 26 007 | 031 | 055 | 079 | 102 | 126 | 150 | 174 | 198 | 221 | I | 2.4 | 2.3 |
| 83 | 245 | 269 | 293 | 316 | 340 | 364 | 387 | 411 | 435 | 458 | 2 | 4.8 | 4.6 |
| 84 | 482 | 505 | 529 | 553 | 576 | 600 | 623 | 647 | 670 | 694 | 3 | 7.2 | 6.9 |
| 85 | 717 | 741 | 764 | 788 | 811 | 834 | 858 | 881 | 905 | 928 | 4 | 9.6 | 9.2 |
| 86 | 951 | 975 | 998 | *021 | *045 | *068 | *091 | *114 | *138 | *161 | 5 | 12.0 | 11.5 |
| 87 | 27 184 | 207 | 231 | 254 | 277 | 300 | 323 | 346 | 370 | 393 | 6 | 14.4 | 13.8 |
| 88 | 416 | 439 | 462 | 485 | 508 | 531 | 554 | 577 | 600 | 623 | 7 | 16.8 | 16.1 |
| 89 | 646 | 669 | 692 | 715 | 738 | 761 | 784 | 807 | 830 | 852 | 8 | 19.2 | 18.4 |
| | | | | | | | | | | | 9 | 21.6 | 20.7 |
| 190 | 875 | 898 | 921 | 944 | 967 | 989 | *012 | *035 | *058 | *081 | | | |
| 91 | 28 103 | 126 | 149 | 171 | 194 | 217 | 240 | 262 | 285 | 307 | | | |
| 92 | 330 | 353 | 375 | 398 | 421 | 443 | 466 | 488 | 511 | 533 | I | 2.2 | 2.1 |
| 93 | 556 | 578 | 601 | 623 | 646 | 668 | 691 | 713 | 735 | 758 | 2 | 4.4 | 4.2 |
| 94 | 780 | 803 | 825 | 847 | 870 | 892 | 914 | 937 | 959 | 981 | 3 | 6.6 | 6.3 |
| 95 | 29 003 | 026 | 048 | 070 | 092 | 115 | 137 | 159 | 181 | 203 | 4 | 8.8 | 8.4 |
| 96 | 226 | 248 | 270 | 292 | 314 | 336 | 358 | 380 | 403 | 425 | 5 | 11.0 | 10.5 |
| 97 | 447 | 469 | 491 | 513 | 535 | 557 | 579 | 601 | 623 | 645 | 6 | 13.2 | 12.6 |
| 98 | 667 | 688 | 710 | 732 | 754 | 776 | 798 | 820 | 842 | 863 | 7 | 15.4 | 14.7 |
| 99 | 885 | 907 | 929 | 951 | 973 | 994 | *016 | *038 | *060 | *081 | 8 | 17.6 | 16.8 |
| | | | | | | | | | | | 9 | 19.8 | 18.9 |
| 200 | 30 103 | 125 | 146 | 168 | 190 | 211 | 233 | 255 | 276 | 298 | | | |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. | | |
|----|---|---|---|---|---|---|---|---|---|---|------------|--|--|
|----|---|---|---|---|---|---|---|---|---|---|------------|--|--|

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. | |
|------------|--------|------|------|------|------|------|------|------|------|------|------------|-----------|
| 200 | 30 103 | 125 | 146 | 168 | 190 | 211 | 233 | 255 | 276 | 298 | | |
| 01 | 320 | 341 | 363 | 384 | 406 | 428 | 449 | 471 | 492 | 514 | | |
| 02 | 535 | 557 | 578 | 600 | 621 | 643 | 664 | 685 | 707 | 728 | I | 22 2.1 |
| 03 | 750 | 771 | 792 | 814 | 835 | 856 | 878 | 899 | 920 | 942 | 2 | 4.4 4.2 |
| 04 | 963 | 984 | *006 | *027 | *048 | *069 | *091 | *112 | *133 | *154 | 3 | 6.6 6.3 |
| 05 | 31 175 | 197 | 218 | 239 | 260 | 281 | 302 | 323 | 345 | 366 | 4 | 8.8 8.4 |
| 06 | 387 | 408 | 429 | 450 | 471 | 492 | 513 | 534 | 555 | 576 | 5 | 11.0 10.5 |
| 07 | 597 | 618 | 639 | 660 | 681 | 702 | 723 | 744 | 765 | 785 | 6 | 13.2 12.6 |
| 08 | 806 | 827 | 848 | 869 | 890 | 911 | 931 | 952 | 973 | 994 | 7 | 15.4 14.7 |
| 09 | 32 015 | 035 | 056 | 077 | 098 | 118 | 139 | 160 | 181 | 201 | 8 | 17.6 16.8 |
| 210 | 222 | 243 | 263 | 284 | 305 | 325 | 346 | 366 | 387 | 408 | 9 | 19.8 18.9 |
| I1 | 428 | 449 | 469 | 490 | 510 | 531 | 552 | 572 | 593 | 613 | | 20 |
| I2 | 634 | 654 | 675 | 695 | 715 | 736 | 756 | 777 | 797 | 818 | I | 2.0 |
| I3 | 838 | 858 | 879 | 899 | 919 | 940 | 960 | 980 | *001 | *021 | 2 | 4.0 |
| I4 | 33 041 | 062 | 082 | 102 | 122 | 143 | 163 | 183 | 203 | 224 | 3 | 6.0 |
| I5 | 244 | 264 | 284 | 304 | 325 | 345 | 365 | 385 | 405 | 425 | 4 | 8.0 |
| I6 | 445 | 465 | 485 | 506 | 526 | 546 | 566 | 586 | 606 | 626 | 5 | 10.0 |
| I7 | 646 | 666 | 686 | 706 | 726 | 746 | 766 | 786 | 806 | 826 | 6 | 12.0 |
| I8 | 846 | 866 | 885 | 905 | 925 | 945 | 965 | 985 | *005 | *025 | 7 | 14.0 |
| I9 | 34 044 | 064 | 084 | 104 | 124 | 143 | 163 | 183 | 203 | 223 | 8 | 16.0 |
| 220 | 242 | 262 | 282 | 301 | 321 | 341 | 361 | 380 | 400 | 420 | 9 | 18.0 |
| 21 | 439 | 459 | 479 | 498 | 518 | 537 | 557 | 577 | 596 | 616 | | 19 |
| 22 | 635 | 655 | 674 | 694 | 713 | 733 | 753 | 772 | 792 | 811 | I | 1.9 |
| 23 | 830 | 850 | 869 | 889 | 908 | 928 | 947 | 967 | 986 | *005 | 2 | 3.8 |
| 24 | 35 025 | 044 | 064 | 083 | 102 | 122 | 141 | 160 | 180 | 199 | 3 | 5.7 |
| 25 | 218 | 238 | 257 | 276 | 295 | 315 | 334 | 353 | 372 | 392 | 4 | 7.6 |
| 26 | 411 | 430 | 449 | 468 | 488 | 507 | 526 | 545 | 564 | 583 | 5 | 9.5 |
| 27 | 603 | 622 | 641 | 660 | 679 | 698 | 717 | 736 | 755 | 774 | 6 | 11.4 |
| 28 | 793 | 813 | 832 | 851 | 870 | 889 | 908 | 927 | 946 | 965 | 7 | 13.3 |
| 29 | 984 | *003 | *021 | *040 | *059 | *078 | *097 | *116 | *135 | *154 | 8 | 15.2 |
| 230 | 36 173 | 192 | 211 | 229 | 248 | 267 | 286 | 305 | 324 | 342 | 9 | 17.1 |
| 31 | 361 | 380 | 399 | 418 | 436 | 455 | 474 | 493 | 511 | 530 | | 18 |
| 32 | 549 | 568 | 586 | 605 | 624 | 642 | 661 | 680 | 698 | 717 | I | 1.8 |
| 33 | 736 | 754 | 773 | 791 | 810 | 829 | 847 | 866 | 884 | 903 | 2 | 3.6 |
| 34 | 922 | 940 | 959 | 977 | 996 | *014 | *033 | *051 | *070 | *088 | 3 | 5.4 |
| 35 | 37 107 | 125 | 144 | 162 | 181 | 199 | 218 | 236 | 254 | 273 | 4 | 7.2 |
| 36 | 291 | 310 | 328 | 346 | 365 | 383 | 401 | 420 | 438 | 457 | 5 | 9.0 |
| 37 | 475 | 493 | 511 | 530 | 548 | 566 | 585 | 603 | 621 | 639 | 6 | 10.8 |
| 38 | 658 | 676 | 694 | 712 | 731 | 749 | 767 | 785 | 803 | 822 | 7 | 12.6 |
| 39 | 840 | 858 | 876 | 894 | 912 | 931 | 949 | 967 | 985 | *003 | 8 | 14.4 |
| 240 | 38 021 | 039 | 057 | 075 | 093 | 112 | 130 | 148 | 166 | 184 | 9 | 16.2 |
| 41 | 202 | 220 | 238 | 256 | 274 | 292 | 310 | 328 | 346 | 364 | | 17 |
| 42 | 382 | 399 | 417 | 435 | 453 | 471 | 489 | 507 | 525 | 543 | I | 1.7 |
| 43 | 561 | 578 | 596 | 614 | 632 | 650 | 668 | 686 | 703 | 721 | 2 | 3.4 |
| 44 | 739 | 757 | 775 | 792 | 810 | 828 | 846 | 863 | 881 | 899 | 3 | 5.1 |
| 45 | 917 | 934 | 952 | 970 | 987 | *005 | *023 | *041 | *058 | *076 | 4 | 6.8 |
| 46 | 39 094 | 111 | 129 | 146 | 164 | 182 | 199 | 217 | 235 | 252 | 5 | 8.5 |
| 47 | 270 | 287 | 305 | 322 | 340 | 358 | 375 | 393 | 410 | 428 | 6 | 10.2 |
| 48 | 445 | 463 | 480 | 498 | 515 | 533 | 550 | 568 | 585 | 602 | 7 | 11.9 |
| 49 | 620 | 637 | 655 | 672 | 690 | 707 | 724 | 742 | 759 | 777 | 8 | 13.6 |
| 250 | 794 | 811 | 829 | 846 | 863 | 881 | 898 | 915 | 933 | 950 | 9 | 15.3 |
| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. | |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |
|------------|--------|------|------|------|------|------|------|------|------|------|------------|
| 250 | 39 794 | 811 | 829 | 846 | 863 | 881 | 898 | 915 | 933 | 950 | |
| 51 | 967 | 985 | *002 | *019 | *037 | *054 | *071 | *088 | *106 | *123 | 18 |
| 52 | 40 140 | 157 | 175 | 192 | 209 | 226 | 243 | 261 | 278 | 295 | 1 1.8 |
| 53 | 312 | 329 | 346 | 364 | 381 | 398 | 415 | 432 | 449 | 466 | 2 3.6 |
| 54 | 483 | 500 | 518 | 535 | 552 | 569 | 586 | 603 | 620 | 637 | 3 5.4 |
| 55 | 654 | 671 | 688 | 705 | 722 | 739 | 756 | 773 | 790 | 807 | 4 7.2 |
| 56 | 824 | 841 | 858 | 875 | 892 | 909 | 926 | 943 | 960 | 976 | 5 9.0 |
| 57 | 993 | *010 | *027 | *044 | *061 | *078 | *095 | *111 | *128 | *145 | 6 10.8 |
| 58 | 41 162 | 179 | 196 | 212 | 229 | 246 | 263 | 280 | 296 | 313 | 7 12.6 |
| 59 | 330 | 347 | 363 | 380 | 397 | 414 | 430 | 447 | 464 | 481 | 8 14.4 |
| 260 | 497 | 514 | 531 | 547 | 564 | 581 | 597 | 614 | 631 | 647 | 9 16.2 |
| 61 | 664 | 681 | 697 | 714 | 731 | 747 | 764 | 780 | 797 | 814 | |
| 62 | 830 | 847 | 863 | 880 | 896 | 913 | 929 | 946 | 963 | 979 | 1 1.7 |
| 63 | 996 | *012 | *029 | *045 | *062 | *078 | *095 | *111 | *127 | *144 | 2 3.4 |
| 64 | 42 160 | 177 | 193 | 210 | 226 | 243 | 259 | 275 | 292 | 308 | 3 5.1 |
| 65 | 325 | 341 | 357 | 374 | 390 | 406 | 423 | 439 | 455 | 472 | 4 6.8 |
| 66 | 488 | 504 | 521 | 537 | 553 | 570 | 586 | 602 | 619 | 635 | 5 8.5 |
| 67 | 651 | 667 | 684 | 700 | 716 | 732 | 749 | 765 | 781 | 797 | 6 10.2 |
| 68 | 813 | 830 | 846 | 862 | 878 | 894 | 911 | 927 | 943 | 959 | 7 11.9 |
| 69 | 975 | 991 | *008 | *024 | *040 | *056 | *072 | *088 | *104 | *120 | 8 13.6 |
| 270 | 43 136 | 152 | 169 | 185 | 201 | 217 | 233 | 249 | 265 | 281 | 9 15.3 |
| 71 | 297 | 313 | 329 | 345 | 361 | 377 | 393 | 409 | 425 | 441 | |
| 72 | 457 | 473 | 489 | 505 | 521 | 537 | 553 | 569 | 584 | 600 | 1 1.6 |
| 73 | 616 | 632 | 648 | 664 | 680 | 696 | 712 | 727 | 743 | 759 | 2 3.2 |
| 74 | 775 | 791 | 807 | 823 | 838 | 854 | 870 | 886 | 902 | 917 | 3 4.8 |
| 75 | 933 | 949 | 965 | 981 | 996 | *012 | *028 | *044 | *059 | *075 | 4 6.4 |
| 76 | 44 091 | 107 | 122 | 138 | 154 | 170 | 185 | 201 | 217 | 232 | 5 8.0 |
| 77 | 248 | 264 | 279 | 295 | 311 | 326 | 342 | 358 | 373 | 389 | 6 9.6 |
| 78 | 404 | 420 | 436 | 451 | 467 | 483 | 498 | 514 | 529 | 545 | 7 11.2 |
| 79 | 560 | 576 | 592 | 607 | 623 | 638 | 654 | 669 | 685 | 700 | 8 12.8 |
| 280 | 716 | 731 | 747 | 762 | 778 | 793 | 809 | 824 | 840 | 855 | 9 14.4 |
| 81 | 871 | 886 | 902 | 917 | 932 | 948 | 963 | 979 | 994 | *010 | |
| 82 | 45 025 | 040 | 056 | 071 | 086 | 102 | 117 | 133 | 148 | 163 | 1 1.5 |
| 83 | 179 | 194 | 209 | 225 | 240 | 255 | 271 | 286 | 301 | 317 | 2 3.0 |
| 84 | 332 | 347 | 362 | 378 | 393 | 408 | 423 | 439 | 454 | 469 | 3 4.5 |
| 85 | 484 | 500 | 515 | 530 | 545 | 561 | 576 | 591 | 606 | 621 | 4 6.0 |
| 86 | 637 | 652 | 667 | 682 | 697 | 712 | 728 | 743 | 758 | 773 | 5 7.5 |
| 87 | 788 | 803 | 818 | 834 | 849 | 864 | 879 | 894 | 909 | 924 | 6 9.0 |
| 88 | 939 | 954 | 969 | 984 | *000 | *015 | *030 | *045 | *060 | *075 | 7 10.5 |
| 89 | 46 090 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 8 12.0 |
| 290 | 240 | 255 | 270 | 285 | 300 | 315 | 330 | 345 | 359 | 374 | 9 13.5 |
| 91 | 389 | 404 | 419 | 434 | 449 | 464 | 479 | 494 | 509 | 523 | |
| 92 | 538 | 553 | 568 | 583 | 598 | 613 | 627 | 642 | 657 | 672 | 1 1.4 |
| 93 | 687 | 702 | 716 | 731 | 746 | 761 | 776 | 790 | 805 | 820 | 2 2.8 |
| 94 | 835 | 850 | 864 | 879 | 894 | 909 | 923 | 938 | 953 | 967 | 3 4.2 |
| 95 | 982 | 997 | *012 | *026 | *041 | *056 | *070 | *085 | *100 | *114 | 4 5.6 |
| 96 | 47 129 | 144 | 159 | 173 | 188 | 202 | 217 | 232 | 246 | 261 | 5 7.0 |
| 97 | 276 | 290 | 305 | 319 | 334 | 349 | 363 | 378 | 392 | 407 | 6 8.4 |
| 98 | 422 | 436 | 451 | 465 | 480 | 494 | 509 | 524 | 538 | 553 | 7 9.8 |
| 99 | 567 | 582 | 596 | 611 | 625 | 640 | 654 | 669 | 683 | 698 | 8 11.2 |
| 300 | 712 | 727 | 741 | 756 | 770 | 784 | 799 | 813 | 828 | 842 | 9 12.6 |
| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |
|------------|--------|------|------|------|------|------|------|------|------|------|------------|
| 300 | 47 712 | 727 | 741 | 756 | 770 | 784 | 799 | 813 | 828 | 842 | |
| 01 | 857 | 871 | 885 | 900 | 914 | 929 | 943 | 958 | 972 | 986 | |
| 02 | 48 001 | 015 | 029 | 044 | 058 | 073 | 087 | 101 | 116 | 130 | |
| 03 | 144 | 159 | 173 | 187 | 202 | 216 | 230 | 244 | 259 | 273 | 15 |
| 04 | 287 | 302 | 316 | 330 | 344 | 359 | 373 | 387 | 401 | 416 | 1 |
| 05 | 430 | 444 | 458 | 473 | 487 | 501 | 515 | 530 | 544 | 558 | 2 |
| 06 | 572 | 586 | 601 | 615 | 629 | 643 | 657 | 671 | 686 | 700 | 3 |
| 07 | 714 | 728 | 742 | 756 | 770 | 785 | 799 | 813 | 827 | 841 | 4 |
| 08 | 855 | 869 | 883 | 897 | 911 | 926 | 940 | 954 | 968 | 982 | 5 |
| 09 | 996 | *010 | *024 | *038 | *052 | *066 | *080 | *094 | *108 | *122 | 6 |
| 310 | 49 136 | 150 | 164 | 178 | 192 | 206 | 220 | 234 | 248 | 262 | 7 |
| 11 | 276 | 290 | 304 | 318 | 332 | 346 | 360 | 374 | 388 | 402 | 8 |
| 12 | 415 | 429 | 443 | 457 | 471 | 485 | 499 | 513 | 527 | 541 | 9 |
| 13 | 554 | 568 | 582 | 596 | 610 | 624 | 638 | 651 | 665 | 679 | 13.5 |
| 14 | 693 | 707 | 721 | 734 | 748 | 762 | 776 | 790 | 803 | 817 | |
| 15 | 831 | 845 | 859 | 872 | 886 | 900 | 914 | 927 | 941 | 955 | 14 |
| 16 | 969 | 982 | 996 | *010 | *024 | *037 | *051 | *065 | *079 | *092 | 1 |
| 17 | 50 106 | 120 | 133 | 147 | 161 | 174 | 188 | 202 | 215 | 229 | 2 |
| 18 | 243 | 256 | 270 | 284 | 297 | 311 | 325 | 338 | 352 | 365 | 3 |
| 19 | 379 | 393 | 406 | 420 | 433 | 447 | 461 | 474 | 488 | 501 | 4 |
| 320 | 515 | 529 | 542 | 556 | 569 | 583 | 596 | 610 | 623 | 637 | 5 |
| 21 | 651 | 664 | 678 | 691 | 705 | 718 | 732 | 745 | 759 | 772 | 6 |
| 22 | 786 | 799 | 813 | 826 | 840 | 853 | 866 | 880 | 893 | 907 | 7 |
| 23 | 920 | 934 | 947 | 961 | 974 | 987 | *001 | *014 | *028 | *041 | 8 |
| 24 | 51 055 | 068 | 081 | 095 | 108 | 121 | 135 | 148 | 162 | 175 | 9 |
| 25 | 188 | 202 | 215 | 228 | 242 | 255 | 268 | 282 | 295 | 308 | |
| 26 | 322 | 335 | 348 | 362 | 375 | 388 | 402 | 415 | 428 | 441 | 13 |
| 27 | 455 | 468 | 481 | 495 | 508 | 521 | 534 | 548 | 561 | 574 | 1 |
| 28 | 587 | 601 | 614 | 627 | 640 | 654 | 667 | 680 | 693 | 706 | 2 |
| 29 | 720 | 733 | 746 | 759 | 772 | 786 | 799 | 812 | 825 | 838 | 3 |
| 330 | 851 | 865 | 878 | 891 | 904 | 917 | 930 | 943 | 957 | 970 | 4 |
| 31 | 983 | 996 | *009 | *022 | *035 | *048 | *061 | *075 | *088 | *101 | 5 |
| 32 | 52 114 | 127 | 140 | 153 | 166 | 179 | 192 | 205 | 218 | 231 | 6 |
| 33 | 244 | 257 | 270 | 284 | 297 | 310 | 323 | 336 | 349 | 362 | 7 |
| 34 | 375 | 388 | 401 | 414 | 427 | 440 | 453 | 466 | 479 | 492 | 8 |
| 35 | 504 | 517 | 530 | 543 | 556 | 569 | 582 | 595 | 608 | 621 | 9 |
| 36 | 634 | 647 | 660 | 673 | 686 | 699 | 711 | 724 | 737 | 750 | |
| 37 | 763 | 776 | 789 | 802 | 815 | 827 | 840 | 853 | 866 | 879 | |
| 38 | 892 | 905 | 917 | 930 | 943 | 956 | 969 | 982 | 994 | *007 | |
| 39 | 53 020 | 033 | 046 | 058 | 071 | 084 | 097 | 110 | 122 | 135 | 12 |
| 340 | 148 | 173 | 186 | 199 | 212 | 224 | 237 | 250 | 263 | 276 | 1 |
| 41 | 275 | 288 | 301 | 314 | 326 | 339 | 352 | 364 | 377 | 390 | 2 |
| 42 | 403 | 415 | 428 | 441 | 453 | 466 | 479 | 491 | 504 | 517 | 3 |
| 43 | 529 | 542 | 555 | 567 | 580 | 593 | 605 | 618 | 631 | 643 | 4 |
| 44 | 656 | 668 | 681 | 694 | 706 | 719 | 732 | 744 | 757 | 769 | 5 |
| 45 | 782 | 794 | 807 | 820 | 832 | 845 | 857 | 870 | 882 | 895 | 6 |
| 46 | 908 | 920 | 933 | 945 | 958 | 970 | 983 | 995 | *008 | *020 | 7 |
| 47 | 54 033 | 045 | 058 | 070 | 083 | 095 | 108 | 120 | 133 | 145 | 8 |
| 48 | 158 | 170 | 183 | 195 | 208 | 220 | 233 | 245 | 258 | 270 | 9 |
| 49 | 283 | 295 | 307 | 320 | 332 | 345 | 357 | 370 | 382 | 394 | 10.8 |
| 350 | 407 | 419 | 432 | 444 | 456 | 469 | 481 | 494 | 506 | 518 | |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |
|------------|--------|------|------|------|------|------|------|------|------|------|------------|
| 350 | 54 407 | 419 | 432 | 444 | 456 | 469 | 481 | 494 | 506 | 518 | |
| 51 | 531 | 543 | 555 | 568 | 580 | 593 | 605 | 617 | 630 | 642 | |
| 52 | 654 | 667 | 679 | 691 | 704 | 716 | 728 | 741 | 753 | 765 | |
| 53 | 777 | 790 | 802 | 814 | 827 | 839 | 851 | 864 | 876 | 888 | |
| 54 | 900 | 913 | 925 | 937 | 949 | 962 | 974 | 986 | 998 | *011 | 13 |
| 55 | 55 023 | 035 | 047 | 060 | 072 | 084 | 096 | 108 | 121 | 133 | 1 |
| 56 | 145 | 157 | 169 | 182 | 194 | 206 | 218 | 230 | 242 | 255 | 2 |
| 57 | 267 | 279 | 291 | 303 | 315 | 328 | 340 | 352 | 364 | 376 | 3 |
| 58 | 388 | 400 | 413 | 425 | 437 | 449 | 461 | 473 | 485 | 497 | 4 |
| 59 | 509 | 522 | 534 | 546 | 558 | 570 | 582 | 594 | 606 | 618 | 5 |
| 360 | 630 | 642 | 654 | 666 | 678 | 691 | 703 | 715 | 727 | 739 | 6 |
| 61 | 751 | 763 | 775 | 787 | 799 | 811 | 823 | 835 | 847 | 859 | 7 |
| 62 | 871 | 883 | 895 | 907 | 919 | 931 | 943 | 955 | 967 | 979 | 8 |
| 63 | 991 | *003 | *015 | *027 | *038 | *050 | *062 | *074 | *086 | *098 | 9 |
| 64 | 56 110 | 122 | 134 | 146 | 158 | 170 | 182 | 194 | 205 | 217 | |
| 65 | 229 | 241 | 253 | 265 | 277 | 289 | 301 | 312 | 324 | 336 | 12 |
| 66 | 348 | 360 | 372 | 384 | 396 | 407 | 419 | 431 | 443 | 455 | 1 |
| 67 | 467 | 478 | 490 | 502 | 514 | 526 | 538 | 549 | 561 | 573 | 2 |
| 68 | 585 | 597 | 608 | 620 | 632 | 644 | 656 | 667 | 679 | 691 | 3 |
| 69 | 703 | 714 | 726 | 738 | 750 | 761 | 773 | 785 | 797 | 808 | 4 |
| 370 | 820 | 832 | 844 | 855 | 867 | 879 | 891 | 902 | 914 | 926 | 5 |
| 71 | 937 | 949 | 961 | 972 | 984 | 996 | *008 | *019 | *031 | *043 | 6 |
| 72 | 57 054 | 066 | 078 | 089 | 101 | 113 | 124 | 136 | 148 | 159 | 7 |
| 73 | 171 | 183 | 194 | 206 | 217 | 229 | 241 | 252 | 264 | 276 | 8 |
| 74 | 287 | 299 | 310 | 322 | 334 | 345 | 357 | 368 | 380 | 392 | 9 |
| 75 | 403 | 415 | 426 | 438 | 449 | 461 | 473 | 484 | 496 | 507 | 10.8 |
| 76 | 519 | 530 | 542 | 553 | 565 | 576 | 588 | 600 | 611 | 623 | |
| 77 | 634 | 646 | 657 | 669 | 680 | 692 | 703 | 715 | 726 | 738 | 11 |
| 78 | 749 | 761 | 772 | 784 | 795 | 807 | 818 | 830 | 841 | 852 | 1 |
| 79 | 864 | 875 | 887 | 898 | 910 | 921 | 933 | 944 | 955 | 967 | 2 |
| 380 | 978 | 990 | *001 | *013 | *024 | *035 | *047 | *058 | *070 | *081 | 3 |
| 81 | 58 092 | 104 | 115 | 127 | 138 | 149 | 161 | 172 | 184 | 195 | 4 |
| 82 | 206 | 218 | 229 | 240 | 252 | 263 | 274 | 286 | 297 | 309 | 5 |
| 83 | 320 | 331 | 343 | 354 | 365 | 377 | 388 | 399 | 410 | 422 | 6 |
| 84 | 433 | 444 | 456 | 467 | 478 | 490 | 501 | 512 | 524 | 535 | 7 |
| 85 | 546 | 557 | 569 | 580 | 591 | 602 | 614 | 625 | 636 | 647 | 8 |
| 86 | 659 | 670 | 681 | 692 | 704 | 715 | 726 | 737 | 749 | 760 | 9 |
| 87 | 771 | 782 | 794 | 805 | 816 | 827 | 838 | 850 | 861 | 872 | |
| 88 | 883 | 894 | 906 | 917 | 928 | 939 | 950 | 961 | 973 | 984 | |
| 89 | 995 | *006 | *017 | *028 | *040 | *051 | *062 | *073 | *084 | *095 | 10 |
| 390 | 59 106 | 118 | 129 | 140 | 151 | 162 | 173 | 184 | 195 | 207 | 1 |
| 91 | 218 | 229 | 240 | 251 | 262 | 273 | 284 | 295 | 306 | 318 | 2 |
| 92 | 329 | 340 | 351 | 362 | 373 | 384 | 395 | 406 | 417 | 428 | 3 |
| 93 | 439 | 450 | 461 | 472 | 483 | 494 | 506 | 517 | 528 | 539 | 4 |
| 94 | 550 | 561 | 572 | 583 | 594 | 605 | 616 | 627 | 638 | 649 | 5 |
| 95 | 660 | 671 | 682 | 693 | 704 | 715 | 726 | 737 | 748 | 759 | 6 |
| 96 | 770 | 780 | 791 | 802 | 813 | 824 | 835 | 846 | 857 | 868 | 7 |
| 97 | 879 | 890 | 901 | 912 | 923 | 934 | 945 | 956 | 966 | 977 | 8 |
| 98 | 988 | 999 | *010 | *021 | *032 | *043 | *054 | *065 | *076 | *087 | 9 |
| 99 | 60 097 | 108 | 119 | 130 | 141 | 152 | 163 | 173 | 184 | 195 | |
| 400 | 206 | 217 | 228 | 239 | 249 | 260 | 271 | 282 | 293 | 304 | |
| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |
|------------|--------|-----|-----|-----|------|------|------|------|------|------|------------|
| 400 | 60 206 | 217 | 228 | 239 | 249 | 260 | 271 | 282 | 293 | 304 | |
| 01 | 314 | 325 | 336 | 347 | 358 | 369 | 379 | 390 | 401 | 412 | |
| 02 | 423 | 433 | 444 | 455 | 466 | 477 | 487 | 498 | 509 | 520 | |
| 03 | 531 | 541 | 552 | 563 | 574 | 584 | 595 | 606 | 617 | 627 | |
| 04 | 638 | 649 | 660 | 670 | 681 | 692 | 703 | 713 | 724 | 735 | |
| 05 | 746 | 756 | 767 | 778 | 788 | 799 | 810 | 821 | 831 | 842 | |
| 06 | 853 | 863 | 874 | 885 | 895 | 906 | 917 | 927 | 938 | 949 | II |
| 07 | 959 | 970 | 981 | 991 | *002 | *013 | *023 | *034 | *045 | *055 | I 1.1 |
| 08 | 61 066 | 077 | 087 | 098 | 109 | 119 | 130 | 140 | 151 | 162 | 2 2.2 |
| 09 | 172 | 183 | 194 | 204 | 215 | 225 | 236 | 247 | 257 | 268 | 3 3.3 |
| 410 | 278 | 289 | 300 | 310 | 321 | 331 | 342 | 352 | 363 | 374 | 4 4.4 |
| 11 | 384 | 395 | 405 | 416 | 426 | 437 | 448 | 458 | 469 | 479 | 5 5.5 |
| 12 | 490 | 500 | 511 | 521 | 532 | 542 | 553 | 563 | 574 | 584 | 6 6.6 |
| 13 | 595 | 606 | 616 | 627 | 637 | 648 | 658 | 669 | 679 | 690 | 7 7.7 |
| 14 | 700 | 711 | 721 | 731 | 742 | 752 | 763 | 773 | 784 | 794 | 8 8.8 |
| 15 | 805 | 815 | 826 | 836 | 847 | 857 | 868 | 878 | 888 | 899 | 9 9.9 |
| 16 | 909 | 920 | 930 | 941 | 951 | 962 | 972 | 982 | 993 | *003 | |
| 17 | 62 014 | 024 | 034 | 045 | 055 | 066 | 076 | 086 | 097 | 107 | |
| 18 | 118 | 128 | 138 | 149 | 159 | 170 | 180 | 190 | 201 | 211 | |
| 19 | 221 | 232 | 242 | 252 | 263 | 273 | 284 | 294 | 304 | 315 | |
| 420 | 325 | 335 | 346 | 356 | 366 | 377 | 387 | 397 | 408 | 418 | |
| 21 | 428 | 439 | 449 | 459 | 469 | 480 | 490 | 500 | 511 | 521 | IO |
| 22 | 531 | 542 | 552 | 562 | 572 | 583 | 593 | 603 | 613 | 624 | I 1.0 |
| 23 | 634 | 644 | 655 | 665 | 675 | 685 | 696 | 706 | 716 | 726 | 2 2.0 |
| 24 | 737 | 747 | 757 | 767 | 778 | 788 | 798 | 808 | 818 | 829 | 3 3.0 |
| 25 | 839 | 849 | 859 | 870 | 880 | 890 | 900 | 910 | 921 | 931 | 4 4.0 |
| 26 | 941 | 951 | 961 | 972 | 982 | 992 | *002 | *012 | *022 | *033 | 5 5.0 |
| 27 | 63 043 | 053 | 063 | 073 | 083 | 094 | 104 | 114 | 124 | 134 | 6 6.0 |
| 28 | 144 | 155 | 165 | 175 | 185 | 195 | 205 | 215 | 225 | 236 | 7 7.0 |
| 29 | 246 | 256 | 266 | 276 | 286 | 296 | 306 | 317 | 327 | 337 | 8 8.0 |
| 430 | 347 | 357 | 367 | 377 | 387 | 397 | 407 | 417 | 428 | 438 | 9 9.0 |
| 31 | 448 | 458 | 468 | 478 | 488 | 498 | 508 | 518 | 528 | 538 | |
| 32 | 548 | 558 | 568 | 579 | 589 | 599 | 609 | 619 | 629 | 639 | |
| 33 | 649 | 659 | 669 | 679 | 689 | 699 | 709 | 719 | 729 | 739 | |
| 34 | 749 | 759 | 769 | 779 | 789 | 799 | 809 | 819 | 829 | 839 | |
| 35 | 849 | 859 | 869 | 879 | 889 | 899 | 909 | 919 | 929 | 939 | |
| 36 | 949 | 959 | 969 | 979 | 988 | 998 | *008 | *018 | *028 | *038 | 9 |
| 37 | 64 048 | 058 | 068 | 078 | 088 | 098 | 108 | 118 | 128 | 137 | I 0.9 |
| 38 | 147 | 157 | 167 | 177 | 187 | 197 | 207 | 217 | 227 | 237 | 2 1.8 |
| 39 | 246 | 256 | 266 | 276 | 286 | 296 | 306 | 316 | 326 | 335 | 3 2.7 |
| 440 | 345 | 355 | 365 | 375 | 385 | 395 | 404 | 414 | 424 | 434 | 4 3.6 |
| 41 | 444 | 454 | 464 | 473 | 483 | 493 | 503 | 513 | 523 | 532 | 5 4.5 |
| 42 | 542 | 552 | 562 | 572 | 582 | 591 | 601 | 611 | 621 | 631 | 6 5.4 |
| 43 | 640 | 650 | 660 | 670 | 680 | 689 | 699 | 709 | 719 | 729 | 7 6.3 |
| 44 | 738 | 748 | 758 | 768 | 777 | 787 | 797 | 807 | 816 | 826 | 8 7.2 |
| 45 | 836 | 846 | 856 | 865 | 875 | 885 | 895 | 904 | 914 | 924 | 9 8.1 |
| 46 | 933 | 943 | 953 | 963 | 972 | 982 | 992 | *002 | *011 | *021 | |
| 47 | 65 031 | 040 | 050 | 060 | 070 | 079 | 089 | 099 | 108 | 118 | |
| 48 | 128 | 137 | 147 | 157 | 167 | 176 | 186 | 196 | 205 | 215 | |
| 49 | 225 | 234 | 244 | 254 | 263 | 273 | 283 | 292 | 302 | 312 | |
| 450 | 321 | 331 | 341 | 350 | 360 | 369 | 379 | 389 | 398 | 408 | |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |
|------------|--------|------|------|------|------|------|------|------|------|------|------------|
| 450 | 65 32I | 33I | 34I | 350 | 360 | 369 | 379 | 389 | 398 | 408 | |
| 51 | 418 | 427 | 437 | 447 | 456 | 466 | 475 | 485 | 495 | 504 | |
| 52 | 514 | 523 | 533 | 543 | 552 | 562 | 571 | 581 | 591 | 600 | |
| 53 | 610 | 619 | 629 | 639 | 648 | 658 | 667 | 677 | 686 | 696 | |
| 54 | 706 | 715 | 725 | 734 | 744 | 753 | 763 | 772 | 782 | 792 | |
| 55 | 80I | 81I | 820 | 830 | 839 | 849 | 858 | 868 | 877 | 887 | |
| 56 | 896 | 906 | 916 | 925 | 935 | 944 | 954 | 963 | 973 | 982 | 10 |
| 57 | 992 | *00I | *01I | *020 | *030 | *039 | *049 | *058 | *068 | *077 | 1 I 1.0 |
| 58 | 66 087 | 096 | 106 | 115 | 124 | 134 | 143 | 153 | 162 | 172 | 2 2.0 |
| 59 | 18I | 19I | 200 | 210 | 219 | 229 | 238 | 247 | 257 | 266 | 3 3.0 |
| 460 | 276 | 285 | 295 | 304 | 314 | 323 | 332 | 342 | 35I | 36I | 4 4.0 |
| 61 | 370 | 380 | 389 | 398 | 408 | 417 | 427 | 436 | 445 | 455 | 5 5.0 |
| 62 | 464 | 474 | 483 | 492 | 502 | 511 | 521 | 530 | 539 | 549 | 6 6.0 |
| 63 | 558 | 567 | 577 | 586 | 596 | 605 | 614 | 624 | 633 | 642 | 7 7.0 |
| 64 | 652 | 66I | 67I | 680 | 689 | 699 | 708 | 717 | 727 | 736 | 8 8.0 |
| 65 | 745 | 755 | 764 | 773 | 783 | 792 | 80I | 81I | 820 | 829 | 9 9.0 |
| 66 | 839 | 848 | 857 | 867 | 876 | 885 | 894 | 904 | 913 | 922 | |
| 67 | 932 | 94I | 950 | 960 | 969 | 978 | 987 | 997 | *006 | *015 | |
| 68 | 67 025 | 034 | 043 | 052 | 062 | 07I | 080 | 089 | 099 | 108 | |
| 69 | 117 | 127 | 136 | 145 | 154 | 164 | 173 | 182 | 19I | 20I | |
| 470 | 210 | 219 | 228 | 237 | 247 | 256 | 265 | 274 | 284 | 293 | |
| 71 | 302 | 31I | 32I | 330 | 339 | 348 | 357 | 367 | 376 | 385 | 9 |
| 72 | 394 | 403 | 413 | 422 | 431 | 440 | 449 | 459 | 468 | 477 | 1 0.9 |
| 73 | 486 | 495 | 504 | 514 | 523 | 532 | 54I | 550 | 560 | 569 | 2 1.8 |
| 74 | 578 | 587 | 596 | 605 | 614 | 624 | 633 | 642 | 65I | 660 | 3 2.7 |
| 75 | 669 | 679 | 688 | 697 | 706 | 715 | 724 | 733 | 742 | 752 | 4 3.6 |
| 76 | 761 | 770 | 779 | 788 | 797 | 806 | 815 | 825 | 834 | 843 | 5 4.5 |
| 77 | 852 | 86I | 870 | 879 | 888 | 897 | 906 | 916 | 925 | 934 | 6 5.4 |
| 78 | 943 | 952 | 96I | 970 | 979 | 988 | 997 | *006 | *015 | *024 | 7 6.3 |
| 79 | 68 034 | 043 | 052 | 06I | 070 | 079 | 088 | 097 | 106 | 115 | 8 7.2 |
| 480 | 124 | 133 | 142 | 15I | 160 | 169 | 178 | 187 | 196 | 205 | 9 8.1 |
| 81 | 215 | 224 | 233 | 242 | 25I | 260 | 269 | 278 | 287 | 296 | |
| 82 | 305 | 314 | 323 | 332 | 34I | 350 | 359 | 368 | 377 | 386 | |
| 83 | 395 | 404 | 413 | 422 | 43I | 440 | 449 | 458 | 467 | 476 | |
| 84 | 485 | 494 | 502 | 51I | 520 | 529 | 538 | 547 | 556 | 565 | |
| 85 | 574 | 583 | 592 | 60I | 610 | 619 | 628 | 637 | 646 | 655 | |
| 86 | 664 | 673 | 68I | 690 | 699 | 708 | 717 | 726 | 735 | 744 | 8 |
| 87 | 753 | 762 | 77I | 780 | 789 | 797 | 806 | 815 | 824 | 833 | 1 0.8 |
| 88 | 842 | 85I | 860 | 869 | 878 | 886 | 895 | 904 | 913 | 922 | 2 1.6 |
| 89 | 931 | 940 | 949 | 958 | 966 | 975 | 984 | 993 | *002 | *01I | 3 2.4 |
| 490 | 69 020 | 028 | 037 | 046 | 055 | 064 | 073 | 082 | 090 | 099 | 4 3.2 |
| 91 | 108 | 117 | 126 | 135 | 144 | 152 | 161 | 170 | 179 | 188 | 5 4.0 |
| 92 | 197 | 205 | 214 | 223 | 232 | 24I | 249 | 258 | 267 | 276 | 6 4.8 |
| 93 | 285 | 294 | 302 | 31I | 320 | 329 | 338 | 346 | 355 | 364 | 7 5.6 |
| 94 | 373 | 38I | 390 | 399 | 408 | 417 | 425 | 434 | 443 | 452 | 8 6.4 |
| 95 | 46I | 469 | 478 | 487 | 496 | 504 | 513 | 522 | 531 | 539 | 9 7.2 |
| 96 | 548 | 557 | 566 | 574 | 583 | 592 | 60I | 609 | 618 | 627 | |
| 97 | 636 | 644 | 653 | 662 | 67I | 679 | 688 | 697 | 705 | 714 | |
| 98 | 723 | 732 | 740 | 749 | 758 | 767 | 775 | 784 | 793 | 80I | |
| 99 | 810 | 819 | 827 | 836 | 845 | 854 | 862 | 87I | 880 | 888 | |
| 500 | 897 | 906 | 914 | 923 | 932 | 940 | 949 | 958 | 966 | 975 | |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |
|------------|--------|------|------|------|------|------|------|------|------|------|------------|
| 500 | 69 897 | 906 | 914 | 923 | 932 | 940 | 949 | 958 | 966 | 975 | |
| 01 | 984 | 992 | *001 | *010 | *018 | *027 | *036 | *044 | *053 | *062 | |
| 02 | 70 070 | 079 | 088 | 096 | 105 | 114 | 122 | 131 | 140 | 148 | |
| 03 | 157 | 165 | 174 | 183 | 191 | 200 | 209 | 217 | 226 | 234 | |
| 04 | 243 | 252 | 260 | 269 | 278 | 286 | 295 | 303 | 312 | 321 | |
| 05 | 329 | 338 | 346 | 355 | 364 | 372 | 381 | 389 | 398 | 406 | |
| 06 | 415 | 424 | 432 | 441 | 449 | 458 | 467 | 475 | 484 | 492 | 9 |
| 07 | 501 | 509 | 518 | 526 | 535 | 544 | 552 | 561 | 569 | 578 | 1 0.9 |
| 08 | 586 | 595 | 603 | 612 | 621 | 629 | 638 | 646 | 655 | 663 | 2 1.8 |
| 09 | 672 | 680 | 689 | 697 | 706 | 714 | 723 | 731 | 740 | 749 | 3 2.7 |
| 510 | 757 | 766 | 774 | 783 | 791 | 800 | 808 | 817 | 825 | 834 | 4 3.6 |
| 11 | 842 | 851 | 859 | 868 | 876 | 885 | 893 | 902 | 910 | 919 | 5 4.5 |
| 12 | 927 | 935 | 944 | 952 | 961 | 969 | 978 | 986 | 995 | *003 | 6 5.4 |
| 13 | 71 012 | 020 | 029 | 037 | 046 | 054 | 063 | 071 | 079 | 088 | 7 6.3 |
| 14 | 096 | 105 | 113 | 122 | 130 | 139 | 147 | 155 | 164 | 172 | 8 7.2 |
| 15 | 181 | 189 | 198 | 206 | 214 | 223 | 231 | 240 | 248 | 257 | 9 8.1 |
| 16 | 265 | 273 | 282 | 290 | 299 | 307 | 315 | 324 | 332 | 341 | |
| 17 | 349 | 357 | 366 | 374 | 383 | 391 | 399 | 408 | 416 | 425 | |
| 18 | 433 | 441 | 450 | 458 | 466 | 475 | 483 | 492 | 500 | 508 | |
| 19 | 517 | 525 | 533 | 542 | 550 | 559 | 567 | 575 | 584 | 592 | |
| 520 | 600 | 609 | 617 | 625 | 634 | 642 | 650 | 659 | 667 | 675 | |
| 21 | 684 | 692 | 700 | 709 | 717 | 725 | 734 | 742 | 750 | 759 | 8 |
| 22 | 767 | 775 | 784 | 792 | 800 | 809 | 817 | 825 | 834 | 842 | 1 0.8 |
| 23 | 850 | 858 | 867 | 875 | 883 | 892 | 900 | 908 | 917 | 925 | 2 1.6 |
| 24 | 933 | 941 | 950 | 958 | 966 | 975 | 983 | 991 | 999 | *008 | 3 2.4 |
| 25 | 72 016 | 024 | 032 | 041 | 049 | 057 | 066 | 074 | 082 | 090 | 4 3.2 |
| 26 | 099 | 107 | 115 | 123 | 132 | 140 | 148 | 156 | 165 | 173 | 5 4.0 |
| 27 | 181 | 189 | 198 | 206 | 214 | 222 | 230 | 239 | 247 | 255 | 6 4.8 |
| 28 | 263 | 272 | 280 | 288 | 296 | 304 | 313 | 321 | 329 | 337 | 7 5.6 |
| 29 | 346 | 354 | 362 | 370 | 378 | 387 | 395 | 403 | 411 | 419 | 8 6.4 |
| 530 | 428 | 436 | 444 | 452 | 460 | 469 | 477 | 485 | 493 | 501 | 9 7.2 |
| 31 | 509 | 518 | 526 | 534 | 542 | 550 | 558 | 567 | 575 | 583 | |
| 32 | 591 | 599 | 607 | 616 | 624 | 632 | 640 | 648 | 656 | 665 | |
| 33 | 673 | 681 | 689 | 697 | 705 | 713 | 722 | 730 | 738 | 746 | |
| 34 | 754 | 762 | 770 | 779 | 787 | 795 | 803 | 811 | 819 | 827 | |
| 35 | 835 | 843 | 852 | 860 | 868 | 876 | 884 | 892 | 900 | 908 | |
| 36 | 916 | 925 | 933 | 941 | 949 | 957 | 965 | 973 | 981 | 989 | 7 |
| 37 | 997 | *006 | *014 | *022 | *030 | *038 | *046 | *054 | *062 | *070 | 1 0.7 |
| 38 | 73 078 | 086 | 094 | 102 | 111 | 119 | 127 | 135 | 143 | 151 | 2 1.4 |
| 39 | 159 | 167 | 175 | 183 | 191 | 199 | 207 | 215 | 223 | 231 | 3 2.1 |
| 540 | 239 | 247 | 255 | 263 | 272 | 280 | 288 | 296 | 304 | 312 | 4 2.8 |
| 41 | 320 | 328 | 336 | 344 | 352 | 360 | 368 | 376 | 384 | 392 | 5 3.5 |
| 42 | 400 | 408 | 416 | 424 | 432 | 440 | 448 | 456 | 464 | 472 | 6 4.2 |
| 43 | 480 | 488 | 496 | 504 | 512 | 520 | 528 | 536 | 544 | 552 | 7 4.9 |
| 44 | 560 | 568 | 576 | 584 | 592 | 600 | 608 | 616 | 624 | 632 | 8 5.6 |
| 45 | 640 | 648 | 656 | 664 | 672 | 679 | 687 | 695 | 703 | 711 | 9 6.3 |
| 46 | 719 | 727 | 735 | 743 | 751 | 759 | 767 | 775 | 783 | 791 | |
| 47 | 799 | 807 | 815 | 823 | 830 | 838 | 846 | 854 | 862 | 870 | |
| 48 | 878 | 886 | 894 | 902 | 910 | 918 | 926 | 933 | 941 | 949 | |
| 49 | 957 | 965 | 973 | 981 | 989 | 997 | *005 | *013 | *020 | *028 | |
| 550 | 74 036 | 044 | 052 | 060 | 068 | 076 | 084 | 092 | 099 | 107 | |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |
|-----|--------|-----|-----|-----|------|------|------|------|------|------|------------|
| 550 | 74 036 | 044 | 052 | 060 | 068 | 076 | 084 | 092 | 099 | 107 | |
| 51 | 115 | 123 | 131 | 139 | 147 | 155 | 162 | 170 | 178 | 186 | |
| 52 | 194 | 202 | 210 | 218 | 225 | 233 | 241 | 249 | 257 | 265 | |
| 53 | 273 | 280 | 288 | 296 | 304 | 312 | 320 | 327 | 335 | 343 | |
| 54 | 351 | 359 | 367 | 374 | 382 | 390 | 398 | 406 | 414 | 421 | |
| 55 | 429 | 437 | 445 | 453 | 461 | 468 | 476 | 484 | 492 | 500 | |
| 56 | 507 | 515 | 523 | 531 | 539 | 547 | 554 | 562 | 570 | 578 | |
| 57 | 586 | 593 | 601 | 609 | 617 | 624 | 632 | 640 | 648 | 656 | |
| 58 | 663 | 671 | 679 | 687 | 695 | 702 | 710 | 718 | 726 | 733 | |
| 59 | 741 | 749 | 757 | 764 | 772 | 780 | 788 | 796 | 803 | 811 | |
| 560 | 819 | 827 | 834 | 842 | 850 | 858 | 865 | 873 | 881 | 889 | |
| 61 | 896 | 904 | 912 | 920 | 927 | 935 | 943 | 950 | 958 | 966 | 8 |
| 62 | 974 | 981 | 989 | 997 | *005 | *012 | *020 | *028 | *035 | *043 | |
| 63 | 75 051 | 059 | 066 | 074 | 082 | 089 | 097 | 105 | 113 | 120 | 1 0.8 |
| 64 | 128 | 136 | 143 | 151 | 159 | 166 | 174 | 182 | 189 | 197 | 2 1.6 |
| 65 | 205 | 213 | 220 | 228 | 236 | 243 | 251 | 259 | 266 | 274 | 3 2.4 |
| 66 | 282 | 289 | 297 | 305 | 312 | 320 | 328 | 335 | 343 | 351 | 4 3.2 |
| 67 | 358 | 366 | 374 | 381 | 389 | 397 | 404 | 412 | 420 | 427 | 5 4.0 |
| 68 | 435 | 442 | 450 | 458 | 465 | 473 | 481 | 488 | 496 | 504 | 6 4.8 |
| 69 | 511 | 519 | 526 | 534 | 542 | 549 | 557 | 565 | 572 | 580 | 7 5.6 |
| 570 | 587 | 595 | 603 | 610 | 618 | 626 | 633 | 641 | 648 | 656 | 8 6.4 |
| 71 | 664 | 671 | 679 | 686 | 694 | 702 | 709 | 717 | 724 | 732 | 9 7.2 |
| 72 | 740 | 747 | 755 | 762 | 770 | 778 | 785 | 793 | 800 | 808 | |
| 73 | 815 | 823 | 831 | 838 | 846 | 853 | 861 | 868 | 876 | 884 | |
| 74 | 891 | 899 | 906 | 914 | 921 | 929 | 937 | 944 | 952 | 959 | |
| 75 | 967 | 974 | 982 | 989 | 997 | *005 | *012 | *020 | *027 | *035 | |
| 76 | 042 | 050 | 057 | 065 | 072 | 080 | 087 | 095 | 103 | 110 | |
| 77 | 118 | 125 | 133 | 140 | 148 | 155 | 163 | 170 | 178 | 185 | |
| 78 | 193 | 200 | 208 | 215 | 223 | 230 | 238 | 245 | 253 | 260 | |
| 79 | 268 | 275 | 283 | 290 | 298 | 305 | 313 | 320 | 328 | 335 | |
| 580 | 343 | 350 | 358 | 365 | 373 | 380 | 388 | 395 | 403 | 410 | |
| 81 | 418 | 425 | 433 | 440 | 448 | 455 | 462 | 470 | 477 | 485 | |
| 82 | 492 | 500 | 507 | 515 | 522 | 530 | 537 | 545 | 552 | 559 | |
| 83 | 567 | 574 | 582 | 589 | 597 | 604 | 612 | 619 | 626 | 634 | 7 |
| 84 | 641 | 649 | 656 | 664 | 671 | 678 | 686 | 693 | 701 | 708 | 1 0.7 |
| 85 | 716 | 723 | 730 | 738 | 745 | 753 | 760 | 768 | 775 | 782 | 2 1.4 |
| 86 | 790 | 797 | 805 | 812 | 819 | 827 | 834 | 842 | 849 | 856 | 3 2.1 |
| 87 | 864 | 871 | 879 | 886 | 893 | 901 | 908 | 916 | 923 | 930 | 4 2.8 |
| 88 | 938 | 945 | 953 | 960 | 967 | 975 | 982 | 989 | 997 | *004 | 5 3.5 |
| 89 | 77 012 | 019 | 026 | 034 | 041 | 048 | 056 | 063 | 070 | 078 | 6 4.2 |
| 590 | 085 | 093 | 100 | 107 | 115 | 122 | 129 | 137 | 144 | 151 | 7 4.9 |
| 91 | 159 | 166 | 173 | 181 | 188 | 195 | 203 | 210 | 217 | 225 | 8 5.6 |
| 92 | 232 | 240 | 247 | 254 | 262 | 269 | 276 | 283 | 291 | 298 | 9 6.3 |
| 93 | 305 | 313 | 320 | 327 | 335 | 342 | 349 | 357 | 364 | 371 | |
| 94 | 379 | 386 | 393 | 401 | 408 | 415 | 422 | 430 | 437 | 444 | |
| 95 | 452 | 459 | 466 | 474 | 481 | 488 | 495 | 503 | 510 | 517 | |
| 96 | 525 | 532 | 539 | 546 | 554 | 561 | 568 | 576 | 583 | 590 | |
| 97 | 597 | 605 | 612 | 619 | 627 | 634 | 641 | 648 | 656 | 663 | |
| 98 | 670 | 677 | 685 | 692 | 699 | 706 | 714 | 721 | 728 | 735 | |
| 99 | 743 | 750 | 757 | 764 | 772 | 779 | 786 | 793 | 801 | 808 | |
| 600 | 815 | 822 | 830 | 837 | 844 | 851 | 859 | 866 | 873 | 880 | |
| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |
|------------|--------|-----|-----|-----|-----|-----|------|------|------|------|------------|
| 600 | 77 815 | 822 | 830 | 837 | 844 | 851 | 859 | 866 | 873 | 880 | |
| 01 | 887 | 895 | 902 | 909 | 916 | 924 | 931 | 938 | 945 | 952 | |
| 02 | 960 | 967 | 974 | 981 | 988 | 996 | *003 | *010 | *017 | *025 | |
| 03 | 78 032 | 039 | 046 | 053 | 061 | 068 | 075 | 082 | 089 | 097 | |
| 04 | 104 | 111 | 118 | 125 | 132 | 140 | 147 | 154 | 161 | 168 | |
| 05 | 176 | 183 | 190 | 197 | 204 | 211 | 219 | 226 | 233 | 240 | |
| 06 | 247 | 254 | 262 | 269 | 276 | 283 | 290 | 297 | 305 | 312 | 8 |
| 07 | 319 | 326 | 333 | 340 | 347 | 355 | 362 | 369 | 376 | 383 | 1 0.8 |
| 08 | 390 | 398 | 405 | 412 | 419 | 426 | 433 | 440 | 447 | 455 | 2 1.6 |
| 09 | 462 | 469 | 476 | 483 | 490 | 497 | 504 | 512 | 519 | 526 | 3 2.4 |
| 610 | 533 | 540 | 547 | 554 | 561 | 569 | 576 | 583 | 590 | 597 | 4 3.2 |
| 11 | 604 | 611 | 618 | 625 | 633 | 640 | 647 | 654 | 661 | 668 | 5 4.0 |
| 12 | 675 | 682 | 689 | 696 | 704 | 711 | 718 | 725 | 732 | 739 | 6 4.8 |
| 13 | 746 | 753 | 760 | 767 | 774 | 781 | 789 | 796 | 803 | 810 | 7 5.6 |
| 14 | 817 | 824 | 831 | 838 | 845 | 852 | 859 | 866 | 873 | 880 | 8 6.4 |
| 15 | 888 | 895 | 902 | 909 | 916 | 923 | 930 | 937 | 944 | 951 | 9 7.2 |
| 16 | 958 | 965 | 972 | 979 | 986 | 993 | *000 | *007 | *014 | *021 | |
| 17 | 79 029 | 036 | 043 | 050 | 057 | 064 | 071 | 078 | 085 | 092 | |
| 18 | 099 | 106 | 113 | 120 | 127 | 134 | 141 | 148 | 155 | 162 | |
| 19 | 169 | 176 | 183 | 190 | 197 | 204 | 211 | 218 | 225 | 232 | |
| 620 | 239 | 246 | 253 | 260 | 267 | 274 | 281 | 288 | 295 | 302 | |
| 21 | 309 | 316 | 323 | 330 | 337 | 344 | 351 | 358 | 365 | 372 | 7 |
| 22 | 379 | 386 | 393 | 400 | 407 | 414 | 421 | 428 | 435 | 442 | 1 0.7 |
| 23 | 449 | 456 | 463 | 470 | 477 | 484 | 491 | 498 | 505 | 511 | 2 1.4 |
| 24 | 518 | 525 | 532 | 539 | 546 | 553 | 560 | 567 | 574 | 581 | 3 2.1 |
| 25 | 588 | 595 | 602 | 609 | 616 | 623 | 630 | 637 | 644 | 651 | 4 2.8 |
| 26 | 657 | 664 | 671 | 678 | 685 | 692 | 699 | 706 | 713 | 720 | 5 3.5 |
| 27 | 727 | 734 | 741 | 748 | 754 | 761 | 768 | 775 | 782 | 789 | 6 4.2 |
| 28 | 796 | 803 | 810 | 817 | 824 | 831 | 837 | 844 | 851 | 858 | 7 4.9 |
| 29 | 865 | 872 | 879 | 886 | 893 | 900 | 906 | 913 | 920 | 927 | 8 5.6 |
| 630 | 934 | 941 | 948 | 955 | 962 | 969 | 975 | 982 | 989 | 996 | 9 6.3 |
| 31 | 80 003 | 010 | 017 | 024 | 030 | 037 | 044 | 051 | 058 | 065 | |
| 32 | 072 | 079 | 085 | 092 | 099 | 106 | 113 | 120 | 127 | 134 | |
| 33 | 140 | 147 | 154 | 161 | 168 | 175 | 182 | 188 | 195 | 202 | |
| 34 | 209 | 216 | 223 | 229 | 236 | 243 | 250 | 257 | 264 | 271 | |
| 35 | 277 | 284 | 291 | 298 | 305 | 312 | 318 | 325 | 332 | 339 | |
| 36 | 346 | 353 | 359 | 366 | 373 | 380 | 387 | 393 | 400 | 407 | 6 |
| 37 | 414 | 421 | 428 | 434 | 441 | 448 | 455 | 462 | 468 | 475 | 1 0.6 |
| 38 | 482 | 489 | 496 | 502 | 509 | 516 | 523 | 530 | 536 | 543 | 2 1.2 |
| 39 | 550 | 557 | 564 | 570 | 577 | 584 | 591 | 598 | 604 | 611 | 3 1.8 |
| 640 | 618 | 625 | 632 | 638 | 645 | 652 | 659 | 665 | 672 | 679 | 4 2.4 |
| 41 | 686 | 693 | 699 | 706 | 713 | 720 | 726 | 733 | 740 | 747 | 5 3.0 |
| 42 | 754 | 760 | 767 | 774 | 781 | 787 | 794 | 801 | 808 | 814 | 6 3.6 |
| 43 | 821 | 828 | 835 | 841 | 848 | 855 | 862 | 868 | 875 | 882 | 7 4.2 |
| 44 | 889 | 895 | 902 | 909 | 916 | 922 | 929 | 936 | 943 | 949 | 8 4.8 |
| 45 | 956 | 963 | 969 | 976 | 983 | 990 | 996 | *003 | *010 | *017 | 9 5.4 |
| 46 | 81 023 | 030 | 037 | 043 | 050 | 057 | 064 | 070 | 077 | 084 | |
| 47 | 090 | 097 | 104 | 111 | 117 | 124 | 131 | 137 | 144 | 151 | |
| 48 | 158 | 164 | 171 | 178 | 184 | 191 | 198 | 204 | 211 | 218 | |
| 49 | 224 | 231 | 238 | 245 | 251 | 258 | 265 | 271 | 278 | 285 | |
| 650 | 291 | 298 | 305 | 311 | 318 | 325 | 331 | 338 | 345 | 351 | |
| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. | |
|------------|-----|------|------|------|------|------|------|------|------|------|------------|--|
| 650 | 81 | 29I | 298 | 305 | 311 | 318 | 325 | 33I | 338 | 345 | 35I | |
| 51 | 358 | 365 | 37I | 378 | 385 | 39I | 398 | 405 | 41I | 418 | | |
| 52 | 425 | 43I | 438 | 445 | 45I | 458 | 465 | 47I | 478 | 485 | | |
| 53 | 49I | 498 | 505 | 51I | 518 | 525 | 53I | 538 | 544 | 55I | | |
| 54 | 558 | 564 | 57I | 578 | 584 | 59I | 598 | 604 | 61I | 617 | | |
| 55 | 624 | 63I | 637 | 644 | 65I | 657 | 664 | 67I | 677 | 684 | | |
| 56 | 690 | 697 | 704 | 710 | 717 | 723 | 730 | 737 | 743 | 750 | | |
| 57 | 757 | 763 | 770 | 776 | 783 | 790 | 796 | 803 | 809 | 816 | | |
| 58 | 823 | 829 | 836 | 842 | 849 | 856 | 862 | 869 | 875 | 882 | | |
| 59 | 889 | 895 | 902 | 908 | 915 | 92I | 928 | 935 | 94I | 948 | | |
| 660 | 954 | 96I | 968 | 974 | 98I | 987 | 994 | *000 | *007 | *014 | | |
| 61 | 82 | 020 | 027 | 033 | 040 | 046 | 053 | 060 | 066 | 073 | 079 | |
| 62 | 086 | 092 | 099 | 105 | 112 | 119 | 125 | 132 | 138 | 145 | | |
| 63 | 15I | 158 | 164 | 17I | 178 | 184 | 19I | 197 | 204 | 210 | | |
| 64 | 217 | 223 | 230 | 236 | 243 | 249 | 256 | 263 | 269 | 276 | | |
| 65 | 282 | 289 | 295 | 302 | 308 | 315 | 32I | 328 | 334 | 34I | | |
| 66 | 347 | 354 | 360 | 367 | 373 | 380 | 387 | 393 | 400 | 406 | | |
| 67 | 413 | 419 | 426 | 432 | 439 | 445 | 452 | 458 | 465 | 47I | | |
| 68 | 478 | 484 | 49I | 497 | 504 | 510 | 517 | 523 | 530 | 536 | | |
| 69 | 543 | 549 | 556 | 562 | 569 | 575 | 582 | 588 | 595 | 60I | | |
| 670 | 607 | 614 | 620 | 627 | 633 | 640 | 646 | 653 | 659 | 666 | | |
| 71 | 672 | 679 | 685 | 692 | 698 | 705 | 71I | 718 | 724 | 730 | | |
| 72 | 737 | 743 | 750 | 756 | 763 | 769 | 776 | 782 | 789 | 795 | | |
| 73 | 802 | 808 | 814 | 82I | 827 | 834 | 840 | 847 | 853 | 860 | | |
| 74 | 866 | 872 | 879 | 885 | 892 | 898 | 905 | 91I | 918 | 924 | | |
| 75 | 930 | 937 | 943 | 950 | 956 | 963 | 969 | 975 | 982 | 988 | | |
| 76 | 995 | *00I | *008 | *014 | *020 | *027 | *033 | *040 | *046 | *052 | | |
| 77 | 83 | 059 | 065 | 072 | 078 | 085 | 09I | 097 | 104 | 110 | 117 | |
| 78 | 123 | 129 | 136 | 142 | 149 | 155 | 16I | 168 | 174 | 18I | | |
| 79 | 187 | 193 | 200 | 206 | 213 | 219 | 225 | 232 | 238 | 245 | | |
| 680 | 25I | 257 | 264 | 270 | 276 | 283 | 289 | 296 | 302 | 308 | | |
| 81 | 315 | 32I | 327 | 334 | 340 | 347 | 353 | 359 | 366 | 372 | | |
| 82 | 378 | 385 | 39I | 398 | 404 | 410 | 417 | 423 | 429 | 436 | | |
| 83 | 442 | 448 | 455 | 46I | 467 | 474 | 480 | 487 | 493 | 499 | | |
| 84 | 506 | 512 | 518 | 525 | 53I | 537 | 544 | 550 | 556 | 563 | | |
| 85 | 569 | 575 | 582 | 588 | 594 | 60I | 607 | 613 | 620 | 626 | | |
| 86 | 632 | 639 | 645 | 65I | 658 | 664 | 670 | 677 | 683 | 689 | | |
| 87 | 696 | 702 | 708 | 715 | 72I | 727 | 734 | 740 | 746 | 753 | | |
| 88 | 759 | 765 | 77I | 778 | 784 | 790 | 797 | 803 | 809 | 816 | | |
| 89 | 822 | 828 | 835 | 84I | 847 | 853 | 860 | 866 | 872 | 879 | | |
| 690 | 885 | 89I | 897 | 904 | 910 | 916 | 923 | 929 | 935 | 942 | | |
| 91 | 948 | 954 | 960 | 967 | 973 | 979 | 985 | 992 | 998 | *004 | | |
| 92 | 84 | 01I | 017 | 023 | 029 | 036 | 042 | 048 | 055 | 06I | 067 | |
| 93 | 073 | 080 | 086 | 092 | 098 | 105 | 11I | 117 | 123 | 130 | | |
| 94 | 136 | 142 | 148 | 155 | 16I | 167 | 173 | 180 | 186 | 192 | | |
| 95 | 198 | 205 | 21I | 217 | 223 | 230 | 236 | 242 | 248 | 255 | | |
| 96 | 26I | 267 | 273 | 280 | 286 | 292 | 298 | 305 | 31I | 317 | | |
| 97 | 323 | 330 | 336 | 342 | 348 | 354 | 36I | 367 | 373 | 379 | | |
| 98 | 386 | 392 | 398 | 404 | 410 | 417 | 423 | 429 | 435 | 442 | | |
| 99 | 448 | 454 | 460 | 466 | 473 | 479 | 485 | 49I | 497 | 504 | | |
| 700 | 510 | 516 | 522 | 528 | 535 | 54I | 547 | 553 | 559 | 566 | | |

7

- 1 0.7
- 2 1.4
- 3 2.1
- 4 2.8
- 5 3.5
- 6 4.2
- 7 4.9
- 8 5.6
- 9 6.3

6

- 1 0.6
- 2 1.2
- 3 1.8
- 4 2.4
- 5 3.0
- 6 3.6
- 7 4.2
- 8 4.8
- 9 5.4

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |
|----|---|---|---|---|---|---|---|---|---|---|------------|
|----|---|---|---|---|---|---|---|---|---|---|------------|

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |
|------------|--------|-----|-----|-----|------|------|------|------|------|------|------------|
| 700 | 84 510 | 516 | 522 | 528 | 535 | 541 | 547 | 553 | 559 | 566 | |
| 01 | 572 | 578 | 584 | 590 | 597 | 603 | 609 | 615 | 621 | 628 | |
| 02 | 634 | 640 | 646 | 652 | 658 | 665 | 671 | 677 | 683 | 689 | |
| 03 | 696 | 702 | 708 | 714 | 720 | 726 | 733 | 739 | 745 | 751 | |
| 04 | 757 | 763 | 770 | 776 | 782 | 788 | 794 | 800 | 807 | 813 | |
| 05 | 819 | 825 | 831 | 837 | 844 | 850 | 856 | 862 | 868 | 874 | |
| 06 | 880 | 887 | 893 | 899 | 905 | 911 | 917 | 924 | 930 | 936 | 7 |
| 07 | 942 | 948 | 954 | 960 | 967 | 973 | 979 | 985 | 991 | 997 | 1 0.7 |
| 08 | 85 003 | 009 | 016 | 022 | 028 | 034 | 040 | 046 | 052 | 058 | 2 1.4 |
| 09 | 065 | 071 | 077 | 083 | 089 | 095 | 101 | 107 | 114 | 120 | 3 2.1 |
| 710 | 126 | 132 | 138 | 144 | 150 | 156 | 163 | 169 | 175 | 181 | 4 2.8 |
| 11 | 187 | 193 | 199 | 205 | 211 | 217 | 224 | 230 | 236 | 242 | 5 3.5 |
| 12 | 248 | 254 | 260 | 266 | 272 | 278 | 285 | 291 | 297 | 303 | 6 4.2 |
| 13 | 309 | 315 | 321 | 327 | 333 | 339 | 345 | 352 | 358 | 364 | 7 4.9 |
| 14 | 370 | 376 | 382 | 388 | 394 | 400 | 406 | 412 | 418 | 425 | 8 5.6 |
| 15 | 431 | 437 | 443 | 449 | 455 | 461 | 467 | 473 | 479 | 485 | 9 6.3 |
| 16 | 491 | 497 | 503 | 509 | 516 | 522 | 528 | 534 | 540 | 546 | |
| 17 | 552 | 558 | 564 | 570 | 576 | 582 | 588 | 594 | 600 | 606 | |
| 18 | 612 | 618 | 625 | 631 | 637 | 643 | 649 | 655 | 661 | 667 | |
| 19 | 673 | 679 | 685 | 691 | 697 | 703 | 709 | 715 | 721 | 727 | |
| 720 | 733 | 739 | 745 | 751 | 757 | 763 | 769 | 775 | 781 | 788 | |
| 21 | 794 | 800 | 806 | 812 | 818 | 824 | 830 | 836 | 842 | 848 | 6 |
| 22 | 854 | 860 | 866 | 872 | 878 | 884 | 890 | 896 | 902 | 908 | 1 0.6 |
| 23 | 914 | 920 | 926 | 932 | 938 | 944 | 950 | 956 | 962 | 968 | 2 1.2 |
| 24 | 86 974 | 980 | 986 | 992 | 998 | *004 | *010 | *016 | *022 | *028 | 3 1.8 |
| 25 | 034 | 040 | 046 | 052 | 058 | 064 | 070 | 076 | 082 | 088 | 4 2.4 |
| 26 | 094 | 100 | 106 | 112 | 118 | 124 | 130 | 136 | 141 | 147 | 5 3.0 |
| 27 | 153 | 159 | 165 | 171 | 177 | 183 | 189 | 195 | 201 | 207 | 6 3.6 |
| 28 | 213 | 219 | 225 | 231 | 237 | 243 | 249 | 255 | 261 | 267 | 7 4.2 |
| 29 | 273 | 279 | 285 | 291 | 297 | 303 | 308 | 314 | 320 | 326 | 8 4.8 |
| 730 | 332 | 338 | 344 | 350 | 356 | 362 | 368 | 374 | 380 | 386 | 9 5.4 |
| 31 | 392 | 398 | 404 | 410 | 415 | 421 | 427 | 433 | 439 | 445 | |
| 32 | 451 | 457 | 463 | 469 | 475 | 481 | 487 | 493 | 499 | 504 | |
| 33 | 510 | 516 | 522 | 528 | 534 | 540 | 546 | 552 | 558 | 564 | |
| 34 | 570 | 576 | 581 | 587 | 593 | 599 | 605 | 611 | 617 | 623 | |
| 35 | 629 | 635 | 641 | 646 | 652 | 658 | 664 | 670 | 676 | 682 | |
| 36 | 688 | 694 | 700 | 705 | 711 | 717 | 723 | 729 | 735 | 741 | 5 |
| 37 | 747 | 753 | 759 | 764 | 770 | 776 | 782 | 788 | 794 | 800 | 1 0.5 |
| 38 | 806 | 812 | 817 | 823 | 829 | 835 | 841 | 847 | 853 | 859 | 2 1.0 |
| 39 | 864 | 870 | 876 | 882 | 888 | 894 | 900 | 906 | 911 | 917 | 3 1.5 |
| 740 | 923 | 929 | 935 | 941 | 947 | 953 | 958 | 964 | 970 | 976 | 4 2.0 |
| 41 | 982 | 988 | 994 | 999 | *005 | *011 | *017 | *023 | *029 | *035 | 5 2.5 |
| 42 | 87 040 | 046 | 052 | 058 | 064 | 070 | 075 | 081 | 087 | 093 | 6 3.0 |
| 43 | 099 | 105 | 111 | 116 | 122 | 128 | 134 | 140 | 146 | 151 | 7 3.5 |
| 44 | 157 | 163 | 169 | 175 | 181 | 186 | 192 | 198 | 204 | 210 | 8 4.0 |
| 45 | 216 | 221 | 227 | 233 | 239 | 245 | 251 | 256 | 262 | 268 | 9 4.5 |
| 46 | 274 | 280 | 286 | 291 | 297 | 303 | 309 | 315 | 320 | 326 | |
| 47 | 332 | 338 | 344 | 349 | 355 | 361 | 367 | 373 | 379 | 384 | |
| 48 | 390 | 396 | 402 | 408 | 413 | 419 | 425 | 431 | 437 | 442 | |
| 49 | 448 | 454 | 460 | 466 | 471 | 477 | 483 | 489 | 495 | 500 | |
| 750 | 506 | 512 | 518 | 523 | 529 | 535 | 541 | 547 | 552 | 558 | |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |
|-----|--------|-----|-----|------|------|------|------|------|------|------|------------|
| 750 | 87 506 | 512 | 518 | 523 | 529 | 535 | 541 | 547 | 552 | 558 | |
| 51 | 564 | 570 | 576 | 581 | 587 | 593 | 599 | 604 | 610 | 616 | |
| 52 | 622 | 628 | 633 | 639 | 645 | 651 | 656 | 662 | 668 | 674 | |
| 53 | 679 | 685 | 691 | 697 | 703 | 708 | 714 | 720 | 726 | 731 | |
| 54 | 737 | 743 | 749 | 754 | 760 | 766 | 772 | 777 | 783 | 789 | |
| 55 | 795 | 800 | 806 | 812 | 818 | 823 | 829 | 835 | 841 | 846 | |
| 56 | 852 | 858 | 864 | 869 | 875 | 881 | 887 | 892 | 898 | 904 | |
| 57 | 910 | 915 | 921 | 927 | 933 | 938 | 944 | 950 | 955 | 961 | |
| 58 | 967 | 973 | 978 | 984 | 990 | 996 | *001 | *007 | *013 | *018 | |
| 59 | 88 024 | 030 | 036 | 041 | 047 | 053 | 058 | 064 | 070 | 076 | |
| 760 | 081 | 087 | 093 | 098 | 104 | 110 | 116 | 121 | 127 | 133 | |
| 61 | 138 | 144 | 150 | 156 | 161 | 167 | 173 | 178 | 184 | 190 | 6 |
| 62 | 195 | 201 | 207 | 213 | 218 | 224 | 230 | 235 | 241 | 247 | 1 0.6 |
| 63 | 252 | 258 | 264 | 270 | 275 | 281 | 287 | 292 | 298 | 304 | 2 1.2 |
| 64 | 309 | 315 | 321 | 326 | 332 | 338 | 343 | 349 | 355 | 360 | 3 1.8 |
| 65 | 366 | 372 | 377 | 383 | 389 | 395 | 400 | 406 | 412 | 417 | 4 2.4 |
| 66 | 423 | 429 | 434 | 440 | 446 | 451 | 457 | 463 | 468 | 474 | 5 3.0 |
| 67 | 480 | 485 | 491 | 497 | 502 | 508 | 513 | 519 | 525 | 530 | 6 3.6 |
| 68 | 536 | 542 | 547 | 553 | 559 | 564 | 570 | 576 | 581 | 587 | 7 4.2 |
| 69 | 593 | 598 | 604 | 610 | 615 | 621 | 627 | 632 | 638 | 643 | 8 4.8 |
| 770 | 649 | 655 | 660 | 666 | 672 | 677 | 683 | 689 | 694 | 700 | 9 5.4 |
| 71 | 705 | 711 | 717 | 722 | 728 | 734 | 739 | 745 | 750 | 756 | |
| 72 | 762 | 767 | 773 | 779 | 784 | 790 | 795 | 801 | 807 | 812 | |
| 73 | 818 | 824 | 829 | 835 | 840 | 846 | 852 | 857 | 863 | 868 | |
| 74 | 874 | 880 | 885 | 891 | 897 | 902 | 908 | 913 | 919 | 925 | |
| 75 | 930 | 936 | 941 | 947 | 953 | 958 | 964 | 969 | 975 | 981 | |
| 76 | 986 | 992 | 997 | *003 | *009 | *014 | *020 | *025 | *031 | *037 | |
| 77 | 89 042 | 048 | 053 | 059 | 064 | 070 | 076 | 081 | 087 | 092 | |
| 78 | 098 | 104 | 109 | 115 | 120 | 126 | 131 | 137 | 143 | 148 | |
| 79 | 154 | 159 | 165 | 170 | 176 | 182 | 187 | 193 | 198 | 204 | |
| 780 | 209 | 215 | 221 | 226 | 232 | 237 | 243 | 248 | 254 | 260 | |
| 81 | 265 | 271 | 276 | 282 | 287 | 293 | 298 | 304 | 310 | 315 | 5 |
| 82 | 321 | 326 | 332 | 337 | 343 | 348 | 354 | 360 | 365 | 371 | 1 0.5 |
| 83 | 376 | 382 | 387 | 393 | 398 | 404 | 409 | 415 | 421 | 426 | 2 1.0 |
| 84 | 432 | 437 | 443 | 448 | 454 | 459 | 465 | 470 | 476 | 481 | 3 1.5 |
| 85 | 487 | 492 | 498 | 504 | 509 | 515 | 520 | 526 | 531 | 537 | 4 2.0 |
| 86 | 542 | 548 | 553 | 559 | 564 | 570 | 575 | 581 | 586 | 592 | 5 2.5 |
| 87 | 597 | 603 | 609 | 614 | 620 | 625 | 631 | 636 | 642 | 647 | 6 3.0 |
| 88 | 653 | 658 | 664 | 669 | 675 | 680 | 686 | 691 | 697 | 702 | 7 3.5 |
| 89 | 708 | 713 | 719 | 724 | 730 | 735 | 741 | 746 | 752 | 757 | 8 4.0 |
| 790 | 763 | 768 | 774 | 779 | 785 | 790 | 796 | 801 | 807 | 812 | 9 4.5 |
| 91 | 818 | 823 | 829 | 834 | 840 | 845 | 851 | 856 | 862 | 867 | |
| 92 | 873 | 878 | 883 | 889 | 894 | 900 | 905 | 911 | 916 | 922 | |
| 93 | 927 | 933 | 938 | 944 | 949 | 955 | 960 | 966 | 971 | 977 | |
| 94 | 982 | 988 | 993 | 998 | *004 | *009 | *015 | *020 | *026 | *031 | |
| 95 | 90 037 | 042 | 048 | 053 | 059 | 064 | 069 | 075 | 080 | 086 | |
| 96 | 091 | 097 | 102 | 108 | 113 | 119 | 124 | 129 | 135 | 140 | |
| 97 | 146 | 151 | 157 | 162 | 168 | 173 | 179 | 184 | 189 | 195 | |
| 98 | 200 | 206 | 211 | 217 | 222 | 227 | 233 | 238 | 244 | 249 | |
| 99 | 255 | 260 | 266 | 271 | 276 | 282 | 287 | 293 | 298 | 304 | |
| 800 | 309 | 314 | 320 | 325 | 331 | 336 | 342 | 347 | 352 | 358 | |
| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |
|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------------|
| 800 | 90 309 | 314 | 320 | 325 | 331 | 336 | 342 | 347 | 352 | 358 | |
| 01 | 363 | 369 | 374 | 380 | 385 | 390 | 396 | 401 | 407 | 412 | |
| 02 | 417 | 423 | 428 | 434 | 439 | 445 | 450 | 455 | 461 | 466 | |
| 03 | 472 | 477 | 482 | 488 | 493 | 499 | 504 | 509 | 515 | 520 | |
| 04 | 526 | 531 | 536 | 542 | 547 | 553 | 558 | 563 | 569 | 574 | |
| 05 | 580 | 585 | 590 | 596 | 601 | 607 | 612 | 617 | 623 | 628 | |
| 06 | 634 | 639 | 644 | 650 | 655 | 660 | 666 | 671 | 677 | 682 | |
| 07 | 687 | 693 | 698 | 703 | 709 | 714 | 720 | 725 | 730 | 736 | |
| 08 | 741 | 747 | 752 | 757 | 763 | 768 | 773 | 779 | 784 | 789 | |
| 09 | 795 | 800 | 806 | 811 | 816 | 822 | 827 | 832 | 838 | 843 | |
| 810 | 849 | 854 | 859 | 865 | 870 | 875 | 881 | 886 | 891 | 897 | |
| 11 | 902 | 907 | 913 | 918 | 924 | 929 | 934 | 940 | 945 | 950 | 6 |
| 12 | 956 | 961 | 966 | 972 | 977 | 982 | 988 | 993 | 998 | *004 | |
| 13 | 91 009 | 014 | 020 | 025 | 030 | 036 | 041 | 046 | 052 | 057 | 1 0.6 |
| 14 | 062 | 068 | 073 | 078 | 084 | 089 | 094 | 100 | 105 | 110 | 2 1.2 |
| 15 | 116 | 121 | 126 | 132 | 137 | 142 | 148 | 153 | 158 | 164 | 3 1.8 |
| 16 | 169 | 174 | 180 | 185 | 190 | 196 | 201 | 206 | 212 | 217 | 4 2.4 |
| 17 | 222 | 228 | 233 | 238 | 243 | 249 | 254 | 259 | 265 | 270 | 5 3.0 |
| 18 | 275 | 281 | 286 | 291 | 297 | 302 | 307 | 312 | 318 | 323 | 6 3.6 |
| 19 | 328 | 334 | 339 | 344 | 350 | 355 | 360 | 365 | 371 | 376 | 7 4.2 |
| 820 | 381 | 387 | 392 | 397 | 403 | 408 | 413 | 418 | 424 | 429 | 8 4.8 |
| 21 | 434 | 440 | 445 | 450 | 455 | 461 | 466 | 471 | 477 | 482 | 9 5.4 |
| 22 | 487 | 492 | 498 | 503 | 508 | 514 | 519 | 524 | 529 | 535 | |
| 23 | 540 | 545 | 551 | 556 | 561 | 566 | 572 | 577 | 582 | 587 | |
| 24 | 593 | 598 | 603 | 609 | 614 | 619 | 624 | 630 | 635 | 640 | |
| 25 | 645 | 651 | 656 | 661 | 666 | 672 | 677 | 682 | 687 | 693 | |
| 26 | 698 | 703 | 709 | 714 | 719 | 724 | 730 | 735 | 740 | 745 | |
| 27 | 751 | 756 | 761 | 766 | 772 | 777 | 782 | 787 | 793 | 798 | |
| 28 | 803 | 808 | 814 | 819 | 824 | 829 | 834 | 840 | 845 | 850 | |
| 29 | 855 | 861 | 866 | 871 | 876 | 882 | 887 | 892 | 897 | 903 | |
| 830 | 908 | 913 | 918 | 924 | 929 | 934 | 939 | 944 | 950 | 955 | |
| 31 | 960 | 965 | 971 | 976 | 981 | 986 | 991 | 997 | *002 | *007 | |
| 32 | 92 012 | 018 | 023 | 028 | 033 | 038 | 044 | 049 | 054 | 059 | 5 |
| 33 | 065 | 070 | 075 | 080 | 085 | 091 | 096 | 101 | 106 | 111 | |
| 34 | 117 | 122 | 127 | 132 | 137 | 143 | 148 | 153 | 158 | 163 | 1 0.5 |
| 35 | 169 | 174 | 179 | 184 | 189 | 195 | 200 | 205 | 210 | 215 | 2 1.0 |
| 36 | 221 | 226 | 231 | 236 | 241 | 247 | 252 | 257 | 262 | 267 | 3 1.5 |
| 37 | 273 | 278 | 283 | 288 | 293 | 298 | 304 | 309 | 314 | 319 | 4 2.0 |
| 38 | 324 | 330 | 335 | 340 | 345 | 350 | 355 | 361 | 366 | 371 | 5 2.5 |
| 39 | 376 | 381 | 387 | 392 | 397 | 402 | 407 | 412 | 418 | 423 | 6 3.0 |
| 840 | 428 | 433 | 438 | 443 | 449 | 454 | 459 | 464 | 469 | 474 | 7 3.5 |
| 41 | 480 | 485 | 490 | 495 | 500 | 505 | 511 | 516 | 521 | 526 | 8 4.0 |
| 42 | 531 | 536 | 542 | 547 | 552 | 557 | 562 | 567 | 572 | 578 | 9 4.5 |
| 43 | 583 | 588 | 593 | 598 | 603 | 609 | 614 | 619 | 624 | 629 | |
| 44 | 634 | 639 | 645 | 650 | 655 | 660 | 665 | 670 | 675 | 681 | |
| 45 | 686 | 691 | 696 | 701 | 706 | 711 | 716 | 722 | 727 | 732 | |
| 46 | 737 | 742 | 747 | 752 | 758 | 763 | 768 | 773 | 778 | 783 | |
| 47 | 788 | 793 | 799 | 804 | 809 | 814 | 819 | 824 | 829 | 834 | |
| 48 | 840 | 845 | 850 | 855 | 860 | 865 | 870 | 875 | 881 | 886 | |
| 49 | 891 | 896 | 901 | 906 | 911 | 916 | 921 | 927 | 932 | 937 | |
| 850 | 942 | 947 | 952 | 957 | 962 | 967 | 973 | 978 | 983 | 988 | |
| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |
|-----|--------|-----|------|------|------|------|------|------|------|------|------------|
| 850 | 92 942 | 947 | 952 | 957 | 962 | 967 | 973 | 978 | 983 | 988 | |
| 51 | 993 | 998 | *003 | *008 | *013 | *018 | *024 | *029 | *034 | *039 | |
| 52 | 93 044 | 049 | 054 | 059 | 064 | 069 | 075 | 080 | 085 | 090 | |
| 53 | 095 | 100 | 105 | 110 | 115 | 120 | 125 | 131 | 136 | 141 | |
| 54 | 146 | 151 | 156 | 161 | 166 | 171 | 176 | 181 | 186 | 192 | |
| 55 | 197 | 202 | 207 | 212 | 217 | 222 | 227 | 232 | 237 | 242 | |
| 56 | 247 | 252 | 258 | 263 | 268 | 273 | 278 | 283 | 288 | 293 | 6 |
| 57 | 298 | 303 | 308 | 313 | 318 | 323 | 328 | 334 | 339 | 344 | 1 0.6 |
| 58 | 349 | 354 | 359 | 364 | 369 | 374 | 379 | 384 | 389 | 394 | 2 1.2 |
| 59 | 399 | 404 | 409 | 414 | 420 | 425 | 430 | 435 | 440 | 445 | 3 1.8 |
| 860 | 450 | 455 | 460 | 465 | 470 | 475 | 480 | 485 | 490 | 495 | 4 2.4 |
| 61 | 500 | 505 | 510 | 515 | 520 | 526 | 531 | 536 | 541 | 546 | 5 3.0 |
| 62 | 551 | 556 | 561 | 566 | 571 | 576 | 581 | 586 | 591 | 596 | 6 3.6 |
| 63 | 601 | 606 | 611 | 616 | 621 | 626 | 631 | 636 | 641 | 646 | 7 4.2 |
| 64 | 651 | 656 | 661 | 666 | 671 | 676 | 682 | 687 | 692 | 697 | 8 4.8 |
| 65 | 702 | 707 | 712 | 717 | 722 | 727 | 732 | 737 | 742 | 747 | 9 5.4 |
| 66 | 752 | 757 | 762 | 767 | 772 | 777 | 782 | 787 | 792 | 797 | |
| 67 | 802 | 807 | 812 | 817 | 822 | 827 | 832 | 837 | 842 | 847 | |
| 68 | 852 | 857 | 862 | 867 | 872 | 877 | 882 | 887 | 892 | 897 | |
| 69 | 902 | 907 | 912 | 917 | 922 | 927 | 932 | 937 | 942 | 947 | |
| 870 | 952 | 957 | 962 | 967 | 972 | 977 | 982 | 987 | 992 | 997 | |
| 71 | 94 002 | 007 | 012 | 017 | 022 | 027 | 032 | 037 | 042 | 047 | 5 |
| 72 | 052 | 057 | 062 | 067 | 072 | 077 | 082 | 086 | 091 | 096 | 1 0.5 |
| 73 | 101 | 106 | 111 | 116 | 121 | 126 | 131 | 136 | 141 | 146 | 2 1.0 |
| 74 | 151 | 156 | 161 | 166 | 171 | 176 | 181 | 186 | 191 | 196 | 3 1.5 |
| 75 | 201 | 206 | 211 | 216 | 221 | 226 | 231 | 236 | 240 | 245 | 4 2.0 |
| 76 | 250 | 255 | 260 | 265 | 270 | 275 | 280 | 285 | 290 | 295 | 5 2.5 |
| 77 | 300 | 305 | 310 | 315 | 320 | 325 | 330 | 335 | 340 | 345 | 6 3.0 |
| 78 | 349 | 354 | 359 | 364 | 369 | 374 | 379 | 384 | 389 | 394 | 7 3.5 |
| 79 | 399 | 404 | 409 | 414 | 419 | 424 | 429 | 433 | 438 | 443 | 8 4.0 |
| 880 | 448 | 453 | 458 | 463 | 468 | 473 | 478 | 483 | 488 | 493 | 9 4.5 |
| 81 | 498 | 503 | 507 | 512 | 517 | 522 | 527 | 532 | 537 | 542 | |
| 82 | 547 | 552 | 557 | 562 | 567 | 571 | 576 | 581 | 586 | 591 | |
| 83 | 596 | 601 | 606 | 611 | 616 | 621 | 626 | 630 | 635 | 640 | |
| 84 | 645 | 650 | 655 | 660 | 665 | 670 | 675 | 680 | 685 | 689 | |
| 85 | 694 | 699 | 704 | 709 | 714 | 719 | 724 | 729 | 734 | 738 | |
| 86 | 743 | 748 | 753 | 758 | 763 | 768 | 773 | 778 | 783 | 787 | 4 |
| 87 | 792 | 797 | 802 | 807 | 812 | 817 | 822 | 827 | 832 | 836 | 1 0.4 |
| 88 | 841 | 846 | 851 | 856 | 861 | 866 | 871 | 876 | 880 | 885 | 2 0.8 |
| 89 | 890 | 895 | 900 | 905 | 910 | 915 | 919 | 924 | 929 | 934 | 3 1.2 |
| 890 | 939 | 944 | 949 | 954 | 959 | 963 | 968 | 973 | 978 | 983 | 4 1.6 |
| 91 | 988 | 993 | 998 | *002 | *007 | *012 | *017 | *022 | *027 | *032 | 5 2.0 |
| 92 | 95 036 | 041 | 046 | 051 | 056 | 061 | 066 | 071 | 075 | 080 | 6 2.4 |
| 93 | 085 | 090 | 095 | 100 | 105 | 109 | 114 | 119 | 124 | 129 | 7 2.8 |
| 94 | 134 | 139 | 143 | 148 | 153 | 158 | 163 | 168 | 173 | 177 | 8 3.2 |
| 95 | 182 | 187 | 192 | 197 | 202 | 207 | 211 | 216 | 221 | 226 | 9 3.6 |
| 96 | 231 | 236 | 240 | 245 | 250 | 255 | 260 | 265 | 270 | 274 | |
| 97 | 279 | 284 | 289 | 294 | 299 | 303 | 308 | 313 | 318 | 323 | |
| 98 | 328 | 332 | 337 | 342 | 347 | 352 | 357 | 361 | 366 | 371 | |
| 99 | 376 | 381 | 386 | 390 | 395 | 400 | 405 | 410 | 415 | 419 | |
| 900 | 424 | 429 | 434 | 439 | 444 | 448 | 453 | 458 | 463 | 468 | |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |
|------------|--------|------|------|------|------|------|------|------|------|------|------------|
| 900 | 95 424 | 429 | 434 | 439 | 444 | 448 | 453 | 458 | 463 | 468 | |
| 01 | 472 | 477 | 482 | 487 | 492 | 497 | 501 | 506 | 511 | 516 | |
| 02 | 521 | 525 | 530 | 535 | 540 | 545 | 550 | 554 | 559 | 564 | |
| 03 | 569 | 574 | 578 | 583 | 588 | 593 | 598 | 602 | 607 | 612 | |
| 04 | 617 | 622 | 626 | 631 | 636 | 641 | 646 | 650 | 655 | 660 | |
| 05 | 665 | 670 | 674 | 679 | 684 | 689 | 694 | 698 | 703 | 708 | |
| 06 | 713 | 718 | 722 | 727 | 732 | 737 | 742 | 746 | 751 | 756 | |
| 07 | 761 | 766 | 770 | 775 | 780 | 785 | 789 | 794 | 799 | 804 | |
| 08 | 809 | 813 | 818 | 823 | 828 | 832 | 837 | 842 | 847 | 852 | |
| 09 | 856 | 861 | 866 | 871 | 875 | 880 | 885 | 890 | 895 | 899 | |
| 910 | 904 | 909 | 914 | 918 | 923 | 928 | 933 | 938 | 942 | 947 | |
| 11 | 952 | 957 | 961 | 966 | 971 | 976 | 980 | 985 | 990 | 995 | 5 |
| 12 | 999 | *004 | *009 | *014 | *019 | *023 | *028 | *033 | *038 | *042 | 1 0.5 |
| 13 | 96 047 | 052 | 057 | 061 | 066 | 071 | 076 | 080 | 085 | 090 | 2 1.0 |
| 14 | 095 | 099 | 104 | 109 | 114 | 118 | 123 | 128 | 133 | 137 | 3 1.5 |
| 15 | 142 | 147 | 152 | 156 | 161 | 166 | 171 | 175 | 180 | 185 | 4 2.0 |
| 16 | 190 | 194 | 199 | 204 | 209 | 213 | 218 | 223 | 227 | 232 | 5 2.5 |
| 17 | 237 | 242 | 246 | 251 | 256 | 261 | 265 | 270 | 275 | 280 | 6 3.0 |
| 18 | 284 | 289 | 294 | 298 | 303 | 308 | 313 | 317 | 322 | 327 | 7 3.5 |
| 19 | 332 | 336 | 341 | 346 | 350 | 355 | 360 | 365 | 369 | 374 | 8 4.0 |
| 920 | 379 | 384 | 388 | 393 | 398 | 402 | 407 | 412 | 417 | 421 | 9 4.5 |
| 21 | 426 | 431 | 435 | 440 | 445 | 450 | 454 | 459 | 464 | 468 | |
| 22 | 473 | 478 | 483 | 487 | 492 | 497 | 501 | 506 | 511 | 515 | |
| 23 | 520 | 525 | 530 | 534 | 539 | 544 | 548 | 553 | 558 | 562 | |
| 24 | 567 | 572 | 577 | 581 | 586 | 591 | 595 | 600 | 605 | 609 | |
| 25 | 614 | 619 | 624 | 628 | 633 | 638 | 642 | 647 | 652 | 656 | |
| 26 | 661 | 666 | 670 | 675 | 680 | 685 | 689 | 694 | 699 | 703 | |
| 27 | 708 | 713 | 717 | 722 | 727 | 731 | 736 | 741 | 745 | 750 | |
| 28 | 755 | 759 | 764 | 769 | 774 | 778 | 783 | 788 | 792 | 797 | |
| 29 | 802 | 806 | 811 | 816 | 820 | 825 | 830 | 834 | 839 | 844 | |
| 930 | 848 | 853 | 858 | 862 | 867 | 872 | 876 | 881 | 886 | 890 | |
| 31 | 895 | 900 | 904 | 909 | 914 | 918 | 923 | 928 | 932 | 937 | 4 |
| 32 | 942 | 946 | 951 | 956 | 960 | 965 | 970 | 974 | 979 | 984 | 1 0.4 |
| 33 | 988 | 993 | 997 | *002 | *007 | *011 | *016 | *021 | *025 | *030 | 2 0.8 |
| 34 | 97 035 | 039 | 044 | 049 | 053 | 058 | 063 | 067 | 072 | 077 | 3 1.2 |
| 35 | 081 | 086 | 090 | 095 | 100 | 104 | 109 | 114 | 118 | 123 | 4 1.6 |
| 36 | 128 | 132 | 137 | 142 | 146 | 151 | 155 | 160 | 165 | 169 | 5 2.0 |
| 37 | 174 | 179 | 183 | 188 | 192 | 197 | 202 | 206 | 211 | 216 | 6 2.4 |
| 38 | 220 | 225 | 230 | 234 | 239 | 243 | 248 | 253 | 257 | 262 | 7 2.8 |
| 39 | 267 | 271 | 276 | 280 | 285 | 290 | 294 | 299 | 304 | 308 | 8 3.2 |
| 940 | 313 | 317 | 322 | 327 | 331 | 336 | 340 | 345 | 350 | 354 | 9 3.6 |
| 41 | 359 | 364 | 368 | 373 | 377 | 382 | 387 | 391 | 396 | 400 | |
| 42 | 405 | 410 | 414 | 419 | 424 | 428 | 433 | 437 | 442 | 447 | |
| 43 | 451 | 456 | 460 | 465 | 470 | 474 | 479 | 483 | 488 | 493 | |
| 44 | 497 | 502 | 506 | 511 | 516 | 520 | 525 | 529 | 534 | 539 | |
| 45 | 543 | 548 | 552 | 557 | 562 | 566 | 571 | 575 | 580 | 585 | |
| 46 | 589 | 594 | 598 | 603 | 607 | 612 | 617 | 621 | 626 | 630 | |
| 47 | 635 | 640 | 644 | 649 | 653 | 658 | 663 | 667 | 672 | 676 | |
| 48 | 681 | 685 | 690 | 695 | 699 | 704 | 708 | 713 | 717 | 722 | |
| 49 | 727 | 731 | 736 | 740 | 745 | 749 | 754 | 759 | 763 | 768 | |
| 950 | 772 | 777 | 782 | 786 | 791 | 795 | 800 | 804 | 809 | 813 | |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------------|
| 950 | 97 772 | 777 | 782 | 786 | 791 | 795 | 800 | 804 | 809 | 813 | |
| 51 | 818 | 823 | 827 | 832 | 836 | 841 | 845 | 850 | 855 | 859 | |
| 52 | 864 | 868 | 873 | 877 | 882 | 886 | 891 | 896 | 900 | 905 | |
| 53 | 909 | 914 | 918 | 923 | 928 | 932 | 937 | 941 | 946 | 950 | |
| 54 | 955 | 959 | 964 | 968 | 973 | 978 | 982 | 987 | 991 | 996 | |
| 55 | 98 000 | 005 | 009 | 014 | 019 | 023 | 028 | 032 | 037 | 041 | |
| 56 | 046 | 050 | 055 | 059 | 064 | 068 | 073 | 078 | 082 | 087 | |
| 57 | 091 | 096 | 100 | 105 | 109 | 114 | 118 | 123 | 127 | 132 | |
| 58 | 137 | 141 | 146 | 150 | 155 | 159 | 164 | 168 | 173 | 177 | |
| 59 | 182 | 186 | 191 | 195 | 200 | 204 | 209 | 214 | 218 | 223 | |
| 960 | 227 | 232 | 236 | 241 | 245 | 250 | 254 | 259 | 263 | 268 | |
| 61 | 272 | 277 | 281 | 286 | 290 | 295 | 299 | 304 | 308 | 313 | 5 |
| 62 | 318 | 322 | 327 | 331 | 336 | 340 | 345 | 349 | 354 | 358 | 1 0.5 |
| 63 | 363 | 367 | 372 | 376 | 381 | 385 | 390 | 394 | 399 | 403 | 2 1.0 |
| 64 | 408 | 412 | 417 | 421 | 426 | 430 | 435 | 439 | 444 | 448 | 3 1.5 |
| 65 | 453 | 457 | 462 | 466 | 471 | 475 | 480 | 484 | 489 | 493 | 4 2.0 |
| 66 | 498 | 502 | 507 | 511 | 516 | 520 | 525 | 529 | 534 | 538 | 5 2.5 |
| 67 | 543 | 547 | 552 | 556 | 561 | 565 | 570 | 574 | 579 | 583 | 6 3.0 |
| 68 | 588 | 592 | 597 | 601 | 605 | 610 | 614 | 619 | 623 | 628 | 7 3.5 |
| 69 | 632 | 637 | 641 | 646 | 650 | 655 | 659 | 664 | 668 | 673 | 8 4.0 |
| 970 | 677 | 682 | 686 | 691 | 695 | 700 | 704 | 709 | 713 | 717 | 9 4.5 |
| 71 | 722 | 726 | 731 | 735 | 740 | 744 | 749 | 753 | 758 | 762 | |
| 72 | 767 | 771 | 776 | 780 | 784 | 789 | 793 | 798 | 802 | 807 | |
| 73 | 811 | 816 | 820 | 825 | 829 | 834 | 838 | 843 | 847 | 851 | |
| 74 | 856 | 860 | 865 | 869 | 874 | 878 | 883 | 887 | 892 | 896 | |
| 75 | 900 | 905 | 909 | 914 | 918 | 923 | 927 | 932 | 936 | 941 | |
| 76 | 945 | 949 | 954 | 958 | 963 | 967 | 972 | 976 | 981 | 985 | |
| 77 | 989 | 994 | 998 | *003 | *007 | *012 | *016 | *021 | *025 | *029 | |
| 78 | 99 034 | 038 | 043 | 047 | 052 | 056 | 061 | 065 | 069 | 074 | |
| 79 | 078 | 083 | 087 | 092 | 096 | 100 | 105 | 109 | 114 | 118 | |
| 980 | 123 | 127 | 131 | 136 | 140 | 145 | 149 | 154 | 158 | 162 | |
| 81 | 167 | 171 | 176 | 180 | 185 | 189 | 193 | 198 | 202 | 207 | |
| 82 | 211 | 216 | 220 | 224 | 229 | 233 | 238 | 242 | 247 | 251 | |
| 83 | 255 | 260 | 264 | 269 | 273 | 277 | 282 | 286 | 291 | 295 | |
| 84 | 300 | 304 | 308 | 313 | 317 | 322 | 326 | 330 | 335 | 339 | |
| 85 | 344 | 348 | 352 | 357 | 361 | 366 | 370 | 374 | 379 | 383 | |
| 86 | 388 | 392 | 396 | 401 | 405 | 410 | 414 | 419 | 423 | 427 | |
| 87 | 432 | 436 | 441 | 445 | 449 | 454 | 458 | 463 | 467 | 471 | |
| 88 | 476 | 480 | 484 | 489 | 493 | 498 | 502 | 506 | 511 | 515 | |
| 89 | 520 | 524 | 528 | 533 | 537 | 542 | 546 | 550 | 555 | 559 | |
| 990 | 564 | 568 | 572 | 577 | 581 | 585 | 590 | 594 | 599 | 603 | |
| 91 | 607 | 612 | 616 | 621 | 625 | 629 | 634 | 638 | 642 | 647 | |
| 92 | 651 | 656 | 660 | 664 | 669 | 673 | 677 | 682 | 686 | 691 | |
| 93 | 695 | 699 | 704 | 708 | 712 | 717 | 721 | 726 | 730 | 734 | |
| 94 | 739 | 743 | 747 | 752 | 756 | 760 | 765 | 769 | 774 | 778 | |
| 95 | 782 | 787 | 791 | 795 | 800 | 804 | 808 | 813 | 817 | 822 | |
| 96 | 826 | 830 | 835 | 839 | 843 | 848 | 852 | 856 | 861 | 865 | |
| 97 | 870 | 874 | 878 | 883 | 887 | 891 | 896 | 900 | 904 | 909 | |
| 98 | 913 | 917 | 922 | 926 | 930 | 935 | 939 | 944 | 948 | 952 | |
| 99 | 957 | 961 | 965 | 970 | 974 | 978 | 983 | 987 | 991 | 996 | |
| 1000 | 00 000 | 004 | 009 | 013 | 017 | 022 | 026 | 030 | 035 | 039 | |
| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Prop. Pts. |

TABLE II.

CONSTANTS WITH THEIR LOGARITHMS.

| | Number. | Logarithm. |
|--|--------------|---------------|
| π (ratio of circumference to diameter) . . . | 3.14159265 | 0.49714 99 |
| π^2 | 9.86960440 | 0.99429 97 |
| $\sqrt{\pi}$ | 1.77245385 | 0.24857 49 |
| $\frac{1}{\pi}$ | 0.31830989 | 9.50285 01—10 |
| $\frac{1}{\pi^2}$ | 0.10132118 | 9.00570 03—10 |
| $\frac{1}{\sqrt{\pi}}$ | 0.56418958 | 9.75142 51—10 |
| Number of degrees in circumference | 360° | 2.55630 25 |
| “ minutes “ | 21600' | 4.33445 38 |
| “ seconds “ | 1296000'' | 6.11260 50 |
| Degrees in arc equal to radius | 57°.2957795 | 1.75812 26 |
| Minutes “ “ “ | 3437'.74677 | 3.53627 39 |
| Seconds “ “ “ | 206264''.806 | 5.31442 51 |
| Length of arc of 1 degree | .01745329 | 8.24187 74—10 |
| “ “ 1 minute | .00029089 | 6.46372 61—10 |
| “ “ 1 second | .000004848 | 4.68557 49—10 |
| Napierian base | 2.718281828 | 0.43429 45 |
| Modulus of common logarithms | 0.434294482 | 9.63778 43—10 |
| Hours in which earth revolves through arc equal to radius | 3.8197186 | 0.58203 14 |
| Equat. radius of earth, miles (Clarke, 1878) | 3963.296 | 3.59805 65 |
| Polar “ “ “ “ “ | 3949.790 | 3.59657 40 |
| Mean “ “ “ | 3956. | 3.59725 63 |
| Inches in 1 metre (U. S. Standard) | 39.37 | 1.59516 54 |
| “ 1 “ (British Standard) | 39.37079 | 1.59517 41 |
| “ 1 “ (Clarke, 1866) | 39.37043 | 1.59517 01 |
| Feet in 1 mile | 5280. | 3.72263 39 |
| Feet in 1 nautical mile (U. S. Coast Survey) | 6080.290 | 3.78392 43 |
| Feet per second in 1 mile per hour | 1.466667 | .16633 15 |
| Miles per hour in 1 foot per second | 0.681818 | 9.83366 86—10 |

TABLE III.

LOGARITHMS

OF THE

SINE, COSINE, TANGENT, AND COTANGENT

FOR

EACH MINUTE OF THE QUADRANT.

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | | Prop. Pts. | |
|-----------|----------------|-----------|-----------------|--------------|-----------------|----------------|-----------|-------------------|----------|
| 0 | | | | | | 0.00 000 | 60 | | |
| 1 | 6.46 373 | | 6.46 373 | | 3.53 627 | 0.00 000 | 59 | d. | p. p. 1" |
| 2 | 6.76 476 | 30103 | 6.76 476 | 30103 | 3.23 524 | 0.00 000 | 58 | 30103 | 501.72 |
| 3 | 6.94 085 | 17609 | 6.94 085 | 17609 | 3.05 915 | 0.00 000 | 57 | 17609 | 293.48 |
| 4 | 7.06 579 | 12494 | 7.06 579 | 12494 | 2.93 421 | 0.00 000 | 56 | 12494 | 208.23 |
| 5 | 7.16 270 | 9691 | 7.16 270 | 9691 | 2.83 730 | 0.00 000 | 55 | 9691 | 161.52 |
| 6 | 7.24 188 | 7918 | 7.24 188 | 7918 | 2.75 812 | 0.00 000 | 54 | 7918 | 131.97 |
| 7 | 7.30 882 | 6694 | 7.30 882 | 6694 | 2.69 118 | 0.00 000 | 53 | 6694 | 111.57 |
| 8 | 7.36 682 | 5800 | 7.36 682 | 5800 | 2.63 318 | 0.00 000 | 52 | 5800 | 96.67 |
| 9 | 7.41 797 | 5115 | 7.41 797 | 5115 | 2.58 203 | 0.00 000 | 51 | 5115 | 85.25 |
| 10 | 7.46 373 | 4576 | 7.46 373 | 4576 | 2.53 627 | 0.00 000 | 50 | 4576 | 76.27 |
| 11 | 7.50 512 | 4139 | 7.50 512 | 4139 | 2.49 488 | 0.00 000 | 49 | 4139 | 68.98 |
| 12 | 7.54 291 | 3779 | 7.54 291 | 3779 | 2.45 709 | 0.00 000 | 48 | 3779 | 62.98 |
| 13 | 7.57 767 | 3476 | 7.57 767 | 3476 | 2.42 233 | 0.00 000 | 47 | 3476 | 57.93 |
| 14 | 7.60 985 | 3218 | 7.60 986 | 3219 | 2.39 014 | 0.00 000 | 46 | 3219 | 53.65 |
| 15 | 7.63 982 | 2997 | 7.63 982 | 2996 | 2.36 018 | 0.00 000 | 45 | 3218 | 53.63 |
| 16 | 7.66 784 | 2802 | 7.66 785 | 2803 | 2.33 215 | 0.00 000 | 44 | 2997 | 49.95 |
| 17 | 7.69 417 | 2633 | 7.69 418 | 2633 | 2.30 582 | 0.99 999 | 43 | 2996 | 49.93 |
| 18 | 7.71 900 | 2483 | 7.71 900 | 2482 | 2.28 100 | 0.99 999 | 42 | 2803 | 46.72 |
| 19 | 7.74 248 | 2348 | 7.74 248 | 2348 | 2.25 752 | 0.99 999 | 41 | 2802 | 46.70 |
| 20 | 7.76 475 | 2227 | 7.76 476 | 2228 | 2.23 524 | 0.99 999 | 40 | 2633 | 43.88 |
| 21 | 7.78 594 | 2119 | 7.78 595 | 2119 | 2.21 405 | 0.99 999 | 39 | 2483 | 41.38 |
| 22 | 7.80 615 | 2021 | 7.80 615 | 2020 | 2.19 385 | 0.99 999 | 38 | 2482 | 41.37 |
| 23 | 7.82 545 | 1930 | 7.82 546 | 1931 | 2.17 454 | 0.99 999 | 37 | 2348 | 39.13 |
| 24 | 7.84 393 | 1848 | 7.84 394 | 1848 | 2.15 606 | 0.99 999 | 36 | 2228 | 37.13 |
| 25 | 7.86 166 | 1773 | 7.86 167 | 1773 | 2.13 833 | 0.99 999 | 35 | 2227 | 37.12 |
| 26 | 7.87 870 | 1704 | 7.87 871 | 1704 | 2.12 129 | 0.99 999 | 34 | 2119 | 35.32 |
| 27 | 7.89 509 | 1639 | 7.89 510 | 1639 | 2.10 490 | 0.99 999 | 33 | 2021 | 33.68 |
| 28 | 7.91 088 | 1579 | 7.91 089 | 1579 | 2.08 911 | 0.99 999 | 32 | 2020 | 33.67 |
| 29 | 7.92 612 | 1524 | 7.92 613 | 1524 | 2.07 387 | 0.99 998 | 31 | 1931 | 32.18 |
| 30 | 7.94 084 | 1472 | 7.94 086 | 1473 | 2.05 914 | 0.99 998 | 30 | 1930 | 32.17 |
| 31 | 7.95 508 | 1424 | 7.95 510 | 1424 | 2.04 490 | 0.99 998 | 29 | 1848 | 30.80 |
| 32 | 7.96 887 | 1379 | 7.96 889 | 1379 | 2.03 111 | 0.99 998 | 28 | 1773 | 29.55 |
| 33 | 7.98 223 | 1336 | 7.98 225 | 1336 | 2.01 775 | 0.99 998 | 27 | 1704 | 28.40 |
| 34 | 7.99 520 | 1297 | 7.99 522 | 1297 | 2.00 478 | 0.99 998 | 26 | 1639 | 27.32 |
| 35 | 8.00 779 | 1259 | 8.00 781 | 1259 | 1.99 219 | 0.99 998 | 25 | 1579 | 26.32 |
| 36 | 8.02 002 | 1223 | 8.02 004 | 1223 | 1.97 996 | 0.99 998 | 24 | 1524 | 25.40 |
| 37 | 8.03 192 | 1190 | 8.03 194 | 1190 | 1.96 806 | 0.99 997 | 23 | 1473 | 24.55 |
| 38 | 8.04 350 | 1158 | 8.04 353 | 1159 | 1.95 647 | 0.99 997 | 22 | 1472 | 24.53 |
| 39 | 8.05 478 | 1128 | 8.05 481 | 1128 | 1.94 519 | 0.99 997 | 21 | 1424 | 23.73 |
| 40 | 8.06 578 | 1100 | 8.06 581 | 1100 | 1.93 419 | 0.99 997 | 20 | 1379 | 22.98 |
| 41 | 8.07 650 | 1072 | 8.07 653 | 1072 | 1.92 347 | 0.99 997 | 19 | d. | p. p. 1" |
| 42 | 8.08 696 | 1046 | 8.08 700 | 1047 | 1.91 300 | 0.99 997 | 18 | 1336 | 22.27 |
| 43 | 8.09 718 | 1022 | 8.09 722 | 1022 | 1.90 278 | 0.99 997 | 17 | 1297 | 21.62 |
| 44 | 8.10 717 | 999 | 8.10 720 | 998 | 1.89 280 | 0.99 996 | 16 | 1259 | 20.98 |
| 45 | 8.11 693 | 976 | 8.11 696 | 976 | 1.88 304 | 0.99 996 | 15 | 1223 | 20.38 |
| 46 | 8.12 647 | 954 | 8.12 651 | 955 | 1.87 349 | 0.99 996 | 14 | 1190 | 19.83 |
| 47 | 8.13 581 | 934 | 8.13 585 | 934 | 1.86 415 | 0.99 996 | 13 | 1159 | 19.32 |
| 48 | 8.14 495 | 914 | 8.14 500 | 915 | 1.85 500 | 0.99 996 | 12 | 1158 | 19.30 |
| 49 | 8.15 391 | 896 | 8.15 395 | 895 | 1.84 605 | 0.99 996 | 11 | 1128 | 18.80 |
| 50 | 8.16 268 | 877 | 8.16 273 | 878 | 1.83 727 | 0.99 995 | 10 | 1100 | 18.33 |
| 51 | 8.17 128 | 860 | 8.17 133 | 860 | 1.82 867 | 0.99 995 | 9 | 1072 | 17.87 |
| 52 | 8.17 971 | 843 | 8.17 976 | 843 | 1.82 024 | 0.99 995 | 8 | 1047 | 17.45 |
| 53 | 8.18 798 | 827 | 8.18 804 | 828 | 1.81 196 | 0.99 995 | 7 | 1046 | 17.43 |
| 54 | 8.19 610 | 812 | 8.19 616 | 812 | 1.80 384 | 0.99 995 | 6 | 1022 | 17.03 |
| 55 | 8.20 407 | 797 | 8.20 413 | 797 | 1.79 587 | 0.99 994 | 5 | 999 | 16.65 |
| 56 | 8.21 189 | 782 | 8.21 195 | 782 | 1.78 805 | 0.99 994 | 4 | 998 | 16.63 |
| 57 | 8.21 958 | 769 | 8.21 964 | 769 | 1.78 036 | 0.99 994 | 3 | 976 | 16.27 |
| 58 | 8.22 713 | 755 | 8.22 720 | 756 | 1.77 280 | 0.99 994 | 2 | 954 | 15.92 |
| 59 | 8.23 456 | 743 | 8.23 462 | 742 | 1.76 538 | 0.99 994 | 1 | 954 | 15.90 |
| 60 | 8.24 186 | 730 | 8.24 192 | 730 | 1.75 808 | 0.99 993 | 0 | 934 | 15.57 |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | ∕ | Prop. Pts. | |

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | | Prop. Pts. | | | | | |
|-----------|----------|-----|----------|-------|----------|----------|-----------|------------|-----------------|-----------|-----------------|--|--|
| 0 | 8.24 186 | | 8.24 192 | | 1.75 808 | 9.99 993 | 60 | | | | | | |
| 1 | 8.24 903 | 717 | 8.24 910 | 718 | 1.75 090 | 9.99 993 | 59 | | | | | | |
| 2 | 8.25 609 | 706 | 8.25 616 | 706 | 1.74 384 | 9.99 993 | 58 | | | | | | |
| 3 | 8.26 304 | 695 | 8.26 312 | 696 | 1.73 688 | 9.99 993 | 57 | | | | | | |
| 4 | 8.26 988 | 684 | 8.26 996 | 684 | 1.73 004 | 9.99 992 | 56 | | | | | | |
| | | 673 | | 673 | | | | | | | | | |
| 5 | 8.27 661 | 663 | 8.27 669 | 663 | 1.72 331 | 9.99 992 | 55 | | | | | | |
| 6 | 8.28 324 | 653 | 8.28 332 | 654 | 1.71 668 | 9.99 992 | 54 | | | | | | |
| 7 | 8.28 977 | 644 | 8.28 986 | 643 | 1.71 014 | 9.99 992 | 53 | | | | | | |
| 8 | 8.29 621 | 634 | 8.29 629 | 634 | 1.70 371 | 9.99 992 | 52 | | | | | | |
| 9 | 8.30 255 | 624 | 8.30 263 | 625 | 1.69 737 | 9.99 991 | 51 | | | | | | |
| | | 616 | | 617 | | | | d. | p. p. 1" | d. | p. p. 1" | | |
| 10 | 8.30 879 | 616 | 8.30 888 | 617 | 1.69 112 | 9.99 991 | 50 | 718 | 11.97 | 485 | 8.08 | | |
| 11 | 8.31 495 | 608 | 8.31 505 | 607 | 1.68 495 | 9.99 991 | 49 | 717 | 11.95 | 480 | 8.00 | | |
| 12 | 8.32 103 | 599 | 8.32 112 | 599 | 1.67 888 | 9.99 990 | 48 | 706 | 11.77 | 475 | 7.92 | | |
| 13 | 8.32 702 | 590 | 8.32 711 | 591 | 1.67 289 | 9.99 990 | 47 | 696 | 11.60 | 474 | 7.90 | | |
| 14 | 8.33 292 | 583 | 8.33 302 | 584 | 1.66 698 | 9.99 990 | 46 | 695 | 11.58 | 470 | 7.83 | | |
| | | 575 | | 575 | | | | 684 | 11.40 | 464 | 7.73 | | |
| 15 | 8.33 875 | 568 | 8.33 886 | 568 | 1.66 114 | 9.99 990 | 45 | 673 | 11.22 | 460 | 7.67 | | |
| 16 | 8.34 450 | 560 | 8.34 461 | 561 | 1.65 539 | 9.99 989 | 44 | 663 | 11.05 | 459 | 7.65 | | |
| 17 | 8.35 018 | 553 | 8.35 029 | 553 | 1.64 971 | 9.99 989 | 43 | 654 | 10.90 | 455 | 7.58 | | |
| 18 | 8.35 578 | 547 | 8.35 590 | 546 | 1.64 410 | 9.99 989 | 42 | 653 | 10.88 | 450 | 7.50 | | |
| 19 | 8.36 131 | 539 | 8.36 143 | 540 | 1.63 857 | 9.99 989 | 41 | 644 | 10.73 | 446 | 7.43 | | |
| | | 533 | | 533 | | | | 643 | 10.72 | 445 | 7.42 | | |
| 20 | 8.36 678 | 526 | 8.36 689 | 527 | 1.63 311 | 9.99 988 | 40 | 634 | 10.57 | 441 | 7.35 | | |
| 21 | 8.37 217 | 520 | 8.37 229 | 520 | 1.62 771 | 9.99 988 | 39 | 625 | 10.42 | 437 | 7.28 | | |
| 22 | 8.37 750 | 514 | 8.37 762 | 514 | 1.62 238 | 9.99 988 | 38 | 624 | 10.40 | 436 | 7.27 | | |
| 23 | 8.38 276 | 508 | 8.38 289 | 509 | 1.61 711 | 9.99 987 | 37 | 617 | 10.28 | 433 | 7.22 | | |
| 24 | 8.38 796 | 502 | 8.38 809 | 502 | 1.61 191 | 9.99 987 | 36 | 616 | 10.27 | 432 | 7.20 | | |
| | | 496 | | 496 | | | | 608 | 10.13 | 428 | 7.13 | | |
| 25 | 8.39 310 | 491 | 8.39 323 | 491 | 1.60 677 | 9.99 987 | 35 | 607 | 10.12 | 427 | 7.12 | | |
| 26 | 8.39 818 | 485 | 8.39 832 | 486 | 1.60 168 | 9.99 986 | 34 | 599 | 9.98 | 424 | 7.07 | | |
| 27 | 8.40 320 | 480 | 8.40 334 | 480 | 1.59 170 | 9.99 986 | 33 | 591 | 9.85 | 420 | 7.00 | | |
| 28 | 8.40 816 | 474 | 8.40 830 | 475 | 1.58 679 | 9.99 985 | 32 | 590 | 9.83 | 419 | 6.98 | | |
| 29 | 8.41 307 | 470 | 8.41 321 | 470 | 1.58 193 | 9.99 985 | 31 | 584 | 9.73 | 416 | 6.93 | | |
| | | 464 | | 464 | | | | 583 | 9.72 | 412 | 6.87 | | |
| 30 | 8.41 792 | 459 | 8.41 807 | 459 | 1.57 713 | 9.99 985 | 30 | 575 | 9.58 | 411 | 6.85 | | |
| 31 | 8.42 272 | 455 | 8.42 287 | 455 | 1.57 238 | 9.99 984 | 29 | 568 | 9.47 | 408 | 6.80 | | |
| 32 | 8.42 746 | 450 | 8.42 762 | 450 | 1.56 768 | 9.99 984 | 28 | 561 | 9.35 | 404 | 6.73 | | |
| 33 | 8.43 216 | 445 | 8.43 232 | 446 | 1.56 304 | 9.99 984 | 27 | 560 | 9.33 | 401 | 6.68 | | |
| 34 | 8.43 680 | 441 | 8.43 696 | 441 | 1.55 844 | 9.99 983 | 26 | 553 | 9.22 | 400 | 6.67 | | |
| | | 436 | | 437 | | | | 547 | 9.12 | 397 | 6.62 | | |
| 35 | 8.44 139 | 433 | 8.44 156 | 433 | 1.55 389 | 9.99 983 | 25 | 546 | 9.10 | 396 | 6.60 | | |
| 36 | 8.44 594 | 427 | 8.44 611 | 428 | 1.54 939 | 9.99 983 | 24 | 540 | 9.00 | 393 | 6.55 | | |
| 37 | 8.45 044 | 424 | 8.45 061 | 424 | 1.54 493 | 9.99 982 | 23 | 539 | 8.98 | 390 | 6.50 | | |
| 38 | 8.45 489 | 419 | 8.45 507 | 420 | 1.54 052 | 9.99 982 | 22 | 533 | 8.88 | 386 | 6.43 | | |
| 39 | 8.45 930 | 416 | 8.45 948 | 416 | 1.53 615 | 9.99 982 | 21 | 527 | 8.78 | 383 | 6.38 | | |
| | | 412 | | 412 | | | | 526 | 8.77 | 382 | 6.37 | | |
| 40 | 8.46 366 | 408 | 8.46 385 | 408 | 1.53 183 | 9.99 981 | 20 | 520 | 8.67 | 380 | 6.33 | | |
| 41 | 8.46 799 | 404 | 8.46 817 | 404 | 1.52 755 | 9.99 981 | 19 | 514 | 8.57 | 379 | 6.32 | | |
| 42 | 8.47 226 | 400 | 8.47 245 | 401 | 1.52 331 | 9.99 981 | 18 | 509 | 8.48 | 376 | 6.27 | | |
| 43 | 8.47 650 | 396 | 8.47 669 | 397 | 1.51 911 | 9.99 980 | 17 | 508 | 8.47 | 373 | 6.22 | | |
| 44 | 8.48 069 | 393 | 8.48 089 | 393 | 1.51 495 | 9.99 980 | 16 | 502 | 8.37 | 370 | 6.17 | | |
| | | 388 | | 388 | | | | 496 | 8.27 | 369 | 6.15 | | |
| 45 | 8.48 485 | 386 | 8.48 505 | 386 | 1.51 083 | 9.99 979 | 15 | 491 | 8.18 | 367 | 6.12 | | |
| 46 | 8.48 896 | 382 | 8.48 917 | 383 | 1.50 675 | 9.99 979 | 14 | 486 | 8.10 | 363 | 6.05 | | |
| 47 | 8.49 304 | 379 | 8.49 325 | 379 | 1.50 271 | 9.99 979 | 13 | | | | | | |
| 48 | 8.49 708 | 376 | 8.49 729 | 376 | 1.49 870 | 9.99 978 | 12 | | | | | | |
| 49 | 8.50 108 | 373 | 8.50 130 | 373 | 1.49 473 | 9.99 978 | 11 | | | | | | |
| | | 369 | | 369 | | | | | | | | | |
| 50 | 8.50 504 | 367 | 8.50 527 | 367 | 1.49 080 | 9.99 977 | 10 | | | | | | |
| 51 | 8.50 897 | 363 | 8.50 920 | 363 | 1.48 690 | 9.99 977 | 9 | | | | | | |
| 52 | 8.51 287 | 360 | 8.51 310 | 360 | 1.48 304 | 9.99 977 | 8 | | | | | | |
| 53 | 8.51 673 | 357 | 8.51 696 | 357 | 1.47 921 | 9.99 976 | 7 | | | | | | |
| 54 | 8.52 055 | 354 | 8.52 079 | 354 | 1.47 541 | 9.99 976 | 6 | | | | | | |
| | | 350 | | 350 | | | | | | | | | |
| 55 | 8.52 434 | 348 | 8.52 459 | 348 | 1.47 165 | 9.99 975 | 5 | | | | | | |
| 56 | 8.52 810 | 345 | 8.52 835 | 345 | 1.46 792 | 9.99 975 | 4 | | | | | | |
| 57 | 8.53 183 | 342 | 8.53 208 | 342 | 1.46 422 | 9.99 974 | 3 | | | | | | |
| 58 | 8.53 552 | 339 | 8.53 578 | 339 | 1.46 055 | 9.99 974 | 2 | | | | | | |
| 59 | 8.53 919 | 336 | 8.53 945 | 336 | 1.45 692 | 9.99 974 | 1 | | | | | | |
| | | 333 | | 333 | | | | | | | | | |
| 60 | 8.54 282 | | 8.54 308 | | | | 0 | | | | | | |
| | | | | | | | | | | | | | |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | ∕ | Prop. Pts. | | | | | |

| ° | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | Prop. Pts. |
|----|----------|-----|----------|-------|----------|----------|------------|
| 0 | 8.54 282 | | 8.54 308 | | I.45 692 | 9.99 974 | 60 |
| 1 | 8.54 642 | 360 | 8.54 669 | 361 | I.45 331 | 9.99 973 | 59 |
| 2 | 8.54 999 | 357 | 8.55 027 | 358 | I.44 973 | 9.99 973 | 58 |
| 3 | 8.55 354 | 355 | 8.55 382 | 355 | I.44 618 | 9.99 972 | 57 |
| 4 | 8.55 705 | 351 | 8.55 734 | 352 | I.44 266 | 9.99 972 | 56 |
| 5 | 8.56 054 | 349 | 8.56 083 | 349 | I.43 917 | 9.99 971 | 55 |
| 6 | 8.56 400 | 346 | 8.56 429 | 346 | I.43 571 | 9.99 971 | 54 |
| 7 | 8.56 743 | 343 | 8.56 773 | 344 | I.43 227 | 9.99 970 | 53 |
| 8 | 8.57 084 | 341 | 8.57 114 | 341 | I.42 886 | 9.99 970 | 52 |
| 9 | 8.57 421 | 337 | 8.57 452 | 338 | I.42 548 | 9.99 969 | 51 |
| 10 | 8.57 757 | 336 | 8.57 788 | 336 | I.42 212 | 9.99 969 | 50 |
| 11 | 8.58 089 | 332 | 8.58 121 | 333 | I.41 879 | 9.99 968 | 49 |
| 12 | 8.58 419 | 330 | 8.58 451 | 330 | I.41 549 | 9.99 968 | 48 |
| 13 | 8.58 747 | 328 | 8.58 779 | 328 | I.41 221 | 9.99 967 | 47 |
| 14 | 8.59 072 | 325 | 8.59 105 | 326 | I.40 895 | 9.99 967 | 46 |
| 15 | 8.59 395 | 323 | 8.59 428 | 323 | I.40 572 | 9.99 967 | 45 |
| 16 | 8.59 715 | 320 | 8.59 749 | 321 | I.40 251 | 9.99 966 | 44 |
| 17 | 8.60 033 | 318 | 8.60 068 | 319 | I.39 932 | 9.99 966 | 43 |
| 18 | 8.60 349 | 316 | 8.60 384 | 316 | I.39 616 | 9.99 965 | 42 |
| 19 | 8.60 662 | 313 | 8.60 698 | 314 | I.39 302 | 9.99 964 | 41 |
| 20 | 8.60 973 | 311 | 8.61 009 | 311 | I.38 991 | 9.99 964 | 40 |
| 21 | 8.61 282 | 309 | 8.61 319 | 310 | I.38 681 | 9.99 963 | 39 |
| 22 | 8.61 589 | 307 | 8.61 626 | 307 | I.38 374 | 9.99 963 | 38 |
| 23 | 8.61 894 | 305 | 8.61 931 | 305 | I.38 069 | 9.99 962 | 37 |
| 24 | 8.62 196 | 302 | 8.62 234 | 303 | I.37 766 | 9.99 962 | 36 |
| 25 | 8.62 497 | 301 | 8.62 535 | 301 | I.37 465 | 9.99 961 | 35 |
| 26 | 8.62 795 | 298 | 8.62 834 | 299 | I.37 166 | 9.99 961 | 34 |
| 27 | 8.63 091 | 296 | 8.63 131 | 297 | I.36 869 | 9.99 960 | 33 |
| 28 | 8.63 385 | 294 | 8.63 426 | 295 | I.36 574 | 9.99 960 | 32 |
| 29 | 8.63 678 | 293 | 8.63 718 | 292 | I.36 282 | 9.99 959 | 31 |
| 30 | 8.63 968 | 290 | 8.64 009 | 291 | I.35 991 | 9.99 959 | 30 |
| 31 | 8.64 256 | 288 | 8.64 298 | 289 | I.35 702 | 9.99 958 | 29 |
| 32 | 8.64 543 | 287 | 8.64 585 | 287 | I.35 415 | 9.99 958 | 28 |
| 33 | 8.64 827 | 284 | 8.64 870 | 285 | I.35 130 | 9.99 957 | 27 |
| 34 | 8.65 110 | 283 | 8.65 154 | 284 | I.34 846 | 9.99 956 | 26 |
| 35 | 8.65 391 | 281 | 8.65 435 | 281 | I.34 565 | 9.99 956 | 25 |
| 36 | 8.65 670 | 279 | 8.65 715 | 280 | I.34 285 | 9.99 955 | 24 |
| 37 | 8.65 947 | 277 | 8.65 993 | 278 | I.34 007 | 9.99 955 | 23 |
| 38 | 8.66 223 | 276 | 8.66 269 | 276 | I.33 731 | 9.99 954 | 22 |
| 39 | 8.66 497 | 274 | 8.66 543 | 274 | I.33 457 | 9.99 954 | 21 |
| 40 | 8.66 769 | 272 | 8.66 816 | 273 | I.33 184 | 9.99 953 | 20 |
| 41 | 8.67 039 | 270 | 8.67 087 | 271 | I.32 913 | 9.99 952 | 19 |
| 42 | 8.67 308 | 269 | 8.67 356 | 269 | I.32 644 | 9.99 952 | 18 |
| 43 | 8.67 575 | 267 | 8.67 624 | 268 | I.32 376 | 9.99 951 | 17 |
| 44 | 8.67 841 | 266 | 8.67 890 | 266 | I.32 110 | 9.99 951 | 16 |
| 45 | 8.68 104 | 263 | 8.68 154 | 264 | I.31 846 | 9.99 950 | 15 |
| 46 | 8.68 367 | 263 | 8.68 417 | 263 | I.31 583 | 9.99 949 | 14 |
| 47 | 8.68 627 | 260 | 8.68 678 | 261 | I.31 322 | 9.99 949 | 13 |
| 48 | 8.68 886 | 259 | 8.68 938 | 260 | I.31 062 | 9.99 948 | 12 |
| 49 | 8.69 144 | 258 | 8.69 196 | 258 | I.30 804 | 9.99 948 | 11 |
| 50 | 8.69 400 | 256 | 8.69 453 | 257 | I.30 547 | 9.99 947 | 10 |
| 51 | 8.69 654 | 254 | 8.69 708 | 255 | I.30 292 | 9.99 946 | 9 |
| 52 | 8.69 907 | 253 | 8.69 962 | 254 | I.30 038 | 9.99 946 | 8 |
| 53 | 8.70 159 | 252 | 8.70 214 | 252 | I.29 786 | 9.99 945 | 7 |
| 54 | 8.70 409 | 250 | 8.70 465 | 251 | I.29 535 | 9.99 944 | 6 |
| 55 | 8.70 658 | 249 | 8.70 714 | 249 | I.29 286 | 9.99 944 | 5 |
| 56 | 8.70 905 | 247 | 8.70 962 | 248 | I.29 038 | 9.99 943 | 4 |
| 57 | 8.71 151 | 246 | 8.71 208 | 246 | I.28 792 | 9.99 942 | 3 |
| 58 | 8.71 395 | 244 | 8.71 453 | 245 | I.28 547 | 9.99 942 | 2 |
| 59 | 8.71 638 | 243 | 8.71 697 | 244 | I.28 303 | 9.99 941 | 1 |
| 60 | 8.71 880 | 242 | 8.71 940 | 243 | I.28 060 | 9.99 940 | 0 |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | Prop. Pts. |

| d. | p. p. 1" | d. | p. p. 1" |
|-----|----------|-----|----------|
| 361 | 6.02 | 291 | 4.85 |
| 360 | 6.00 | 290 | 4.83 |
| 358 | 5.97 | 289 | 4.82 |
| 357 | 5.95 | 288 | 4.80 |
| 355 | 5.92 | 287 | 4.78 |
| 352 | 5.87 | 285 | 4.75 |
| 351 | 5.85 | 284 | 4.73 |
| 349 | 5.82 | 283 | 4.72 |
| 346 | 5.77 | 281 | 4.68 |
| 344 | 5.73 | 280 | 4.67 |
| 343 | 5.72 | 279 | 4.65 |
| 341 | 5.68 | 278 | 4.63 |
| 338 | 5.63 | 277 | 4.62 |
| 337 | 5.62 | 276 | 4.60 |
| 336 | 5.60 | 274 | 4.57 |
| 333 | 5.55 | 273 | 4.55 |
| 332 | 5.53 | 272 | 4.53 |
| 330 | 5.50 | 271 | 4.52 |
| 328 | 5.47 | 270 | 4.50 |
| 326 | 5.43 | 269 | 4.48 |
| 325 | 5.42 | 268 | 4.47 |
| 323 | 5.38 | 267 | 4.45 |
| 321 | 5.35 | 266 | 4.43 |
| 320 | 5.33 | 264 | 4.40 |
| 319 | 5.32 | 263 | 4.38 |
| 318 | 5.30 | 261 | 4.35 |
| 316 | 5.27 | 260 | 4.33 |
| 314 | 5.23 | 259 | 4.32 |
| 313 | 5.22 | 258 | 4.30 |
| 311 | 5.18 | 257 | 4.28 |
| 310 | 5.17 | 256 | 4.27 |
| 309 | 5.15 | 255 | 4.25 |
| 307 | 5.12 | 254 | 4.23 |
| 305 | 5.08 | 253 | 4.22 |
| 303 | 5.05 | 252 | 4.20 |
| 302 | 5.03 | 251 | 4.18 |
| 301 | 5.02 | 250 | 4.17 |
| 299 | 4.98 | 249 | 4.15 |
| 298 | 4.97 | 248 | 4.13 |
| 297 | 4.95 | 247 | 4.12 |
| 296 | 4.93 | 246 | 4.10 |
| 295 | 4.92 | 245 | 4.08 |
| 294 | 4.90 | 244 | 4.07 |
| 293 | 4.88 | 243 | 4.05 |
| 292 | 4.87 | 242 | 4.03 |

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | | Prop. Pts. | | | |
|----|----------|-----|----------|-------|----------|----------|----|------------|-------|-------|-------|
| 0 | 8.71 880 | | 8.71 940 | | I.28 060 | 9.99 940 | 60 | | | | |
| 1 | 8.72 120 | 240 | 8.72 181 | 241 | I.27 819 | 9.99 940 | 59 | 6 | 238 | 234 | 229 |
| 2 | 8.72 359 | 239 | 8.72 420 | 239 | I.27 580 | 9.99 939 | 58 | 7 | 23.8 | 23.4 | 22.9 |
| 3 | 8.72 597 | 238 | 8.72 659 | 239 | I.27 341 | 9.99 938 | 57 | 7 | 27.8 | 27.3 | 26.7 |
| 4 | 8.72 834 | 237 | 8.72 896 | 237 | I.27 104 | 9.99 938 | 56 | 8 | 31.7 | 31.2 | 30.5 |
| | | 235 | | 236 | | | | 9 | 35.7 | 35.1 | 34.4 |
| 5 | 8.73 069 | | 8.73 132 | | I.26 868 | 9.99 937 | 55 | 10 | 39.7 | 39.0 | 38.2 |
| 6 | 8.73 303 | 234 | 8.73 366 | 234 | I.26 634 | 9.99 936 | 54 | 20 | 79.3 | 78.0 | 76.3 |
| 7 | 8.73 535 | 232 | 8.73 600 | 234 | I.26 400 | 9.99 936 | 53 | 30 | 119.0 | 117.0 | 114.5 |
| 8 | 8.73 767 | 232 | 8.73 832 | 232 | I.26 168 | 9.99 935 | 52 | 40 | 158.7 | 156.0 | 152.7 |
| 9 | 8.73 997 | 230 | 8.74 063 | 231 | I.25 937 | 9.99 934 | 51 | 50 | 198.3 | 195.0 | 190.8 |
| | | 229 | | 229 | | | | | | | |
| 10 | 8.74 226 | | 8.74 292 | | I.25 708 | 9.99 934 | 50 | | | | |
| 11 | 8.74 454 | 228 | 8.74 521 | 229 | I.25 479 | 9.99 933 | 49 | | 225 | 220 | 216 |
| 12 | 8.74 680 | 226 | 8.74 748 | 227 | I.25 252 | 9.99 932 | 48 | 6 | 22.5 | 22.0 | 21.6 |
| 13 | 8.74 906 | 226 | 8.74 974 | 226 | I.25 026 | 9.99 932 | 47 | 7 | 26.3 | 25.7 | 25.2 |
| 14 | 8.75 130 | 224 | 8.75 199 | 225 | I.24 801 | 9.99 931 | 46 | 8 | 30.0 | 29.3 | 28.8 |
| | | 223 | | 224 | | | | 9 | 33.8 | 33.0 | 32.4 |
| 15 | 8.75 353 | | 8.75 423 | | I.24 577 | 9.99 930 | 45 | 10 | 37.5 | 36.7 | 36.0 |
| 16 | 8.75 575 | 222 | 8.75 645 | 222 | I.24 355 | 9.99 929 | 44 | 20 | 75.0 | 73.3 | 72.0 |
| 17 | 8.75 795 | 220 | 8.75 867 | 222 | I.24 133 | 9.99 929 | 43 | 30 | 112.5 | 110.0 | 108.0 |
| 18 | 8.76 015 | 220 | 8.76 087 | 220 | I.23 913 | 9.99 928 | 42 | 40 | 150.0 | 146.7 | 144.0 |
| 19 | 8.76 234 | 219 | 8.76 306 | 219 | I.23 694 | 9.99 927 | 41 | 50 | 187.5 | 183.3 | 180.0 |
| | | 217 | | 219 | | | | | | | |
| 20 | 8.76 451 | | 8.76 523 | | I.23 475 | 9.99 926 | 40 | | | | |
| 21 | 8.76 667 | 216 | 8.76 742 | 217 | I.23 258 | 9.99 926 | 39 | | 212 | 208 | 204 |
| 22 | 8.76 883 | 216 | 8.76 958 | 216 | I.23 042 | 9.99 925 | 38 | 6 | 21.2 | 20.8 | 20.4 |
| 23 | 8.77 097 | 214 | 8.77 173 | 215 | I.22 827 | 9.99 924 | 37 | 7 | 24.7 | 24.3 | 23.8 |
| 24 | 8.77 310 | 213 | 8.77 387 | 214 | I.22 613 | 9.99 923 | 36 | 8 | 28.3 | 27.7 | 27.2 |
| | | 212 | | 213 | | | | 9 | 31.8 | 31.2 | 30.6 |
| 25 | 8.77 522 | | 8.77 600 | | I.22 400 | 9.99 923 | 35 | 10 | 35.3 | 34.7 | 34.0 |
| 26 | 8.77 733 | 211 | 8.77 811 | 211 | I.22 189 | 9.99 922 | 34 | 20 | 70.7 | 69.3 | 68.0 |
| 27 | 8.77 943 | 210 | 8.78 022 | 211 | I.21 978 | 9.99 921 | 33 | 30 | 106.0 | 104.0 | 102.0 |
| 28 | 8.78 152 | 209 | 8.78 232 | 210 | I.21 768 | 9.99 920 | 32 | 40 | 141.3 | 138.7 | 136.0 |
| 29 | 8.78 360 | 208 | 8.78 441 | 209 | I.21 559 | 9.99 920 | 31 | 50 | 176.7 | 173.3 | 170.0 |
| | | 208 | | 208 | | | | | | | |
| 30 | 8.78 568 | | 8.78 649 | | I.21 351 | 9.99 919 | 30 | | | | |
| 31 | 8.78 774 | 206 | 8.78 855 | 206 | I.21 145 | 9.99 918 | 29 | 6 | 20.1 | 19.7 | 19.3 |
| 32 | 8.78 979 | 205 | 8.79 061 | 206 | I.20 939 | 9.99 917 | 28 | 7 | 23.5 | 23.0 | 22.5 |
| 33 | 8.79 183 | 204 | 8.79 266 | 205 | I.20 734 | 9.99 917 | 27 | 8 | 26.8 | 26.3 | 25.7 |
| 34 | 8.79 386 | 203 | 8.79 470 | 204 | I.20 530 | 9.99 916 | 26 | 9 | 30.2 | 29.6 | 29.0 |
| | | 202 | | 203 | | | | 10 | 33.5 | 32.8 | 32.2 |
| 35 | 8.79 588 | 201 | 8.79 673 | 202 | I.20 327 | 9.99 915 | 25 | 20 | 67.0 | 65.7 | 64.3 |
| 36 | 8.79 789 | 201 | 8.79 875 | 201 | I.20 125 | 9.99 914 | 24 | 30 | 100.5 | 98.5 | 96.5 |
| 37 | 8.79 990 | 199 | 8.80 076 | 201 | I.19 924 | 9.99 913 | 23 | 40 | 134.0 | 131.3 | 128.7 |
| 38 | 8.80 189 | 199 | 8.80 277 | 199 | I.19 723 | 9.99 913 | 22 | 50 | 167.5 | 164.2 | 160.8 |
| 39 | 8.80 388 | 199 | 8.80 476 | 199 | I.19 524 | 9.99 912 | 21 | | | | |
| | | 197 | | 198 | | | | | | | |
| 40 | 8.80 585 | | 8.80 674 | | I.19 326 | 9.99 911 | 20 | | | | |
| 41 | 8.80 782 | 197 | 8.80 872 | 198 | I.19 128 | 9.99 910 | 19 | | 189 | 185 | 181 |
| 42 | 8.80 978 | 196 | 8.81 068 | 196 | I.18 932 | 9.99 909 | 18 | 6 | 18.9 | 18.5 | 18.1 |
| 43 | 8.81 173 | 195 | 8.81 264 | 196 | I.18 736 | 9.99 909 | 17 | 7 | 22.1 | 21.6 | 21.1 |
| 44 | 8.81 367 | 194 | 8.81 459 | 195 | I.18 541 | 9.99 908 | 16 | 8 | 25.2 | 24.7 | 24.1 |
| | | 193 | | 194 | | | | 9 | 28.4 | 27.8 | 27.2 |
| 45 | 8.81 560 | | 8.81 653 | | I.18 347 | 9.99 907 | 15 | 10 | 31.5 | 30.8 | 30.2 |
| 46 | 8.81 752 | 192 | 8.81 846 | 193 | I.18 154 | 9.99 906 | 14 | 20 | 63.0 | 61.7 | 60.3 |
| 47 | 8.81 944 | 192 | 8.82 038 | 192 | I.17 962 | 9.99 905 | 13 | 30 | 94.5 | 92.5 | 90.5 |
| 48 | 8.82 134 | 190 | 8.82 230 | 192 | I.17 770 | 9.99 904 | 12 | 40 | 126.0 | 123.3 | 120.7 |
| 49 | 8.82 324 | 190 | 8.82 420 | 190 | I.17 580 | 9.99 904 | 11 | 50 | 157.5 | 154.2 | 150.8 |
| | | 189 | | 190 | | | | | | | |
| 50 | 8.82 513 | | 8.82 610 | | I.17 390 | 9.99 903 | 10 | | | | |
| 51 | 8.82 701 | 188 | 8.82 799 | 189 | I.17 201 | 9.99 902 | 9 | | 4 | 3 | 2 |
| 52 | 8.82 888 | 187 | 8.82 987 | 188 | I.17 013 | 9.99 901 | 8 | 6 | 0.4 | 0.3 | 0.2 |
| 53 | 8.83 075 | 187 | 8.83 175 | 188 | I.16 825 | 9.99 900 | 7 | 7 | 0.5 | 0.4 | 0.2 |
| 54 | 8.83 261 | 186 | 8.83 361 | 186 | I.16 639 | 9.99 899 | 6 | 8 | 0.6 | 0.4 | 0.3 |
| | | 185 | | 186 | | | | 9 | 0.5 | 0.5 | 0.3 |
| 55 | 8.83 446 | | 8.83 547 | | I.16 453 | 9.99 898 | 5 | 10 | 0.7 | 0.5 | 0.3 |
| 56 | 8.83 630 | 184 | 8.83 732 | 185 | I.16 268 | 9.99 898 | 4 | 20 | 1.3 | 1.0 | 0.7 |
| 57 | 8.83 813 | 183 | 8.83 916 | 184 | I.16 084 | 9.99 897 | 3 | 30 | 2.0 | 1.5 | 1.0 |
| 58 | 8.83 996 | 183 | 8.84 100 | 184 | I.15 900 | 9.99 896 | 2 | 40 | 2.7 | 2.0 | 1.3 |
| 59 | 8.84 177 | 181 | 8.84 282 | 182 | I.15 718 | 9.99 895 | 1 | 50 | 3.3 | 2.5 | 1.7 |
| | | 181 | | 182 | | | | | | | |
| 60 | 8.84 358 | | 8.84 464 | | I.15 536 | 9.99 894 | 0 | | | | |
| | | | | | | | | | | | |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | ∕ | Prop. Pts. | | | |

| ✓ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | ✓ | Prop. Pts. | | | |
|----|----------|-----|----------|-------|----------|----------|-----------|------------|-------|-------|-------|
| 0 | 8.84 358 | | 8.84 464 | | I.15 536 | 9.99 894 | 60 | | | | |
| 1 | 8.84 539 | 181 | 8.84 646 | 182 | I.15 354 | 9.99 893 | 59 | 180 | 177 | 174 | |
| 2 | 8.84 718 | 179 | 8.84 826 | 180 | I.15 174 | 9.99 892 | 58 | 6 | 18.0 | 17.7 | 17.4 |
| 3 | 8.84 897 | 179 | 8.85 006 | 180 | I.14 994 | 9.99 891 | 57 | 7 | 21.0 | 20.7 | 20.3 |
| 4 | 8.85 075 | 178 | 8.85 185 | 179 | I.14 815 | 9.99 891 | 56 | 8 | 24.0 | 23.6 | 23.2 |
| | | 177 | | 178 | | | | 9 | 27.0 | 26.6 | 26.1 |
| 5 | 8.85 252 | 177 | 8.85 363 | | I.14 637 | 9.99 890 | 55 | 10 | 30.0 | 29.5 | 29.0 |
| 6 | 8.85 429 | 177 | 8.85 540 | 177 | I.14 460 | 9.99 889 | 54 | 20 | 60.0 | 59.0 | 58.0 |
| 7 | 8.85 605 | 176 | 8.85 717 | 177 | I.14 283 | 9.99 888 | 53 | 30 | 90.0 | 88.5 | 87.0 |
| 8 | 8.85 780 | 175 | 8.85 893 | 176 | I.14 107 | 9.99 887 | 52 | 40 | 120.0 | 118.0 | 116.0 |
| 9 | 8.85 955 | 175 | 8.86 069 | 176 | I.13 931 | 9.99 886 | 51 | 50 | 150.0 | 147.5 | 145.0 |
| | | 173 | | 174 | | | | | | | |
| 10 | 8.86 128 | | 8.86 243 | | I.13 757 | 9.99 885 | 50 | | | | |
| 11 | 8.86 301 | 173 | 8.86 417 | 174 | I.13 583 | 9.99 884 | 49 | | 171 | 169 | 167 |
| 12 | 8.86 474 | 173 | 8.86 591 | 174 | I.13 409 | 9.99 883 | 48 | 6 | 17.1 | 16.9 | 16.7 |
| 13 | 8.86 645 | 171 | 8.86 763 | 172 | I.13 237 | 9.99 882 | 47 | 7 | 20.0 | 19.7 | 19.5 |
| 14 | 8.86 816 | 171 | 8.86 935 | 172 | I.13 065 | 9.99 881 | 46 | 8 | 22.8 | 22.5 | 22.3 |
| | | 171 | | 171 | | | | 9 | 25.7 | 25.4 | 25.1 |
| 15 | 8.86 987 | 169 | 8.87 106 | 171 | I.12 894 | 9.99 880 | 45 | 10 | 28.5 | 28.2 | 27.8 |
| 16 | 8.87 156 | 169 | 8.87 277 | 170 | I.12 723 | 9.99 879 | 44 | 20 | 57.0 | 56.3 | 55.7 |
| 17 | 8.87 325 | 169 | 8.87 447 | 169 | I.12 553 | 9.99 879 | 43 | 30 | 85.5 | 84.5 | 83.5 |
| 18 | 8.87 494 | 169 | 8.87 616 | 169 | I.12 384 | 9.99 878 | 42 | 40 | 114.0 | 112.7 | 111.3 |
| 19 | 8.87 661 | 167 | 8.87 785 | 169 | I.12 215 | 9.99 877 | 41 | 50 | 142.5 | 140.8 | 139.2 |
| | | 168 | | 168 | | | | | | | |
| 20 | 8.87 829 | 166 | 8.87 953 | | I.12 047 | 9.99 876 | 40 | | | | |
| 21 | 8.87 995 | 166 | 8.88 120 | 167 | I.11 880 | 9.99 875 | 39 | | 165 | 163 | 160 |
| 22 | 8.88 161 | 166 | 8.88 287 | 167 | I.11 713 | 9.99 874 | 38 | 6 | 16.5 | 16.3 | 16.0 |
| 23 | 8.88 328 | 165 | 8.88 453 | 166 | I.11 547 | 9.99 873 | 37 | 7 | 19.3 | 19.0 | 18.7 |
| 24 | 8.88 490 | 164 | 8.88 618 | 165 | I.11 382 | 9.99 872 | 36 | 8 | 22.0 | 21.7 | 21.3 |
| | | 164 | | 165 | | | | 9 | 24.8 | 24.5 | 24.0 |
| 25 | 8.88 654 | 163 | 8.88 783 | 165 | I.11 217 | 9.99 871 | 35 | 10 | 27.5 | 27.2 | 26.7 |
| 26 | 8.88 817 | 163 | 8.88 948 | 165 | I.11 052 | 9.99 870 | 34 | 20 | 55.0 | 54.3 | 53.3 |
| 27 | 8.88 980 | 163 | 8.89 111 | 163 | I.10 889 | 9.99 869 | 33 | 30 | 82.5 | 81.5 | 80.0 |
| 28 | 8.89 142 | 162 | 8.89 274 | 163 | I.10 726 | 9.99 868 | 32 | 40 | 110.0 | 108.7 | 106.7 |
| 29 | 8.89 304 | 160 | 8.89 437 | 161 | I.10 563 | 9.99 867 | 31 | 50 | 137.5 | 135.8 | 133.3 |
| | | 160 | | 161 | | | | | | | |
| 30 | 8.89 464 | 161 | 8.89 598 | | I.10 402 | 9.99 866 | 30 | | | | |
| 31 | 8.89 625 | 159 | 8.89 760 | 162 | I.10 240 | 9.99 865 | 29 | | 157 | 155 | 153 |
| 32 | 8.89 784 | 159 | 8.89 920 | 160 | I.10 080 | 9.99 864 | 28 | 6 | 15.7 | 15.5 | 15.3 |
| 33 | 8.89 943 | 159 | 8.90 080 | 160 | I.09 920 | 9.99 863 | 27 | 7 | 18.3 | 18.1 | 17.9 |
| 34 | 8.90 102 | 159 | 8.90 240 | 160 | I.09 760 | 9.99 862 | 26 | 8 | 20.9 | 20.7 | 20.4 |
| | | 158 | | 159 | | | | 9 | 23.6 | 23.3 | 23.0 |
| 35 | 8.90 260 | 157 | 8.90 399 | 158 | I.09 601 | 9.99 861 | 25 | 10 | 26.2 | 25.8 | 25.5 |
| 36 | 8.90 417 | 157 | 8.90 557 | 158 | I.09 443 | 9.99 860 | 24 | 20 | 52.3 | 51.7 | 51.0 |
| 37 | 8.90 574 | 157 | 8.90 715 | 158 | I.09 285 | 9.99 859 | 23 | 30 | 78.5 | 77.5 | 76.5 |
| 38 | 8.90 730 | 156 | 8.90 872 | 157 | I.09 128 | 9.99 858 | 22 | 40 | 104.7 | 103.3 | 102.0 |
| 39 | 8.90 885 | 155 | 8.91 029 | 157 | I.08 971 | 9.99 857 | 21 | 50 | 130.8 | 129.2 | 127.5 |
| | | 155 | | 156 | | | | | | | |
| 40 | 8.91 040 | 155 | 8.91 185 | | I.08 815 | 9.99 856 | 20 | | | | |
| 41 | 8.91 195 | 155 | 8.91 340 | 155 | I.08 660 | 9.99 855 | 19 | | 151 | 149 | 147 |
| 42 | 8.91 349 | 154 | 8.91 495 | 155 | I.08 505 | 9.99 854 | 18 | 6 | 15.1 | 14.9 | 14.7 |
| 43 | 8.91 502 | 153 | 8.91 650 | 155 | I.08 350 | 9.99 853 | 17 | 7 | 17.6 | 17.4 | 17.2 |
| 44 | 8.91 655 | 153 | 8.91 803 | 153 | I.08 197 | 9.99 852 | 16 | 8 | 20.1 | 19.9 | 19.6 |
| | | 152 | | 154 | | | | 9 | 22.7 | 22.4 | 22.1 |
| 45 | 8.91 807 | 152 | 8.91 957 | 153 | I.08 043 | 9.99 851 | 15 | 10 | 25.2 | 24.8 | 24.5 |
| 46 | 8.91 959 | 151 | 8.92 110 | 152 | I.07 890 | 9.99 850 | 14 | 20 | 50.3 | 49.7 | 49.0 |
| 47 | 8.92 110 | 151 | 8.92 262 | 152 | I.07 738 | 9.99 848 | 13 | 30 | 75.5 | 74.5 | 73.5 |
| 48 | 8.92 261 | 151 | 8.92 414 | 151 | I.07 586 | 9.99 847 | 12 | 40 | 100.7 | 99.3 | 98.0 |
| 49 | 8.92 411 | 150 | 8.92 565 | 151 | I.07 435 | 9.99 846 | 11 | 50 | 125.8 | 124.2 | 122.5 |
| | | 150 | | 151 | | | | | | | |
| 50 | 8.92 561 | | 8.92 716 | | I.07 284 | 9.99 845 | 10 | | | | |
| 51 | 8.92 710 | 149 | 8.92 866 | 150 | I.07 134 | 9.99 844 | 9 | | 146 | 2 | 1 |
| 52 | 8.92 859 | 149 | 8.93 016 | 150 | I.06 984 | 9.99 843 | 8 | 6 | 14.6 | 0.2 | 0.1 |
| 53 | 8.93 007 | 148 | 8.93 163 | 149 | I.06 835 | 9.99 842 | 7 | 7 | 17.0 | 0.2 | 0.1 |
| 54 | 8.93 154 | 147 | 8.93 313 | 148 | I.06 687 | 9.99 841 | 6 | 8 | 19.5 | 0.3 | 0.1 |
| | | 147 | | 149 | | | | 9 | 21.9 | 0.3 | 0.2 |
| 55 | 8.93 301 | 147 | 8.93 462 | 147 | I.06 538 | 9.99 840 | 5 | 10 | 24.3 | 0.3 | 0.2 |
| 56 | 8.93 448 | 146 | 8.93 609 | 147 | I.06 391 | 9.99 839 | 4 | 20 | 48.7 | 0.7 | 0.3 |
| 57 | 8.93 594 | 146 | 8.93 756 | 147 | I.06 244 | 9.99 838 | 3 | 30 | 73.0 | 1.0 | 0.5 |
| 58 | 8.93 740 | 146 | 8.93 903 | 146 | I.06 097 | 9.99 837 | 2 | 40 | 97.3 | 1.3 | 0.7 |
| 59 | 8.93 885 | 145 | 8.94 049 | 146 | I.05 951 | 9.99 836 | 1 | 50 | 121.7 | 1.7 | 0.8 |
| | | 145 | | 146 | | | | | | | |
| 60 | 8.94 030 | | 8.94 195 | | I.05 805 | 9.99 834 | 0 | | | | |
| | | | | | | | | | | | |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | ✓ | Prop. Pts. | | | |

| ✓ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | | Prop. Pts. | | | |
|-----------|----------------|-----------|-----------------|--------------|-----------------|----------------|-----------|-------------------|-------|-------|-------|
| 0 | 8.94 030 | | 8.94 195 | | 1.05 805 | 9.99 834 | 60 | | | | |
| 1 | 8.94 174 | 144 | 8.94 340 | 145 | 1.05 660 | 9.99 833 | 59 | 6 | 145 | 143 | 141 |
| 2 | 8.94 317 | 143 | 8.94 485 | 145 | 1.05 515 | 9.99 832 | 58 | 7 | 14.5 | 14.3 | 14.1 |
| 3 | 8.94 461 | 144 | 8.94 630 | 145 | 1.05 370 | 9.99 831 | 57 | 8 | 16.9 | 16.7 | 16.5 |
| 4 | 8.94 603 | 142 | 8.94 773 | 143 | 1.05 227 | 9.99 830 | 56 | 9 | 19.3 | 19.1 | 18.8 |
| | | 143 | | 144 | | | | 10 | 21.8 | 21.5 | 21.2 |
| 5 | 8.94 746 | 141 | 8.94 917 | 143 | 1.05 083 | 9.99 829 | 55 | 10 | 24.2 | 23.8 | 23.5 |
| 6 | 8.94 887 | 142 | 8.95 060 | 142 | 1.04 940 | 9.99 828 | 54 | 20 | 48.3 | 47.7 | 47.0 |
| 7 | 8.95 029 | 141 | 8.95 202 | 142 | 1.04 798 | 9.99 827 | 53 | 30 | 72.5 | 71.5 | 70.5 |
| 8 | 8.95 170 | 140 | 8.95 344 | 142 | 1.04 656 | 9.99 825 | 52 | 40 | 96.7 | 95.3 | 94.0 |
| 9 | 8.95 310 | 140 | 8.95 486 | 141 | 1.04 514 | 9.99 824 | 51 | 50 | 120.8 | 119.2 | 117.5 |
| 10 | 8.95 450 | | 8.95 627 | | 1.04 373 | 9.99 823 | 50 | | | | |
| 11 | 8.95 589 | 139 | 8.95 767 | 140 | 1.04 233 | 9.99 822 | 49 | | 139 | 138 | 136 |
| 12 | 8.95 728 | 139 | 8.95 908 | 141 | 1.04 092 | 9.99 821 | 48 | 6 | 13.9 | 13.8 | 13.6 |
| 13 | 8.95 867 | 139 | 8.96 047 | 139 | 1.03 953 | 9.99 820 | 47 | 7 | 16.2 | 16.1 | 15.9 |
| 14 | 8.96 005 | 138 | 8.96 187 | 140 | 1.03 813 | 9.99 819 | 46 | 8 | 18.5 | 18.4 | 18.1 |
| | | 138 | | 138 | | | | 9 | 20.9 | 20.7 | 20.4 |
| 15 | 8.96 143 | 137 | 8.96 325 | 139 | 1.03 675 | 9.99 817 | 45 | 10 | 23.2 | 23.0 | 22.7 |
| 16 | 8.96 280 | 137 | 8.96 464 | 138 | 1.03 536 | 9.99 816 | 44 | 20 | 46.3 | 46.0 | 45.3 |
| 17 | 8.96 417 | 136 | 8.96 602 | 137 | 1.03 398 | 9.99 815 | 43 | 30 | 69.5 | 69.0 | 68.0 |
| 18 | 8.96 553 | 136 | 8.96 739 | 138 | 1.03 261 | 9.99 814 | 42 | 40 | 92.7 | 92.0 | 90.7 |
| 19 | 8.96 689 | 136 | 8.96 877 | 136 | 1.03 123 | 9.99 813 | 41 | 50 | 115.8 | 115.0 | 113.3 |
| 20 | 8.96 825 | | 8.97 013 | | 1.02 987 | 9.99 812 | 40 | | | | |
| 21 | 8.96 960 | 135 | 8.97 150 | 137 | 1.02 850 | 9.99 810 | 39 | | 135 | 133 | 131 |
| 22 | 8.97 095 | 135 | 8.97 285 | 135 | 1.02 715 | 9.99 809 | 38 | 6 | 13.5 | 13.3 | 13.1 |
| 23 | 8.97 229 | 134 | 8.97 421 | 136 | 1.02 579 | 9.99 808 | 37 | 7 | 15.8 | 15.5 | 15.3 |
| 24 | 8.97 363 | 133 | 8.97 556 | 135 | 1.02 444 | 9.99 807 | 36 | 8 | 18.0 | 17.7 | 17.5 |
| | | 133 | | 135 | | | | 9 | 20.3 | 20.0 | 19.7 |
| 25 | 8.97 496 | 133 | 8.97 691 | 134 | 1.02 309 | 9.99 806 | 35 | 10 | 22.5 | 22.2 | 21.8 |
| 26 | 8.97 629 | 133 | 8.97 825 | 134 | 1.02 175 | 9.99 804 | 34 | 20 | 45.0 | 44.3 | 43.7 |
| 27 | 8.97 762 | 132 | 8.97 959 | 133 | 1.02 041 | 9.99 803 | 33 | 30 | 67.5 | 66.5 | 65.5 |
| 28 | 8.97 894 | 132 | 8.98 092 | 133 | 1.01 908 | 9.99 802 | 32 | 40 | 90.0 | 88.7 | 87.3 |
| 29 | 8.98 026 | 131 | 8.98 225 | 133 | 1.01 775 | 9.99 801 | 31 | 50 | 112.5 | 110.8 | 109.2 |
| 30 | 8.98 157 | | 8.98 358 | | 1.01 642 | 9.99 800 | 30 | | | | |
| 31 | 8.98 288 | 131 | 8.98 490 | 132 | 1.01 510 | 9.99 798 | 29 | | 129 | 128 | 126 |
| 32 | 8.98 419 | 131 | 8.98 622 | 132 | 1.01 378 | 9.99 797 | 28 | 6 | 12.9 | 12.8 | 12.6 |
| 33 | 8.98 549 | 130 | 8.98 753 | 131 | 1.01 247 | 9.99 796 | 27 | 7 | 15.1 | 14.9 | 14.7 |
| 34 | 8.98 679 | 129 | 8.98 884 | 131 | 1.01 116 | 9.99 795 | 26 | 8 | 17.2 | 17.1 | 16.8 |
| | | 129 | | 131 | | | | 9 | 19.4 | 19.2 | 18.9 |
| 35 | 8.98 808 | 129 | 8.99 015 | 130 | 1.00 985 | 9.99 793 | 25 | 10 | 21.5 | 21.3 | 21.0 |
| 36 | 8.98 937 | 129 | 8.99 145 | 130 | 1.00 855 | 9.99 792 | 24 | 20 | 43.0 | 42.7 | 42.0 |
| 37 | 8.99 066 | 128 | 8.99 275 | 130 | 1.00 725 | 9.99 791 | 23 | 30 | 64.5 | 64.0 | 63.0 |
| 38 | 8.99 194 | 128 | 8.99 405 | 129 | 1.00 595 | 9.99 790 | 22 | 40 | 86.0 | 85.3 | 84.0 |
| 39 | 8.99 322 | 128 | 8.99 534 | 128 | 1.00 466 | 9.99 788 | 21 | 50 | 107.5 | 106.7 | 105.0 |
| 40 | 8.99 450 | | 8.99 662 | | 1.00 338 | 9.99 787 | 20 | | | | |
| 41 | 8.99 577 | 127 | 8.99 791 | 129 | 1.00 209 | 9.99 786 | 19 | | 125 | 123 | 122 |
| 42 | 8.99 704 | 127 | 8.99 919 | 128 | 1.00 081 | 9.99 785 | 18 | 6 | 12.5 | 12.3 | 12.2 |
| 43 | 8.99 830 | 126 | 9.00 046 | 127 | 0.99 954 | 9.99 783 | 17 | 7 | 14.6 | 14.4 | 14.2 |
| 44 | 8.99 956 | 126 | 9.00 174 | 128 | 0.99 826 | 9.99 782 | 16 | 8 | 16.7 | 16.4 | 16.3 |
| | | 126 | | 127 | | | | 9 | 18.8 | 18.5 | 18.3 |
| 45 | 9.00 082 | 125 | 9.00 301 | 126 | 0.99 699 | 9.99 781 | 15 | 10 | 20.8 | 20.5 | 20.3 |
| 46 | 9.00 207 | 125 | 9.00 427 | 126 | 0.99 573 | 9.99 780 | 14 | 20 | 41.7 | 41.0 | 40.7 |
| 47 | 9.00 332 | 124 | 9.00 553 | 126 | 0.99 447 | 9.99 778 | 13 | 30 | 62.5 | 61.5 | 61.0 |
| 48 | 9.00 456 | 125 | 9.00 679 | 126 | 0.99 321 | 9.99 777 | 12 | 40 | 83.3 | 82.0 | 81.3 |
| 49 | 9.00 581 | 123 | 9.00 805 | 125 | 0.99 195 | 9.99 776 | 11 | 50 | 104.2 | 102.5 | 101.7 |
| 50 | 9.00 704 | | 9.00 930 | | 0.99 070 | 9.99 775 | 10 | | | | |
| 51 | 9.00 828 | 124 | 9.01 055 | 125 | 0.98 945 | 9.99 773 | 9 | | 121 | 120 | 119 |
| 52 | 9.00 951 | 123 | 9.01 179 | 124 | 0.98 821 | 9.99 772 | 8 | 6 | 12.1 | 12.0 | 0.1 |
| 53 | 9.01 074 | 123 | 9.01 303 | 124 | 0.98 697 | 9.99 771 | 7 | 7 | 14.1 | 14.0 | 0.1 |
| 54 | 9.01 196 | 122 | 9.01 427 | 124 | 0.98 573 | 9.99 769 | 6 | 8 | 16.1 | 16.0 | 0.1 |
| | | 122 | | 123 | | | | 9 | 18.2 | 18.0 | 0.2 |
| 55 | 9.01 318 | 122 | 9.01 550 | 123 | 0.98 450 | 9.99 768 | 5 | 10 | 20.2 | 20.0 | 0.2 |
| 56 | 9.01 440 | 121 | 9.01 673 | 123 | 0.98 327 | 9.99 767 | 4 | 20 | 40.3 | 40.0 | 0.3 |
| 57 | 9.01 561 | 121 | 9.01 796 | 122 | 0.98 204 | 9.99 765 | 3 | 30 | 60.5 | 60.0 | 0.5 |
| 58 | 9.01 682 | 121 | 9.01 918 | 122 | 0.98 082 | 9.99 764 | 2 | 40 | 80.7 | 80.0 | 0.7 |
| 59 | 9.01 803 | 120 | 9.02 040 | 122 | 0.97 960 | 9.99 763 | 1 | 50 | 100.8 | 100.0 | 0.8 |
| 60 | 9.01 923 | | 9.02 162 | | 0.97 838 | 9.99 761 | 0 | | | | |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | ✓ | Prop. Pts. | | | |

| ∠ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | | Prop. Pts. | | | |
|-----------|----------------|-----------|-----------------|--------------|-----------------|----------------|-----------|-------------------|-------|-------|------|
| 0 | 9.01 923 | | 9.02 162 | | 0.97 838 | 9.99 761 | 60 | | | | |
| 1 | 9.02 043 | 120 | 9.02 283 | 121 | 0.97 717 | 9.99 760 | 59 | | 121 | 120 | 119 |
| 2 | 9.02 163 | 120 | 9.02 404 | 121 | 0.97 596 | 9.99 759 | 58 | 6 | 12.1 | 12.0 | 11.9 |
| 3 | 9.02 283 | 120 | 9.02 525 | 121 | 0.97 475 | 9.99 757 | 57 | 7 | 14.1 | 14.0 | 13.9 |
| 4 | 9.02 402 | 119 | 9.02 645 | 120 | 0.97 355 | 9.99 756 | 56 | 8 | 16.1 | 16.0 | 15.9 |
| | | 118 | | 121 | | | | 9 | 18.2 | 18.0 | 17.9 |
| 5 | 9.02 520 | 119 | 9.02 766 | 119 | 0.97 234 | 9.99 755 | 55 | 10 | 20.2 | 20.0 | 19.8 |
| 6 | 9.02 639 | 118 | 9.02 885 | 120 | 0.97 115 | 9.99 753 | 54 | 20 | 40.3 | 40.0 | 39.7 |
| 7 | 9.02 757 | 117 | 9.03 005 | 119 | 0.96 995 | 9.99 752 | 53 | 30 | 60.5 | 60.0 | 59.5 |
| 8 | 9.02 874 | 118 | 9.03 124 | 118 | 0.96 876 | 9.99 751 | 52 | 40 | 80.7 | 80.0 | 79.3 |
| 9 | 9.02 992 | 117 | 9.03 242 | 119 | 0.96 758 | 9.99 749 | 51 | 50 | 100.8 | 100.0 | 99.2 |
| 10 | 9.03 109 | | 9.03 361 | | 0.96 639 | 9.99 748 | 50 | | | | |
| 11 | 9.03 226 | 117 | 9.03 479 | 118 | 0.96 521 | 9.99 747 | 49 | | 118 | 117 | 116 |
| 12 | 9.03 342 | 116 | 9.03 597 | 118 | 0.96 403 | 9.99 745 | 48 | 6 | 11.8 | 11.7 | 11.6 |
| 13 | 9.03 458 | 116 | 9.03 714 | 117 | 0.96 286 | 9.99 744 | 47 | 7 | 13.8 | 13.7 | 13.5 |
| 14 | 9.03 574 | 116 | 9.03 832 | 118 | 0.96 168 | 9.99 742 | 46 | 8 | 15.7 | 15.6 | 15.5 |
| | | 116 | | 116 | | | | 9 | 17.7 | 17.6 | 17.4 |
| 15 | 9.03 690 | 115 | 9.03 948 | 117 | 0.96 052 | 9.99 741 | 45 | 10 | 19.7 | 19.5 | 19.3 |
| 16 | 9.03 805 | 115 | 9.04 065 | 116 | 0.95 935 | 9.99 740 | 44 | 20 | 39.3 | 39.0 | 38.7 |
| 17 | 9.03 920 | 114 | 9.04 181 | 116 | 0.95 819 | 9.99 738 | 43 | 30 | 59.0 | 58.5 | 58.0 |
| 18 | 9.04 034 | 114 | 9.04 297 | 116 | 0.95 703 | 9.99 737 | 42 | 40 | 78.7 | 78.0 | 77.3 |
| 19 | 9.04 149 | 115 | 9.04 413 | 116 | 0.95 587 | 9.99 736 | 41 | 50 | 98.3 | 97.5 | 96.7 |
| 20 | 9.04 262 | | 9.04 528 | | 0.95 472 | 9.99 734 | 40 | | | | |
| 21 | 9.04 376 | 114 | 9.04 643 | 115 | 0.95 357 | 9.99 733 | 39 | | 115 | 114 | 113 |
| 22 | 9.04 490 | 114 | 9.04 758 | 115 | 0.95 242 | 9.99 731 | 38 | 6 | 11.5 | 11.4 | 11.3 |
| 23 | 9.04 603 | 113 | 9.04 873 | 115 | 0.95 127 | 9.99 730 | 37 | 7 | 13.4 | 13.3 | 13.2 |
| 24 | 9.04 715 | 113 | 9.04 987 | 114 | 0.95 013 | 9.99 728 | 36 | 8 | 15.3 | 15.2 | 15.1 |
| | | 113 | | 114 | | | | 9 | 17.3 | 17.1 | 17.0 |
| 25 | 9.04 828 | 112 | 9.05 101 | 113 | 0.94 899 | 9.99 727 | 35 | 10 | 19.2 | 19.0 | 18.8 |
| 26 | 9.04 940 | 112 | 9.05 214 | 113 | 0.94 786 | 9.99 726 | 34 | 20 | 38.3 | 38.0 | 37.7 |
| 27 | 9.05 052 | 112 | 9.05 328 | 114 | 0.94 672 | 9.99 724 | 33 | 30 | 57.5 | 57.0 | 56.5 |
| 28 | 9.05 164 | 112 | 9.05 441 | 113 | 0.94 559 | 9.99 723 | 32 | 40 | 76.7 | 76.0 | 75.3 |
| 29 | 9.05 275 | 111 | 9.05 553 | 112 | 0.94 447 | 9.99 721 | 31 | 50 | 95.8 | 95.0 | 94.2 |
| 30 | 9.05 386 | | 9.05 666 | | 0.94 334 | 9.99 720 | 30 | | | | |
| 31 | 9.05 497 | 111 | 9.05 778 | 112 | 0.94 222 | 9.99 718 | 29 | | 112 | 111 | 110 |
| 32 | 9.05 607 | 110 | 9.05 890 | 112 | 0.94 110 | 9.99 717 | 28 | 6 | 11.2 | 11.1 | 11.0 |
| 33 | 9.05 717 | 110 | 9.06 002 | 112 | 0.93 998 | 9.99 716 | 27 | 7 | 13.1 | 13.0 | 12.8 |
| 34 | 9.05 827 | 110 | 9.06 113 | 111 | 0.93 887 | 9.99 714 | 26 | 8 | 14.9 | 14.8 | 14.7 |
| | | 110 | | 111 | | | | 9 | 16.8 | 16.7 | 16.5 |
| 35 | 9.05 937 | 109 | 9.06 224 | 111 | 0.93 776 | 9.99 713 | 25 | 10 | 18.7 | 18.5 | 18.3 |
| 36 | 9.06 046 | 109 | 9.06 335 | 110 | 0.93 665 | 9.99 711 | 24 | 20 | 37.3 | 37.0 | 36.7 |
| 37 | 9.06 155 | 109 | 9.06 445 | 110 | 0.93 555 | 9.99 710 | 23 | 30 | 56.0 | 55.5 | 55.0 |
| 38 | 9.06 264 | 109 | 9.06 556 | 111 | 0.93 444 | 9.99 708 | 22 | 40 | 74.7 | 74.0 | 73.3 |
| 39 | 9.06 372 | 108 | 9.06 666 | 110 | 0.93 334 | 9.99 707 | 21 | 50 | 93.3 | 92.5 | 91.7 |
| 40 | 9.06 481 | | 9.06 775 | | 0.93 225 | 9.99 705 | 20 | | | | |
| 41 | 9.06 589 | 108 | 9.06 885 | 110 | 0.93 115 | 9.99 704 | 19 | | 109 | 108 | 107 |
| 42 | 9.06 696 | 107 | 9.06 994 | 109 | 0.93 006 | 9.99 702 | 18 | 6 | 10.9 | 10.8 | 10.7 |
| 43 | 9.06 804 | 108 | 9.07 103 | 109 | 0.92 897 | 9.99 701 | 17 | 7 | 12.7 | 12.6 | 12.5 |
| 44 | 9.06 911 | 107 | 9.07 211 | 108 | 0.92 789 | 9.99 699 | 16 | 8 | 14.5 | 14.4 | 14.3 |
| | | 107 | | 109 | | | | 9 | 16.4 | 16.2 | 16.1 |
| 45 | 9.07 018 | 106 | 9.07 320 | 108 | 0.92 680 | 9.99 698 | 15 | 10 | 18.2 | 18.0 | 17.8 |
| 46 | 9.07 124 | 107 | 9.07 428 | 108 | 0.92 572 | 9.99 696 | 14 | 20 | 36.3 | 36.0 | 35.7 |
| 47 | 9.07 231 | 107 | 9.07 536 | 107 | 0.92 464 | 9.99 695 | 13 | 30 | 54.5 | 54.0 | 53.5 |
| 48 | 9.07 337 | 106 | 9.07 643 | 107 | 0.92 357 | 9.99 693 | 12 | 40 | 72.7 | 72.0 | 71.3 |
| 49 | 9.07 442 | 105 | 9.07 751 | 108 | 0.92 249 | 9.99 692 | 11 | 50 | 90.8 | 90.0 | 89.2 |
| 50 | 9.07 548 | | 9.07 858 | | 0.92 142 | 9.99 690 | 10 | | | | |
| 51 | 9.07 653 | 105 | 9.07 964 | 106 | 0.92 036 | 9.99 689 | 9 | | 106 | 105 | 104 |
| 52 | 9.07 758 | 105 | 9.08 071 | 107 | 0.91 929 | 9.99 687 | 8 | 6 | 10.6 | 10.5 | 10.4 |
| 53 | 9.07 863 | 105 | 9.08 177 | 106 | 0.91 823 | 9.99 686 | 7 | 7 | 12.4 | 12.3 | 12.1 |
| 54 | 9.07 968 | 105 | 9.08 283 | 106 | 0.91 717 | 9.99 684 | 6 | 8 | 14.1 | 14.0 | 13.9 |
| | | 104 | | 106 | | | | 9 | 15.9 | 15.8 | 15.6 |
| 55 | 9.08 072 | 104 | 9.08 389 | 106 | 0.91 611 | 9.99 683 | 5 | 10 | 17.7 | 17.5 | 17.3 |
| 56 | 9.08 176 | 104 | 9.08 495 | 105 | 0.91 505 | 9.99 681 | 4 | 20 | 35.3 | 35.0 | 34.7 |
| 57 | 9.08 280 | 104 | 9.08 600 | 105 | 0.91 400 | 9.99 680 | 3 | 30 | 53.0 | 52.5 | 52.0 |
| 58 | 9.08 383 | 103 | 9.08 705 | 105 | 0.91 295 | 9.99 678 | 2 | 40 | 70.7 | 70.0 | 69.3 |
| 59 | 9.08 486 | 103 | 9.08 810 | 105 | 0.91 190 | 9.99 677 | 1 | 50 | 88.3 | 87.5 | 86.7 |
| 60 | 9.08 589 | | 9.08 914 | | 0.91 086 | 9.99 675 | 0 | | | | |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | ∠ | Prop. Pts. | | | |

| / | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | | Prop. Pts. | | | | | |
|----|----------|-----|----------|-------|----------|----------|-----------|------------|------|------|------|--|--|
| 0 | 9.08 589 | | 9.08 914 | | 0.91 086 | 9.99 675 | 60 | | | | | | |
| 1 | 9.08 692 | 103 | 9.09 019 | 105 | 0.90 981 | 9.99 674 | 59 | | 105 | 104 | 103 | | |
| 2 | 9.08 795 | 103 | 9.09 123 | 104 | 0.90 877 | 9.99 672 | 58 | 6 | 10.5 | 10.4 | 10.3 | | |
| 3 | 9.08 897 | 102 | 9.09 227 | 104 | 0.90 773 | 9.99 670 | 57 | 7 | 12.3 | 12.1 | 12.0 | | |
| 4 | 9.08 999 | 102 | 9.09 330 | 103 | 0.90 670 | 9.99 669 | 56 | 8 | 14.0 | 13.9 | 13.7 | | |
| | | 102 | | 104 | | | | 9 | 15.8 | 15.6 | 15.5 | | |
| 5 | 9.09 101 | | 9.09 434 | | 0.90 566 | 9.99 667 | 55 | 10 | 17.5 | 17.3 | 17.2 | | |
| 6 | 9.09 202 | 101 | 9.09 537 | 103 | 0.90 463 | 9.99 666 | 54 | 20 | 35.0 | 34.7 | 34.3 | | |
| 7 | 9.09 304 | 102 | 9.09 640 | 103 | 0.90 360 | 9.99 664 | 53 | 30 | 52.5 | 52.0 | 51.5 | | |
| 8 | 9.09 405 | 101 | 9.09 742 | 102 | 0.90 258 | 9.99 663 | 52 | 40 | 70.0 | 69.3 | 68.7 | | |
| 9 | 9.09 506 | 101 | 9.09 845 | 103 | 0.90 155 | 9.99 661 | 51 | 50 | 87.5 | 86.7 | 85.8 | | |
| | | 100 | | 102 | | | | | | | | | |
| 10 | 9.09 606 | | 9.09 947 | | 0.90 053 | 9.99 659 | 50 | | | | | | |
| 11 | 9.09 707 | 101 | 9.10 049 | 102 | 0.89 951 | 9.99 658 | 49 | | | | | | |
| 12 | 9.09 807 | 100 | 9.10 150 | 101 | 0.89 850 | 9.99 656 | 48 | 6 | 10.2 | 10.1 | 10.0 | | |
| 13 | 9.09 907 | 100 | 9.10 252 | 102 | 0.89 748 | 9.99 655 | 47 | 7 | 11.9 | 11.8 | 11.7 | | |
| 14 | 9.10 006 | 99 | 9.10 353 | 101 | 0.89 647 | 9.99 653 | 46 | 8 | 13.6 | 13.5 | 13.3 | | |
| | | 100 | | 101 | | | | 9 | 15.3 | 15.2 | 15.0 | | |
| 15 | 9.10 106 | | 9.10 454 | | 0.89 546 | 9.99 651 | 45 | 10 | 17.0 | 16.8 | 16.7 | | |
| 16 | 9.10 205 | 99 | 9.10 555 | 101 | 0.89 445 | 9.99 650 | 44 | 20 | 34.0 | 33.7 | 33.3 | | |
| 17 | 9.10 304 | 99 | 9.10 656 | 101 | 0.89 344 | 9.99 648 | 43 | 30 | 51.0 | 50.5 | 50.0 | | |
| 18 | 9.10 402 | 98 | 9.10 756 | 100 | 0.89 244 | 9.99 647 | 42 | 40 | 68.0 | 67.3 | 66.7 | | |
| 19 | 9.10 501 | 99 | 9.10 856 | 100 | 0.89 144 | 9.99 645 | 41 | 50 | 85.0 | 84.2 | 83.3 | | |
| | | 98 | | 100 | | | | | | | | | |
| 20 | 9.10 599 | | 9.10 956 | | 0.89 044 | 9.99 643 | 40 | | | | | | |
| 21 | 9.10 697 | 98 | 9.11 056 | 100 | 0.88 944 | 9.99 642 | 39 | | 99 | 98 | 97 | | |
| 22 | 9.10 795 | 98 | 9.11 155 | 99 | 0.88 845 | 9.99 640 | 38 | 6 | 9.9 | 9.8 | 9.7 | | |
| 23 | 9.10 893 | 98 | 9.11 254 | 99 | 0.88 746 | 9.99 638 | 37 | 7 | 11.6 | 11.4 | 11.3 | | |
| 24 | 9.10 990 | 97 | 9.11 353 | 99 | 0.88 647 | 9.99 637 | 36 | 8 | 13.2 | 13.1 | 12.9 | | |
| | | 97 | | 99 | | | | 9 | 14.9 | 14.7 | 14.6 | | |
| 25 | 9.11 087 | | 9.11 452 | | 0.88 548 | 9.99 635 | 35 | 10 | 16.5 | 16.3 | 16.2 | | |
| 26 | 9.11 184 | 97 | 9.11 551 | 99 | 0.88 449 | 9.99 633 | 34 | 20 | 33.0 | 32.7 | 32.3 | | |
| 27 | 9.11 281 | 97 | 9.11 649 | 98 | 0.88 351 | 9.99 632 | 33 | 30 | 49.5 | 49.0 | 48.5 | | |
| 28 | 9.11 377 | 96 | 9.11 747 | 98 | 0.88 253 | 9.99 630 | 32 | 40 | 66.0 | 65.3 | 64.7 | | |
| 29 | 9.11 474 | 97 | 9.11 845 | 98 | 0.88 155 | 9.99 629 | 31 | 50 | 82.5 | 81.7 | 80.8 | | |
| | | 96 | | 98 | | | | | | | | | |
| 30 | 9.11 570 | | 9.11 943 | | 0.88 057 | 9.99 627 | 30 | | | | | | |
| 31 | 9.11 666 | 96 | 9.12 040 | 97 | 0.87 960 | 9.99 625 | 29 | | 96 | 95 | 94 | | |
| 32 | 9.11 761 | 95 | 9.12 138 | 98 | 0.87 862 | 9.99 624 | 28 | 6 | 9.6 | 9.5 | 9.4 | | |
| 33 | 9.11 857 | 96 | 9.12 235 | 97 | 0.87 765 | 9.99 622 | 27 | 7 | 11.2 | 11.1 | 11.0 | | |
| 34 | 9.11 952 | 95 | 9.12 332 | 97 | 0.87 668 | 9.99 620 | 26 | 8 | 12.8 | 12.7 | 12.5 | | |
| | | 95 | | 96 | | | | 9 | 14.4 | 14.3 | 14.1 | | |
| 35 | 9.12 047 | | 9.12 428 | | 0.87 572 | 9.99 618 | 25 | 10 | 16.0 | 15.8 | 15.7 | | |
| 36 | 9.12 142 | 95 | 9.12 525 | 97 | 0.87 475 | 9.99 617 | 24 | 20 | 32.0 | 31.7 | 31.3 | | |
| 37 | 9.12 236 | 94 | 9.12 621 | 96 | 0.87 379 | 9.99 615 | 23 | 30 | 48.0 | 47.5 | 47.0 | | |
| 38 | 9.12 331 | 95 | 9.12 717 | 96 | 0.87 283 | 9.99 613 | 22 | 40 | 64.0 | 63.3 | 62.7 | | |
| 39 | 9.12 425 | 94 | 9.12 813 | 96 | 0.87 187 | 9.99 612 | 21 | 50 | 80.0 | 79.2 | 78.3 | | |
| | | 94 | | 96 | | | | | | | | | |
| 40 | 9.12 519 | | 9.12 909 | | 0.87 091 | 9.99 610 | 20 | | | | | | |
| 41 | 9.12 612 | 93 | 9.13 004 | 95 | 0.86 996 | 9.99 608 | 19 | | 93 | 92 | 91 | | |
| 42 | 9.12 706 | 94 | 9.13 099 | 95 | 0.86 901 | 9.99 607 | 18 | 6 | 9.3 | 9.2 | 9.1 | | |
| 43 | 9.12 799 | 93 | 9.13 194 | 95 | 0.86 806 | 9.99 605 | 17 | 7 | 10.9 | 10.7 | 10.6 | | |
| 44 | 9.12 892 | 93 | 9.13 289 | 95 | 0.86 711 | 9.99 603 | 16 | 8 | 12.4 | 12.3 | 12.1 | | |
| | | 93 | | 95 | | | | 9 | 14.0 | 13.8 | 13.7 | | |
| 45 | 9.12 985 | | 9.13 384 | | 0.86 616 | 9.99 601 | 15 | 10 | 15.5 | 15.3 | 15.2 | | |
| 46 | 9.13 078 | 93 | 9.13 478 | 94 | 0.86 522 | 9.99 600 | 14 | 20 | 31.0 | 30.7 | 30.3 | | |
| 47 | 9.13 171 | 93 | 9.13 573 | 95 | 0.86 427 | 9.99 598 | 13 | 30 | 46.5 | 46.0 | 45.5 | | |
| 48 | 9.13 263 | 92 | 9.13 667 | 94 | 0.86 333 | 9.99 596 | 12 | 40 | 62.0 | 61.3 | 60.7 | | |
| 49 | 9.13 355 | 92 | 9.13 761 | 94 | 0.86 239 | 9.99 595 | 11 | 50 | 77.5 | 76.7 | 75.8 | | |
| | | 92 | | 93 | | | | | | | | | |
| 50 | 9.13 447 | | 9.13 854 | | 0.86 146 | 9.99 593 | 10 | | | | | | |
| 51 | 9.13 539 | 92 | 9.13 948 | 94 | 0.86 052 | 9.99 591 | 9 | | 90 | 2 | 1 | | |
| 52 | 9.13 630 | 91 | 9.14 041 | 93 | 0.85 959 | 9.99 589 | 8 | 6 | 9.0 | 0.2 | 0.1 | | |
| 53 | 9.13 722 | 92 | 9.14 134 | 93 | 0.85 866 | 9.99 588 | 7 | 7 | 10.5 | 0.2 | 0.1 | | |
| 54 | 9.13 813 | 91 | 9.14 227 | 93 | 0.85 773 | 9.99 586 | 6 | 8 | 12.0 | 0.3 | 0.1 | | |
| | | 91 | | 93 | | | | 9 | 13.5 | 0.3 | 0.2 | | |
| 55 | 9.13 904 | | 9.14 320 | | 0.85 680 | 9.99 584 | 5 | 10 | 15.0 | 0.3 | 0.2 | | |
| 56 | 9.13 994 | 90 | 9.14 412 | 92 | 0.85 588 | 9.99 582 | 4 | 20 | 30.0 | 0.7 | 0.3 | | |
| 57 | 9.14 085 | 91 | 9.14 504 | 92 | 0.85 496 | 9.99 581 | 3 | 30 | 45.0 | 1.0 | 0.5 | | |
| 58 | 9.14 175 | 90 | 9.14 597 | 93 | 0.85 403 | 9.99 579 | 2 | 40 | 60.0 | 1.3 | 0.7 | | |
| 59 | 9.14 266 | 91 | 9.14 688 | 91 | 0.85 312 | 9.99 577 | 1 | 50 | 75.0 | 1.7 | 0.8 | | |
| | | 90 | | 92 | | | | | | | | | |
| 60 | 9.14 356 | | 9.14 780 | | 0.85 220 | 9.99 575 | 0 | | | | | | |
| / | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | | Prop. Pts. | | | | | |

| ° | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | | Prop. Pts. | | | |
|-----------|----------------|-----------|-----------------|--------------|-----------------|----------------|-----------|-------------------|------|------|------|
| 0 | 9.14 356 | | 9.14 780 | | 0.85 220 | 9.99 575 | 60 | | | | |
| 1 | 9.14 445 | 89 | 9.14 872 | 92 | 0.85 128 | 9.99 574 | 59 | 6 | 92 | 91 | 90 |
| 2 | 9.14 535 | 90 | 9.14 963 | 91 | 0.85 037 | 9.99 572 | 58 | 7 | 10.7 | 10.6 | 10.5 |
| 3 | 9.14 624 | 89 | 9.15 054 | 91 | 0.84 946 | 9.99 570 | 57 | 8 | 12.3 | 12.1 | 12.0 |
| 4 | 9.14 714 | 90 | 9.15 145 | 91 | 0.84 855 | 9.99 568 | 56 | 9 | 13.8 | 13.7 | 13.5 |
| 5 | 9.14 803 | 88 | 9.15 236 | 91 | 0.84 764 | 9.99 566 | 55 | 10 | 15.3 | 15.2 | 15.0 |
| 6 | 9.14 891 | 89 | 9.15 327 | 90 | 0.84 673 | 9.99 565 | 54 | 20 | 30.7 | 30.3 | 30.0 |
| 7 | 9.14 980 | 89 | 9.15 417 | 90 | 0.84 583 | 9.99 563 | 53 | 30 | 46.0 | 45.5 | 45.0 |
| 8 | 9.15 069 | 89 | 9.15 508 | 91 | 0.84 492 | 9.99 561 | 52 | 40 | 61.3 | 60.7 | 60.0 |
| 9 | 9.15 157 | 88 | 9.15 598 | 90 | 0.84 402 | 9.99 559 | 51 | 50 | 76.7 | 75.8 | 75.0 |
| 10 | 9.15 245 | | 9.15 688 | | 0.84 312 | 9.99 557 | 50 | | 89 | 88 | |
| 11 | 9.15 333 | 88 | 9.15 777 | 89 | 0.84 223 | 9.99 556 | 49 | 6 | 8.9 | 8.8 | |
| 12 | 9.15 421 | 88 | 9.15 867 | 90 | 0.84 133 | 9.99 554 | 48 | 7 | 10.4 | 10.3 | |
| 13 | 9.15 508 | 87 | 9.15 956 | 89 | 0.84 044 | 9.99 552 | 47 | 8 | 11.9 | 11.7 | |
| 14 | 9.15 596 | 88 | 9.16 046 | 90 | 0.83 954 | 9.99 550 | 46 | 9 | 13.4 | 13.2 | |
| 15 | 9.15 683 | 87 | 9.16 135 | 89 | 0.83 865 | 9.99 548 | 45 | 10 | 14.8 | 14.7 | |
| 16 | 9.15 770 | 87 | 9.16 224 | 88 | 0.83 776 | 9.99 546 | 44 | 20 | 29.7 | 29.3 | |
| 17 | 9.15 857 | 87 | 9.16 312 | 89 | 0.83 688 | 9.99 545 | 43 | 30 | 44.5 | 44.0 | |
| 18 | 9.15 944 | 87 | 9.16 401 | 89 | 0.83 599 | 9.99 543 | 42 | 40 | 59.3 | 58.7 | |
| 19 | 9.16 030 | 86 | 9.16 489 | 88 | 0.83 511 | 9.99 541 | 41 | 50 | 74.2 | 73.3 | |
| 20 | 9.16 116 | | 9.16 577 | | 0.83 423 | 9.99 539 | 40 | | 87 | 86 | 85 |
| 21 | 9.16 203 | 87 | 9.16 665 | 88 | 0.83 335 | 9.99 537 | 39 | 6 | 8.7 | 8.6 | 8.5 |
| 22 | 9.16 289 | 86 | 9.16 753 | 88 | 0.83 247 | 9.99 535 | 38 | 7 | 10.2 | 10.0 | 9.9 |
| 23 | 9.16 374 | 85 | 9.16 841 | 87 | 0.83 159 | 9.99 533 | 37 | 8 | 11.6 | 11.5 | 11.3 |
| 24 | 9.16 460 | 86 | 9.16 928 | 88 | 0.83 072 | 9.99 532 | 36 | 9 | 13.1 | 12.9 | 12.8 |
| 25 | 9.16 545 | 85 | 9.17 016 | 88 | 0.82 984 | 9.99 530 | 35 | 10 | 14.5 | 14.3 | 14.2 |
| 26 | 9.16 631 | 86 | 9.17 103 | 87 | 0.82 897 | 9.99 528 | 34 | 20 | 29.0 | 28.7 | 28.3 |
| 27 | 9.16 716 | 85 | 9.17 190 | 87 | 0.82 810 | 9.99 526 | 33 | 30 | 43.5 | 43.0 | 42.5 |
| 28 | 9.16 801 | 85 | 9.17 277 | 87 | 0.82 723 | 9.99 524 | 32 | 40 | 58.0 | 57.3 | 56.7 |
| 29 | 9.16 886 | 85 | 9.17 363 | 86 | 0.82 637 | 9.99 522 | 31 | 50 | 72.5 | 71.7 | 70.8 |
| 30 | 9.16 970 | | 9.17 450 | | 0.82 550 | 9.99 520 | 30 | | 84 | 83 | |
| 31 | 9.17 055 | 85 | 9.17 536 | 87 | 0.82 464 | 9.99 518 | 29 | 6 | 8.4 | 8.3 | |
| 32 | 9.17 139 | 84 | 9.17 622 | 86 | 0.82 378 | 9.99 517 | 28 | 7 | 9.8 | 9.7 | |
| 33 | 9.17 223 | 84 | 9.17 708 | 86 | 0.82 292 | 9.99 515 | 27 | 8 | 11.2 | 11.1 | |
| 34 | 9.17 307 | 84 | 9.17 794 | 86 | 0.82 206 | 9.99 513 | 26 | 9 | 12.6 | 12.5 | |
| 35 | 9.17 391 | 84 | 9.17 880 | 86 | 0.82 120 | 9.99 511 | 25 | 10 | 14.0 | 13.8 | |
| 36 | 9.17 474 | 83 | 9.17 965 | 85 | 0.82 035 | 9.99 509 | 24 | 20 | 28.0 | 27.7 | |
| 37 | 9.17 558 | 84 | 9.18 051 | 86 | 0.81 949 | 9.99 507 | 23 | 30 | 42.0 | 41.5 | |
| 38 | 9.17 641 | 83 | 9.18 136 | 85 | 0.81 864 | 9.99 505 | 22 | 40 | 56.0 | 55.3 | |
| 39 | 9.17 724 | 83 | 9.18 221 | 85 | 0.81 779 | 9.99 503 | 21 | 50 | 70.0 | 69.2 | |
| 40 | 9.17 807 | | 9.18 306 | | 0.81 694 | 9.99 501 | 20 | | 82 | 81 | 80 |
| 41 | 9.17 890 | 83 | 9.18 391 | 85 | 0.81 609 | 9.99 499 | 19 | 6 | 8.2 | 8.1 | 8.0 |
| 42 | 9.17 973 | 83 | 9.18 475 | 84 | 0.81 525 | 9.99 497 | 18 | 7 | 9.6 | 9.5 | 9.3 |
| 43 | 9.18 055 | 82 | 9.18 560 | 85 | 0.81 440 | 9.99 495 | 17 | 8 | 10.9 | 10.8 | 10.7 |
| 44 | 9.18 137 | 82 | 9.18 644 | 84 | 0.81 356 | 9.99 494 | 16 | 9 | 12.3 | 12.2 | 12.0 |
| 45 | 9.18 220 | 83 | 9.18 728 | 84 | 0.81 272 | 9.99 492 | 15 | 10 | 13.7 | 13.5 | 13.3 |
| 46 | 9.18 302 | 82 | 9.18 812 | 84 | 0.81 188 | 9.99 490 | 14 | 20 | 27.3 | 27.0 | 26.7 |
| 47 | 9.18 383 | 81 | 9.18 896 | 84 | 0.81 104 | 9.99 488 | 13 | 30 | 41.0 | 40.5 | 40.0 |
| 48 | 9.18 465 | 82 | 9.18 979 | 83 | 0.81 021 | 9.99 486 | 12 | 40 | 54.7 | 54.0 | 53.3 |
| 49 | 9.18 547 | 82 | 9.19 063 | 84 | 0.80 937 | 9.99 484 | 11 | 50 | 68.3 | 67.5 | 66.7 |
| 50 | 9.18 628 | | 9.19 146 | | 0.80 854 | 9.99 482 | 10 | | 2 | 1 | |
| 51 | 9.18 709 | 81 | 9.19 229 | 83 | 0.80 771 | 9.99 480 | 9 | 6 | 0.2 | 0.1 | |
| 52 | 9.18 790 | 81 | 9.19 312 | 83 | 0.80 688 | 9.99 478 | 8 | 7 | 0.2 | 0.1 | |
| 53 | 9.18 871 | 81 | 9.19 395 | 83 | 0.80 605 | 9.99 476 | 7 | 8 | 0.3 | 0.1 | |
| 54 | 9.18 952 | 81 | 9.19 478 | 83 | 0.80 522 | 9.99 474 | 6 | 9 | 0.3 | 0.2 | |
| 55 | 9.19 033 | 80 | 9.19 561 | 83 | 0.80 439 | 9.99 472 | 5 | 10 | 0.3 | 0.2 | |
| 56 | 9.19 113 | 80 | 9.19 643 | 82 | 0.80 357 | 9.99 470 | 4 | 20 | 0.7 | 0.3 | |
| 57 | 9.19 193 | 80 | 9.19 725 | 82 | 0.80 275 | 9.99 468 | 3 | 30 | 1.0 | 0.5 | |
| 58 | 9.19 273 | 80 | 9.19 807 | 82 | 0.80 193 | 9.99 466 | 2 | 40 | 1.3 | 0.7 | |
| 59 | 9.19 353 | 80 | 9.19 889 | 82 | 0.80 111 | 9.99 464 | 1 | 50 | 1.7 | 0.8 | |
| 60 | 9.19 433 | | 9.19 971 | | 0.80 029 | 9.99 462 | 0 | | | | |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | ° | Prop. Pts. | | | |

| /' | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | | Prop. Pts. | | | | | |
|----|----------|----|----------|-------|----------|----------|-----------|------------|------|------|------|--|--|
| 0 | 9.19 433 | | 9.19 971 | | 0.80 029 | 9.99 462 | 60 | | | | | | |
| 1 | 9.19 513 | 80 | 9.20 053 | 82 | 0.79 947 | 9.99 460 | 59 | | 82 | 81 | 80 | | |
| 2 | 9.19 592 | 79 | 9.20 134 | 81 | 0.79 866 | 9.99 458 | 58 | 6 | 8.2 | 8.1 | 8.0 | | |
| 3 | 9.19 672 | 80 | 9.20 216 | 82 | 0.79 784 | 9.99 456 | 57 | 7 | 9.6 | 9.5 | 9.3 | | |
| 4 | 9.19 751 | 79 | 9.20 297 | 81 | 0.79 703 | 9.99 454 | 56 | 8 | 10.9 | 10.8 | 10.7 | | |
| 5 | 9.19 830 | 79 | 9.20 378 | 81 | 0.79 622 | 9.99 452 | 55 | 9 | 12.3 | 12.2 | 12.0 | | |
| 6 | 9.19 909 | 79 | 9.20 459 | 81 | 0.79 541 | 9.99 450 | 54 | 10 | 13.7 | 13.5 | 13.3 | | |
| 7 | 9.19 988 | 79 | 9.20 540 | 81 | 0.79 460 | 9.99 448 | 53 | 20 | 27.3 | 27.0 | 26.7 | | |
| 8 | 9.20 067 | 79 | 9.20 621 | 81 | 0.79 379 | 9.99 446 | 52 | 30 | 41.0 | 40.5 | 40.0 | | |
| 9 | 9.20 145 | 78 | 9.20 701 | 81 | 0.79 299 | 9.99 444 | 51 | 40 | 54.7 | 54.0 | 53.3 | | |
| 10 | 9.20 223 | 78 | 9.20 782 | 81 | 0.79 218 | 9.99 442 | 50 | 50 | 68.3 | 67.5 | 66.7 | | |
| 11 | 9.20 302 | 79 | 9.20 862 | 80 | 0.79 138 | 9.99 440 | 49 | | 79 | 78 | | | |
| 12 | 9.20 380 | 78 | 9.20 942 | 80 | 0.79 058 | 9.99 438 | 48 | 6 | 7.9 | 7.8 | | | |
| 13 | 9.20 458 | 78 | 9.21 022 | 80 | 0.78 978 | 9.99 436 | 47 | 7 | 9.2 | 9.1 | | | |
| 14 | 9.20 535 | 77 | 9.21 102 | 80 | 0.78 898 | 9.99 434 | 46 | 8 | 10.5 | 10.4 | | | |
| 15 | 9.20 613 | 78 | 9.21 182 | 80 | 0.78 818 | 9.99 432 | 45 | 9 | 11.9 | 11.7 | | | |
| 16 | 9.20 691 | 78 | 9.21 261 | 79 | 0.78 739 | 9.99 429 | 44 | 10 | 13.2 | 13.0 | | | |
| 17 | 9.20 768 | 77 | 9.21 341 | 80 | 0.78 659 | 9.99 427 | 43 | 20 | 26.3 | 26.0 | | | |
| 18 | 9.20 845 | 77 | 9.21 420 | 79 | 0.78 580 | 9.99 425 | 42 | 30 | 39.5 | 39.0 | | | |
| 19 | 9.20 922 | 77 | 9.21 499 | 79 | 0.78 501 | 9.99 423 | 41 | 40 | 52.7 | 52.0 | | | |
| 20 | 9.20 999 | 77 | 9.21 578 | 79 | 0.78 422 | 9.99 421 | 40 | 50 | 65.8 | 65.0 | | | |
| 21 | 9.21 076 | 77 | 9.21 657 | 79 | 0.78 343 | 9.99 419 | 39 | | 77 | 76 | | | |
| 22 | 9.21 153 | 77 | 9.21 736 | 79 | 0.78 264 | 9.99 417 | 38 | 6 | 7.7 | 7.6 | | | |
| 23 | 9.21 229 | 76 | 9.21 814 | 78 | 0.78 186 | 9.99 415 | 37 | 7 | 9.0 | 8.9 | | | |
| 24 | 9.21 306 | 77 | 9.21 893 | 79 | 0.78 107 | 9.99 413 | 36 | 8 | 10.3 | 10.1 | | | |
| 25 | 9.21 382 | 76 | 9.21 971 | 78 | 0.78 029 | 9.99 411 | 35 | 9 | 11.6 | 11.4 | | | |
| 26 | 9.21 458 | 76 | 9.22 049 | 78 | 0.77 951 | 9.99 409 | 34 | 10 | 12.8 | 12.7 | | | |
| 27 | 9.21 534 | 76 | 9.22 127 | 78 | 0.77 873 | 9.99 407 | 33 | 20 | 25.7 | 25.3 | | | |
| 28 | 9.21 610 | 76 | 9.22 205 | 78 | 0.77 795 | 9.99 404 | 32 | 30 | 38.5 | 38.0 | | | |
| 29 | 9.21 685 | 75 | 9.22 283 | 78 | 0.77 717 | 9.99 402 | 31 | 40 | 51.3 | 50.7 | | | |
| 30 | 9.21 761 | 76 | 9.22 361 | 78 | 0.77 639 | 9.99 400 | 30 | 50 | 64.2 | 63.3 | | | |
| 31 | 9.21 836 | 75 | 9.22 438 | 77 | 0.77 562 | 9.99 398 | 29 | | 75 | 74 | | | |
| 32 | 9.21 912 | 76 | 9.22 516 | 78 | 0.77 484 | 9.99 396 | 28 | 6 | 7.5 | 7.4 | | | |
| 33 | 9.21 987 | 75 | 9.22 593 | 77 | 0.77 407 | 9.99 394 | 27 | 7 | 8.8 | 8.6 | | | |
| 34 | 9.22 062 | 75 | 9.22 670 | 77 | 0.77 330 | 9.99 392 | 26 | 8 | 10.0 | 9.9 | | | |
| 35 | 9.22 137 | 75 | 9.22 747 | 77 | 0.77 253 | 9.99 390 | 25 | 9 | 11.3 | 11.1 | | | |
| 36 | 9.22 211 | 74 | 9.22 824 | 77 | 0.77 176 | 9.99 388 | 24 | 10 | 12.5 | 12.3 | | | |
| 37 | 9.22 286 | 75 | 9.22 901 | 77 | 0.77 099 | 9.99 385 | 23 | 20 | 25.0 | 24.7 | | | |
| 38 | 9.22 361 | 75 | 9.22 977 | 77 | 0.77 023 | 9.99 383 | 22 | 30 | 37.5 | 37.0 | | | |
| 39 | 9.22 435 | 74 | 9.23 054 | 76 | 0.76 946 | 9.99 381 | 21 | 40 | 50.0 | 49.3 | | | |
| 40 | 9.22 509 | 74 | 9.23 130 | 76 | 0.76 870 | 9.99 379 | 20 | 50 | 62.5 | 61.7 | | | |
| 41 | 9.22 583 | 74 | 9.23 206 | 76 | 0.76 794 | 9.99 377 | 19 | | 73 | 72 | 71 | | |
| 42 | 9.22 657 | 74 | 9.23 283 | 77 | 0.76 717 | 9.99 375 | 18 | 6 | 7.3 | 7.2 | 7.1 | | |
| 43 | 9.22 731 | 74 | 9.23 359 | 76 | 0.76 641 | 9.99 372 | 17 | 7 | 8.5 | 8.4 | 8.3 | | |
| 44 | 9.22 805 | 74 | 9.23 435 | 76 | 0.76 565 | 9.99 370 | 16 | 8 | 9.7 | 9.6 | 9.5 | | |
| 45 | 9.22 878 | 73 | 9.23 510 | 75 | 0.76 490 | 9.99 368 | 15 | 9 | 11.0 | 10.8 | 10.7 | | |
| 46 | 9.22 952 | 74 | 9.23 586 | 75 | 0.76 414 | 9.99 366 | 14 | 10 | 12.2 | 12.0 | 11.8 | | |
| 47 | 9.23 025 | 73 | 9.23 661 | 75 | 0.76 339 | 9.99 364 | 13 | 20 | 24.3 | 24.0 | 23.7 | | |
| 48 | 9.23 098 | 73 | 9.23 737 | 76 | 0.76 263 | 9.99 362 | 12 | 30 | 36.5 | 36.0 | 35.5 | | |
| 49 | 9.23 171 | 73 | 9.23 812 | 75 | 0.76 188 | 9.99 359 | 11 | 40 | 48.7 | 48.0 | 47.3 | | |
| 50 | 9.23 244 | 73 | 9.23 887 | 75 | 0.76 113 | 9.99 357 | 10 | 50 | 60.8 | 60.0 | 59.2 | | |
| 51 | 9.23 317 | 73 | 9.23 962 | 75 | 0.76 038 | 9.99 355 | 9 | | | 3 | 2 | | |
| 52 | 9.23 390 | 73 | 9.24 037 | 75 | 0.75 963 | 9.99 353 | 8 | 6 | 0.3 | 0.2 | | | |
| 53 | 9.23 462 | 72 | 9.24 112 | 75 | 0.75 888 | 9.99 351 | 7 | 7 | 0.4 | 0.2 | | | |
| 54 | 9.23 535 | 73 | 9.24 186 | 74 | 0.75 814 | 9.99 348 | 6 | 8 | 0.4 | 0.3 | | | |
| 55 | 9.23 607 | 72 | 9.24 261 | 75 | 0.75 739 | 9.99 346 | 5 | 9 | 0.5 | 0.3 | | | |
| 56 | 9.23 679 | 72 | 9.24 335 | 74 | 0.75 665 | 9.99 344 | 4 | 10 | 0.5 | 0.3 | | | |
| 57 | 9.23 752 | 73 | 9.24 410 | 75 | 0.75 590 | 9.99 342 | 3 | 20 | 1.0 | 0.7 | | | |
| 58 | 9.23 823 | 72 | 9.24 484 | 74 | 0.75 516 | 9.99 340 | 2 | 30 | 1.5 | 1.0 | | | |
| 59 | 9.23 895 | 72 | 9.24 558 | 74 | 0.75 442 | 9.99 337 | 1 | 40 | 2.0 | 1.3 | | | |
| 60 | 9.23 967 | 72 | 9.24 632 | 74 | 0.75 368 | 9.99 335 | 0 | 50 | 2.5 | 1.7 | | | |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | /' | Prop. Pts. | | | | | |

| ✓ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | ✓ | Prop. Pts. | | |
|-----------|----------|----|----------|-------|----------|----------|----|-----------|------------|------|------|
| 0 | 9.23 967 | | 9.24 632 | | 0.75 368 | 9.99 335 | | 60 | | | |
| 1 | 9.24 039 | 72 | 9.24 706 | 74 | 0.75 294 | 9.99 333 | 2 | 59 | 6 | 74 | 73 |
| 2 | 9.24 110 | 71 | 9.24 779 | 73 | 0.75 221 | 9.99 331 | 3 | 58 | 7 | 7.4 | 7.3 |
| 3 | 9.24 181 | 71 | 9.24 853 | 74 | 0.75 147 | 9.99 328 | 2 | 57 | 8 | 8.6 | 8.5 |
| 4 | 9.24 253 | 72 | 9.24 926 | 73 | 0.75 074 | 9.99 326 | 2 | 56 | 8 | 9.9 | 9.7 |
| | | 71 | | 74 | | | 2 | | 9 | 11.1 | 11.0 |
| 5 | 9.24 324 | 71 | 9.25 000 | | 0.75 000 | 9.99 324 | 2 | 55 | 10 | 12.3 | 12.2 |
| 6 | 9.24 395 | 71 | 9.25 073 | 73 | 0.74 927 | 9.99 322 | 2 | 54 | 20 | 24.7 | 24.3 |
| 7 | 9.24 466 | 71 | 9.25 146 | 73 | 0.74 854 | 9.99 319 | 3 | 53 | 30 | 37.0 | 36.5 |
| 8 | 9.24 536 | 70 | 9.25 219 | 73 | 9.74 781 | 9.99 317 | 2 | 52 | 40 | 49.3 | 48.7 |
| 9 | 9.24 607 | 71 | 9.25 292 | 73 | 0.74 708 | 9.99 315 | 2 | 51 | 50 | 61.7 | 60.8 |
| | | 70 | | 73 | | | 2 | | | | |
| 10 | 9.24 677 | | 9.25 365 | | 0.74 635 | 9.99 313 | | 50 | | | |
| 11 | 9.24 748 | 71 | 9.25 437 | 72 | 0.74 563 | 9.99 310 | 3 | 49 | 6 | 72 | 71 |
| 12 | 9.24 818 | 70 | 9.25 510 | 73 | 0.74 490 | 9.99 308 | 2 | 48 | 7 | 7.2 | 7.1 |
| 13 | 9.24 888 | 70 | 9.25 582 | 72 | 0.74 418 | 9.99 306 | 2 | 47 | 7 | 8.4 | 8.3 |
| 14 | 9.24 958 | 70 | 9.25 655 | 73 | 0.74 345 | 9.99 304 | 2 | 46 | 8 | 9.6 | 9.5 |
| | | 70 | | 72 | | | 3 | | 9 | 10.8 | 10.7 |
| 15 | 9.25 028 | 70 | 9.25 727 | 72 | 0.74 273 | 9.99 301 | 2 | 45 | 10 | 12.0 | 11.8 |
| 16 | 9.25 098 | 70 | 9.25 799 | 72 | 0.74 201 | 9.99 299 | 2 | 44 | 20 | 24.0 | 23.7 |
| 17 | 9.25 168 | 70 | 9.25 871 | 72 | 0.74 129 | 9.99 297 | 2 | 43 | 30 | 36.0 | 35.5 |
| 18 | 9.25 237 | 69 | 9.25 943 | 72 | 0.74 057 | 9.99 294 | 3 | 42 | 40 | 48.0 | 47.3 |
| 19 | 9.25 307 | 70 | 9.26 015 | 72 | 0.73 985 | 9.99 292 | 2 | 41 | 50 | 60.0 | 59.2 |
| | | 69 | | 71 | | | 2 | | | | |
| 20 | 9.25 376 | | 9.26 086 | | 0.73 914 | 9.99 290 | | 40 | | | |
| 21 | 9.25 445 | 69 | 9.26 158 | 72 | 0.73 842 | 9.99 288 | 2 | 39 | 6 | 70 | 69 |
| 22 | 9.25 514 | 69 | 9.26 229 | 71 | 0.73 771 | 9.99 285 | 3 | 38 | 7 | 8.2 | 8.1 |
| 23 | 9.25 583 | 69 | 9.26 301 | 72 | 0.73 699 | 9.99 283 | 2 | 37 | 8 | 9.3 | 9.2 |
| 24 | 9.25 652 | 69 | 9.26 372 | 71 | 0.73 628 | 9.99 281 | 2 | 36 | 9 | 10.5 | 10.4 |
| | | 69 | | 71 | | | 3 | | 10 | 11.7 | 11.5 |
| 25 | 9.25 721 | 69 | 9.26 443 | 71 | 0.73 557 | 9.99 278 | 2 | 35 | 20 | 23.3 | 23.0 |
| 26 | 9.25 790 | 68 | 9.26 514 | 71 | 0.73 486 | 9.99 276 | 2 | 34 | 30 | 35.0 | 34.5 |
| 27 | 9.25 858 | 68 | 9.26 585 | 71 | 0.73 415 | 9.99 274 | 3 | 33 | 40 | 46.7 | 46.0 |
| 28 | 9.25 927 | 69 | 9.26 655 | 70 | 0.73 345 | 9.99 271 | 2 | 32 | 50 | 58.3 | 57.5 |
| 29 | 9.25 995 | 68 | 9.26 726 | 71 | 0.73 274 | 9.99 269 | 2 | 31 | | | |
| | | 68 | | 71 | | | 2 | | | | |
| 30 | 9.26 063 | | 9.26 797 | | 0.73 203 | 9.99 267 | | 30 | | | |
| 31 | 9.26 131 | 68 | 9.26 867 | 70 | 0.73 133 | 9.99 264 | 3 | 29 | 6 | 68 | 67 |
| 32 | 9.26 199 | 68 | 9.26 937 | 70 | 0.73 063 | 9.99 262 | 2 | 28 | 7 | 6.8 | 6.7 |
| 33 | 9.26 267 | 68 | 9.27 008 | 71 | 0.72 992 | 9.99 260 | 2 | 27 | 8 | 7.9 | 7.8 |
| 34 | 9.26 335 | 68 | 9.27 078 | 70 | 0.72 922 | 9.99 257 | 3 | 26 | 8 | 9.1 | 8.9 |
| | | 68 | | 70 | | | 2 | | 9 | 10.2 | 10.1 |
| 35 | 9.26 403 | 67 | 9.27 148 | 70 | 0.72 852 | 9.99 255 | 3 | 25 | 10 | 11.3 | 11.2 |
| 36 | 9.26 470 | 68 | 9.27 218 | 70 | 0.72 782 | 9.99 252 | 2 | 24 | 20 | 22.7 | 22.3 |
| 37 | 9.26 538 | 68 | 9.27 288 | 70 | 0.72 712 | 9.99 250 | 2 | 23 | 30 | 34.0 | 33.5 |
| 38 | 9.26 605 | 67 | 9.27 357 | 69 | 0.72 643 | 9.99 248 | 2 | 22 | 40 | 45.3 | 44.7 |
| 39 | 9.26 672 | 67 | 9.27 427 | 70 | 0.72 573 | 9.99 245 | 3 | 21 | 50 | 56.7 | 55.8 |
| | | 67 | | 69 | | | 2 | | | | |
| 40 | 9.26 739 | | 9.27 496 | | 0.72 504 | 9.99 243 | | 20 | | | |
| 41 | 9.26 806 | 67 | 9.27 566 | 70 | 0.72 434 | 9.99 241 | 3 | 19 | 6 | 66 | 65 |
| 42 | 9.26 873 | 67 | 9.27 635 | 69 | 0.72 365 | 9.99 238 | 2 | 18 | 7 | 6.6 | 6.5 |
| 43 | 9.26 940 | 67 | 9.27 704 | 69 | 0.72 296 | 9.99 236 | 2 | 17 | 8 | 7.7 | 7.6 |
| 44 | 9.27 007 | 66 | 9.27 773 | 69 | 0.72 227 | 9.99 233 | 3 | 16 | 8 | 8.8 | 8.7 |
| | | 66 | | 69 | | | 2 | | 9 | 9.9 | 9.8 |
| 45 | 9.27 073 | 67 | 9.27 842 | 69 | 0.72 158 | 9.99 231 | 2 | 15 | 10 | 11.0 | 10.8 |
| 46 | 9.27 140 | 66 | 9.27 911 | 69 | 0.72 089 | 9.99 229 | 3 | 14 | 20 | 22.0 | 21.7 |
| 47 | 9.27 206 | 66 | 9.27 980 | 69 | 0.72 020 | 9.99 226 | 3 | 13 | 30 | 33.0 | 32.5 |
| 48 | 9.27 273 | 67 | 9.28 049 | 68 | 0.71 951 | 9.99 224 | 3 | 12 | 40 | 44.0 | 43.3 |
| 49 | 9.27 339 | 66 | 9.28 117 | 69 | 0.71 883 | 9.99 221 | 2 | 11 | 50 | 55.0 | 54.2 |
| | | 66 | | 68 | | | 2 | | | | |
| 50 | 9.27 405 | | 9.28 186 | | 0.71 814 | 9.99 219 | | 10 | | | |
| 51 | 9.27 471 | 66 | 9.28 254 | 68 | 0.71 746 | 9.99 217 | 2 | 9 | 6 | 3 | 2 |
| 52 | 9.27 537 | 66 | 9.28 323 | 69 | 0.71 677 | 9.99 214 | 3 | 8 | 7 | 0.3 | 0.2 |
| 53 | 9.27 602 | 65 | 9.28 391 | 68 | 0.71 609 | 9.99 212 | 2 | 7 | 8 | 0.4 | 0.3 |
| 54 | 9.27 668 | 66 | 9.28 459 | 68 | 0.71 541 | 9.99 209 | 3 | 6 | 9 | 0.5 | 0.3 |
| | | 66 | | 68 | | | 2 | | 10 | 0.5 | 0.3 |
| 55 | 9.27 734 | 65 | 9.28 527 | 68 | 0.71 473 | 9.99 207 | 3 | 5 | 20 | 1.0 | 0.7 |
| 56 | 9.27 799 | 65 | 9.28 595 | 67 | 0.71 405 | 9.99 204 | 2 | 4 | 30 | 1.5 | 1.0 |
| 57 | 9.27 864 | 66 | 9.28 662 | 68 | 0.71 338 | 9.99 202 | 2 | 3 | 40 | 2.0 | 1.3 |
| 58 | 9.27 930 | 66 | 9.28 730 | 68 | 0.71 270 | 9.99 200 | 3 | 2 | 50 | 2.5 | 1.7 |
| 59 | 9.27 995 | 65 | 9.28 798 | 68 | 0.71 202 | 9.99 197 | 2 | 1 | | | |
| | | 65 | | 67 | | | 2 | | | | |
| 60 | 9.28 060 | | 9.28 865 | | 0.71 135 | 9.99 195 | | 0 | | | |
| | | | | | | | | | | | |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | ✓ | Prop. Pts. | | |

| ✓ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | ✓ | Prop. Pts. | | |
|----|----------|----|----------|-------|----------|----------|----|----|------------|------|------|
| 0 | 9.28 060 | | 9.28 865 | | 0.71 135 | 9.99 195 | | 60 | | | |
| 1 | 9.28 125 | 65 | 9.28 933 | 68 | 0.71 067 | 9.99 192 | 3 | 59 | 68 | 67 | |
| 2 | 9.28 190 | 65 | 9.29 000 | 67 | 0.71 000 | 9.99 190 | 3 | 58 | 6 | 6.8 | 6.7 |
| 3 | 9.28 254 | 64 | 9.29 067 | 67 | 0.70 933 | 9.99 187 | 3 | 57 | 7 | 7.9 | 7.8 |
| 4 | 9.28 319 | 65 | 9.29 134 | 67 | 0.70 866 | 9.99 185 | 3 | 56 | 8 | 9.1 | 8.9 |
| | | 65 | | | | | 2 | | 9 | 10.2 | 10.1 |
| 5 | 9.28 384 | 64 | 9.29 201 | 67 | 0.70 799 | 9.99 182 | 2 | 55 | 10 | 11.3 | 11.2 |
| 6 | 9.28 448 | 64 | 9.29 268 | 67 | 0.70 732 | 9.99 180 | 3 | 54 | 20 | 22.7 | 22.3 |
| 7 | 9.28 512 | 64 | 9.29 335 | 67 | 0.70 665 | 9.99 177 | 3 | 53 | 30 | 34.0 | 33.5 |
| 8 | 9.28 577 | 65 | 9.29 402 | 67 | 0.70 598 | 9.99 175 | 3 | 52 | 40 | 45.3 | 44.7 |
| 9 | 9.28 641 | 64 | 9.29 468 | 66 | 0.70 532 | 9.99 172 | 2 | 51 | 50 | 56.7 | 55.8 |
| | | 64 | | | | | 2 | | | | |
| 10 | 9.28 705 | 64 | 9.29 535 | 66 | 0.70 465 | 9.99 170 | 3 | 50 | 66 | 65 | |
| 11 | 9.28 769 | 64 | 9.29 601 | 66 | 0.70 399 | 9.99 167 | 3 | 49 | | | |
| 12 | 9.28 833 | 64 | 9.29 668 | 67 | 0.70 332 | 9.99 165 | 3 | 48 | 6 | 6.6 | 6.5 |
| 13 | 9.28 896 | 63 | 9.29 734 | 66 | 0.70 266 | 9.99 162 | 2 | 47 | 7 | 7.7 | 7.6 |
| 14 | 9.28 960 | 64 | 9.29 800 | 66 | 0.70 200 | 9.99 160 | 2 | 46 | 8 | 8.8 | 8.7 |
| | | 64 | | | | | 3 | | 9 | 9.9 | 9.8 |
| 15 | 9.29 024 | 63 | 9.29 866 | 66 | 0.70 134 | 9.99 157 | 2 | 45 | 10 | 11.0 | 10.8 |
| 16 | 9.29 087 | 63 | 9.29 932 | 66 | 0.70 068 | 9.99 155 | 3 | 44 | 20 | 22.0 | 21.7 |
| 17 | 9.29 150 | 63 | 9.29 998 | 66 | 0.70 002 | 9.99 152 | 2 | 43 | 30 | 33.0 | 32.5 |
| 18 | 9.29 214 | 64 | 9.30 064 | 66 | 0.69 936 | 9.99 150 | 2 | 42 | 40 | 44.0 | 43.3 |
| 19 | 9.29 277 | 63 | 9.30 130 | 66 | 0.69 870 | 9.99 147 | 3 | 41 | 50 | 55.0 | 54.2 |
| | | 63 | | | | | 2 | | | | |
| 20 | 9.29 340 | 63 | 9.30 195 | 65 | 0.69 805 | 9.99 145 | 3 | 40 | | | |
| 21 | 9.29 403 | 63 | 9.30 261 | 66 | 0.69 739 | 9.99 142 | 2 | 39 | 64 | 63 | |
| 22 | 9.29 466 | 63 | 9.30 326 | 65 | 0.69 674 | 9.99 140 | 2 | 38 | 6 | 6.4 | 6.3 |
| 23 | 9.29 529 | 63 | 9.30 391 | 65 | 0.69 609 | 9.99 137 | 3 | 37 | 7 | 7.5 | 7.4 |
| 24 | 9.29 591 | 62 | 9.30 457 | 66 | 0.69 543 | 9.99 135 | 2 | 36 | 8 | 8.5 | 8.4 |
| | | 63 | | | | | 3 | | 9 | 9.6 | 9.5 |
| 25 | 9.29 654 | 62 | 9.30 522 | 65 | 0.69 478 | 9.99 132 | 2 | 35 | 10 | 10.7 | 10.5 |
| 26 | 9.29 716 | 62 | 9.30 587 | 65 | 0.69 413 | 9.99 130 | 3 | 34 | 20 | 21.3 | 21.0 |
| 27 | 9.29 779 | 63 | 9.30 652 | 65 | 0.69 348 | 9.99 127 | 3 | 33 | 30 | 32.0 | 31.5 |
| 28 | 9.29 841 | 62 | 9.30 717 | 65 | 0.69 283 | 9.99 124 | 2 | 32 | 40 | 42.7 | 42.0 |
| 29 | 9.29 903 | 62 | 9.30 782 | 65 | 0.69 218 | 9.99 122 | 2 | 31 | 50 | 53.3 | 52.5 |
| | | 63 | | | | | 3 | | | | |
| 30 | 9.29 966 | 62 | 9.30 846 | 65 | 0.69 154 | 9.99 119 | 2 | 30 | 62 | 61 | |
| 31 | 9.30 028 | 62 | 9.30 911 | 64 | 0.69 089 | 9.99 117 | 3 | 29 | 6 | 6.2 | 6.1 |
| 32 | 9.30 090 | 61 | 9.30 975 | 65 | 0.69 025 | 9.99 114 | 2 | 28 | 7 | 7.2 | 7.1 |
| 33 | 9.30 151 | 61 | 9.31 040 | 65 | 0.68 960 | 9.99 112 | 2 | 27 | 8 | 8.3 | 8.1 |
| 34 | 9.30 213 | 62 | 9.31 104 | 64 | 0.68 896 | 9.99 109 | 3 | 26 | 9 | 9.3 | 9.2 |
| | | 62 | | | | | 2 | | 10 | 10.3 | 10.2 |
| 35 | 9.30 275 | 61 | 9.31 168 | 65 | 0.68 832 | 9.99 106 | 2 | 25 | 20 | 20.7 | 20.3 |
| 36 | 9.30 336 | 62 | 9.31 233 | 64 | 0.68 767 | 9.99 104 | 3 | 24 | 30 | 31.0 | 30.5 |
| 37 | 9.30 398 | 62 | 9.31 297 | 64 | 0.68 703 | 9.99 101 | 2 | 23 | 40 | 41.3 | 40.7 |
| 38 | 9.30 459 | 61 | 9.31 361 | 64 | 0.68 639 | 9.99 099 | 3 | 22 | 50 | 51.7 | 50.8 |
| 39 | 9.30 521 | 62 | 9.31 425 | 64 | 0.68 575 | 9.99 096 | 2 | 21 | | | |
| | | 61 | | | | | 3 | | | | |
| 40 | 9.30 582 | 61 | 9.31 489 | 64 | 0.68 511 | 9.99 093 | 2 | 20 | 60 | 59 | |
| 41 | 9.30 643 | 61 | 9.31 552 | 63 | 0.68 448 | 9.99 091 | 2 | 19 | 6 | 6.0 | 5.9 |
| 42 | 9.30 704 | 61 | 9.31 616 | 64 | 0.68 384 | 9.99 088 | 3 | 18 | 7 | 7.0 | 6.9 |
| 43 | 9.30 765 | 61 | 9.31 679 | 63 | 0.68 321 | 9.99 086 | 2 | 17 | 8 | 8.0 | 7.9 |
| 44 | 9.30 826 | 61 | 9.31 743 | 64 | 0.68 257 | 9.99 083 | 3 | 16 | 9 | 9.0 | 8.9 |
| | | 61 | | | | | 3 | | 10 | 10.0 | 9.8 |
| 45 | 9.30 887 | 60 | 9.31 806 | 64 | 0.68 194 | 9.99 080 | 2 | 15 | 20 | 20.0 | 19.7 |
| 46 | 9.30 947 | 61 | 9.31 870 | 63 | 0.68 130 | 9.99 078 | 3 | 14 | 30 | 30.0 | 29.5 |
| 47 | 9.31 008 | 61 | 9.31 933 | 64 | 0.68 067 | 9.99 075 | 2 | 13 | 40 | 40.0 | 39.3 |
| 48 | 9.31 068 | 60 | 9.31 996 | 63 | 0.68 004 | 9.99 072 | 3 | 12 | 50 | 50.0 | 49.2 |
| 49 | 9.31 129 | 61 | 9.32 059 | 63 | 0.67 941 | 9.99 070 | 2 | 11 | | | |
| | | 60 | | | | | 3 | | | | |
| 50 | 9.31 189 | 61 | 9.32 122 | 63 | 0.67 878 | 9.99 067 | 2 | 10 | 3 | 2 | |
| 51 | 9.31 250 | 60 | 9.32 185 | 63 | 0.67 815 | 9.99 064 | 3 | 9 | 6 | 0.3 | 0.2 |
| 52 | 9.31 310 | 60 | 9.32 248 | 63 | 0.67 752 | 9.99 062 | 2 | 8 | 7 | 0.4 | 0.2 |
| 53 | 9.31 370 | 60 | 9.32 311 | 63 | 0.67 689 | 9.99 059 | 3 | 7 | 8 | 0.4 | 0.3 |
| 54 | 9.31 430 | 60 | 9.32 373 | 62 | 0.67 627 | 9.99 056 | 2 | 6 | 9 | 0.5 | 0.3 |
| | | 60 | | | | | 3 | | 10 | 0.5 | 0.3 |
| 55 | 9.31 490 | 59 | 9.32 436 | 62 | 0.67 564 | 9.99 054 | 2 | 5 | 20 | 1.0 | 0.7 |
| 56 | 9.31 549 | 60 | 9.32 498 | 62 | 0.67 502 | 9.99 051 | 3 | 4 | 30 | 1.5 | 1.0 |
| 57 | 9.31 609 | 60 | 9.32 561 | 63 | 0.67 439 | 9.99 048 | 2 | 3 | 40 | 2.0 | 1.3 |
| 58 | 9.31 669 | 60 | 9.32 623 | 62 | 0.67 377 | 9.99 046 | 2 | 2 | 50 | 2.5 | 1.7 |
| 59 | 9.31 728 | 59 | 9.32 685 | 62 | 0.67 315 | 9.99 043 | 3 | 1 | | | |
| | | 60 | | | | | 3 | | | | |
| 60 | 9.31 788 | | 9.32 747 | | 0.67 253 | 9.99 040 | | 0 | | | |

| ° | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | Prop. Pts. |
|----|----------|----|----------|-------|----------|----------|----|-----------------|
| 0 | 9.31 788 | | 9.32 747 | | 0.67 253 | 9.99 040 | | 60 |
| 1 | 9.31 847 | 59 | 9.32 810 | 63 | 0.67 190 | 9.99 038 | 2 | 59 |
| 2 | 9.31 907 | 60 | 9.32 872 | 62 | 0.67 128 | 9.99 035 | 3 | 6 6.3 6.2 |
| 3 | 9.31 966 | 59 | 9.32 933 | 61 | 0.67 067 | 9.99 032 | 3 | 57 7 7.4 7.2 |
| 4 | 9.32 025 | 59 | 9.32 995 | 62 | 0.67 005 | 9.99 030 | 2 | 56 8 8.4 8.3 |
| 5 | 9.32 084 | 59 | 9.33 057 | 62 | 0.66 943 | 9.99 027 | 3 | 55 9 9.5 9.3 |
| 6 | 9.32 143 | 59 | 9.33 119 | 61 | 0.66 881 | 9.99 024 | 2 | 54 10 10.5 10.3 |
| 7 | 9.32 202 | 59 | 9.33 180 | 62 | 0.66 820 | 9.99 022 | 2 | 53 20 21.0 20.7 |
| 8 | 9.32 261 | 59 | 9.33 242 | 61 | 0.66 758 | 9.99 019 | 3 | 52 30 31.5 31.0 |
| 9 | 9.32 319 | 58 | 9.33 303 | 61 | 0.66 697 | 9.99 016 | 3 | 51 40 42.0 41.3 |
| 10 | 9.32 378 | 59 | 9.33 365 | 62 | 0.66 635 | 9.99 013 | 3 | 50 50 52.5 51.7 |
| 11 | 9.32 437 | 59 | 9.33 426 | 61 | 0.66 574 | 9.99 011 | 2 | 49 |
| 12 | 9.32 495 | 58 | 9.33 487 | 61 | 0.66 513 | 9.99 008 | 3 | 48 6 6.1 6.0 |
| 13 | 9.32 553 | 58 | 9.33 548 | 61 | 0.66 452 | 9.99 005 | 3 | 47 7 7.1 7.0 |
| 14 | 9.32 612 | 59 | 9.33 609 | 61 | 0.66 391 | 9.99 002 | 2 | 46 8 8.1 8.0 |
| 15 | 9.32 670 | 58 | 9.33 670 | 61 | 0.66 330 | 9.99 000 | 2 | 45 9 9.2 9.0 |
| 16 | 9.32 728 | 58 | 9.33 731 | 61 | 0.66 269 | 9.98 997 | 3 | 44 10 10.2 10.0 |
| 17 | 9.32 786 | 58 | 9.33 792 | 61 | 0.66 208 | 9.98 994 | 3 | 43 20 20.3 20.0 |
| 18 | 9.32 844 | 58 | 9.33 853 | 60 | 0.66 147 | 9.98 991 | 3 | 42 30 30.5 30.0 |
| 19 | 9.32 902 | 58 | 9.33 913 | 61 | 0.66 087 | 9.98 989 | 2 | 41 40 40.7 40.0 |
| 20 | 9.32 960 | 58 | 9.33 974 | 60 | 0.66 026 | 9.98 986 | 3 | 50 50 50.8 50.0 |
| 21 | 9.33 018 | 58 | 9.34 034 | 60 | 0.65 966 | 9.98 983 | 3 | 40 |
| 22 | 9.33 075 | 57 | 9.34 095 | 61 | 0.65 905 | 9.98 980 | 3 | 39 6 5.9 |
| 23 | 9.33 133 | 58 | 9.34 155 | 60 | 0.65 845 | 9.98 978 | 3 | 38 7 6.9 |
| 24 | 9.33 190 | 57 | 9.34 215 | 60 | 0.65 785 | 9.98 975 | 3 | 37 8 7.9 |
| 25 | 9.33 248 | 58 | 9.34 276 | 61 | 0.65 724 | 9.98 972 | 3 | 36 9 8.9 |
| 26 | 9.33 305 | 57 | 9.34 336 | 60 | 0.65 664 | 9.98 969 | 3 | 35 10 9.8 |
| 27 | 9.33 362 | 57 | 9.34 396 | 60 | 0.65 604 | 9.98 967 | 2 | 34 20 19.7 |
| 28 | 9.33 420 | 58 | 9.34 456 | 60 | 0.65 544 | 9.98 964 | 3 | 33 30 29.5 |
| 29 | 9.33 477 | 57 | 9.34 516 | 60 | 0.65 484 | 9.98 961 | 3 | 32 40 39.3 |
| 30 | 9.33 534 | 57 | 9.34 576 | 60 | 0.65 424 | 9.98 958 | 3 | 31 50 49.2 |
| 31 | 9.33 591 | 57 | 9.34 635 | 59 | 0.65 365 | 9.98 955 | 3 | 30 |
| 32 | 9.33 647 | 56 | 9.34 695 | 60 | 0.65 305 | 9.98 953 | 2 | 29 6 5.8 5.7 |
| 33 | 9.33 704 | 57 | 9.34 755 | 60 | 0.65 245 | 9.98 950 | 3 | 28 7 6.8 6.7 |
| 34 | 9.33 761 | 57 | 9.34 814 | 59 | 0.65 186 | 9.98 947 | 3 | 27 8 7.7 7.6 |
| 35 | 9.33 818 | 57 | 9.34 874 | 60 | 0.65 126 | 9.98 944 | 3 | 26 9 8.7 8.6 |
| 36 | 9.33 874 | 56 | 9.34 933 | 59 | 0.65 067 | 9.98 941 | 3 | 25 10 9.7 9.5 |
| 37 | 9.33 931 | 57 | 9.34 992 | 59 | 0.65 008 | 9.98 938 | 3 | 24 20 19.3 19.0 |
| 38 | 9.33 987 | 56 | 9.35 051 | 59 | 0.64 949 | 9.98 936 | 2 | 23 30 29.0 28.5 |
| 39 | 9.34 043 | 56 | 9.35 111 | 60 | 0.64 889 | 9.98 933 | 3 | 22 40 38.7 38.0 |
| 40 | 9.34 100 | 57 | 9.35 170 | 59 | 0.64 830 | 9.98 930 | 3 | 21 50 48.3 47.5 |
| 41 | 9.34 156 | 56 | 9.35 229 | 59 | 0.64 771 | 9.98 927 | 3 | 20 |
| 42 | 9.34 212 | 56 | 9.35 288 | 59 | 0.64 712 | 9.98 924 | 3 | 19 6 5.6 5.5 |
| 43 | 9.34 268 | 56 | 9.35 347 | 59 | 0.64 653 | 9.98 921 | 3 | 18 7 6.5 6.4 |
| 44 | 9.34 324 | 56 | 9.35 405 | 58 | 0.64 595 | 9.98 919 | 2 | 17 8 7.5 7.3 |
| 45 | 9.34 380 | 56 | 9.35 464 | 59 | 0.64 536 | 9.98 916 | 3 | 16 9 8.4 8.3 |
| 46 | 9.34 436 | 56 | 9.35 523 | 59 | 0.64 477 | 9.98 913 | 3 | 15 10 9.3 9.2 |
| 47 | 9.34 491 | 55 | 9.35 581 | 58 | 0.64 419 | 9.98 910 | 3 | 14 20 18.7 18.3 |
| 48 | 9.34 547 | 56 | 9.35 640 | 59 | 0.64 360 | 9.98 907 | 3 | 13 30 28.0 27.5 |
| 49 | 9.34 602 | 55 | 9.35 698 | 58 | 0.64 302 | 9.98 904 | 3 | 12 40 37.3 36.7 |
| 50 | 9.34 658 | 56 | 9.35 757 | 59 | 0.64 243 | 9.98 901 | 3 | 11 50 46.7 45.8 |
| 51 | 9.34 713 | 55 | 9.35 815 | 58 | 0.64 185 | 9.98 898 | 3 | 10 |
| 52 | 9.34 769 | 56 | 9.35 873 | 58 | 0.64 127 | 9.98 896 | 2 | 9 3 2 |
| 53 | 9.34 824 | 55 | 9.35 931 | 58 | 0.64 069 | 9.98 893 | 3 | 8 6 0.3 0.2 |
| 54 | 9.34 879 | 55 | 9.35 989 | 58 | 0.64 011 | 9.98 890 | 3 | 7 7 0.4 0.2 |
| 55 | 9.34 934 | 55 | 9.36 047 | 58 | 0.63 953 | 9.98 887 | 3 | 6 8 0.4 0.3 |
| 56 | 9.34 989 | 55 | 9.36 105 | 58 | 0.63 895 | 9.98 884 | 3 | 5 9 0.5 0.3 |
| 57 | 9.35 044 | 55 | 9.36 163 | 58 | 0.63 837 | 9.98 881 | 3 | 4 10 0.5 0.3 |
| 58 | 9.35 099 | 55 | 9.36 221 | 58 | 0.63 779 | 9.98 878 | 3 | 3 20 1.0 0.7 |
| 59 | 9.35 154 | 55 | 9.36 279 | 58 | 0.63 721 | 9.98 875 | 3 | 2 30 1.5 1.0 |
| 60 | 9.35 209 | 55 | 9.36 336 | 57 | 0.63 664 | 9.98 872 | 3 | 1 40 2.0 1.3 |
| | | | | | | | | 50 2.5 1.7 |
| | | | | | | | | 0 |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | Prop. Pts. |

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. | | |
|----|----------|----|----------|-------|----------|----------|----|-----------|------------|-----------|-----------|
| 0 | 9.35 209 | | 9.36 336 | | 0.63 664 | 9.98 872 | | 60 | | | |
| 1 | 9.35 263 | 54 | 9.36 394 | 58 | 0.63 606 | 9.98 869 | 3 | 59 | 58 | 57 | |
| 2 | 9.35 318 | 55 | 9.36 452 | 58 | 0.63 548 | 9.98 867 | 2 | 58 | 6 | 5.8 | 5.7 |
| 3 | 9.35 373 | 55 | 9.36 509 | 57 | 0.63 491 | 9.98 864 | 3 | 57 | 7 | 6.8 | 6.7 |
| 4 | 9.35 427 | 54 | 9.36 566 | 57 | 0.63 434 | 9.98 861 | 3 | 56 | 8 | 7.7 | 7.6 |
| 5 | 9.35 481 | 54 | 9.36 624 | 58 | 0.63 376 | 9.98 858 | 3 | 55 | 9 | 8.7 | 8.6 |
| 6 | 9.35 536 | 55 | 9.36 681 | 57 | 0.63 319 | 9.98 855 | 3 | 54 | 10 | 9.7 | 9.5 |
| 7 | 9.35 590 | 54 | 9.36 738 | 57 | 0.63 262 | 9.98 852 | 3 | 53 | 20 | 19.3 | 19.0 |
| 8 | 9.35 644 | 54 | 9.36 795 | 57 | 0.63 205 | 9.98 849 | 3 | 52 | 30 | 29.0 | 28.5 |
| 9 | 9.35 698 | 54 | 9.36 852 | 57 | 0.63 148 | 9.98 846 | 3 | 51 | 40 | 38.7 | 38.0 |
| 10 | 9.35 752 | 54 | 9.36 909 | 57 | 0.63 091 | 9.98 843 | 3 | 50 | 50 | 48.3 | 47.5 |
| 11 | 9.35 806 | 54 | 9.36 966 | 57 | 0.63 034 | 9.98 840 | 3 | 49 | | 56 | 55 |
| 12 | 9.35 860 | 54 | 9.37 023 | 57 | 0.62 977 | 9.98 837 | 3 | 48 | 6 | 5.6 | 5.5 |
| 13 | 9.35 914 | 54 | 9.37 080 | 57 | 0.62 920 | 9.98 834 | 3 | 47 | 7 | 6.5 | 6.4 |
| 14 | 9.35 968 | 54 | 9.37 137 | 57 | 0.62 863 | 9.98 831 | 3 | 46 | 8 | 7.5 | 7.3 |
| 15 | 9.36 022 | 54 | 9.37 193 | 56 | 0.62 807 | 9.98 828 | 3 | 45 | 9 | 8.4 | 8.3 |
| 16 | 9.36 075 | 53 | 9.37 250 | 57 | 0.62 750 | 9.98 825 | 3 | 44 | 10 | 9.3 | 9.2 |
| 17 | 9.36 129 | 54 | 9.37 306 | 56 | 0.62 694 | 9.98 822 | 3 | 43 | 20 | 18.7 | 18.3 |
| 18 | 9.36 182 | 53 | 9.37 363 | 57 | 0.62 637 | 9.98 819 | 3 | 42 | 30 | 28.0 | 27.5 |
| 19 | 9.36 236 | 54 | 9.37 419 | 56 | 0.62 581 | 9.98 816 | 3 | 41 | 40 | 37.3 | 36.7 |
| 20 | 9.36 289 | 53 | 9.37 476 | 57 | 0.62 524 | 9.98 813 | 3 | 40 | 50 | 46.7 | 45.8 |
| 21 | 9.36 342 | 53 | 9.37 532 | 56 | 0.62 468 | 9.98 810 | 3 | 39 | | 54 | |
| 22 | 9.36 395 | 53 | 9.37 588 | 56 | 0.62 412 | 9.98 807 | 3 | 38 | 6 | 5.4 | |
| 23 | 9.36 449 | 54 | 9.37 644 | 56 | 0.62 356 | 9.98 804 | 3 | 37 | 7 | 6.3 | |
| 24 | 9.36 502 | 53 | 9.37 700 | 56 | 0.62 300 | 9.98 801 | 3 | 36 | 8 | 7.2 | |
| 25 | 9.36 555 | 53 | 9.37 756 | 56 | 0.62 244 | 9.98 798 | 3 | 35 | 9 | 8.1 | |
| 26 | 9.36 608 | 52 | 9.37 812 | 56 | 0.62 188 | 9.98 795 | 3 | 34 | 10 | 9.0 | |
| 27 | 9.36 660 | 53 | 9.37 868 | 56 | 0.62 132 | 9.98 792 | 3 | 33 | 20 | 18.0 | |
| 28 | 9.36 713 | 53 | 9.37 924 | 56 | 0.62 076 | 9.98 789 | 3 | 32 | 30 | 27.0 | |
| 29 | 9.36 766 | 53 | 9.37 980 | 56 | 0.62 020 | 9.98 786 | 3 | 31 | 40 | 36.0 | |
| 30 | 9.36 819 | 52 | 9.38 035 | 55 | 0.61 965 | 9.98 783 | 3 | 30 | 50 | 45.0 | |
| 31 | 9.36 871 | 53 | 9.38 091 | 56 | 0.61 909 | 9.98 780 | 3 | 29 | | 53 | 52 |
| 32 | 9.36 924 | 52 | 9.38 147 | 56 | 0.61 853 | 9.98 777 | 3 | 28 | 6 | 5.3 | 5.2 |
| 33 | 9.36 976 | 52 | 9.38 202 | 55 | 0.61 798 | 9.98 774 | 3 | 27 | 7 | 6.2 | 6.1 |
| 34 | 9.37 028 | 52 | 9.38 257 | 55 | 0.61 743 | 9.98 771 | 3 | 26 | 8 | 7.1 | 6.9 |
| 35 | 9.37 081 | 52 | 9.38 313 | 56 | 0.61 687 | 9.98 768 | 3 | 25 | 9 | 8.0 | 7.8 |
| 36 | 9.37 133 | 52 | 9.38 368 | 55 | 0.61 632 | 9.98 765 | 3 | 24 | 10 | 8.8 | 8.7 |
| 37 | 9.37 185 | 52 | 9.38 423 | 55 | 0.61 577 | 9.98 762 | 3 | 23 | 20 | 17.7 | 17.3 |
| 38 | 9.37 237 | 52 | 9.38 479 | 56 | 0.61 521 | 9.98 759 | 3 | 22 | 30 | 26.5 | 26.0 |
| 39 | 9.37 289 | 52 | 9.38 534 | 55 | 0.61 466 | 9.98 756 | 3 | 21 | 40 | 35.3 | 34.7 |
| 40 | 9.37 341 | 52 | 9.38 589 | 55 | 0.61 411 | 9.98 753 | 3 | 20 | 50 | 44.2 | 43.3 |
| 41 | 9.37 393 | 52 | 9.38 644 | 55 | 0.61 356 | 9.98 750 | 3 | 19 | | 51 | 4 |
| 42 | 9.37 445 | 52 | 9.38 699 | 55 | 0.61 301 | 9.98 746 | 4 | 18 | 6 | 5.1 | 0.4 |
| 43 | 9.37 497 | 52 | 9.38 754 | 55 | 0.61 246 | 9.98 743 | 3 | 17 | 7 | 6.0 | 0.5 |
| 44 | 9.37 549 | 52 | 9.38 808 | 54 | 0.61 192 | 9.98 740 | 3 | 16 | 8 | 6.8 | 0.5 |
| 45 | 9.37 600 | 52 | 9.38 863 | 55 | 0.61 137 | 9.98 737 | 3 | 15 | 9 | 7.7 | 0.6 |
| 46 | 9.37 652 | 52 | 9.38 918 | 55 | 0.61 082 | 9.98 734 | 3 | 14 | 10 | 8.5 | 0.7 |
| 47 | 9.37 703 | 51 | 9.38 972 | 54 | 0.61 028 | 9.98 731 | 3 | 13 | 20 | 17.0 | 1.3 |
| 48 | 9.37 755 | 52 | 9.39 027 | 55 | 0.60 973 | 9.98 728 | 3 | 12 | 30 | 25.5 | 2.0 |
| 49 | 9.37 806 | 52 | 9.39 082 | 55 | 0.60 918 | 9.98 725 | 3 | 11 | 40 | 34.0 | 2.7 |
| 50 | 9.37 858 | 52 | 9.39 136 | 54 | 0.60 864 | 9.98 722 | 3 | 10 | 50 | 42.5 | 3.3 |
| 51 | 9.37 909 | 51 | 9.39 190 | 54 | 0.60 810 | 9.98 719 | 3 | 9 | | 3 | 2 |
| 52 | 9.37 960 | 51 | 9.39 245 | 55 | 0.60 755 | 9.98 715 | 4 | 8 | 6 | 0.3 | 0.2 |
| 53 | 9.38 011 | 51 | 9.39 299 | 54 | 0.60 701 | 9.98 712 | 3 | 7 | 7 | 0.4 | 0.2 |
| 54 | 9.38 062 | 51 | 9.39 353 | 54 | 0.60 647 | 9.98 709 | 3 | 6 | 8 | 0.4 | 0.3 |
| 55 | 9.38 113 | 51 | 9.39 407 | 54 | 0.60 593 | 9.98 706 | 3 | 5 | 9 | 0.5 | 0.3 |
| 56 | 9.38 164 | 51 | 9.39 461 | 54 | 0.60 539 | 9.98 703 | 3 | 4 | 10 | 0.5 | 0.3 |
| 57 | 9.38 215 | 51 | 9.39 515 | 54 | 0.60 485 | 9.98 700 | 3 | 3 | 20 | 1.0 | 0.7 |
| 58 | 9.38 266 | 51 | 9.39 569 | 54 | 0.60 431 | 9.98 697 | 3 | 2 | 30 | 1.5 | 1.0 |
| 59 | 9.38 317 | 51 | 9.39 623 | 54 | 0.60 377 | 9.98 694 | 3 | 1 | 40 | 2.0 | 1.3 |
| 60 | 9.38 368 | 51 | 9.39 677 | 54 | 0.60 323 | 9.98 690 | 4 | 0 | 50 | 2.5 | 1.7 |

| ∠ | L. Sin. | d. | L. Tang. | e. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. |
|----|----------|----|----------|-------|----------|----------|----|-----------|-----------------------|
| 0 | 9.38 368 | | 9.39 677 | | 0.60 323 | 9.98 690 | | 60 | |
| 1 | 9.38 418 | 50 | 9.39 731 | 54 | 0.60 269 | 9.98 687 | 3 | 59 | |
| 2 | 9.38 469 | 51 | 9.39 785 | 54 | 0.60 215 | 9.98 684 | 3 | 58 | 54 53 |
| 3 | 9.38 519 | 50 | 9.39 838 | 53 | 0.60 162 | 9.98 681 | 3 | 57 | 6 5.4 5.3 |
| 4 | 9.38 570 | 51 | 9.39 892 | 54 | 0.60 108 | 9.98 678 | 3 | 56 | 7 6.3 6.2 |
| 5 | 9.38 620 | 50 | 9.39 945 | 53 | 0.60 055 | 9.98 675 | 3 | 55 | 8 7.2 7.1 |
| 6 | 9.38 670 | 50 | 9.39 999 | 54 | 0.60 001 | 9.98 671 | 4 | 54 | 9 8.1 8.0 |
| 7 | 9.38 721 | 51 | 9.40 052 | 53 | 0.59 948 | 9.98 668 | 3 | 53 | 10 9.0 8.8 |
| 8 | 9.38 771 | 50 | 9.40 106 | 54 | 0.59 894 | 9.98 665 | 3 | 52 | 20 18.0 17.7 |
| 9 | 9.38 821 | 51 | 9.40 159 | 53 | 0.59 841 | 9.98 662 | 3 | 51 | 30 27.0 26.5 |
| 10 | 9.38 871 | 50 | 9.40 212 | 53 | 0.59 788 | 9.98 659 | 3 | 50 | 40 36.0 35.3 |
| 11 | 9.38 921 | 50 | 9.40 266 | 54 | 0.59 734 | 9.98 656 | 3 | 49 | 50 45.0 44.2 |
| 12 | 9.38 971 | 50 | 9.40 319 | 53 | 0.59 681 | 9.98 652 | 4 | 48 | |
| 13 | 9.39 021 | 51 | 9.40 372 | 53 | 0.59 628 | 9.98 649 | 3 | 47 | |
| 14 | 9.39 071 | 50 | 9.40 425 | 53 | 0.59 575 | 9.98 646 | 3 | 46 | |
| 15 | 9.39 121 | 50 | 9.40 478 | 53 | 0.59 522 | 9.98 643 | 3 | 45 | 6 52 51 |
| 16 | 9.39 170 | 49 | 9.40 531 | 53 | 0.59 469 | 9.98 640 | 3 | 44 | 7 5.2 5.1 |
| 17 | 9.39 220 | 50 | 9.40 584 | 53 | 0.59 416 | 9.98 636 | 4 | 43 | 8 6.1 6.0 |
| 18 | 9.39 270 | 50 | 9.40 636 | 52 | 0.59 364 | 9.98 633 | 3 | 42 | 7 6.9 6.8 |
| 19 | 9.39 319 | 49 | 9.40 689 | 53 | 0.59 311 | 9.98 630 | 3 | 41 | 9 7.8 7.7 |
| 20 | 9.39 369 | 50 | 9.40 742 | 53 | 0.59 258 | 9.98 627 | 3 | 40 | 10 8.7 8.5 |
| 21 | 9.39 418 | 49 | 9.40 795 | 53 | 0.59 205 | 9.98 623 | 4 | 39 | 20 17.3 17.0 |
| 22 | 9.39 467 | 49 | 9.40 847 | 52 | 0.59 153 | 9.98 620 | 3 | 38 | 30 26.0 25.5 |
| 23 | 9.39 517 | 50 | 9.40 900 | 53 | 0.59 100 | 9.98 617 | 3 | 37 | 40 34.7 34.0 |
| 24 | 9.39 566 | 49 | 9.40 952 | 52 | 0.59 048 | 9.98 614 | 3 | 36 | 50 43.3 42.5 |
| 25 | 9.39 615 | 49 | 9.41 005 | 53 | 0.58 995 | 9.98 610 | 4 | 35 | |
| 26 | 9.39 664 | 49 | 9.41 057 | 52 | 0.58 943 | 9.98 607 | 3 | 34 | 6 50 49 |
| 27 | 9.39 713 | 49 | 9.41 109 | 52 | 0.58 891 | 9.98 604 | 3 | 33 | 7 5.0 4.9 |
| 28 | 9.39 762 | 49 | 9.41 161 | 52 | 0.58 839 | 9.98 601 | 3 | 32 | 8 5.8 5.7 |
| 29 | 9.39 811 | 49 | 9.41 214 | 53 | 0.58 786 | 9.98 597 | 4 | 31 | 9 6.7 6.5 |
| 30 | 9.39 860 | 49 | 9.41 266 | 52 | 0.58 734 | 9.98 594 | 3 | 30 | 10 7.5 7.4 |
| 31 | 9.39 909 | 49 | 9.41 318 | 52 | 0.58 682 | 9.98 591 | 3 | 29 | 10 8.3 8.2 |
| 32 | 9.39 958 | 49 | 9.41 370 | 52 | 0.58 630 | 9.98 588 | 3 | 28 | 20 16.7 16.3 |
| 33 | 9.40 006 | 48 | 9.41 422 | 52 | 0.58 578 | 9.98 584 | 4 | 27 | 30 25.0 24.5 |
| 34 | 9.40 055 | 48 | 9.41 474 | 52 | 0.58 526 | 9.98 581 | 3 | 26 | 40 33.3 32.7 |
| 35 | 9.40 103 | 49 | 9.41 526 | 52 | 0.58 474 | 9.98 578 | 3 | 25 | 50 41.7 40.8 |
| 36 | 9.40 152 | 48 | 9.41 578 | 52 | 0.58 422 | 9.98 574 | 4 | 24 | |
| 37 | 9.40 200 | 48 | 9.41 629 | 51 | 0.58 371 | 9.98 571 | 3 | 23 | |
| 38 | 9.40 249 | 49 | 9.41 681 | 52 | 0.58 319 | 9.98 568 | 3 | 22 | 6 48 47 |
| 39 | 9.40 297 | 48 | 9.41 733 | 52 | 0.58 267 | 9.98 565 | 3 | 21 | 7 4.8 4.7 |
| 40 | 9.40 346 | 49 | 9.41 784 | 51 | 0.58 216 | 9.98 561 | 4 | 20 | 8 5.6 5.5 |
| 41 | 9.40 394 | 48 | 9.41 836 | 52 | 0.58 164 | 9.98 558 | 3 | 19 | 7 6.4 6.3 |
| 42 | 9.40 442 | 48 | 9.41 887 | 51 | 0.58 113 | 9.98 555 | 3 | 18 | 9 7.2 7.1 |
| 43 | 9.40 490 | 48 | 9.41 939 | 52 | 0.58 061 | 9.98 551 | 4 | 17 | 10 8.0 7.8 |
| 44 | 9.40 538 | 48 | 9.41 990 | 51 | 0.58 010 | 9.98 548 | 3 | 16 | 20 16.0 15.7 |
| 45 | 9.40 586 | 48 | 9.42 041 | 51 | 0.57 959 | 9.98 545 | 3 | 15 | 30 24.0 23.5 |
| 46 | 9.40 634 | 48 | 9.42 093 | 52 | 0.57 907 | 9.98 541 | 4 | 14 | 40 32.0 31.3 |
| 47 | 9.40 682 | 48 | 9.42 144 | 51 | 0.57 856 | 9.98 538 | 3 | 13 | 50 40.0 39.2 |
| 48 | 9.40 730 | 48 | 9.42 195 | 51 | 0.57 805 | 9.98 535 | 3 | 12 | |
| 49 | 9.40 778 | 48 | 9.42 246 | 51 | 0.57 754 | 9.98 531 | 4 | 11 | |
| 50 | 9.40 825 | 47 | 9.42 297 | 51 | 0.57 703 | 9.98 528 | 3 | 10 | 6 4 3 |
| 51 | 9.40 873 | 48 | 9.42 348 | 51 | 0.57 652 | 9.98 525 | 3 | 9 | 7 0.4 0.3 |
| 52 | 9.40 921 | 48 | 9.42 399 | 51 | 0.57 601 | 9.98 521 | 4 | 8 | 8 0.5 0.4 |
| 53 | 9.40 968 | 47 | 9.42 450 | 51 | 0.57 550 | 9.98 518 | 3 | 7 | 9 0.6 0.5 |
| 54 | 9.41 016 | 48 | 9.42 501 | 51 | 0.57 499 | 9.98 515 | 3 | 6 | 10 0.7 0.5 |
| 55 | 9.41 063 | 47 | 9.42 552 | 51 | 0.57 448 | 9.98 511 | 4 | 5 | 20 1.3 1.0 |
| 56 | 9.41 111 | 48 | 9.42 603 | 51 | 0.57 397 | 9.98 508 | 3 | 4 | 30 2.0 1.5 |
| 57 | 9.41 158 | 47 | 9.42 653 | 50 | 0.57 347 | 9.98 505 | 3 | 3 | 40 2.7 2.0 |
| 58 | 9.41 205 | 47 | 9.42 704 | 51 | 0.57 296 | 9.98 501 | 4 | 2 | 50 3.3 2.5 |
| 59 | 9.41 252 | 47 | 9.42 755 | 51 | 0.57 245 | 9.98 498 | 3 | 1 | |
| 60 | 9.41 300 | 48 | 9.42 805 | 50 | 0.57 195 | 9.98 494 | 4 | 0 | |
| | L. Cos. | d. | L. Cotg. | e. d. | L. Tang. | L. Sin. | d. | ∠ | Prop. Pts. |

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | ∕ | Prop. Pts. | | |
|-----------|----------|----|----------|-------|----------|----------|----|-----------|------------|------|------|
| 0 | 9.41 300 | | 9.42 805 | | 0.57 195 | 9.98 494 | | 60 | | | |
| 1 | 9.41 347 | 47 | 9.42 856 | 51 | 0.57 144 | 9.98 491 | 3 | 59 | | | |
| 2 | 9.41 394 | 47 | 9.42 906 | 50 | 0.57 094 | 9.98 488 | 3 | 58 | | | |
| 3 | 9.41 441 | 47 | 9.42 957 | 51 | 0.57 043 | 9.98 484 | 4 | 57 | 6 | 51 | 5.0 |
| 4 | 9.41 488 | 47 | 9.43 007 | 50 | 0.56 993 | 9.98 481 | 3 | 56 | 7 | 6.0 | 5.8 |
| | | 47 | | 50 | | | 4 | | 8 | 6.8 | 6.7 |
| 5 | 9.41 535 | | 9.43 057 | | 0.56 943 | 9.98 477 | | 55 | | | |
| 6 | 9.41 582 | 47 | 9.43 108 | 51 | 0.56 892 | 9.98 474 | 3 | 54 | 9 | 7.7 | 7.5 |
| 7 | 9.41 628 | 46 | 9.43 158 | 50 | 0.56 842 | 9.98 471 | 3 | 53 | 10 | 8.5 | 8.3 |
| 8 | 9.41 675 | 47 | 9.43 208 | 50 | 0.56 792 | 9.98 467 | 4 | 52 | 20 | 17.0 | 16.7 |
| 9 | 9.41 722 | 47 | 9.43 258 | 50 | 0.56 742 | 9.98 464 | 3 | 51 | 30 | 25.5 | 25.0 |
| | | 46 | | 50 | | | 4 | | 40 | 34.0 | 33.3 |
| 10 | 9.41 768 | | 9.43 308 | | 0.56 692 | 9.98 460 | | 50 | 50 | 42.5 | 41.7 |
| 11 | 9.41 815 | 47 | 9.43 358 | 50 | 0.56 642 | 9.98 457 | 3 | 49 | | | |
| 12 | 9.41 861 | 46 | 9.43 408 | 50 | 0.56 592 | 9.98 453 | 4 | 48 | | | |
| 13 | 9.41 908 | 47 | 9.43 458 | 50 | 0.56 542 | 9.98 450 | 3 | 47 | | | |
| 14 | 9.41 954 | 46 | 9.43 508 | 50 | 0.56 492 | 9.98 447 | 3 | 46 | | | |
| | | 47 | | 50 | | | 4 | | | 49 | 48 |
| 15 | 9.42 001 | | 9.43 558 | | 0.56 442 | 9.98 443 | | 45 | 6 | 4.9 | 4.8 |
| 16 | 9.42 047 | 46 | 9.43 607 | 49 | 0.56 393 | 9.98 440 | 3 | 44 | 7 | 5.7 | 5.6 |
| 17 | 9.42 093 | 46 | 9.43 657 | 50 | 0.56 343 | 9.98 436 | 4 | 43 | 8 | 6.5 | 6.4 |
| 18 | 9.42 140 | 47 | 9.43 707 | 50 | 0.56 293 | 9.98 433 | 3 | 42 | 9 | 7.4 | 7.2 |
| 19 | 9.42 186 | 46 | 9.43 756 | 49 | 0.56 244 | 9.98 429 | 4 | 41 | 10 | 8.2 | 8.0 |
| | | 46 | | 50 | | | 3 | | 20 | 16.3 | 16.0 |
| 20 | 9.42 232 | | 9.43 806 | | 0.56 194 | 9.98 426 | | 40 | 30 | 24.5 | 24.0 |
| 21 | 9.42 278 | 46 | 9.43 855 | 50 | 0.56 145 | 9.98 422 | 4 | 39 | 40 | 32.7 | 32.0 |
| 22 | 9.42 324 | 46 | 9.43 905 | 49 | 0.56 095 | 9.98 419 | 3 | 38 | 50 | 40.8 | 40.0 |
| 23 | 9.42 370 | 46 | 9.43 954 | 49 | 0.56 046 | 9.98 415 | 4 | 37 | | | |
| 24 | 9.42 416 | 45 | 9.44 004 | 50 | 0.55 996 | 9.98 412 | 3 | 36 | | | |
| | | 46 | | 49 | | | 4 | | | | |
| 25 | 9.42 461 | 46 | 9.44 053 | 49 | 0.55 947 | 9.98 409 | 4 | 35 | | | |
| 26 | 9.42 507 | 46 | 9.44 102 | 49 | 0.55 898 | 9.98 405 | 3 | 34 | | | |
| 27 | 9.42 553 | 46 | 9.44 151 | 49 | 0.55 849 | 9.98 402 | 4 | 33 | 6 | 4.7 | 4.6 |
| 28 | 9.42 599 | 45 | 9.44 201 | 50 | 0.55 799 | 9.98 398 | 3 | 32 | 7 | 5.5 | 5.4 |
| 29 | 9.42 644 | 46 | 9.44 250 | 49 | 0.55 750 | 9.98 395 | 4 | 31 | 8 | 6.3 | 6.1 |
| | | 45 | | 49 | | | 4 | | 9 | 7.1 | 6.9 |
| 30 | 9.42 690 | | 9.44 299 | | 0.55 701 | 9.98 391 | | 30 | 10 | 7.8 | 7.7 |
| 31 | 9.42 735 | 45 | 9.44 348 | 49 | 0.55 652 | 9.98 388 | 3 | 29 | 20 | 15.7 | 15.3 |
| 32 | 9.42 781 | 46 | 9.44 397 | 49 | 0.55 603 | 9.98 384 | 4 | 28 | 30 | 23.5 | 23.0 |
| 33 | 9.42 826 | 45 | 9.44 446 | 49 | 0.55 554 | 9.98 381 | 3 | 27 | 40 | 31.3 | 30.7 |
| 34 | 9.42 872 | 46 | 9.44 495 | 49 | 0.55 505 | 9.98 377 | 4 | 26 | 50 | 39.2 | 38.3 |
| | | 45 | | 48 | | | 3 | | | | |
| 35 | 9.42 917 | 45 | 9.44 544 | 48 | 0.55 456 | 9.98 373 | 4 | 25 | | | |
| 36 | 9.42 962 | 46 | 9.44 592 | 49 | 0.55 408 | 9.98 370 | 3 | 24 | | | |
| 37 | 9.43 008 | 46 | 9.44 641 | 49 | 0.55 359 | 9.98 366 | 4 | 23 | | | |
| 38 | 9.43 053 | 45 | 9.44 690 | 49 | 0.55 310 | 9.98 363 | 3 | 22 | | | |
| 39 | 9.43 098 | 45 | 9.44 738 | 49 | 0.55 262 | 9.98 359 | 4 | 21 | | | |
| | | 45 | | 49 | | | 3 | | 6 | 4.5 | 4.4 |
| 40 | 9.43 143 | | 9.44 787 | | 0.55 213 | 9.98 356 | | 20 | 7 | 5.3 | 5.1 |
| 41 | 9.43 188 | 45 | 9.44 836 | 49 | 0.55 164 | 9.98 352 | 4 | 19 | 8 | 6.0 | 5.9 |
| 42 | 9.43 233 | 45 | 9.44 884 | 48 | 0.55 116 | 9.98 349 | 3 | 18 | 9 | 6.8 | 6.6 |
| 43 | 9.43 278 | 45 | 9.44 933 | 48 | 0.55 067 | 9.98 345 | 4 | 17 | 10 | 7.5 | 7.3 |
| 44 | 9.43 323 | 44 | 9.44 981 | 48 | 0.55 019 | 9.98 342 | 3 | 16 | 20 | 15.0 | 14.7 |
| | | 44 | | 48 | | | 4 | | 30 | 22.5 | 22.0 |
| 45 | 9.43 367 | 45 | 9.45 029 | 49 | 0.54 971 | 9.98 338 | 3 | 15 | 40 | 30.0 | 29.3 |
| 46 | 9.43 412 | 45 | 9.45 078 | 48 | 0.54 922 | 9.98 334 | 4 | 14 | 50 | 37.5 | 36.7 |
| 47 | 9.43 457 | 45 | 9.45 126 | 48 | 0.54 874 | 9.98 331 | 3 | 13 | | | |
| 48 | 9.43 502 | 45 | 9.45 174 | 48 | 0.54 826 | 9.98 327 | 4 | 12 | | | |
| 49 | 9.43 546 | 44 | 9.45 222 | 48 | 0.54 778 | 9.98 324 | 3 | 11 | | | |
| | | 45 | | 49 | | | 4 | | | | |
| 50 | 9.43 591 | | 9.45 271 | | 0.54 729 | 9.98 320 | | 10 | | | |
| 51 | 9.43 635 | 44 | 9.45 319 | 48 | 0.54 681 | 9.98 317 | 3 | 9 | 6 | 0.4 | 0.3 |
| 52 | 9.43 680 | 45 | 9.45 367 | 48 | 0.54 633 | 9.98 313 | 4 | 8 | 7 | 0.5 | 0.4 |
| 53 | 9.43 724 | 44 | 9.45 415 | 48 | 0.54 585 | 9.98 309 | 4 | 7 | 8 | 0.5 | 0.4 |
| 54 | 9.43 769 | 44 | 9.45 463 | 48 | 0.54 537 | 9.98 306 | 3 | 6 | 9 | 0.6 | 0.5 |
| | | 44 | | 48 | | | 4 | | 10 | 0.7 | 0.5 |
| 55 | 9.43 813 | 44 | 9.45 511 | 48 | 0.54 489 | 9.98 302 | 3 | 5 | 20 | 1.3 | 1.0 |
| 56 | 9.43 857 | 44 | 9.45 559 | 48 | 0.54 441 | 9.98 299 | 4 | 4 | 30 | 2.0 | 1.5 |
| 57 | 9.43 901 | 44 | 9.45 606 | 47 | 0.54 394 | 9.98 295 | 4 | 3 | 40 | 2.7 | 2.0 |
| 58 | 9.43 946 | 45 | 9.45 654 | 48 | 0.54 346 | 9.98 291 | 4 | 2 | 50 | 3.3 | 2.5 |
| 59 | 9.43 990 | 44 | 9.45 702 | 48 | 0.54 298 | 9.98 288 | 3 | 1 | | | |
| | | 44 | | 48 | | | 4 | | | | |
| 60 | 9.44 034 | | 9.45 750 | | 0.54 250 | 9.98 284 | | 0 | | | |

| ✓ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | ✓ | Prop. Pts. | | |
|----|----------|----|----------|-------|----------|----------|----|----|------------|------|------|
| 0 | 9.44 034 | | 9.45 750 | | 0.54 250 | 9.98 284 | | 60 | | | |
| 1 | 9.44 078 | 44 | 9.45 797 | 47 | 0.54 203 | 9.98 281 | 3 | 59 | | | |
| 2 | 9.44 122 | 44 | 9.45 845 | 48 | 0.54 155 | 9.98 277 | 4 | 58 | | 48 | 47 |
| 3 | 9.44 166 | 44 | 9.45 892 | 47 | 0.54 108 | 9.98 273 | 4 | 57 | 6 | 4.8 | 4.7 |
| 4 | 9.44 210 | 44 | 9.45 940 | 48 | 0.54 060 | 9.98 270 | 3 | 56 | 7 | 5.6 | 5.5 |
| | | 43 | | 47 | | | 4 | 55 | 8 | 6.4 | 6.3 |
| 5 | 9.44 253 | 44 | 9.45 987 | 48 | 0.54 013 | 9.98 266 | 4 | 54 | 9 | 7.2 | 7.1 |
| 6 | 9.44 297 | 44 | 9.46 035 | 47 | 0.53 965 | 9.98 262 | 3 | 53 | 10 | 8.0 | 7.8 |
| 7 | 9.44 341 | 44 | 9.46 082 | 48 | 0.53 918 | 9.98 259 | 4 | 52 | 20 | 16.0 | 15.7 |
| 8 | 9.44 385 | 44 | 9.46 130 | 47 | 0.53 870 | 9.98 255 | 4 | 51 | 30 | 24.0 | 23.5 |
| 9 | 9.44 428 | 43 | 9.46 177 | 47 | 0.53 823 | 9.98 251 | 3 | 50 | 40 | 32.0 | 31.3 |
| | | 44 | | 47 | | | 4 | 49 | 50 | 40.0 | 39.2 |
| 10 | 9.44 472 | 44 | 9.46 224 | 47 | 0.53 776 | 9.98 248 | 4 | 48 | | | |
| 11 | 9.44 516 | 43 | 9.46 271 | 48 | 0.53 729 | 9.98 244 | 4 | 47 | | | |
| 12 | 9.44 559 | 43 | 9.46 319 | 47 | 0.53 681 | 9.98 240 | 3 | 46 | | | |
| 13 | 9.44 602 | 43 | 9.46 366 | 47 | 0.53 634 | 9.98 237 | 4 | 45 | | 46 | 45 |
| 14 | 9.44 646 | 44 | 9.46 413 | 47 | 0.53 587 | 9.98 233 | 4 | 44 | 6 | 4.6 | 4.5 |
| | | 43 | | 47 | | | 3 | 44 | 7 | 5.4 | 5.3 |
| 15 | 9.44 689 | 44 | 9.46 460 | 47 | 0.53 540 | 9.98 229 | 4 | 43 | 8 | 6.1 | 6.0 |
| 16 | 9.44 733 | 43 | 9.46 507 | 47 | 0.53 493 | 9.98 226 | 4 | 42 | 9 | 6.9 | 6.8 |
| 17 | 9.44 776 | 43 | 9.46 554 | 47 | 0.53 446 | 9.98 222 | 4 | 41 | 10 | 7.7 | 7.5 |
| 18 | 9.44 819 | 43 | 9.46 601 | 47 | 0.53 399 | 9.98 218 | 3 | 40 | 20 | 15.3 | 15.0 |
| 19 | 9.44 862 | 43 | 9.46 648 | 46 | 0.53 352 | 9.98 215 | 4 | 39 | 30 | 23.0 | 22.5 |
| | | 44 | | 47 | | | 3 | 38 | 40 | 30.7 | 30.0 |
| 20 | 9.44 905 | 43 | 9.46 694 | 47 | 0.53 306 | 9.98 211 | 4 | 37 | 50 | 38.3 | 37.5 |
| 21 | 9.44 948 | 44 | 9.46 741 | 47 | 0.53 259 | 9.98 207 | 4 | 36 | | | |
| 22 | 9.44 992 | 44 | 9.46 788 | 47 | 0.53 212 | 9.98 204 | 4 | 35 | | 44 | 43 |
| 23 | 9.45 035 | 43 | 9.46 835 | 47 | 0.53 165 | 9.98 200 | 4 | 34 | 6 | 4.4 | 4.3 |
| 24 | 9.45 077 | 42 | 9.46 881 | 46 | 0.53 119 | 9.98 196 | 4 | 33 | 7 | 5.1 | 5.0 |
| | | 43 | | 47 | | | 4 | 32 | 8 | 5.9 | 5.7 |
| 25 | 9.45 120 | 43 | 9.46 928 | 47 | 0.53 072 | 9.98 192 | 3 | 31 | 9 | 6.6 | 6.5 |
| 26 | 9.45 163 | 43 | 9.46 975 | 47 | 0.53 025 | 9.98 189 | 4 | 30 | 10 | 7.3 | 7.2 |
| 27 | 9.45 206 | 43 | 9.47 021 | 46 | 0.52 979 | 9.98 185 | 4 | 29 | 20 | 14.7 | 14.3 |
| 28 | 9.45 249 | 43 | 9.47 068 | 47 | 0.52 932 | 9.98 181 | 4 | 28 | 30 | 22.0 | 21.5 |
| 29 | 9.45 292 | 42 | 9.47 114 | 46 | 0.52 886 | 9.98 177 | 3 | 27 | 40 | 29.3 | 28.7 |
| | | 43 | | 46 | | | 4 | 26 | 50 | 36.7 | 35.8 |
| 30 | 9.45 334 | 43 | 9.47 160 | 47 | 0.52 840 | 9.98 174 | 4 | 25 | | | |
| 31 | 9.45 377 | 42 | 9.47 207 | 46 | 0.52 793 | 9.98 170 | 4 | 24 | | | |
| 32 | 9.45 419 | 43 | 9.47 253 | 46 | 0.52 747 | 9.98 166 | 4 | 23 | | | |
| 33 | 9.45 462 | 43 | 9.47 299 | 46 | 0.52 701 | 9.98 162 | 4 | 22 | | 42 | 41 |
| 34 | 9.45 504 | 42 | 9.47 346 | 46 | 0.52 654 | 9.98 159 | 4 | 21 | 6 | 4.2 | 4.1 |
| | | 43 | | 46 | | | 4 | 20 | 7 | 4.9 | 4.8 |
| 35 | 9.45 547 | 42 | 9.47 392 | 46 | 0.52 608 | 9.98 155 | 4 | 19 | 8 | 5.6 | 5.5 |
| 36 | 9.45 589 | 43 | 9.47 438 | 46 | 0.52 562 | 9.98 151 | 4 | 18 | 9 | 6.3 | 6.2 |
| 37 | 9.45 632 | 42 | 9.47 484 | 46 | 0.52 516 | 9.98 147 | 3 | 17 | 10 | 7.0 | 6.8 |
| 38 | 9.45 674 | 42 | 9.47 530 | 46 | 0.52 470 | 9.98 144 | 4 | 16 | 20 | 14.0 | 13.7 |
| 39 | 9.45 716 | 42 | 9.47 576 | 46 | 0.52 424 | 9.98 140 | 4 | 15 | 30 | 21.0 | 20.5 |
| | | 43 | | 46 | | | 4 | 14 | 40 | 28.0 | 27.3 |
| 40 | 9.45 758 | 42 | 9.47 622 | 46 | 0.52 378 | 9.98 136 | 4 | 13 | 50 | 35.0 | 34.2 |
| 41 | 9.45 801 | 43 | 9.47 668 | 46 | 0.52 332 | 9.98 132 | 3 | 12 | | | |
| 42 | 9.45 843 | 42 | 9.47 714 | 46 | 0.52 286 | 9.98 129 | 4 | 11 | | | |
| 43 | 9.45 885 | 42 | 9.47 760 | 46 | 0.52 240 | 9.98 125 | 4 | 10 | | 4 | 3 |
| 44 | 9.45 927 | 42 | 9.47 806 | 46 | 0.52 194 | 9.98 121 | 4 | 9 | 6 | 0.4 | 0.3 |
| | | 43 | | 46 | | | 4 | 8 | 7 | 0.5 | 0.4 |
| 45 | 9.45 969 | 42 | 9.47 852 | 45 | 0.52 148 | 9.98 117 | 4 | 7 | 8 | 0.5 | 0.4 |
| 46 | 9.46 011 | 42 | 9.47 897 | 46 | 0.52 103 | 9.98 113 | 3 | 6 | 9 | 0.6 | 0.5 |
| 47 | 9.46 053 | 42 | 9.47 943 | 46 | 0.52 057 | 9.98 110 | 4 | 5 | 10 | 0.7 | 0.5 |
| 48 | 9.46 095 | 42 | 9.47 989 | 46 | 0.52 011 | 9.98 106 | 4 | 4 | 20 | 1.3 | 1.0 |
| 49 | 9.46 136 | 41 | 9.48 035 | 46 | 0.51 965 | 9.98 102 | 4 | 3 | 30 | 2.0 | 1.5 |
| | | 42 | | 45 | | | 4 | 2 | 40 | 2.7 | 2.0 |
| 50 | 9.46 178 | 42 | 9.48 080 | 46 | 0.51 920 | 9.98 098 | 4 | 1 | 50 | 3.3 | 2.5 |
| 51 | 9.46 220 | 42 | 9.48 126 | 46 | 0.51 874 | 9.98 094 | 4 | 0 | | | |
| 52 | 9.46 262 | 42 | 9.48 171 | 45 | 0.51 829 | 9.98 090 | 4 | | | | |
| 53 | 9.46 303 | 41 | 9.48 217 | 46 | 0.51 783 | 9.98 087 | 3 | | | | |
| 54 | 9.46 345 | 42 | 9.48 262 | 45 | 0.51 738 | 9.98 083 | 4 | | | | |
| | | 41 | | 45 | | | 4 | | | | |
| 55 | 9.46 386 | 42 | 9.48 307 | 46 | 0.51 693 | 9.98 079 | 4 | | | | |
| 56 | 9.46 428 | 42 | 9.48 353 | 46 | 0.51 647 | 9.98 075 | 4 | | | | |
| 57 | 9.46 469 | 41 | 9.48 398 | 45 | 0.51 602 | 9.98 071 | 4 | | | | |
| 58 | 9.46 511 | 42 | 9.48 443 | 45 | 0.51 557 | 9.98 067 | 4 | | | | |
| 59 | 9.46 552 | 41 | 9.48 489 | 46 | 0.51 511 | 9.98 063 | 4 | | | | |
| | | 42 | | 45 | | | 3 | | | | |
| 60 | 9.46 594 | | 9.48 534 | | 0.51 466 | 9.98 060 | | 0 | | | |

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. | | |
|-----------|----------|----|----------|-------|----------|----------|----|-----------|------------|------|------|
| 0 | 9.46 594 | | 9.48 534 | | 0.51 466 | 9.98 060 | | 60 | | | |
| 1 | 9.46 635 | 41 | 9.48 579 | 45 | 0.51 421 | 9.98 056 | 4 | 59 | | | |
| 2 | 9.46 676 | 41 | 9.48 624 | 45 | 0.51 376 | 9.98 052 | 4 | 58 | 45 | 44 | |
| 3 | 9.46 717 | 41 | 9.48 669 | 45 | 0.51 331 | 9.98 048 | 4 | 57 | 6 | 4.5 | 4.4 |
| 4 | 9.46 758 | 41 | 9.48 714 | 45 | 0.51 286 | 9.98 044 | 4 | 56 | 7 | 5.3 | 5.1 |
| | | 42 | | 45 | | | 4 | | 8 | 6.0 | 5.9 |
| 5 | 9.46 800 | | 9.48 759 | 45 | 0.51 241 | 9.98 040 | 4 | 55 | 9 | 6.8 | 6.6 |
| 6 | 9.46 841 | 41 | 9.48 804 | 45 | 0.51 196 | 9.98 036 | 4 | 54 | 10 | 7.5 | 7.3 |
| 7 | 9.46 882 | 41 | 9.48 849 | 45 | 0.51 151 | 9.98 032 | 4 | 53 | 20 | 15.0 | 14.7 |
| 8 | 9.46 923 | 41 | 9.48 894 | 45 | 0.51 106 | 9.98 029 | 3 | 52 | 30 | 22.5 | 22.0 |
| 9 | 9.46 964 | 41 | 9.48 939 | 45 | 0.51 061 | 9.98 025 | 4 | 51 | 40 | 30.0 | 29.3 |
| 10 | 9.47 005 | 41 | 9.48 984 | 45 | 0.51 016 | 9.98 021 | 4 | 50 | 50 | 37.5 | 36.7 |
| 11 | 9.47 045 | 40 | 9.49 029 | 45 | 0.50 971 | 9.98 017 | 4 | 49 | | | |
| 12 | 9.47 086 | 41 | 9.49 073 | 44 | 0.50 927 | 9.98 013 | 4 | 48 | | | |
| 13 | 9.47 127 | 41 | 9.49 118 | 45 | 0.50 882 | 9.98 009 | 4 | 47 | | | |
| 14 | 9.47 168 | 41 | 9.49 163 | 45 | 0.50 837 | 9.98 005 | 4 | 46 | | | |
| | | 41 | | 44 | | | 4 | | | 43 | |
| 15 | 9.47 209 | | 9.49 207 | 44 | 0.50 793 | 9.98 001 | 4 | 45 | 6 | 4.3 | |
| 16 | 9.47 249 | 40 | 9.49 252 | 45 | 0.50 748 | 9.97 997 | 4 | 44 | 7 | 5.0 | |
| 17 | 9.47 290 | 41 | 9.49 296 | 44 | 0.50 704 | 9.97 993 | 4 | 43 | 8 | 5.7 | |
| 18 | 9.47 330 | 40 | 9.49 341 | 45 | 0.50 659 | 9.97 989 | 4 | 42 | 9 | 6.5 | |
| 19 | 9.47 371 | 41 | 9.49 385 | 44 | 0.50 615 | 9.97 986 | 3 | 41 | 10 | 7.2 | |
| 20 | 9.47 411 | 40 | 9.49 430 | 45 | 0.50 570 | 9.97 982 | 4 | 40 | 20 | 14.3 | |
| 21 | 9.47 452 | 41 | 9.49 474 | 44 | 0.50 526 | 9.97 978 | 4 | 39 | 30 | 21.5 | |
| 22 | 9.47 492 | 40 | 9.49 519 | 45 | 0.50 481 | 9.97 974 | 4 | 38 | 40 | 28.7 | |
| 23 | 9.47 533 | 41 | 9.49 563 | 44 | 0.50 437 | 9.97 970 | 4 | 37 | 50 | 35.8 | |
| 24 | 9.47 573 | 40 | 9.49 607 | 44 | 0.50 393 | 9.97 966 | 4 | 36 | | | |
| | | 40 | | 45 | | | 4 | | | | |
| 25 | 9.47 613 | | 9.49 652 | 44 | 0.50 348 | 9.97 962 | 4 | 35 | | | |
| 26 | 9.47 654 | 41 | 9.49 696 | 44 | 0.50 304 | 9.97 958 | 4 | 34 | 42 | 41 | |
| 27 | 9.47 694 | 40 | 9.49 740 | 44 | 0.50 260 | 9.97 954 | 4 | 33 | 6 | 4.2 | 4.1 |
| 28 | 9.47 734 | 40 | 9.49 784 | 44 | 0.50 216 | 9.97 950 | 4 | 32 | 7 | 4.9 | 4.8 |
| 29 | 9.47 774 | 40 | 9.49 828 | 44 | 0.50 172 | 9.97 946 | 4 | 31 | 8 | 5.6 | 5.5 |
| 30 | 9.47 814 | 40 | 9.49 872 | 44 | 0.50 128 | 9.97 942 | 4 | 30 | 9 | 6.3 | 6.2 |
| 31 | 9.47 854 | 40 | 9.49 916 | 44 | 0.50 084 | 9.97 938 | 4 | 29 | 10 | 7.0 | 6.8 |
| 32 | 9.47 894 | 40 | 9.49 960 | 44 | 0.50 040 | 9.97 934 | 4 | 28 | 20 | 14.0 | 13.7 |
| 33 | 9.47 934 | 40 | 9.50 004 | 44 | 0.49 996 | 9.97 930 | 4 | 27 | 30 | 21.0 | 20.5 |
| 34 | 9.47 974 | 40 | 9.50 048 | 44 | 0.49 952 | 9.97 926 | 4 | 26 | 40 | 28.0 | 27.3 |
| | | 40 | | 44 | | | 4 | | 50 | 35.0 | 34.2 |
| 35 | 9.48 014 | 40 | 9.50 092 | 44 | 0.49 908 | 9.97 922 | 4 | 25 | | | |
| 36 | 9.48 054 | 40 | 9.50 136 | 44 | 0.49 864 | 9.97 918 | 4 | 24 | | | |
| 37 | 9.48 094 | 40 | 9.50 180 | 44 | 0.49 820 | 9.97 914 | 4 | 23 | | | |
| 38 | 9.48 133 | 39 | 9.50 223 | 43 | 0.49 777 | 9.97 910 | 4 | 22 | 40 | 39 | |
| 39 | 9.48 173 | 40 | 9.50 267 | 44 | 0.49 733 | 9.97 906 | 4 | 21 | 6 | 4.0 | 3.9 |
| 40 | 9.48 213 | 40 | 9.50 311 | 44 | 0.49 689 | 9.97 902 | 4 | 20 | 7 | 4.7 | 4.6 |
| 41 | 9.48 252 | 39 | 9.50 355 | 44 | 0.49 645 | 9.97 898 | 4 | 19 | 8 | 5.3 | 5.2 |
| 42 | 9.48 292 | 40 | 9.50 398 | 43 | 0.49 602 | 9.97 894 | 4 | 18 | 9 | 6.0 | 5.9 |
| 43 | 9.48 332 | 40 | 9.50 442 | 44 | 0.49 558 | 9.97 890 | 4 | 17 | 10 | 6.7 | 6.5 |
| 44 | 9.48 371 | 39 | 9.50 485 | 43 | 0.49 515 | 9.97 886 | 4 | 16 | 20 | 13.3 | 13.0 |
| | | 40 | | 44 | | | 4 | | 30 | 20.0 | 19.5 |
| 45 | 9.48 411 | | 9.50 529 | 43 | 0.49 471 | 9.97 882 | 4 | 15 | 40 | 26.7 | 26.0 |
| 46 | 9.48 450 | 39 | 9.50 572 | 43 | 0.49 428 | 9.97 878 | 4 | 14 | 50 | 33.3 | 32.5 |
| 47 | 9.48 490 | 40 | 9.50 616 | 44 | 0.49 384 | 9.97 874 | 4 | 13 | | | |
| 48 | 9.48 529 | 39 | 9.50 659 | 43 | 0.49 341 | 9.97 870 | 4 | 12 | | | |
| 49 | 9.48 568 | 39 | 9.50 703 | 44 | 0.49 297 | 9.97 866 | 4 | 11 | | | |
| 50 | 9.48 607 | 39 | 9.50 746 | 43 | 0.49 254 | 9.97 861 | 5 | 10 | | | |
| 51 | 9.48 647 | 40 | 9.50 789 | 43 | 0.49 211 | 9.97 857 | 4 | 9 | 6 | 0.5 | 0.4 |
| 52 | 9.48 686 | 39 | 9.50 833 | 44 | 0.49 167 | 9.97 853 | 4 | 8 | 7 | 0.6 | 0.5 |
| 53 | 9.48 725 | 39 | 9.50 876 | 43 | 0.49 124 | 9.97 849 | 4 | 7 | 8 | 0.7 | 0.5 |
| 54 | 9.48 764 | 39 | 9.50 919 | 43 | 0.49 081 | 9.97 845 | 4 | 6 | 9 | 0.8 | 0.6 |
| | | 39 | | 43 | | | 4 | | 10 | 0.8 | 0.7 |
| 55 | 9.48 803 | | 9.50 962 | 43 | 0.49 038 | 9.97 841 | 4 | 5 | 20 | 1.7 | 1.3 |
| 56 | 9.48 842 | 39 | 9.51 005 | 43 | 0.48 995 | 9.97 837 | 4 | 4 | 30 | 2.5 | 2.0 |
| 57 | 9.48 881 | 39 | 9.51 048 | 43 | 0.48 952 | 9.97 833 | 4 | 3 | 40 | 3.3 | 2.7 |
| 58 | 9.48 920 | 39 | 9.51 092 | 44 | 0.48 908 | 9.97 829 | 4 | 2 | 50 | 4.2 | 3.3 |
| 59 | 9.48 959 | 39 | 9.51 135 | 43 | 0.48 865 | 9.97 825 | 4 | 1 | | | |
| | | 39 | | 43 | | | 4 | | | | |
| 60 | 9.48 998 | | 9.51 178 | | 0.48 822 | 9.97 821 | | 0 | | | |
| | | | | | | | | | | | |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | ∕ | Prop. Pts. | | |

| ✓ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | ✓ | Prop. Pts. | | |
|----|----------|----|----------|-------|----------|----------|----|----|------------|------|------|
| 0 | 9.48 998 | | 9.51 178 | | 0.48 822 | 9.97 821 | | 60 | | | |
| 1 | 9.49 037 | 39 | 9.51 221 | 43 | 0.48 779 | 9.97 817 | 4 | 59 | | | |
| 2 | 9.49 076 | 39 | 9.51 264 | 43 | 0.48 736 | 9.97 812 | 5 | 58 | | | |
| 3 | 9.49 115 | 39 | 9.51 306 | 42 | 0.48 694 | 9.97 808 | 4 | 57 | 6 | 4.3 | 4.2 |
| 4 | 9.49 153 | 38 | 9.51 349 | 43 | 0.48 651 | 9.97 804 | 4 | 56 | 7 | 5.0 | 4.9 |
| 5 | 9.49 192 | 39 | 9.51 392 | 43 | 0.48 608 | 9.97 800 | 4 | 55 | 8 | 5.7 | 5.6 |
| 6 | 9.49 231 | 39 | 9.51 435 | 43 | 0.48 565 | 9.97 796 | 4 | 54 | 9 | 6.5 | 6.3 |
| 7 | 9.49 269 | 38 | 9.51 478 | 43 | 0.48 522 | 9.97 792 | 4 | 53 | 10 | 7.2 | 7.0 |
| 8 | 9.49 308 | 39 | 9.51 520 | 42 | 0.48 480 | 9.97 788 | 4 | 52 | 20 | 14.3 | 14.0 |
| 9 | 9.49 347 | 39 | 9.51 563 | 43 | 0.48 437 | 9.97 784 | 4 | 51 | 30 | 21.5 | 21.0 |
| 10 | 9.49 385 | 38 | 9.51 606 | 43 | 0.48 394 | 9.97 779 | 5 | 50 | 40 | 28.7 | 28.0 |
| 11 | 9.49 424 | 39 | 9.51 648 | 42 | 0.48 352 | 9.97 775 | 4 | 49 | 50 | 35.8 | 35.0 |
| 12 | 9.49 462 | 38 | 9.51 691 | 43 | 0.48 309 | 9.97 771 | 4 | 48 | | | |
| 13 | 9.49 500 | 38 | 9.51 734 | 43 | 0.48 266 | 9.97 767 | 4 | 47 | | | |
| 14 | 9.49 539 | 39 | 9.51 776 | 42 | 0.48 224 | 9.97 763 | 4 | 46 | | | 41 |
| 15 | 9.49 577 | 38 | 9.51 819 | 43 | 0.48 181 | 9.97 759 | 5 | 45 | 6 | 4.1 | |
| 16 | 9.49 615 | 38 | 9.51 861 | 42 | 0.48 139 | 9.97 754 | 4 | 44 | 7 | 4.8 | |
| 17 | 9.49 654 | 39 | 9.51 903 | 42 | 0.48 097 | 9.97 750 | 4 | 43 | 8 | 5.5 | |
| 18 | 9.49 692 | 38 | 9.51 946 | 43 | 0.48 054 | 9.97 746 | 4 | 42 | 9 | 6.2 | |
| 19 | 9.49 730 | 38 | 9.51 988 | 42 | 0.48 012 | 9.97 742 | 4 | 41 | 10 | 6.8 | |
| 20 | 9.49 768 | 38 | 9.52 031 | 43 | 0.47 969 | 9.97 738 | 4 | 40 | 20 | 13.7 | |
| 21 | 9.49 806 | 38 | 9.52 073 | 42 | 0.47 927 | 9.97 734 | 4 | 39 | 30 | 20.5 | |
| 22 | 9.49 844 | 38 | 9.52 115 | 42 | 0.47 885 | 9.97 729 | 5 | 38 | 40 | 27.3 | |
| 23 | 9.49 882 | 38 | 9.52 157 | 42 | 0.47 843 | 9.97 725 | 4 | 37 | 50 | 34.2 | |
| 24 | 9.49 920 | 38 | 9.52 200 | 43 | 0.47 800 | 9.97 721 | 4 | 36 | | | |
| 25 | 9.49 958 | 38 | 9.52 242 | 42 | 0.47 758 | 9.97 717 | 4 | 35 | | | |
| 26 | 9.49 996 | 38 | 9.52 284 | 42 | 0.47 716 | 9.97 713 | 4 | 34 | | | |
| 27 | 9.50 034 | 38 | 9.52 326 | 42 | 0.47 674 | 9.97 708 | 5 | 33 | 6 | 3.9 | 3.8 |
| 28 | 9.50 072 | 38 | 9.52 368 | 42 | 0.47 632 | 9.97 704 | 4 | 32 | 7 | 4.6 | 4.4 |
| 29 | 9.50 110 | 38 | 9.52 410 | 42 | 0.47 590 | 9.97 700 | 4 | 31 | 8 | 5.2 | 5.1 |
| 30 | 9.50 148 | 38 | 9.52 452 | 42 | 0.47 548 | 9.97 696 | 4 | 30 | 9 | 5.9 | 5.7 |
| 31 | 9.50 185 | 37 | 9.52 494 | 42 | 0.47 506 | 9.97 691 | 5 | 29 | 10 | 6.5 | 6.3 |
| 32 | 9.50 223 | 38 | 9.52 536 | 42 | 0.47 464 | 9.97 687 | 4 | 28 | 20 | 13.0 | 12.7 |
| 33 | 9.50 261 | 38 | 9.52 578 | 42 | 0.47 422 | 9.97 683 | 4 | 27 | 30 | 19.5 | 19.0 |
| 34 | 9.50 298 | 37 | 9.52 620 | 42 | 0.47 380 | 9.97 679 | 4 | 26 | 40 | 26.0 | 25.3 |
| 35 | 9.50 336 | 38 | 9.52 661 | 41 | 0.47 339 | 9.97 674 | 5 | 25 | 50 | 32.5 | 31.7 |
| 36 | 9.50 374 | 38 | 9.52 703 | 42 | 0.47 297 | 9.97 670 | 4 | 24 | | | |
| 37 | 9.50 411 | 37 | 9.52 745 | 42 | 0.47 255 | 9.97 666 | 4 | 23 | | | |
| 38 | 9.50 449 | 38 | 9.52 787 | 42 | 0.47 213 | 9.97 662 | 4 | 22 | | | |
| 39 | 9.50 486 | 37 | 9.52 829 | 42 | 0.47 171 | 9.97 657 | 5 | 21 | 6 | 3.7 | 3.6 |
| 40 | 9.50 523 | 37 | 9.52 870 | 41 | 0.47 130 | 9.97 653 | 4 | 20 | 7 | 4.3 | 4.2 |
| 41 | 9.50 561 | 38 | 9.52 912 | 42 | 0.47 088 | 9.97 649 | 4 | 19 | 8 | 4.9 | 4.8 |
| 42 | 9.50 598 | 37 | 9.52 953 | 41 | 0.47 047 | 9.97 645 | 4 | 18 | 9 | 5.6 | 5.4 |
| 43 | 9.50 635 | 37 | 9.52 995 | 42 | 0.47 005 | 9.97 640 | 5 | 17 | 10 | 6.2 | 6.0 |
| 44 | 9.50 673 | 38 | 9.53 037 | 42 | 0.46 963 | 9.97 636 | 4 | 16 | 20 | 12.3 | 12.0 |
| 45 | 9.50 710 | 37 | 9.53 078 | 41 | 0.46 922 | 9.97 632 | 4 | 15 | 30 | 18.5 | 18.0 |
| 46 | 9.50 747 | 37 | 9.53 120 | 42 | 0.46 880 | 9.97 628 | 4 | 14 | 40 | 24.7 | 24.0 |
| 47 | 9.50 784 | 37 | 9.53 161 | 41 | 0.46 839 | 9.97 623 | 5 | 13 | 50 | 30.8 | 30.0 |
| 48 | 9.50 821 | 37 | 9.53 202 | 41 | 0.46 798 | 9.97 619 | 4 | 12 | | | |
| 49 | 9.50 858 | 37 | 9.53 244 | 42 | 0.46 756 | 9.97 615 | 4 | 11 | | | |
| 50 | 9.50 896 | 38 | 9.53 285 | 41 | 0.46 715 | 9.97 610 | 5 | 10 | | 5 | 4 |
| 51 | 9.50 933 | 37 | 9.53 327 | 42 | 0.46 673 | 9.97 606 | 4 | 9 | 6 | 0.5 | 0.5 |
| 52 | 9.50 970 | 37 | 9.53 368 | 42 | 0.46 632 | 9.97 602 | 4 | 8 | 7 | 0.6 | 0.4 |
| 53 | 9.51 007 | 37 | 9.53 409 | 41 | 0.46 591 | 9.97 597 | 5 | 7 | 8 | 0.7 | 0.5 |
| 54 | 9.51 043 | 36 | 9.53 450 | 41 | 0.46 550 | 9.97 593 | 4 | 6 | 9 | 0.8 | 0.6 |
| 55 | 9.51 080 | 37 | 9.53 492 | 42 | 0.46 508 | 9.97 589 | 4 | 5 | 10 | 0.8 | 0.7 |
| 56 | 9.51 117 | 37 | 9.53 533 | 41 | 0.46 467 | 9.97 584 | 5 | 4 | 20 | 1.7 | 1.3 |
| 57 | 9.51 154 | 37 | 9.53 574 | 41 | 0.46 426 | 9.97 580 | 4 | 3 | 30 | 2.5 | 2.0 |
| 58 | 9.51 191 | 37 | 9.53 615 | 41 | 0.46 385 | 9.97 576 | 4 | 2 | 40 | 3.3 | 2.7 |
| 59 | 9.51 227 | 36 | 9.53 656 | 41 | 0.46 344 | 9.97 571 | 5 | 1 | 50 | 4.2 | 3.3 |
| 60 | 9.51 264 | 37 | 9.53 697 | 41 | 0.46 303 | 9.97 567 | 4 | 0 | | | |

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. |
|-----------|----------------|-----------|-----------------|--------------|-----------------|----------------|-----------|-----------|-------------------|
| 0 | 9.51 264 | | 9.53 697 | | 0.46 303 | 9.97 567 | | 60 | |
| 1 | 9.51 301 | 37 | 9.53 738 | 41 | 0.46 262 | 9.97 563 | 4 | 59 | |
| 2 | 9.51 338 | 37 | 9.53 779 | 41 | 0.46 221 | 9.97 558 | 5 | 58 | |
| 3 | 9.51 374 | 36 | 9.53 820 | 41 | 0.46 180 | 9.97 554 | 4 | 57 | 6 4.1 4.0 |
| 4 | 9.51 411 | 37 | 9.53 861 | 41 | 0.46 139 | 9.97 550 | 4 | 56 | 7 4.8 4.7 |
| | | 36 | | 41 | | | 5 | | 8 5.5 5.3 |
| 5 | 9.51 447 | 37 | 9.53 902 | 41 | 0.46 098 | 9.97 545 | 4 | 55 | 9 6.2 6.0 |
| 6 | 9.51 484 | 36 | 9.53 943 | 41 | 0.46 057 | 9.97 541 | 5 | 54 | 10 6.8 6.7 |
| 7 | 9.51 520 | 37 | 9.53 984 | 41 | 0.46 016 | 9.97 536 | 4 | 53 | 20 13.7 13.3 |
| 8 | 9.51 557 | 37 | 9.54 025 | 41 | 0.45 975 | 9.97 532 | 4 | 52 | 30 20.5 20.0 |
| 9 | 9.51 593 | 36 | 9.54 065 | 40 | 0.45 935 | 9.97 528 | 4 | 51 | 40 27.3 26.7 |
| | | 36 | | 41 | | | 5 | | 50 34.2 33.3 |
| 10 | 9.51 629 | | 9.54 106 | | 0.45 894 | 9.97 523 | | 50 | |
| 11 | 9.51 666 | 37 | 9.54 147 | 41 | 0.45 853 | 9.97 519 | 4 | 49 | |
| 12 | 9.51 702 | 36 | 9.54 187 | 40 | 0.45 813 | 9.97 515 | 4 | 48 | |
| 13 | 9.51 738 | 36 | 9.54 228 | 41 | 0.45 772 | 9.97 510 | 5 | 47 | |
| 14 | 9.51 774 | 36 | 9.54 269 | 41 | 0.45 731 | 9.97 506 | 4 | 46 | 39 |
| | | 37 | | 40 | | | 5 | | 6 3.9 |
| 15 | 9.51 811 | 36 | 9.54 309 | 41 | 0.45 691 | 9.97 501 | 4 | 45 | 7 4.6 |
| 16 | 9.51 847 | 36 | 9.54 350 | 41 | 0.45 650 | 9.97 497 | 5 | 44 | 8 5.2 |
| 17 | 9.51 883 | 36 | 9.54 390 | 40 | 0.45 610 | 9.97 492 | 4 | 43 | 9 5.9 |
| 18 | 9.51 919 | 36 | 9.54 431 | 41 | 0.45 569 | 9.97 488 | 4 | 42 | 10 6.5 |
| 19 | 9.51 955 | 36 | 9.54 471 | 40 | 0.45 529 | 9.97 484 | 4 | 41 | 20 13.0 |
| | | 36 | | 41 | | | 5 | | 30 19.5 |
| 20 | 9.51 991 | | 9.54 512 | | 0.45 488 | 9.97 479 | | 40 | |
| 21 | 9.52 027 | 36 | 9.54 552 | 40 | 0.45 448 | 9.97 475 | 4 | 39 | 40 26.0 |
| 22 | 9.52 063 | 36 | 9.54 593 | 41 | 0.45 407 | 9.97 470 | 5 | 38 | 50 32.5 |
| 23 | 9.52 099 | 36 | 9.54 633 | 40 | 0.45 367 | 9.97 466 | 4 | 37 | |
| 24 | 9.52 135 | 36 | 9.54 673 | 40 | 0.45 327 | 9.97 461 | 5 | 36 | |
| | | 36 | | 41 | | | 4 | | 35 |
| 25 | 9.52 171 | 36 | 9.54 714 | 40 | 0.45 286 | 9.97 457 | 4 | 34 | 6 3.7 3.6 |
| 26 | 9.52 207 | 35 | 9.54 754 | 40 | 0.45 246 | 9.97 453 | 5 | 33 | 7 4.3 4.2 |
| 27 | 9.52 242 | 36 | 9.54 794 | 41 | 0.45 206 | 9.97 448 | 4 | 32 | 8 4.9 4.8 |
| 28 | 9.52 278 | 36 | 9.54 835 | 41 | 0.45 165 | 9.97 444 | 5 | 31 | 9 5.6 5.4 |
| 29 | 9.52 314 | 36 | 9.54 875 | 40 | 0.45 125 | 9.97 439 | 4 | 30 | 10 6.2 6.0 |
| | | 36 | | 40 | | | 5 | | 20 12.3 12.0 |
| 30 | 9.52 350 | | 9.54 915 | | 0.45 085 | 9.97 435 | | 30 | |
| 31 | 9.52 385 | 35 | 9.54 955 | 40 | 0.45 045 | 9.97 430 | 4 | 29 | 30 18.5 18.0 |
| 32 | 9.52 421 | 36 | 9.54 995 | 40 | 0.45 005 | 9.97 426 | 4 | 28 | 40 24.7 24.0 |
| 33 | 9.52 456 | 35 | 9.55 035 | 40 | 0.44 965 | 9.97 421 | 5 | 27 | 50 30.8 30.0 |
| 34 | 9.52 492 | 36 | 9.55 075 | 40 | 0.44 925 | 9.97 417 | 4 | 26 | |
| | | 35 | | 40 | | | 5 | | 25 |
| 35 | 9.52 527 | 36 | 9.55 115 | 40 | 0.44 885 | 9.97 412 | 4 | 24 | |
| 36 | 9.52 563 | 36 | 9.55 155 | 40 | 0.44 845 | 9.97 408 | 5 | 23 | 6 3.5 3.4 |
| 37 | 9.52 598 | 35 | 9.55 195 | 40 | 0.44 805 | 9.97 403 | 4 | 22 | 7 4.1 4.0 |
| 38 | 9.52 634 | 36 | 9.55 235 | 40 | 0.44 765 | 9.97 399 | 5 | 21 | 8 4.7 4.5 |
| 39 | 9.52 669 | 35 | 9.55 275 | 40 | 0.44 725 | 9.97 394 | 4 | 20 | 9 5.3 5.1 |
| | | 36 | | 40 | | | 5 | | 10 5.8 5.7 |
| 40 | 9.52 705 | | 9.55 315 | | 0.44 685 | 9.97 390 | | 20 | |
| 41 | 9.52 740 | 35 | 9.55 355 | 40 | 0.44 645 | 9.97 385 | 4 | 19 | 20 11.7 11.3 |
| 42 | 9.52 775 | 35 | 9.55 395 | 40 | 0.44 605 | 9.97 381 | 5 | 18 | 30 17.5 17.0 |
| 43 | 9.52 811 | 36 | 9.55 434 | 39 | 0.44 566 | 9.97 376 | 4 | 17 | 40 23.3 22.7 |
| 44 | 9.52 846 | 35 | 9.55 474 | 40 | 0.44 526 | 9.97 372 | 4 | 16 | 50 29.2 28.3 |
| | | 35 | | 40 | | | 5 | | 15 |
| 45 | 9.52 881 | 35 | 9.55 514 | 40 | 0.44 486 | 9.97 367 | 4 | 14 | |
| 46 | 9.52 916 | 35 | 9.55 554 | 40 | 0.44 446 | 9.97 363 | 5 | 13 | |
| 47 | 9.52 951 | 35 | 9.55 593 | 39 | 0.44 407 | 9.97 358 | 4 | 12 | |
| 48 | 9.52 986 | 35 | 9.55 633 | 40 | 0.44 367 | 9.97 353 | 5 | 11 | |
| 49 | 9.53 021 | 35 | 9.55 673 | 40 | 0.44 327 | 9.97 349 | 4 | 10 | 6 0.5 0.4 |
| | | 35 | | 39 | | | 5 | | 7 0.6 0.5 |
| 50 | 9.53 056 | | 9.55 712 | | 0.44 288 | 9.97 344 | | 10 | |
| 51 | 9.53 092 | 36 | 9.55 752 | 40 | 0.44 248 | 9.97 340 | 4 | 9 | 8 0.7 0.5 |
| 52 | 9.53 126 | 34 | 9.55 791 | 39 | 0.44 209 | 9.97 335 | 5 | 8 | 9 0.8 0.6 |
| 53 | 9.53 161 | 35 | 9.55 831 | 40 | 0.44 169 | 9.97 331 | 4 | 7 | 10 0.8 0.7 |
| 54 | 9.53 196 | 35 | 9.55 870 | 39 | 0.44 130 | 9.97 326 | 5 | 6 | 20 1.7 1.3 |
| | | 35 | | 40 | | | 4 | | 30 2.5 2.0 |
| 55 | 9.53 231 | 35 | 9.55 910 | 39 | 0.44 090 | 9.97 322 | 5 | 5 | 40 3.3 2.7 |
| 56 | 9.53 266 | 35 | 9.55 949 | 39 | 0.44 051 | 9.97 317 | 4 | 4 | 50 4.2 3.3 |
| 57 | 9.53 301 | 35 | 9.55 989 | 40 | 0.44 011 | 9.97 312 | 5 | 3 | |
| 58 | 9.53 336 | 35 | 9.56 028 | 39 | 0.43 972 | 9.97 308 | 4 | 2 | |
| 59 | 9.53 370 | 34 | 9.56 067 | 39 | 0.43 933 | 9.97 303 | 5 | 1 | |
| | | 35 | | 40 | | | 4 | | 0 |
| 60 | 9.53 405 | | 9.56 107 | | 0.43 893 | 9.97 299 | | 0 | |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | ∕ | Prop. Pts. |

| ✓ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | Prop. Pts. |
|----|----------|----|----------|-------|----------|----------|----|------------|
| 0 | 9.53 405 | | 9.56 107 | | 0.43 893 | 9.97 299 | | 60 |
| 1 | 9.53 440 | 35 | 9.56 146 | 39 | 0.43 854 | 9.97 294 | 5 | 59 |
| 2 | 9.53 475 | 35 | 9.56 185 | 39 | 0.43 815 | 9.97 289 | 5 | 58 |
| 3 | 9.53 509 | 34 | 9.56 224 | 39 | 0.43 776 | 9.97 285 | 4 | 57 |
| 4 | 9.53 544 | 35 | 9.56 264 | 40 | 0.43 736 | 9.97 280 | 5 | 56 |
| 5 | 9.53 578 | 34 | 9.56 303 | 39 | 0.43 697 | 9.97 276 | 4 | 55 |
| 6 | 9.53 613 | 35 | 9.56 342 | 39 | 0.43 658 | 9.97 271 | 5 | 54 |
| 7 | 9.53 647 | 34 | 9.56 381 | 39 | 0.43 619 | 9.97 266 | 5 | 53 |
| 8 | 9.53 682 | 35 | 9.56 420 | 39 | 0.43 580 | 9.97 262 | 4 | 52 |
| 9 | 9.53 716 | 34 | 9.56 459 | 39 | 0.43 541 | 9.97 257 | 5 | 51 |
| 10 | 9.53 751 | 35 | 9.56 498 | 39 | 0.43 502 | 9.97 252 | 5 | 50 |
| 11 | 9.53 785 | 34 | 9.56 537 | 39 | 0.43 463 | 9.97 248 | 4 | 49 |
| 12 | 9.53 819 | 34 | 9.56 576 | 39 | 0.43 424 | 9.97 243 | 5 | 48 |
| 13 | 9.53 854 | 35 | 9.56 615 | 39 | 0.43 385 | 9.97 238 | 5 | 47 |
| 14 | 9.53 888 | 34 | 9.56 654 | 39 | 0.43 346 | 9.97 234 | 4 | 46 |
| 15 | 9.53 922 | 34 | 9.56 693 | 39 | 0.43 307 | 9.97 229 | 5 | 45 |
| 16 | 9.53 957 | 35 | 9.56 732 | 39 | 0.43 268 | 9.97 224 | 4 | 44 |
| 17 | 9.53 991 | 34 | 9.56 771 | 39 | 0.43 229 | 9.97 220 | 5 | 43 |
| 18 | 9.54 025 | 34 | 9.56 810 | 39 | 0.43 190 | 9.97 215 | 5 | 42 |
| 19 | 9.54 059 | 34 | 9.56 849 | 39 | 0.43 151 | 9.97 210 | 5 | 41 |
| 20 | 9.54 093 | 34 | 9.56 887 | 38 | 0.43 113 | 9.97 206 | 4 | 40 |
| 21 | 9.54 127 | 34 | 9.56 926 | 39 | 0.43 074 | 9.97 201 | 5 | 39 |
| 22 | 9.54 161 | 34 | 9.56 965 | 39 | 0.43 035 | 9.97 196 | 5 | 38 |
| 23 | 9.54 195 | 34 | 9.57 004 | 39 | 0.42 996 | 9.97 192 | 5 | 37 |
| 24 | 9.54 229 | 34 | 9.57 042 | 38 | 0.42 958 | 9.97 187 | 4 | 36 |
| 25 | 9.54 263 | 34 | 9.57 081 | 39 | 0.42 919 | 9.97 182 | 5 | 35 |
| 26 | 9.54 297 | 34 | 9.57 120 | 39 | 0.42 880 | 9.97 178 | 4 | 34 |
| 27 | 9.54 331 | 34 | 9.57 158 | 38 | 0.42 842 | 9.97 173 | 5 | 33 |
| 28 | 9.54 365 | 34 | 9.57 197 | 39 | 0.42 803 | 9.97 168 | 5 | 32 |
| 29 | 9.54 399 | 34 | 9.57 235 | 38 | 0.42 765 | 9.97 163 | 5 | 31 |
| 30 | 9.54 433 | 34 | 9.57 274 | 39 | 0.42 726 | 9.97 159 | 4 | 30 |
| 31 | 9.54 466 | 33 | 9.57 312 | 38 | 0.42 688 | 9.97 154 | 5 | 29 |
| 32 | 9.54 500 | 34 | 9.57 351 | 39 | 0.42 649 | 9.97 149 | 5 | 28 |
| 33 | 9.54 534 | 34 | 9.57 389 | 38 | 0.42 611 | 9.97 145 | 4 | 27 |
| 34 | 9.54 567 | 33 | 9.57 428 | 39 | 0.42 572 | 9.97 140 | 5 | 26 |
| 35 | 9.54 601 | 34 | 9.57 466 | 38 | 0.42 534 | 9.97 135 | 5 | 25 |
| 36 | 9.54 635 | 34 | 9.57 504 | 38 | 0.42 496 | 9.97 130 | 5 | 24 |
| 37 | 9.54 668 | 33 | 9.57 543 | 39 | 0.42 457 | 9.97 126 | 4 | 23 |
| 38 | 9.54 702 | 34 | 9.57 581 | 38 | 0.42 419 | 9.97 121 | 5 | 22 |
| 39 | 9.54 735 | 33 | 9.57 619 | 38 | 0.42 381 | 9.97 116 | 5 | 21 |
| 40 | 9.54 769 | 34 | 9.57 658 | 39 | 0.42 342 | 9.97 111 | 5 | 20 |
| 41 | 9.54 802 | 33 | 9.57 696 | 38 | 0.42 304 | 9.97 107 | 4 | 19 |
| 42 | 9.54 836 | 34 | 9.57 734 | 38 | 0.42 266 | 9.97 102 | 5 | 18 |
| 43 | 9.54 869 | 33 | 9.57 772 | 38 | 0.42 228 | 9.97 097 | 5 | 17 |
| 44 | 9.54 903 | 34 | 9.57 810 | 38 | 0.42 190 | 9.97 092 | 5 | 16 |
| 45 | 9.54 936 | 33 | 9.57 849 | 39 | 0.42 151 | 9.97 087 | 5 | 15 |
| 46 | 9.54 969 | 33 | 9.57 887 | 38 | 0.42 113 | 9.97 083 | 4 | 14 |
| 47 | 9.55 003 | 34 | 9.57 925 | 38 | 0.42 075 | 9.97 078 | 5 | 13 |
| 48 | 9.55 036 | 33 | 9.57 963 | 38 | 0.42 037 | 9.97 073 | 5 | 12 |
| 49 | 9.55 069 | 33 | 9.58 001 | 38 | 0.41 999 | 9.97 068 | 5 | 11 |
| 50 | 9.55 102 | 33 | 9.58 039 | 38 | 0.41 961 | 9.97 063 | 5 | 10 |
| 51 | 9.55 136 | 34 | 9.58 077 | 38 | 0.41 923 | 9.97 059 | 4 | 9 |
| 52 | 9.55 169 | 33 | 9.58 115 | 38 | 0.41 885 | 9.97 054 | 5 | 8 |
| 53 | 9.55 202 | 33 | 9.58 153 | 38 | 0.41 847 | 9.97 049 | 5 | 7 |
| 54 | 9.55 235 | 33 | 9.58 191 | 38 | 0.41 809 | 9.97 044 | 5 | 6 |
| 55 | 9.55 268 | 33 | 9.58 229 | 38 | 0.41 771 | 9.97 039 | 5 | 5 |
| 56 | 9.55 301 | 33 | 9.58 267 | 38 | 0.41 733 | 9.97 035 | 4 | 4 |
| 57 | 9.55 334 | 33 | 9.58 304 | 37 | 0.41 696 | 9.97 030 | 5 | 3 |
| 58 | 9.55 367 | 33 | 9.58 342 | 38 | 0.41 658 | 9.97 025 | 5 | 2 |
| 59 | 9.55 400 | 33 | 9.58 380 | 38 | 0.41 620 | 9.97 020 | 5 | 1 |
| 60 | 9.55 433 | 33 | 9.58 418 | 38 | 0.41 582 | 9.97 015 | 5 | 0 |

| ✓ | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | Prop. Pts. |
|----|---------|----|----------|-------|----------|---------|----|------------|
| 6 | 4.0 | | 3.9 | | | | | 39 |
| 7 | 4.0 | | 3.9 | | | | | 4.6 |
| 8 | 5.3 | | 5.2 | | | | | 5.2 |
| 9 | 6.0 | | 5.9 | | | | | 6.5 |
| 10 | 6.7 | | 6.5 | | | | | 13.0 |
| 20 | 13.3 | | 13.0 | | | | | 19.5 |
| 30 | 20.0 | | 19.5 | | | | | 26.0 |
| 40 | 26.7 | | 26.0 | | | | | 32.5 |
| 50 | 33.3 | | 32.5 | | | | | 37 |
| 6 | 3.8 | | 3.7 | | | | | 4.3 |
| 7 | 4.4 | | 4.3 | | | | | 4.9 |
| 8 | 5.1 | | 4.9 | | | | | 5.6 |
| 9 | 5.7 | | 5.6 | | | | | 6.2 |
| 10 | 6.3 | | 6.2 | | | | | 12.7 |
| 20 | 12.7 | | 12.3 | | | | | 18.5 |
| 30 | 19.0 | | 18.5 | | | | | 24.7 |
| 40 | 25.3 | | 24.7 | | | | | 30.8 |
| 50 | 31.7 | | 30.8 | | | | | 35 |
| 6 | 3.5 | | 3.5 | | | | | 4.1 |
| 7 | 4.1 | | 4.1 | | | | | 4.7 |
| 8 | 4.7 | | 4.7 | | | | | 5.3 |
| 9 | 5.3 | | 5.3 | | | | | 5.8 |
| 10 | 5.8 | | 5.8 | | | | | 11.7 |
| 20 | 11.7 | | 11.7 | | | | | 17.5 |
| 30 | 17.5 | | 17.5 | | | | | 23.3 |
| 40 | 23.3 | | 23.3 | | | | | 29.2 |
| 50 | 29.2 | | 29.2 | | | | | 33 |
| 6 | 3.4 | | 3.3 | | | | | 3.9 |
| 7 | 4.0 | | 3.9 | | | | | 4.4 |
| 8 | 4.5 | | 4.4 | | | | | 5.0 |
| 9 | 5.1 | | 5.0 | | | | | 5.5 |
| 10 | 5.7 | | 5.5 | | | | | 11.0 |
| 20 | 11.3 | | 11.0 | | | | | 16.5 |
| 30 | 17.0 | | 16.5 | | | | | 22.0 |
| 40 | 22.7 | | 22.0 | | | | | 27.5 |
| 50 | 28.3 | | 27.5 | | | | | 5 |
| 6 | 0.5 | | 0.4 | | | | | 0.5 |
| 7 | 0.6 | | 0.5 | | | | | 0.5 |
| 8 | 0.7 | | 0.5 | | | | | 0.6 |
| 9 | 0.8 | | 0.6 | | | | | 0.7 |
| 10 | 0.8 | | 0.7 | | | | | 1.3 |
| 20 | 1.7 | | 1.3 | | | | | 2.0 |
| 30 | 2.5 | | 2.0 | | | | | 2.7 |
| 40 | 3.3 | | 2.7 | | | | | 3.3 |
| 50 | 4.2 | | 3.3 | | | | | |

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. | | |
|-----------|----------|----|----------|-------|----------|----------|----|-----------|------------|------|------|
| 0 | 9.55 433 | | 9.58 418 | | 0.41 582 | 9.97 015 | | 60 | | | |
| 1 | 9.55 466 | 33 | 9.58 455 | 37 | 0.41 545 | 9.97 010 | 5 | 59 | | | |
| 2 | 9.55 499 | 33 | 9.58 493 | 38 | 0.41 507 | 9.97 005 | 5 | 58 | | 38 | 37 |
| 3 | 9.55 532 | 33 | 9.58 531 | 38 | 0.41 469 | 9.97 001 | 4 | 57 | 6 | 3.8 | 3.7 |
| 4 | 9.55 564 | 32 | 9.58 569 | 38 | 0.41 431 | 9.96 996 | 5 | 56 | 7 | 4.4 | 4.3 |
| | | 33 | | 37 | | | 5 | | 8 | 5.1 | 4.9 |
| 5 | 9.55 597 | | 9.58 606 | | 0.41 394 | 9.96 991 | | 55 | 9 | 5.7 | 5.6 |
| 6 | 9.55 630 | 33 | 9.58 644 | 38 | 0.41 356 | 9.96 986 | 5 | 54 | 10 | 6.3 | 6.2 |
| 7 | 9.55 663 | 33 | 9.58 681 | 37 | 0.41 319 | 9.96 981 | 5 | 53 | 20 | 12.7 | 12.3 |
| 8 | 9.55 695 | 32 | 9.58 719 | 38 | 0.41 281 | 9.96 976 | 5 | 52 | 30 | 19.0 | 18.5 |
| 9 | 9.55 728 | 33 | 9.58 757 | 38 | 0.41 243 | 9.96 971 | 5 | 51 | 40 | 25.3 | 24.7 |
| | | 33 | | 37 | | | 5 | | 50 | 31.7 | 30.8 |
| 10 | 9.55 761 | | 9.58 794 | | 0.41 206 | 9.96 966 | | 50 | | | |
| 11 | 9.55 793 | 32 | 9.58 832 | 38 | 0.41 168 | 9.96 962 | 4 | 49 | | | |
| 12 | 9.55 826 | 33 | 9.58 869 | 37 | 0.41 131 | 9.96 957 | 5 | 48 | | | |
| 13 | 9.55 858 | 32 | 9.58 907 | 38 | 0.41 093 | 9.96 952 | 5 | 47 | | | |
| 14 | 9.55 891 | 33 | 9.58 944 | 37 | 0.41 056 | 9.96 947 | 5 | 46 | | | |
| | | 32 | | 37 | | | 5 | | | 36 | 33 |
| 15 | 9.55 923 | | 9.58 981 | | 0.41 019 | 9.96 942 | | 45 | 6 | 3.6 | 3.3 |
| 16 | 9.55 956 | 33 | 9.59 019 | 38 | 0.40 981 | 9.96 937 | 5 | 44 | 7 | 4.2 | 3.9 |
| 17 | 9.55 988 | 32 | 9.59 056 | 37 | 0.40 944 | 9.96 932 | 5 | 43 | 8 | 4.8 | 4.4 |
| 18 | 9.56 021 | 33 | 9.59 094 | 38 | 0.40 906 | 9.96 927 | 5 | 42 | 9 | 5.4 | 5.0 |
| 19 | 9.56 053 | 32 | 9.59 131 | 37 | 0.40 869 | 9.96 922 | 5 | 41 | 10 | 6.0 | 5.5 |
| | | 32 | | 37 | | | 5 | | 20 | 12.0 | 11.0 |
| 20 | 9.56 085 | | 9.59 168 | | 0.40 832 | 9.96 917 | | 40 | 30 | 18.0 | 16.5 |
| 21 | 9.56 118 | 33 | 9.59 205 | 37 | 0.40 795 | 9.96 912 | 5 | 39 | 40 | 24.0 | 22.0 |
| 22 | 9.56 150 | 32 | 9.59 243 | 38 | 0.40 757 | 9.96 907 | 5 | 38 | 50 | 30.0 | 27.5 |
| 23 | 9.56 182 | 32 | 9.59 280 | 37 | 0.40 720 | 9.96 903 | 4 | 37 | | | |
| 24 | 9.56 215 | 33 | 9.59 317 | 37 | 0.40 683 | 9.96 898 | 5 | 36 | | | |
| | | 32 | | 37 | | | 5 | | | | |
| 25 | 9.56 247 | | 9.59 354 | | 0.40 646 | 9.96 893 | | 35 | | | |
| 26 | 9.56 279 | 32 | 9.59 391 | 37 | 0.40 609 | 9.96 888 | 5 | 34 | | | |
| 27 | 9.56 311 | 32 | 9.59 429 | 38 | 0.40 571 | 9.96 883 | 5 | 33 | 6 | 3.2 | |
| 28 | 9.56 343 | 32 | 9.59 466 | 37 | 0.40 534 | 9.96 878 | 5 | 32 | 7 | 3.7 | |
| 29 | 9.56 375 | 32 | 9.59 503 | 37 | 0.40 497 | 9.96 873 | 5 | 31 | 8 | 4.3 | |
| | | 33 | | 37 | | | 5 | | 9 | 4.8 | |
| 30 | 9.56 408 | | 9.59 540 | | 0.40 460 | 9.96 868 | | 30 | 10 | 5.3 | |
| 31 | 9.56 440 | 32 | 9.59 577 | 37 | 0.40 423 | 9.96 863 | 5 | 29 | 20 | 10.7 | |
| 32 | 9.56 472 | 32 | 9.59 614 | 37 | 0.40 386 | 9.96 858 | 5 | 28 | 30 | 16.0 | |
| 33 | 9.56 504 | 32 | 9.59 651 | 37 | 0.40 349 | 9.96 853 | 5 | 27 | 40 | 21.3 | |
| 34 | 9.56 536 | 32 | 9.59 688 | 37 | 0.40 312 | 9.96 848 | 5 | 26 | 50 | 26.7 | |
| | | 32 | | 37 | | | 5 | | | | |
| 35 | 9.56 568 | | 9.59 725 | | 0.40 275 | 9.96 843 | | 25 | | | |
| 36 | 9.56 599 | 31 | 9.59 762 | 37 | 0.40 238 | 9.96 838 | 5 | 24 | | | |
| 37 | 9.56 631 | 32 | 9.59 799 | 37 | 0.40 201 | 9.96 833 | 5 | 23 | | | |
| 38 | 9.56 663 | 32 | 9.59 835 | 36 | 0.40 165 | 9.96 828 | 5 | 22 | | | |
| 39 | 9.56 695 | 32 | 9.59 872 | 37 | 0.40 128 | 9.96 823 | 5 | 21 | 6 | 3.1 | 0.6 |
| | | 32 | | 37 | | | 5 | | 7 | 3.6 | 0.7 |
| 40 | 9.56 727 | | 9.59 909 | | 0.40 091 | 9.96 818 | | 20 | 8 | 4.1 | 0.8 |
| 41 | 9.56 759 | 32 | 9.59 946 | 37 | 0.40 054 | 9.96 813 | 5 | 19 | 9 | 4.7 | 0.9 |
| 42 | 9.56 790 | 31 | 9.59 983 | 37 | 0.40 017 | 9.96 808 | 5 | 18 | 10 | 5.2 | 1.0 |
| 43 | 9.56 822 | 32 | 9.60 019 | 36 | 0.39 981 | 9.96 803 | 5 | 17 | 20 | 10.3 | 2.0 |
| 44 | 9.56 854 | 32 | 9.60 056 | 37 | 0.39 944 | 9.96 798 | 5 | 16 | 30 | 15.5 | 3.0 |
| | | 32 | | 37 | | | 5 | | 40 | 20.7 | 4.0 |
| 45 | 9.56 886 | | 9.60 093 | | 0.39 907 | 9.96 793 | | 15 | 50 | 25.8 | 5.0 |
| 46 | 9.56 917 | 31 | 9.60 130 | 37 | 0.39 870 | 9.96 788 | 5 | 14 | | | |
| 47 | 9.56 949 | 32 | 9.60 166 | 36 | 0.39 834 | 9.96 783 | 5 | 13 | | | |
| 48 | 9.56 980 | 31 | 9.60 203 | 37 | 0.39 797 | 9.96 778 | 5 | 12 | | | |
| 49 | 9.57 012 | 32 | 9.60 240 | 37 | 0.39 760 | 9.96 772 | 6 | 11 | | | |
| | | 32 | | 36 | | | 5 | | | | |
| 50 | 9.57 044 | | 9.60 276 | | 0.39 724 | 9.96 767 | | 10 | | | |
| 51 | 9.57 075 | 31 | 9.60 313 | 37 | 0.39 687 | 9.96 762 | 5 | 9 | 6 | 0.5 | 0.4 |
| 52 | 9.57 107 | 32 | 9.60 349 | 36 | 0.39 651 | 9.96 757 | 5 | 8 | 7 | 0.6 | 0.5 |
| 53 | 9.57 138 | 31 | 9.60 386 | 37 | 0.39 614 | 9.96 752 | 5 | 7 | 8 | 0.7 | 0.5 |
| 54 | 9.57 169 | 31 | 9.60 422 | 36 | 0.39 578 | 9.96 747 | 5 | 6 | 9 | 0.8 | 0.6 |
| | | 32 | | 37 | | | 5 | | 10 | 0.8 | 0.7 |
| 55 | 9.57 201 | | 9.60 459 | | 0.39 541 | 9.96 742 | | 5 | 20 | 1.7 | 1.3 |
| 56 | 9.57 232 | 31 | 9.60 495 | 36 | 0.39 505 | 9.96 737 | 5 | 4 | 30 | 2.5 | 2.0 |
| 57 | 9.57 264 | 32 | 9.60 532 | 37 | 0.39 468 | 9.96 732 | 5 | 3 | 40 | 3.3 | 2.7 |
| 58 | 9.57 295 | 31 | 9.60 568 | 36 | 0.39 432 | 9.96 727 | 5 | 2 | 50 | 4.2 | 3.3 |
| 59 | 9.57 326 | 31 | 9.60 605 | 37 | 0.39 395 | 9.96 722 | 5 | 1 | | | |
| | | 32 | | 36 | | | 5 | | | | |
| 60 | 9.57 358 | | 9.60 641 | | 0.39 359 | 9.96 717 | | 0 | | | |

| ° | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | Prop. Pts. |
|----|----------|----|----------|-------|----------|----------|----|------------|
| 0 | 9.57 358 | | 9.60 641 | | 0.39 359 | 9.96 717 | | 60 |
| 1 | 9.57 389 | 31 | 9.60 677 | 36 | 0.39 323 | 9.96 711 | 6 | 59 |
| 2 | 9.57 420 | 31 | 9.60 714 | 37 | 0.39 286 | 9.96 706 | 5 | 58 |
| 3 | 9.57 451 | 31 | 9.60 750 | 36 | 0.39 250 | 9.96 701 | 5 | 57 |
| 4 | 9.57 482 | 31 | 9.60 786 | 36 | 0.39 214 | 9.96 696 | 5 | 56 |
| 5 | 9.57 514 | 32 | 9.60 823 | 37 | 0.39 177 | 9.96 691 | 5 | 55 |
| 6 | 9.57 545 | 31 | 9.60 859 | 36 | 0.39 141 | 9.96 686 | 5 | 54 |
| 7 | 9.57 576 | 31 | 9.60 895 | 36 | 0.39 105 | 9.96 681 | 5 | 53 |
| 8 | 9.57 607 | 31 | 9.60 931 | 36 | 0.39 069 | 9.96 676 | 5 | 52 |
| 9 | 9.57 638 | 31 | 9.60 967 | 36 | 0.39 033 | 9.96 670 | 6 | 51 |
| 10 | 9.57 669 | 31 | 9.61 004 | 37 | 0.38 996 | 9.96 665 | 5 | 50 |
| 11 | 9.57 700 | 31 | 9.61 040 | 36 | 0.38 960 | 9.96 660 | 5 | 49 |
| 12 | 9.57 731 | 31 | 9.61 076 | 36 | 0.38 924 | 9.96 655 | 5 | 48 |
| 13 | 9.57 762 | 31 | 9.61 112 | 36 | 0.38 888 | 9.96 650 | 5 | 47 |
| 14 | 9.57 793 | 31 | 9.61 148 | 36 | 0.38 852 | 9.96 645 | 5 | 46 |
| 15 | 9.57 824 | 31 | 9.61 184 | 36 | 0.38 816 | 9.96 640 | 5 | 45 |
| 16 | 9.57 855 | 31 | 9.61 220 | 36 | 0.38 780 | 9.96 634 | 6 | 44 |
| 17 | 9.57 885 | 30 | 9.61 256 | 36 | 0.38 744 | 9.96 629 | 5 | 43 |
| 18 | 9.57 916 | 31 | 9.61 292 | 36 | 0.38 708 | 9.96 624 | 5 | 42 |
| 19 | 9.57 947 | 31 | 9.61 328 | 36 | 0.38 672 | 9.96 619 | 5 | 41 |
| 20 | 9.57 978 | 31 | 9.61 364 | 36 | 0.38 636 | 9.96 614 | 5 | 40 |
| 21 | 9.58 008 | 30 | 9.61 400 | 36 | 0.38 600 | 9.96 608 | 6 | 39 |
| 22 | 9.58 039 | 31 | 9.61 436 | 36 | 0.38 564 | 9.96 603 | 5 | 38 |
| 23 | 9.58 070 | 31 | 9.61 472 | 36 | 0.38 528 | 9.96 598 | 5 | 37 |
| 24 | 9.58 101 | 31 | 9.61 508 | 36 | 0.38 492 | 9.96 593 | 5 | 36 |
| 25 | 9.58 131 | 30 | 9.61 544 | 36 | 0.38 456 | 9.96 588 | 5 | 35 |
| 26 | 9.58 162 | 31 | 9.61 579 | 35 | 0.38 421 | 9.96 582 | 6 | 34 |
| 27 | 9.58 192 | 30 | 9.61 615 | 36 | 0.38 385 | 9.96 577 | 5 | 33 |
| 28 | 9.58 223 | 31 | 9.61 651 | 36 | 0.38 349 | 9.96 572 | 5 | 32 |
| 29 | 9.58 253 | 30 | 9.61 687 | 36 | 0.38 313 | 9.96 567 | 5 | 31 |
| 30 | 9.58 284 | 31 | 9.61 722 | 35 | 0.38 278 | 9.96 562 | 5 | 30 |
| 31 | 9.58 314 | 30 | 9.61 758 | 36 | 0.38 242 | 9.96 556 | 6 | 29 |
| 32 | 9.58 345 | 31 | 9.61 794 | 36 | 0.38 206 | 9.96 551 | 5 | 28 |
| 33 | 9.58 375 | 30 | 9.61 830 | 36 | 0.38 170 | 9.96 546 | 5 | 27 |
| 34 | 9.58 406 | 31 | 9.61 865 | 35 | 0.38 135 | 9.96 541 | 5 | 26 |
| 35 | 9.58 436 | 30 | 9.61 901 | 36 | 0.38 099 | 9.96 535 | 6 | 25 |
| 36 | 9.58 467 | 31 | 9.61 936 | 35 | 0.38 064 | 9.96 530 | 5 | 24 |
| 37 | 9.58 497 | 30 | 9.61 972 | 36 | 0.38 028 | 9.96 525 | 5 | 23 |
| 38 | 9.58 527 | 30 | 9.62 008 | 36 | 0.37 992 | 9.96 520 | 5 | 22 |
| 39 | 9.58 557 | 30 | 9.62 043 | 35 | 0.37 957 | 9.96 514 | 6 | 21 |
| 40 | 9.58 588 | 31 | 9.62 079 | 36 | 0.37 921 | 9.96 509 | 5 | 20 |
| 41 | 9.58 618 | 30 | 9.62 114 | 35 | 0.37 886 | 9.96 504 | 5 | 19 |
| 42 | 9.58 648 | 30 | 9.62 150 | 36 | 0.37 850 | 9.96 498 | 6 | 18 |
| 43 | 9.58 678 | 30 | 9.62 185 | 35 | 0.37 815 | 9.96 493 | 5 | 17 |
| 44 | 9.58 709 | 31 | 9.62 221 | 36 | 0.37 779 | 9.96 488 | 5 | 16 |
| 45 | 9.58 739 | 30 | 9.62 256 | 35 | 0.37 744 | 9.96 483 | 5 | 15 |
| 46 | 9.58 769 | 30 | 9.62 292 | 36 | 0.37 708 | 9.96 477 | 6 | 14 |
| 47 | 9.58 799 | 30 | 9.62 327 | 35 | 0.37 673 | 9.96 472 | 5 | 13 |
| 48 | 9.58 829 | 30 | 9.62 362 | 35 | 0.37 638 | 9.96 467 | 5 | 12 |
| 49 | 9.58 859 | 30 | 9.62 398 | 36 | 0.37 602 | 9.96 461 | 6 | 11 |
| 50 | 9.58 889 | 30 | 9.62 433 | 35 | 0.37 567 | 9.96 456 | 5 | 10 |
| 51 | 9.58 919 | 30 | 9.62 468 | 35 | 0.37 532 | 9.96 451 | 5 | 9 |
| 52 | 9.58 949 | 30 | 9.62 504 | 36 | 0.37 496 | 9.96 445 | 6 | 8 |
| 53 | 9.58 979 | 30 | 9.62 539 | 35 | 0.37 461 | 9.96 440 | 5 | 7 |
| 54 | 9.59 009 | 30 | 9.62 574 | 35 | 0.37 426 | 9.96 435 | 5 | 6 |
| 55 | 9.59 039 | 30 | 9.62 609 | 35 | 0.37 391 | 9.96 429 | 6 | 5 |
| 56 | 9.59 069 | 30 | 9.62 645 | 36 | 0.37 355 | 9.96 424 | 5 | 4 |
| 57 | 9.59 098 | 29 | 9.62 680 | 35 | 0.37 320 | 9.96 419 | 5 | 3 |
| 58 | 9.59 128 | 30 | 9.62 715 | 35 | 0.37 285 | 9.96 413 | 6 | 2 |
| 59 | 9.59 158 | 30 | 9.62 750 | 35 | 0.37 250 | 9.96 408 | 5 | 1 |
| 60 | 9.59 188 | 30 | 9.62 785 | 35 | 0.37 215 | 9.96 403 | 5 | 0 |

| L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | ° | Prop. Pts. |
|---------|----|----------|-------|----------|---------|----|---|------------|
|---------|----|----------|-------|----------|---------|----|---|------------|

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | ∕ | Prop. Pts. |
|-----------|----------------|-----------|-----------------|--------------|-----------------|----------------|-----------|-----------|-------------------|
| 0 | 9.59 188 | | 9.62 785 | | 0.37 215 | 9.96 403 | | 60 | |
| 1 | 9.59 218 | 30 | 9.62 820 | 35 | 0.37 180 | 9.96 397 | 6 | 59 | |
| 2 | 9.59 247 | 29 | 9.62 855 | 35 | 0.37 145 | 9.96 392 | 5 | 58 | 36 35 |
| 3 | 9.59 277 | 30 | 9.62 890 | 35 | 0.37 110 | 9.96 387 | 5 | 57 | 6 3.6 3.5 |
| 4 | 9.59 307 | 30 | 9.62 926 | 36 | 0.37 074 | 9.96 381 | 6 | 56 | 7 4.2 4.1 |
| | | 29 | | 35 | | | 5 | | 8 4.8 4.7 |
| 5 | 9.59 336 | 30 | 9.62 961 | 35 | 0.37 039 | 9.96 376 | 6 | 55 | 9 5.4 5.3 |
| 6 | 9.59 366 | 30 | 9.62 996 | 35 | 0.37 004 | 9.96 370 | 6 | 54 | 10 6.0 5.8 |
| 7 | 9.59 396 | 30 | 9.63 031 | 35 | 0.36 969 | 9.96 365 | 5 | 53 | 20 12.0 11.7 |
| 8 | 9.59 425 | 29 | 9.63 066 | 35 | 0.36 934 | 9.96 360 | 5 | 52 | 30 18.0 17.5 |
| 9 | 9.59 455 | 30 | 9.63 101 | 35 | 0.36 899 | 9.96 354 | 6 | 51 | 40 24.0 23.3 |
| | | 29 | | 34 | | | 5 | | 50 30.0 29.2 |
| 10 | 9.59 484 | 30 | 9.63 135 | 35 | 0.36 865 | 9.96 349 | 6 | 50 | |
| 11 | 9.59 514 | 30 | 9.63 170 | 35 | 0.36 830 | 9.96 343 | 6 | 49 | |
| 12 | 9.59 543 | 29 | 9.63 205 | 35 | 0.36 795 | 9.96 338 | 5 | 48 | |
| 13 | 9.59 573 | 30 | 9.63 240 | 35 | 0.36 760 | 9.96 333 | 5 | 47 | |
| 14 | 9.59 602 | 29 | 9.63 275 | 35 | 0.36 725 | 9.96 327 | 6 | 46 | 34 |
| | | 30 | | 35 | | | 5 | | 6 3.4 |
| 15 | 9.59 632 | 30 | 9.63 310 | 35 | 0.36 690 | 9.96 322 | 6 | 45 | 7 4.0 |
| 16 | 9.59 661 | 29 | 9.63 345 | 35 | 0.36 655 | 9.96 316 | 6 | 44 | 8 4.5 |
| 17 | 9.59 690 | 30 | 9.63 379 | 34 | 0.36 621 | 9.96 311 | 5 | 43 | 9 5.1 |
| 18 | 9.59 720 | 29 | 9.63 414 | 35 | 0.36 586 | 9.96 305 | 6 | 42 | 10 5.7 |
| 19 | 9.59 749 | 29 | 9.63 449 | 35 | 0.36 551 | 9.96 300 | 5 | 41 | 20 11.3 |
| | | 30 | | 35 | | | 6 | | 30 17.0 |
| 20 | 9.59 778 | 30 | 9.63 484 | 35 | 0.36 516 | 9.96 294 | 5 | 40 | 40 22.7 |
| 21 | 9.59 808 | 29 | 9.63 519 | 34 | 0.36 481 | 9.96 289 | 5 | 39 | 50 28.3 |
| 22 | 9.59 837 | 30 | 9.63 553 | 35 | 0.36 447 | 9.96 284 | 6 | 38 | |
| 23 | 9.59 866 | 29 | 9.63 588 | 35 | 0.36 412 | 9.96 278 | 6 | 37 | |
| 24 | 9.59 895 | 29 | 9.63 623 | 35 | 0.36 377 | 9.96 273 | 5 | 36 | |
| | | 30 | | 34 | | | 6 | | 6 3.0 2.9 |
| 25 | 9.59 924 | 30 | 9.63 657 | 35 | 0.36 343 | 9.96 267 | 5 | 35 | 7 3.5 3.4 |
| 26 | 9.59 954 | 29 | 9.63 692 | 34 | 0.36 308 | 9.96 262 | 6 | 34 | 8 4.0 3.9 |
| 27 | 9.59 983 | 29 | 9.63 726 | 34 | 0.36 274 | 9.96 256 | 6 | 33 | 9 4.5 4.4 |
| 28 | 9.60 012 | 29 | 9.63 761 | 35 | 0.36 239 | 9.96 251 | 5 | 32 | 10 5.0 4.8 |
| 29 | 9.60 041 | 29 | 9.63 796 | 35 | 0.36 204 | 9.96 245 | 6 | 31 | 20 10.0 9.7 |
| | | 30 | | 34 | | | 5 | | 30 15.0 14.5 |
| 30 | 9.60 070 | 29 | 9.63 830 | 34 | 0.36 170 | 9.96 240 | 5 | 30 | 40 20.0 19.3 |
| 31 | 9.60 099 | 29 | 9.63 865 | 35 | 0.36 135 | 9.96 234 | 6 | 29 | 50 25.0 24.2 |
| 32 | 9.60 128 | 29 | 9.63 899 | 34 | 0.36 101 | 9.96 229 | 5 | 28 | |
| 33 | 9.60 157 | 29 | 9.63 934 | 35 | 0.36 066 | 9.96 223 | 6 | 27 | |
| 34 | 9.60 186 | 29 | 9.63 968 | 34 | 0.36 032 | 9.96 218 | 5 | 26 | |
| | | 30 | | 35 | | | 6 | | 6 2.8 |
| 35 | 9.60 215 | 29 | 9.64 003 | 35 | 0.35 997 | 9.96 212 | 5 | 25 | 7 3.3 |
| 36 | 9.60 244 | 29 | 9.64 037 | 34 | 0.35 963 | 9.96 207 | 5 | 24 | 8 3.7 |
| 37 | 9.60 273 | 29 | 9.64 072 | 35 | 0.35 928 | 9.96 201 | 6 | 23 | 9 4.2 |
| 38 | 9.60 302 | 29 | 9.64 106 | 34 | 0.35 894 | 9.96 196 | 5 | 22 | 10 4.7 |
| 39 | 9.60 331 | 29 | 9.64 140 | 34 | 0.35 860 | 9.96 190 | 6 | 21 | 20 9.3 |
| | | 28 | | 35 | | | 5 | | 30 14.0 |
| 40 | 9.60 359 | 29 | 9.64 175 | 34 | 0.35 825 | 9.96 185 | 6 | 20 | 40 18.7 |
| 41 | 9.60 388 | 29 | 9.64 209 | 34 | 0.35 791 | 9.96 179 | 6 | 19 | 50 23.3 |
| 42 | 9.60 417 | 29 | 9.64 243 | 34 | 0.35 757 | 9.96 174 | 5 | 18 | |
| 43 | 9.60 446 | 29 | 9.64 278 | 35 | 0.35 722 | 9.96 168 | 6 | 17 | |
| 44 | 9.60 474 | 28 | 9.64 312 | 34 | 0.35 688 | 9.96 162 | 6 | 16 | |
| | | 29 | | 34 | | | 5 | | 6 2.8 |
| 45 | 9.60 503 | 29 | 9.64 346 | 34 | 0.35 654 | 9.96 157 | 5 | 15 | 7 3.3 |
| 46 | 9.60 532 | 29 | 9.64 381 | 35 | 0.35 619 | 9.96 151 | 6 | 14 | 8 3.7 |
| 47 | 9.60 561 | 29 | 9.64 415 | 34 | 0.35 585 | 9.96 146 | 5 | 13 | 9 4.2 |
| 48 | 9.60 589 | 28 | 9.64 449 | 34 | 0.35 551 | 9.96 140 | 6 | 12 | 10 4.7 |
| 49 | 9.60 618 | 29 | 9.64 483 | 34 | 0.35 517 | 9.96 135 | 5 | 11 | 20 9.3 |
| | | 28 | | 34 | | | 6 | | 30 14.0 |
| 50 | 9.60 646 | 29 | 9.64 517 | 34 | 0.35 483 | 9.96 129 | 6 | 10 | 40 18.7 |
| 51 | 9.60 675 | 29 | 9.64 552 | 35 | 0.35 448 | 9.96 123 | 6 | 9 | 50 23.3 |
| 52 | 9.60 704 | 29 | 9.64 586 | 34 | 0.35 414 | 9.96 118 | 5 | 8 | |
| 53 | 9.60 732 | 28 | 9.64 620 | 34 | 0.35 380 | 9.96 112 | 6 | 7 | |
| 54 | 9.60 761 | 29 | 9.64 654 | 34 | 0.35 346 | 9.96 107 | 5 | 6 | |
| | | 28 | | 34 | | | 6 | | 6 0.6 0.5 |
| 55 | 9.60 789 | 29 | 9.64 688 | 34 | 0.35 312 | 9.96 101 | 6 | 5 | 7 0.7 0.6 |
| 56 | 9.60 818 | 29 | 9.64 722 | 34 | 0.35 278 | 9.96 095 | 6 | 4 | 8 0.8 0.7 |
| 57 | 9.60 846 | 28 | 9.64 756 | 34 | 0.35 244 | 9.96 090 | 5 | 3 | 9 0.9 0.8 |
| 58 | 9.60 875 | 29 | 9.64 790 | 34 | 0.35 210 | 9.96 084 | 6 | 2 | 10 1.0 0.8 |
| 59 | 9.60 903 | 28 | 9.64 824 | 34 | 0.35 176 | 9.96 079 | 5 | 1 | 20 2.0 1.7 |
| | | 28 | | 34 | | | 6 | | 30 3.0 2.5 |
| 60 | 9.60 931 | 28 | 9.64 858 | 34 | 0.35 142 | 9.96 073 | 6 | 0 | 40 4.0 3.3 |
| | | | | | | | | | 50 5.0 4.2 |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | ∕ | Prop. Pts. |

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. |
|----|----------|----|----------|-------|----------|----------|----|----|--------------|
| 0 | 9.60 931 | | 9.64 858 | | 0.35 142 | 9.96 073 | | 60 | |
| 1 | 9.60 960 | 29 | 9.64 892 | 34 | 0.35 108 | 9.96 067 | 6 | 59 | |
| 2 | 9.60 988 | 28 | 9.64 926 | 34 | 0.35 074 | 9.96 062 | 5 | 58 | |
| 3 | 9.61 016 | 28 | 9.64 960 | 34 | 0.35 040 | 9.96 056 | 6 | 57 | 34 33 |
| 4 | 9.61 045 | 29 | 9.64 994 | 34 | 0.35 006 | 9.96 050 | 6 | 56 | 6 3.4 3.3 |
| | | 28 | | | | | 5 | | 7 4.0 3.9 |
| 5 | 9.61 073 | | 9.65 028 | 34 | 0.34 972 | 9.96 045 | 5 | 55 | 8 4.5 4.4 |
| 6 | 9.61 101 | 28 | 9.65 062 | 34 | 0.34 938 | 9.96 039 | 6 | 54 | 9 5.1 5.0 |
| 7 | 9.61 129 | 28 | 9.65 096 | 34 | 0.34 904 | 9.96 034 | 5 | 53 | 10 5.7 5.5 |
| 8 | 9.61 158 | 29 | 9.65 130 | 34 | 0.34 870 | 9.96 028 | 6 | 52 | 20 11.3 11.0 |
| 9 | 9.61 186 | 28 | 9.65 164 | 34 | 0.34 836 | 9.96 022 | 6 | 51 | 30 17.0 16.5 |
| | | 28 | | | | | 5 | | 40 22.7 22.0 |
| 10 | 9.61 214 | | 9.65 197 | 33 | 0.34 803 | 9.96 017 | 6 | 50 | 50 28.3 27.5 |
| 11 | 9.61 242 | 28 | 9.65 231 | 34 | 0.34 769 | 9.96 011 | 6 | 49 | |
| 12 | 9.61 270 | 28 | 9.65 265 | 34 | 0.34 735 | 9.96 005 | 6 | 48 | |
| 13 | 9.61 298 | 28 | 9.65 299 | 34 | 0.34 701 | 9.96 000 | 5 | 47 | |
| 14 | 9.61 326 | 28 | 9.65 333 | 34 | 0.34 667 | 9.95 994 | 6 | 46 | 29 |
| | | 28 | | | | | 6 | | 6 2.9 |
| 15 | 9.61 354 | | 9.65 366 | 33 | 0.34 634 | 9.95 988 | 6 | 45 | 7 3.4 |
| 16 | 9.61 382 | 28 | 9.65 400 | 34 | 0.34 600 | 9.95 982 | 6 | 44 | 8 3.9 |
| 17 | 9.61 411 | 29 | 9.65 434 | 34 | 0.34 566 | 9.95 977 | 5 | 43 | 9 4.4 |
| 18 | 9.61 438 | 27 | 9.65 467 | 33 | 0.34 533 | 9.95 971 | 6 | 42 | 10 4.8 |
| 19 | 9.61 466 | 28 | 9.65 501 | 34 | 0.34 499 | 9.95 965 | 6 | 41 | 20 9.7 |
| | | 28 | | | | | 5 | | 30 14.5 |
| 20 | 9.61 494 | | 9.65 535 | 33 | 0.34 465 | 9.95 960 | 6 | 40 | 40 19.3 |
| 21 | 9.61 522 | 28 | 9.65 568 | 34 | 0.34 432 | 9.95 954 | 6 | 39 | 50 24.2 |
| 22 | 9.61 550 | 28 | 9.65 602 | 34 | 0.34 398 | 9.95 948 | 6 | 38 | |
| 23 | 9.61 578 | 28 | 9.65 636 | 34 | 0.34 364 | 9.95 942 | 6 | 37 | |
| 24 | 9.61 606 | 28 | 9.65 669 | 33 | 0.34 331 | 9.95 937 | 5 | 36 | |
| | | 28 | | | | | 6 | | 6 2.8 |
| 25 | 9.61 634 | | 9.65 703 | 33 | 0.34 297 | 9.95 931 | 6 | 35 | 7 3.3 |
| 26 | 9.61 662 | 28 | 9.65 736 | 33 | 0.34 264 | 9.95 925 | 6 | 34 | 8 3.7 |
| 27 | 9.61 689 | 27 | 9.65 770 | 34 | 0.34 230 | 9.95 920 | 5 | 33 | 9 4.2 |
| 28 | 9.61 717 | 28 | 9.65 803 | 33 | 0.34 197 | 9.95 914 | 6 | 32 | 10 4.7 |
| 29 | 9.61 745 | 28 | 9.65 837 | 34 | 0.34 163 | 9.95 908 | 6 | 31 | 20 9.3 |
| | | 28 | | | | | 6 | | 30 14.0 |
| 30 | 9.61 773 | | 9.65 870 | 33 | 0.34 130 | 9.95 902 | 6 | 30 | 40 18.7 |
| 31 | 9.61 800 | 27 | 9.65 904 | 34 | 0.34 096 | 9.95 897 | 5 | 29 | 50 23.3 |
| 32 | 9.61 828 | 28 | 9.65 937 | 33 | 0.34 063 | 9.95 891 | 6 | 28 | |
| 33 | 9.61 856 | 28 | 9.65 971 | 34 | 0.34 029 | 9.95 885 | 6 | 27 | |
| 34 | 9.61 883 | 27 | 9.66 004 | 33 | 0.33 996 | 9.95 879 | 6 | 26 | |
| | | 28 | | | | | 6 | | 6 2.7 |
| 35 | 9.61 911 | | 9.66 038 | 34 | 0.33 962 | 9.95 873 | 5 | 25 | 7 3.2 |
| 36 | 9.61 939 | 28 | 9.66 071 | 33 | 0.33 929 | 9.95 868 | 6 | 24 | 8 3.6 |
| 37 | 9.61 966 | 27 | 9.66 104 | 33 | 0.33 896 | 9.95 862 | 6 | 23 | 9 4.1 |
| 38 | 9.61 994 | 28 | 9.66 138 | 34 | 0.33 862 | 9.95 856 | 6 | 22 | 10 4.5 |
| 39 | 9.62 021 | 27 | 9.66 171 | 33 | 0.33 829 | 9.95 850 | 6 | 21 | 20 9.0 |
| | | 28 | | | | | 6 | | 30 13.5 |
| 40 | 9.62 049 | | 9.66 204 | 33 | 0.33 796 | 9.95 844 | 6 | 20 | 40 18.0 |
| 41 | 9.62 076 | 27 | 9.66 238 | 34 | 0.33 762 | 9.95 839 | 5 | 19 | 50 22.5 |
| 42 | 9.62 104 | 28 | 9.66 271 | 33 | 0.33 729 | 9.95 833 | 6 | 18 | |
| 43 | 9.62 131 | 27 | 9.66 304 | 33 | 0.33 696 | 9.95 827 | 6 | 17 | |
| 44 | 9.62 159 | 28 | 9.66 337 | 33 | 0.33 663 | 9.95 821 | 6 | 16 | |
| | | 27 | | | | | 6 | | 6 0.6 0.5 |
| 45 | 9.62 185 | | 9.66 371 | 34 | 0.33 629 | 9.95 815 | 5 | 15 | 7 0.7 0.6 |
| 46 | 9.62 214 | 28 | 9.66 404 | 33 | 0.33 596 | 9.95 810 | 6 | 14 | 8 0.8 0.7 |
| 47 | 9.62 241 | 27 | 9.66 437 | 33 | 0.33 563 | 9.95 804 | 5 | 13 | 9 0.9 0.8 |
| 48 | 9.62 268 | 27 | 9.66 470 | 33 | 0.33 530 | 9.95 798 | 6 | 12 | 10 1.0 0.8 |
| 49 | 9.62 295 | 28 | 9.66 503 | 33 | 0.33 497 | 9.95 792 | 6 | 11 | 20 2.0 1.7 |
| | | 27 | | | | | 6 | | 30 3.0 2.5 |
| 50 | 9.62 323 | | 9.66 537 | 34 | 0.33 463 | 9.95 786 | 6 | 10 | 40 4.0 3.3 |
| 51 | 9.62 350 | 27 | 9.66 570 | 33 | 0.33 430 | 9.95 780 | 6 | 9 | 50 5.0 4.2 |
| 52 | 9.62 377 | 27 | 9.66 603 | 33 | 0.33 397 | 9.95 775 | 5 | 8 | |
| 53 | 9.62 405 | 28 | 9.66 636 | 33 | 0.33 364 | 9.95 769 | 6 | 7 | |
| 54 | 9.62 432 | 27 | 9.66 669 | 33 | 0.33 331 | 9.95 763 | 6 | 6 | |
| | | 27 | | | | | 6 | | 6 0.6 0.5 |
| 55 | 9.62 459 | | 9.66 702 | 33 | 0.33 298 | 9.95 757 | 5 | 5 | 7 0.7 0.6 |
| 56 | 9.62 486 | 27 | 9.66 735 | 33 | 0.33 265 | 9.95 751 | 6 | 4 | 8 0.8 0.7 |
| 57 | 9.62 513 | 28 | 9.66 768 | 33 | 0.33 232 | 9.95 745 | 6 | 3 | 9 0.9 0.8 |
| 58 | 9.62 541 | 27 | 9.66 801 | 33 | 0.33 199 | 9.95 739 | 6 | 2 | 10 1.0 0.8 |
| 59 | 9.62 568 | 27 | 9.66 834 | 33 | 0.33 166 | 9.95 733 | 6 | 1 | 20 2.0 1.7 |
| | | 27 | | | | | 6 | | 30 3.0 2.5 |
| 60 | 9.62 595 | | 9.66 867 | 33 | 0.33 133 | 9.95 728 | 5 | 0 | 40 4.0 3.3 |
| | | 27 | | | | | 6 | | 50 5.0 4.2 |
| | | | | | | | | | |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | ∕ | Prop. Pts. |

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | ∕ | Prop. Pts. |
|-----------|----------|----|----------|-------|----------|----------|----|-----------|--------------|
| 0 | 9.62 595 | | 9.66 867 | | 0.33 133 | 9.95 728 | | 60 | |
| 1 | 9.62 622 | 27 | 9.66 900 | 33 | 0.33 100 | 9.95 722 | 6 | 59 | |
| 2 | 9.62 649 | 27 | 9.66 933 | 33 | 0.33 067 | 9.95 716 | 6 | 58 | |
| 3 | 9.62 676 | 27 | 9.66 966 | 33 | 0.33 034 | 9.95 710 | 6 | 57 | 6 3.3 3.2 |
| 4 | 9.62 703 | 27 | 9.66 999 | 33 | 0.33 001 | 9.95 704 | 6 | 56 | 7 3.9 3.7 |
| 5 | 9.62 730 | 27 | 9.67 032 | 33 | 0.32 968 | 9.95 698 | 6 | 55 | 8 4.4 4.3 |
| 6 | 9.62 757 | 27 | 9.67 065 | 33 | 0.32 935 | 9.95 692 | 6 | 54 | 9 5.0 4.8 |
| 7 | 9.62 784 | 27 | 9.67 098 | 33 | 0.32 902 | 9.95 686 | 6 | 53 | 10 5.5 5.3 |
| 8 | 9.62 811 | 27 | 9.67 131 | 33 | 0.32 869 | 9.95 680 | 6 | 52 | 20 11.0 10.7 |
| 9 | 9.62 838 | 27 | 9.67 163 | 32 | 0.32 837 | 9.95 674 | 6 | 51 | 30 16.5 16.0 |
| 10 | 9.62 865 | 27 | 9.67 196 | 33 | 0.32 804 | 9.95 668 | 6 | 50 | 40 22.0 21.3 |
| 11 | 9.62 892 | 27 | 9.67 229 | 33 | 0.32 771 | 9.95 663 | 5 | 49 | 50 27.5 26.7 |
| 12 | 9.62 918 | 26 | 9.67 262 | 33 | 0.32 738 | 9.95 657 | 6 | 48 | |
| 13 | 9.62 945 | 27 | 9.67 295 | 33 | 0.32 705 | 9.95 651 | 6 | 47 | |
| 14 | 9.62 972 | 27 | 9.67 327 | 32 | 0.32 673 | 9.95 645 | 6 | 46 | |
| 15 | 9.62 999 | 27 | 9.67 360 | 33 | 0.32 640 | 9.95 639 | 6 | 45 | 6 2.7 |
| 16 | 9.63 026 | 27 | 9.67 393 | 33 | 0.32 607 | 9.95 633 | 6 | 44 | 7 3.2 |
| 17 | 9.63 052 | 26 | 9.67 426 | 33 | 0.32 574 | 9.95 627 | 6 | 43 | 8 3.6 |
| 18 | 9.63 079 | 27 | 9.67 458 | 32 | 0.32 542 | 9.95 621 | 6 | 42 | 9 4.1 |
| 19 | 9.63 106 | 27 | 9.67 491 | 33 | 0.32 509 | 9.95 615 | 6 | 41 | 10 4.5 |
| 20 | 9.63 133 | 27 | 9.67 524 | 33 | 0.32 476 | 9.95 609 | 6 | 40 | 20 9.0 |
| 21 | 9.63 159 | 26 | 9.67 556 | 32 | 0.32 444 | 9.95 603 | 6 | 39 | 30 13.5 |
| 22 | 9.63 186 | 27 | 9.67 589 | 33 | 0.32 411 | 9.95 597 | 6 | 38 | 40 18.0 |
| 23 | 9.63 213 | 27 | 9.67 622 | 33 | 0.32 378 | 9.95 591 | 6 | 37 | 50 22.5 |
| 24 | 9.63 239 | 26 | 9.67 654 | 32 | 0.32 346 | 9.95 585 | 6 | 36 | |
| 25 | 9.63 266 | 27 | 9.67 687 | 33 | 0.32 313 | 9.95 579 | 6 | 35 | |
| 26 | 9.63 292 | 27 | 9.67 719 | 32 | 0.32 281 | 9.95 573 | 6 | 34 | |
| 27 | 9.63 319 | 27 | 9.67 752 | 33 | 0.32 248 | 9.95 567 | 6 | 33 | 6 2.6 |
| 28 | 9.63 345 | 26 | 9.67 785 | 33 | 0.32 215 | 9.95 561 | 6 | 32 | 7 3.0 |
| 29 | 9.63 372 | 27 | 9.67 817 | 32 | 0.32 183 | 9.95 555 | 6 | 31 | 8 3.5 |
| 30 | 9.63 398 | 26 | 9.67 850 | 33 | 0.32 150 | 9.95 549 | 6 | 30 | 9 3.9 |
| 31 | 9.63 425 | 27 | 9.67 882 | 32 | 0.32 118 | 9.95 543 | 6 | 29 | 10 4.3 |
| 32 | 9.63 451 | 26 | 9.67 915 | 33 | 0.32 085 | 9.95 537 | 6 | 28 | 20 8.7 |
| 33 | 9.63 478 | 27 | 9.67 947 | 32 | 0.32 053 | 9.95 531 | 6 | 27 | 30 13.0 |
| 34 | 9.63 504 | 26 | 9.67 980 | 33 | 0.32 020 | 9.95 525 | 6 | 26 | 40 17.3 |
| 35 | 9.63 531 | 27 | 9.68 012 | 32 | 0.31 988 | 9.95 519 | 6 | 25 | 50 21.7 |
| 36 | 9.63 557 | 26 | 9.68 044 | 32 | 0.31 956 | 9.95 513 | 6 | 24 | |
| 37 | 9.63 583 | 26 | 9.68 077 | 33 | 0.31 923 | 9.95 507 | 6 | 23 | |
| 38 | 9.63 610 | 27 | 9.68 109 | 32 | 0.31 891 | 9.95 500 | 7 | 22 | |
| 39 | 9.63 636 | 26 | 9.68 142 | 33 | 0.31 858 | 9.95 494 | 6 | 21 | 6 0.7 |
| 40 | 9.63 662 | 26 | 9.68 174 | 32 | 0.31 826 | 9.95 488 | 6 | 20 | 7 0.8 |
| 41 | 9.63 689 | 27 | 9.68 206 | 32 | 0.31 794 | 9.95 482 | 6 | 19 | 8 0.9 |
| 42 | 9.63 715 | 26 | 9.68 239 | 33 | 0.31 761 | 9.95 476 | 6 | 18 | 9 1.1 |
| 43 | 9.63 741 | 26 | 9.68 271 | 32 | 0.31 729 | 9.95 470 | 6 | 17 | 10 1.2 |
| 44 | 9.63 767 | 26 | 9.68 303 | 32 | 0.31 697 | 9.95 464 | 6 | 16 | 20 2.3 |
| 45 | 9.63 794 | 27 | 9.68 336 | 33 | 0.31 664 | 9.95 458 | 6 | 15 | 30 3.5 |
| 46 | 9.63 820 | 26 | 9.68 368 | 32 | 0.31 632 | 9.95 452 | 6 | 14 | 40 4.7 |
| 47 | 9.63 846 | 26 | 9.68 400 | 32 | 0.31 600 | 9.95 446 | 6 | 13 | 50 5.8 |
| 48 | 9.63 872 | 26 | 9.68 432 | 32 | 0.31 568 | 9.95 440 | 6 | 12 | |
| 49 | 9.63 898 | 26 | 9.68 465 | 33 | 0.31 535 | 9.95 434 | 6 | 11 | |
| 50 | 9.63 924 | 26 | 9.68 497 | 32 | 0.31 503 | 9.95 427 | 7 | 10 | 6 6 5 |
| 51 | 9.63 950 | 26 | 9.68 529 | 32 | 0.31 471 | 9.95 421 | 6 | 9 | 6 0.6 0.5 |
| 52 | 9.63 976 | 26 | 9.68 561 | 32 | 0.31 439 | 9.95 415 | 6 | 8 | 7 0.7 0.6 |
| 53 | 9.64 002 | 26 | 9.68 593 | 32 | 0.31 407 | 9.95 409 | 6 | 7 | 8 0.8 0.7 |
| 54 | 9.64 028 | 26 | 9.68 626 | 33 | 0.31 374 | 9.95 403 | 6 | 6 | 9 0.9 0.8 |
| 55 | 9.64 054 | 26 | 9.68 658 | 32 | 0.31 342 | 9.95 397 | 6 | 5 | 10 1.0 0.8 |
| 56 | 9.64 080 | 26 | 9.68 690 | 32 | 0.31 310 | 9.95 391 | 6 | 4 | 20 2.0 1.7 |
| 57 | 9.64 106 | 26 | 9.68 722 | 32 | 0.31 278 | 9.95 384 | 7 | 3 | 30 3.0 2.5 |
| 58 | 9.64 132 | 26 | 9.68 754 | 32 | 0.31 246 | 9.95 378 | 6 | 2 | 40 4.0 3.3 |
| 59 | 9.64 158 | 26 | 9.68 786 | 32 | 0.31 214 | 9.95 372 | 6 | 1 | 50 5.0 4.2 |
| 60 | 9.64 184 | 26 | 9.68 818 | 32 | 0.31 182 | 9.95 366 | 6 | 0 | |

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. |
|----|----------|-----|----------|-------|----------|----------|----|----|------------|
| 0 | 9.64 184 | | 9.68 818 | | 0.31 182 | 9.95 366 | | 60 | |
| 1 | 9.64 210 | 26. | 9.68 850 | 32 | 0.31 150 | 9.95 360 | 6 | 59 | |
| 2 | 9.64 236 | 26 | 9.68 882 | 32 | 0.31 118 | 9.95 354 | 6 | 58 | |
| 3 | 9.64 262 | 26 | 9.68 914 | 32 | 0.31 086 | 9.95 348 | 6 | 57 | 6 |
| 4 | 9.64 288 | 26 | 9.68 946 | 32 | 0.31 054 | 9.95 341 | 7 | 56 | 3.2 |
| | | 25 | | 32 | | | 6 | | 3.1 |
| 5 | 9.64 313 | | 9.68 978 | | 0.31 022 | 9.95 335 | | 55 | 7 |
| 6 | 9.64 339 | 26 | 9.69 010 | 32 | 0.30 990 | 9.95 329 | 6 | 54 | 3.7 |
| 7 | 9.64 365 | 26 | 9.69 042 | 32 | 0.30 958 | 9.95 323 | 6 | 53 | 4.3 |
| 8 | 9.64 391 | 26 | 9.69 074 | 32 | 0.30 926 | 9.95 317 | 6 | 52 | 4.8 |
| 9 | 9.64 417 | 26 | 9.69 106 | 32 | 0.30 894 | 9.95 310 | 6 | 51 | 5.3 |
| | | 25 | | 32 | | | 7 | | 5.2 |
| 10 | 9.64 442 | | 9.69 138 | | 0.30 862 | 9.95 304 | | 50 | 10 |
| 11 | 9.64 468 | 26 | 9.69 170 | 32 | 0.30 830 | 9.95 298 | 6 | 49 | 20 |
| 12 | 9.64 494 | 26 | 9.69 202 | 32 | 0.30 798 | 9.95 292 | 6 | 48 | 30 |
| 13 | 9.64 519 | 25 | 9.69 234 | 32 | 0.30 766 | 9.95 286 | 6 | 47 | 40 |
| 14 | 9.64 545 | 26 | 9.69 266 | 32 | 0.30 734 | 9.95 279 | 7 | 46 | 50 |
| | | 26 | | 32 | | | 6 | | 26 |
| 15 | 9.64 571 | | 9.69 298 | | 0.30 702 | 9.95 273 | | 45 | 6 |
| 16 | 9.64 596 | 25 | 9.69 329 | 31 | 0.30 671 | 9.95 267 | 6 | 44 | 7 |
| 17 | 9.64 622 | 26 | 9.69 361 | 32 | 0.30 639 | 9.95 261 | 6 | 43 | 8 |
| 18 | 9.64 647 | 25 | 9.69 393 | 32 | 0.30 607 | 9.95 254 | 7 | 42 | 9 |
| 19 | 9.64 673 | 26 | 9.69 425 | 32 | 0.30 575 | 9.95 248 | 6 | 41 | 10 |
| | | 25 | | 32 | | | 6 | | 4.3 |
| 20 | 9.64 698 | | 9.69 457 | | 0.30 543 | 9.95 242 | | 40 | 20 |
| 21 | 9.64 724 | 26 | 9.69 488 | 31 | 0.30 512 | 9.95 236 | 6 | 39 | 30 |
| 22 | 9.64 749 | 25 | 9.69 520 | 32 | 0.30 480 | 9.95 229 | 7 | 38 | 40 |
| 23 | 9.64 775 | 26 | 9.69 552 | 32 | 0.30 448 | 9.95 223 | 6 | 37 | 50 |
| 24 | 9.64 800 | 25 | 9.69 584 | 32 | 0.30 416 | 9.95 217 | 6 | 36 | 21.7 |
| | | 26 | | 31 | | | 6 | | |
| 25 | 9.64 826 | | 9.69 615 | | 0.30 385 | 9.95 211 | | 35 | |
| 26 | 9.64 851 | 25 | 9.69 647 | 32 | 0.30 353 | 9.95 204 | 7 | 34 | 25 |
| 27 | 9.64 877 | 26 | 9.69 679 | 32 | 0.30 321 | 9.95 198 | 6 | 33 | 6 |
| 28 | 9.64 902 | 25 | 9.69 710 | 31 | 0.30 290 | 9.95 192 | 6 | 32 | 7 |
| 29 | 9.64 927 | 25 | 9.69 742 | 32 | 0.30 258 | 9.95 185 | 7 | 31 | 8 |
| | | 26 | | 32 | | | 6 | | 3.3 |
| 30 | 9.64 953 | | 9.69 774 | | 0.30 226 | 9.95 179 | | 30 | 9 |
| 31 | 9.64 978 | 25 | 9.69 805 | 31 | 0.30 195 | 9.95 173 | 6 | 29 | 10 |
| 32 | 9.65 003 | 25 | 9.69 837 | 32 | 0.30 163 | 9.95 167 | 6 | 28 | 20 |
| 33 | 9.65 029 | 26 | 9.69 868 | 31 | 0.30 132 | 9.95 160 | 7 | 27 | 30 |
| 34 | 9.65 054 | 25 | 9.69 900 | 32 | 0.30 100 | 9.95 154 | 6 | 26 | 40 |
| | | 25 | | 32 | | | 6 | | 50 |
| 35 | 9.65 079 | | 9.69 932 | | 0.30 068 | 9.95 148 | | 25 | |
| 36 | 9.65 104 | 25 | 9.69 963 | 31 | 0.30 037 | 9.95 141 | 7 | 24 | |
| 37 | 9.65 130 | 26 | 9.69 995 | 32 | 0.30 005 | 9.95 135 | 6 | 23 | |
| 38 | 9.65 155 | 25 | 9.70 026 | 31 | 0.29 974 | 9.95 129 | 6 | 22 | 24 |
| 39 | 9.65 180 | 25 | 9.70 058 | 32 | 0.29 942 | 9.95 122 | 7 | 21 | 6 |
| | | 25 | | 31 | | | 6 | | 2.4 |
| 40 | 9.65 205 | | 9.70 089 | | 0.29 911 | 9.95 116 | | 20 | 7 |
| 41 | 9.65 230 | 25 | 9.70 121 | 32 | 0.29 879 | 9.95 110 | 6 | 19 | 8 |
| 42 | 9.65 255 | 25 | 9.70 152 | 31 | 0.29 848 | 9.95 103 | 7 | 18 | 9 |
| 43 | 9.65 281 | 26 | 9.70 184 | 32 | 0.29 816 | 9.95 097 | 6 | 17 | 10 |
| 44 | 9.65 306 | 25 | 9.70 215 | 31 | 0.29 785 | 9.95 090 | 7 | 16 | 20 |
| | | 25 | | 32 | | | 6 | | 30 |
| 45 | 9.65 331 | | 9.70 247 | | 0.29 753 | 9.95 084 | | 15 | 40 |
| 46 | 9.65 356 | 25 | 9.70 278 | 31 | 0.29 722 | 9.95 078 | 7 | 14 | 16.0 |
| 47 | 9.65 381 | 25 | 9.70 309 | 31 | 0.29 691 | 9.95 071 | 6 | 13 | 50 |
| 48 | 9.65 406 | 25 | 9.70 341 | 32 | 0.29 659 | 9.95 065 | 6 | 12 | 20.0 |
| 49 | 9.65 431 | 25 | 9.70 372 | 31 | 0.29 628 | 9.95 059 | 6 | 11 | |
| | | 25 | | 32 | | | 7 | | |
| 50 | 9.65 456 | | 9.70 404 | | 0.29 596 | 9.95 052 | | 10 | 7 |
| 51 | 9.65 481 | 25 | 9.70 435 | 31 | 0.29 565 | 9.95 046 | 6 | 9 | 6 |
| 52 | 9.65 506 | 25 | 9.70 466 | 31 | 0.29 534 | 9.95 039 | 7 | 8 | 0.7 |
| 53 | 9.65 531 | 25 | 9.70 498 | 32 | 0.29 502 | 9.95 033 | 6 | 7 | 0.8 |
| 54 | 9.65 556 | 25 | 9.70 529 | 31 | 0.29 471 | 9.95 027 | 6 | 6 | 0.9 |
| | | 24 | | 31 | | | 7 | | 1.1 |
| 55 | 9.65 580 | | 9.70 560 | | 0.29 440 | 9.95 020 | | 5 | 10 |
| 56 | 9.65 605 | 25 | 9.70 592 | 32 | 0.29 408 | 9.95 014 | 6 | 4 | 2.3 |
| 57 | 9.65 630 | 25 | 9.70 623 | 31 | 0.29 377 | 9.95 007 | 7 | 3 | 3.0 |
| 58 | 9.65 655 | 25 | 9.70 654 | 31 | 0.29 346 | 9.95 001 | 6 | 2 | 4.7 |
| 59 | 9.65 680 | 25 | 9.70 685 | 31 | 0.29 315 | 9.94 995 | 6 | 1 | 5.8 |
| | | 25 | | 32 | | | 7 | | 5.0 |
| 60 | 9.65 705 | | 9.70 717 | | 0.29 283 | 9.94 988 | | 0 | |

| r | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | Prop. Pts. |
|----|----------|----|----------|-------|----------|----------|----|------------|
| 0 | 9.65 705 | | 9.70 717 | | 0.29 283 | 9.94 988 | | 60 |
| 1 | 9.65 729 | 24 | 9.70 748 | 31 | 0.29 252 | 9.94 982 | 6 | 59 |
| 2 | 9.65 754 | 25 | 9.70 779 | 31 | 0.29 221 | 9.94 975 | 7 | 58 |
| 3 | 9.65 779 | 25 | 9.70 810 | 31 | 0.29 190 | 9.94 969 | 6 | 57 |
| 4 | 9.65 804 | 25 | 9.70 841 | 31 | 0.29 159 | 9.94 962 | 7 | 56 |
| | | 24 | | 32 | | | 6 | |
| 5 | 9.65 828 | | 9.70 873 | | 0.29 127 | 9.94 956 | | 55 |
| 6 | 9.65 853 | 25 | 9.70 904 | 31 | 0.29 096 | 9.94 949 | 7 | 54 |
| 7 | 9.65 878 | 25 | 9.70 935 | 31 | 0.29 065 | 9.94 943 | 6 | 53 |
| 8 | 9.65 902 | 24 | 9.70 966 | 31 | 0.29 034 | 9.94 936 | 7 | 52 |
| 9 | 9.65 927 | 25 | 9.70 997 | 31 | 0.29 003 | 9.94 930 | 6 | 51 |
| 10 | 9.65 952 | 25 | 9.71 028 | 31 | 0.28 972 | 9.94 923 | 7 | 50 |
| 11 | 9.65 976 | 24 | 9.71 059 | 31 | 0.28 941 | 9.94 917 | 6 | 49 |
| 12 | 9.66 001 | 25 | 9.71 090 | 31 | 0.28 910 | 9.94 911 | 6 | 48 |
| 13 | 9.66 025 | 24 | 9.71 121 | 31 | 0.28 879 | 9.94 904 | 7 | 47 |
| 14 | 9.66 050 | 25 | 9.71 153 | 32 | 0.28 847 | 9.94 898 | 6 | 46 |
| | | 25 | | 31 | | | 7 | |
| 15 | 9.66 075 | | 9.71 184 | | 0.28 816 | 9.94 891 | | 45 |
| 16 | 9.66 099 | 24 | 9.71 215 | 31 | 0.28 785 | 9.94 885 | 6 | 44 |
| 17 | 9.66 124 | 25 | 9.71 246 | 31 | 0.28 754 | 9.94 878 | 7 | 43 |
| 18 | 9.66 148 | 24 | 9.71 277 | 31 | 0.28 723 | 9.94 871 | 7 | 42 |
| 19 | 9.66 173 | 25 | 9.71 308 | 31 | 0.28 692 | 9.94 865 | 6 | 41 |
| | | 24 | | 31 | | | 7 | |
| 20 | 9.66 197 | | 9.71 339 | | 0.28 661 | 9.94 858 | | 40 |
| 21 | 9.66 221 | 24 | 9.71 370 | 31 | 0.28 630 | 9.94 852 | 6 | 39 |
| 22 | 9.66 246 | 25 | 9.71 401 | 31 | 0.28 599 | 9.94 845 | 7 | 38 |
| 23 | 9.66 270 | 24 | 9.71 431 | 30 | 0.28 569 | 9.94 839 | 6 | 37 |
| 24 | 9.66 295 | 25 | 9.71 462 | 31 | 0.28 538 | 9.94 832 | 7 | 36 |
| | | 24 | | 31 | | | 6 | |
| 25 | 9.66 319 | | 9.71 493 | | 0.28 507 | 9.94 826 | | 35 |
| 26 | 9.66 343 | 24 | 9.71 524 | 31 | 0.28 476 | 9.94 819 | 7 | 34 |
| 27 | 9.66 368 | 25 | 9.71 555 | 31 | 0.28 445 | 9.94 813 | 6 | 33 |
| 28 | 9.66 392 | 24 | 9.71 586 | 31 | 0.28 414 | 9.94 806 | 7 | 32 |
| 29 | 9.66 416 | 25 | 9.71 617 | 31 | 0.28 383 | 9.94 799 | 7 | 31 |
| | | 25 | | 31 | | | 6 | |
| 30 | 9.66 441 | | 9.71 648 | | 0.28 352 | 9.94 793 | | 30 |
| 31 | 9.66 465 | 24 | 9.71 679 | 31 | 0.28 321 | 9.94 786 | 7 | 29 |
| 32 | 9.66 489 | 24 | 9.71 709 | 30 | 0.28 291 | 9.94 780 | 6 | 28 |
| 33 | 9.66 513 | 24 | 9.71 740 | 31 | 0.28 260 | 9.94 773 | 7 | 27 |
| 34 | 9.66 537 | 24 | 9.71 771 | 31 | 0.28 229 | 9.94 767 | 6 | 26 |
| | | 25 | | 31 | | | 7 | |
| 35 | 9.66 562 | | 9.71 802 | | 0.28 198 | 9.94 760 | | 25 |
| 36 | 9.66 586 | 24 | 9.71 833 | 31 | 0.28 167 | 9.94 753 | 7 | 24 |
| 37 | 9.66 610 | 24 | 9.71 863 | 30 | 0.28 137 | 9.94 747 | 6 | 23 |
| 38 | 9.66 634 | 24 | 9.71 894 | 31 | 0.28 106 | 9.94 740 | 7 | 22 |
| 39 | 9.66 658 | 24 | 9.71 925 | 31 | 0.28 075 | 9.94 734 | 6 | 21 |
| | | 24 | | 30 | | | 7 | |
| 40 | 9.66 682 | | 9.71 955 | | 0.28 045 | 9.94 727 | | 20 |
| 41 | 9.66 706 | 24 | 9.71 986 | 31 | 0.28 014 | 9.94 720 | 7 | 19 |
| 42 | 9.66 731 | 25 | 9.72 017 | 31 | 0.27 983 | 9.94 714 | 6 | 18 |
| 43 | 9.66 755 | 24 | 9.72 048 | 30 | 0.27 952 | 9.94 707 | 7 | 17 |
| 44 | 9.66 779 | 24 | 9.72 078 | 31 | 0.27 922 | 9.94 700 | 7 | 16 |
| | | 24 | | 31 | | | 6 | |
| 45 | 9.66 803 | | 9.72 109 | | 0.27 891 | 9.94 694 | | 15 |
| 46 | 9.66 827 | 24 | 9.72 140 | 31 | 0.27 860 | 9.94 687 | 7 | 14 |
| 47 | 9.66 851 | 24 | 9.72 170 | 30 | 0.27 830 | 9.94 680 | 7 | 13 |
| 48 | 9.66 875 | 24 | 9.72 201 | 31 | 0.27 799 | 9.94 674 | 6 | 12 |
| 49 | 9.66 899 | 24 | 9.72 231 | 30 | 0.27 769 | 9.94 667 | 7 | 11 |
| | | 23 | | 31 | | | 6 | |
| 50 | 9.66 922 | | 9.72 262 | | 0.27 738 | 9.94 660 | | 10 |
| 51 | 9.66 946 | 24 | 9.72 293 | 31 | 0.27 707 | 9.94 654 | 7 | 9 |
| 52 | 9.66 970 | 24 | 9.72 323 | 30 | 0.27 677 | 9.94 647 | 7 | 8 |
| 53 | 9.66 994 | 24 | 9.72 354 | 31 | 0.27 646 | 9.94 640 | 7 | 7 |
| 54 | 9.67 018 | 24 | 9.72 384 | 30 | 0.27 616 | 9.94 634 | 6 | 6 |
| | | 24 | | 31 | | | 7 | |
| 55 | 9.67 042 | | 9.72 415 | | 0.27 585 | 9.94 627 | | 5 |
| 56 | 9.67 066 | 24 | 9.72 445 | 30 | 0.27 555 | 9.94 620 | 7 | 4 |
| 57 | 9.67 090 | 23 | 9.72 476 | 31 | 0.27 524 | 9.94 614 | 6 | 3 |
| 58 | 9.67 113 | 24 | 9.72 506 | 30 | 0.27 494 | 9.94 607 | 7 | 2 |
| 59 | 9.67 137 | 24 | 9.72 537 | 31 | 0.27 463 | 9.94 600 | 7 | 1 |
| | | 24 | | 30 | | | 7 | |
| 60 | 9.67 161 | | 9.72 567 | | 0.27 433 | 9.94 593 | | 0 |

| r | Prop. Pts. |
|------|------------|
| 6 | 3.2 |
| 7 | 3.7 |
| 8 | 4.3 |
| 9 | 4.8 |
| 10 | 5.3 |
| 20 | 10.7 |
| 30 | 16.0 |
| 40 | 21.3 |
| 50 | 26.7 |
| 31 | 3.1 |
| 3.6 | |
| 4.1 | |
| 4.7 | |
| 5.2 | |
| 10.3 | |
| 15.5 | |
| 20.7 | |
| 25.8 | |
| 30 | |
| 3.0 | |
| 3.5 | |
| 4.0 | |
| 4.5 | |
| 5.0 | |
| 10.0 | |
| 15.0 | |
| 20.0 | |
| 25.0 | |
| 25 | |
| 2.4 | |
| 2.8 | |
| 3.2 | |
| 3.6 | |
| 4.0 | |
| 8.0 | |
| 12.0 | |
| 16.0 | |
| 20.0 | |
| 23 | |
| 2.3 | |
| 2.7 | |
| 3.1 | |
| 3.5 | |
| 3.8 | |
| 7 | |
| 11.5 | |
| 15.3 | |
| 19.2 | |
| 7 | |
| 0.6 | |
| 0.7 | |
| 0.8 | |
| 0.8 | |
| 0.9 | |
| 1.0 | |
| 1.0 | |
| 2.0 | |
| 3.0 | |
| 4.0 | |
| 5.0 | |

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | ∕ | Prop. Pts. |
|----|----------|----|----------|-------|----------|----------|----|----|--------------|
| 0 | 9.67 161 | | 9.72 567 | | 0.27 433 | 9.94 593 | | 60 | |
| 1 | 9.67 185 | 24 | 9.72 598 | 31 | 0.27 402 | 9.94 587 | 6 | 59 | |
| 2 | 9.67 208 | 23 | 9.72 628 | 30 | 0.27 372 | 9.94 580 | 7 | 58 | |
| 3 | 9.67 232 | 24 | 9.72 659 | 31 | 0.27 341 | 9.94 573 | 7 | 57 | 31 3.0 |
| 4 | 9.67 256 | 24 | 9.72 689 | 30 | 0.27 311 | 9.94 567 | 6 | 56 | 6 3.1 3.5 |
| | | 24 | | 31 | | | 7 | | 7 3.6 4.0 |
| 5 | 9.67 280 | | 9.72 720 | | 0.27 280 | 9.94 560 | | 55 | 8 4.1 4.5 |
| 6 | 9.67 303 | 23 | 9.72 750 | 30 | 0.27 250 | 9.94 553 | 7 | 54 | 9 4.7 5.0 |
| 7 | 9.67 327 | 24 | 9.72 780 | 30 | 0.27 220 | 9.94 546 | 7 | 53 | 10 5.2 5.5 |
| 8 | 9.67 350 | 23 | 9.72 811 | 31 | 0.27 189 | 9.94 540 | 6 | 52 | 20 10.3 10.0 |
| 9 | 9.67 374 | 24 | 9.72 841 | 30 | 0.27 159 | 9.94 533 | 7 | 51 | 30 15.5 15.0 |
| | | 24 | | 31 | | | 7 | | 40 20.7 20.0 |
| 10 | 9.67 398 | | 9.72 872 | | 0.27 128 | 9.94 526 | | 50 | 50 25.8 25.0 |
| 11 | 9.67 421 | 23 | 9.72 902 | 30 | 0.27 098 | 9.94 519 | 7 | 49 | |
| 12 | 9.67 445 | 24 | 9.72 932 | 30 | 0.27 068 | 9.94 513 | 6 | 48 | |
| 13 | 9.67 468 | 23 | 9.72 963 | 31 | 0.27 037 | 9.94 506 | 7 | 47 | |
| 14 | 9.67 492 | 24 | 9.72 993 | 30 | 0.27 007 | 9.94 499 | 7 | 46 | 29 |
| | | 23 | | 30 | | | 7 | | 6 2.9 |
| 15 | 9.67 515 | | 9.73 023 | | 0.26 977 | 9.94 492 | | 45 | 7 3.4 |
| 16 | 9.67 539 | 24 | 9.73 054 | 31 | 0.26 946 | 9.94 485 | 6 | 44 | 8 3.9 |
| 17 | 9.67 562 | 23 | 9.73 084 | 30 | 0.26 916 | 9.94 479 | 7 | 43 | 9 4.4 |
| 18 | 9.67 586 | 24 | 9.73 114 | 30 | 0.26 886 | 9.94 472 | 7 | 42 | 10 4.8 |
| 19 | 9.67 609 | 23 | 9.73 144 | 30 | 0.26 856 | 9.94 465 | 7 | 41 | 20 9.7 |
| | | 24 | | 31 | | | 7 | | 30 14.5 |
| 20 | 9.67 633 | | 9.73 175 | | 0.26 825 | 9.94 458 | | 40 | 40 19.3 |
| 21 | 9.67 656 | 23 | 9.73 205 | 30 | 0.26 795 | 9.94 451 | 6 | 39 | 50 24.2 |
| 22 | 9.67 680 | 24 | 9.73 235 | 30 | 0.26 765 | 9.94 445 | 6 | 38 | |
| 23 | 9.67 703 | 23 | 9.73 265 | 30 | 0.26 735 | 9.94 438 | 7 | 37 | |
| 24 | 9.67 726 | 23 | 9.73 295 | 30 | 0.26 705 | 9.94 431 | 7 | 36 | |
| | | 24 | | 31 | | | 7 | | 24 2.3 |
| 25 | 9.67 750 | | 9.73 326 | | 0.26 674 | 9.94 424 | | 35 | 7 2.8 2.7 |
| 26 | 9.67 773 | 23 | 9.73 356 | 30 | 0.26 644 | 9.94 417 | 7 | 34 | 8 3.2 3.1 |
| 27 | 9.67 796 | 23 | 9.73 386 | 30 | 0.26 614 | 9.94 410 | 6 | 33 | 9 3.6 3.5 |
| 28 | 9.67 820 | 24 | 9.73 416 | 30 | 0.26 584 | 9.94 404 | 7 | 32 | 10 4.0 3.8 |
| 29 | 9.67 843 | 23 | 9.73 446 | 30 | 0.26 554 | 9.94 397 | 7 | 31 | 20 8.0 7.7 |
| | | 23 | | 30 | | | 7 | | 30 12.0 11.5 |
| 30 | 9.67 866 | | 9.73 476 | | 0.26 524 | 9.94 390 | | 30 | 40 16.0 15.3 |
| 31 | 9.67 890 | 24 | 9.73 507 | 31 | 0.26 493 | 9.94 383 | 7 | 29 | 50 20.0 19.2 |
| 32 | 9.67 913 | 23 | 9.73 537 | 30 | 0.26 463 | 9.94 376 | 7 | 28 | |
| 33 | 9.67 936 | 23 | 9.73 567 | 30 | 0.26 433 | 9.94 369 | 7 | 27 | |
| 34 | 9.67 959 | 23 | 9.73 597 | 30 | 0.26 403 | 9.94 362 | 7 | 26 | |
| | | 23 | | 30 | | | 7 | | 6 2.2 |
| 35 | 9.67 982 | | 9.73 627 | | 0.26 373 | 9.94 355 | | 25 | 7 2.6 |
| 36 | 9.68 006 | 24 | 9.73 657 | 30 | 0.26 343 | 9.94 349 | 6 | 24 | 8 2.9 |
| 37 | 9.68 029 | 23 | 9.73 687 | 30 | 0.26 313 | 9.94 342 | 7 | 23 | 9 3.3 |
| 38 | 9.68 052 | 23 | 9.73 717 | 30 | 0.26 283 | 9.94 335 | 7 | 22 | 10 3.7 |
| 39 | 9.68 075 | 23 | 9.73 747 | 30 | 0.26 253 | 9.94 328 | 7 | 21 | 20 7.3 |
| | | 23 | | 30 | | | 7 | | 30 11.0 |
| 40 | 9.68 098 | | 9.73 777 | | 0.26 223 | 9.94 321 | | 20 | 40 14.7 |
| 41 | 9.68 121 | 23 | 9.73 807 | 30 | 0.26 193 | 9.94 314 | 7 | 19 | 50 18.3 |
| 42 | 9.68 144 | 23 | 9.73 837 | 30 | 0.26 163 | 9.94 307 | 7 | 18 | |
| 43 | 9.68 167 | 23 | 9.73 867 | 30 | 0.26 133 | 9.94 300 | 7 | 17 | |
| 44 | 9.68 190 | 23 | 9.73 897 | 30 | 0.26 103 | 9.94 293 | 7 | 16 | |
| | | 23 | | 30 | | | 7 | | 6 2.2 |
| 45 | 9.68 213 | | 9.73 927 | | 0.26 073 | 9.94 286 | | 15 | 7 2.6 |
| 46 | 9.68 237 | 24 | 9.73 957 | 30 | 0.26 043 | 9.94 279 | 7 | 14 | 8 2.9 |
| 47 | 9.68 260 | 23 | 9.73 987 | 30 | 0.26 013 | 9.94 273 | 6 | 13 | 9 3.3 |
| 48 | 9.68 283 | 23 | 9.74 017 | 30 | 0.25 983 | 9.94 266 | 7 | 12 | 10 3.7 |
| 49 | 9.68 305 | 22 | 9.74 047 | 30 | 0.25 953 | 9.94 259 | 7 | 11 | 20 7.3 |
| | | 23 | | 30 | | | 7 | | 30 11.0 |
| 50 | 9.68 328 | | 9.74 077 | | 0.25 923 | 9.94 252 | | 10 | 40 14.7 |
| 51 | 9.68 351 | 23 | 9.74 107 | 30 | 0.25 893 | 9.94 245 | 7 | 9 | 50 18.3 |
| 52 | 9.68 374 | 23 | 9.74 137 | 30 | 0.25 863 | 9.94 238 | 7 | 8 | |
| 53 | 9.68 397 | 23 | 9.74 166 | 29 | 0.25 834 | 9.94 231 | 7 | 7 | |
| 54 | 9.68 420 | 23 | 9.74 196 | 30 | 0.25 804 | 9.94 224 | 7 | 6 | |
| | | 23 | | 30 | | | 7 | | 6 2.2 |
| 55 | 9.68 443 | | 9.74 226 | | 0.25 774 | 9.94 217 | | 5 | 7 2.6 |
| 56 | 9.68 466 | 23 | 9.74 256 | 30 | 0.25 744 | 9.94 210 | 7 | 4 | 8 2.9 |
| 57 | 9.68 489 | 23 | 9.74 286 | 30 | 0.25 714 | 9.94 203 | 7 | 3 | 9 3.3 |
| 58 | 9.68 512 | 23 | 9.74 316 | 30 | 0.25 684 | 9.94 196 | 7 | 2 | 10 3.7 |
| 59 | 9.68 534 | 22 | 9.74 345 | 29 | 0.25 655 | 9.94 189 | 7 | 1 | 20 7.3 |
| | | 23 | | 30 | | | 7 | | 30 11.0 |
| 60 | 9.68 557 | | 9.74 375 | | 0.25 625 | 9.94 182 | | 0 | 40 14.7 |
| | | | | | | | | | 50 18.3 |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | ∕ | Prop. Pts. |

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | ∕ | Prop. Pts. |
|---------|----------|----------|----------|----------|----------|----------|----|------------|------------|
| 0 | 9.68 557 | | 9.74 375 | | 0.25 625 | 9.94 182 | | 60 | |
| 1 | 9.68 580 | 23 | 9.74 405 | 30 | 0.25 595 | 9.94 175 | 7 | 59 | |
| 2 | 9.68 603 | 23 | 9.74 435 | 30 | 0.25 565 | 9.94 168 | 7 | 58 | 30 |
| 3 | 9.68 625 | 22 | 9.74 465 | 30 | 0.25 535 | 9.94 161 | 7 | 57 | 6 3.0 |
| 4 | 9.68 648 | 23 | 9.74 494 | 29 | 0.25 506 | 9.94 154 | 7 | 56 | 7 3.5 |
| | | 23 | | 30 | | | 7 | | 8 4.0 |
| 5 | 9.68 671 | | 9.74 524 | | 0.25 476 | 9.94 147 | | 55 | 9 4.5 |
| 6 | 9.68 694 | 23 | 9.74 554 | 30 | 0.25 446 | 9.94 140 | 7 | 54 | 10 5.0 |
| 7 | 9.68 716 | 22 | 9.74 583 | 29 | 0.25 417 | 9.94 133 | 7 | 53 | 20 10.0 |
| 8 | 9.68 739 | 23 | 9.74 613 | 30 | 0.25 387 | 9.94 126 | 7 | 52 | 30 15.0 |
| 9 | 9.68 762 | 23 | 9.74 643 | 30 | 0.25 357 | 9.94 119 | 7 | 51 | 40 20.0 |
| | | 22 | | 30 | | | 7 | | 50 25.0 |
| 10 | 9.68 784 | | 9.74 673 | | 0.25 327 | 9.94 112 | | 50 | |
| 11 | 9.68 807 | 23 | 9.74 702 | 29 | 0.25 298 | 9.94 105 | 7 | 49 | |
| 12 | 9.68 829 | 22 | 9.74 732 | 30 | 0.25 268 | 9.94 098 | 7 | 48 | |
| 13 | 9.68 852 | 23 | 9.74 762 | 30 | 0.25 238 | 9.94 090 | 8 | 47 | |
| 14 | 9.68 875 | 23 | 9.74 791 | 29 | 0.25 209 | 9.94 083 | 7 | 46 | 29 |
| | | 22 | | 30 | | | 7 | | 6 2.9 |
| 15 | 9.68 897 | | 9.74 821 | | 0.25 179 | 9.94 076 | | 45 | 7 3.4 |
| 16 | 9.68 920 | 23 | 9.74 851 | 30 | 0.25 149 | 9.94 069 | 7 | 44 | 8 3.9 |
| 17 | 9.68 942 | 22 | 9.74 880 | 29 | 0.25 120 | 9.94 062 | 7 | 43 | 9 4.4 |
| 18 | 9.68 965 | 23 | 9.74 910 | 30 | 0.25 090 | 9.94 055 | 7 | 42 | 10 4.8 |
| 19 | 9.68 987 | 22 | 9.74 939 | 29 | 0.25 061 | 9.94 048 | 7 | 41 | 20 9.7 |
| | | 23 | | 30 | | | 7 | | 30 14.5 |
| 20 | 9.69 010 | | 9.74 969 | | 0.25 031 | 9.94 041 | | 40 | 40 19.3 |
| 21 | 9.69 032 | 22 | 9.74 998 | 29 | 0.25 002 | 9.94 034 | 7 | 39 | 50 24.2 |
| 22 | 9.69 055 | 23 | 9.75 028 | 30 | 0.24 972 | 9.94 027 | 7 | 38 | |
| 23 | 9.69 077 | 22 | 9.75 058 | 30 | 0.24 942 | 9.94 020 | 7 | 37 | |
| 24 | 9.69 100 | 23 | 9.75 087 | 29 | 0.24 913 | 9.94 012 | 8 | 36 | |
| | | 22 | | 30 | | | 7 | | |
| 25 | 9.69 122 | | 9.75 117 | | 0.24 883 | 9.94 005 | | 35 | 23 |
| 26 | 9.69 144 | 22 | 9.75 146 | 29 | 0.24 854 | 9.93 998 | 7 | 34 | 6 2.3 |
| 27 | 9.69 167 | 23 | 9.75 176 | 30 | 0.24 824 | 9.93 991 | 7 | 33 | 7 2.7 |
| 28 | 9.69 189 | 22 | 9.75 205 | 29 | 0.24 795 | 9.93 984 | 7 | 32 | 8 3.1 |
| 29 | 9.69 212 | 23 | 9.75 235 | 30 | 0.24 765 | 9.93 977 | 7 | 31 | 9 3.5 |
| | | 22 | | 29 | | | 7 | | 10 3.8 |
| 30 | 9.69 234 | | 9.75 264 | | 0.24 736 | 9.93 970 | | 30 | 20 7.7 |
| 31 | 9.69 256 | 22 | 9.75 294 | 30 | 0.24 706 | 9.93 963 | 7 | 29 | 30 11.5 |
| 32 | 9.69 279 | 23 | 9.75 323 | 29 | 0.24 677 | 9.93 955 | 8 | 28 | 40 15.3 |
| 33 | 9.69 301 | 22 | 9.75 353 | 30 | 0.24 647 | 9.93 948 | 7 | 27 | 50 19.2 |
| 34 | 9.69 323 | 22 | 9.75 382 | 29 | 0.24 618 | 9.93 941 | 7 | 26 | |
| | | 23 | | 29 | | | 7 | | |
| 35 | 9.69 345 | | 9.75 411 | | 0.24 589 | 9.93 934 | | 25 | 22 |
| 36 | 9.69 368 | 22 | 9.75 441 | 30 | 0.24 559 | 9.93 927 | 7 | 24 | 6 2.2 |
| 37 | 9.69 390 | 22 | 9.75 470 | 29 | 0.24 530 | 9.93 920 | 7 | 23 | 7 2.6 |
| 38 | 9.69 412 | 22 | 9.75 500 | 30 | 0.24 500 | 9.93 912 | 8 | 22 | 8 2.9 |
| 39 | 9.69 434 | 23 | 9.75 529 | 29 | 0.24 471 | 9.93 905 | 7 | 21 | 9 3.3 |
| | | 22 | | 29 | | | 7 | | 10 3.7 |
| 40 | 9.69 456 | | 9.75 558 | | 0.24 442 | 9.93 898 | | 20 | 20 7.3 |
| 41 | 9.69 479 | 23 | 9.75 588 | 30 | 0.24 412 | 9.93 891 | 7 | 19 | 30 11.0 |
| 42 | 9.69 501 | 22 | 9.75 617 | 29 | 0.24 383 | 9.93 884 | 7 | 18 | 40 14.7 |
| 43 | 9.69 523 | 22 | 9.75 647 | 30 | 0.24 353 | 9.93 876 | 8 | 17 | 50 18.3 |
| 44 | 9.69 545 | 22 | 9.75 676 | 29 | 0.24 324 | 9.93 869 | 7 | 16 | |
| | | 22 | | 29 | | | 7 | | |
| 45 | 9.69 567 | | 9.75 705 | | 0.24 295 | 9.93 862 | | 15 | |
| 46 | 9.69 589 | 22 | 9.75 735 | 30 | 0.24 265 | 9.93 855 | 7 | 14 | |
| 47 | 9.69 611 | 22 | 9.75 764 | 29 | 0.24 236 | 9.93 847 | 8 | 13 | |
| 48 | 9.69 633 | 22 | 9.75 793 | 29 | 0.24 207 | 9.93 840 | 7 | 12 | |
| 49 | 9.69 655 | 22 | 9.75 822 | 29 | 0.24 178 | 9.93 833 | 7 | 11 | |
| | | 22 | | 30 | | | 7 | | 8 7 |
| 50 | 9.69 677 | | 9.75 852 | | 0.24 148 | 9.93 826 | | 10 | 6 0.8 0.7 |
| 51 | 9.69 699 | 22 | 9.75 881 | 29 | 0.24 119 | 9.93 819 | 7 | 9 | 7 0.9 0.8 |
| 52 | 9.69 721 | 22 | 9.75 910 | 29 | 0.24 090 | 9.93 811 | 8 | 8 | 8 1.1 0.9 |
| 53 | 9.69 743 | 22 | 9.75 939 | 29 | 0.24 061 | 9.93 804 | 7 | 7 | 9 1.2 1.1 |
| 54 | 9.69 765 | 22 | 9.75 969 | 30 | 0.24 031 | 9.93 797 | 7 | 6 | 10 1.3 1.2 |
| | | 22 | | 29 | | | 8 | | 20 2.7 2.3 |
| 55 | 9.69 787 | | 9.75 998 | | 0.24 002 | 9.93 789 | | 5 | 30 4.0 3.5 |
| 56 | 9.69 809 | 22 | 9.76 027 | 29 | 0.23 973 | 9.93 782 | 7 | 4 | 40 5.3 4.7 |
| 57 | 9.69 831 | 22 | 9.76 056 | 29 | 0.23 944 | 9.93 775 | 7 | 3 | 50 6.7 5.8 |
| 58 | 9.69 853 | 22 | 9.76 086 | 30 | 0.23 914 | 9.93 768 | 7 | 2 | |
| 59 | 9.69 875 | 22 | 9.76 115 | 29 | 0.23 885 | 9.93 760 | 8 | 1 | |
| | | 22 | | 29 | | | 7 | | |
| 60 | 9.69 897 | | 9.76 144 | | 0.23 856 | 9.93 753 | | 0 | |
| | | | | | | | | | |
| L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | ∕ | Prop. Pts. | |

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. |
|----|----------|----|----------|-------|----------|----------|----|-----------|------------|
| 0 | 9.69 897 | | 9.76 144 | | 0.23 856 | 9.93 753 | | 60 | |
| 1 | 9.69 919 | 22 | 9.76 173 | 29 | 0.23 827 | 9.93 746 | 7 | 8 | 59 |
| 2 | 9.69 941 | 22 | 9.76 202 | 29 | 0.23 798 | 9.93 738 | 7 | 7 | 58 |
| 3 | 9.69 963 | 22 | 9.76 231 | 29 | 0.23 769 | 9.93 731 | 7 | 7 | 57 |
| 4 | 9.69 984 | 21 | 9.76 261 | 30 | 0.23 739 | 9.93 724 | 7 | 7 | 56 |
| | | | | 29 | | | 7 | 8 | 6 |
| 5 | 9.70 006 | 22 | 9.76 290 | 29 | 0.23 710 | 9.93 717 | 7 | 8 | 3.0 |
| 6 | 9.70 028 | 22 | 9.76 319 | 29 | 0.23 681 | 9.93 709 | 7 | 8 | 3.5 |
| 7 | 9.70 050 | 22 | 9.76 348 | 29 | 0.23 652 | 9.93 702 | 7 | 7 | 4.0 |
| 8 | 9.70 072 | 22 | 9.76 377 | 29 | 0.23 623 | 9.93 695 | 7 | 8 | 4.5 |
| 9 | 9.70 093 | 21 | 9.76 406 | 29 | 0.23 594 | 9.93 687 | 8 | 8 | 5.0 |
| | | | | 29 | | | 7 | 7 | 10.0 |
| 10 | 9.70 115 | 22 | 9.76 435 | 29 | 0.23 565 | 9.93 680 | 7 | 7 | 15.0 |
| 11 | 9.70 137 | 22 | 9.76 464 | 29 | 0.23 536 | 9.93 673 | 7 | 8 | 20.0 |
| 12 | 9.70 159 | 22 | 9.76 493 | 29 | 0.23 507 | 9.93 665 | 7 | 8 | 25.0 |
| 13 | 9.70 180 | 21 | 9.76 522 | 29 | 0.23 478 | 9.93 658 | 7 | 8 | |
| 14 | 9.70 202 | 22 | 9.76 551 | 29 | 0.23 449 | 9.93 650 | 8 | 8 | |
| | | | | 29 | | | 7 | 7 | 28 |
| 15 | 9.70 224 | 22 | 9.76 580 | 29 | 0.23 420 | 9.93 643 | 7 | 8 | 6 |
| 16 | 9.70 245 | 21 | 9.76 609 | 29 | 0.23 391 | 9.93 636 | 8 | 8 | 7 |
| 17 | 9.70 267 | 22 | 9.76 639 | 30 | 0.23 361 | 9.93 628 | 7 | 8 | 8 |
| 18 | 9.70 288 | 21 | 9.76 668 | 29 | 0.23 332 | 9.93 621 | 7 | 7 | 9 |
| 19 | 9.70 310 | 22 | 9.76 697 | 29 | 0.23 303 | 9.93 614 | 7 | 8 | 4.2 |
| | | | | 28 | | | 8 | 8 | 10 |
| 20 | 9.70 332 | 21 | 9.76 725 | 29 | 0.23 275 | 9.93 606 | 7 | 7 | 4.7 |
| 21 | 9.70 353 | 22 | 9.76 754 | 29 | 0.23 246 | 9.93 599 | 8 | 7 | 20 |
| 22 | 9.70 375 | 22 | 9.76 783 | 29 | 0.23 217 | 9.93 591 | 8 | 8 | 9.3 |
| 23 | 9.70 396 | 21 | 9.76 812 | 29 | 0.23 188 | 9.93 584 | 7 | 7 | 30 |
| 24 | 9.70 418 | 22 | 9.76 841 | 29 | 0.23 159 | 9.93 577 | 7 | 8 | 14.0 |
| | | | | 29 | | | 8 | 8 | 23.3 |
| 25 | 9.70 439 | 22 | 9.76 870 | 29 | 0.23 130 | 9.93 569 | 7 | 7 | |
| 26 | 9.70 461 | 22 | 9.76 899 | 29 | 0.23 101 | 9.93 562 | 7 | 8 | 35 |
| 27 | 9.70 482 | 21 | 9.76 928 | 29 | 0.23 072 | 9.93 554 | 8 | 8 | 34 |
| 28 | 9.70 504 | 22 | 9.76 957 | 29 | 0.23 043 | 9.93 547 | 7 | 7 | 6 |
| 29 | 9.70 525 | 21 | 9.76 986 | 29 | 0.23 014 | 9.93 539 | 8 | 8 | 2.2 |
| | | | | 29 | | | 7 | 7 | 7 |
| 30 | 9.70 547 | 22 | 9.77 015 | 29 | 0.22 985 | 9.93 532 | 7 | 7 | 2.6 |
| 31 | 9.70 568 | 21 | 9.77 044 | 29 | 0.22 956 | 9.93 525 | 8 | 8 | 2.9 |
| 32 | 9.70 590 | 22 | 9.77 073 | 29 | 0.22 927 | 9.93 517 | 7 | 7 | 9 |
| 33 | 9.70 611 | 21 | 9.77 101 | 28 | 0.22 899 | 9.93 510 | 7 | 7 | 10 |
| 34 | 9.70 633 | 22 | 9.77 130 | 29 | 0.22 870 | 9.93 502 | 7 | 8 | 20 |
| | | | | 29 | | | 8 | 8 | 7.3 |
| 35 | 9.70 654 | 21 | 9.77 159 | 29 | 0.22 841 | 9.93 495 | 7 | 7 | 30 |
| 36 | 9.70 675 | 21 | 9.77 188 | 29 | 0.22 812 | 9.93 487 | 8 | 8 | 11.0 |
| 37 | 9.70 697 | 22 | 9.77 217 | 29 | 0.22 783 | 9.93 480 | 7 | 7 | 14.7 |
| 38 | 9.70 718 | 21 | 9.77 246 | 29 | 0.22 754 | 9.93 472 | 8 | 8 | 18.3 |
| 39 | 9.70 739 | 21 | 9.77 274 | 28 | 0.22 726 | 9.93 465 | 7 | 7 | |
| | | | | 29 | | | 8 | 8 | 6 |
| 40 | 9.70 761 | 22 | 9.77 303 | 29 | 0.22 697 | 9.93 457 | 7 | 7 | 2.1 |
| 41 | 9.70 782 | 21 | 9.77 332 | 29 | 0.22 668 | 9.93 450 | 8 | 8 | 2.5 |
| 42 | 9.70 803 | 21 | 9.77 361 | 29 | 0.22 639 | 9.93 442 | 7 | 7 | 2.8 |
| 43 | 9.70 824 | 21 | 9.77 390 | 29 | 0.22 610 | 9.93 435 | 7 | 7 | 9 |
| 44 | 9.70 846 | 22 | 9.77 418 | 28 | 0.22 582 | 9.93 427 | 8 | 8 | 3.2 |
| | | | | 29 | | | 8 | 8 | 3.5 |
| 45 | 9.70 867 | 21 | 9.77 447 | 29 | 0.22 553 | 9.93 420 | 7 | 7 | 7.0 |
| 46 | 9.70 888 | 21 | 9.77 476 | 29 | 0.22 524 | 9.93 412 | 8 | 8 | 10.5 |
| 47 | 9.70 909 | 21 | 9.77 505 | 29 | 0.22 495 | 9.93 405 | 7 | 7 | 14.0 |
| 48 | 9.70 931 | 22 | 9.77 533 | 28 | 0.22 467 | 9.93 397 | 7 | 7 | 17.5 |
| 49 | 9.70 952 | 21 | 9.77 562 | 29 | 0.22 438 | 9.93 390 | 8 | 8 | |
| | | | | 29 | | | 7 | 7 | 8 |
| 50 | 9.70 973 | 21 | 9.77 591 | 28 | 0.22 409 | 9.93 382 | 7 | 7 | 7 |
| 51 | 9.70 994 | 21 | 9.77 619 | 28 | 0.22 381 | 9.93 375 | 8 | 8 | 0.8 |
| 52 | 9.71 015 | 21 | 9.77 648 | 29 | 0.22 352 | 9.93 367 | 7 | 7 | 0.9 |
| 53 | 9.71 036 | 22 | 9.77 677 | 29 | 0.22 323 | 9.93 360 | 7 | 7 | 1.1 |
| 54 | 9.71 058 | 21 | 9.77 706 | 29 | 0.22 294 | 9.93 352 | 8 | 8 | 1.2 |
| | | | | 28 | | | 8 | 8 | 1.1 |
| 55 | 9.71 079 | 21 | 9.77 734 | 29 | 0.22 266 | 9.93 344 | 7 | 7 | 1.3 |
| 56 | 9.71 100 | 21 | 9.77 763 | 29 | 0.22 237 | 9.93 337 | 8 | 8 | 2.7 |
| 57 | 9.71 121 | 21 | 9.77 791 | 28 | 0.22 209 | 9.93 329 | 7 | 7 | 2.3 |
| 58 | 9.71 142 | 21 | 9.77 820 | 29 | 0.22 180 | 9.93 322 | 7 | 7 | 4.0 |
| 59 | 9.71 163 | 21 | 9.77 849 | 29 | 0.22 151 | 9.93 314 | 8 | 8 | 5.3 |
| | | | | 28 | | | 7 | 7 | 6.7 |
| 60 | 9.71 184 | 21 | 9.77 877 | 29 | 0.22 123 | 9.93 307 | 7 | 7 | 5.8 |
| | | | | 29 | | | 7 | 7 | 0 |

| ∕ | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | ∕ | Prop. Pts. |
|---|---------|----|----------|-------|----------|---------|----|---|------------|
|---|---------|----|----------|-------|----------|---------|----|---|------------|

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. |
|-----------|----------|----|----------|-------|----------|----------|----|-----------|------------|
| 0 | 9.71 184 | | 9.77 877 | | 0.22 123 | 9.93 307 | | 60 | |
| 1 | 9.71 205 | 21 | 9.77 906 | 29 | 0.22 094 | 9.93 299 | 8 | 59 | |
| 2 | 9.71 226 | 21 | 9.77 935 | 29 | 0.22 065 | 9.93 291 | 8 | 58 | |
| 3 | 9.71 247 | 21 | 9.77 963 | 28 | 0.22 037 | 9.93 284 | 7 | 57 | 29 |
| 4 | 9.71 268 | 21 | 9.77 992 | 29 | 0.22 008 | 9.93 276 | 8 | 56 | 6 2.9 |
| | | 21 | | 28 | | | 7 | | 7 3.4 |
| 5 | 9.71 289 | | 9.78 020 | | 0.21 980 | 9.93 269 | | 55 | 8 3.9 |
| 6 | 9.71 310 | 21 | 9.78 049 | 29 | 0.21 951 | 9.93 261 | 8 | 54 | 9 4.4 |
| 7 | 9.71 331 | 21 | 9.78 077 | 28 | 0.21 923 | 9.93 253 | 8 | 53 | 10 4.8 |
| 8 | 9.71 352 | 21 | 9.78 106 | 29 | 0.21 894 | 9.93 246 | 7 | 52 | 20 9.7 |
| 9 | 9.71 373 | 21 | 9.78 135 | 29 | 0.21 865 | 9.93 238 | 8 | 51 | 30 14.5 |
| | | 20 | | 28 | | | 8 | | 40 19.3 |
| 10 | 9.71 393 | | 9.78 163 | | 0.21 837 | 9.93 230 | | 50 | 50 24.2 |
| 11 | 9.71 414 | 21 | 9.78 192 | 29 | 0.21 808 | 9.93 223 | 7 | 49 | |
| 12 | 9.71 435 | 21 | 9.78 220 | 28 | 0.21 780 | 9.93 215 | 8 | 48 | |
| 13 | 9.71 456 | 21 | 9.78 249 | 29 | 0.21 751 | 9.93 207 | 8 | 47 | |
| 14 | 9.71 477 | 21 | 9.78 277 | 28 | 0.21 723 | 9.93 200 | 7 | 46 | 28 |
| | | 21 | | 29 | | | 8 | | 6 2.8 |
| 15 | 9.71 498 | | 9.78 306 | | 0.21 694 | 9.93 192 | | 45 | 7 3.3 |
| 16 | 9.71 519 | 21 | 9.78 334 | 28 | 0.21 666 | 9.93 184 | 8 | 44 | 8 3.7 |
| 17 | 9.71 539 | 20 | 9.78 363 | 29 | 0.21 637 | 9.93 177 | 7 | 43 | 9 4.2 |
| 18 | 9.71 560 | 21 | 9.78 391 | 28 | 0.21 609 | 9.93 169 | 8 | 42 | 10 4.7 |
| 19 | 9.71 581 | 21 | 9.78 419 | 28 | 0.21 581 | 9.93 161 | 8 | 41 | 20 9.3 |
| | | 21 | | 29 | | | 7 | | 30 14.0 |
| 20 | 9.71 602 | | 9.78 448 | | 0.21 552 | 9.93 154 | | 40 | 40 18.7 |
| 21 | 9.71 622 | 20 | 9.78 476 | 28 | 0.21 524 | 9.93 146 | 8 | 39 | 50 23.3 |
| 22 | 9.71 643 | 21 | 9.78 505 | 29 | 0.21 495 | 9.93 138 | 8 | 38 | |
| 23 | 9.71 664 | 21 | 9.78 533 | 28 | 0.21 467 | 9.93 131 | 7 | 37 | |
| 24 | 9.71 685 | 21 | 9.78 562 | 29 | 0.21 438 | 9.93 123 | 8 | 36 | |
| | | 20 | | 28 | | | 8 | | 6 2.1 |
| 25 | 9.71 705 | | 9.78 590 | | 0.21 410 | 9.93 115 | | 35 | 7 2.5 |
| 26 | 9.71 726 | 21 | 9.78 618 | 28 | 0.21 382 | 9.93 108 | 7 | 34 | 8 2.8 |
| 27 | 9.71 747 | 21 | 9.78 647 | 29 | 0.21 353 | 9.93 100 | 8 | 33 | 9 3.2 |
| 28 | 9.71 767 | 20 | 9.78 675 | 28 | 0.21 325 | 9.93 092 | 8 | 32 | 10 3.5 |
| 29 | 9.71 788 | 21 | 9.78 704 | 29 | 0.21 296 | 9.93 084 | 8 | 31 | 20 7.0 |
| | | 21 | | 28 | | | 7 | | 30 10.5 |
| 30 | 9.71 809 | | 9.78 732 | | 0.21 268 | 9.93 077 | | 30 | 40 14.0 |
| 31 | 9.71 829 | 20 | 9.78 760 | 28 | 0.21 240 | 9.93 069 | 8 | 29 | 50 17.5 |
| 32 | 9.71 850 | 21 | 9.78 789 | 29 | 0.21 211 | 9.93 061 | 8 | 28 | |
| 33 | 9.71 870 | 20 | 9.78 817 | 28 | 0.21 183 | 9.93 053 | 8 | 27 | |
| 34 | 9.71 891 | 21 | 9.78 845 | 28 | 0.21 155 | 9.93 046 | 7 | 26 | |
| | | 20 | | 29 | | | 8 | | 6 2.0 |
| 35 | 9.71 911 | | 9.78 874 | | 0.21 126 | 9.93 038 | | 25 | 7 2.3 |
| 36 | 9.71 932 | 21 | 9.78 902 | 28 | 0.21 098 | 9.93 030 | 8 | 24 | 8 2.7 |
| 37 | 9.71 952 | 20 | 9.78 930 | 28 | 0.21 070 | 9.93 022 | 8 | 23 | 9 3.0 |
| 38 | 9.71 973 | 21 | 9.78 959 | 29 | 0.21 041 | 9.93 014 | 8 | 22 | 10 3.3 |
| 39 | 9.71 994 | 21 | 9.78 987 | 28 | 0.21 013 | 9.93 007 | 7 | 21 | 20 6.7 |
| | | 20 | | 28 | | | 8 | | 30 10.0 |
| 40 | 9.72 014 | | 9.79 015 | | 0.20 985 | 9.92 999 | | 20 | 40 13.3 |
| 41 | 9.72 034 | 20 | 9.79 043 | 28 | 0.20 957 | 9.92 991 | 8 | 19 | 50 16.7 |
| 42 | 9.72 055 | 21 | 9.79 072 | 29 | 0.20 928 | 9.92 983 | 8 | 18 | |
| 43 | 9.72 075 | 20 | 9.79 100 | 28 | 0.20 900 | 9.92 976 | 7 | 17 | |
| 44 | 9.72 096 | 21 | 9.79 128 | 28 | 0.20 872 | 9.92 968 | 8 | 16 | |
| | | 20 | | 28 | | | 8 | | 6 0.8 |
| 45 | 9.72 116 | | 9.79 156 | | 0.20 844 | 9.92 960 | | 15 | 7 0.9 |
| 46 | 9.72 137 | 21 | 9.79 185 | 29 | 0.20 815 | 9.92 952 | 8 | 14 | 8 1.1 |
| 47 | 9.72 157 | 20 | 9.79 213 | 28 | 0.20 787 | 9.92 944 | 8 | 13 | 9 1.2 |
| 48 | 9.72 177 | 20 | 9.79 241 | 28 | 0.20 759 | 9.92 936 | 8 | 12 | 10 1.3 |
| 49 | 9.72 198 | 21 | 9.79 269 | 28 | 0.20 731 | 9.92 929 | 7 | 11 | 20 2.7 |
| | | 20 | | 28 | | | 8 | | 30 4.0 |
| 50 | 9.72 218 | | 9.79 297 | | 0.20 703 | 9.92 921 | | 10 | 40 5.3 |
| 51 | 9.72 238 | 20 | 9.79 326 | 29 | 0.20 674 | 9.92 913 | 8 | 9 | 50 6.7 |
| 52 | 9.72 259 | 21 | 9.79 354 | 28 | 0.20 646 | 9.92 905 | 8 | 8 | |
| 53 | 9.72 279 | 20 | 9.79 382 | 28 | 0.20 618 | 9.92 897 | 8 | 7 | |
| 54 | 9.72 299 | 21 | 9.79 410 | 28 | 0.20 590 | 9.92 889 | 8 | 6 | |
| | | 20 | | 28 | | | 8 | | 6 0.7 |
| 55 | 9.72 320 | | 9.79 438 | | 0.20 562 | 9.92 881 | | 5 | 7 0.9 |
| 56 | 9.72 340 | 20 | 9.79 466 | 28 | 0.20 534 | 9.92 874 | 7 | 4 | 8 1.1 |
| 57 | 9.72 360 | 20 | 9.79 495 | 29 | 0.20 505 | 9.92 866 | 8 | 3 | 9 1.2 |
| 58 | 9.72 381 | 21 | 9.79 523 | 28 | 0.20 477 | 9.92 858 | 8 | 2 | 10 1.3 |
| 59 | 9.72 401 | 20 | 9.79 551 | 28 | 0.20 449 | 9.92 850 | 8 | 1 | 20 2.7 |
| | | 20 | | 28 | | | 8 | | 30 4.0 |
| 60 | 9.72 421 | | 9.79 579 | | 0.20 421 | 9.92 842 | | 0 | 40 5.3 |
| | | | | | | | | | 50 6.7 |

| ✓ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. | | |
|----|----------|----|----------|-------|----------|----------|----|-----------|------------|------|------|
| 0 | 9.72 42I | 20 | 9.79 579 | 28 | 0.20 42I | 9.92 842 | 8 | 60 | | | |
| 1 | 9.72 44I | 20 | 9.79 607 | 28 | 0.20 393 | 9.92 834 | 8 | 59 | | | |
| 2 | 9.72 46I | 20 | 9.79 635 | 28 | 0.20 365 | 9.92 826 | 8 | 58 | | | |
| 3 | 9.72 482 | 21 | 9.79 663 | 28 | 0.20 337 | 9.92 818 | 8 | 57 | 6 | 2.9 | 2.8 |
| 4 | 9.72 502 | 20 | 9.79 69I | 28 | 0.20 309 | 9.92 810 | 8 | 56 | 7 | 3.4 | 3.3 |
| 5 | 9.72 522 | 20 | 9.79 719 | 28 | 0.20 281 | 9.92 803 | 7 | 55 | 8 | 3.9 | 3.7 |
| 6 | 9.72 542 | 20 | 9.79 747 | 28 | 0.20 253 | 9.92 795 | 8 | 54 | 9 | 4.4 | 4.2 |
| 7 | 9.72 562 | 20 | 9.79 776 | 29 | 0.20 224 | 9.92 787 | 8 | 53 | 10 | 4.8 | 4.7 |
| 8 | 9.72 582 | 20 | 9.79 804 | 28 | 0.20 196 | 9.92 779 | 8 | 52 | 20 | 9.7 | 9.3 |
| 9 | 9.72 602 | 20 | 9.79 832 | 28 | 0.20 168 | 9.92 771 | 8 | 51 | 30 | 14.5 | 14.0 |
| 10 | 9.72 622 | 21 | 9.79 860 | 28 | 0.20 140 | 9.92 763 | 8 | 50 | 40 | 19.3 | 18.7 |
| 11 | 9.72 643 | 20 | 9.79 888 | 28 | 0.20 112 | 9.92 755 | 8 | 49 | 50 | 24.2 | 23.3 |
| 12 | 9.72 663 | 20 | 9.79 916 | 28 | 0.20 084 | 9.92 747 | 8 | 48 | | | |
| 13 | 9.72 683 | 20 | 9.79 944 | 28 | 0.20 056 | 9.92 739 | 8 | 47 | | | |
| 14 | 9.72 703 | 20 | 9.79 972 | 28 | 0.20 028 | 9.92 731 | 8 | 46 | | | |
| 15 | 9.72 723 | 20 | 9.80 000 | 28 | 0.20 000 | 9.92 723 | 8 | 45 | 6 | 2.7 | |
| 16 | 9.72 743 | 20 | 9.80 028 | 28 | 0.19 972 | 9.92 715 | 8 | 44 | 7 | 3.2 | |
| 17 | 9.72 763 | 20 | 9.80 056 | 28 | 0.19 944 | 9.92 707 | 8 | 43 | 8 | 3.6 | |
| 18 | 9.72 783 | 20 | 9.80 084 | 28 | 0.19 916 | 9.92 699 | 8 | 42 | 9 | 4.1 | |
| 19 | 9.72 803 | 20 | 9.80 112 | 28 | 0.19 888 | 9.92 691 | 8 | 41 | 10 | 4.5 | |
| 20 | 9.72 823 | 20 | 9.80 140 | 28 | 0.19 860 | 9.92 683 | 8 | 40 | 20 | 9.0 | |
| 21 | 9.72 843 | 20 | 9.80 168 | 27 | 0.19 832 | 9.92 675 | 8 | 39 | 30 | 13.5 | |
| 22 | 9.72 863 | 20 | 9.80 195 | 28 | 0.19 805 | 9.92 667 | 8 | 38 | 40 | 18.0 | |
| 23 | 9.72 883 | 20 | 9.80 223 | 28 | 0.19 777 | 9.92 659 | 8 | 37 | 50 | 22.5 | |
| 24 | 9.72 902 | 19 | 9.80 251 | 28 | 0.19 749 | 9.92 651 | 8 | 36 | | | |
| 25 | 9.72 922 | 20 | 9.80 279 | 28 | 0.19 721 | 9.92 643 | 8 | 35 | | | |
| 26 | 9.72 942 | 20 | 9.80 307 | 28 | 0.19 693 | 9.92 635 | 8 | 34 | | | |
| 27 | 9.72 962 | 20 | 9.80 335 | 28 | 0.19 665 | 9.92 627 | 8 | 33 | 6 | 2.1 | 2.0 |
| 28 | 9.72 982 | 20 | 9.80 363 | 28 | 0.19 637 | 9.92 619 | 8 | 32 | 7 | 2.5 | 2.3 |
| 29 | 9.73 002 | 20 | 9.80 391 | 28 | 0.19 609 | 9.92 611 | 8 | 31 | 8 | 2.8 | 2.7 |
| 30 | 9.73 022 | 19 | 9.80 419 | 28 | 0.19 581 | 9.92 603 | 8 | 30 | 9 | 3.2 | 3.0 |
| 31 | 9.73 041 | 20 | 9.80 447 | 28 | 0.19 553 | 9.92 595 | 8 | 29 | 10 | 3.5 | 3.3 |
| 32 | 9.73 061 | 20 | 9.80 474 | 27 | 0.19 526 | 9.92 587 | 8 | 28 | 20 | 7.0 | 6.7 |
| 33 | 9.73 081 | 20 | 9.80 502 | 28 | 0.19 498 | 9.92 579 | 8 | 27 | 30 | 10.5 | 10.0 |
| 34 | 9.73 101 | 20 | 9.80 530 | 28 | 0.19 470 | 9.92 571 | 8 | 26 | 40 | 14.0 | 13.3 |
| 35 | 9.73 121 | 19 | 9.80 558 | 28 | 0.19 442 | 9.92 563 | 8 | 25 | 50 | 17.5 | 16.7 |
| 36 | 9.73 140 | 20 | 9.80 586 | 28 | 0.19 414 | 9.92 555 | 8 | 24 | | | |
| 37 | 9.73 160 | 20 | 9.80 614 | 28 | 0.19 386 | 9.92 546 | 9 | 23 | | | |
| 38 | 9.73 180 | 20 | 9.80 642 | 28 | 0.19 358 | 9.92 538 | 8 | 22 | | | |
| 39 | 9.73 200 | 19 | 9.80 669 | 27 | 0.19 331 | 9.92 530 | 8 | 21 | 6 | 1.9 | 0.9 |
| 40 | 9.73 219 | 20 | 9.80 697 | 28 | 0.19 303 | 9.92 522 | 8 | 20 | 7 | 2.2 | 1.1 |
| 41 | 9.73 239 | 20 | 9.80 725 | 28 | 0.19 275 | 9.92 514 | 8 | 19 | 8 | 2.5 | 1.2 |
| 42 | 9.73 259 | 20 | 9.80 753 | 28 | 0.19 247 | 9.92 506 | 8 | 18 | 9 | 2.9 | 1.4 |
| 43 | 9.73 278 | 19 | 9.80 781 | 27 | 0.19 219 | 9.92 498 | 8 | 17 | 10 | 3.2 | 1.5 |
| 44 | 9.73 298 | 20 | 9.80 808 | 27 | 0.19 192 | 9.92 490 | 8 | 16 | 20 | 6.3 | 3.0 |
| 45 | 9.73 318 | 19 | 9.80 836 | 28 | 0.19 164 | 9.92 482 | 8 | 15 | 30 | 9.5 | 4.5 |
| 46 | 9.73 337 | 20 | 9.80 864 | 28 | 0.19 136 | 9.92 473 | 9 | 14 | 40 | 12.7 | 6.0 |
| 47 | 9.73 357 | 20 | 9.80 892 | 28 | 0.19 108 | 9.92 465 | 8 | 13 | 50 | 15.8 | 7.5 |
| 48 | 9.73 377 | 19 | 9.80 919 | 27 | 0.19 081 | 9.92 457 | 8 | 12 | | | |
| 49 | 9.73 397 | 20 | 9.80 947 | 28 | 0.19 053 | 9.92 449 | 8 | 11 | | | |
| 50 | 9.73 416 | 19 | 9.80 975 | 28 | 0.19 025 | 9.92 441 | 8 | 10 | | | |
| 51 | 9.73 435 | 20 | 9.81 003 | 27 | 0.18 997 | 9.92 433 | 8 | 9 | 6 | 0.8 | 0.7 |
| 52 | 9.73 455 | 19 | 9.81 030 | 28 | 0.18 970 | 9.92 425 | 8 | 8 | 7 | 0.9 | 0.8 |
| 53 | 9.73 474 | 20 | 9.81 058 | 28 | 0.18 942 | 9.92 416 | 9 | 7 | 8 | 1.1 | 0.9 |
| 54 | 9.73 494 | 19 | 9.81 086 | 27 | 0.18 914 | 9.92 408 | 8 | 6 | 9 | 1.2 | 1.1 |
| 55 | 9.73 513 | 20 | 9.81 113 | 28 | 0.18 887 | 9.92 400 | 8 | 5 | 10 | 1.3 | 1.2 |
| 56 | 9.73 533 | 19 | 9.81 141 | 28 | 0.18 859 | 9.92 392 | 8 | 4 | 20 | 2.7 | 2.3 |
| 57 | 9.73 552 | 20 | 9.81 169 | 27 | 0.18 831 | 9.92 384 | 8 | 3 | 30 | 4.0 | 3.5 |
| 58 | 9.73 572 | 19 | 9.81 196 | 28 | 0.18 804 | 9.92 376 | 8 | 2 | 40 | 5.3 | 4.7 |
| 59 | 9.73 591 | 20 | 9.81 224 | 28 | 0.18 776 | 9.92 367 | 9 | 1 | 50 | 6.7 | 5.8 |
| 60 | 9.73 611 | 20 | 9.81 252 | 28 | 0.18 748 | 9.92 359 | 8 | 0 | | | |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | ✓ | Prop. Pts. | | |

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. |
|-----------|----------------|-----------|-----------------|--------------|-----------------|----------------|-----------|-----------|---------------------|
| 0 | 9.73 611 | | 9.81 252 | | 0.18 748 | 9.92 359 | | 60 | |
| 1 | 9.73 630 | 19 | 9.81 279 | 27 | 0.18 721 | 9.92 351 | 8 | 59 | |
| 2 | 9.73 650 | 20 | 9.81 307 | 28 | 0.18 693 | 9.92 343 | 8 | 58 | 28 27 |
| 3 | 9.73 669 | 19 | 9.81 335 | 28 | 0.18 665 | 9.92 335 | 8 | 57 | 6 2.8 2.7 |
| 4 | 9.73 689 | 20 | 9.81 362 | 27 | 0.18 638 | 9.92 326 | 9 | 56 | 7 3.3 3.2 |
| 5 | 9.73 708 | 19 | 9.81 390 | 28 | 0.18 610 | 9.92 318 | 8 | 55 | 8 3.7 3.6 |
| 6 | 9.73 727 | 19 | 9.81 418 | 28 | 0.18 582 | 9.92 310 | 8 | 54 | 9 4.2 4.1 |
| 7 | 9.73 747 | 20 | 9.81 445 | 27 | 0.18 555 | 9.92 302 | 8 | 53 | 10 4.7 4.5 |
| 8 | 9.73 766 | 19 | 9.81 473 | 28 | 0.18 527 | 9.92 293 | 9 | 52 | 20 9.3 9.0 |
| 9 | 9.73 785 | 19 | 9.81 500 | 27 | 0.18 500 | 9.92 285 | 9 | 51 | 30 14.0 13.5 |
| 10 | 9.73 805 | 20 | 9.81 528 | 28 | 0.18 472 | 9.92 277 | 8 | 50 | 40 18.7 18.0 |
| 11 | 9.73 824 | 19 | 9.81 556 | 28 | 0.18 444 | 9.92 269 | 8 | 49 | 50 23.3 22.5 |
| 12 | 9.73 843 | 19 | 9.81 583 | 27 | 0.18 417 | 9.92 260 | 9 | 48 | |
| 13 | 9.73 863 | 20 | 9.81 611 | 28 | 0.18 389 | 9.92 252 | 8 | 47 | |
| 14 | 9.73 882 | 19 | 9.81 638 | 27 | 0.18 362 | 9.92 244 | 8 | 46 | |
| 15 | 9.73 901 | 19 | 9.81 666 | 28 | 0.18 334 | 9.92 235 | 9 | 45 | 20 |
| 16 | 9.73 921 | 20 | 9.81 693 | 27 | 0.18 307 | 9.92 227 | 8 | 44 | 6 2.0 |
| 17 | 9.73 940 | 19 | 9.81 721 | 28 | 0.18 279 | 9.92 219 | 8 | 43 | 7 2.3 |
| 18 | 9.73 959 | 19 | 9.81 748 | 27 | 0.18 252 | 9.92 211 | 8 | 42 | 8 2.7 |
| 19 | 9.73 978 | 19 | 9.81 776 | 27 | 0.18 224 | 9.92 202 | 9 | 41 | 9 3.0 |
| 20 | 9.73 997 | 19 | 9.81 803 | 28 | 0.18 197 | 9.92 194 | 8 | 40 | 10 3.3 |
| 21 | 9.74 017 | 20 | 9.81 831 | 27 | 0.18 169 | 9.92 186 | 8 | 39 | 20 6.7 |
| 22 | 9.74 036 | 19 | 9.81 858 | 28 | 0.18 142 | 9.92 177 | 9 | 38 | 30 10.0 |
| 23 | 9.74 055 | 19 | 9.81 886 | 27 | 0.18 114 | 9.92 169 | 8 | 37 | 40 13.3 |
| 24 | 9.74 074 | 19 | 9.81 913 | 28 | 0.18 087 | 9.92 161 | 8 | 36 | 50 16.7 |
| 25 | 9.74 093 | 19 | 9.81 941 | 27 | 0.18 059 | 9.92 152 | 9 | 35 | |
| 26 | 9.74 113 | 20 | 9.81 968 | 28 | 0.18 032 | 9.92 144 | 8 | 34 | 19 |
| 27 | 9.74 132 | 19 | 9.81 996 | 27 | 0.18 004 | 9.92 136 | 8 | 33 | 6 1.9 |
| 28 | 9.74 151 | 19 | 9.82 023 | 27 | 0.17 977 | 9.92 127 | 8 | 32 | 7 2.2 |
| 29 | 9.74 170 | 19 | 9.82 051 | 28 | 0.17 949 | 9.92 119 | 8 | 31 | 8 2.5 |
| 30 | 9.74 189 | 19 | 9.82 078 | 27 | 0.17 922 | 9.92 111 | 8 | 30 | 9 2.9 |
| 31 | 9.74 208 | 19 | 9.82 106 | 28 | 0.17 894 | 9.92 102 | 9 | 29 | 10 3.2 |
| 32 | 9.74 227 | 19 | 9.82 133 | 27 | 0.17 867 | 9.92 094 | 8 | 28 | 20 6.3 |
| 33 | 9.74 246 | 19 | 9.82 161 | 28 | 0.17 839 | 9.92 086 | 8 | 27 | 30 9.5 |
| 34 | 9.74 265 | 19 | 9.82 188 | 27 | 0.17 812 | 9.92 077 | 9 | 26 | 40 12.7 |
| 35 | 9.74 284 | 19 | 9.82 215 | 28 | 0.17 785 | 9.92 069 | 8 | 25 | 50 15.8 |
| 36 | 9.74 303 | 19 | 9.82 243 | 27 | 0.17 757 | 9.92 060 | 9 | 24 | |
| 37 | 9.74 322 | 19 | 9.82 270 | 28 | 0.17 730 | 9.92 052 | 8 | 23 | |
| 38 | 9.74 341 | 19 | 9.82 298 | 27 | 0.17 702 | 9.92 044 | 8 | 22 | 18 |
| 39 | 9.74 360 | 19 | 9.82 325 | 28 | 0.17 675 | 9.92 035 | 9 | 21 | 6 1.8 |
| 40 | 9.74 379 | 19 | 9.82 352 | 27 | 0.17 648 | 9.92 027 | 8 | 20 | 7 2.1 |
| 41 | 9.74 398 | 19 | 9.82 380 | 28 | 0.17 620 | 9.92 018 | 9 | 19 | 8 2.4 |
| 42 | 9.74 417 | 19 | 9.82 407 | 27 | 0.17 593 | 9.92 010 | 8 | 18 | 9 2.7 |
| 43 | 9.74 436 | 19 | 9.82 435 | 28 | 0.17 565 | 9.92 002 | 8 | 17 | 10 3.0 |
| 44 | 9.74 455 | 19 | 9.82 462 | 27 | 0.17 538 | 9.91 993 | 9 | 16 | 20 6.0 |
| 45 | 9.74 474 | 19 | 9.82 489 | 28 | 0.17 511 | 9.91 985 | 8 | 15 | 30 9.0 |
| 46 | 9.74 493 | 19 | 9.82 517 | 27 | 0.17 483 | 9.91 976 | 9 | 14 | 40 12.0 |
| 47 | 9.74 512 | 19 | 9.82 544 | 28 | 0.17 456 | 9.91 968 | 8 | 13 | 50 15.0 |
| 48 | 9.74 531 | 19 | 9.82 571 | 27 | 0.17 429 | 9.91 959 | 9 | 12 | |
| 49 | 9.74 549 | 18 | 9.82 599 | 28 | 0.17 401 | 9.91 951 | 8 | 11 | |
| 50 | 9.74 568 | 19 | 9.82 626 | 27 | 0.17 374 | 9.91 942 | 9 | 10 | 9 8 |
| 51 | 9.74 587 | 19 | 9.82 653 | 28 | 0.17 347 | 9.91 934 | 8 | 9 | 6 0.9 0.8 |
| 52 | 9.74 606 | 19 | 9.82 681 | 27 | 0.17 319 | 9.91 925 | 9 | 8 | 7 1.1 0.9 |
| 53 | 9.74 625 | 19 | 9.82 708 | 28 | 0.17 292 | 9.91 917 | 8 | 7 | 8 1.2 1.1 |
| 54 | 9.74 644 | 19 | 9.82 735 | 27 | 0.17 265 | 9.91 908 | 9 | 6 | 9 1.4 1.2 |
| 55 | 9.74 662 | 18 | 9.82 762 | 28 | 0.17 238 | 9.91 900 | 8 | 5 | 10 1.5 1.3 |
| 56 | 9.74 681 | 19 | 9.82 790 | 27 | 0.17 210 | 9.91 891 | 9 | 4 | 20 3.0 2.7 |
| 57 | 9.74 700 | 19 | 9.82 817 | 28 | 0.17 183 | 9.91 883 | 8 | 3 | 30 4.5 4.0 |
| 58 | 9.74 719 | 19 | 9.82 844 | 27 | 0.17 156 | 9.91 874 | 9 | 2 | 40 6.0 5.3 |
| 59 | 9.74 737 | 18 | 9.82 871 | 28 | 0.17 129 | 9.91 866 | 8 | 1 | 50 7.5 6.7 |
| 60 | 9.74 756 | 19 | 9.82 899 | | 0.17 101 | 9.91 857 | 9 | 0 | |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | ∕ | Prop. Pts. |

| r | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. |
|----|----------|----|----------|-------|----------|----------|----|-----------|--------------|
| 0 | 9.74 756 | | 9.82 899 | | 0.17 101 | 9.91 857 | | 60 | |
| 1 | 9.74 775 | 19 | 9.82 926 | 27 | 0.17 074 | 9.91 849 | 8 | 59 | |
| 2 | 9.74 794 | 19 | 9.82 953 | 27 | 0.17 047 | 9.91 840 | 9 | 58 | 28 27 |
| 3 | 9.74 812 | 18 | 9.82 980 | 27 | 0.17 020 | 9.91 832 | 8 | 57 | 6 2.8 2.7 |
| 4 | 9.74 831 | 19 | 9.83 008 | 28 | 0.16 992 | 9.91 823 | 9 | 56 | 7 3.3 3.2 |
| 5 | 9.74 850 | 19 | 9.83 035 | 27 | 0.16 965 | 9.91 815 | 8 | 55 | 8 3.7 3.6 |
| 6 | 9.74 868 | 18 | 9.83 062 | 27 | 0.16 938 | 9.91 806 | 9 | 54 | 9 4.2 4.1 |
| 7 | 9.74 887 | 19 | 9.83 089 | 27 | 0.16 911 | 9.91 798 | 8 | 53 | 10 4.7 4.5 |
| 8 | 9.74 906 | 19 | 9.83 117 | 28 | 0.16 883 | 9.91 789 | 9 | 52 | 20 9.3 9.0 |
| 9 | 9.74 924 | 18 | 9.83 144 | 27 | 0.16 856 | 9.91 781 | 8 | 51 | 30 14.0 13.5 |
| 10 | 9.74 943 | 19 | 9.83 171 | 27 | 0.16 829 | 9.91 772 | 9 | 50 | 40 18.7 18.0 |
| 11 | 9.74 961 | 18 | 9.83 198 | 27 | 0.16 802 | 9.91 763 | 8 | 49 | 50 23.3 22.5 |
| 12 | 9.74 980 | 19 | 9.83 225 | 27 | 0.16 775 | 9.91 755 | 9 | 48 | |
| 13 | 9.74 999 | 19 | 9.83 252 | 27 | 0.16 748 | 9.91 746 | 8 | 47 | |
| 14 | 9.75 017 | 18 | 9.83 280 | 28 | 0.16 720 | 9.91 738 | 9 | 46 | 26 |
| 15 | 9.75 036 | 19 | 9.83 307 | 27 | 0.16 693 | 9.91 729 | 8 | 45 | 6 2.6 |
| 16 | 9.75 054 | 18 | 9.83 334 | 27 | 0.16 666 | 9.91 720 | 9 | 44 | 7 3.0 |
| 17 | 9.75 073 | 19 | 9.83 361 | 27 | 0.16 639 | 9.91 712 | 8 | 43 | 8 3.5 |
| 18 | 9.75 091 | 18 | 9.83 388 | 27 | 0.16 612 | 9.91 703 | 9 | 42 | 9 3.9 |
| 19 | 9.75 110 | 19 | 9.83 415 | 27 | 0.16 585 | 9.91 695 | 8 | 41 | 10 4.3 |
| 20 | 9.75 128 | 18 | 9.83 442 | 27 | 0.16 558 | 9.91 686 | 9 | 40 | 20 8.7 |
| 21 | 9.75 147 | 19 | 9.83 470 | 28 | 0.16 530 | 9.91 677 | 8 | 39 | 30 13.0 |
| 22 | 9.75 165 | 18 | 9.83 497 | 27 | 0.16 503 | 9.91 669 | 9 | 38 | 40 17.3 |
| 23 | 9.75 184 | 19 | 9.83 524 | 27 | 0.16 476 | 9.91 660 | 8 | 37 | 50 21.7 |
| 24 | 9.75 202 | 18 | 9.83 551 | 27 | 0.16 449 | 9.91 651 | 9 | 36 | |
| 25 | 9.75 221 | 19 | 9.83 578 | 27 | 0.16 422 | 9.91 643 | 8 | 35 | |
| 26 | 9.75 239 | 18 | 9.83 605 | 27 | 0.16 395 | 9.91 634 | 9 | 34 | 19 |
| 27 | 9.75 258 | 19 | 9.83 632 | 27 | 0.16 368 | 9.91 625 | 8 | 33 | 6 1.9 |
| 28 | 9.75 276 | 18 | 9.83 659 | 27 | 0.16 341 | 9.91 617 | 9 | 32 | 7 2.2 |
| 29 | 9.75 294 | 19 | 9.83 686 | 27 | 0.16 314 | 9.91 608 | 8 | 31 | 8 2.5 |
| 30 | 9.75 313 | 18 | 9.83 713 | 27 | 0.16 287 | 9.91 599 | 9 | 30 | 9 2.9 |
| 31 | 9.75 331 | 19 | 9.83 740 | 28 | 0.16 260 | 9.91 591 | 8 | 29 | 10 3.2 |
| 32 | 9.75 350 | 18 | 9.83 768 | 27 | 0.16 232 | 9.91 582 | 9 | 28 | 20 6.3 |
| 33 | 9.75 368 | 19 | 9.83 795 | 27 | 0.16 205 | 9.91 573 | 8 | 27 | 30 9.5 |
| 34 | 9.75 386 | 18 | 9.83 822 | 27 | 0.16 178 | 9.91 565 | 9 | 26 | 40 12.7 |
| 35 | 9.75 405 | 19 | 9.83 849 | 27 | 0.16 151 | 9.91 556 | 8 | 25 | 50 15.8 |
| 36 | 9.75 423 | 18 | 9.83 876 | 27 | 0.16 124 | 9.91 547 | 9 | 24 | |
| 37 | 9.75 441 | 19 | 9.83 903 | 27 | 0.16 097 | 9.91 538 | 8 | 23 | |
| 38 | 9.75 459 | 18 | 9.83 930 | 27 | 0.16 070 | 9.91 530 | 9 | 22 | 18 |
| 39 | 9.75 478 | 19 | 9.83 957 | 27 | 0.16 043 | 9.91 521 | 8 | 21 | 6 1.8 |
| 40 | 9.75 496 | 18 | 9.83 984 | 27 | 0.16 016 | 9.91 512 | 9 | 20 | 7 2.1 |
| 41 | 9.75 514 | 19 | 9.84 011 | 27 | 0.15 989 | 9.91 504 | 8 | 19 | 8 2.4 |
| 42 | 9.75 533 | 18 | 9.84 038 | 27 | 0.15 962 | 9.91 495 | 9 | 18 | 9 2.7 |
| 43 | 9.75 551 | 19 | 9.84 065 | 27 | 0.15 935 | 9.91 486 | 8 | 17 | 10 3.0 |
| 44 | 9.75 569 | 18 | 9.84 092 | 27 | 0.15 908 | 9.91 477 | 9 | 16 | 20 6.0 |
| 45 | 9.75 587 | 19 | 9.84 119 | 27 | 0.15 881 | 9.91 469 | 8 | 15 | 30 9.0 |
| 46 | 9.75 605 | 18 | 9.84 146 | 27 | 0.15 854 | 9.91 460 | 9 | 14 | 40 12.0 |
| 47 | 9.75 624 | 19 | 9.84 173 | 27 | 0.15 827 | 9.91 451 | 8 | 13 | 50 15.0 |
| 48 | 9.75 642 | 18 | 9.84 200 | 27 | 0.15 800 | 9.91 442 | 9 | 12 | |
| 49 | 9.75 660 | 19 | 9.84 227 | 27 | 0.15 773 | 9.91 433 | 8 | 11 | |
| 50 | 9.75 678 | 18 | 9.84 254 | 26 | 0.15 746 | 9.91 425 | 9 | 10 | 6 9 8 |
| 51 | 9.75 696 | 19 | 9.84 280 | 27 | 0.15 720 | 9.91 416 | 8 | 9 | 6 0.9 0.8 |
| 52 | 9.75 714 | 18 | 9.84 307 | 27 | 0.15 693 | 9.91 407 | 9 | 8 | 7 1.1 0.9 |
| 53 | 9.75 733 | 19 | 9.84 334 | 27 | 0.15 666 | 9.91 398 | 8 | 7 | 8 1.2 1.1 |
| 54 | 9.75 751 | 18 | 9.84 361 | 27 | 0.15 639 | 9.91 389 | 9 | 6 | 9 1.4 1.2 |
| 55 | 9.75 769 | 19 | 9.84 388 | 27 | 0.15 612 | 9.91 381 | 8 | 5 | 10 1.5 1.3 |
| 56 | 9.75 787 | 18 | 9.84 415 | 27 | 0.15 585 | 9.91 372 | 9 | 4 | 20 3.0 2.7 |
| 57 | 9.75 805 | 19 | 9.84 442 | 27 | 0.15 558 | 9.91 363 | 8 | 3 | 30 4.5 4.0 |
| 58 | 9.75 823 | 18 | 9.84 469 | 27 | 0.15 531 | 9.91 354 | 9 | 2 | 40 6.0 5.3 |
| 59 | 9.75 841 | 19 | 9.84 496 | 27 | 0.15 504 | 9.91 345 | 8 | 1 | 50 7.5 6.7 |
| 60 | 9.75 859 | 18 | 9.84 523 | 27 | 0.15 477 | 9.91 336 | 9 | 0 | |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | r | Prop. Pts. |

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. |
|-----------|----------------|-----------|-----------------|--------------|-----------------|----------------|-----------|-----------|-------------------|
| 0 | 9.75 859 | | 9.84 523 | | 0.15 477 | 9.91 336 | | 60 | |
| 1 | 9.75 877 | 18 | 9.84 550 | 27 | 0.15 450 | 9.91 328 | 8 | 59 | |
| 2 | 9.75 895 | 18 | 9.84 576 | 26 | 0.15 424 | 9.91 319 | 9 | 58 | 27 2.6 |
| 3 | 9.75 913 | 18 | 9.84 603 | 27 | 0.15 397 | 9.91 310 | 9 | 57 | 6 2.7 3.0 |
| 4 | 9.75 931 | 18 | 9.84 630 | 27 | 0.15 370 | 9.91 301 | 9 | 56 | 7 3.2 3.5 |
| | | 18 | | 27 | | | 9 | | 8 3.6 3.9 |
| 5 | 9.75 949 | | 9.84 657 | | 0.15 343 | 9.91 292 | | 55 | 10 4.5 4.3 |
| 6 | 9.75 967 | 18 | 9.84 684 | 27 | 0.15 316 | 9.91 283 | 9 | 54 | 20 9.0 8.7 |
| 7 | 9.75 985 | 18 | 9.84 711 | 27 | 0.15 289 | 9.91 274 | 9 | 53 | 30 13.5 13.0 |
| 8 | 9.75 003 | 18 | 9.84 738 | 27 | 0.15 262 | 9.91 266 | 8 | 52 | 40 18.0 17.3 |
| 9 | 9.76 021 | 18 | 9.84 764 | 26 | 0.15 236 | 9.91 257 | 9 | 51 | 50 22.5 21.7 |
| 10 | 9.76 039 | | 9.84 791 | | 0.15 209 | 9.91 248 | | 50 | |
| 11 | 9.76 057 | 18 | 9.84 818 | 27 | 0.15 182 | 9.91 239 | 9 | 49 | |
| 12 | 9.76 075 | 18 | 9.84 845 | 27 | 0.15 155 | 9.91 230 | 9 | 48 | 18 |
| 13 | 9.76 093 | 18 | 9.84 872 | 27 | 0.15 128 | 9.91 221 | 9 | 47 | |
| 14 | 9.76 111 | 18 | 9.84 899 | 27 | 0.15 101 | 9.91 212 | 9 | 46 | |
| 15 | 9.76 129 | 18 | 9.84 925 | 26 | 0.15 075 | 9.91 203 | 9 | 45 | 6 1.8 |
| 16 | 9.76 146 | 17 | 9.84 952 | 27 | 0.15 048 | 9.91 194 | 9 | 44 | 7 2.1 |
| 17 | 9.76 164 | 18 | 9.84 979 | 27 | 0.15 021 | 9.91 185 | 9 | 43 | 8 2.4 |
| 18 | 9.76 182 | 18 | 9.85 006 | 27 | 0.14 994 | 9.91 176 | 9 | 42 | 9 2.7 |
| 19 | 9.76 200 | 18 | 9.85 033 | 27 | 0.14 967 | 9.91 167 | 9 | 41 | 10 3.0 |
| 20 | 9.76 218 | | 9.85 059 | | 0.14 941 | 9.91 158 | | 40 | 20 6.0 |
| 21 | 9.76 236 | 18 | 9.85 086 | 27 | 0.14 914 | 9.91 149 | 9 | 39 | 30 9.0 |
| 22 | 9.76 253 | 17 | 9.85 113 | 27 | 0.14 887 | 9.91 141 | 8 | 38 | 40 12.0 |
| 23 | 9.76 271 | 18 | 9.85 140 | 27 | 0.14 860 | 9.91 132 | 9 | 37 | 50 15.0 |
| 24 | 9.76 289 | 18 | 9.85 166 | 26 | 0.14 834 | 9.91 123 | 9 | 36 | |
| 25 | 9.76 307 | | 9.85 193 | | 0.14 807 | 9.91 114 | | 35 | |
| 26 | 9.76 324 | 17 | 9.85 220 | 27 | 0.14 780 | 9.91 105 | 9 | 34 | 17 |
| 27 | 9.76 342 | 18 | 9.85 247 | 27 | 0.14 753 | 9.91 096 | 9 | 33 | 6 1.7 |
| 28 | 9.76 360 | 18 | 9.85 273 | 26 | 0.14 727 | 9.91 087 | 9 | 32 | 7 2.0 |
| 29 | 9.76 378 | 18 | 9.85 300 | 27 | 0.14 700 | 9.91 078 | 9 | 31 | 8 2.3 |
| 30 | 9.76 395 | 17 | 9.85 327 | 27 | 0.14 673 | 9.91 069 | 9 | 30 | 9 2.6 |
| 31 | 9.76 413 | 18 | 9.85 354 | 27 | 0.14 646 | 9.91 060 | 9 | 29 | 10 2.8 |
| 32 | 9.76 431 | 18 | 9.85 380 | 26 | 0.14 620 | 9.91 051 | 9 | 28 | 20 5.7 |
| 33 | 9.76 448 | 17 | 9.85 407 | 27 | 0.14 593 | 9.91 042 | 9 | 27 | 30 8.5 |
| 34 | 9.76 466 | 18 | 9.85 434 | 27 | 0.14 566 | 9.91 033 | 9 | 26 | 40 11.3 |
| 35 | 9.76 484 | | 9.85 460 | | 0.14 540 | 9.91 023 | | 25 | 50 14.2 |
| 36 | 9.76 501 | 17 | 9.85 487 | 27 | 0.14 513 | 9.91 014 | 9 | 24 | |
| 37 | 9.76 519 | 18 | 9.85 514 | 27 | 0.14 486 | 9.91 005 | 9 | 23 | |
| 38 | 9.76 537 | 18 | 9.85 540 | 26 | 0.14 460 | 9.90 996 | 9 | 22 | 10 |
| 39 | 9.76 554 | 17 | 9.85 567 | 27 | 0.14 433 | 9.90 987 | 9 | 21 | 6 1.0 |
| 40 | 9.76 572 | | 9.85 594 | | 0.14 406 | 9.90 978 | | 20 | 7 1.2 |
| 41 | 9.76 590 | 18 | 9.85 620 | 26 | 0.14 380 | 9.90 969 | 9 | 19 | 8 1.3 |
| 42 | 9.76 607 | 17 | 9.85 647 | 27 | 0.14 353 | 9.90 960 | 9 | 18 | 9 1.5 |
| 43 | 9.76 625 | 18 | 9.85 674 | 27 | 0.14 326 | 9.90 951 | 9 | 17 | 10 1.7 |
| 44 | 9.76 642 | 17 | 9.85 700 | 26 | 0.14 300 | 9.90 942 | 9 | 16 | 20 3.3 |
| 45 | 9.76 660 | 18 | 9.85 727 | 27 | 0.14 273 | 9.90 933 | 9 | 15 | 30 5.0 |
| 46 | 9.76 677 | 17 | 9.85 754 | 27 | 0.14 246 | 9.90 924 | 9 | 14 | 40 6.7 |
| 47 | 9.76 695 | 18 | 9.85 780 | 26 | 0.14 220 | 9.90 915 | 9 | 13 | 50 8.3 |
| 48 | 9.76 712 | 17 | 9.85 807 | 27 | 0.14 193 | 9.90 906 | 9 | 12 | |
| 49 | 9.76 730 | 18 | 9.85 834 | 27 | 0.14 166 | 9.90 896 | 10 | 11 | |
| 50 | 9.76 747 | 17 | 9.85 860 | 26 | 0.14 140 | 9.90 887 | 9 | 10 | 9 8 |
| 51 | 9.76 765 | 18 | 9.85 887 | 27 | 0.14 113 | 9.90 878 | 9 | 9 | 6 0.9 0.8 |
| 52 | 9.76 782 | 17 | 9.85 913 | 26 | 0.14 087 | 9.90 869 | 9 | 8 | 7 1.1 0.9 |
| 53 | 9.76 800 | 18 | 9.85 940 | 27 | 0.14 060 | 9.90 860 | 9 | 7 | 8 1.2 1.1 |
| 54 | 9.76 817 | 17 | 9.85 967 | 27 | 0.14 033 | 9.90 851 | 9 | 6 | 9 1.4 1.2 |
| 55 | 9.76 835 | 18 | 9.85 993 | 26 | 0.14 007 | 9.90 842 | 9 | 5 | 10 1.5 1.3 |
| 56 | 9.76 852 | 17 | 9.86 020 | 27 | 0.13 980 | 9.90 832 | 10 | 4 | 20 3.0 2.7 |
| 57 | 9.76 870 | 18 | 9.86 046 | 26 | 0.13 954 | 9.90 823 | 9 | 3 | 30 4.5 4.0 |
| 58 | 9.76 887 | 17 | 9.86 073 | 27 | 0.13 927 | 9.90 814 | 9 | 2 | 40 6.0 5.3 |
| 59 | 9.76 904 | 17 | 9.86 100 | 27 | 0.13 900 | 9.90 805 | 9 | 1 | 50 7.5 6.7 |
| | | 18 | | 26 | | | 9 | | |
| 60 | 9.76 922 | | 9.86 126 | | 0.13 874 | 9.90 796 | | 0 | |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | ∕ | Prop. Pts. |

| ✓ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. |
|----|----------|----|----------|-------|----------|----------|----|----|--------------|
| 0 | 9.76 922 | | 9.86 126 | | 0.13 874 | 9.90 796 | | 60 | |
| 1 | 9.76 939 | 17 | 9.86 153 | 27 | 0.13 847 | 9.90 787 | 9 | 59 | |
| 2 | 9.76 957 | 18 | 9.86 179 | 26 | 0.13 821 | 9.90 777 | 10 | 58 | 27 26 |
| 3 | 9.76 974 | 17 | 9.86 206 | 27 | 0.13 794 | 9.90 768 | 9 | 57 | 6 2.7 2.6 |
| 4 | 9.76 991 | 17 | 9.86 232 | 26 | 0.13 768 | 9.90 759 | 9 | 56 | 7 3.2 3.0 |
| | | 18 | | 27 | | | 9 | | 8 3.6 3.5 |
| 5 | 9.77 009 | | 9.86 259 | | 0.13 741 | 9.90 750 | | 55 | 9 4.1 3.9 |
| 6 | 9.77 026 | 17 | 9.86 285 | 26 | 0.13 715 | 9.90 741 | 9 | 54 | 10 4.5 4.3 |
| 7 | 9.77 043 | 17 | 9.86 312 | 27 | 0.13 688 | 9.90 731 | 10 | 53 | 20 9.0 8.7 |
| 8 | 9.77 061 | 18 | 9.86 338 | 26 | 0.13 662 | 9.90 722 | 9 | 52 | 30 13.5 13.0 |
| 9 | 9.77 078 | 17 | 9.86 365 | 27 | 0.13 635 | 9.90 713 | 9 | 51 | 40 18.0 17.3 |
| | | 17 | | 27 | | | 9 | | 50 22.5 21.7 |
| 10 | 9.77 095 | | 9.86 392 | | 0.13 608 | 9.90 704 | | 50 | |
| 11 | 9.77 112 | 17 | 9.86 418 | 26 | 0.13 582 | 9.90 694 | 10 | 49 | |
| 12 | 9.77 130 | 18 | 9.86 445 | 27 | 0.13 555 | 9.90 685 | 9 | 48 | 18 |
| 13 | 9.77 147 | 17 | 9.86 471 | 26 | 0.13 529 | 9.90 676 | 9 | 47 | 6 1.8 |
| 14 | 9.77 164 | 17 | 9.86 498 | 27 | 0.13 502 | 9.90 667 | 9 | 46 | 7 2.1 |
| | | 17 | | 26 | | | 10 | | 8 2.4 |
| 15 | 9.77 181 | 18 | 9.86 524 | 26 | 0.13 476 | 9.90 657 | 9 | 45 | 9 2.7 |
| 16 | 9.77 199 | 17 | 9.86 551 | 27 | 0.13 449 | 9.90 648 | 9 | 44 | 10 3.0 |
| 17 | 9.77 216 | 17 | 9.86 577 | 26 | 0.13 423 | 9.90 639 | 9 | 43 | 20 6.0 |
| 18 | 9.77 233 | 17 | 9.86 603 | 26 | 0.13 397 | 9.90 630 | 9 | 42 | 30 9.0 |
| 19 | 9.77 250 | 17 | 9.86 630 | 27 | 0.13 370 | 9.90 620 | 10 | 41 | 40 12.0 |
| | | 18 | | 26 | | | 9 | | 50 15.0 |
| 20 | 9.77 268 | | 9.86 656 | | 0.13 344 | 9.90 611 | | 40 | |
| 21 | 9.77 285 | 17 | 9.86 683 | 27 | 0.13 317 | 9.90 602 | 9 | 39 | |
| 22 | 9.77 302 | 17 | 9.86 709 | 26 | 0.13 291 | 9.90 592 | 10 | 38 | |
| 23 | 9.77 319 | 17 | 9.86 736 | 27 | 0.13 264 | 9.90 583 | 9 | 37 | |
| 24 | 9.77 336 | 17 | 9.86 762 | 26 | 0.13 238 | 9.90 574 | 9 | 36 | |
| | | 17 | | 27 | | | 9 | | |
| 25 | 9.77 353 | | 9.86 789 | | 0.13 211 | 9.90 565 | | 35 | |
| 26 | 9.77 370 | 17 | 9.86 815 | 26 | 0.13 185 | 9.90 555 | 10 | 34 | 17 |
| 27 | 9.77 387 | 17 | 9.86 842 | 27 | 0.13 158 | 9.90 546 | 9 | 33 | 6 1.7 |
| 28 | 9.77 405 | 18 | 9.86 868 | 26 | 0.13 132 | 9.90 537 | 9 | 32 | 7 2.0 |
| 29 | 9.77 422 | 17 | 9.86 894 | 26 | 0.13 106 | 9.90 527 | 10 | 31 | 8 2.3 |
| | | 17 | | 27 | | | 9 | | 9 2.6 |
| 30 | 9.77 439 | | 9.86 921 | | 0.13 079 | 9.90 518 | | 30 | |
| 31 | 9.77 456 | 17 | 9.86 947 | 26 | 0.13 053 | 9.90 509 | 9 | 29 | 10 2.8 |
| 32 | 9.77 473 | 17 | 9.86 974 | 27 | 0.13 026 | 9.90 499 | 10 | 28 | 20 5.7 |
| 33 | 9.77 490 | 17 | 9.87 000 | 26 | 0.13 000 | 9.90 490 | 9 | 27 | 30 8.5 |
| 34 | 9.77 507 | 17 | 9.87 027 | 27 | 0.12 973 | 9.90 480 | 10 | 26 | 40 11.3 |
| | | 17 | | 26 | | | 9 | | 50 14.2 |
| 35 | 9.77 524 | | 9.87 053 | | 0.12 947 | 9.90 471 | | 25 | |
| 36 | 9.77 541 | 17 | 9.87 079 | 26 | 0.12 921 | 9.90 462 | 9 | 24 | |
| 37 | 9.77 558 | 17 | 9.87 106 | 27 | 0.12 894 | 9.90 452 | 10 | 23 | |
| 38 | 9.77 575 | 17 | 9.87 132 | 26 | 0.12 868 | 9.90 443 | 9 | 22 | 16 |
| 39 | 9.77 592 | 17 | 9.87 158 | 26 | 0.12 842 | 9.90 434 | 9 | 21 | 6 1.6 |
| | | 17 | | 27 | | | 10 | | 7 1.9 |
| 40 | 9.77 609 | | 9.87 185 | | 0.12 815 | 9.90 424 | | 20 | |
| 41 | 9.77 626 | 17 | 9.87 211 | 26 | 0.12 789 | 9.90 415 | 9 | 19 | 8 2.1 |
| 42 | 9.77 643 | 17 | 9.87 238 | 27 | 0.12 762 | 9.90 405 | 9 | 18 | 9 2.4 |
| 43 | 9.77 660 | 17 | 9.87 264 | 26 | 0.12 736 | 9.90 396 | 10 | 17 | 10 2.7 |
| 44 | 9.77 677 | 17 | 9.87 290 | 26 | 0.12 710 | 9.90 386 | 10 | 16 | 20 5.3 |
| | | 17 | | 27 | | | 9 | | 30 8.0 |
| 45 | 9.77 694 | | 9.87 317 | | 0.12 683 | 9.90 377 | | 15 | 40 10.7 |
| 46 | 9.77 711 | 17 | 9.87 343 | 26 | 0.12 657 | 9.90 368 | 9 | 14 | 50 13.3 |
| 47 | 9.77 728 | 17 | 9.87 369 | 26 | 0.12 631 | 9.90 358 | 10 | 13 | |
| 48 | 9.77 744 | 16 | 9.87 396 | 27 | 0.12 604 | 9.90 349 | 9 | 12 | |
| 49 | 9.77 761 | 17 | 9.87 422 | 26 | 0.12 578 | 9.90 339 | 10 | 11 | |
| | | 17 | | 26 | | | 9 | | |
| 50 | 9.77 778 | | 9.87 448 | | 0.12 552 | 9.90 330 | | 10 | |
| 51 | 9.77 795 | 17 | 9.87 475 | 27 | 0.12 525 | 9.90 320 | 10 | 9 | 6 1.0 0.9 |
| 52 | 9.77 812 | 17 | 9.87 501 | 26 | 0.12 499 | 9.90 311 | 9 | 8 | 7 1.2 1.1 |
| 53 | 9.77 829 | 17 | 9.87 527 | 27 | 0.12 473 | 9.90 301 | 9 | 7 | 8 1.3 1.2 |
| 54 | 9.77 846 | 17 | 9.87 554 | 26 | 0.12 446 | 9.90 292 | 10 | 6 | 9 1.5 1.4 |
| | | 16 | | 26 | | | 10 | | 10 1.7 1.5 |
| 55 | 9.77 862 | | 9.87 580 | | 0.12 420 | 9.90 282 | | 5 | 20 3.3 3.0 |
| 56 | 9.77 879 | 17 | 9.87 606 | 26 | 0.12 394 | 9.90 273 | 9 | 4 | 30 5.0 4.5 |
| 57 | 9.77 896 | 17 | 9.87 633 | 27 | 0.12 367 | 9.90 263 | 10 | 3 | 40 6.7 6.0 |
| 58 | 9.77 913 | 17 | 9.87 659 | 26 | 0.12 341 | 9.90 254 | 9 | 2 | 50 8.3 7.5 |
| 59 | 9.77 930 | 17 | 9.87 685 | 26 | 0.12 315 | 9.90 244 | 10 | 1 | |
| | | 16 | | 26 | | | 9 | | |
| 60 | 9.77 946 | | 9.87 711 | | 0.12 289 | 9.90 235 | | 0 | |

| ✓ | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | ✓ | Prop. Pts. |
|---|---------|----|----------|-------|----------|---------|----|---|------------|
|---|---------|----|----------|-------|----------|---------|----|---|------------|

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. |
|----|----------|----|----------|-------|----------|----------|----|----|------------|
| 0 | 9.77 946 | | 9.87 711 | | 0.12 289 | 9.90 235 | | 60 | |
| 1 | 9.77 963 | 17 | 9.87 738 | 27 | 0.12 262 | 9.90 225 | 10 | 59 | |
| 2 | 9.77 980 | 17 | 9.87 764 | 26 | 0.12 236 | 9.90 216 | 9 | 58 | 27 |
| 3 | 9.77 997 | 17 | 9.87 790 | 26 | 0.12 210 | 9.90 206 | 10 | 57 | 6 2.7 |
| 4 | 9.78 013 | 16 | 9.87 817 | 27 | 0.12 183 | 9.90 197 | 9 | 56 | 7 3.2 |
| | | 17 | | 26 | | | 10 | | 8 3.6 |
| 5 | 9.78 030 | | 9.87 843 | | 0.12 157 | 9.90 187 | | 55 | |
| 6 | 9.78 047 | 17 | 9.87 869 | 26 | 0.12 131 | 9.90 178 | 9 | 54 | 9 4.1 |
| 7 | 9.78 063 | 16 | 9.87 895 | 26 | 0.12 105 | 9.90 168 | 10 | 53 | 10 4.5 |
| 8 | 9.78 080 | 17 | 9.87 922 | 27 | 0.12 078 | 9.90 159 | 9 | 52 | 20 9.0 |
| 9 | 9.78 097 | 17 | 9.87 948 | 26 | 0.12 052 | 9.90 149 | 10 | 51 | 30 13.5 |
| | | 16 | | 26 | | | 10 | | 40 18.0 |
| 10 | 9.78 113 | | 9.87 974 | | 0.12 026 | 9.90 139 | | 50 | |
| 11 | 9.78 130 | 17 | 9.88 000 | 26 | 0.12 000 | 9.90 130 | 9 | 49 | 50 22.5 |
| 12 | 9.78 147 | 17 | 9.88 027 | 27 | 0.11 973 | 9.90 120 | 10 | 48 | |
| 13 | 9.78 163 | 16 | 9.88 053 | 26 | 0.11 947 | 9.90 111 | 9 | 47 | |
| 14 | 9.78 180 | 17 | 9.88 079 | 26 | 0.11 921 | 9.90 101 | 10 | 46 | 26 |
| | | 17 | | 26 | | | 10 | | 6 2.6 |
| 15 | 9.78 197 | 16 | 9.88 105 | 26 | 0.11 895 | 9.90 091 | 9 | 45 | 7 3.0 |
| 16 | 9.78 213 | 16 | 9.88 131 | 26 | 0.11 869 | 9.90 082 | 9 | 44 | 8 3.5 |
| 17 | 9.78 230 | 17 | 9.88 158 | 27 | 0.11 842 | 9.90 072 | 10 | 43 | 9 3.9 |
| 18 | 9.78 246 | 16 | 9.88 184 | 26 | 0.11 816 | 9.90 063 | 9 | 42 | 10 4.3 |
| 19 | 9.78 263 | 17 | 9.88 210 | 26 | 0.11 790 | 9.90 053 | 10 | 41 | 20 8.7 |
| | | 17 | | 26 | | | 10 | | 30 13.0 |
| 20 | 9.78 280 | 16 | 9.88 236 | 26 | 0.11 764 | 9.90 043 | 9 | 40 | 40 17.3 |
| 21 | 9.78 296 | 17 | 9.88 262 | 27 | 0.11 738 | 9.90 034 | 10 | 39 | 50 21.7 |
| 22 | 9.78 313 | 16 | 9.88 289 | 26 | 0.11 711 | 9.90 024 | 9 | 38 | |
| 23 | 9.78 329 | 16 | 9.88 315 | 26 | 0.11 685 | 9.90 014 | 10 | 37 | |
| 24 | 9.78 346 | 17 | 9.88 341 | 26 | 0.11 659 | 9.90 005 | 9 | 36 | |
| | | 16 | | 26 | | | 10 | | 6 1.7 |
| 25 | 9.78 362 | 17 | 9.88 367 | 26 | 0.11 633 | 9.89 995 | 10 | 35 | 7 2.0 |
| 26 | 9.78 379 | 16 | 9.88 393 | 26 | 0.11 607 | 9.89 985 | 9 | 34 | 8 2.3 |
| 27 | 9.78 395 | 16 | 9.88 420 | 26 | 0.11 580 | 9.89 976 | 9 | 33 | 9 2.6 |
| 28 | 9.78 412 | 17 | 9.88 446 | 26 | 0.11 554 | 9.89 966 | 10 | 32 | 10 2.8 |
| 29 | 9.78 428 | 16 | 9.88 472 | 26 | 0.11 528 | 9.89 956 | 10 | 31 | 20 5.7 |
| | | 17 | | 26 | | | 9 | | 30 8.5 |
| 30 | 9.78 445 | 16 | 9.88 498 | 26 | 0.11 502 | 9.89 947 | 9 | 30 | 40 11.3 |
| 31 | 9.78 461 | 16 | 9.88 524 | 26 | 0.11 476 | 9.89 937 | 10 | 29 | 50 14.2 |
| 32 | 9.78 478 | 17 | 9.88 550 | 26 | 0.11 450 | 9.89 927 | 10 | 28 | |
| 33 | 9.78 494 | 16 | 9.88 577 | 27 | 0.11 423 | 9.89 918 | 9 | 27 | |
| 34 | 9.78 510 | 16 | 9.88 603 | 26 | 0.11 397 | 9.89 908 | 10 | 26 | |
| | | 17 | | 26 | | | 10 | | 6 1.6 |
| 35 | 9.78 527 | 16 | 9.88 629 | 26 | 0.11 371 | 9.89 898 | 10 | 25 | 7 1.9 |
| 36 | 9.78 543 | 16 | 9.88 655 | 26 | 0.11 345 | 9.89 888 | 10 | 24 | 8 2.1 |
| 37 | 9.78 560 | 17 | 9.88 681 | 26 | 0.11 319 | 9.89 879 | 9 | 23 | 9 2.4 |
| 38 | 9.78 576 | 16 | 9.88 707 | 26 | 0.11 293 | 9.89 869 | 10 | 22 | 10 2.7 |
| 39 | 9.78 592 | 16 | 9.88 733 | 26 | 0.11 267 | 9.89 859 | 10 | 21 | 20 5.3 |
| | | 17 | | 26 | | | 10 | | 30 8.0 |
| 40 | 9.78 609 | 17 | 9.88 759 | 26 | 0.11 241 | 9.89 849 | 9 | 20 | 40 10.7 |
| 41 | 9.78 625 | 16 | 9.88 786 | 27 | 0.11 214 | 9.89 840 | 9 | 19 | 50 13.3 |
| 42 | 9.78 642 | 17 | 9.88 812 | 26 | 0.11 188 | 9.89 830 | 9 | 18 | |
| 43 | 9.78 658 | 16 | 9.88 838 | 26 | 0.11 162 | 9.89 820 | 10 | 17 | |
| 44 | 9.78 674 | 16 | 9.88 864 | 26 | 0.11 136 | 9.89 810 | 10 | 16 | |
| | | 17 | | 26 | | | 9 | | 6 1.6 |
| 45 | 9.78 691 | 16 | 9.88 890 | 26 | 0.11 110 | 9.89 801 | 9 | 15 | 7 1.9 |
| 46 | 9.78 707 | 16 | 9.88 916 | 26 | 0.11 084 | 9.89 791 | 10 | 14 | 8 2.1 |
| 47 | 9.78 723 | 16 | 9.88 942 | 26 | 0.11 058 | 9.89 781 | 10 | 13 | 9 2.4 |
| 48 | 9.78 739 | 16 | 9.88 968 | 26 | 0.11 032 | 9.89 771 | 10 | 12 | 10 2.7 |
| 49 | 9.78 756 | 17 | 9.88 994 | 26 | 0.11 006 | 9.89 761 | 10 | 11 | 20 5.3 |
| | | 16 | | 26 | | | 9 | | 30 8.0 |
| 50 | 9.78 772 | 16 | 9.89 020 | 26 | 0.10 980 | 9.89 752 | 9 | 10 | 40 10.7 |
| 51 | 9.78 788 | 16 | 9.89 046 | 26 | 0.10 954 | 9.89 742 | 10 | 9 | 50 13.3 |
| 52 | 9.78 805 | 17 | 9.89 073 | 27 | 0.10 927 | 9.89 732 | 10 | 8 | |
| 53 | 9.78 821 | 16 | 9.89 099 | 26 | 0.10 901 | 9.89 722 | 10 | 7 | |
| 54 | 9.78 837 | 16 | 9.89 125 | 26 | 0.10 875 | 9.89 712 | 10 | 6 | |
| | | 16 | | 26 | | | 10 | | 6 1.6 |
| 55 | 9.78 853 | 16 | 9.89 151 | 26 | 0.10 849 | 9.89 702 | 9 | 5 | 10 1.7 |
| 56 | 9.78 869 | 16 | 9.89 177 | 26 | 0.10 823 | 9.89 693 | 9 | 4 | 20 3.3 |
| 57 | 9.78 886 | 17 | 9.89 203 | 26 | 0.10 797 | 9.89 683 | 10 | 3 | 30 5.0 |
| 58 | 9.78 902 | 16 | 9.89 229 | 26 | 0.10 771 | 9.89 673 | 10 | 2 | 40 6.7 |
| 59 | 9.78 918 | 16 | 9.89 255 | 26 | 0.10 745 | 9.89 663 | 10 | 1 | 50 8.3 |
| | | 16 | | 26 | | | 10 | | |
| 60 | 9.78 934 | | 9.89 281 | | 0.10 719 | 9.89 653 | | 0 | |
| | | | | | | | | | |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | ∕ | Prop. Pts. |

| ° | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. |
|-----------|----------|----|----------|-------|----------|----------|----|-----------|--------------|
| 0 | 9.78 934 | 16 | 9.89 281 | 26 | 0.10 719 | 9.89 653 | 10 | 60 | |
| 1 | 9.78 950 | 17 | 9.89 307 | 26 | 0.10 693 | 9.89 643 | 10 | 59 | |
| 2 | 9.78 967 | 17 | 9.89 333 | 26 | 0.10 667 | 9.89 633 | 10 | 58 | 26 25 |
| 3 | 9.78 983 | 16 | 9.89 359 | 26 | 0.10 641 | 9.89 624 | 9 | 57 | 6 2.6 2.5 |
| 4 | 9.78 999 | 16 | 9.89 385 | 26 | 0.10 615 | 9.89 614 | 10 | 56 | 7 3.0 2.9 |
| 5 | 9.79 015 | 16 | 9.89 411 | 26 | 0.10 589 | 9.89 604 | 10 | 55 | 8 3.5 3.3 |
| 6 | 9.79 031 | 16 | 9.89 437 | 26 | 0.10 563 | 9.89 594 | 10 | 54 | 9 3.9 3.8 |
| 7 | 9.79 047 | 16 | 9.89 463 | 26 | 0.10 537 | 9.89 584 | 10 | 53 | 10 4.3 4.2 |
| 8 | 9.79 063 | 16 | 9.89 489 | 26 | 0.10 511 | 9.89 574 | 10 | 52 | 20 8.7 8.3 |
| 9 | 9.79 079 | 16 | 9.89 515 | 26 | 0.10 485 | 9.89 564 | 10 | 51 | 30 13.0 12.5 |
| 10 | 9.79 095 | 16 | 9.89 541 | 26 | 0.10 459 | 9.89 554 | 10 | 50 | 40 17.3 16.7 |
| 11 | 9.79 111 | 16 | 9.89 567 | 26 | 0.10 433 | 9.89 544 | 10 | 49 | 50 21.7 20.8 |
| 12 | 9.79 128 | 17 | 9.89 593 | 26 | 0.10 407 | 9.89 534 | 10 | 48 | |
| 13 | 9.79 144 | 16 | 9.89 619 | 26 | 0.10 381 | 9.89 524 | 10 | 47 | |
| 14 | 9.79 160 | 16 | 9.89 645 | 26 | 0.10 355 | 9.89 514 | 10 | 46 | 17 |
| 15 | 9.79 176 | 16 | 9.89 671 | 26 | 0.10 329 | 9.89 504 | 9 | 45 | 6 1.7 |
| 16 | 9.79 192 | 16 | 9.89 697 | 26 | 0.10 303 | 9.89 495 | 10 | 44 | 7 2.0 |
| 17 | 9.79 208 | 16 | 9.89 723 | 26 | 0.10 277 | 9.89 485 | 10 | 43 | 8 2.3 |
| 18 | 9.79 224 | 16 | 9.89 749 | 26 | 0.10 251 | 9.89 475 | 10 | 42 | 9 2.6 |
| 19 | 9.79 240 | 16 | 9.89 775 | 26 | 0.10 225 | 9.89 465 | 10 | 41 | 10 2.8 |
| 20 | 9.79 256 | 16 | 9.89 801 | 26 | 0.10 199 | 9.89 455 | 10 | 40 | 20 5.7 |
| 21 | 9.79 272 | 16 | 9.89 827 | 26 | 0.10 173 | 9.89 445 | 10 | 39 | 30 8.5 |
| 22 | 9.79 288 | 16 | 9.89 853 | 26 | 0.10 147 | 9.89 435 | 10 | 38 | 40 11.3 |
| 23 | 9.79 304 | 16 | 9.89 879 | 26 | 0.10 121 | 9.89 425 | 10 | 37 | 50 14.2 |
| 24 | 9.79 319 | 15 | 9.89 905 | 26 | 0.10 095 | 9.89 415 | 10 | 36 | |
| 25 | 9.79 335 | 16 | 9.89 931 | 26 | 0.10 069 | 9.89 405 | 10 | 35 | 16 15 |
| 26 | 9.79 351 | 16 | 9.89 957 | 26 | 0.10 043 | 9.89 395 | 10 | 34 | 6 1.6 1.5 |
| 27 | 9.79 367 | 16 | 9.89 983 | 26 | 0.10 017 | 9.89 385 | 10 | 33 | 7 1.9 1.8 |
| 28 | 9.79 383 | 16 | 9.90 009 | 26 | 0.09 991 | 9.89 375 | 11 | 32 | 8 2.1 2.0 |
| 29 | 9.79 399 | 16 | 9.90 035 | 26 | 0.09 965 | 9.89 364 | 10 | 31 | 9 2.4 2.3 |
| 30 | 9.79 415 | 16 | 9.90 061 | 25 | 0.09 939 | 9.89 354 | 10 | 30 | 10 2.7 2.5 |
| 31 | 9.79 431 | 16 | 9.90 086 | 26 | 0.09 914 | 9.89 344 | 10 | 29 | 20 5.3 5.0 |
| 32 | 9.79 447 | 16 | 9.90 112 | 26 | 0.09 888 | 9.89 334 | 10 | 28 | 30 8.0 7.5 |
| 33 | 9.79 463 | 16 | 9.90 138 | 26 | 0.09 862 | 9.89 324 | 10 | 27 | 40 10.7 10.0 |
| 34 | 9.79 478 | 15 | 9.90 164 | 26 | 0.09 836 | 9.89 314 | 10 | 26 | 50 13.3 12.5 |
| 35 | 9.79 494 | 16 | 9.90 190 | 26 | 0.09 810 | 9.89 304 | 10 | 25 | |
| 36 | 9.79 510 | 16 | 9.90 216 | 26 | 0.09 784 | 9.89 294 | 10 | 24 | |
| 37 | 9.79 526 | 16 | 9.90 242 | 26 | 0.09 758 | 9.89 284 | 10 | 23 | |
| 38 | 9.79 542 | 16 | 9.90 268 | 26 | 0.09 732 | 9.89 274 | 10 | 22 | 11 |
| 39 | 9.79 558 | 16 | 9.90 294 | 26 | 0.09 706 | 9.89 264 | 10 | 21 | 6 1.1 |
| 40 | 9.79 573 | 15 | 9.90 320 | 26 | 0.09 680 | 9.89 254 | 10 | 20 | 7 1.3 |
| 41 | 9.79 589 | 16 | 9.90 346 | 26 | 0.09 654 | 9.89 244 | 10 | 19 | 8 1.5 |
| 42 | 9.79 605 | 16 | 9.90 371 | 25 | 0.09 629 | 9.89 233 | 11 | 18 | 9 1.7 |
| 43 | 9.79 621 | 16 | 9.90 397 | 26 | 0.09 603 | 9.89 223 | 10 | 17 | 10 1.8 |
| 44 | 9.79 636 | 15 | 9.90 423 | 26 | 0.09 577 | 9.89 213 | 10 | 16 | 20 3.7 |
| 45 | 9.79 652 | 16 | 9.90 449 | 26 | 0.09 551 | 9.89 203 | 10 | 15 | 30 5.5 |
| 46 | 9.79 668 | 16 | 9.90 475 | 26 | 0.09 525 | 9.89 193 | 10 | 14 | 40 7.3 |
| 47 | 9.79 684 | 16 | 9.90 501 | 26 | 0.09 499 | 9.89 183 | 10 | 13 | 50 9.2 |
| 48 | 9.79 699 | 15 | 9.90 527 | 26 | 0.09 473 | 9.89 173 | 10 | 12 | |
| 49 | 9.79 715 | 16 | 9.90 553 | 26 | 0.09 447 | 9.89 162 | 11 | 11 | |
| 50 | 9.79 731 | 16 | 9.90 578 | 25 | 0.09 422 | 9.89 152 | 10 | 10 | 10 9 |
| 51 | 9.79 746 | 15 | 9.90 604 | 26 | 0.09 396 | 9.89 142 | 10 | 9 | 6 1.0 0.9 |
| 52 | 9.79 762 | 16 | 9.90 630 | 26 | 0.09 370 | 9.89 132 | 10 | 8 | 7 1.2 1.1 |
| 53 | 9.79 778 | 16 | 9.90 656 | 26 | 0.09 344 | 9.89 122 | 10 | 7 | 8 1.3 1.2 |
| 54 | 9.79 793 | 15 | 9.90 682 | 26 | 0.09 318 | 9.89 112 | 10 | 6 | 9 1.5 1.4 |
| 55 | 9.79 809 | 16 | 9.90 708 | 26 | 0.09 292 | 9.89 101 | 10 | 5 | 10 1.7 1.5 |
| 56 | 9.79 825 | 16 | 9.90 734 | 26 | 0.09 266 | 9.89 091 | 10 | 4 | 20 3.3 3.0 |
| 57 | 9.79 840 | 15 | 9.90 759 | 25 | 0.09 241 | 9.89 081 | 10 | 3 | 30 5.0 4.5 |
| 58 | 9.79 856 | 16 | 9.90 785 | 26 | 0.09 215 | 9.89 071 | 10 | 2 | 40 6.7 6.0 |
| 59 | 9.79 872 | 16 | 9.90 811 | 26 | 0.09 189 | 9.89 060 | 11 | 1 | 50 8.3 7.5 |
| 60 | 9.79 887 | 15 | 9.90 837 | 26 | 0.09 163 | 9.89 050 | 10 | 0 | |

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. |
|----|----------|----|----------|-------|----------|----------|----|-----------|------------|
| 0 | 9.79 887 | | 9.90 837 | | 0.09 163 | 9.89 050 | | 60 | |
| 1 | 9.79 903 | 16 | 9.90 863 | 26 | 0.09 137 | 9.89 040 | 10 | 59 | |
| 2 | 9.79 918 | 15 | 9.90 889 | 26 | 0.09 111 | 9.89 030 | 10 | 58 | 26 |
| 3 | 9.79 934 | 16 | 9.90 914 | 25 | 0.09 086 | 9.89 020 | 10 | 57 | 6 2.6 |
| 4 | 9.79 950 | 16 | 9.90 940 | 26 | 0.09 060 | 9.89 009 | 11 | 56 | 7 3.0 |
| 5 | 9.79 965 | 15 | 9.90 966 | | 0.09 034 | 9.88 999 | 10 | 55 | 8 3.5 |
| 6 | 9.79 981 | 16 | 9.90 992 | 26 | 0.09 008 | 9.88 989 | 10 | 54 | 9 3.9 |
| 7 | 9.79 996 | 15 | 9.91 018 | 26 | 0.08 982 | 9.88 978 | 11 | 53 | 10 4.3 |
| 8 | 9.80 012 | 16 | 9.91 043 | 25 | 0.08 957 | 9.88 968 | 10 | 52 | 20 8.7 |
| 9 | 9.80 027 | 15 | 9.91 069 | 26 | 0.08 931 | 9.88 958 | 10 | 51 | 30 13.0 |
| 10 | 9.80°043 | 16 | 9.91 095 | 26 | 0.08 905 | 9.88 948 | 10 | 50 | 40 17.3 |
| 11 | 9.80 058 | 15 | 9.91 121 | 26 | 0.08 879 | 9.88 937 | 11 | 49 | 50 21.7 |
| 12 | 9.80 074 | 16 | 9.91 147 | 25 | 0.08 853 | 9.88 927 | 10 | 48 | |
| 13 | 9.80 089 | 15 | 9.91 172 | 26 | 0.08 828 | 9.88 917 | 10 | 47 | |
| 14 | 9.80 105 | 16 | 9.91 198 | 26 | 0.08 802 | 9.88 906 | 11 | 46 | |
| 15 | 9.80 120 | 15 | 9.91 224 | 26 | 0.08 776 | 9.88 896 | 10 | 45 | 6 2.5 |
| 16 | 9.80 136 | 16 | 9.91 250 | 26 | 0.08 750 | 9.88 886 | 10 | 44 | 7 2.9 |
| 17 | 9.80 151 | 15 | 9.91 276 | 26 | 0.08 724 | 9.88 875 | 11 | 43 | 8 3.3 |
| 18 | 9.80 166 | 15 | 9.91 301 | 25 | 0.08 699 | 9.88 865 | 10 | 42 | 9 3.8 |
| 19 | 9.80 182 | 16 | 9.91 327 | 26 | 0.08 673 | 9.88 855 | 10 | 41 | 10 4.2 |
| 20 | 9.80 197 | 15 | 9.91 353 | 26 | 0.08 647 | 9.88 844 | 11 | 40 | 20 8.3 |
| 21 | 9.80 213 | 16 | 9.91 379 | 26 | 0.08 621 | 9.88 834 | 10 | 39 | 30 12.5 |
| 22 | 9.80 228 | 15 | 9.91 404 | 25 | 0.08 596 | 9.88 824 | 10 | 38 | 40 16.7 |
| 23 | 9.80 244 | 16 | 9.91 430 | 26 | 0.08 570 | 9.88 813 | 11 | 37 | 50 20.8 |
| 24 | 9.80 259 | 15 | 9.91 456 | 26 | 0.08 544 | 9.88 803 | 10 | 36 | |
| 25 | 9.80 274 | 15 | 9.91 482 | 26 | 0.08 518 | 9.88 793 | | 35 | |
| 26 | 9.80 290 | 16 | 9.91 507 | 25 | 0.08 493 | 9.88 782 | 11 | 34 | 16 |
| 27 | 9.80 305 | 15 | 9.91 533 | 26 | 0.08 467 | 9.88 772 | 10 | 33 | 6 1.6 |
| 28 | 9.80 320 | 15 | 9.91 559 | 26 | 0.08 441 | 9.88 761 | 11 | 32 | 7 1.9 |
| 29 | 9.80 336 | 16 | 9.91 585 | 26 | 0.08 415 | 9.88 751 | 10 | 31 | 8 2.1 |
| 30 | 9.80 351 | 15 | 9.91 610 | 25 | 0.08 390 | 9.88 741 | 10 | 30 | 9 2.4 |
| 31 | 9.80 366 | 15 | 9.91 636 | 26 | 0.08 364 | 9.88 730 | 11 | 29 | 10 2.7 |
| 32 | 9.80 382 | 16 | 9.91 662 | 26 | 0.08 338 | 9.88 720 | 10 | 28 | 20 5.3 |
| 33 | 9.80 397 | 15 | 9.91 688 | 26 | 0.08 312 | 9.88 709 | 11 | 27 | 30 8.0 |
| 34 | 9.80 412 | 15 | 9.91 713 | 25 | 0.08 287 | 9.88 699 | 10 | 26 | 40 10.7 |
| 35 | 9.80 428 | 16 | 9.91 739 | 26 | 0.08 261 | 9.88 688 | 11 | 25 | 50 13.3 |
| 36 | 9.80 443 | 15 | 9.91 765 | 26 | 0.08 235 | 9.88 678 | 10 | 24 | |
| 37 | 9.80 458 | 15 | 9.91 791 | 26 | 0.08 209 | 9.88 668 | 10 | 23 | |
| 38 | 9.80 473 | 15 | 9.91 816 | 25 | 0.08 184 | 9.88 657 | 11 | 22 | 15 |
| 39 | 9.80 489 | 16 | 9.91 842 | 26 | 0.08 158 | 9.88 647 | 10 | 21 | 6 1.5 |
| 40 | 9.80 504 | 15 | 9.91 868 | 26 | 0.08 132 | 9.88 636 | 11 | 20 | 7 1.8 |
| 41 | 9.80 519 | 15 | 9.91 893 | 25 | 0.08 107 | 9.88 626 | 10 | 19 | 8 2.0 |
| 42 | 9.80 534 | 15 | 9.91 919 | 26 | 0.08 081 | 9.88 615 | 11 | 18 | 9 2.3 |
| 43 | 9.80 550 | 16 | 9.91 945 | 26 | 0.08 055 | 9.88 605 | 10 | 17 | 10 2.5 |
| 44 | 9.80 565 | 15 | 9.91 971 | 26 | 0.08 029 | 9.88 594 | 11 | 16 | 20 5.0 |
| 45 | 9.80 580 | 15 | 9.91 996 | 25 | 0.08 004 | 9.88 584 | 10 | 15 | 30 7.5 |
| 46 | 9.80 595 | 15 | 9.92 022 | 26 | 0.07 978 | 9.88 573 | 11 | 14 | 40 10.0 |
| 47 | 9.80 610 | 15 | 9.92 048 | 26 | 0.07 952 | 9.88 563 | 10 | 13 | 50 12.5 |
| 48 | 9.80 625 | 15 | 9.92 073 | 25 | 0.07 927 | 9.88 552 | 11 | 12 | |
| 49 | 9.80 641 | 16 | 9.92 099 | 26 | 0.07 901 | 9.88 542 | 10 | 11 | |
| 50 | 9.80 656 | 15 | 9.92 125 | 26 | 0.07 875 | 9.88 531 | 11 | 10 | |
| 51 | 9.80 671 | 15 | 9.92 150 | 25 | 0.07 850 | 9.88 521 | 10 | 9 | 6 1.1 1.0 |
| 52 | 9.80 686 | 15 | 9.92 176 | 26 | 0.07 824 | 9.88 510 | 11 | 8 | 7 1.3 1.2 |
| 53 | 9.80 701 | 15 | 9.92 202 | 26 | 0.07 798 | 9.88 499 | 10 | 7 | 8 1.5 1.3 |
| 54 | 9.80 716 | 15 | 9.92 227 | 25 | 0.07 773 | 9.88 489 | 11 | 6 | 9 1.7 1.5 |
| 55 | 9.80 731 | 15 | 9.92 253 | 26 | 0.07 747 | 9.88 478 | 10 | 5 | 10 1.8 1.7 |
| 56 | 9.80 746 | 15 | 9.92 279 | 26 | 0.07 721 | 9.88 468 | 11 | 4 | 20 3.7 3.3 |
| 57 | 9.80 762 | 16 | 9.92 304 | 25 | 0.07 696 | 9.88 457 | 10 | 3 | 30 5.5 5.0 |
| 58 | 9.80 777 | 15 | 9.92 330 | 26 | 0.07 670 | 9.88 447 | 11 | 2 | 40 7.3 6.7 |
| 59 | 9.80 792 | 15 | 9.92 356 | 26 | 0.07 644 | 9.88 436 | 10 | 1 | 50 9.2 8.3 |
| 60 | 9.80 807 | 15 | 9.92 381 | 25 | 0.07 619 | 9.88 425 | 11 | 0 | |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | ∕ | Prop. Pts. |

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. | |
|-----------|----------------|-----------|-----------------|--------------|-----------------|----------------|-----------|-----------|-------------------|------|
| 0 | 9.80 807 | | 9.92 381 | | 0.07 619 | 9.88 425 | | 60 | | |
| 1 | 9.80 822 | 15 | 9.92 407 | 26 | 0.07 593 | 9.88 415 | 10 | 59 | | |
| 2 | 9.80 837 | 15 | 9.92 433 | 26 | 0.07 567 | 9.88 404 | 11 | 58 | | |
| 3 | 9.80 852 | 15 | 9.92 458 | 25 | 0.07 542 | 9.88 394 | 10 | 57 | 6 | 2.6 |
| 4 | 9.80 867 | 15 | 9.92 484 | 26 | 0.07 516 | 9.88 383 | 11 | 56 | 7 | 3.0 |
| | | 15 | | 26 | | | 11 | | 8 | 3.5 |
| 5 | 9.80 882 | | 9.92 510 | | 0.07 490 | 9.88 372 | | 55 | 9 | 3.9 |
| 6 | 9.80 897 | 15 | 9.92 535 | 25 | 0.07 465 | 9.88 362 | 10 | 54 | 10 | 4.3 |
| 7 | 9.80 912 | 15 | 9.92 561 | 26 | 0.07 439 | 9.88 351 | 11 | 53 | 20 | 8.7 |
| 8 | 9.80 927 | 15 | 9.92 587 | 26 | 0.07 413 | 9.88 340 | 10 | 52 | 30 | 13.0 |
| 9 | 9.80 942 | 15 | 9.92 612 | 25 | 0.07 388 | 9.88 330 | 11 | 51 | 40 | 17.3 |
| | | 15 | | 25 | | | 11 | | 50 | 21.7 |
| 10 | 9.80 957 | | 9.92 638 | | 0.07 362 | 9.88 319 | | 50 | | |
| 11 | 9.80 972 | 15 | 9.92 663 | 25 | 0.07 337 | 9.88 308 | 11 | 49 | | |
| 12 | 9.80 987 | 15 | 9.92 689 | 26 | 0.07 311 | 9.88 298 | 10 | 48 | | |
| 13 | 9.81 002 | 15 | 9.92 715 | 25 | 0.07 285 | 9.88 287 | 11 | 47 | | |
| 14 | 9.81 017 | 15 | 9.92 740 | 26 | 0.07 260 | 9.88 276 | 10 | 46 | | |
| | | 15 | | 26 | | | 10 | | | 25 |
| 15 | 9.81 032 | | 9.92 766 | | 0.07 234 | 9.88 266 | | 45 | 6 | 2.5 |
| 16 | 9.81 047 | 15 | 9.92 792 | 26 | 0.07 208 | 9.88 255 | 11 | 44 | 7 | 2.9 |
| 17 | 9.81 061 | 14 | 9.92 817 | 25 | 0.07 183 | 9.88 244 | 11 | 43 | 8 | 3.3 |
| 18 | 9.81 076 | 15 | 9.92 843 | 26 | 0.07 157 | 9.88 233 | 10 | 42 | 9 | 3.8 |
| 19 | 9.81 091 | 15 | 9.92 868 | 25 | 0.07 132 | 9.88 223 | 11 | 41 | 10 | 4.2 |
| | | 15 | | 26 | | | 11 | | 20 | 8.3 |
| 20 | 9.81 106 | | 9.92 894 | | 0.07 106 | 9.88 212 | | 40 | | |
| 21 | 9.81 121 | 15 | 9.92 920 | 26 | 0.07 080 | 9.88 201 | 11 | 39 | 30 | 12.5 |
| 22 | 9.81 136 | 15 | 9.92 945 | 25 | 0.07 055 | 9.88 191 | 10 | 38 | 40 | 16.7 |
| 23 | 9.81 151 | 15 | 9.92 971 | 26 | 0.07 029 | 9.88 180 | 11 | 37 | 50 | 20.8 |
| 24 | 9.81 166 | 15 | 9.92 996 | 25 | 0.07 004 | 9.88 169 | 11 | 36 | | |
| | | 14 | | 26 | | | 11 | | | |
| 25 | 9.81 180 | | 9.93 022 | | 0.06 978 | 9.88 158 | | 35 | | |
| 26 | 9.81 195 | 15 | 9.93 048 | 26 | 0.06 952 | 9.88 148 | 10 | 34 | | 15 |
| 27 | 9.81 210 | 15 | 9.93 073 | 25 | 0.06 927 | 9.88 137 | 11 | 33 | 6 | 1.5 |
| 28 | 9.81 225 | 15 | 9.93 099 | 26 | 0.06 901 | 9.88 126 | 11 | 32 | 7 | 1.8 |
| 29 | 9.81 240 | 15 | 9.93 124 | 25 | 0.06 876 | 9.88 115 | 11 | 31 | 8 | 2.0 |
| | | 14 | | 26 | | | 10 | | 9 | 2.3 |
| 30 | 9.81 254 | | 9.93 150 | | 0.06 850 | 9.88 105 | | 30 | | |
| 31 | 9.81 269 | 15 | 9.93 175 | 25 | 0.06 825 | 9.88 094 | 11 | 29 | 10 | 2.5 |
| 32 | 9.81 284 | 15 | 9.93 201 | 26 | 0.06 799 | 9.88 083 | 11 | 28 | 20 | 5.0 |
| 33 | 9.81 299 | 15 | 9.93 227 | 26 | 0.06 773 | 9.88 072 | 11 | 27 | 30 | 7.5 |
| 34 | 9.81 314 | 15 | 9.93 252 | 25 | 0.06 748 | 9.88 061 | 11 | 26 | 40 | 10.0 |
| | | 14 | | 26 | | | 10 | | 50 | 12.5 |
| 35 | 9.81 328 | | 9.93 278 | | 0.06 722 | 9.88 051 | | 25 | | |
| 36 | 9.81 343 | 15 | 9.93 303 | 25 | 0.06 697 | 9.88 040 | 11 | 24 | | |
| 37 | 9.81 358 | 15 | 9.93 329 | 26 | 0.06 671 | 9.88 029 | 11 | 23 | | |
| 38 | 9.81 372 | 14 | 9.93 354 | 25 | 0.06 646 | 9.88 018 | 11 | 22 | | 14 |
| 39 | 9.81 387 | 15 | 9.93 380 | 26 | 0.06 620 | 9.88 007 | 11 | 21 | 6 | 1.4 |
| | | 15 | | 26 | | | 11 | | 7 | 1.6 |
| 40 | 9.81 402 | | 9.93 406 | | 0.06 594 | 9.87 996 | | 20 | | |
| 41 | 9.81 417 | 15 | 9.93 431 | 25 | 0.06 569 | 9.87 985 | 11 | 19 | 8 | 1.9 |
| 42 | 9.81 431 | 14 | 9.93 457 | 26 | 0.06 543 | 9.87 975 | 10 | 18 | 9 | 2.1 |
| 43 | 9.81 446 | 15 | 9.93 482 | 25 | 0.06 518 | 9.87 964 | 11 | 17 | 10 | 2.3 |
| 44 | 9.81 461 | 15 | 9.93 508 | 26 | 0.06 492 | 9.87 953 | 11 | 16 | 20 | 4.7 |
| | | 14 | | 25 | | | 11 | | 30 | 7.0 |
| 45 | 9.81 475 | | 9.93 533 | | 0.06 467 | 9.87 942 | | 15 | 40 | 9.3 |
| 46 | 9.81 490 | 15 | 9.93 559 | 26 | 0.06 441 | 9.87 931 | 11 | 14 | 50 | 11.7 |
| 47 | 9.81 505 | 15 | 9.93 584 | 25 | 0.06 416 | 9.87 920 | 11 | 13 | | |
| 48 | 9.81 519 | 14 | 9.93 610 | 26 | 0.06 390 | 9.87 909 | 11 | 12 | | |
| 49 | 9.81 534 | 15 | 9.93 636 | 25 | 0.06 364 | 9.87 898 | 11 | 11 | | |
| | | 15 | | 25 | | | 11 | | | |
| 50 | 9.81 549 | | 9.93 661 | | 0.06 339 | 9.87 887 | | 10 | | |
| 51 | 9.81 563 | 14 | 9.93 687 | 26 | 0.06 313 | 9.87 877 | 10 | 9 | 6 | 1.1 |
| 52 | 9.81 578 | 15 | 9.93 712 | 25 | 0.06 288 | 9.87 866 | 11 | 8 | 7 | 1.3 |
| 53 | 9.81 592 | 14 | 9.93 738 | 26 | 0.06 262 | 9.87 855 | 11 | 7 | 8 | 1.5 |
| 54 | 9.81 607 | 15 | 9.93 763 | 25 | 0.06 237 | 9.87 844 | 11 | 6 | 9 | 1.7 |
| | | 15 | | 26 | | | 11 | | 10 | 1.8 |
| 55 | 9.81 622 | | 9.93 789 | | 0.06 211 | 9.87 833 | | 5 | 20 | 3.7 |
| 56 | 9.81 636 | 14 | 9.93 814 | 26 | 0.06 186 | 9.87 822 | 11 | 4 | 30 | 5.5 |
| 57 | 9.81 651 | 15 | 9.93 840 | 25 | 0.06 160 | 9.87 811 | 11 | 3 | 40 | 7.3 |
| 58 | 9.81 665 | 14 | 9.93 865 | 26 | 0.06 135 | 9.87 800 | 11 | 2 | 50 | 9.2 |
| 59 | 9.81 680 | 15 | 9.93 891 | 25 | 0.06 109 | 9.87 789 | 11 | 1 | | 8.3 |
| | | 14 | | 25 | | | 11 | | | |
| 60 | 9.81 694 | | 9.93 916 | | 0.06 084 | 9.87 778 | | 0 | | |
| | | | | | | | | | | |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | ∕ | Prop. Pts. | |

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. |
|----|----------|----|----------|-------|----------|----------|----|-----------|-------------|
| 0 | 9.81 694 | | 9.93 916 | | 0.06 084 | 9.87 778 | | 60 | |
| 1 | 9.81 709 | 15 | 9.93 942 | 25 | 0.06 058 | 9.87 767 | 11 | 59 | |
| 2 | 9.81 723 | 14 | 9.93 967 | 26 | 0.06 033 | 9.87 756 | 11 | 58 | 26 |
| 3 | 9.81 738 | 15 | 9.93 993 | 26 | 0.06 007 | 9.87 745 | 11 | 57 | 6 3.0 |
| 4 | 9.81 752 | 14 | 9.94 018 | 25 | 0.05 982 | 9.87 734 | 11 | 56 | 7 3.0 |
| 5 | 9.81 767 | 15 | 9.94 044 | 25 | 0.05 956 | 9.87 723 | 11 | 55 | 8 3.5 |
| 6 | 9.81 781 | 14 | 9.94 069 | 26 | 0.05 931 | 9.87 712 | 11 | 54 | 9 3.9 |
| 7 | 9.81 796 | 15 | 9.94 095 | 26 | 0.05 905 | 9.87 701 | 11 | 53 | 10 4.3 |
| 8 | 9.81 810 | 14 | 9.94 120 | 25 | 0.05 880 | 9.87 690 | 11 | 52 | 20 8.7 |
| 9 | 9.81 825 | 15 | 9.94 146 | 25 | 0.05 854 | 9.87 679 | 11 | 51 | 30 13.0 |
| 10 | 9.81 839 | 14 | 9.94 171 | 25 | 0.05 829 | 9.87 668 | 11 | 50 | 40 17.3 |
| 11 | 9.81 854 | 15 | 9.94 197 | 26 | 0.05 803 | 9.87 657 | 11 | 49 | 50 21.7 |
| 12 | 9.81 868 | 14 | 9.94 222 | 25 | 0.05 778 | 9.87 646 | 11 | 48 | |
| 13 | 9.81 882 | 14 | 9.94 248 | 26 | 0.05 752 | 9.87 635 | 11 | 47 | |
| 14 | 9.81 897 | 15 | 9.94 273 | 25 | 0.05 727 | 9.87 624 | 11 | 46 | 25 |
| 15 | 9.81 911 | 14 | 9.94 299 | 26 | 0.05 701 | 9.87 613 | 11 | 45 | 6 2.5 |
| 16 | 9.81 926 | 15 | 9.94 324 | 25 | 0.05 676 | 9.87 601 | 12 | 44 | 7 2.9 |
| 17 | 9.81 940 | 14 | 9.94 350 | 26 | 0.05 650 | 9.87 590 | 11 | 43 | 8 3.3 |
| 18 | 9.81 955 | 15 | 9.94 375 | 25 | 0.05 625 | 9.87 579 | 11 | 42 | 9 3.8 |
| 19 | 9.81 969 | 14 | 9.94 401 | 26 | 0.05 599 | 9.87 568 | 11 | 41 | 10 4.2 |
| 20 | 9.81 983 | 15 | 9.94 426 | 25 | 0.05 574 | 9.87 557 | 11 | 40 | 20 8.3 |
| 21 | 9.81 998 | 14 | 9.94 452 | 26 | 0.05 548 | 9.87 546 | 11 | 39 | 30 12.5 |
| 22 | 9.82 012 | 14 | 9.94 477 | 25 | 0.05 523 | 9.87 535 | 11 | 38 | 40 16.7 |
| 23 | 9.82 026 | 14 | 9.94 503 | 26 | 0.05 497 | 9.87 524 | 11 | 37 | 50 20.8 |
| 24 | 9.82 041 | 15 | 9.94 528 | 25 | 0.05 472 | 9.87 513 | 11 | 36 | |
| 25 | 9.82 055 | 14 | 9.94 554 | 26 | 0.05 446 | 9.87 501 | 11 | 35 | |
| 26 | 9.82 069 | 14 | 9.94 579 | 25 | 0.05 421 | 9.87 490 | 11 | 34 | 15 |
| 27 | 9.82 084 | 15 | 9.94 604 | 25 | 0.05 396 | 9.87 479 | 11 | 33 | 6 1.5 |
| 28 | 9.82 098 | 14 | 9.94 630 | 26 | 0.05 370 | 9.87 468 | 11 | 32 | 7 1.8 |
| 29 | 9.82 112 | 14 | 9.94 655 | 25 | 0.05 345 | 9.87 457 | 11 | 31 | 8 2.0 |
| 30 | 9.82 126 | 14 | 9.94 681 | 26 | 0.05 319 | 9.87 446 | 11 | 30 | 9 2.3 |
| 31 | 9.82 141 | 15 | 9.94 706 | 25 | 0.05 294 | 9.87 434 | 12 | 29 | 10 2.5 |
| 32 | 9.82 155 | 14 | 9.94 732 | 26 | 0.05 268 | 9.87 423 | 11 | 28 | 20 5.0 |
| 33 | 9.82 169 | 14 | 9.94 757 | 25 | 0.05 243 | 9.87 412 | 11 | 27 | 30 7.5 |
| 34 | 9.82 184 | 15 | 9.94 783 | 26 | 0.05 217 | 9.87 401 | 11 | 26 | 40 10.0 |
| 35 | 9.82 198 | 14 | 9.94 808 | 25 | 0.05 192 | 9.87 390 | 11 | 25 | 50 12.5 |
| 36 | 9.82 212 | 14 | 9.94 834 | 26 | 0.05 166 | 9.87 378 | 12 | 24 | |
| 37 | 9.82 226 | 14 | 9.94 859 | 25 | 0.05 141 | 9.87 367 | 11 | 23 | |
| 38 | 9.82 240 | 14 | 9.94 884 | 25 | 0.05 116 | 9.87 356 | 11 | 22 | 14 |
| 39 | 9.82 255 | 15 | 9.94 910 | 26 | 0.05 090 | 9.87 345 | 11 | 21 | 6 1.4 |
| 40 | 9.82 269 | 14 | 9.94 935 | 25 | 0.05 065 | 9.87 334 | 11 | 20 | 7 1.6 |
| 41 | 9.82 283 | 14 | 9.94 961 | 26 | 0.05 039 | 9.87 322 | 12 | 19 | 8 1.9 |
| 42 | 9.82 297 | 14 | 9.94 986 | 25 | 0.05 014 | 9.87 311 | 11 | 18 | 9 2.1 |
| 43 | 9.82 311 | 14 | 9.95 012 | 26 | 0.04 988 | 9.87 300 | 11 | 17 | 10 2.3 |
| 44 | 9.82 326 | 15 | 9.95 037 | 25 | 0.04 963 | 9.87 288 | 12 | 16 | 20 4.7 |
| 45 | 9.82 340 | 14 | 9.95 062 | 25 | 0.04 938 | 9.87 277 | 11 | 15 | 30 7.0 |
| 46 | 9.82 354 | 14 | 9.95 088 | 26 | 0.04 912 | 9.87 266 | 11 | 14 | 40 9.3 |
| 47 | 9.82 368 | 14 | 9.95 113 | 25 | 0.04 887 | 9.87 255 | 11 | 13 | 50 11.7 |
| 48 | 9.82 382 | 14 | 9.95 139 | 26 | 0.04 861 | 9.87 243 | 12 | 12 | |
| 49 | 9.82 396 | 14 | 9.95 164 | 25 | 0.04 836 | 9.87 232 | 11 | 11 | |
| 50 | 9.82 410 | 14 | 9.95 190 | 26 | 0.04 810 | 9.87 221 | 11 | 10 | 12 11 |
| 51 | 9.82 424 | 14 | 9.95 215 | 25 | 0.04 785 | 9.87 209 | 12 | 9 | 6 1.2 1.1 |
| 52 | 9.82 439 | 15 | 9.95 240 | 25 | 0.04 760 | 9.87 198 | 11 | 8 | 7 1.4 1.3 |
| 53 | 9.82 453 | 14 | 9.95 266 | 26 | 0.04 734 | 9.87 187 | 11 | 7 | 8 1.6 1.5 |
| 54 | 9.82 467 | 14 | 9.95 291 | 25 | 0.04 709 | 9.87 175 | 12 | 6 | 9 1.8 1.7 |
| 55 | 9.82 481 | 14 | 9.95 317 | 26 | 0.04 683 | 9.87 164 | 11 | 5 | 10 2.0 1.8 |
| 56 | 9.82 495 | 14 | 9.95 342 | 25 | 0.04 658 | 9.87 153 | 11 | 4 | 20 4.0 3.7 |
| 57 | 9.82 509 | 14 | 9.95 368 | 26 | 0.04 632 | 9.87 141 | 12 | 3 | 30 6.0 5.5 |
| 58 | 9.82 523 | 14 | 9.95 393 | 25 | 0.04 607 | 9.87 130 | 11 | 2 | 40 8.0 7.3 |
| 59 | 9.82 537 | 14 | 9.95 418 | 25 | 0.04 582 | 9.87 119 | 11 | 1 | 50 10.0 9.2 |
| 60 | 9.82 551 | 14 | 9.95 444 | 26 | 0.04 556 | 9.87 107 | 12 | 0 | |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | ∕ | Prop. Pts. |

| ✓ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. |
|-----------|----------|----|----------|-------|----------|----------|----|-----------|------------|
| 0 | 9.82 551 | | 9.95 444 | | 0.04 556 | 9.87 107 | | 60 | |
| 1 | 9.82 565 | 14 | 9.95 469 | 25 | 0.04 531 | 9.87 096 | 11 | 59 | |
| 2 | 9.82 579 | 14 | 9.95 495 | 25 | 0.04 505 | 9.87 085 | 12 | 58 | 26 |
| 3 | 9.82 593 | 14 | 9.95 520 | 25 | 0.04 480 | 9.87 073 | 12 | 57 | 6 2.6 |
| 4 | 9.82 607 | 14 | 9.95 545 | 25 | 0.04 455 | 9.87 062 | 11 | 56 | 7 3.0 |
| | | 14 | | 26 | | | 12 | | 8 3.5 |
| 5 | 9.82 621 | 14 | 9.95 571 | 25 | 0.04 429 | 9.87 050 | 11 | 55 | 9 3.9 |
| 6 | 9.82 635 | 14 | 9.95 596 | 26 | 0.04 404 | 9.87 039 | 11 | 54 | 10 4.7 |
| 7 | 9.82 649 | 14 | 9.95 622 | 26 | 0.04 378 | 9.87 028 | 12 | 53 | 20 8.3 |
| 8 | 9.82 663 | 14 | 9.95 647 | 25 | 0.04 353 | 9.87 016 | 11 | 52 | 30 13.0 |
| 9 | 9.82 677 | 14 | 9.95 672 | 26 | 0.04 328 | 9.87 005 | 12 | 51 | 40 17.3 |
| 10 | 9.82 691 | | 9.95 698 | | 0.04 302 | 9.86 993 | | 50 | 50 21.7 |
| 11 | 9.82 705 | 14 | 9.95 723 | 25 | 0.04 277 | 9.86 982 | 11 | 49 | |
| 12 | 9.82 719 | 14 | 9.95 748 | 25 | 0.04 252 | 9.86 970 | 12 | 48 | |
| 13 | 9.82 733 | 14 | 9.95 774 | 26 | 0.04 226 | 9.86 959 | 11 | 47 | |
| 14 | 9.82 747 | 14 | 9.95 799 | 25 | 0.04 201 | 9.86 947 | 12 | 46 | |
| | | 14 | | 26 | | | 11 | | 25 |
| 15 | 9.82 761 | 14 | 9.95 825 | 25 | 0.04 175 | 9.86 936 | 12 | 45 | 6 2.5 |
| 16 | 9.82 775 | 14 | 9.95 850 | 25 | 0.04 150 | 9.86 924 | 11 | 44 | 7 2.9 |
| 17 | 9.82 788 | 13 | 9.95 875 | 25 | 0.04 125 | 9.86 913 | 11 | 43 | 8 3.3 |
| 18 | 9.82 802 | 14 | 9.95 901 | 26 | 0.04 099 | 9.86 902 | 11 | 42 | 9 3.8 |
| 19 | 9.82 816 | 14 | 9.95 926 | 25 | 0.04 074 | 9.86 890 | 12 | 41 | 10 4.2 |
| | | 14 | | 26 | | | 11 | | 20 8.3 |
| 20 | 9.82 830 | | 9.95 952 | | 0.04 048 | 9.86 879 | | 40 | 30 12.5 |
| 21 | 9.82 844 | 14 | 9.95 977 | 25 | 0.04 023 | 9.86 867 | 12 | 39 | 40 16.7 |
| 22 | 9.82 858 | 14 | 9.96 002 | 25 | 0.03 998 | 9.86 855 | 12 | 38 | 50 20.8 |
| 23 | 9.82 872 | 14 | 9.96 028 | 26 | 0.03 972 | 9.86 844 | 11 | 37 | |
| 24 | 9.82 885 | 13 | 9.96 053 | 25 | 0.03 947 | 9.86 832 | 12 | 36 | |
| | | 14 | | 25 | | | 11 | | |
| 25 | 9.82 899 | 14 | 9.96 078 | 25 | 0.03 922 | 9.86 821 | 12 | 35 | |
| 26 | 9.82 913 | 14 | 9.96 104 | 26 | 0.03 896 | 9.86 809 | 12 | 34 | 14 |
| 27 | 9.82 927 | 14 | 9.96 129 | 25 | 0.03 871 | 9.86 798 | 11 | 33 | 6 1.4 |
| 28 | 9.82 941 | 14 | 9.96 155 | 26 | 0.03 845 | 9.86 786 | 12 | 32 | 7 1.6 |
| 29 | 9.82 955 | 14 | 9.96 180 | 25 | 0.03 820 | 9.86 775 | 11 | 31 | 8 1.9 |
| | | 13 | | 25 | | | 12 | | |
| 30 | 9.82 968 | | 9.96 205 | | 0.03 795 | 9.86 763 | | 30 | 9 2.1 |
| 31 | 9.82 982 | 14 | 9.96 231 | 26 | 0.03 769 | 9.86 752 | 11 | 29 | 10 2.3 |
| 32 | 9.82 996 | 14 | 9.96 256 | 25 | 0.03 744 | 9.86 740 | 12 | 28 | 20 4.7 |
| 33 | 9.83 010 | 14 | 9.96 281 | 25 | 0.03 719 | 9.86 728 | 12 | 27 | 30 7.0 |
| 34 | 9.83 023 | 13 | 9.96 307 | 26 | 0.03 693 | 9.86 717 | 11 | 26 | 40 9.3 |
| | | 14 | | 25 | | | 12 | | 50 11.7 |
| 35 | 9.83 037 | 14 | 9.96 332 | 25 | 0.03 668 | 9.86 705 | 11 | 25 | |
| 36 | 9.83 051 | 14 | 9.96 357 | 25 | 0.03 643 | 9.86 694 | 11 | 24 | |
| 37 | 9.83 065 | 14 | 9.96 383 | 26 | 0.03 617 | 9.86 682 | 12 | 23 | |
| 38 | 9.83 078 | 13 | 9.96 408 | 25 | 0.03 592 | 9.86 670 | 12 | 22 | |
| 39 | 9.83 092 | 14 | 9.96 433 | 25 | 0.03 567 | 9.86 659 | 11 | 21 | 6 1.3 |
| | | 14 | | 26 | | | 12 | | 7 1.5 |
| 40 | 9.83 106 | | 9.96 459 | | 0.03 541 | 9.86 647 | | 20 | 8 1.7 |
| 41 | 9.83 120 | 14 | 9.96 484 | 25 | 0.03 516 | 9.86 635 | 12 | 19 | 9 2.0 |
| 42 | 9.83 133 | 13 | 9.96 510 | 26 | 0.03 490 | 9.86 624 | 11 | 18 | 10 2.2 |
| 43 | 9.83 147 | 14 | 9.96 535 | 25 | 0.03 465 | 9.86 612 | 12 | 17 | 20 4.3 |
| 44 | 9.83 161 | 14 | 9.96 560 | 25 | 0.03 440 | 9.86 600 | 12 | 16 | 30 6.5 |
| | | 13 | | 26 | | | 11 | | 40 8.7 |
| 45 | 9.83 174 | 14 | 9.96 586 | 25 | 0.03 414 | 9.86 589 | 12 | 15 | 50 10.8 |
| 46 | 9.83 188 | 14 | 9.96 611 | 25 | 0.03 389 | 9.86 577 | 12 | 14 | |
| 47 | 9.83 202 | 14 | 9.96 636 | 25 | 0.03 364 | 9.86 565 | 12 | 13 | |
| 48 | 9.83 215 | 13 | 9.96 662 | 26 | 0.03 338 | 9.86 554 | 11 | 12 | |
| 49 | 9.83 229 | 14 | 9.96 687 | 25 | 0.03 313 | 9.86 542 | 12 | 11 | |
| | | 13 | | 25 | | | 12 | | |
| 50 | 9.83 242 | | 9.96 712 | | 0.03 288 | 9.86 530 | | 10 | 12 1.1 |
| 51 | 9.83 256 | 14 | 9.96 738 | 26 | 0.03 262 | 9.86 518 | 12 | 9 | 6 1.2 |
| 52 | 9.83 270 | 14 | 9.96 763 | 25 | 0.03 237 | 9.86 507 | 11 | 8 | 7 1.4 |
| 53 | 9.83 283 | 13 | 9.96 788 | 25 | 0.03 212 | 9.86 495 | 12 | 7 | 8 1.6 |
| 54 | 9.83 297 | 14 | 9.96 814 | 26 | 0.03 186 | 9.86 483 | 12 | 6 | 9 1.8 |
| | | 13 | | 25 | | | 11 | | 10 2.0 |
| 55 | 9.83 310 | 14 | 9.96 839 | 25 | 0.03 161 | 9.86 472 | 12 | 5 | 20 4.0 |
| 56 | 9.83 324 | 14 | 9.96 864 | 26 | 0.03 136 | 9.86 460 | 12 | 4 | 30 6.0 |
| 57 | 9.83 338 | 14 | 9.96 890 | 26 | 0.03 110 | 9.86 448 | 12 | 3 | 40 8.0 |
| 58 | 9.83 351 | 13 | 9.96 915 | 25 | 0.03 085 | 9.86 436 | 12 | 2 | 50 10.0 |
| 59 | 9.83 365 | 14 | 9.96 940 | 25 | 0.03 060 | 9.86 425 | 11 | 1 | 9.2 |
| | | 13 | | 26 | | | 12 | | |
| 60 | 9.83 378 | | 9.96 966 | | 0.03 034 | 9.86 413 | | 0 | |

| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | ✓ | Prop. Pts. |
|--|---------|----|----------|-------|----------|---------|----|---|------------|
|--|---------|----|----------|-------|----------|---------|----|---|------------|

| ∕ | L. Sin. | d. | L. Tang. | c. d. | L. Cotg. | L. Cos. | d. | | Prop. Pts. |
|-----------|----------------|-----------|-----------------|--------------|-----------------|----------------|-----------|-----------|-------------------|
| 0 | 9.84 177 | | 9.98 484 | | 0.01 516 | 9.85 693 | | 60 | |
| 1 | 9.84 190 | 13 | 9.98 509 | 25 | 0.01 491 | 9.85 681 | 12 | 59 | |
| 2 | 9.84 203 | 13 | 9.98 534 | 25 | 0.01 466 | 9.85 669 | 12 | 58 | 26 |
| 3 | 9.84 216 | 13 | 9.98 560 | 26 | 0.01 440 | 9.85 657 | 12 | 57 | 6 2.6 |
| 4 | 9.84 229 | 13 | 9.98 585 | 25 | 0.01 415 | 9.85 645 | 12 | 56 | 7 3.0 |
| 5 | 9.84 242 | 13 | 9.98 610 | 25 | 0.01 390 | 9.85 632 | 13 | 55 | 8 3.5 |
| 6 | 9.84 255 | 13 | 9.98 635 | 25 | 0.01 365 | 9.85 620 | 12 | 54 | 9 3.9 |
| 7 | 9.84 269 | 14 | 9.98 661 | 26 | 0.01 339 | 9.85 608 | 12 | 53 | 10 4.3 |
| 8 | 9.84 282 | 13 | 9.98 686 | 25 | 0.01 314 | 9.85 596 | 12 | 52 | 20 8.7 |
| 9 | 9.84 295 | 13 | 9.98 711 | 25 | 0.01 289 | 9.85 583 | 13 | 51 | 30 13.0 |
| 10 | 9.84 308 | 13 | 9.98 737 | 26 | 0.01 263 | 9.85 571 | 12 | 50 | 40 17.3 |
| 11 | 9.84 321 | 13 | 9.98 762 | 25 | 0.01 238 | 9.85 559 | 12 | 49 | 50 21.7 |
| 12 | 9.84 334 | 13 | 9.98 787 | 25 | 0.01 213 | 9.85 547 | 12 | 48 | |
| 13 | 9.84 347 | 13 | 9.98 812 | 25 | 0.01 188 | 9.85 534 | 13 | 47 | |
| 14 | 9.84 360 | 13 | 9.98 838 | 26 | 0.01 162 | 9.85 522 | 12 | 46 | 25 |
| 15 | 9.84 373 | 13 | 9.98 863 | 25 | 0.01 137 | 9.85 510 | 12 | 45 | 6 2.5 |
| 16 | 9.84 385 | 12 | 9.98 888 | 25 | 0.01 112 | 9.85 497 | 13 | 44 | 7 2.9 |
| 17 | 9.84 398 | 13 | 9.98 913 | 25 | 0.01 087 | 9.85 485 | 12 | 43 | 8 3.3 |
| 18 | 9.84 411 | 13 | 9.98 939 | 26 | 0.01 061 | 9.85 473 | 12 | 42 | 9 3.8 |
| 19 | 9.84 424 | 13 | 9.98 964 | 25 | 0.01 036 | 9.85 460 | 13 | 41 | 10 4.2 |
| 20 | 9.84 437 | 13 | 9.98 989 | 25 | 0.01 011 | 9.85 448 | 12 | 40 | 20 8.3 |
| 21 | 9.84 450 | 13 | 9.99 015 | 26 | 0.00 985 | 9.85 436 | 12 | 39 | 30 12.5 |
| 22 | 9.84 463 | 13 | 9.99 040 | 25 | 0.00 960 | 9.85 423 | 13 | 38 | 40 16.7 |
| 23 | 9.84 476 | 13 | 9.99 065 | 25 | 0.00 935 | 9.85 411 | 12 | 37 | 50 20.8 |
| 24 | 9.84 489 | 13 | 9.99 090 | 25 | 0.00 910 | 9.85 399 | 12 | 36 | |
| 25 | 9.84 502 | 13 | 9.99 116 | 26 | 0.00 884 | 9.85 386 | 13 | 35 | |
| 26 | 9.84 515 | 13 | 9.99 141 | 25 | 0.00 859 | 9.85 374 | 12 | 34 | 14 |
| 27 | 9.84 528 | 13 | 9.99 166 | 25 | 0.00 834 | 9.85 361 | 13 | 33 | 6 1.4 |
| 28 | 9.84 540 | 12 | 9.99 191 | 25 | 0.00 809 | 9.85 349 | 12 | 32 | 7 1.6 |
| 29 | 9.84 553 | 13 | 9.99 217 | 26 | 0.00 783 | 9.85 337 | 12 | 31 | 8 1.9 |
| 30 | 9.84 566 | 13 | 9.99 242 | 25 | 0.00 758 | 9.85 324 | 13 | 30 | 9 2.1 |
| 31 | 9.84 579 | 13 | 9.99 267 | 25 | 0.00 733 | 9.85 312 | 12 | 29 | 10 2.3 |
| 32 | 9.84 592 | 13 | 9.99 293 | 26 | 0.00 707 | 9.85 299 | 13 | 28 | 20 4.7 |
| 33 | 9.84 605 | 13 | 9.99 318 | 25 | 0.00 682 | 9.85 287 | 12 | 27 | 30 7.0 |
| 34 | 9.84 618 | 13 | 9.99 343 | 25 | 0.00 657 | 9.85 274 | 13 | 26 | 40 9.3 |
| 35 | 9.84 630 | 12 | 9.99 368 | 25 | 0.00 632 | 9.85 262 | 12 | 25 | 50 11.7 |
| 36 | 9.84 643 | 13 | 9.99 394 | 26 | 0.00 606 | 9.85 250 | 12 | 24 | |
| 37 | 9.84 656 | 13 | 9.99 419 | 25 | 0.00 581 | 9.85 237 | 13 | 23 | |
| 38 | 9.84 669 | 13 | 9.99 444 | 25 | 0.00 556 | 9.85 225 | 12 | 22 | 13 |
| 39 | 9.84 682 | 13 | 9.99 469 | 25 | 0.00 531 | 9.85 212 | 13 | 21 | 6 1.3 |
| 40 | 9.84 694 | 12 | 9.99 495 | 26 | 0.00 505 | 9.85 200 | 12 | 20 | 7 1.5 |
| 41 | 9.84 707 | 13 | 9.99 520 | 25 | 0.00 480 | 9.85 187 | 13 | 19 | 8 1.7 |
| 42 | 9.84 720 | 13 | 9.99 545 | 25 | 0.00 455 | 9.85 175 | 12 | 18 | 9 2.0 |
| 43 | 9.84 733 | 13 | 9.99 570 | 25 | 0.00 430 | 9.85 162 | 13 | 17 | 10 2.2 |
| 44 | 9.84 745 | 12 | 9.99 596 | 26 | 0.00 404 | 9.85 150 | 12 | 16 | 20 4.3 |
| 45 | 9.84 758 | 13 | 9.99 621 | 25 | 0.00 379 | 9.85 137 | 13 | 15 | 30 6.5 |
| 46 | 9.84 771 | 13 | 9.99 646 | 25 | 0.00 354 | 9.85 125 | 13 | 14 | 40 8.7 |
| 47 | 9.84 784 | 13 | 9.99 672 | 26 | 0.00 328 | 9.85 112 | 12 | 13 | 50 10.8 |
| 48 | 9.84 796 | 12 | 9.99 697 | 25 | 0.00 303 | 9.85 100 | 12 | 12 | |
| 49 | 9.84 809 | 13 | 9.99 722 | 25 | 0.00 278 | 9.85 087 | 13 | 11 | |
| 50 | 9.84 822 | 13 | 9.99 747 | 25 | 0.00 253 | 9.85 074 | 13 | 10 | 12 |
| 51 | 9.84 835 | 13 | 9.99 773 | 26 | 0.00 227 | 9.85 062 | 12 | 9 | 6 1.2 |
| 52 | 9.84 847 | 12 | 9.99 798 | 25 | 0.00 202 | 9.85 049 | 13 | 8 | 7 1.4 |
| 53 | 9.84 860 | 13 | 9.99 823 | 25 | 0.00 177 | 9.85 037 | 12 | 7 | 8 1.6 |
| 54 | 9.84 873 | 13 | 9.99 848 | 25 | 0.00 152 | 9.85 024 | 13 | 6 | 9 1.8 |
| 55 | 9.84 885 | 12 | 9.99 874 | 26 | 0.00 126 | 9.85 012 | 12 | 5 | 10 2.0 |
| 56 | 9.84 898 | 13 | 9.99 899 | 25 | 0.00 101 | 9.84 999 | 13 | 4 | 20 4.0 |
| 57 | 9.84 911 | 13 | 9.99 924 | 25 | 0.00 076 | 9.84 986 | 13 | 3 | 30 6.0 |
| 58 | 9.84 923 | 12 | 9.99 949 | 25 | 0.00 051 | 9.84 974 | 12 | 2 | 40 8.0 |
| 59 | 9.84 936 | 13 | 9.99 975 | 26 | 0.00 025 | 9.84 961 | 13 | 1 | 50 10.0 |
| 60 | 9.84 949 | 13 | 0.00 000 | 25 | 0.00 000 | 9.84 949 | 12 | 0 | |
| | L. Cos. | d. | L. Cotg. | c. d. | L. Tang. | L. Sin. | d. | ∕ | Prop. Pts. |

| // | / | S | T |
|------|----|---------|---------|
| 0 | 0 | 4.68557 | 4.68557 |
| 60 | 1 | .68557 | .68557 |
| 120 | 2 | .68557 | .68557 |
| 180 | 3 | .68557 | .68557 |
| 240 | 4 | .68557 | .68558 |
| 300 | 5 | 4.68557 | 4.68558 |
| 360 | 6 | .68557 | .68558 |
| 420 | 7 | .68557 | .68558 |
| 480 | 8 | .68557 | .68558 |
| 540 | 9 | .68557 | .68558 |
| 600 | 10 | 4.68557 | 4.68558 |
| 660 | 11 | .68557 | .68558 |
| 720 | 12 | .68557 | .68558 |
| 780 | 13 | .68557 | .68558 |
| 840 | 14 | .68557 | .68558 |
| 900 | 15 | 4.68557 | 4.68558 |
| 960 | 16 | .68557 | .68558 |
| 1020 | 17 | .68557 | .68558 |
| 1080 | 18 | .68557 | .68558 |
| 1140 | 19 | .68557 | .68558 |
| 1200 | 20 | 4.68557 | 4.68558 |
| 1260 | 21 | .68557 | .68558 |
| 1320 | 22 | .68557 | .68558 |
| 1380 | 23 | .68557 | .68558 |
| 1440 | 24 | .68557 | .68558 |
| 1500 | 25 | 4.68557 | 4.68558 |
| 1560 | 26 | .68557 | .68558 |
| 1620 | 27 | .68557 | .68558 |
| 1680 | 28 | .68557 | .68558 |
| 1740 | 29 | .68557 | .68559 |
| 1800 | 30 | 4.68557 | 4.68559 |
| 1860 | 31 | .68557 | .68559 |
| 1920 | 32 | .68557 | .68559 |
| 1980 | 33 | .68557 | .68559 |
| 2040 | 34 | .68557 | .68559 |
| 2100 | 35 | 4.68557 | 4.68559 |
| 2160 | 36 | .68557 | .68559 |
| 2220 | 37 | .68557 | .68559 |
| 2280 | 38 | .68557 | .68559 |
| 2340 | 39 | .68557 | .68559 |
| 2400 | 40 | 4.68557 | 4.68559 |
| 2460 | 41 | .68556 | .68560 |
| 2520 | 42 | .68556 | .68560 |
| 2580 | 43 | .68556 | .68560 |
| 2640 | 44 | .68556 | .68560 |
| 2700 | 45 | 4.68556 | 4.68560 |
| 2760 | 46 | .68556 | .68560 |
| 2820 | 47 | .68556 | .68560 |
| 2880 | 48 | .68556 | .68560 |
| 2940 | 49 | .68556 | .68560 |
| 3000 | 50 | 4.68556 | 4.68561 |
| 3060 | 51 | .68556 | .68561 |
| 3120 | 52 | .68556 | .68561 |
| 3180 | 53 | .68556 | .68561 |
| 3240 | 54 | .68556 | .68561 |
| 3300 | 55 | 4.68556 | 4.68561 |
| 3360 | 56 | .68556 | .68561 |
| 3420 | 57 | .68555 | .68561 |
| 3480 | 58 | .68555 | .68562 |
| 3540 | 59 | .68555 | .68562 |
| 3600 | 60 | 4.68555 | 4.68562 |

| // | / | S | T |
|------|----|---------|---------|
| 3600 | 0 | 4.68555 | 4.68562 |
| 3660 | 1 | .68555 | .68562 |
| 3720 | 2 | .68555 | .68562 |
| 3780 | 3 | .68555 | .68562 |
| 3840 | 4 | .68555 | .68563 |
| 3900 | 5 | 4.68555 | 4.68563 |
| 3960 | 6 | .68555 | .68563 |
| 4020 | 7 | .68555 | .68563 |
| 4080 | 8 | .68555 | .68563 |
| 4140 | 9 | .68555 | .68563 |
| 4200 | 10 | 4.68554 | 4.68563 |
| 4260 | 11 | .68554 | .68564 |
| 4320 | 12 | .68554 | .68564 |
| 4380 | 13 | .68554 | .68564 |
| 4440 | 14 | .68554 | .68564 |
| 4500 | 15 | 4.68554 | 4.68564 |
| 4560 | 16 | .68554 | .68565 |
| 4620 | 17 | .68554 | .68565 |
| 4680 | 18 | .68554 | .68565 |
| 4740 | 19 | .68554 | .68565 |
| 4800 | 20 | 4.68554 | 4.68565 |
| 4860 | 21 | .68553 | .68566 |
| 4920 | 22 | .68553 | .68566 |
| 4980 | 23 | .68553 | .68566 |
| 5040 | 24 | .68553 | .68566 |
| 5100 | 25 | 4.68553 | 4.68566 |
| 5160 | 26 | .68553 | .68567 |
| 5220 | 27 | .68553 | .68567 |
| 5280 | 28 | .68553 | .68567 |
| 5340 | 29 | .68553 | .68567 |
| 5400 | 30 | 4.68553 | 4.68567 |
| 5460 | 31 | .68552 | .68568 |
| 5520 | 32 | .68552 | .68568 |
| 5580 | 33 | .68552 | .68568 |
| 5640 | 34 | .68552 | .68568 |
| 5700 | 35 | 4.68552 | 4.68569 |
| 5760 | 36 | .68552 | .68569 |
| 5820 | 37 | .68552 | .68569 |
| 5880 | 38 | .68552 | .68569 |
| 5940 | 39 | .68551 | .68569 |
| 6000 | 40 | 4.68551 | 4.68570 |
| 6060 | 41 | .68551 | .68570 |
| 6120 | 42 | .68551 | .68570 |
| 6180 | 43 | .68551 | .68570 |
| 6240 | 44 | .68551 | .68571 |
| 6300 | 45 | 4.68551 | 4.68571 |
| 6360 | 46 | .68551 | .68571 |
| 6420 | 47 | .68550 | .68572 |
| 6480 | 48 | .68550 | .68572 |
| 6540 | 49 | .68550 | .68572 |
| 6600 | 50 | 4.68550 | 4.68572 |
| 6660 | 51 | .68550 | .68573 |
| 6720 | 52 | .68550 | .68573 |
| 6780 | 53 | .68550 | .68573 |
| 6840 | 54 | .68550 | .68573 |
| 6900 | 55 | 4.68549 | 4.68574 |
| 6960 | 56 | .68549 | .68574 |
| 7020 | 57 | .68549 | .68574 |
| 7080 | 58 | .68549 | .68575 |
| 7140 | 59 | .68549 | .68575 |
| 7200 | 60 | 4.68549 | 4.68575 |

Log sin a = log a'' + S.

Log tan a = log a'' + T.

| // | / | S | T |
|-------|----|---------|---------|
| 7200 | 0 | 4.68549 | 4.68575 |
| 7260 | 1 | .68549 | .68575 |
| 7320 | 2 | .68548 | .68576 |
| 7380 | 3 | .68548 | .68576 |
| 7440 | 4 | .68548 | .68576 |
| 7500 | 5 | 4.68548 | 4.68577 |
| 7560 | 6 | .68548 | .68577 |
| 7620 | 7 | .68548 | .68577 |
| 7680 | 8 | .68547 | .68578 |
| 7740 | 9 | .68547 | .68578 |
| 7800 | 10 | 4.68547 | 4.68578 |
| 7860 | 11 | .68547 | .68579 |
| 7920 | 12 | .68547 | .68579 |
| 7980 | 13 | .68547 | .68579 |
| 8040 | 14 | .68546 | .68579 |
| 8100 | 15 | 4.68546 | 4.68580 |
| 8160 | 16 | .68546 | .68580 |
| 8220 | 17 | .68546 | .68580 |
| 8280 | 18 | .68546 | .68581 |
| 8340 | 19 | .68546 | .68581 |
| 8400 | 20 | 4.68545 | 4.68582 |
| 8460 | 21 | .68545 | .68582 |
| 8520 | 22 | .68545 | .68582 |
| 8580 | 23 | .68545 | .68583 |
| 8640 | 24 | .68545 | .68583 |
| 8700 | 25 | 4.68545 | 4.68583 |
| 8760 | 26 | .68544 | .68584 |
| 8820 | 27 | .68544 | .68584 |
| 8880 | 28 | .68544 | .68584 |
| 8940 | 29 | .68544 | .68585 |
| 9000 | 30 | 4.68544 | 4.68585 |
| 9060 | 31 | .68544 | .68585 |
| 9120 | 32 | .68543 | .68586 |
| 9180 | 33 | .68543 | .68586 |
| 9240 | 34 | .68543 | .68587 |
| 9300 | 35 | 4.68543 | 4.68587 |
| 9360 | 36 | .68543 | .68587 |
| 9420 | 37 | .68542 | .68588 |
| 9480 | 38 | .68542 | .68588 |
| 9540 | 39 | .68542 | .68588 |
| 9600 | 40 | 4.68542 | 4.68589 |
| 9660 | 41 | .68542 | .68589 |
| 9720 | 42 | .68541 | .68590 |
| 9780 | 43 | .68541 | .68590 |
| 9840 | 44 | .68541 | .68590 |
| 9900 | 45 | 4.68541 | 4.68591 |
| 9960 | 46 | .68541 | .68591 |
| 10020 | 47 | .68540 | .68592 |
| 10080 | 48 | .68540 | .68592 |
| 10140 | 49 | .68540 | .68592 |
| 10200 | 50 | 4.68540 | 4.68593 |
| 10260 | 51 | .68540 | .68593 |
| 10320 | 52 | .68539 | .68594 |
| 10380 | 53 | .68539 | .68594 |
| 10440 | 54 | .68539 | .68595 |
| 10500 | 55 | 4.68539 | 4.68595 |
| 10560 | 56 | .68539 | .68595 |
| 10620 | 57 | .68538 | .68596 |
| 10680 | 58 | .68538 | .68596 |
| 10740 | 59 | .68538 | .68597 |
| 10800 | 60 | 4.68538 | 4.68597 |

| // | / | S | T |
|-------|----|---------|---------|
| 10800 | 0 | 4.68538 | 4.68597 |
| 10860 | 1 | .68537 | .68598 |
| 10920 | 2 | .68537 | .68598 |
| 10980 | 3 | .68537 | .68599 |
| 11040 | 4 | .68537 | .68599 |
| 11100 | 5 | 4.68537 | 4.68599 |
| 11160 | 6 | .68536 | .68600 |
| 11220 | 7 | .68536 | .68600 |
| 11280 | 8 | .68536 | .68601 |
| 11340 | 9 | .68536 | .68601 |
| 11400 | 10 | 4.68535 | 4.68602 |
| 11460 | 11 | .68535 | .68602 |
| 11520 | 12 | .68535 | .68603 |
| 11580 | 13 | .68535 | .68603 |
| 11640 | 14 | .68534 | .68604 |
| 11700 | 15 | 4.68534 | 4.68604 |
| 11760 | 16 | .68534 | .68605 |
| 11820 | 17 | .68534 | .68605 |
| 11880 | 18 | .68533 | .68606 |
| 11940 | 19 | .68533 | .68606 |
| 12000 | 20 | 4.68533 | 4.68607 |
| 12060 | 21 | .68533 | .68607 |
| 12120 | 22 | .68532 | .68608 |
| 12180 | 23 | .68532 | .68608 |
| 12240 | 24 | .68532 | .68609 |
| 12300 | 25 | 4.68532 | 4.68609 |
| 12360 | 26 | .68531 | .68610 |
| 12420 | 27 | .68531 | .68610 |
| 12480 | 28 | .68531 | .68611 |
| 12540 | 29 | .68531 | .68611 |
| 12600 | 30 | 4.68530 | 4.68612 |
| 12660 | 31 | .68530 | .68612 |
| 12720 | 32 | .68530 | .68613 |
| 12780 | 33 | .68530 | .68613 |
| 12840 | 34 | .68529 | .68614 |
| 12900 | 35 | 4.68529 | 4.68614 |
| 12960 | 36 | .68529 | .68615 |
| 13020 | 37 | .68529 | .68615 |
| 13080 | 38 | .68528 | .68616 |
| 13140 | 39 | .68528 | .68616 |
| 13200 | 40 | 4.68528 | 4.68617 |
| 13260 | 41 | .68528 | .68617 |
| 13320 | 42 | .68527 | .68618 |
| 13380 | 43 | .68527 | .68618 |
| 13440 | 44 | .68527 | .68619 |
| 13500 | 45 | 4.68526 | 4.68620 |
| 13560 | 46 | .68526 | .68620 |
| 13620 | 47 | .68526 | .68621 |
| 13680 | 48 | .68526 | .68621 |
| 13740 | 49 | .68525 | .68622 |
| 13800 | 50 | 4.68525 | 4.68622 |
| 13860 | 51 | .68525 | .68623 |
| 13920 | 52 | .68525 | .68623 |
| 13980 | 53 | .68524 | .68624 |
| 14040 | 54 | .68524 | .68625 |
| 14100 | 55 | 4.68524 | 4.68625 |
| 14160 | 56 | .68523 | .68626 |
| 14220 | 57 | .68523 | .68626 |
| 14280 | 58 | .68523 | .68627 |
| 14340 | 59 | .68522 | .68628 |
| 14400 | 60 | 4.68522 | 4.68628 |

$$\text{Log sin } a = \text{log } a'' + \text{S.}$$

$$\text{Log tan } a = \text{log } a'' + \text{T.}$$

TABLE V.

NATURAL

SINES, COSINES, TANGENTS, AND COTANGENTS.

| ° / | N. Sin. | N. Tan. | N. Cot. | N. Cos. | | ° / | N. Sin. | N. Tan. | N. Cot. | N. Cos. | |
|------|---------|---------|-----------|---------|-------|------|---------|---------|---------|---------|-------|
| 0 0 | .00 000 | .00 000 | Infinity. | Unity. | 90 0 | 2 30 | .04 362 | .04 366 | 22.904 | .99 905 | 87 30 |
| 5 | 145 | 145 | 687.55 | " | 55 | 35 | 507 | 512 | 22.164 | 898 | 25 |
| 10 | 291 | 291 | 343.77 | " | 50 | 40 | 653 | 658 | 21.470 | 892 | 20 |
| 15 | 436 | 436 | 229.18 | .99 999 | 45 | 45 | 798 | 803 | 20.819 | 885 | 15 |
| 20 | 582 | 582 | 171.89 | .998 | 40 | 50 | .04 943 | .04 949 | 20.206 | 878 | 10 |
| 25 | 727 | 727 | 137.51 | .997 | 35 | 55 | .05 088 | .05 095 | 19.627 | 870 | 5 |
| 30 | .00 873 | .00 873 | 114.59 | .99 996 | 30 | 3 0 | .05 234 | .05 241 | 19.081 | .99 863 | 87 0 |
| 35 | .01 018 | .01 018 | 98.218 | .995 | 25 | 5 | 379 | 387 | 18.564 | 855 | 55 |
| 40 | 164 | 164 | 85.940 | .993 | 20 | 10 | 524 | 533 | 18.075 | 847 | 50 |
| 45 | 309 | 309 | 76.390 | .991 | 15 | 15 | 669 | 678 | 17.611 | 839 | 45 |
| 50 | 454 | 455 | 68.750 | .989 | 10 | 20 | 814 | 824 | 17.169 | 831 | 40 |
| 55 | 600 | 600 | 62.499 | .987 | 5 | 25 | .05 960 | .05 970 | 16.750 | 822 | 35 |
| 1 0 | .01 745 | .01 746 | 57.290 | .99 985 | 89 0 | 30 | .06 105 | .06 116 | 16.350 | .99 813 | 30 |
| 5 | .01 891 | .01 891 | 52.882 | .982 | 55 | 35 | 250 | 262 | 15.969 | 804 | 25 |
| 10 | .02 036 | .02 036 | 49.104 | .979 | 50 | 40 | 395 | 408 | .605 | 795 | 20 |
| 15 | 181 | 182 | 45.829 | .976 | 45 | 45 | 540 | 554 | 15.257 | 786 | 15 |
| 20 | 327 | 328 | 42.964 | .973 | 40 | 50 | 685 | 700 | 14.924 | 776 | 10 |
| 25 | 472 | 473 | 40.436 | .969 | 35 | 55 | 831 | 847 | .606 | 766 | 5 |
| 30 | .02 618 | .02 619 | 38.188 | .99 966 | 30 | 4 0 | .06 976 | .06 993 | 14.301 | .99 756 | 86 0 |
| 35 | 763 | 764 | 36.178 | .962 | 25 | 5 | .07 121 | .07 139 | 14.008 | 746 | 55 |
| 40 | .02 908 | .02 910 | 34.368 | .958 | 20 | 10 | 266 | 285 | 13.727 | 736 | 50 |
| 45 | .03 054 | .03 055 | 32.730 | .953 | 15 | 15 | 411 | 431 | .457 | 725 | 45 |
| 50 | 199 | 201 | 31.242 | .949 | 10 | 20 | 556 | 578 | 13.197 | 714 | 40 |
| 55 | 345 | 346 | 29.882 | .944 | 5 | 25 | 701 | 724 | 12.947 | 703 | 35 |
| 2 0 | .03 490 | .03 492 | 28.636 | .99 939 | 88 0 | 30 | .07 846 | .07 870 | 12.706 | .99 692 | 30 |
| 5 | 635 | 638 | 27.490 | .934 | 55 | 35 | .07 991 | .08 017 | .474 | 680 | 25 |
| 10 | 781 | 783 | 26.432 | .929 | 50 | 40 | .08 136 | 163 | .251 | 668 | 20 |
| 15 | .03 926 | .03 929 | 25.452 | .923 | 45 | 45 | 281 | 309 | 12.035 | 657 | 15 |
| 20 | .04 071 | .04 075 | 24.542 | .917 | 40 | 50 | 426 | 456 | 11.826 | 644 | 10 |
| 25 | 217 | 220 | 23.695 | .911 | 35 | 55 | 571 | 602 | .625 | 632 | 5 |
| 2 30 | .04 362 | .04 366 | 22.904 | .99 905 | 87 30 | 5 0 | .08 716 | .08 749 | 11.430 | .99 619 | 85 0 |
| | N. Cos. | N. Cot. | N. Tan. | N. Sin. | ° / | | N. Cos. | N. Cot. | N. Tan. | N. Sin. | ° / |

| ° / | N. Sin. | N. Tan. | N. Cot. | N. Cos. | | ° / | N. Sin. | N. Tan. | N. Cot. | N. Cos. | |
|------|---------|---------|---------|---------|------|------|---------|---------|---------|---------|------|
| 5 0 | .08 716 | .08 749 | 11.430 | .99 619 | 85 0 | 10 0 | .17 365 | .17 633 | 5.6713 | .98 481 | 80 0 |
| 5 | .08 860 | .08 895 | .242 | 607 | 55 | 5 | 508 | 783 | .6234 | 455 | 55 |
| 10 | .09 005 | .09 042 | 11.059 | 594 | 50 | 10 | 651 | .17 933 | .5764 | 430 | 50 |
| 15 | 150 | 189 | 10.883 | 580 | 45 | 15 | 794 | .18 083 | .5301 | 404 | 45 |
| 20 | 295 | 335 | .712 | 567 | 40 | 20 | .17 937 | 233 | .4845 | 378 | 40 |
| 25 | 440 | 482 | .546 | 553 | 35 | 25 | .18 081 | 384 | .4397 | 352 | 35 |
| 30 | .09 585 | .09 629 | 10.385 | .99 540 | 30 | 30 | .18 224 | .18 534 | 5.3955 | .98 325 | 30 |
| 35 | 729 | 776 | .229 | 526 | 25 | 35 | 367 | 684 | .3521 | 299 | 25 |
| 40 | .09 874 | .09 923 | 10.078 | 511 | 20 | 40 | 509 | 835 | .3093 | 272 | 20 |
| 45 | .10 019 | .10 069 | 9.9310 | 497 | 15 | 45 | 652 | .18 986 | .2672 | 245 | 15 |
| 50 | 164 | 216 | .7882 | 482 | 10 | 50 | 795 | .19 136 | .2257 | 218 | 10 |
| 55 | 308 | 363 | .6493 | 467 | 5 | 55 | .18 938 | 287 | .1848 | 190 | 5 |
| 6 0 | .10 453 | .10 510 | 9.5144 | .99 452 | 84 0 | 11 0 | .19 081 | .19 438 | 5.1446 | .98 163 | 79 0 |
| 5 | 597 | 657 | .3831 | 437 | 55 | 5 | 224 | 589 | .1049 | 135 | 55 |
| 10 | 742 | 805 | .2553 | 421 | 50 | 10 | 366 | 740 | .0658 | 107 | 50 |
| 15 | .10 887 | .10 952 | .1309 | 406 | 45 | 15 | 509 | .19 891 | 5.0273 | 079 | 45 |
| 20 | .11 031 | .11 099 | 9.0098 | 390 | 40 | 20 | 652 | .20 042 | 4.9894 | 050 | 40 |
| 25 | 176 | 246 | 8.8919 | 374 | 35 | 25 | 794 | 194 | .9520 | .98 021 | 35 |
| 30 | .11 320 | .11 394 | 8.7769 | .99 357 | 30 | 30 | .19 937 | .20 345 | 4.9152 | .97 992 | 30 |
| 35 | 465 | 541 | .6648 | 341 | 25 | 35 | .20 079 | 497 | .8788 | 963 | 25 |
| 40 | 609 | 688 | .5555 | 324 | 20 | 40 | 222 | 648 | .8430 | 934 | 20 |
| 45 | 754 | 836 | .4490 | 307 | 15 | 45 | 364 | 800 | .8077 | 905 | 15 |
| 50 | .11 898 | .11 983 | .3450 | 290 | 10 | 50 | 507 | .20 952 | .7729 | 875 | 10 |
| 55 | .12 043 | .12 131 | .2434 | 272 | 5 | 55 | 649 | .21 104 | .7385 | 845 | 5 |
| 7 0 | .12 187 | .12 278 | 8.1443 | .99 255 | 83 0 | 12 0 | .20 791 | .21 256 | 4.7046 | .97 815 | 78 0 |
| 5 | 331 | 426 | 8.0476 | 237 | 55 | 5 | .20 933 | 408 | .6712 | 784 | 55 |
| 10 | 476 | 574 | 7.9530 | 219 | 50 | 10 | .21 076 | 560 | .6382 | 754 | 50 |
| 15 | 620 | 722 | .8606 | 200 | 45 | 15 | 218 | 712 | .6057 | 723 | 45 |
| 20 | 764 | .12 869 | .7704 | 182 | 40 | 20 | 360 | .21 864 | .5736 | 692 | 40 |
| 25 | .12 908 | .13 017 | .6821 | 163 | 35 | 25 | 502 | .22 017 | .5420 | 661 | 35 |
| 30 | .13 053 | .13 165 | 7.5958 | .99 144 | 30 | 30 | .21 644 | .22 169 | 4.5107 | .97 630 | 30 |
| 35 | 197 | 313 | .5113 | 125 | 25 | 35 | 786 | 322 | .4799 | 598 | 25 |
| 40 | 341 | 461 | .4287 | 106 | 20 | 40 | .21 928 | 475 | .4494 | 566 | 20 |
| 45 | 485 | 609 | .3479 | 087 | 15 | 45 | .22 070 | 628 | .4194 | 534 | 15 |
| 50 | 629 | 758 | .2687 | 067 | 10 | 50 | 212 | 781 | .3897 | 502 | 10 |
| 55 | 773 | .13 906 | .1912 | 047 | 5 | 55 | 353 | .22 934 | .3604 | 470 | 5 |
| 8 0 | .13 917 | .14 054 | 7.1154 | .99 027 | 82 0 | 13 0 | .22 495 | .23 087 | 4.3315 | .97 437 | 77 0 |
| 5 | .14 061 | 202 | 7.0410 | .99 006 | 55 | 5 | 637 | 240 | .3029 | 404 | 55 |
| 10 | 205 | 351 | 6.9682 | .98 986 | 50 | 10 | 778 | 393 | .2747 | 371 | 50 |
| 15 | 349 | 499 | .8699 | 965 | 45 | 15 | .22 920 | 547 | .2468 | 338 | 45 |
| 20 | 493 | 648 | .8269 | 944 | 40 | 20 | .23 062 | 700 | .2193 | 304 | 40 |
| 25 | 637 | 796 | .7584 | 923 | 35 | 25 | 203 | .23 854 | .1922 | 271 | 35 |
| 30 | .14 781 | .14 945 | 6.6912 | .98 902 | 30 | 30 | .23 345 | .24 008 | 4.1653 | .97 237 | 30 |
| 35 | .14 925 | .15 094 | .6252 | 880 | 25 | 35 | 486 | 162 | .1388 | 203 | 25 |
| 40 | .15 069 | 243 | .5606 | 858 | 20 | 40 | 627 | 316 | .1126 | 169 | 20 |
| 45 | 212 | 391 | .4971 | 836 | 15 | 45 | 769 | 470 | .0867 | 134 | 15 |
| 50 | 356 | 540 | .4348 | 814 | 10 | 50 | .23 910 | 624 | .0611 | 100 | 10 |
| 55 | 500 | 689 | .3737 | 791 | 5 | 55 | .24 051 | 778 | .0358 | 065 | 5 |
| 9 0 | .15 643 | .15 838 | 6.3138 | .98 769 | 81 0 | 14 0 | .24 192 | .24 933 | 4.0108 | .97 030 | 76 0 |
| 5 | 787 | .15 988 | .2549 | 746 | 55 | 5 | 333 | .25 087 | 3.9861 | .96 994 | 55 |
| 10 | .15 931 | .16 137 | .1970 | 723 | 50 | 10 | 474 | 242 | .9617 | 959 | 50 |
| 15 | .16 074 | 286 | .1402 | 700 | 45 | 15 | 615 | 397 | .9375 | 923 | 45 |
| 20 | 218 | 435 | .0844 | 676 | 40 | 20 | 756 | 552 | .9136 | 887 | 40 |
| 25 | 361 | 585 | 6.0296 | 652 | 35 | 25 | .24 897 | 707 | .8900 | 851 | 35 |
| 30 | .16 505 | .16 734 | 5.9758 | .98 629 | 30 | 30 | .25 038 | .25 862 | 3.8667 | .96 815 | 30 |
| 35 | 648 | .16 884 | .9228 | 604 | 25 | 35 | 179 | .26 017 | .8436 | 778 | 25 |
| 40 | 792 | .17 033 | .8708 | 580 | 20 | 40 | 320 | 172 | .8208 | 742 | 20 |
| 45 | .16 935 | 183 | .8197 | 556 | 15 | 45 | 460 | 328 | .7983 | 705 | 15 |
| 50 | .17 078 | 333 | .7694 | 531 | 10 | 50 | 601 | 483 | .7760 | 667 | 10 |
| 55 | 222 | 483 | .7199 | 506 | 5 | 55 | 741 | 639 | .7539 | 630 | 5 |
| 10 0 | .17 365 | .17 633 | 5.6713 | .98 481 | 80 0 | 15 0 | .25 882 | .26 795 | 3.7321 | .96 593 | 75 0 |
| | N. Cos. | N. Cot. | N. Tan. | N. Sin. | ° / | | N. Cos. | N. Cot. | N. Tan. | N. Sin. | ° / |

| o / | N. Sin. | N. Tan. | N. Cot. | N. Cos. | o / | N. Sin. | N. Tan. | N. Cot. | N. Cos. | o / | |
|------|---------|---------|---------|---------|------|---------|---------|---------|---------|---------|------|
| 15 o | .25 882 | .26 795 | 3.7231 | .96 593 | 75 o | 20 o | .34 202 | .36 397 | 2.7475 | .93 969 | 70 o |
| 5 | .26 022 | .26 951 | .7105 | 555 | 55 | 5 | 339 | 562 | .7351 | 919 | 55 |
| 10 | 163 | .27 107 | .6891 | 517 | 50 | 10 | 475 | 727 | .7228 | 869 | 50 |
| 15 | 303 | 263 | .6680 | 479 | 45 | 15 | 612 | .36 892 | .7106 | 819 | 45 |
| 20 | 443 | 419 | .6470 | 440 | 40 | 20 | 748 | .37 057 | .6985 | 769 | 40 |
| 25 | 584 | 576 | .6264 | 402 | 35 | 25 | .34 884 | 223 | .6805 | 718 | 35 |
| 30 | .26 724 | .27 732 | 3.6059 | .96 363 | 30 | 30 | .35 021 | .37 388 | 2.6746 | .93 667 | 30 |
| 35 | .26 864 | .27 889 | .5856 | 324 | 25 | 35 | 157 | 554 | .6628 | 616 | 25 |
| 40 | .27 004 | .28 046 | .5656 | 285 | 20 | 40 | 293 | 720 | .6511 | 565 | 20 |
| 45 | 144 | 203 | .5457 | 246 | 15 | 45 | 429 | .37 887 | .6395 | 514 | 15 |
| 50 | 284 | 360 | .5261 | 206 | 10 | 50 | 565 | .38 053 | .6279 | 462 | 10 |
| 55 | 424 | 517 | .5067 | 166 | 5 | 55 | 701 | 220 | .6165 | 410 | 5 |
| 16 o | .27 564 | .28 675 | 3.4874 | .96 126 | 74 o | 21 o | .35 837 | .38 386 | 2.6051 | .93 358 | 69 o |
| 5 | 704 | 832 | .4684 | 086 | 55 | 5 | .35 973 | 553 | .5938 | 306 | 55 |
| 10 | 843 | .28 990 | .4495 | 046 | 50 | 10 | .36 108 | 721 | .5826 | 253 | 50 |
| 15 | .27 983 | .29 147 | .4308 | .96 005 | 45 | 15 | 244 | .38 888 | .5715 | 201 | 45 |
| 20 | .28 123 | 305 | .4124 | .95 964 | 40 | 20 | 379 | .39 055 | .5605 | 148 | 40 |
| 25 | 262 | 463 | .3941 | 923 | 35 | 25 | 515 | 223 | .5495 | 095 | 35 |
| 30 | .28 402 | .29 621 | 3.3759 | .95 882 | 30 | 30 | .36 650 | .39 391 | 2.5386 | .93 042 | 30 |
| 35 | 541 | 780 | .3580 | 841 | 25 | 35 | 785 | 559 | .5279 | .92 988 | 25 |
| 40 | 680 | .29 938 | .3402 | 799 | 20 | 40 | .36 921 | 727 | .5172 | 935 | 20 |
| 45 | 820 | .30 097 | .3226 | 757 | 15 | 45 | .37 056 | .39 896 | .5065 | 881 | 15 |
| 50 | .28 959 | 255 | .3052 | 715 | 10 | 50 | 191 | .40 065 | .4960 | 827 | 10 |
| 55 | .29 098 | 414 | .2879 | 673 | 5 | 55 | 326 | 234 | .4855 | 773 | 5 |
| 17 o | .29 237 | .30 573 | 3.2709 | .95 630 | 73 o | 22 o | .37 461 | .40 403 | 2.4751 | .92 718 | 68 o |
| 5 | 376 | 732 | .2539 | 588 | 55 | 5 | 595 | 572 | .4648 | 664 | 55 |
| 10 | 515 | .30 891 | .2371 | 545 | 50 | 10 | 730 | 741 | .4545 | 609 | 50 |
| 15 | 654 | .31 051 | .2205 | 502 | 45 | 15 | 865 | .40 911 | .4443 | 554 | 45 |
| 20 | 793 | 210 | .2041 | 459 | 40 | 20 | .37 999 | .41 081 | .4342 | 499 | 40 |
| 25 | .29 932 | 370 | .1878 | 415 | 35 | 25 | .38 134 | 251 | .4242 | 444 | 35 |
| 30 | .30 071 | .31 530 | 3.1716 | .95 372 | 30 | 30 | .38 268 | .41 421 | 2.4142 | .92 388 | 30 |
| 35 | 209 | 690 | .1556 | 328 | 25 | 35 | 493 | 592 | .4043 | 332 | 25 |
| 40 | 348 | .31 850 | .1397 | 284 | 20 | 40 | 537 | 763 | .3945 | 276 | 20 |
| 45 | 486 | .32 010 | .1240 | 240 | 15 | 45 | 671 | .41 933 | .3847 | 220 | 15 |
| 50 | 625 | 171 | .1084 | 195 | 10 | 50 | 805 | .42 105 | .3750 | 164 | 10 |
| 55 | 763 | 331 | .0930 | 150 | 5 | 55 | .38 939 | 276 | .3654 | 107 | 5 |
| 18 o | .30 902 | .32 492 | 3.0777 | .95 106 | 72 o | 23 o | .39 073 | .42 447 | 2.3559 | .92 050 | 67 o |
| 5 | .31 040 | 653 | .0625 | 061 | 55 | 5 | 207 | 619 | .3464 | .91 994 | 55 |
| 10 | 178 | 814 | .0475 | .95 015 | 50 | 10 | 341 | 791 | .3369 | 936 | 50 |
| 15 | 316 | .32 975 | .0326 | .94 970 | 45 | 15 | 474 | .42 963 | .3276 | 879 | 45 |
| 20 | 454 | .33 136 | .0178 | 924 | 40 | 20 | 608 | .43 136 | .3183 | 822 | 40 |
| 25 | 593 | 298 | 3.0032 | 878 | 35 | 25 | 741 | 308 | .3090 | 764 | 35 |
| 30 | .31 730 | .33 460 | 2.9887 | .94 832 | 30 | 30 | .39 875 | .43 481 | 2.2998 | .91 706 | 30 |
| 35 | .31 868 | 621 | .9743 | 786 | 25 | 35 | .40 008 | 654 | .2907 | 648 | 25 |
| 40 | .32 006 | 783 | .9600 | 740 | 20 | 40 | 141 | .43 828 | .2817 | 590 | 20 |
| 45 | 144 | .33 945 | .9459 | 693 | 15 | 45 | 275 | .44 001 | .2727 | 531 | 15 |
| 50 | 282 | .34 108 | .9319 | 646 | 10 | 50 | 408 | 175 | .2637 | 472 | 10 |
| 55 | 419 | 270 | .9180 | 599 | 5 | 55 | 541 | 349 | .2549 | 414 | 5 |
| 19 o | .32 557 | .34 433 | 2.9042 | .94 552 | 71 o | 24 o | .40 674 | .44 523 | 2.2460 | .91 355 | 66 o |
| 5 | 694 | 596 | .8905 | 504 | 55 | 5 | 806 | 697 | .2373 | 295 | 55 |
| 10 | 832 | 758 | .8770 | 457 | 50 | 10 | .40 939 | .44 872 | .2286 | 236 | 50 |
| 15 | .32 969 | .34 922 | .8636 | 409 | 45 | 15 | .41 072 | .45 047 | .2199 | 176 | 45 |
| 20 | .33 106 | .35 085 | .8502 | 361 | 40 | 20 | 204 | 222 | .2113 | 116 | 40 |
| 25 | 244 | 248 | .8370 | 313 | 35 | 25 | 337 | 397 | .2028 | .91 056 | 35 |
| 30 | .33 381 | .35 412 | 2.8239 | .94 264 | 30 | 30 | .41 469 | .45 573 | 2.1943 | .90 996 | 30 |
| 35 | 518 | 576 | .8109 | 215 | 25 | 35 | 602 | 748 | .1859 | 936 | 25 |
| 40 | 655 | 740 | .7980 | 167 | 20 | 40 | 734 | .45 924 | .1775 | 875 | 20 |
| 45 | 792 | .35 904 | .7852 | 118 | 15 | 45 | 866 | .46 101 | .1692 | 814 | 15 |
| 50 | .33 929 | .36 068 | .7725 | 068 | 10 | 50 | .41 998 | 277 | .1609 | 753 | 10 |
| 55 | .34 065 | 232 | .7600 | .94 019 | 5 | 55 | .42 130 | 454 | .1527 | 692 | 5 |
| 20 o | .34 202 | .36 397 | 2.7475 | .93 969 | 70 o | 25 o | .42 262 | .46 631 | 2.1445 | .90 631 | 65 o |
| | N. Cos. | N. Cot. | N. Tan. | N. Sin. | o / | N. Cos. | N. Cot. | N. Tan. | N. Sin. | o / | |

| o / | N. Sin. | N. Tan. | N. Cot. | N. Cos. | o / | N. Sin. | N. Tan. | N. Cot. | N. Cos. | o / | N. Sin. | N. Tan. | N. Cot. | N. Cos. |
|------|---------|---------|---------|---------|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 25 o | .42 262 | .46 631 | 2.1445 | .90 631 | 65 o | 30 o | .50 000 | .57 735 | 1.7321 | .86 603 | 60 o | | | |
| 5 | 394 | 808 | .1364 | 569 | 55 | 5 | 126 | .57 929 | .7262 | 530 | 55 | | | |
| 10 | 525 | .46 985 | .1283 | 507 | 50 | 10 | 252 | .58 124 | .7205 | 457 | 50 | | | |
| 15 | 657 | .47 163 | .1203 | 446 | 45 | 15 | 377 | 318 | .7147 | 384 | 45 | | | |
| 20 | 788 | 341 | .1123 | 383 | 40 | 20 | 503 | 513 | .7090 | 310 | 40 | | | |
| 25 | .42 920 | 519 | .1044 | 321 | 35 | 25 | 628 | 709 | .7033 | 237 | 35 | | | |
| 30 | .43 051 | .47 698 | 2.0965 | .90 259 | 30 | 30 | 754 | .58 905 | 1.6977 | .86 163 | 30 | | | |
| 35 | 182 | .47 876 | .0887 | 196 | 25 | 35 | .50 879 | .59 101 | .6920 | 089 | 25 | | | |
| 40 | 313 | .48 055 | .0809 | 133 | 20 | 40 | .51 004 | 297 | .6864 | .86 015 | 20 | | | |
| 45 | 445 | 234 | .0732 | 070 | 15 | 45 | 129 | 494 | .6808 | .85 941 | 15 | | | |
| 50 | 575 | 414 | .0655 | .90 007 | 10 | 50 | 254 | 691 | .6753 | 866 | 10 | | | |
| 55 | 706 | 593 | .0579 | .89 943 | 5 | 55 | 379 | .59 888 | .6698 | 792 | 5 | | | |
| 26 o | .43 837 | .48 773 | 2.0503 | .89 879 | 64 o | 31 o | .51 504 | .60 086 | 1.6643 | .85 717 | 59 o | | | |
| 5 | .43 968 | .48 953 | .0428 | 816 | 55 | 5 | 628 | 284 | .6588 | 642 | 55 | | | |
| 10 | .44 098 | .49 134 | .0353 | 752 | 50 | 10 | 753 | 483 | .6534 | 567 | 50 | | | |
| 15 | 229 | 315 | .0278 | 687 | 45 | 15 | .51 877 | 681 | .6479 | 491 | 45 | | | |
| 20 | 359 | 495 | .0204 | 623 | 40 | 20 | .52 002 | .60 881 | .6426 | 416 | 40 | | | |
| 25 | 490 | 677 | .0130 | 558 | 35 | 25 | 126 | .61 080 | .6372 | 340 | 35 | | | |
| 30 | .44 620 | .49 858 | 2.0057 | .89 493 | 30 | 30 | .52 250 | .61 280 | 1.6319 | .85 264 | 30 | | | |
| 35 | 750 | .50 040 | 1.9984 | 428 | 25 | 35 | 374 | 480 | .6265 | 188 | 25 | | | |
| 40 | .44 880 | 222 | .9912 | 363 | 20 | 40 | 498 | 681 | .6212 | 112 | 20 | | | |
| 45 | .45 010 | 404 | .9840 | 298 | 15 | 45 | 621 | .61 882 | .6160 | .85 035 | 15 | | | |
| 50 | 140 | 587 | .9768 | 232 | 10 | 50 | 745 | .62 083 | .6107 | .84 959 | 10 | | | |
| 55 | 269 | 769 | .9697 | 167 | 5 | 55 | 869 | 285 | .6055 | 882 | 5 | | | |
| 27 o | .45 399 | .50 953 | 1.9626 | .89 101 | 68 o | 32 o | .52 992 | .62 487 | 1.6003 | .84 805 | 58 o | | | |
| 5 | 529 | .51 136 | .9556 | .89 035 | 55 | 5 | .53 115 | 689 | .5952 | 728 | 55 | | | |
| 10 | 658 | 319 | .9486 | .88 968 | 50 | 10 | 238 | .62 892 | .5900 | 650 | 50 | | | |
| 15 | 787 | 503 | .9416 | 902 | 45 | 15 | 361 | .63 095 | .5849 | 573 | 45 | | | |
| 20 | .45 917 | 688 | .9347 | 835 | 40 | 20 | 484 | 299 | .5798 | 495 | 40 | | | |
| 25 | .46 046 | .51 872 | .9278 | 768 | 35 | 25 | 607 | 503 | .5747 | 417 | 35 | | | |
| 30 | .46 175 | .52 057 | 1.9210 | .88 701 | 30 | 30 | .53 730 | .63 707 | 1.5697 | .84 339 | 30 | | | |
| 35 | 304 | 242 | .9142 | 634 | 25 | 35 | 853 | .63 912 | .5647 | 261 | 25 | | | |
| 40 | 433 | 427 | .9074 | 566 | 20 | 40 | .53 975 | .64 117 | .5597 | 182 | 20 | | | |
| 45 | 561 | 613 | .9007 | 499 | 15 | 45 | .54 097 | 322 | .5547 | 104 | 15 | | | |
| 50 | 690 | 798 | .8940 | 431 | 10 | 50 | 220 | 528 | .5497 | .84 025 | 10 | | | |
| 55 | 819 | .52 985 | .8873 | 363 | 5 | 55 | 342 | 734 | .5448 | .83 946 | 5 | | | |
| 28 o | .46 947 | .53 171 | 1.8807 | .88 295 | 62 o | 33 o | .54 464 | .64 941 | 1.5399 | .83 867 | 57 o | | | |
| 5 | .47 076 | 358 | .8741 | 226 | 55 | 5 | 586 | .65 148 | .5350 | 788 | 55 | | | |
| 10 | 204 | 545 | .8676 | 158 | 50 | 10 | 708 | 355 | .5301 | 708 | 50 | | | |
| 15 | 332 | 732 | .8611 | 089 | 45 | 15 | 829 | 563 | .5253 | 629 | 45 | | | |
| 20 | 460 | .53 920 | .8546 | .88 020 | 40 | 20 | .54 951 | 771 | .5204 | 549 | 40 | | | |
| 25 | 588 | .54 107 | .8482 | .87 951 | 35 | 25 | .55 072 | .65 980 | .5156 | 469 | 35 | | | |
| 30 | .47 716 | .54 296 | 1.8418 | .87 882 | 30 | 30 | .55 194 | .66 189 | 1.5108 | .83 389 | 30 | | | |
| 35 | 844 | 484 | .8354 | 812 | 25 | 35 | 315 | 398 | .5061 | 308 | 25 | | | |
| 40 | .47 971 | 673 | .8291 | 743 | 20 | 40 | .50 436 | 608 | .5013 | 228 | 20 | | | |
| 45 | .48 099 | .54 862 | .8228 | 673 | 15 | 45 | 557 | .66 818 | .4966 | 147 | 15 | | | |
| 50 | 226 | .55 051 | .8165 | 603 | 10 | 50 | 678 | .67 028 | .4919 | .83 066 | 10 | | | |
| 55 | 354 | 241 | .8103 | 532 | 5 | 55 | 799 | 239 | .4872 | .82 985 | 5 | | | |
| 29 o | .48 481 | .55 431 | 1.8040 | .87 462 | 61 o | 34 o | .55 919 | .67 451 | 1.4826 | .82 904 | 56 o | | | |
| 5 | 608 | 621 | .7979 | 391 | 55 | 5 | .56 040 | 663 | .4779 | 822 | 55 | | | |
| 10 | 735 | .55 812 | .7917 | 321 | 50 | 10 | 160 | .67 875 | .4733 | 741 | 50 | | | |
| 15 | 862 | .56 003 | .7856 | 250 | 45 | 15 | 280 | .68 088 | .4687 | 659 | 45 | | | |
| 20 | .48 989 | 194 | .7796 | 178 | 40 | 20 | 401 | 301 | .4641 | 577 | 40 | | | |
| 25 | .49 116 | 385 | .7735 | 107 | 35 | 25 | 521 | 514 | .4596 | 495 | 35 | | | |
| 30 | .49 242 | .56 577 | 1.7675 | .87 036 | 30 | 30 | 641 | .68 728 | 1.4550 | .82 413 | 30 | | | |
| 35 | 369 | 769 | .7615 | .86 964 | 25 | 35 | 760 | .68 942 | .4505 | 330 | 25 | | | |
| 40 | 495 | .56 962 | .7556 | 802 | 20 | 40 | .56 880 | .69 157 | .4460 | 248 | 20 | | | |
| 45 | 622 | .57 155 | .7496 | 820 | 15 | 45 | .57 000 | 372 | .4415 | 165 | 15 | | | |
| 50 | 748 | 348 | .7437 | 748 | 10 | 50 | 119 | 588 | .4370 | .82 082 | 10 | | | |
| 55 | .49 874 | 541 | .7379 | 675 | 5 | 55 | 238 | .69 804 | .4326 | .81 999 | 5 | | | |
| 30 o | .50 000 | .57 735 | 1.7321 | .86 603 | 60 o | 36 o | .57 358 | .70 021 | 1.4281 | .81 915 | 55 o | | | |
| | N. Cos. | N. Cot. | N. Tan. | N. Sin. | o / | | N. Cos. | N. Cot. | N. Tan. | N. Sin. | o / | | | |

| o / | N. Sin. | N. Tan. | N. Cot. | N. Cos. | | o / | N. Sin. | N. Tan. | N. Cot. | N. Cos. | |
|------|---------|---------|---------|---------|------|------|---------|----------|---------|---------|------|
| 35 o | .57 358 | .70 021 | 1.4281 | .81 915 | 55 o | 40 o | .64 279 | .83 910 | 1.1918 | .76 604 | 50 o |
| 5 | 477 | 238 | .4237 | 832 | 55 | 5 | 390 | .84 158 | .1882 | 511 | 55 |
| 10 | 596 | 455 | .4193 | 748 | 50 | 10 | 501 | 407 | .1847 | 417 | 50 |
| 15 | 715 | 673 | .4150 | 664 | 45 | 15 | 612 | 656 | .1812 | 323 | 45 |
| 20 | 833 | .70 891 | .4106 | 580 | 40 | 20 | 723 | .84 906 | .1778 | 229 | 40 |
| 25 | .57 952 | .71 110 | .4063 | 496 | 35 | 25 | 834 | .85 157 | .1743 | 135 | 35 |
| 30 | .58 070 | .71 329 | 1.4019 | .81 412 | 30 | 30 | .64 945 | .85 408 | 1.1708 | .76 041 | 30 |
| 35 | 189 | 549 | .3976 | 327 | 25 | 35 | .65 055 | 660 | .1674 | .75 946 | 25 |
| 40 | 307 | 769 | .3934 | 242 | 20 | 40 | 166 | .85 912 | .1640 | 851 | 20 |
| 45 | 425 | 71 990 | .3891 | 157 | 15 | 45 | 276 | .86 166 | .1606 | 756 | 15 |
| 50 | 543 | .72 211 | .3848 | .81 072 | 10 | 50 | 386 | 419 | .1571 | 661 | 10 |
| 55 | 661 | 432 | .3806 | .80 987 | 5 | 55 | 496 | 674 | .1538 | 566 | 5 |
| 36 o | .58 779 | .72 654 | 1.3764 | .80 902 | 54 o | 41 o | .65 606 | .86 929 | 1.1504 | .75 471 | 49 o |
| 5 | .58 896 | .72 877 | .3722 | 816 | 55 | 5 | 716 | .87 184 | .1470 | 375 | 55 |
| 10 | .59 014 | .73 100 | .3680 | 730 | 50 | 10 | 825 | 441 | .1436 | 280 | 50 |
| 15 | 131 | 323 | .3638 | 644 | 45 | 15 | .65 935 | 698 | .1403 | 184 | 45 |
| 20 | 248 | 547 | .3597 | 558 | 40 | 20 | .66 044 | .87 955 | .1369 | .75 088 | 40 |
| 25 | 365 | 771 | .3555 | 472 | 35 | 25 | 153 | .88 214 | .1336 | .74 992 | 35 |
| 30 | .59 482 | .73 996 | 1.3514 | .80 386 | 30 | 30 | .66 262 | .88 473 | 1.1303 | .74 896 | 30 |
| 35 | 599 | .74 221 | .3473 | 299 | 25 | 35 | 371 | 732 | .1270 | 799 | 25 |
| 40 | 716 | 447 | .3432 | 212 | 20 | 40 | 480 | .88 992 | .1237 | 703 | 20 |
| 45 | 832 | 674 | .3392 | 125 | 15 | 45 | 588 | .89 253 | .1204 | 606 | 15 |
| 50 | .59 949 | .74 900 | .3351 | .80 038 | 10 | 50 | 697 | 515 | .1171 | 509 | 10 |
| 55 | .60 065 | .75 128 | .3311 | .79 951 | 5 | 55 | 805 | .89 777 | .1139 | 412 | 5 |
| 37 o | .60 182 | .75 355 | 1.3270 | .79 864 | 53 o | 42 o | .66 913 | .90 040 | 1.1106 | .74 314 | 48 o |
| 5 | 298 | 584 | .3230 | 776 | 55 | 5 | .67 021 | 304 | .1074 | 217 | 55 |
| 10 | 414 | .75 812 | .3190 | 688 | 50 | 10 | 129 | 569 | .1041 | 120 | 50 |
| 15 | 529 | .76 042 | .3151 | 600 | 45 | 15 | 237 | .90 834 | .1009 | .74 022 | 45 |
| 20 | 645 | 272 | .3111 | 512 | 40 | 20 | 344 | .91 099 | .0977 | .73 924 | 40 |
| 25 | 761 | 502 | .3072 | 424 | 35 | 25 | 452 | 366 | .0945 | 826 | 35 |
| 30 | 876 | .76 733 | 1.3032 | .79 335 | 30 | 30 | .67 559 | .91 633 | 1.0913 | .73 728 | 30 |
| 35 | .60 991 | .76 964 | .2993 | 247 | 25 | 35 | 666 | .91 901 | .0881 | 629 | 25 |
| 40 | .61 107 | .77 196 | .2954 | 158 | 20 | 40 | 773 | .92 170 | .0850 | 531 | 20 |
| 45 | 222 | 428 | .2915 | .79 069 | 15 | 45 | 880 | 439 | .0818 | 432 | 15 |
| 50 | 337 | 661 | .2876 | .78 980 | 10 | 50 | .67 987 | 709 | .0786 | 333 | 10 |
| 55 | 451 | .77 895 | .2838 | 891 | 5 | 55 | .68 093 | .92 980 | .0755 | 234 | 5 |
| 38 o | .61 566 | .78 129 | 1.2799 | .78 801 | 52 o | 43 o | .68 200 | .93 252 | 1.0724 | .73 135 | 47 o |
| 5 | 681 | 363 | .2761 | 711 | 55 | 5 | 306 | 524 | .0692 | .73 036 | 55 |
| 10 | 795 | 598 | .2723 | 622 | 50 | 10 | 412 | .93 797 | .0661 | .72 937 | 50 |
| 15 | .61 909 | .78 834 | .2685 | 532 | 45 | 15 | 518 | .94 071 | .0630 | 837 | 45 |
| 20 | .62 024 | .79 070 | .2647 | 442 | 40 | 20 | 624 | 345 | .0599 | 737 | 40 |
| 25 | 138 | 306 | .2609 | 351 | 35 | 25 | 730 | 620 | .0569 | 637 | 35 |
| 30 | .62 251 | .79 544 | 1.2572 | .78 261 | 30 | 30 | .68 835 | .94 896 | 1.0538 | .72 537 | 30 |
| 35 | 365 | .79 781 | .2534 | 170 | 25 | 35 | .68 941 | .95 173 | .0507 | 437 | 25 |
| 40 | 479 | .80 020 | .2497 | .78 079 | 20 | 40 | .69 046 | 451 | .0477 | 337 | 20 |
| 45 | 592 | 258 | .2460 | .77 988 | 15 | 45 | 151 | .95 729 | .0446 | 236 | 15 |
| 50 | 706 | 498 | .2423 | 897 | 10 | 50 | 256 | .96 008 | .0416 | 136 | 10 |
| 55 | 819 | 738 | .2386 | 806 | 5 | 55 | 361 | 288 | .0385 | .72 035 | 5 |
| 39 o | .62 932 | .80 978 | 1.2349 | .77 715 | 51 o | 44 o | .69 466 | .96 569 | 1.0355 | .71 934 | 46 o |
| 5 | .63 045 | .81 220 | .2312 | 623 | 55 | 5 | 570 | .96 850 | .0325 | 833 | 55 |
| 10 | 158 | 461 | .2276 | 531 | 50 | 10 | 675 | .97 133 | .0295 | 732 | 50 |
| 15 | 271 | 703 | .2239 | 439 | 45 | 15 | 779 | 416 | .0265 | 630 | 45 |
| 20 | 383 | .81 946 | .2203 | 347 | 40 | 20 | 883 | 700 | .0235 | 529 | 40 |
| 25 | 496 | .82 190 | .2167 | 255 | 35 | 25 | .69 987 | .97 984 | .0206 | 427 | 35 |
| 30 | .63 608 | .82 434 | 1.2131 | .77 162 | 30 | 30 | .70 091 | .98 270 | 1.0176 | .71 325 | 30 |
| 35 | 720 | 678 | .2095 | .77 070 | 25 | 35 | 195 | 556 | .0147 | 223 | 25 |
| 40 | 832 | .82 923 | .2059 | .76 977 | 20 | 40 | 298 | .98 843 | .0117 | 121 | 20 |
| 45 | .63 944 | .83 169 | .2024 | 884 | 15 | 45 | 401 | .99 131 | .0088 | .71 019 | 15 |
| 50 | .64 056 | 415 | .1988 | 791 | 10 | 50 | 505 | 420 | .0058 | .70 916 | 10 |
| 55 | 167 | 662 | .1953 | 698 | 5 | 55 | 608 | .99 710 | .0029 | 813 | 5 |
| 40 o | .64 279 | .83 910 | 1.1918 | .76 604 | 50 o | 45 o | .70 711 | 1.00 000 | 1.0000 | .70 711 | 45 o |
| | N. Cos. | N. Cot | N. Tan. | N. Sin. | o / | | N. Cos. | N. Cot. | N. Tan. | N. Sin. | o / |

| DEGREES. | | | MINUTES. | | | SECONDS. | | | |
|----------|------------|-----|------------|------|------------|----------|------------|-----|------------|
| 0° | 0.0000 00 | 60° | 1.04719 76 | 120° | 2.09439 51 | 0' | 0.0000 00 | 0'' | 0.0000 00 |
| 1 | 0.01745 33 | 61 | 1.06465 08 | 121 | 2.11184 84 | 1 | 0.00029 09 | 1 | 0.00000 48 |
| 2 | 0.03490 66 | 62 | 1.08210 41 | 122 | 2.12930 17 | 2 | 0.00058 18 | 2 | 0.00000 97 |
| 3 | 0.05235 99 | 63 | 1.09955 74 | 123 | 2.14675 50 | 3 | 0.00087 27 | 3 | 0.00001 45 |
| 4 | 0.06981 32 | 64 | 1.11701 07 | 124 | 2.16420 83 | 4 | 0.00116 36 | 4 | 0.00001 94 |
| 5 | 0.08726 65 | 65 | 1.13446 40 | 125 | 2.18166 16 | 5 | 0.00145 44 | 5 | 0.00002 42 |
| 6 | 0.10471 98 | 66 | 1.15191 73 | 126 | 2.19911 49 | 6 | 0.00174 53 | 6 | 0.00002 91 |
| 7 | 0.12217 30 | 67 | 1.16937 06 | 127 | 2.21656 82 | 7 | 0.00203 62 | 7 | 0.00003 39 |
| 8 | 0.13962 63 | 68 | 1.18682 39 | 128 | 2.23402 14 | 8 | 0.00232 71 | 8 | 0.00003 88 |
| 9 | 0.15707 96 | 69 | 1.20427 72 | 129 | 2.25147 47 | 9 | 0.00261 80 | 9 | 0.00004 36 |
| 10 | 0.17453 29 | 70 | 1.22173 05 | 130 | 2.26892 80 | 10 | 0.00290 89 | 10 | 0.00004 85 |
| 11 | 0.19198 62 | 71 | 1.23918 38 | 131 | 2.28638 13 | 11 | 0.00319 98 | 11 | 0.00005 33 |
| 12 | 0.20943 95 | 72 | 1.25663 71 | 132 | 2.30383 46 | 12 | 0.00349 07 | 12 | 0.00005 82 |
| 13 | 0.22689 28 | 73 | 1.27409 04 | 133 | 2.32128 79 | 13 | 0.00378 15 | 13 | 0.00006 30 |
| 14 | 0.24434 61 | 74 | 1.29154 36 | 134 | 2.33874 12 | 14 | 0.00407 24 | 14 | 0.00006 79 |
| 15 | 0.26179 94 | 75 | 1.30899 69 | 135 | 2.35619 45 | 15 | 0.00436 33 | 15 | 0.00007 27 |
| 16 | 0.27925 27 | 76 | 1.32645 02 | 136 | 2.37364 78 | 16 | 0.00465 42 | 16 | 0.00007 76 |
| 17 | 0.29670 60 | 77 | 1.34390 35 | 137 | 2.39110 11 | 17 | 0.00494 51 | 17 | 0.00008 24 |
| 18 | 0.31415 93 | 78 | 1.36135 68 | 138 | 2.40855 44 | 18 | 0.00523 60 | 18 | 0.00008 73 |
| 19 | 0.33161 26 | 79 | 1.37881 01 | 139 | 2.42600 77 | 19 | 0.00552 69 | 19 | 0.00009 21 |
| 20 | 0.34906 59 | 80 | 1.39626 34 | 140 | 2.44346 10 | 20 | 0.00581 78 | 20 | 0.00009 70 |
| 21 | 0.36651 91 | 81 | 1.41371 67 | 141 | 2.46091 42 | 21 | 0.00610 87 | 21 | 0.00010 18 |
| 22 | 0.38397 24 | 82 | 1.43117 00 | 142 | 2.47836 75 | 22 | 0.00639 95 | 22 | 0.00010 67 |
| 23 | 0.40142 57 | 83 | 1.44862 33 | 143 | 2.49582 08 | 23 | 0.00669 04 | 23 | 0.00011 15 |
| 24 | 0.41887 90 | 84 | 1.46607 66 | 144 | 2.51327 41 | 24 | 0.00698 13 | 24 | 0.00011 64 |
| 25 | 0.43633 23 | 85 | 1.48352 99 | 145 | 2.53072 74 | 25 | 0.00727 22 | 25 | 0.00012 12 |
| 26 | 0.45378 56 | 86 | 1.50098 32 | 146 | 2.54818 07 | 26 | 0.00756 31 | 26 | 0.00012 61 |
| 27 | 0.47123 89 | 87 | 1.51843 64 | 147 | 2.56563 40 | 27 | 0.00785 40 | 27 | 0.00013 09 |
| 28 | 0.48869 22 | 88 | 1.53588 97 | 148 | 2.58308 73 | 28 | 0.00814 49 | 28 | 0.00013 57 |
| 29 | 0.50614 55 | 89 | 1.55334 30 | 149 | 2.60054 06 | 29 | 0.00843 58 | 29 | 0.00014 06 |
| 30 | 0.52359 88 | 90 | 1.57079 63 | 150 | 2.61799 39 | 30 | 0.00872 66 | 30 | 0.00014 54 |
| 31 | 0.54105 21 | 91 | 1.58824 96 | 151 | 2.63544 72 | 31 | 0.00901 75 | 31 | 0.00015 03 |
| 32 | 0.55850 54 | 92 | 1.60570 29 | 152 | 2.65290 05 | 32 | 0.00930 84 | 32 | 0.00015 51 |
| 33 | 0.57595 87 | 93 | 1.62315 62 | 153 | 2.67035 38 | 33 | 0.00959 93 | 33 | 0.00016 00 |
| 34 | 0.59341 19 | 94 | 1.64060 95 | 154 | 2.68780 70 | 34 | 0.00989 02 | 34 | 0.00016 48 |
| 35 | 0.61086 52 | 95 | 1.65806 28 | 155 | 2.70526 03 | 35 | 0.01018 11 | 35 | 0.00016 97 |
| 36 | 0.62831 85 | 96 | 1.67551 61 | 156 | 2.72271 36 | 36 | 0.01047 20 | 36 | 0.00017 45 |
| 37 | 0.64577 18 | 97 | 1.69296 94 | 157 | 2.74016 69 | 37 | 0.01076 29 | 37 | 0.00017 94 |
| 38 | 0.66322 51 | 98 | 1.71042 27 | 158 | 2.75762 02 | 38 | 0.01105 38 | 38 | 0.00018 42 |
| 39 | 0.68067 84 | 99 | 1.72787 60 | 159 | 2.77507 35 | 39 | 0.01134 46 | 39 | 0.00018 91 |
| 40 | 0.69813 17 | 100 | 1.74532 93 | 160 | 2.79252 68 | 40 | 0.01163 55 | 40 | 0.00019 39 |
| 41 | 0.71558 50 | 101 | 1.76278 25 | 161 | 2.80998 01 | 41 | 0.01192 64 | 41 | 0.00019 88 |
| 42 | 0.73303 83 | 102 | 1.78023 58 | 162 | 2.82743 34 | 42 | 0.01221 73 | 42 | 0.00020 36 |
| 43 | 0.75049 16 | 103 | 1.79768 91 | 163 | 2.84488 67 | 43 | 0.01250 82 | 43 | 0.00020 85 |
| 44 | 0.76794 49 | 104 | 1.81514 24 | 164 | 2.86234 00 | 44 | 0.01279 91 | 44 | 0.00021 33 |
| 45 | 0.78539 82 | 105 | 1.83259 57 | 165 | 2.87979 33 | 45 | 0.01309 00 | 45 | 0.00021 82 |
| 46 | 0.80285 15 | 106 | 1.85004 90 | 166 | 2.89724 66 | 46 | 0.01338 09 | 46 | 0.00022 30 |
| 47 | 0.82030 47 | 107 | 1.86750 23 | 167 | 2.91469 99 | 47 | 0.01367 17 | 47 | 0.00022 79 |
| 48 | 0.83775 80 | 108 | 1.88495 56 | 168 | 2.93215 31 | 48 | 0.01396 26 | 48 | 0.00023 27 |
| 49 | 0.85521 13 | 109 | 1.90240 89 | 169 | 2.94960 64 | 49 | 0.01425 35 | 49 | 0.00023 76 |
| 50 | 0.87266 46 | 110 | 1.91986 22 | 170 | 2.96705 97 | 50 | 0.01454 44 | 50 | 0.00024 24 |
| 51 | 0.89011 79 | 111 | 1.93731 55 | 171 | 2.98451 30 | 51 | 0.01483 53 | 51 | 0.00024 73 |
| 52 | 0.90757 12 | 112 | 1.95476 88 | 172 | 3.00196 63 | 52 | 0.01512 62 | 52 | 0.00025 21 |
| 53 | 0.92502 45 | 113 | 1.97222 21 | 173 | 3.01941 96 | 53 | 0.01541 71 | 53 | 0.00025 70 |
| 54 | 0.94247 78 | 114 | 1.98967 53 | 174 | 3.03687 29 | 54 | 0.01570 80 | 54 | 0.00026 18 |
| 55 | 0.95993 11 | 115 | 2.00712 86 | 175 | 3.05432 62 | 55 | 0.01599 89 | 55 | 0.00026 66 |
| 56 | 0.97738 44 | 116 | 2.02458 19 | 176 | 3.07177 95 | 56 | 0.01628 97 | 56 | 0.00027 15 |
| 57 | 0.99483 77 | 117 | 2.04203 52 | 177 | 3.08923 28 | 57 | 0.01658 06 | 57 | 0.00027 63 |
| 58 | 1.01229 10 | 118 | 2.05948 85 | 178 | 3.10668 61 | 58 | 0.01687 15 | 58 | 0.00028 12 |
| 59 | 1.02974 43 | 119 | 2.07694 18 | 179 | 3.12413 94 | 59 | 0.01716 24 | 59 | 0.00028 60 |
| 60 | 1.04719 76 | 120 | 2.09439 51 | 180 | 3.14159 27 | 60 | 0.01745 33 | 60 | 0.00029 09 |

TABLE VII.

NAPIERIAN LOGARITHMS OF NUMBERS.

| N. | Log. | N. | Log. | N. | Log. | N. | Log. | N. | Log. |
|----|---------|----|---------|----|---------|----|---------|-----|---------|
| 1 | 0.00000 | 21 | 3.04452 | 41 | 3.71357 | 61 | 4.11087 | 81 | 4.39445 |
| 2 | 0.69315 | 22 | 3.09104 | 42 | 3.73767 | 62 | 4.12713 | 82 | 4.40672 |
| 3 | 1.09861 | 23 | 3.13549 | 43 | 3.76120 | 63 | 4.14313 | 83 | 4.41884 |
| 4 | 1.38629 | 24 | 3.17805 | 44 | 3.78419 | 64 | 4.15888 | 84 | 4.43082 |
| 5 | 1.60944 | 25 | 3.21888 | 45 | 3.80666 | 65 | 4.17439 | 85 | 4.44265 |
| 6 | 1.79176 | 26 | 3.25810 | 46 | 3.82864 | 66 | 4.18965 | 86 | 4.45435 |
| 7 | 1.94591 | 27 | 3.29584 | 47 | 3.85015 | 67 | 4.20469 | 87 | 4.46591 |
| 8 | 2.07944 | 28 | 3.33220 | 48 | 3.87120 | 68 | 4.21951 | 88 | 4.47734 |
| 9 | 2.19722 | 29 | 3.36730 | 49 | 3.89182 | 69 | 4.23411 | 89 | 4.48864 |
| 10 | 2.30259 | 30 | 3.40120 | 50 | 3.91202 | 70 | 4.24850 | 90 | 4.49981 |
| 11 | 2.39790 | 31 | 3.43399 | 51 | 3.93183 | 71 | 4.26268 | 91 | 4.51086 |
| 12 | 2.48491 | 32 | 3.46574 | 52 | 3.95124 | 72 | 4.27667 | 92 | 4.52179 |
| 13 | 2.56495 | 33 | 3.49651 | 53 | 3.97029 | 73 | 4.29046 | 93 | 4.53260 |
| 14 | 2.63906 | 34 | 3.52636 | 54 | 3.98898 | 74 | 4.30407 | 94 | 4.54329 |
| 15 | 2.70805 | 35 | 3.55535 | 55 | 4.00733 | 75 | 4.31749 | 95 | 4.55388 |
| 16 | 2.77259 | 36 | 3.58352 | 56 | 4.02535 | 76 | 4.33073 | 96 | 4.56435 |
| 17 | 2.83321 | 37 | 3.61092 | 57 | 4.04305 | 77 | 4.34381 | 97 | 4.57471 |
| 18 | 2.89037 | 38 | 3.63759 | 58 | 4.06044 | 78 | 4.35671 | 98 | 4.58492 |
| 19 | 2.94444 | 39 | 3.66356 | 59 | 4.07754 | 79 | 4.36945 | 99 | 4.59512 |
| 20 | 2.99573 | 40 | 3.68888 | 60 | 4.09434 | 80 | 4.38203 | 100 | 4.60517 |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 10 | 4.6 0517 | 1512 | 2497 | 3473 | 4439 | 5396 | 6344 | 7283 | 8213 | 9135 |
| 11 | 4.7 0048 | 0953 | 1850 | 2739 | 3620 | 4493 | 5359 | 6217 | 7068 | 7912 |
| 12 | 8749 | 9579 | *0402 | *1218 | *2028 | *2831 | *3628 | *4419 | *5203 | *5981 |
| 13 | 4.8 6753 | 7520 | 8280 | 9035 | 9784 | *0527 | *1265 | *1998 | *2725 | *3447 |
| 14 | 4.9 4164 | 4876 | 5583 | 6284 | 6981 | 7673 | 8361 | 9043 | 9721 | *0395 |
| 15 | 5.0 1064 | 1728 | 2388 | 3044 | 3695 | 4343 | 4986 | 5625 | 6260 | 6890 |
| 16 | 7517 | 8140 | 8760 | 9375 | 9987 | *0595 | *1199 | *1799 | *2396 | *2990 |
| 17 | 5.1 3580 | 4166 | 4749 | 5329 | 5906 | 6479 | 7048 | 7615 | 8178 | 8739 |
| 18 | 9296 | 9850 | *0401 | *0949 | *1494 | *2036 | *2575 | *3111 | *3644 | *4175 |
| 19 | 5.2 4702 | 5227 | 5750 | 6269 | 6786 | 7300 | 7811 | 8320 | 8827 | 9330 |
| 20 | 5.3 9832 | *0330 | *0827 | *1321 | *1812 | *2301 | *2788 | *3272 | *3754 | *4233 |
| 21 | 5.3 4711 | 5186 | 5659 | 6129 | 6598 | 7064 | 7528 | 7990 | 8450 | 8907 |
| 22 | 9363 | 9816 | *0268 | *0717 | *1165 | *1610 | *2053 | *2495 | *2935 | *3372 |
| 23 | 5.4 3808 | 4242 | 4674 | 5104 | 5532 | 5959 | 6383 | 6806 | 7227 | 7646 |
| 24 | 8064 | 8480 | 8894 | 9306 | 9717 | *0126 | *0533 | *0939 | *1343 | *1745 |
| 25 | 5.5 2146 | 2545 | 2943 | 3339 | 3733 | 4126 | 4518 | 4908 | 5296 | 5683 |
| 26 | 6068 | 6452 | 6834 | 7215 | 7595 | 7973 | 8350 | 8725 | 9099 | 9471 |
| 27 | 9842 | *0212 | *0580 | *0947 | *1313 | *1677 | *2040 | *2402 | *2762 | *3121 |
| 28 | 5.6 3479 | 3835 | 4191 | 4545 | 4897 | 5249 | 5599 | 5948 | 6296 | 6643 |
| 29 | 6988 | 7332 | 7675 | 8017 | 8358 | 8698 | 9036 | 9373 | 9709 | *0044 |
| 30 | 5.7 0378 | 0711 | 1043 | 1373 | 1703 | 2031 | 2359 | 2685 | 3010 | 3334 |
| 31 | 3657 | 3979 | 4300 | 4620 | 4939 | 5257 | 5574 | 5890 | 6205 | 6519 |
| 32 | 6832 | 7144 | 7455 | 7765 | 8074 | 8383 | 8690 | 8996 | 9301 | 9606 |
| 33 | 9909 | *0212 | *0513 | *0814 | *1114 | *1413 | *1711 | *2008 | *2305 | *2600 |
| 34 | 5.8 2895 | 3188 | 3481 | 3773 | 4064 | 4354 | 4644 | 4932 | 5220 | 5507 |
| 35 | 5.8 5793 | 6079 | 6363 | 6647 | 6930 | 7212 | 7493 | 7774 | 8053 | 8332 |
| 36 | 8610 | 8888 | 9164 | 9440 | 9715 | 9990 | *0263 | *0536 | *0808 | *1080 |
| 37 | 5.9 1350 | 1620 | 1889 | 2158 | 2426 | 2693 | 2959 | 3225 | 3489 | 3754 |
| 38 | 4017 | 4280 | 4542 | 4803 | 5064 | 5324 | 5584 | 5842 | 6101 | 6358 |
| 39 | 6615 | 6871 | 7126 | 7381 | 7635 | 7889 | 8141 | 8394 | 8645 | 8896 |
| 40 | 5.9 9146 | 9396 | 9645 | 9894 | *0141 | *0389 | *0635 | *0881 | *1127 | *1372 |
| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----|----------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 40 | 5.9 9146 | 9396 | 9645 | 9894 | *0141 | *0389 | *0635 | *0881 | *1127 | *1372 |
| 41 | 6.0 1616 | 1859 | 2102 | 2345 | 2587 | 2828 | 3069 | 3309 | 3548 | 3787 |
| 42 | 4025 | 4263 | 4501 | 4737 | 4973 | 5209 | 5444 | 5678 | 5912 | 6146 |
| 43 | 6379 | 6611 | 6843 | 7074 | 7304 | 7535 | 7764 | 7993 | 8222 | 8450 |
| 44 | 8677 | 8904 | 9131 | 9357 | 9582 | 9807 | *0032 | *0256 | *0479 | *0702 |
| 45 | 6.1 0925 | 1147 | 1368 | 1589 | 1810 | 2030 | 2249 | 2468 | 2687 | 2905 |
| 46 | 3123 | 3340 | 3556 | 3773 | 3988 | 4204 | 4419 | 4633 | 4847 | 5060 |
| 47 | 5273 | 5486 | 5698 | 5910 | 6121 | 6331 | 6542 | 6752 | 6961 | 7170 |
| 48 | 7379 | 7587 | 7794 | 8002 | 8208 | 8415 | 8621 | 8826 | 9032 | 9236 |
| 49 | 9441 | 9644 | 9848 | *0051 | *0254 | *0456 | *0658 | *0859 | *1060 | *1261 |
| 50 | 6.2 1461 | 1661 | 1860 | 2059 | 2258 | 2456 | 2654 | 2851 | 3048 | 3245 |
| 51 | 3441 | 3637 | 3832 | 4028 | 4222 | 4417 | 4611 | 4804 | 4998 | 5190 |
| 52 | 5383 | 5575 | 5767 | 5958 | 6149 | 6340 | 6530 | 6720 | 6910 | 7099 |
| 53 | 7288 | 7476 | 7664 | 7852 | 8040 | 8227 | 8413 | 8600 | 8786 | 8972 |
| 54 | 9157 | 9342 | 9527 | 9711 | 9895 | *0079 | *0262 | *0445 | *0628 | *0810 |
| 55 | 6.3 0992 | 1173 | 1355 | 1536 | 1716 | 1897 | 2077 | 2257 | 2436 | 2615 |
| 56 | 2794 | 2972 | 3150 | 3328 | 3505 | 3683 | 3859 | 4036 | 4212 | 4388 |
| 57 | 4564 | 4739 | 4914 | 5089 | 5263 | 5437 | 5611 | 5784 | 5957 | 6130 |
| 58 | 6303 | 6475 | 6647 | 6819 | 6990 | 7161 | 7332 | 7502 | 7673 | 7843 |
| 59 | 8012 | 8182 | 8351 | 8519 | 8688 | 8856 | 9024 | 9192 | 9359 | 9526 |
| 60 | 6.3 9693 | 9859 | *0026 | *0192 | *0357 | *0523 | *0688 | *0853 | *1017 | *1182 |
| 61 | 6.4 1346 | 1510 | 1673 | 1836 | 1999 | 2162 | 2325 | 2487 | 2649 | 2811 |
| 62 | 2972 | 3133 | 3294 | 3455 | 3615 | 3775 | 3935 | 4095 | 4254 | 4413 |
| 63 | 4572 | 4731 | 4889 | 5047 | 5205 | 5362 | 5520 | 5677 | 5834 | 5990 |
| 64 | 6147 | 6303 | 6459 | 6614 | 6770 | 6925 | 7080 | 7235 | 7389 | 7543 |
| 65 | 6.4 7697 | 7851 | 8004 | 8158 | 8311 | 8464 | 8616 | 8768 | 8920 | 9072 |
| 66 | 9224 | 9375 | 9527 | 9677 | 9828 | 9979 | *0129 | *0279 | *0429 | *0578 |
| 67 | 6.5 0728 | 0877 | 1026 | 1175 | 1323 | 1471 | 1619 | 1767 | 1915 | 2062 |
| 68 | 2209 | 2356 | 2503 | 2649 | 2796 | 2942 | 3088 | 3233 | 3379 | 3524 |
| 69 | 3669 | 3814 | 3959 | 4103 | 4247 | 4391 | 4535 | 4679 | 4822 | 4965 |
| 70 | 6.5 5108 | 5251 | 5393 | 5536 | 5678 | 5820 | 5962 | 6103 | 6244 | 6386 |
| 71 | 6526 | 6667 | 6808 | 6948 | 7088 | 7228 | 7368 | 7508 | 7647 | 7786 |
| 72 | 7925 | 8064 | 8203 | 8341 | 8479 | 8617 | 8755 | 8893 | 9030 | 9167 |
| 73 | 9304 | 9441 | 9578 | 9715 | 9851 | 9987 | *0123 | *0259 | *0394 | *0530 |
| 74 | 6.6 0665 | 0800 | 0935 | 1070 | 1204 | 1338 | 1473 | 1607 | 1740 | 1874 |
| 75 | 6.6 2007 | 2141 | 2274 | 2407 | 2539 | 2672 | 2804 | 2936 | 3068 | 3200 |
| 76 | 3332 | 3463 | 3595 | 3726 | 3857 | 3988 | 4118 | 4249 | 4379 | 4509 |
| 77 | 4639 | 4769 | 4898 | 5028 | 5157 | 5286 | 5415 | 5544 | 5673 | 5801 |
| 78 | 5929 | 6058 | 6185 | 6313 | 6441 | 6568 | 6696 | 6823 | 6950 | 7077 |
| 79 | 7203 | 7330 | 7456 | 7582 | 7708 | 7834 | 7960 | 8085 | 8211 | 8336 |
| 80 | 6.6 8461 | 8586 | 8711 | 8835 | 8960 | 9084 | 9208 | 9332 | 9456 | 9580 |
| 81 | 9703 | 9827 | 9950 | *0073 | *0196 | *0319 | *0441 | *0564 | *0686 | *0808 |
| 82 | 6.7 0930 | 1052 | 1174 | 1296 | 1417 | 1538 | 1659 | 1780 | 1901 | 2022 |
| 83 | 2143 | 2263 | 2383 | 2503 | 2623 | 2743 | 2863 | 2982 | 3102 | 3221 |
| 84 | 3340 | 3459 | 3578 | 3697 | 3815 | 3934 | 4052 | 4170 | 4288 | 4406 |
| 85 | 6.7 4524 | 4641 | 4759 | 4876 | 4993 | 5110 | 5227 | 5344 | 5460 | 5577 |
| 86 | 5693 | 5809 | 5926 | 6041 | 6157 | 6273 | 6388 | 6504 | 6619 | 6734 |
| 87 | 6849 | 6964 | 7079 | 7194 | 7308 | 7422 | 7537 | 7651 | 7765 | 7878 |
| 88 | 7992 | 8106 | 8219 | 8333 | 8446 | 8559 | 8672 | 8784 | 8897 | 9010 |
| 89 | 9122 | 9234 | 9347 | 9459 | 9571 | 9682 | 9794 | 9906 | *0017 | *0128 |
| 90 | 6.8 0239 | 0351 | 0461 | 0572 | 0683 | 0793 | 0904 | 1014 | 1124 | 1235 |
| 91 | 1344 | 1454 | 1564 | 1674 | 1783 | 1892 | 2002 | 2111 | 2220 | 2329 |
| 92 | 2437 | 2546 | 2655 | 2763 | 2871 | 2979 | 3087 | 3195 | 3303 | 3411 |
| 93 | 3518 | 3626 | 3733 | 3841 | 3948 | 4055 | 4162 | 4268 | 4375 | 4482 |
| 94 | 4588 | 4694 | 4801 | 4907 | 5013 | 5118 | 5224 | 5330 | 5435 | 5541 |
| 95 | 6.8 5646 | 5751 | 5857 | 5961 | 6066 | 6171 | 6276 | 6380 | 6485 | 6589 |
| 96 | 6693 | 6797 | 6901 | 7005 | 7109 | 7213 | 7316 | 7420 | 7523 | 7626 |
| 97 | 7730 | 7833 | 7936 | 8038 | 8141 | 8244 | 8346 | 8449 | 8551 | 8653 |
| 98 | 8755 | 8857 | 8959 | 9061 | 9163 | 9264 | 9366 | 9467 | 9568 | 9669 |
| 99 | 9770 | 9871 | 9972 | *0073 | *0174 | *0274 | *0375 | *0475 | *0575 | *0675 |
| 100 | 6.9 0776 | 0875 | 0975 | 1075 | 1175 | 1274 | 1374 | 1473 | 1572 | 1672 |
| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

UNIVERSITY OF CALIFORNIA LIBRARY
BERKELEY

Return to desk from which borrowed.
This book is DUE on the last date stamped below.

ASTRONOMY LIBRARY

~~JUN 9 1961~~

~~NOV 14 1962~~
~~FEB 15 1971~~

YC102260

QA55

C8

MATH-
STAT.
LIBRARY

-188

