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A METHOD OF COMPUTING SPHERICAL BESSEL
FUNCTIONS OF COMPLEX ARGUMENT WITH
TABLES

W. J. Lentz

Army Electronics Command

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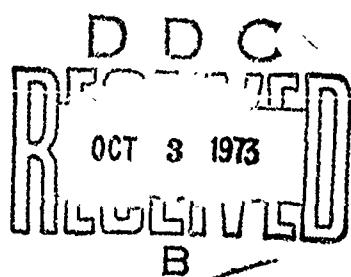
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13. ABSTRACT Ten-place tables of spherical Bessel functions of complex argument with real and imaginary values from 0.001 to 1000 in varying increments for 100 consecutive orders are presented. The method used to generate these tables is based on a continued fraction representation of the ratio of Bessel functions of consecutive order. This method retains a high degree of accuracy in a finite digit machine, incorporates a terminating condition, is fast and simple, and is versatile enough to find wide application as a method for continued fractions in general.		

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CONTENTS

	Page
INTRODUCTION.	3
RECURSION RELATIONS	3
INFINITE SERIES	4
CONTINUED FRACTIONS	4
Basic Properties	4
Algorithms	7
ACCURACY.	10
OTHER FUNCTIONS	10
ACKNOWLEDGEMENTS.	11
LITERATURE CITED.	12
APPENDIX.	13

INTRODUCTION

Spherical Bessel functions of complex argument find application in scientific computations ranging from electronic circuit analysis to the understanding of nuclear and Mie scattering. Yet tables of Bessel functions are presently limited to spherical Bessel functions of real argument and to nonspherical Bessel functions of complex argument of 0 and 1 order. Tables of the former may be found in Abramowitz [1], and tables of the latter in Lowan [2]. The generation of spherical Bessel functions of complex argument is not a trivial problem, even with modern high-speed computers, because of difficulties associated with each of the methods used for their generation.

To surmount these difficulties, it became necessary to develop a method which would be simple and accurate for machine computation, and which would incorporate a terminating condition. The result was a method based on a continued fraction representation of the ratio of Bessel functions of consecutive order.

The purpose of this report is primarily to present the new method of calculating continued fractions, and secondarily to present tables of spherical Bessel functions of complex argument against which this method and others may be checked. The development is placed in perspective by reviewing the advantages and disadvantages of the other methods and algorithms which might be used. Suggestions are made relative to the extension of the method to other functions of complex argument.

RECURSION RELATIONS

Recursion relations are the simplest and most common method of generating Bessel functions. The fundamental recursion relation is

$$J_{v+1}(x) + J_{v-1}(x) = 2v/x J_v(x) \quad (1)$$

where J is the Bessel function of order v and complex argument x and $v = n + 1/2$ where n is an integer. This relation may be used with two consecutive orders to generate all the necessary orders by starting at low order and recurring upward or starting at an approximate high order and recurring downward.

Unfortunately both of these methods have serious limitations. Lowan [2] has noted that the upward recursions are unstable when $2v/x$ is greater than unity, because the values of consecutive orders of

Bessel functions have common initial digits. Gautchi [3] has shown that the upward recursion has no digit accuracy after only seven recursions with 32-bit capacity for $x = 1.0$. Therefore, even using double precision arithmetic, the procedure will not work for more than a very few consecutive orders.

Miller's downward recursion scheme [4] has solved the problem of accuracy at the expense of machine time and storage. By starting with an approximate value for high orders, one can recur downward with only roundoff error. Since downward recursions start at a very high order for moderate arguments, this method is impractical when only a few orders are needed. This technique also suffers from the same problem that the forward recursion has - once accuracy is lost in a term, all the following terms have lost the same amount of accuracy. In this case, roundoff error may accumulate so that the more significant smaller orders are very much more inaccurate than the approximate initial high order.

INFINITE SERIES

The infinite series for Bessel functions is seldom used because the series is computationally divergent for moderate x and small orders. When the series does converge, it converges slowly, and it is difficult to program. Infinite series representations of Bessel functions are therefore mathematically interesting but not very practical for computation.

CONTINUED FRACTIONS

Continued fractions have the advantage of being simple, easy to program, and accurate for machine computation. Unfortunately, they have been neglected in favor of recursion relations because of difficulties in determining the accuracy of a given number of terms in a continued fraction. The following development of continued fractions is intended to review their basic properties, point out the weaknesses in available algorithms, and to develop a method of generating Bessel functions which is free of these weaknesses.

Basic Properties

A continued fraction may be written as

$$f = a_0 + \frac{b_1}{c_1 + \frac{b_2}{c_2 + \frac{b_3}{c_3 + \dots}}} \quad (2)$$

which can be rewritten as

$$f = a_0 + \frac{b_1}{c_1} + \frac{b_2}{c_2} + \frac{b_3}{c_3} + \dots \quad (3)$$

The n^{th} approximate convergent to the continued fraction representation of f is written as

$$f_n = a_0 + \frac{b_1}{c_1} + \dots + \frac{b_n}{c_n} \quad (4)$$

Continued fractions may be generated from a three-term recursion relation in a simple way:

$$\begin{aligned} \frac{J_{v-1}}{J_v} &= \frac{2v}{x} - \frac{J_{v+1}}{J_v} = \frac{2v}{x} - \frac{1}{\frac{2(v+1)}{x} - \frac{J_{v+2}}{J_{v+1}}} \\ &= \frac{2v}{x} - \frac{1}{\frac{2(v+1)}{x} - \frac{1}{\frac{2(v+2)}{x} - \dots}} \end{aligned} \quad (5)$$

So

$$\frac{J_{v-1}}{J_v} = 2vx^{-1} - \frac{1}{2(v+1)x^{-1}} - \frac{1}{2(v+2)x^{-1}} - \dots \quad (6)$$

This form is one of a simple continued fraction which may be defined as

$$f(x) = a_1 + \frac{1}{a_2} + \frac{1}{a_3} + \frac{1}{a_4} + \dots + \frac{1}{a_n} + \dots \quad (7)$$

where $a_1 \neq 0$ and the a 's may be negative.

Equation (7) may be written in the more convenient notation of

$$f(x) = [a_1, a_2, a_3, \dots] \quad (8)$$

The n^{th} convergent is written in like manner:

$$f_n(x) = [a_1, a_2, a_3, \dots, a_n] \quad (9)$$

It has been shown by Wall [5] that all continued fractions may be expressed as simple continued fractions of the above form. In addition, Watson [6] has shown that the form of the continued fraction for Bessel functions is unique, requiring that all the n^{th} convergents of the continued fraction in whatever form have the same numerical value. For example, all of the following are equivalent in the n^{th} convergent:

$$\frac{J_v}{J_{v-1}} = \cfrac{1/2 x/v}{1} - \cfrac{1/4 x^2/(v[v+1])}{1} - \cfrac{1/4 x^2/([v+1][v+2])}{1} - \dots \quad (10)$$

$$\frac{J_v}{J_{v-1}} = \cfrac{1}{2vx^{-1}} - \cfrac{1}{2(v+1)x^{-1}} - \dots \quad (11)$$

$$\frac{J_v}{J_{v-1}} = \cfrac{x}{2v} - \cfrac{x^2}{2(v+1)} - \cfrac{x^2}{2(v+2)} - \dots \quad (12)$$

Algorithms

It is now possible to generate the ratio of Bessel functions by starting with the last value on the right of Eq. (9) and working backwards to a_1 . However, the minimum necessary value of n must be specified before the computation starts, since adding one term means the re-computation of the entire fraction. Gautchi [3] has made an estimate of the value of n for determining Bessel functions to a given accuracy. This method does not apply in general to continued fractions and is only an approximate estimate which is difficult to apply. Moreover, the tail-to-head method suffers somewhat from roundoff error when the difference between two values is near zero.

Another method of computing J_{v-1}/J_v follows logically from the relations

$$\begin{aligned} p_n &= a_n p_{n-1} + p_{n-2} \\ q_n &= a_n q_{n-1} + q_{n-2} \end{aligned} \quad (13)$$

so

$$\frac{p_n}{q_n} \equiv [a_1, a_2, \dots, a_n] \quad (14)$$

where p_n is the n^{th} partial numerator and q_n the n^{th} partial denominator of the n^{th} convergent.

Wall [5] has shown that these relations are generally true for any continued fraction. Starting with the initial values of $p_1 = a_1$, $q_1 = 1$, $p_0 = 1$, and $q_0 = 0$, one can generate successive approximants to the exact infinite continued fraction until the desired accuracy is obtained. This method is illustrated in Teichroew [7] and Abramowitz [1]. The former has noted that the values of p_n and q_n may grow so large as to cause overflow in the computer. Moreover, for negative a_m an initial number of digits may cancel, causing loss of accuracy in the m^{th} convergent in exactly the same way as the original recursion relation (Eq. (1)). This forward ratio method leaves much to be desired.

By noticing that the relations in Eq. (13) are themselves recursion relations, one obtains a new method of generating Bessel functions:

$$\frac{p_n}{p_{n-1}} = a_n + \frac{p_{n-2}}{p_{n-1}} = [a_n, a_{n-1}, \dots, a_2, a_1]$$

$$\frac{q_n}{q_{n-1}} = a_n + \frac{q_{n-2}}{q_{n-1}} = [a_n, a_{n-1}, \dots, a_2] \quad (15)$$

Note that the relation for q_n/q_{n-1} starts with a_2 rather than a_1 because $q_0 = 0$.

$$\frac{\frac{p_n}{p_{n-1}}}{\frac{q_n}{q_{n-1}}} = \frac{\frac{p_n}{q_n}}{\frac{p_{n-1}}{q_{n-1}}} = \frac{[a_n, a_{n-1}, \dots, a_1]}{[a_n, a_{n-1}, \dots, a_2]} \quad (16)$$

So the value of p_n/q_n is given by

$$\frac{p_n}{q_n} = \frac{[a_n, \dots, a_1] [a_{n-1}, \dots, a_1] \dots [a_1]}{[a_n, \dots, a_2] [a_{n-1}, \dots, a_2] \dots [a_2]} \quad (17)$$

Eq. (17) gives the value of the n^{th} approximant to the exact continued fractions representation for a particular continued fraction. When the ratio

$$\frac{\frac{p_n}{q_n}}{\frac{p_{n-1}}{q_{n-1}}} - 1 < \epsilon \quad (18)$$

where ϵ is the maximum allowable error, the product can be terminated since all subsequent ratios will be unity. Eq. (17) gives a simple method of computing the ratios of Bessel functions of successive order to the number of significant digits in the computer. The specific formula for the Bessel function is

$$\frac{J_{v-1}}{J_v} = 2vx^{-1} + \frac{1}{-2(v+1)x^{-1}} + \frac{1}{2(v+2)x^{-1}} + \frac{1}{-2(v+3)x^{-1}} + \dots \quad (19)$$

Every other a_n is negative in Eq. (17), but the application is unchanged. Each numerator and denominator is generated from the preceding one by taking the reciprocal and adding the next a_n :

$$\frac{J_{v-1}}{J_v} \approx \frac{[2(v+2m)x^{-1}, -2(v+2m-1)x^{-1}, \dots, 2vx^{-1}] \dots [2vx^{-1}]}{[2(v+2m)x^{-1}, -2(v+2m-1)x^{-1}, \dots, -2(v+1)x^{-1}] \dots [-2(v+1)x^{-1}]} \quad (20)$$

Since both the numerators and denominators alternate in sign, it is simpler to consider all a_n positive, and to generate each successive term by taking the reciprocal and subtracting from the next a_n . The n^{th} approximate convergent is the product of all the preceding ratios, and the fraction terminates when the n^{th} ratio in Eq. (18) is unity.

It may be noted that the order of the terms in the simple continued fraction has been reversed between Eqs. (8) and (17). This means that it is not necessary to decide how many terms are desired before the computation, as in Eq. (9). Because the successive numerators and denominators of Eq. (17) are tending toward the same finite value, there is no large growth in the numerator and denominator as in the use of Eq. (13).

An advantage that is not immediately apparent is that a particular n^{th} convergent being near zero or very large is no disadvantage. Although the computed n^{th} approximant will deviate slightly from the theoretical value, the n^{th} convergent will converge back to the correct value. In other words, the n^{th} approximant is slightly self-correcting.

The continued fraction converges very quickly and does not require significant storage. This first ratio usually requires the largest number of terms, and for $x = 1.0$ and $v = 1.5$ with 64-bit capacity, only nine terms are needed. A sample calculation follows:

$$x = 1.0 \quad v = 9.5$$

$$\frac{J_{v-1}}{J_v} = \frac{(19)(20.94736842)(22.95226131)(24.95643131)(26.95993017)}{(21)(22.95238095)(24.95643154)(26.95993017)}$$

$$= 18.95228198 \quad (21)$$

This value is identical to the handbook value [1].

The development has made no restrictions on the form of the argument or order, so they can both be complex and positive or negative. Near zeros of the Bessel functions it should be noted that the accuracy may drop to ten places rather than ten significant digits. The actual spherical Bessel functions rather than their ratios as in Eq. (19) are found from

$$j_0(x) = \sqrt{\frac{\pi}{2x}} J_{1/2}(x) = \frac{\sin(x)}{x} \quad y_0(x) = \sqrt{\frac{\pi}{2x}} J_{-1/2}(x) = \frac{-\cos(x)}{x}$$

$$j_n(\lambda) = \frac{J_{n+1/2}}{J_{n-1/2}} \frac{J_{n-1/2}}{J_{n-3/2}} \dots J_{1/2} \sqrt{\frac{\pi}{2x}}$$

$$y_n(x) = \frac{J_{-n-1/2}}{J_{-n+1/2}} \frac{J_{-n+1/2}}{J_{-n+3/2}} \dots J_{-1/2} \sqrt{\frac{\pi}{2x}} \quad (22)$$

ACCURACY

A comparison between the accuracy of a double precision 64-bit and single precision 32-bit program was made for the real values of argument tabulated in Abramowitz [1]. The agreement between the double precision routine and the handbook was exact for 10 significant digits for all arguments. By comparing the single precision version to the double precision version, it is estimated that the last four of the 16 digits would be susceptible to machine roundoff. Therefore, the table is reproduced to 10 digits to allow for the additional possibility of roundoff error in the arguments.

OTHER FUNCTIONS

Many known functions have been expressed in terms of continued fractions, and they may be evaluated by Eq. (17). Abramowitz [1] has listed one form of a continued fraction representation for most of the

functions in his handbook. The form of any continued fraction may be changed to that of Eq. (7) by the following transformations:

$$f(x) = a_0 + \frac{b_1}{c_1} + \frac{b_2}{c_2} + \dots = a_0 + \frac{d_1 b_1}{d_1 c_1} + \frac{d_1 d_2 b_2}{d_2 c_2} + \frac{d_2 d_3 b_3}{d_3 c_3} + \dots \quad (23)$$

The only requirement is that a_0 be nonzero; if a_0 is zero, this requirement may be met by taking the reciprocal of the continued fraction.

The continued fraction technique will converge with fewer terms than any other current method and is specifically adapted to machine computation. Although mathematically equivalent to recursion relations, the continued fraction technique gains accuracy from the fact that the product of two numbers in the computer does not lose accuracy, as does the difference of two numbers.

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LITERATURE CITED

1. Abramowitz, M., and I. A. Stegum, ed., 1966, "Handbook of Mathematical Functions," US Department of Commerce, National Bureau of Standards, Washington, D. C. 20402.
2. Lowan, I. A., 1950, "Tables of Bessel Functions $Y_0(z)$ and $Y_1(z)$ for Complex Arguments," Computation Laboratory, National Bureau of Standards, Washington, D. C. 20402.
3. Gautchi, Walter, 1957, "Computational Aspects of Three-Term Recurrence Relations," Siam Review, 9 (1), 24-82.
4. British Association for the Advancement of Science, 1952, Mathematical Tables. Vol X: Bessel Functions; Part II: Functions of Positive Integer Order, University Press, Cambridge.
5. Wall, H. S., 1948, Analytic Theory of Continued Fractions, D. Van Nostrand Company, Inc., New York.
6. Watson, G. N., 1952, A Treatise on the Theory of Bessel Functions, University Press, Cambridge.
7. Teichroew, D., 1952, "Use of Continued Fractions in High Speed Computing," Math Tables Aids Comput., 6, 127-133.

APPENDIX A

USE OF THE TABLES

The following tables contain 100 orders of spherical Bessel functions of the first and second kind for the same argument on the same page. The real and imaginary parts of the spherical Bessel functions of the first kind $j_n(x) = \sqrt{\frac{3}{2}\pi/x} J_{n+\frac{1}{2}}(x)$ are presented on the left side with the appropriate order n , and the spherical Bessel functions of the second kind $y_n(x) = \sqrt{\frac{3}{2}\pi/x} Y_{n+\frac{1}{2}}(x) = (-1)^{n+1} \sqrt{\frac{3}{2}\pi/x} J_{-(n+\frac{1}{2})}(x)$ are in like manner on the right side of the page.

Beyond the 20th order, the missing orders can be found by a downward recursion for $j_n(z)$ and by an upward recursion for $y_n(x)$. The spherical Bessel functions of the complex conjugate of the argument presented here can be found by taking the complex conjugate of the results in the Table. Since these Tables are intended as check values, interpolation should not be attempted between values of argument.

In those few cases where the value of the spherical Bessel functions exceed $10^{\pm 300}$ a scale factor of $10^{\pm 300}$ was multiplied by the $j_n(x)$ and 10^{-300} was multiplied by the $y_n(x)$. These scale factors are indicated by a sudden break in the order of magnitude with increasing n since the initial values never exceeded the scale factor.

Many of the more useful relations among the spherical Bessel functions may be found in Abramowitz [1]. If these relations are used to check the table, it should be noted that the initial values of j_0 and y_0 are given by Eq. (22) and that the last or highest order being correct depends on all the lower orders being correct.

REAL X = .1000000000-002		IMAGINARY X = .000000000		
FIRST KIND		SECOND KIND		
N	REAL BESSEL	IMAGINARY BESSEL	N	
0	.9999983333+000	.000000000	0	-.9999995000+003
1	.3333333000-003	.000000000	1	-.1000000500+007
2	.6666666190-007	.000000000	2	-.3000000500+010
3	.9523808995-011	.000000000	3	-.1500000150+014
4	.1058201010-014	.000000000	4	-.1050000075+018
5	.9620009250-019	.000000000	5	-.9450000525+021
6	.7400007153-023	.000000000	6	-.1039500474+026
7	.4933381222-027	.000000000	7	-.1351350524+030
8	.2901963610-031	.000000000	8	-.2027025068+034
9	.1527349272-035	.000000000	9	-.3445942601+038
10	.727301787-040	.000000000	10	-.6547290922+042
11	.3162213825-044	.000000000	11	-.1374931090+047
12	.1264885532-048	.000000000	12	-.3162341501+051
13	.4684761237-053	.000000000	13	-.7905853739+055
14	.1615434911-057	.000000000	14	-.2134580506+060
15	.5211080365-062	.000000000	15	-.6190283460+064
16	.1579115265-066	.000000000	16	-.1918987871+069
17	.4511757898-071	.000000000	17	-.6332659967+073
18	.1219394027-075	.000000000	18	-.2216430986+078
19	.3126651354-080	.000000000	19	-.8200794643+082
20	.7625978916-085	.000000000	20	-.3196309909+087
30	.5611103649-132	.000000000	30	-.2921560662+134
31	.8906656588-137	.000000000	31	-.1782152031+139
40	.1547505320-180	.000000000	40	-.7977794232+182
41	.1864464241-185	.000000000	41	-.6462013327+187
50	.3632868058-230	.000000000	50	-.2725392154+232
51	.3527056368-235	.000000000	51	-.2752646075+237
60	.1185210171-280	.000000000	60	-.6972993491+282
61	.9635855055-286	.000000000	61	-.8437322124+287
70	.7450332054-032	.000000000	70	-.9519305355+033
71	.5210022416-037	.000000000	71	-.1342222055+039
80	.1139843580-083	.000000000	80	-.5449151298+085
81	.6992905401-089	.000000000	81	-.8773133589+090
90	.5058076563-136	.000000000	90	-.1092285142+138
91	.2763976264-141	.000000000	91	-.1977036107+143
99	.1500080550-183	.000000000	99	-.3349903863+185
100	.7463087313-189	.000000000	100	-.66663088687+190

REAL X = .100000000-002	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	N	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
0	*100000000+001	*333333333-006	0	-.4999995000+003	-.5000005000+003
1	*3333334000-003	-.333332667-003	1	-.5000000000+000	-.5000000000+006
2	*19047619C5-013	-.133333333-006	2	.7499997500+009	.7500002500+009
3	*1904761693-010	-.1904762116-010	3	.3750000000+013	.7500000000+006
4	-.4232804233-014	-.3848003848-021	4	.1312500187+017	.1312499812+017
5	*3848004144-018	*3848003552-018	5	.1312500000+014	.1181250000+021
6	*3946670614-029	.5920005920-022	6	-.6496874409+024	.6496875591+024
7	*39466703d1-026	.3946670845-026	7	-.8445937500+028	.6496875000+021
8	*4643141898-030	.2443758894-037	8	-.6334453547+032	.6334452703+032
9	*2443759010-034	-.2443758777-034	9	-.6334453126+029	-.1076857031+037
10	*1011908445-045	-.2327389423-038	10	.1023014126+041	.1623014234+041
11	-.1011908404-042	-.1011908485-042	11	.2148329777+045	.1023014180+038
12	-.8095267557-047	-.2998247245-054	12	.2470579351+049	.2470579137+049
13	-.2998247347-051	.2998247140-051	13	.2470579244+046	.6176448110+053
14	-.6670182971-063	.2067756719-055	14	-.8338204639+057	.8338205257+057
15	.6670182764-060	.6670183168-060	15	-.2418079435+052	.8338204950+054
16	.4042535131-064	.1155010038-071	16	-.3748023245+066	.3748023003+066
17	.1155010069-068	-.1155010006-068	17	-.3748023125+063	.1236847631+071
18	.1630845515-080	-.6243297500-073	18	.2164483292+075	.2164483416+075
19	-.1600845474-077	-.1600845552-077	19	.800858641+079	.2164483355+072
20	-.7809002501-082	-.1816047096-089	20	.1561674780+084	.1561674700+084
30	-.2918533262-135	*1838675950-127	30	-.4457947674+129	.4457947825+129
31	*2918533208-132	*291853298-132	31	-.2719348127+134	.4457947752+126
40	.1622676948-174	.1955032478-182	40	-.3804108754+176	.3804108658+176
41	*1955032491-179	-.1955032445-179	41	-.3804108711+173	.3081328052+181
50	*183483745-230	-.1218988248-222	50	.4061150718+224	.4061150800+224
51	-.183483725-227	-.1183483747-227	51	.4101762267+229	.4061150768+221
60	-.127260973b-271	-.1034642073-279	60	.3247053139+273	.3247053085+273
61	-.1034642070-276	.1034642054-276	61	.3247053121+270	.3928934265+278
70	*1060829665-030	.2559914610-021	70	-.1385241231+023	.1385241251+023
71	*1790150078-026	.1790150076-026	71	-.1953190149+028	.1385241246+020
80	*1253271274-071	-.1594710073-080	80	-.2477987125+073	.2477987094+073
81	*7688780813-077	-.7688780834-077	81	-.2477987122+070	.39289559246+078
90	-.3457733971-131	-.1779652483-122	90	.1552230533+124	.1552230551+124
91	-.9724876978-128	-.9724876940-128	91	.2809537281+129	.1552230552+121
99	-.8444702798-169	-.8444702757-169	99	.2975312311+170	.1510310829+162
100	-.8402689331-174	.2084958455-182	100	.2960435765+175	.2960435735+175

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best available copy.

REAL X = .100000000-001	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	N	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
0	.99999833334+000	.000000000	0	-.999950004+002	.000000000
1	.333330000-002	.000000000	1	-.100049999+005	.000000000
2	.06666619048-005	.000000000	2	-.300050001+007	.000000000
3	.9523756614-008	.000000000	3	-.1500015000+010	.000000000
4	.1058196248-010	.000000000	4	-.1050007500+013	.000000000
5	.9619972620-014	.000000000	5	-.9450052500+015	.000000000
6	.7399982733-017	.000000000	6	-.1039504725+019	.000000000
7	.4933323757-020	.000070000	7	-.1351355198+022	.000000000
8	.2901956050-023	.000030000	8	-.2027031757+025	.000000000
9	.1527345672-026	.000000000	9	-.3445952635+028	.000000000
10	.7273076135-030	.000000000	10	-.6547307980+031	.000000000
11	.3162207565-033	.000000000	11	-.1374934331+035	.000000000
12	.1264883215-036	.000000000	12	-.31623453507+038	.000000000
13	.4684753240-040	.000000000	13	-.7905869392+041	.000000000
14	.1615432332-043	.000000000	14	-.2134584420+045	.000000000
15	.5211072547-047	.000000000	15	-.6190294027+048	.000000000
16	.1579113030-050	.000000000	16	-.1918990935+052	.000000000
17	.4511751852-054	.000000000	17	-.6332669466+055	.000000000
18	.1219392480-057	.000000000	18	-.2216434121+059	.000000000
19	.3126647579-061	.000000000	19	-.8200805615+062	.000000000
20	.7625970137-065	.000000000	20	-.3198313968+066	.000000000
30	.5611189240-102	.000000000	30	-.2921563113+103	.000000000
31	.8906649605-106	.000000000	31	-.1782153499+107	.000000000
40	.1547504397-140	.000000000	40	-.7977799231+141	.000000000
41	.1864463156-144	.000000000	41	-.6462017276+145	.000000000
50	.3632866512-180	.000000000	50	-.2725393516+181	.000000000
51	.3527054705-184	.000000000	51	-.2752647424+185	.000000000
60	.1185209694-220	.000000000	60	-.697296392+221	.000000000
61	.9635851237-225	.000000000	61	-.8437325575+225	.000000000
70	.7450329476-262	.000000000	70	-.9519308745+262	.000000000
71	.5210020637-266	.000000000	71	-.134222526+267	.000000000
80	.1139843234-003	.000000000	80	-.544915294+004	.000000000
81	.6992903303-008	.000000000	81	-.8773136287+008	.000000000
90	.505807519b-046	.000000000	90	-.1092285444+047	.000000000
91	.2763975525-050	.000000000	91	-.1977036648+051	.000000000
99	.1500080180-084	.000000000	99	-.3349904705+085	.000000000
100	.7463085493-089	.000000000	100	-.66666310345+089	.000000000

REAL X = .100000000-001	IMAGINARY X = -.100000000-002	FIRST KIND	SECOND KIND	
N	REAL BESSEL	IMAGINARY BESSEL	REAL BESSEL	IMAGINARY BESSEL
0	*9939835001+000	*3333300333-005	0	-*9930490103+002
1	*3333301001-002	*3333233667-003	1	-*9705430877+004
2	*6599955233-005	-1333314476-005	2	-*2824466837+007
3	*9238047593-008	-2847593121-008	3	-*1355140990+010
4	*9948107191-011	-4190448290-011	4	-*8996416554+012
5	*8562789304-014	-4713876301-014	5	-*7580370371+015
6	*6301080969-017	-4292429927-017	6	-*7693434530+018
7	*3914559915-020	-3281693597-020	7	-*9072282004+021
8	*2109642015-023	-2160677021-023	8	-*1209371589+025
9	*9966182441-027	-1248232582-026	9	-*1780325737+028
10	*4151405280-030	-6418546281-030	10	-*2831790342+031
11	*1525891747-033	-2971168742-033	11	-*4741409707+034
12	*4915099842-037	-1249503365-036	12	-*8052415020+037
13	*1357628374-040	-4809831617-040	13	-*1287027025+041
14	*3022914478-044	-1705377593-043	14	-*1499570861+044
15	*4250118302-048	-5598731961-047	15	-*1366246173+047
16	*4066711368-052	-1709464735-050	16	-*2173451858+051
17	-*6051817991-055	-4872509002-054	17	-*1281892192+055
18	-*2952521192-058	-1300538145-057	18	-*6398918890+058
19	-*1090528143-061	-3259007709-061	19	-*3044702451+062
20	-*3454704950-065	-7682817209-065	20	-*1437132554+066
30	-*6439766506-102	-9833770893-103	30	-*2500630944+103
31	-*1037794345-105	-5387308174-107	31	-*1518122061+107
40	-*1253073673-140	-1412548196-140	40	-*3811614043+141
41	-*1359540801-144	-1852838058-144	41	-*2634020342+145
50	*1247361131-180	-488816863-180	50	-*7660863994+180
51	*1646837710-184	-4236971638-184	51	-*9631845280+184
60	*1524679672-220	-4767659521-221	60	-*5041634955+221
61	*1278338438-224	-2636568983-225	61	-*6164552837+225
70	*8115476906-262	-6747538145-262	70	-*4690590671+262
71	*5203302881-266	-5286074041-266	71	-*5883008694+266
80	-*202335863-004	-1684966245-003	80	-*7918260948+003
81	-*2275043027-008	-1021308413-007	81	-*1828850502+008
90	-*7111066732-046	-3475464460-046	90	-*6512742915+046
91	-*4075744946-050	-1510578025-050	91	-*1210392203+051
99	-*2218481522-084	-1050980173-084	99	-*1744853275+085
100	-*1051434562-088	-6332479248-089	100	-*3230825927+089

REAL X = •10000000000-001

IMAGINARY X = -.1000000000-001

N	FIRST KIND REAL BESSEL	SECOND KIND IMAGINARY BESSEL	REAL BESSEL	IMAGINARY BESSEL	N	FIRST KIND REAL BESSEL	SECOND KIND IMAGINARY BESSEL	REAL BESSEL	IMAGINARY BESSEL
0	•9999999997+000	•3333333333-004	0	-•4999499992+002	-•5004999992+002	0	-•4999499992+002	0	-•5000000025+004
1	•3333400000-002	-•3333266666-002	1	-•4999999997+000	-•5000000025+004	1	-•4999999997+000	2	•7499749988+006
2	•1904761905-009	-•1333333333-004	2	•7499749988+006	-•7500249988+006	2	•7499749988+006	3	-•7499999996+004
3	-•1904740741-007	-•1904783069-007	3	•3749999999+009	-•7499999996+004	3	•3749999999+009	4	•1312518750+012
4	-•4232804233-010	-•3848003848-015	4	•1312518750+012	•1312481250+012	4	•1312500000+010	5	•1181250000+015
5	-•3848033448-013	-•3847974248-013	5	•1312500000+010	•1181250000+015	5	•1312500000+010	6	•6496815937+017
6	-•3946670513-021	-•5920005920-015	6	•6496815937+017	•6496934062+017	6	•6496815937+017	7	-•8445937500+020
7	•3946647393-019	•3946693829-019	7	-•8445937500+020	•6496875000+015	7	-•8445937500+020	8	-•6334495355+023
8	•4643141898-022	•2443758894-027	8	-•6334495355+023	-•63344410895+023	8	-•6334495355+023	9	-•1076857031+027
9	•2443770531-025	-•2443747257-025	9	-•6334453125+021	-•1023019564+030	9	-•6334453125+021	10	-•1023019564+030
10	•1011908445-033	-•2327389423-028	10	•1023019564+030	-•1023019564+030	10	•1023019564+030	11	-•2148329777+033
11	-•1011904397-031	-•1011912492-031	11	-•2148329777+033	-•1023014180+028	11	-•2148329777+033	12	-•2470589986+036
12	-•8095267557-035	-•2998247243-040	12	-•2470589986+036	•2470568502+036	12	-•2470589986+036	13	•2470579244+034
13	-•2998257582-038	•2998236904-038	13	•2470579244+034	•6176448110+039	13	•2470579244+034	14	•8338235830+042
14	-•6670182966-047	•2067756719-041	14	•8338174066+042	•8338204948+040	14	•8338174066+042	15	-•2418079435+046
15	•6670162753-045	•6670203179-045	15	-•2418079435+046	-•3748011034+049	15	-•2418079435+046	16	-•3748035215+049
16	•4042535131-048	•1155010037-053	16	-•3748035215+049	-•3748011034+049	16	-•3748035215+049	17	-•3748023124+047
17	•1155013159-051	-•1155006916-051	17	-•3748023124+047	-•1236647631+053	17	-•3748023124+047	18	-•2164489538+056
18	•1500845513-060	-•624329750-055	18	-•2164489538+056	-•2164489538+056	18	-•2164489538+056	19	-•2164483354+054
19	-•1600841608-058	-•1600849417-058	19	-•8008588411+059	-•2164483354+054	19	-•8008588411+059	20	-•1561678744+063
20	-•7809002501-062	-•181604793-067	20	-•1561678744+063	-•3081328052+139	20	-•1561678744+063	21	-•4457955305+098
30	-•2913533253-103	-•1838675950-097	30	-•4457940194+098	-•4457940194+098	30	-•4457940194+098	31	-•2719348127+102
31	•2918528763-101	•2918537743-101	31	-•2719348127+102	-•4457947750+096	31	-•2719348127+102	32	-•3804103891+135
40	•1622676948-134	•1955032468-140	40	-•3804103891+135	-•3804103891+135	40	-•3804103891+135	41	-•324705840+212
41	•1955034768-138	-•1955030168-138	41	-•3247053112+210	-•3247053112+210	41	-•3247053112+210	50	-•3928934265+216
50	•183483736-178	-•1218988248-172	50	-•4061146657+173	-•4061154861+173	50	-•4061146657+173	51	-•4061150759+171
51	-•1183482609-176	-•1183484863-176	51	-•4101762267+177	-•4101762267+177	51	-•4101762267+177	60	-•380413522+135
60	-•1272609736-211	-•1034642062-217	60	-•324705840+212	-•324705840+212	60	-•324705840+212	61	-•3247053112+210
61	-•1034642890-215	-•1034641234-215	61	-•3247053112+210	-•3247053112+210	61	-•3247053112+210	70	-•1385242237+252
70	-•1790150078-257	-•2559914610-251	70	-•1385240244+252	-•1385240244+252	70	-•1385240244+252	71	-•1953190149+256
71	-•1790148843-255	-•1790151312-255	71	-•1953190149+256	-•1953190149+256	71	-•1953190149+256	80	-•2477986668+292
80	-•1255271274-291	-•7688780825-298	80	-•2477986668+292	-•2477986668+292	80	-•2477986668+292	81	-•2477987110+290
81	-•7688785483-296	-•7688776163-296	81	-•2477987110+290	-•2477987110+290	81	-•2477987110+290	90	-•3989559246+296
90	-•9724876962-039	-•1779652483-032	90	-•1552229675+033	-•1552229675+033	90	-•1552229675+033	91	-•1552231409+033
91	-•9724871702-037	-•9724882216-037	91	-•2809537281+037	-•2809537281+037	91	-•2809537281+037	99	-•1510310816+064
99	-•8444698576-070	-•8444706979-070	99	-•2975312311+070	-•2975312311+070	99	-•2975312311+070	100	-•2960434262+074
100	-•8402689331-074	-•4139255830-080	100	-•2960437238+074	-•2960437238+074	100	-•2960437238+074		

REAL X = •100000000+000		IMAGINARY X = •000000000	
N	FIRST KIND REAL BESSEL..	IMAGINARY BESSEL	SECOND KIND REAL BESSEL
0	•9983341665+000	•000000000	•9950041653+001
1	•3330001190+001	•000000000	•1004987507+003
2	•6661906084+003	•000000000	•3005012479+004
3	•9518519721+005	•000000000	•1501501252+006
4	•1057720150+006	•000000000	•1059750375+008
5	•9616310233+009	•000000000	•9455251876+009
6	•7397541094+011	•000000000	•1039972631+012
7	•4931847476+013	•000000000	•1-51869868+014
8	•2901200103+015	•000000000	•2027700805+016
9	•1526985693+017	•000000000	•3446956181+018
10	•7271510997+020	•000000000	•6549013975+020
11	•3161581505+022	•000000000	•1375258465+023
12	•1264651338+024	•000000000	•3163028980+025
13	•468395365+027	•000000000	•7907434923+027
14	•1615174403+029	•000000000	•2134975799+030
15	•5210290941+032	•000000000	•6191350743+032
16	•1578889971+034	•000000000	•1919297380+035
17	•4511148301+037	•000000000	•6333619442+037
18	•1219237720+039	•000000000	•2216747612+040
19	•3126270115+042	•000000000	•8201902827+042
20	•7625092312+045	•000000000	•3198719935+045
30	•5610748376+072	•000000000	•2921808238+072
31	•8905971555+075	•000000000	•1782298073+075
40	•1547412109+100	•000000000	•7978299122+100
41	•1864354581+103	•000000000	•6462412189+103
50	•3632691727+130	•000000000	•2725529784+130
51	•352688435+133	•000000000	•2752782334+133
60	•1185161998+160	•000000000	•6973286451+160
61	•9635469665+164	•000000000	•437670746+163
70	•7450071584+192	•000000000	•9519647748+191
71	•5209842781+195	•000000000	•1342269648+195
80	•1139808620+223	•000000000	•544932640+223
81	•6992693519+227	•000000000	•8773406024+226
90	•5057938380+256	•000000000	•1092315650+256
91	•2763901571+259	•000000000	•1977090717+259
99	•1500043239+285	•000000000	•3349988878+285
100	•7462903513+289	•000000000	•6666476167+288

REAL X = .100000000+000	IMAGINARY X = -.100000000-001	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	N REAL BESSSEL	SECOND KIND IMAGINARY BESSSEL
0 .9983507832+000	• 3330034484-003	0	-.9851030503+001	-.9950865584+000	
1 .3330101072-001	-• 3323372499-002	1	-.9754807204+002	-.1960617071+002	
2 .6595524460-003	-• 1331448386-003	2	-.2829380305+004	-.871131684+003	
3 .9233331642-005	-• 2845027202-005	3	-.1356583424+006	-.571164130+005	
4 .9944053106-007	-• 4187686788-007	4	-.9003410701+007	-.4897567786+007	
5 .8659883138-009	-• 4711440139-009	5	-.7585067704+009	-.5165882320+009	
6 .6299305909-011	-• 4290612031-011	6	-.7697443638+011	-.6451815193+011	
7 .3913622684-013	-• 3280519810-013	7	-.9076410557+013	-.9294560069+013	
8 .2109210511-015	-• 2160009901-015	8	-.1209866771+016	-.1515113867+016	
9 .996445326-018	-• 1247894354-017	9	-.1781299486+018	-.2753739653+018	
10 .4150797065-020	-• 6417000184-020	10	-.2832808211+020	-.5515246749+020	
11 .1525710305-022	-• 2970525970-022	11	-.4743084668+022	-.1205606908+023	
12 .4914665898-025	-• 1249250579-024	12	-.8055359143+024	-.2853397160+025	
13 .1357563147-027	-• 4808972561-027	13	-.1287566922+027	-.7262133774+027	
14 .302298188-030	-• 1705098372-029	14	-.1500567535+029	-.1975754066+030	
15 .4251166587-033	-• 5597887857-032	15	-.1364525728+031	-.5715970200+032	
16 .-4081304502-036	-• 1709226556-034	16	• 2173236528+034	-.1750198789+035	
17 .-6049712939-038	-• 4871879887-037	17	• 1281913145+037	-.5647407394+037	
18 .-2951820120-040	-• 1300382231-039	18	• 6399273907+039	-.1912582129+046	
19 .-1090319122-042	-• 3258644529-042	19	• 3044924541+042	-.6772003669+042	
20 .-3454134391-045	-• 7682021211-045	20	• 1437249753+045	-.2497336690+045	
30 .-6439250150-072	-• 9834017881-073	30	• 2500836475+072	-.1298633740+071	
31 .-1037715286-074	-• 5388492552-076	31	• 1518245204+075	• 7260892793+073	
45 .-1253016538-100	-• 1412449853-100	40	• 3611916565+100	.5272461680+100	
41 .-1339485153-103	-• 1852715639-103	41	• 2634235122+103	• 4534111831+103	
50 .-1247258643-130	-• 4488615289-130	50	• 7661046108+129	• 1971086570+130	
51 .-1646720905-133	-• 4236789423-133	51	• 9632126931+132	• 1894474041+133	
60 .-1524615091-160	-• 4767592287-161	60	• 5041833926+160	• 1039920402+160	
61 .-1278286234-163	-• 2636566861-164	61	• 6164797256+163	• 418222485+162	
70 .-611524551-192	-• 6747250734-192	70	• 4690789983+191	• 4765340464+191	
71 .-5203163120-195	-• 5285839868-195	71	• 5883264471+194	• 7307453783+194	
80 .-2023190697-224	-• 1684916817-223	80	• 7918283664+222	• 3554766647+223	
81 .-2274914162-227	-• 1021279445-226	81	• 1828872102+226	• 5540284779+226	
90 .-7110857558-256	-• 3475409862-256	90	• 6512907867+255	• 2413895538+255	
91 .-4075628901-259	-• 151059822-259	91	• 1210423247+259	• 3158725613+258	
99 .-2218432611-285	-• 1050943623-285	99	• 1744901961+285	• 1050890847+285	
100 .-10514122888-288	-• 6332275106-289	100	• 3230917500+288	• 2414364184+288	

REAL X = .100000000+000	FIRST KIND REAL BESSSEL	IMAGINARY X = -.500000000-001	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
N 0	9987496358+000	1665416803-002	0	-7950010433+001
1	3352498587+001	-1662084859-001	1	-4849906220+002
2	5002080916-003	-6659524719-003	2	-3880124948+003
3	2387232838-005	-1308845872-004	3	-2680787484+005
4	-4620838244-007	-1586970778-006	4	-4084796998+007
5	-1141572634-008	-1232647416-008	5	-4529682299+009
6	-1352306074-010	-5090741487-011	6	-4736503128+011
7	-1071255905-012	-114312149-013	7	-4669712299+013
8	-5973787298-015	-3806503729-015	8	-3818332168+015
9	-2142337722-017	-3575593208-017	9	-8598610524+016
10	-1587859105-020	-22:2781697-019	10	-7252038680+019
11	-4076770087-022	-9987775250-022	11	-2711043575+022
12	-3628350508-024	-3179737658-024	12	-7174260662+024
13	-1932698800-026	-5057440141-027	13	-1622593844+027
14	-7536496264-029	-1588391518-029	14	-3135465803+029
15	-2174934700-031	-1727982203-031	15	-4384615888+031
16	-3972568286-034	-8531755109-034	16	-8024439957+032
17	-8284368275-036	-3005162257-035	17	-4011988262+036
18	-4287713722-039	-8008770063-039	18	-2172541339+039
19	-2128118071-041	-1503817891-041	19	-8704944538+041
20	-7015659171-044	-1074888794-044	20	-2923882771+044
30	-3601674527-071	-1553497553-070	30	-2148289303+070
31	-6612491269-074	-2751719741-073	31	-3229779073+073
40	-1280758428-098	-4013998404-099	40	-8122131889+098
41	-1784891065-101	-2879297922-102	41	-4838630451+101
50	-3563230379-128	-8931206715-128	50	-7729954542+126
51	-8761004950-132	-1040080437-130	51	-4332128000+130
60	-8597554698-158	-4211760612-158	60	-7720815958+157
61	-8701983871-161	-7075108881-163	61	-7443368411+160
70	-9307202552-189	-1583307042-188	70	-2339223351+187
71	-9724880881-193	-1432634949-191	71	-1679671787+191
80	-7041580943-220	-4893600374-220	80	-6411872228+219
81	-5821094654-223	-8422127344-224	81	-8855923568+222
90	-7331129381-252	-9005861546-252	90	-9269760877+250
91	-1545462017-255	-6924278623-255	91	-1664657340+254
99	-3205707155-281	-8837042350-281	99	-3468394717+280
100	-3793150002-284	-3599098624-284	100	-8141289404+283

REAL X = +1000000000+000		IMAGINARY X = -.1000000000+000	
FIRST KIND	SECOND KIND	REAL BESSSEL	IMAGINARY BESSSEL
N	REAL BESSSEL	IMAGINARY BESSSEL	IMAGINARY BESSSEL
0	* 99999666674-000	.3333331746-002	- .4949916722+001
1	* 3339995236-001	- .3326661907-001	- .4999972222+000
2	* 1904761584-005	- .1333332275-002	- .7474874584+003
3	* 190264541-004	- .1906877345-004	- .3749987500+005
4	* 4232802753-006	- .3848003519-009	- .1314373123+007
5	* 3850962864-008	- .3845042859-008	- .1312499375+006
6	* 3946670410-013	- .5920004759-010	- .6490665470+010
7	* 394348432-012	- .3948991573-012	- .8445934547+012
8	* 4643141316-014	- .2443758809-017	- .6338674469+014
9	* 2444922335-016	- .2442594946-016	- .6334452584+013
10	* 1011908420-021	- .2327389220-018	- .1022475593+019
11	- 1011503606-020	- .1012313133-020	- .2148329508+021
12	- 8095267040-023	- .2998247188-026	- .2471653153+023
13	- 2999280955-025	- .2997213198-025	- .2470579159+022
14	- 6670182870-031	- .2067756618-027	- .8335116107+027
15	* 6698161410-030	- .6672203945-030	- .2418079281+030
16	* 4042534975-032	- .1155010024-035	- .3749231956+032
17	* 1155322162-034	- .1154697833-034	- .3748023055+031
18	* 160034593-040	- .6243297304-037	- .2163864837+037
19	- 1600455017-039	- .1601235917-039	- .8008588102+039
20	- 7809002999-042	- .1816047079-045	- .1562075115+042
30	- 2918533242-071	- .1838675927-067	- .4457192099+067
31	* 2918094215-070	- .2918982225-070	- .2719348089+070
40	* 1622676937-094	* 1955032463-098	- .3804590208+094
41	* 1955262458-097	- .1954802451-097	- .3804108696+093
50	* 1183483734-126	- .12118988243-122	- .4060740521+122
51	- 1183371108-125	- .1183596444-125	- .4101762249+125
60	- 1222609732-151	- .1034642061-155	- .3247325962+151
61	- 1034724830-154	* 1034559288-154	- .3247053108+150
70	- 1790150076-185	* 2559914604-181	- .1385141579+181
71	* 1790026614-184	* 1790273532-184	- .1953190144+184
80	* 1253271272-211	* 7688780819-216	- .2478142953+211
81	* 7689246796-215	- .7688314825-215	- .2477987108+210
90	* 9724876954-247	- .1779652481-242	- .1552143823+242
91	- 9724351276-246	- .9725402614-246	- .2809537277+245
99	- 8444282633-271	- .8445122902-271	- .2975312308+270
100	- 8402689321-274	- .4139255826-278	- .2960584512+273

	REAL X = .500000000+000	IMAGINARY X = .000000000	FIRST KIND REAL BESSEL	SECOND KIND REAL BESSEL	IMAGINARY BESSEL	N	G	REAL BESSEL	IMAGINARY BESSEL
0	.9588510772+000	.000000000	.000000000	.000000000	.000000000	1	-.1755165124+001	.000000000	.000000000
1	.1625370306+000	.000000000	.000000000	.000000000	.000000000	2	-.4469181325+001	.000000000	.000000000
2	.1637110661+001	.000000000	.000000000	.000000000	.000000000	3	-.2505992282+002	.000000000	.000000000
3	.1174035444+002	.000000000	.000000000	.000000000	.000000000	4	-.2461300469+003	.000000000	.000000000
4	.6538950615+004	.000000000	.000000000	.000000000	.000000000	5	-.3420760734+004	.000000000	.000000000
5	.2977466875+005	.000000000	.000000000	.000000000	.000000000	6	-.6132756317+005	.000000000	.000000000
6	.1146651077+006	.000000000	.000000000	.000000000	.000000000	7	-.1345785629+007	.000000000	.000000000
7	.3825924069+008	.000000000	.000000000	.000000000	.000000000	8	-.3492909879+008	.000000000	.000000000
8	.1126143960+009	.000000000	.000000000	.000000000	.000000000	9	-.1046527178+010	.000000000	.000000000
9	.2965395717+011	.000000000	.000000000	.000000000	.000000000	10	-.3554699495+011	.000000000	.000000000
10	.7064123964+013	.000000000	.000000000	.000000000	.000000000	11	-.1349739281+013	.000000000	.000000000
11	.1536347347+014	.000000000	.000000000	.000000000	.000000000	12	-.5665350281+014	.000000000	.000000000
12	.3073833515+016	.000000000	.000000000	.000000000	.000000000	13	-.2604711390+016	.000000000	.000000000
13	.5694102833+018	.000000000	.000000000	.000000000	.000000000	14	-.1301789160+018	.000000000	.000000000
14	.9820150200+020	.000000000	.000000000	.000000000	.000000000	15	-.7027056753+019	.000000000	.000000000
15	.1584282443+021	.000000000	.000000000	.000000000	.000000000	16	-.4074391127+021	.000000000	.000000000
16	.2400947730+023	.000000000	.000000000	.000000000	.000000000	17	-.2525419793+023	.000000000	.000000000
17	.3430587719+025	.000000000	.000000000	.000000000	.000000000	18	-.1666569624+025	.000000000	.000000000
18	.4636732791+027	.000000000	.000000000	.000000000	.000000000	19	-.4074391127+021	.000000000	.000000000
19	.5945458910+029	.000000000	.000000000	.000000000	.000000000	20	-.6728876184+030	.000000000	.000000000
20	.7251588081+031	.000000000	.000000000	.000000000	.000000000	30	-.5287310662+050	.000000000	.000000000
30	.5215472608+051	.000000000	.000000000	.000000000	.000000000	31	-.7669986145+052	.000000000	.000000000
31	.4139516707+053	.000000000	.000000000	.000000000	.000000000	40	-.1757113595+072	.000000000	.000000000
40	.1405329805+072	.000000000	.000000000	.000000000	.000000000	41	-.2846412810+074	.000000000	.000000000
41	.8466142216+075	.000000000	.000000000	.000000000	.000000000	50	-.6144791292+094	.000000000	.000000000
50	.3222721537+095	.000000000	.000000000	.000000000	.000000000	51	-.12+1216806+097	.000000000	.000000000
51	.1564464096+097	.000000000	.000000000	.000000000	.000000000	60	-.1609552657+118	.000000000	.000000000
60	.1026961759+118	.000000000	.000000000	.000000000	.000000000	61	-.3895049800+120	.000000000	.000000000
61	.4174709179+121	.000000000	.000000000	.000000000	.000000000	70	-.2249704639+142	.000000000	.000000000
70	.6305162791+143	.000000000	.000000000	.000000000	.000000000	71	-.6344036156+144	.000000000	.000000000
71	.2204628956+145	.000000000	.000000000	.000000000	.000000000	80	-.1318560137+167	.000000000	.000000000
80	.9421337382+158	.000000000	.000000000	.000000000	.000000000	81	-.4245722178+169	.000000000	.000000000
81	.2890007656+170	.000000000	.000000000	.000000000	.000000000	90	-.2706256208+192	.000000000	.000000000
90	.4083091760+193	.000000000	.000000000	.000000000	.000000000	91	-.9796571878+194	.000000000	.000000000
91	.1115607080+195	.000000000	.000000000	.000000000	.000000000	99	-.4249202980+215	.000000000	.000000000
99	.2365238425+216	.000000000	.000000000	.000000000	.000000000	100	-.1691172001+218	.000000000	.000000000

REAL X = .500000000+000	IMAGINARY X = -.100000000-001	FIRST KIND REAL BESSSEL	SECOND KIND IMAGINARY BESSSEL
0	9588665124+000	*1625386482-002	0 *1754359366+001
1	1625418833+000	*3087059952-002	1 *4464395998+001
2	1636514187-001	-643131065-003	2 -2500198356+002
3	1172672212-002	-6978003536-004	3 -2451641927+003
4	6523535390-004	-5199396049-005	4 -3400494165+004
5	2965685194-005	-2963675572-006	5 -6081738436+005
6	1139823519-006	-13703483399-007	6 -1330837182+007
7	3793976096-008	-5334432272-009	7 -342996488+008
8	1113593970-009	-1793859681-010	8 -1027831289+010
9	2922887352-011	-5310846759-012	9 -3477098890-011
10	6937527725-013	-1404543209-013	10 -1314395529+013
11	1502698977-014	-3356707368-015	11 -5490130962+014
12	2993068730-016	-7317648048-017	12 -2510795023+016
13	5517360128-018	-1466513086-018	13 -1247676731+018
14	9464721790-020	-2719586134-020	14 -6593552080+019
15	1518161522-021	-4693037691-022	15 -3855470528+021
16	2286511657-023	-7572549352-024	16 -2372941331+023
17	3205426894-025	-1147368188-025	17 -1554061197+025
18	4355445107-027	-1638525790-027	18 -1078989466+027
19	5542743030-029	-2212732710-029	19 -7516054386+028
20	6706408286-031	-2834083203-031	20 -6118811985+030
30	4330890300-051	-2961908436-051	30 -5086088460+050
31	3390401108-053	-2419621219-053	31 -6113579957+052
40	9871355338-073	-1016053480-072	40 -1189171790+072
41	5824380990-075	-623965385-075	41 -1884349699+074
50	1759239069-095	-2738756964-095	50 -3184309631+094
51	8274275488-098	-1346605545-097	51 -6220286121+096
60	3768135681-119	-9586462093-119	60 -5467155746+117
61	1453031784-121	-3968286911-121	61 -1250261678+120
70	1088172942-143	-6300764225-143	70 -3336925470+141
71	5364217495-146	-2210700822-145	71 -8170017948+143
80	2772002407-169	-9569249378-168	80 -634893038+165
81	1437402265-171	-2933679161-170	81 -2877701256+168
90	9434513557-194	-4048769680-193	90 -6547179358+191
91	2739004103-196	-1101073797-195	91 -2555509170+194
99	9592546041-217	-2213621805-216	99 -1732179432+215
100	2496352548-219	-5458830614-219	100 -7192660022+217

-1493149809+218

REAL X = .500000000+000	FIRST KIND	IMAGINARY X = -.100000000+000	SECOND KIND
N	REAL BESSEL	IMAGINARY BESSEL	REAL BESSEL
0	.9603953523+000	.1626988426-001	-.1677633909+001
1	.1630225818+000	-.309071128-001	-.4020625263+001
2	.1577420959-001	-.6440239540-002	-.1979736635+002
3	.1037586461-002	-.6896504715-003	-.1616998497+003
4	.5005172505-004	-.5001479768-004	-.1726769308+004
5	.1821541870-005	-.2734286213-005	-.2081696305+005
6	.4902539769-007	-.1193489089-006	-.2255868201+006
7	.8376168361-009	-.4309520425-008	-.1347696843+006
8	-.7557391879-012	-.1317754867-009	-.1762998705+009
9	-.7147426255-012	-.3465704570-011	-.1136008705+011
10	-.3355415221-013	-.7914562693-013	-.6122136200+012
11	-.1074271364-014	-.1575140350-014	-.3197276729+014
12	-.277990930-016	-.2721127769-016	-.1690708823+016
13	-.6158356886-018	-.4009941671-018	-.9184796903+017
14	-.1200433362-019	-.4790064290-020	-.5148362185+019
15	-.209129413-021	-.3852403345-022	-.2976268566+021
16	-.3285947451-023	-.5030346367-025	-.1768471645+023
17	-.4680627683-025	-.1011253218-025	-.1073568453+025
18	-.6052685188-027	-.2632450373-027	-.6596028632+026
19	-.7085620876-029	-.4928089945-029	-.4039698483+028
20	-.7439601672-031	-.7739541794-031	-.2398967400+030
30	-.8784353755-051	-.3327655850-051	-.3376673580+050
31	-.7500378718-053	-.1246544722-053	-.4092549863+052
40	-.1269548148-073	-.3076818109-072	-.1858389733+071
41	-.4472210532-075	-.1838265321-074	-.5275008434+073
50	-.7756723013-095	-.3694585210-095	-.1810292516+094
51	-.3406753981-097	-.2546655887-097	-.2990385781+096
60	-.2497553917-118	-.2204009151-118	-.4209032201+117
61	-.1194476708-120	-.6928885619-121	-.1093025654+120
70	-.7822843909-143	-.2361984983-142	-.6827641746+140
71	-.1083492430-145	-.8805847924-145	-.1157628031+143
80	-.4507629699-167	-.3766958374-168	-.2587552138+166
81	-.1359608997-169	-.3921011240-170	-.7549304219+168
90	-.1115246159-192	-.21082666754-192	-.2870543386+191
91	-.4199223971-195	-.550891659-195	-.1244290634+194
99	-.1268768939-215	-.1052195486-215	-.3764441429+214
100	.2632668822-218	-.3248655596-218	-.1085076934+217

REAL X =	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	N	REAL BESSSEL SECOND KIND	IMAGINARY BESSEL
0	.9979168389+000	*8330853253-001	0	-.7397584859+000	-.1239411281+001
1	.1748498205+000	-.1581859095+000	1	-.4982640439+000	-.2062478299+001
2	.1190350932-002	-.3331679954-001	2	.5432401252+001	-.6442815749+001
3	-.2314068089-002	-.2446333586-002	3	.5987434905+002	-.2989594184+001
4	-.2644924532-003	-.6012164835-005	4	.4346152014+003	+.4046360928+003
5	-.1225432576-004	-.1179184419-004	5	.2099375651+003	.7556251305+004
6	-.1541618490-007	-.9248875685-006	6	-.8124406634+005	.8502344147+005
7	-.3037696111-007	-.3126380108-007	7	-.2161687539+007	.4157562539+005
8	-.1813585253-008	-.2386431827-010	8	-.3296770340+008	-.3188670215+008
9	-.4829477783-010	-.4715837780-010	9	-.1621533378+008	-.2102566470+010
10	-.2470441477-013	-.2272717710-011	10	-.2067363929+011	-.2122496757+011
11	-.4891321521-013	-.4990139390-013	11	.8798869594+012	-.1947532737+011
12	-.1976304603-014	-.1829963686-016	12	.2045765896+014	*2001769250+014
13	-.3691393699-016	-.3628291414-016	13	.1011927434+014	*1011894262+016
14	-.1017779970-019	-.1262019992-017	14	-.2706838232+017	.2757434778+017
15	-.2020102299-019	-.2050944146-019	15	-.1584649294+019	.1366116417+017
16	-.6168270233-021	-.4405981826-023	16	-.4952055391+020	-.4872820816+020
17	-.8871376765-023	-.8752296091-023	17	-.2456275974+020	-.324222810+022
18	-.1526676230-026	-.2361582445-024	18	-.1126676223+024	-.1142887667+024
19	-.3034698365-026	-.3071934390-026	19	.8397410957+025	-.5674012071+023
20	-.7447124850-028	-.4329772351-030	20	.3295992244+027	.3254004514+027
30	-.6795223505-049	-.1712387351-046	30	-.9532715945+045	.5613845929+045
31	-.135381104-048	-.1364265295-048	31	-.1167340986+048	.4786670121+045
40	-.1475809550-066	-.4445222916-069	40	-.8391753032+065	-.8338808042+065
41	-.8916569158-069	-.8864272415-069	41	-.4182654593+065	-.1355475791+068
50	-.2627859350-090	-.1082675928-087	50	-.9121775611+086	-.5167961915+086
51	-.5243195337-090	-.5268222570-090	51	.1847263728+089	.4572444301+086
60	-.1103810749-109	-.2243520871-112	60	.7502907302+108	.7471448525+108
61	-.4496009937-112	-.4478061770-112	61	.3743594558+108	.1811897190+111
70	-.3790788387-135	-.2168328749-132	70	-.3264920290+131	.3276685781+131
71	-.7568497680-135	-.7594641049-135	71	-.9223664989+133	.1635403307+131
80	-.1036680496-155	-.15900002007-158	80	-.6000618139+154	.5981977250+154
81	-.3184819797-158	-.3175183421-158	81	-.2995701347+154	-.1929230118+157
90	-.1963922670-182	-.1437590501-179	90	.3837765378+178	-.3848500393+178
91	-.3922535076-182	-.3933150874-182	91	.1391214135+181	-.1921567707+178
99	-.1330681017-201	-.1333995293-201	99	.3771653369+200	-.4786364713+197
100	-.6628548134-204	-.8163240745-207	100	.7515019466+202	.7496161189+202

REAL X = .500000000+000		IMAGINARY X = -.150000000+001	
FIRST KIND	SECOND KIND	REAL BESSEL	IMAGINARY BESSEL
N	REAL BESSEL	IMAGINARY BESSEL	N
0	.1346732161+001	*302959442+000	0 *1996118384+000
1	.2871826040+000	-.5741951986+000	-4411139628+000
2	-.1408712410+000	-.1305478762+000	-.4717576180+000
3	-.3641021654+001	*2103359956+001	.3657666801+000
4	.1555819643+002	*7072006055+002	-.2713025813+000
5	.1021858204+002	*9743740664+004	-.9131841216+001
6	.4918372227+004	-.1133730143+003	-.2309857038+002
7	-.9672014443+005	-.857421096+005	.2816705316+003
8	-.1031874735+005	*6022540336+006	-.2795294469+004
9	*2064920075+007	*9675151244+007	-.5990440271+004
10	.7374456181+008	*8026022674+009	-.3303601438+006
11	.2107266356+009	-.4624350379+009	-.1702306423+007
12	-.2351813338+010	-.2177587103+010	-.3911078437+008
13	-.1639236959+011	*9036828549+012	-.6894357487+009
14	.1860450967+013	*1001153880+012	-.2203423940+010
15	.5135354663+014	*7056636795+015	-.2110190092+012
16	.1094067976+015	-.2224904387+015	-.1744996647+013
17	-.7969113146+017	-.7845982495+017	-.5466966335+014
18	-.4249572207+018	*2171851521+018	-.1436539923+016
19	.2919335928+020	*1910232819+019	-.5246339895+018
20	.7337414792+021	*1253850119+021	-.9780257356+019
30	.5157711754+036	*126019725+036	-.1039794174+035
31	.7086304778+038	-.1127719605+037	-.4777142771+036
40	.1355433715+052	*4381991532+053	-.3246905313+051
41	.1607532472+054	-.2185325773+054	-.1618206786+053
50	.3017351609+070	*1229132128+070	-.1250682663+069
51	.3253676723+072	-.3797259965+072	-.6314084500+070
60	.92279412109+089	*4615679867+089	-.3556537229+067
61	.9398853363+091	-.9439752464+091	-.3246905305+089
70	.5461670596+108	*3248951297+108	-.1732605053+089
71	.5316820890+110	-.4592969700+110	-.5341231115+106
80	.7765299842+128	*5449351458+128	-.5328219956+126
81	.7395879181+130	-.5474406593+130	-.1307574544+128
90	.3175498973+148	*2606546902+146	-.7197907462+146
91	.3003875312+158	-.1890718110+150	-.2313635136+148
99	-.3211260873+167	*6801549643+167	-.3053878495+165
100	.4276902841+169	*4088033523+169	-.4701681408+167

REAL X = .5000000000+000		IMAGINARY X = -.3000000000+001	
N	FIRST KIND REAL BESSEL	SECOND KIND REAL BESSEL	IMAGINARY BESSEL IMAGINARY BESSEL
0	.3112203694+001	.1090197476+001	.1080094372+001
1	.8947440394+000	-.20556790977+001	-.2040279480+001
2	-.9659060337+000	-.5531693800+000	-.52666931543+000
3	-.2587688377+000	.34094983877+000	.2883555225+000
4	-.9395051232-001	.9470167889-001	-.9746363030-001
5	.2804797017-001	-.2064337277-001	.2938850084+000
6	-.3626713689-002	-.6913088055-002	.2813799839+001
7	-.1449397716-002	.4945180423-003	-.1860648892+001
8	.4576290273-004	.2629246059-003	-.6837653541+002
9	.4181174533-004	-.5972650683-006	-.6529061818+002
10	.8593339763-006	-.5887258283-005	.2401125031+004
11	-.7392827835-006	-.2328075223-006	.8260531379+004
12	-.4182402749-007	.8317195112-007	-.1102252868+006
13	.8396656178-008	.6088314441-008	-.8229259150+006
14	.7647181525-009	-.75386272976-009	.5902326153+007
15	-.6083043680-010	-.8534325703-010	.8958652334+008
16	-.8604516507-011	.4227177994-011	-.2887168070+009
17	.2396104471-012	.7920465131-012	-.1110735837+011
18	.6703531177-013	-.8809245568-014	-.5030182215+010
19	.1711232368-015	-.5241263065-014	.1557212352+013
20	-.3796705037-015	-.7542589703-016	.7314378410+013
30	-.4966699530-028	.1802117683-027	-.2607853471+026
31	.817738338-029	.3752804257-029	-.3246092182+027
40	.3233107557-041	.1146622975-041	-.5729019156+039
41	.6079883018-043	-.1098416449-042	.2463942679+041
50	.2191248798-056	-.4933243801-056	.5023525887+054
51	-.1329663577-057	-.8766286345-058	.1361932114+056
60	-.1041467353-071	-.564043896-072	.1408419689+070
61	-.1797508479-073	.2309930590-073	-.6177846192+071
70	-.2729612234-088	.4209133353-088	-.3427159443+086
71	.7873658401-090	.7194011216-090	-.1694989481+068
80	.4107346789-105	.3153143781-105	-.2981949172+103
81	.7060223394-107	-.6590955285-107	.1153648611+105
90	.1039718713-122	-.1151547275-122	.72766388962+120
91	-.1603470703-124	-.2018423736-124	.6093306116+122
99	.6180502700-139	-.8143282629-139	.1108574998+137
100	-.1061526531-140	-.1124713150-140	.87778078502+138

REAL X = .100000000+001	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	REAL BESSSEL	SECOND KIND IMAGINARY BESSSEL
N 0	.8414709848+000	.000000000	0 -.5403023059+000	.000000000
1	.3011686789+000	.000000000	1 -.1381773291+001	.000000000
2	.6203505201-001	.000000000	2 -.3605017566+001	.000000000
3	.9606581117-002	.000000000	3 -.1664331454+002	.000000000
4	.1011015808-002	.000000000	4 -.1128981842+003	.000000000
5	.9256115861-004	.000000000	5 -.9994403434+003	.000000000
6	.7156936310-005	.000000000	6 -.1088094559+005	.000000000
7	.4790134199-006	.000000000	7 -.1404528524+006	.000000000
8	.2826498802-007	.000000000	8 -.2095911840+007	.000000000
9	.1491376503-006	.000000000	9 -.354904843+008	.000000000
10	.7116552640-010	.000000000	10 -.6722150083+009	.000000000
11	.3099551855-011	.000000000	11 -.1408102512+011	.000000000
12	.1241662597-012	.000000000	12 -.3231913629+012	.000000000
13	.4604637678-014	.000000000	13 -.8065703047+013	.000000000
14	.1589575988-015	.000000000	14 -.2174507909+015	.000000000
15	.5132686115-017	.000000000	15 -.6298007233+016	.000000000
16	.1556708271-018	.000000000	16 -.1950207734+018	.000000000
17	.4451177504-020	.000000000	17 -.6429387516+019	.000000000
18	.71203855742-021	.000000000	18 -.2248335423+021	.000000000
19	.3088742364-023	.000000000	19 -.8312411677+022	.000000000
20	.7537795722-025	.000000000	20 -.3239592219+024	.000000000
30	.5566831267-042	.000000000	30 -.2946428547+041	.000000000
31	.8838398941-044	.000000000	31 -.1796821871+043	.000000000
40	.1538210374-060	.000000000	40 -.8028450851+059	.000000000
41	.1853528272-062	.000000000	41 -.6502028762+061	.000000000
50	.3615274717-080	.000000000	50 -.2739192285+079	.000000000
51	.3510300060-082	.000000000	51 -.2766307493+081	.000000000
60	.1180401872-100	.000000000	60 -.7002354448+099	.000000000
61	.9597387446-103	.000000000	61 -.8472260406+101	.000000000
70	.7424326831-122	.000000000	70 -.9553609989+120	.000000000
71	.5192037359-124	.000000000	71 -.1346990274+123	.000000000
80	.1136352423-143	.000000000	80 -.5466314292+142	.000000000
81	.6971746491-146	.000000000	81 -.880422203+144	.000000000
90	.5044275355-166	.000000000	90 -.1095340529+165	.000000000
91	.2754516044-168	.000000000	91 -.1982505163+167	.000000000
99	.1496353602-186	.000000000	99 -.3358417058+185	.000000000
100	.7444727742-189	.000000000	100 -.6683079463+187	.000000000

REAL X = •100000000+001	FIRST KIND	IMAGINARY X = -.100000000-002	SECOND KIND
N	REAL BESSSEL	IMAGINARY BESSSEL	REAL BESSSEL
0	•8414711044+000	•3011687085-003	-.5403011942+000
1	•3011687675+000	-.2391336491-003	-.1381770377+001
2	•6203501199-001	-.1150635394-003	-.3604999120+001
3	•9006557590-002	-.2600872290-004	-.1664316003+002
4	•1011010155-002	-.3951498754-005	-.1128965638+003
5	•9256027212-004	-.4556480192-006	-.9994199679+003
6	•7156832056-005	-.4246246983-007	-.5883689899+001
7	•4790035718-006	-.3324812872-008	-.1088064737+005
8	•2826420925-007	-.2246269922-009	-.1404478772+006
9	•1491323488-008	-.133511059-010	-.2095818713+007
10	•7116235645-010	-.7085473266-012	-.3548811634+008
11	•3099382806-011	-.3397040020-013	-.6721710143+009
12	•1241581225-012	-.1485363493-014	-.1407993454+011
13	•4604280663-014	-.5970002869-016	-.3231621287+012
14	•1589432081-015	-.2220216338-017	-.8064860523+013
15	•513249601-017	-.7683230302-019	-.1125921661+012
16	•1556522202-018	-.2486195449-020	-.3253549201+013
17	•4450574259-020	-.7554662258-022	-.2174248142+015
18	•1203672127-021	-.2163753860-023	-.6297154095+016
19	•3088215669-023	-.58860774758-025	-.1949910400+018
20	•7536367171-025	-.1505719683-026	-.6428291539+019
30	•5564412543-042	-.1668939932-043	-.1155266567+018
31	•8834293646-044	-.2738146988-045	-.4265110054+019
40	•1537011461-060	-.6149469800-062	-.8310670525+022
42	•1852009471-062	-.7595311179-064	-.3238845610+024
50	•3610948610-080	-.1806578250-081	-.2944968778+041
51	•3505827025-082	-.1789188184-083	-.1795874717+043
60	•1178313716-160	-.7077414529-102	-.8021543559+058
61	•9579833954-163	-.5850186402-104	-.6496161729+061
70	•7405407546-122	-.5192447667-123	-.2735562378+079
71	•5179192624-124	-.3683057974-125	-.2762497874+081
80	•1132763907-145	-.9080790902-145	-.1343452703+123
81	•6949173069-146	-.5640746989-147	-.5448173971+142
90	•5024088409-166	-.4533649485-167	-.8770496631+144
91	•2745236837-168	-.2504933739-169	-.1090759325+165
99	•1489101161-166	-.1478970037-167	-.3341473588+185
100	•7407909203-189	-.7432330309-190	-.6648689008+187

REAL X = .100000000+001		IMAGINARY X = -.100000000-001	
N	FIRST KIND REAL BESSSEL.	SECOND KIND REAL BESSSEL.	IMAGINARY BESSSEL
0	.8414829415+000	.3011716306-002	.5401911536+000
1	.3011775339+000	.2391358449-002	.1381481928+001
2	.6203104957-.001	.1150651741-002	.2222846780-001
3	.9004228348-002	.2600826345-003	.9430228768-001
4	.1010450498-002	.395169934-004	.1662786922+002
5	.9247251341-004	.4555650988-005	.1127362208+003
6	.7146511796-005	.4244914324-006	.9974039892+003
7	.4780287709-006	.3323221144-007	.1085114509+005
8	.2818712692-007	.2244749986-008	.1399557851+006
9	.1486076807-008	.13338998387-009	.2086609248+007
10	.7084867490-010	.7077173264-011	.1868876205+006
11	.3082656870-011	.3392052380-012	.3529708683+008
12	.1233531132-012	.1482692827-013	.3520349054+007
13	.4568968241-014	.5957103707-015	.1111091993+005
14	.1575208890-015	.2214540945-016	.7507824251+003
15	.5079103227-017	.7660298306-018	.13239883234+008
16	.1538129200-018	.2477628067-019	.1677929644+010
17	.4390956996-020	.7524896081-021	.4172839827+011
18	.1185530394-021	.2154088301-022	.1121468137+013
19	.3036190612-023	.5831314236-024	.3239025061+014
20	.7395299710-025	.1497258798-025	.1677929644+010
30	.5326462134-042	.1646682915-042	.4235696050+020
31	.6430509812-044	.2699029806-044	.3239020518+022
40	.1419703010-060	.6000168536-061	.1000404927+016
41	.1703495805-062	.7401264696-063	.3290287824+017
50	.3180842525-080	.1737232366-080	.1148058387+019
51	.307161126-082	.1717679835-082	.3239025061+014
60	.9772227452-101	.6684087275-101	.1647512887+022
61	.7891064242-103	.5514035189-103	.33290287824+017
70	.5698796340-122	.4799121438-122	.6737812159+023
71	.3951799276-124	.3396048287-124	.8969367131+040
80	.7949496353-144	.8183666612-144	.5640186195+042
81	.4826960776-146	.5069616354-146	.3192629257+059
90	.3150049819-166	.3968871188-166	.2644892519+061
91	.1699699788-168	.2186061028-168	.1333523869+079
99	.8252122749-187	.1257129958-186	.1370675024+081
100	.4043035922-189	.6295589499-189	.1569942681+167
			.2811763870+185
			.5630639567+187

REAL X	FIRST KIND REAL BESSSEL	IMAGINARY X = -.100000000+000	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
N	IMAGINARY BESSSEL	N	REAL BESSSEL	REAL BESSSEL
0	.3014639475-001	0	-5292844832+000	-1372158621+000
1	-.2393554972-001	1	-.1353125521+001	-.2184080882+000
2	-.1152287122-001	2	-.3425026544+001	-.9134395054+000
3	-.2596228860-002	3	-.1515025366+002	-.5999127356+001
4	-.3918264271-003	4	-.9741892043+002	-.5116484669+002
5	-.4472756359-004	5	-.8073466986+003	-.5367341880+003
6	-.6123837147-005	6	-.8110903929+004	-.6673743507+004
7	-.3820807355-006	7	-.9500045976+005	-.9580271204+005
8	-.2066408594-007	8	-.1260505758+007	-.1557228603+007
9	-.9791865561-009	9	-.1850035524+008	-.2823661911+008
10	-.4090268731-010	10	-.2936475865+009	-.5644293438+009
11	-.1507613795-011	11	-.4913477561+010	-.1231797739+011
12	-.4871222326-013	12	-.8354658598+011	-.2911330740+012
13	-.1350955133-014	13	-.1342444903+013	-.7400744712+013
14	-.3029183265-016	14	-.1601942536+014	-.2011392713+015
15	-.4354061862-018	15	-.1189073474+015	-.5813681634+016
16	-.3547411186-020	16	-.2151023307+017	-.1778797695+018
17	-.5841338415-021	17	-.1283882178+019	-.5735818404+019
18	-.2882323258-022	18	-.6434605474+020	-.1941390079+021
19	-.1069578744-023	19	-.3067150132+022	-.6870564071+022
20	-.3397478986-025	20	-.144900649+024	-.2532614187+024
30	-.6387808827-042	30	-.2521474403+041	-.1351790533+040
31	-.1029837605-043	31	-.1530609760+043	-.7070996556+041
40	-.1247313916-060	40	-.3842284335+059	-.530460231+059
41	-.1333929197-062	41	-.2655795968+061	-.4558385350+061
50	-.1237043518-080	50	-.76779249611+078	-.1981637123+079
51	-.1635075835-082	51	-.9660311201+080	-.1904636682+081
60	-.1518169973-100	60	-.5061769536+099	-.1048423559+099
61	-.1273076089-102	61	-.61898286780+101	-.6494915169+100
70	-.8092135624-122	70	-.4710762144+120	-.4778816824+120
71	-.5189203260-124	71	-.5908895457+122	-.7328748677+122
80	-.2006913545-144	80	-.7920522325+141	-.3566233694+142
81	-.2262057460-146	81	-.1831029763+144	-.5558301251+144
90	-.7089964613-166	90	-.6529423257+164	-.2424124967+164
91	-.4064040207-168	91	-.123531481+167	-.3173927674+166
99	-.2213546577-186	99	-.1749777194+185	-.1052629072+185
100	-.1049185123-188	100	-.32440087447+187	-.2418705463+187

REAL X = .100000000+001		IMAGINARY X = -.500000000+000	
FIRST KIND		SECOND KIND	
REAL BESSSEL	IMAGINARY BESSSEL	REAL BESSSEL	IMAGINARY BESSSEL
N 0	*.8717112232+000	*.1543066165+000	-.3120124954+000
1	*.3236338366+000	-.1223630451+000	-.6835240885+000
2	*.5184563880-001	-.5961732083-001	-.9027982649+000
3	*.2983360257-002	-.1241496060-001	*.1826391394+001
4	-.3769316699-003	-.1553049825-002	*.3957582195+002
5	-.1062889102-003	-.1239521497-003	*.4613178622+003
6	-.1302128154-004	-.5400297347-005	*.4916586049+004
7	-.1050871577-005	.7839328879-007	*.4918309947+005
8	*.5953711407-007	.3578735104-007	*.4128036038+006
9	*.2187161622-008	.3462309728-008	*.1214534149+007
10	-.2129651163-010	.2173284955-009	*.6919336271+008
11	*.3820864196-011	.9918299501-011	-.2701481683+010
12	*.352066309-012	.3201475274-012	-.7248106168+011
13	*.1899314715-013	.5318356880-014	-.1653412542+013
14	*.7470932690-015	-.1450296072-015	-.3224670377+014
15	*.2176013444-016	-.1676184691-016	-.4603380551+015
16	*.4049666414-018	-.8385290408-018	*.3464064760+015
17	*.4317654638-021	-.2976010515-019	*.3943143527+018
18	-.4146022943-021	-.7986198393-021	-.2173504414+020
19	-.2088882497-022	-.1515604942-022	*.8773895424+021
20	-.6946738771-024	-.1145723647-024	*.2963682323+023
30	*.3701768349-041	-.1541509148-040	*.2086276108+039
31	-.6366238416-043	-.2740977483-042	*.3218041150+041
40	*.1272636637-058	*.4072063406-059	-.8168477532+057
41	*.1778752082-060	-.2763200775-061	*.4882136873+059
50	-.3593139869-078	*.8881907607-078	-.7298285667+075
51	*.8241362792-081	*.1036809668-079	*.4313087004+078
60	-.8554675488-098	-.4233530936-098	*.7745134928+096
61	-.8676389126-100	*.3618142704-102	*.7481762404+098
70	*.9337682252-119	-.1575978973-118	-.2468512958+116
71	*.1016779524-121	-.1428632175-120	*.1669942742+119
80	*.7010701495-140	*.4903780826-140	-.6423934569+138
81	*.5805464892-142	*.8577406136-143	-.8885368840+140
90	*.7340556505-152	*.8967786921-162	*.940462945+159
91	-.1560848631-164	*.6906245642-164	-.1649748940+162
99	-.3178058882-182	-.8828588856-182	*.3466641190+180
100	-.3777447911-184	-.3601744475-184	*.8150290034+182

REAL X = .100000000+001	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	IMAGINARY X = -.100000000+001	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
N 0	*9667107481+000	*3317468333+000	N 0	*7758384032-001	-.9113138654+000
1	*3950657977+000	-.2620850747+000	1	-.4722618952+000	-.7486118459+000
2	*1901556057-001	-.1322757489+000	2	*3369410857+000	-.9199967462+000
3	-.1683752413-001	-.2106539599-001	3	*3614606475+001	-.7090273054+000
4	*4218009054-002	-.3844715465-003	4	*1479577715+002	*1108952384+002
5	-.4133946573-003	*3542332861-003	5	*1306353340+002	*1171928817+003
6	-.3944634358-005	*5908400489-004	6	*5875071930+003	*7053207594+003
7	*3708502141-005	*4172622399-005	7	-.8416445224+004	*6485953002+003
8	*4637324268-006	*2442915699-007	8	-.6740029674+005	-.5896419519+005
9	*2557565178-007	-.2324693692-007	9	-.6329041795+005	-.1074746777+007
10	*1011658605-009	-.2325365821-008	10	*9676235705+007	-.1075238915+008
11	-.9706912297-010	-.1051626675-009	11	*2145638514+009	-.1022486444+008
12	-.8090098586-011	-.2997691419-012	12	*2575393997+010	*2360650740+010
13	-.3099950811-012	*2893208825-012	13	*2469726864+010	.6171078407+011
14	-.6669220491-015	*2066746151-013	14	-.8023296663+012	*86407624469+012
15	*6465194864-015	*6869396351-015	15	*2416535547+014	*8336146345+012
16	*4040974388-016	*1154876637-017	16	-.3866817069+015	-.3625060592+015
17	*1185823079-017	-.1123396611-017	17	-.3747328325+015	-.1236243175+017
18	*1600694179-020	-.6241345333-019	18	*2101714128+018	-.2225378742+018
19	-.1561349869-020	-.1639433168-020	19	*8005496544+019	-.2164171036+018
20	-.7806984744-022	-.1815903988-023	20	*1601171447+021	*1521095870+021
30	-.2918421562-039	*1838451451-037	30	*4381730556+036	*4532839395+036
31	*2873299288-039	*2963097073-035	31	-.2718970345+038	*4457726822+036
40	*1622561948-054	*1954988406-056	40	-.3851947912+053	-.3755644142+053
41	*1977900170-056	*1931900396-056	41	-.3804004479+053	-.3081087289+055
50	*1183466180-074	-.1218931892-072	50	*4019918326+071	-.4101960292+071
51	-.1172159954-074	-.1194702180-074	51	*4101557160+073	-.4061080275+071
60	-.1272568351-091	-.1034631200-093	60	*3274222328+090	*3219650682+090
61	-.1042886527-093	*1026332423-093	61	*3247014243+090	*3928797835+092
70	-.1790136080-113	*2559852881-111	70	-.1375239195+110	*1395170544+110
71	*1777762316-113	*1802453853-113	71	-.1953140321+112	*1385229117+110
80	*1253247975-131	*7688734318-134	80	-.2493522194+130	-.2462352759+130
81	*7735239703-134	-.7642042910-134	81	-.2477970565+130	-.3989481322+132
99	*9724830108-155	-.1779626200-152	90	*1543534414+151	-.1560877678+151
91	-.9672163751-155	-.9777303061-155	91	*280493923+153	-.155222377+151
99	-.8402586018-172	-.8486612557-172	99	*2975273586+170	-.1510304130+168
100	-.8402588374-174	-.4139239571-176	100	*2945521495+172	

REAL X = .1000000000+001		IMAGINARY X = -.3000000000+001		SECOND KIND	
N	FIRST KIND	IMAGINARY BESSEL	REAL BESSSEL	IMAGINARY BESSEL	REAL BESSEL
0	•2470968822+001	•2000225544+001	0	•1984967225+001	-.2474849405+001
1	•1631996444+001	-.1533536204+001	1	-.1530017278+001	-.1652220317+001
2	-.6011873053+000	-.9914896055+000	2	-.9569741234+000	•6021677599+000
3	-.4453556886+000	•1360104436+000	3	•1482785768+000	•5178430119+000
4	•3816391611-002	•1514499699+000	4	-.2670119782-001	•7170735962-001
5	•3987552231-001	•1059878664-001	5	-.3659195258+000	-.5253996223+000
6	•5070687016-002	-.8202080986-002	6	•135808473+001	-.1957181379+001
7	-.1295513341-002	-.1485812559-002	7	•9374337920+001	•34J7296875+001
8	-.3278005135-003	•1435521143-003	8	•2629337529+001	•49152644733+002
9	•6136684778-005	•5806853405-004	9	•2645227331+003	•6674258219+002
10	•8469570534-005	•1757203593-005	10	-.8803965359+003	-.1430121206+004
11	•5790307089-006	-.1020112143-005	11	•7425453585+004	-.8616495290+004
12	-.9902611553-007	-.1081496303-006	12	•7741275729+005	•3284781177+005
13	-.1547377086-007	•7042200981-008	13	-.6025214867+005	•6713317044+006
14	•2051062720-009	•1826028960-008	14	•5677880364+007	•1291705386+007
15	•1821270967-009	•3770756843-010	15	•2764343776+008	-.4632294525+008
16	•8607341317-011	-.1535349825-010	16	•3507866142+009	•4019768069+009
17	-.1063237638-011	-.1181433630-011	17	•5164809652+010	•2192586963+010
18	-.1236199311-012	•5468535031-013	18	•5296115939+010	•6230653253+011
19	•1056504384-014	•1064319126-013	19	•7163629497+012	•1695546965+012
20	•8164604592-015	•1836968970-015	20	•4772309336+013	•7782489727+013
30	•5753765627-027	•1625063165-027	30	•4876378106+025	•7124476241+025
31	•1680236148-026	-.2479554686-026	31	•1010756400+027	•1328247061-027
40	•1531063078-040	•5411718535-041	40	•1476720033+039	•1859718694+039
41	•3792257992-042	-.4879636232-042	41	•3404903575+040	•5122322221+040
50	•3465692331-055	•1500817579-055	50	•5529649943+053	•6159178931+053
51	•7725566472-057	-.8635039536-057	51	•1310158866+055	•2298615150+055
60	•1056103202-070	•5652368208-071	60	•1533124756+069	•1481789833+069
61	•2259608179-072	-.2189232118-072	61	•3528836072+070	•7360829035+070
70	•6522276586-087	•4020061595-087	70	•2244440670+085	•1875482738+085
71	•1298657510-088	-.1087142716-088	71	•4774289669+086	•1214190986+087
80	•9468537463-104	•6841522534-104	80	•1364795682+102	•9802876726+101
81	•1839225812-105	-.1329566902-105	81	•2540175034+103	•8172184875+103
90	•3955430334-121	•3328947006-121	90	•2881275514+119	•1762856982+119
91	•7616101538-123	-.4665462102-123	91	•4361767014+120	•1883994119+121
99	-.2114823776-137	•4352421958-137	99	•2346623141+135	•2295355033+135
100	•5443715711-139	•5319994602-139	100	-.183755415+137	•9446320982+136

REAL X = .100000000+001

FIRST KIND

REAL BESSSEL

N	REAL BESSSEL	IMAGINARY BESSSEL	SECOND KIND
0	.6809115557+003	.8586404396+003	REAL BESSSEL
1	.7893682292+003	-.6049931815+003	-.8586404355+003
2	-.4780313563+003	-.6448179907+003	-.6049931793+003
3	-.4848163207+003	.3364223125+003	-.6448179853+003
4	.2112662462+003	.3321230772+003	.3364223093+003
5	.2076907689+003	-.1185701357+003	-.1185701296+003
6	-.5951066814+002	-.1188387892+003	-.1188387593+003
7	-.6238974003+002	.2667616426+002	.2667615031+002
8	.1062679943+002	.3014256608+002	.3014244952+002
9	.1344339703+002	-.3715970930+001	-.3715940642+001
10	-.1107403189+001	-.5552051349+001	-.5551446246+001
11	-.2129780034+001	.25906225346+000	.2590955705+000
12	.3245936942-001	.7610516509+000	.7569902751+000
13	.2540233213+000	.9661610266-002	.7654086412-002
14	.9619768037-002	-.7939659908-001	-.4519055944-001
15	-.2329077670-001	-.4637537421-002	.3233440530-001
16	-.1920535139-002	.6425268003-002	.3452716375+000
17	+.66982522-002	.6618666106-003	-.6604980449+000
18	-.2055902750-003	-.4093852747-003	.4299158618+001
19	-.9478172896-004	-.5868694134-004	.1273047209+002
20	-.1557621864-004	.2073512606-004	-.6080618484+002
30	-.1416632238-011	-.4997725807-014	.1233289634+009
31	-.2173767840-013	-.2196849188-012	.6675199431+010
40	-.1947222342-020	-.2805079655-020	.3063470534+018
41	-.3559401027-021	-.1990340554-021	-.125545441+019
50	-.2699328568-030	-.7016497767-030	-.145899134+028
51	-.6497010553-031	-.326051431-031	-.7023889486+028
60	-.2327337503-040	-.5260182535-041	.4069540531+037
61	-.239380354-042	-.1922297944-041	.4121499755+039
70	-.1077250239-051	-.1030505403-051	.3567044170+049
71	-.7915546902-053	-.6787954077-053	-.3771469254+050
80	-.4128524695-064	.2260638562-063	-.2563799252+061
81	-.1356876501-064	-.3895426804-065	-.1595011636+062
90	-.9550447634-076	-.4039140231-076	-.1553498128+073
91	-.1683573673-077	-.5422738891-077	.9329820632+074
99	-.1483174498-087	-.2766993090-087	.1314469535+085
100	-.1300102237-088	-.8728119757-089	.2007164976+086

N	REAL BESSSEL	IMAGINARY BESSSEL	SECOND KIND
0	.8586404396+003	0	REAL BESSSEL
1	-.6049931815+003	1	-.8586404355+003
2	-.6448179907+003	2	-.6049931793+003
3	-.3364223093+003	3	-.6448179853+003
4	-.3321230666+003	4	-.3364223093+003
5	-.1185701296+003	5	-.1185701296+003
6	-.1188387593+003	6	-.1188387593+003
7	.2667615031+002	7	.2667615031+002
8	.3014244952+002	8	.3014244952+002
9	-.3715940642+001	9	-.3715940642+001
10	-.5551446246+001	10	-.5551446246+001
11	.2590955705+000	11	.2590955705+000
12	.7569902751+000	12	.7569902751+000
13	.7654086412-002	13	.7654086412-002
14	-.4519055944-001	14	-.4519055944-001
15	.3233440530-001	15	.3233440530-001
16	-.3452716375+000	16	-.3452716375+000
17	-.6604980449+000	17	-.6604980449+000
18	.4299158618+001	18	.4299158618+001
19	.1273047209+002	19	.1273047209+002
20	-.6080618484+002	20	-.6080618484+002
30	.1233289634+009	30	.1233289634+009
31	.6675199431+010	31	.6675199431+010
40	.3063470534+018	40	.3063470534+018
41	-.125545441+019	41	-.125545441+019
50	-.145899134+028	50	-.145899134+028
51	-.7023889486+028	51	-.7023889486+028
60	.4069540531+037	60	.4069540531+037
61	.4121499755+039	61	.4121499755+039
70	.3567044170+049	70	.3567044170+049
71	-.3771469254+050	71	-.3771469254+050
80	-.2563799252+060	80	-.2563799252+060
81	-.1595011636+062	81	-.1595011636+062
90	-.1553498128+073	90	-.1553498128+073
91	.9329820632+074	91	.9329820632+074
99	.1314469535+084	99	.1314469535+085
100	.2422567514+086	100	.2422567514+086

IMAGINARY X = -.100000000+002

IMAGINARY BESSSEL

N	REAL BESSSEL	IMAGINARY BESSSEL	SECOND KIND
0	.8586404396+003	0	REAL BESSSEL
1	-.6049931815+003	1	-.8586404355+003
2	-.6448179907+003	2	-.6049931793+003
3	-.3364223093+003	3	-.6448179853+003
4	-.3321230666+003	4	-.3364223093+003
5	-.1185701296+003	5	-.2112662505+003
6	-.1188387593+003	6	-.2076907860+003
7	.2667615031+002	7	-.595106723+002
8	.3014244952+002	8	-.6238979692+002
9	-.3715940642+001	9	-.1344365370+002
10	-.5551446246+001	10	-.1107433243+001
11	.2590955705+000	11	.213301092+001
12	.7569902751+000	12	.3206783389+001
13	.7654086412-002	13	.2655003698+000
14	-.4519055944-001	14	-.1844609337-001
15	.3233440530-001	15	.1304485792+000
16	-.3452716375+000	16	.1577289805+000
17	-.6604980449+000	17	.1207028619+001
18	.4299158618+001	18	.2864860836+001
19	.1273047209+002	19	.1509691810+002
20	-.6080618484+002	20	.5816440459+002
30	.1233289634+009	30	.1087565199+010
31	.6675199431+010	31	.1409621446+010
40	.3063470534+018	40	.167910280+018
41	-.125545441+019	41	.2627655369+019
50	-.145899134+027	50	.5830902269+027
51	-.7023889486+028	51	.1099621446+029
60	.4069540531+037	60	.3376324173+036
61	.4121499755+039	61	.8922270731+037
70	.3567044170+049	70	.3040852014+049
71	-.3771469254+050	71	.5427628761+050
80	-.2563799252+060	80	.7422995947+060
81	-.1595011636+062	81	.3985045020+062
90	-.1553498128+073	90	.5035622780+073
91	.9329820632+074	91	.1893007475+074
99	.1314469535+084	99	.8852954192+084
100	.2422567514+086	100	.2422567514+086

REAL X = .1000000000+001	IMAGINARY X = -.1000000000+003	REAL BESSEL	IMAGINARY BESSEL	REAL BESSEL	IMAGINARY BESSEL
N	FIRST KIND	IMAGINARY BESSEL	N	SECOND KIND	N
0	.7374340646+041	.123611949+042	0	.1123611949+042	-.7374340646+041
1	.1112450689+042	-.7299481113+041	1	-.7299481113+041	-.1112450689+042
2	-.7152041090+041	-.1090460728+042	2	-.1090460728+042	-.7152041090+041
3	-.1058290670+042	.6936463057+041	3	.6936463057+041	-.1058290670+042
4	.6659129933+041	.1016873292+042	4	.1016873292+042	-.6659129933+041
5	.9673804858+041	-.6328050345+041	5	-.6328050345+041	-.9673804858+041
6	-.5952473875+041	-.9111680943+041	6	-.9111680943+041	-.5952473875+041
7	-.8497142228+041	.554246214+041	7	.554246214+041	-.8497142228+041
8	.5108443248+041	.7845549615+041	8	.7845549915+041	-.5108443248+041
9	.7172215589+041	-.4660777496+041	9	-.4660777496+041	-.7172215589+041
10	-.4209358222+041	-.6491819803+041	10	-.6491819803+041	-.4209358222+041
11	-.5817908513+041	.3763269199+041	11	.3763269199+041	-.5817908513+041
12	.3330513001+041	.5162489298+041	12	.5162489298+041	-.3330513001+041
13	.4535740688+041	-.2917819270+041	13	-.2917819270+041	-.4535740688+041
14	-.2530535296+041	-.3945839089+041	14	-.3945839089+041	-.2530535296+041
15	-.3398899589+041	.2172595623+041	15	.2172595623+041	-.3398899589+041
16	.1846562462+041	.2899019945+041	16	.2899019945+041	-.1846562462+041
17	.244841712+041	-.1553725132+041	17	-.1553725132+041	-.244841712+041
18	-.1294244457+041	-.2047599026+041	18	-.2047599026+041	-.1294244457+041
19	-.1695664051+041	.1067327206+041	19	.1067327206+041	-.1695664051+041
20	.8714160392+40	.1390518330+041	20	.1390518330+041	-.8714160392+40
30	-.6637011559+039	-.1120129243+040	30	-.1120129243+040	-.6637011559+039
31	-.8257792265+039	.4859658009+039	31	.4859658009+039	-.8257792265+039
40	.1901050398+038	.3469931356+038	40	.3469931355+038	-.1901050396+038
41	.2328404450+038	-.1264098075+038	41	-.1264098077+038	-.2328404452+038
50	-.2104978018+036	-.4253851015+036	50	-.4253840384+036	-.2104968567+036
51	-.2606325883+036	.1274904597+036	51	.1274904597+036	-.2606343132+036
60	.9290534155+035	.2133496668+034	60	.1934810730+034	-.734512937+033
61	.1197764349+034	-.5141297161+035	61	-.8617227947+035	-.1549106069+034
70	-.1585723426+031	-.4538708471+031	70	-.8622030270+035	-.9414633688+035
71	-.2343445678+031	.8548921910+030	71	.1928302705+036	.1655199759+036
80	.1292412883+028	.4251823240+028	80	-.8352066451+038	.10294870034039
81	.2026653378+028	-.6020624377+027	81	-.2164267800+039	-.1733468658+039
90	-.4261421535+024	-.1821219887+025	90	.1734395607+042	-.244535723+042
91	-.8043968816+024	.1824944230+024	91	.5543689201+042	-.3876333108+042
99	-.8946452641+021	.1514074355+021	99	.5021035509+045	.3114346960+045
100	.5993675054+020	.3701007335+021	100	-.7414203604+045	.1214356498+046

REAL X = .1300000000+001	FIRST KIND REAL BESSSEL	IMAGINARY X = .0000000000	SECOND KIND REAL BESSSEL	IMAGINARY BESSEL
N				
0	.7411986042+000	.000000000	0	-.2057683297+000
1	.3643844427+000	.003000000	1	-.8994819347+000
2	.9968857135-001	.000000000	2	-.1869959212+-71
3	.1903313940-001	.000000000	3	-.6292668880+001
4	.2797563871-002	.003000000	4	-.3201364245+002
5	.3346104780-003	.000002000	5	-.2153402404+003
6	.3375555815-004	.000000000	6	-.1790096084+004
7	.2945103335-005	.000000000	7	-.1768562360+005
8	.2264034287-006	.000000000	8	-.2022747570+006
9	.1555688553-007	.000000000	9	-.2627445817+007
10	.9664368165-009	.000000000	10	-.3819885641+008
11	.5478611822-010	.000000000	11	-.6144310040+009
12	.2856044335-011	.000000000	12	-.1083250352+011
13	.1378112538-012	.000000000	13	-.2077029444+012
14	.6189400389-014	.000000000	14	-.4302997880+013
15	.2599856276-015	.000000003	15	-.9578224977+014
16	.1025688560-016	.000000006	16	-.2279735266+016
17	.3814684447-018	.000000000	17	-.5777442065+017
18	.1341867757-019	.000000000	18	-.1553185436+019
19	.4577629521-021	.000000000	19	-.4414827261+020
20	.1421099638-022	.066000000	20	-.1322894993+022
30	.1450539521-038	.000000000	30	-.8701467998+037
31	.2994413060-040	.000000000	31	-.4081076285+039
40	.5532701242-056	.000000000	40	-.1717320406+055
41	.86657894445-058	.000000000	41	-.1069740039+057
50	.1794130639-074	.000000000	50	-.4246442175+073
51	.2264790688-076	.000000000	51	-.3298601209+075
60	.8080026375-094	.000000000	60	-.7869711475+092
61	.8540804167-096	.000000000	61	-.7324025475+094
70	.7008803789-114	.000000000	70	-.7785159155+112
71	.6372159210-116	.000000000	71	-.8443175218+114
80	.1479319455-134	.000000000	80	-.3230170521+133
81	.1179899478-136	.000000000	81	-.4000177833+135
90	.9054859351-156	.000000000	90	-.4693979417+154
91	.6432734677-158	.000000000	91	-.6535122728+156
99	.2848922638-175	.000000000	99	-.1356937953+174
100	.1842663105-177	.000000000	100	-.2077069318+176

REAL X = .1300000000+001	IMAGINARY X = -.1000000000-002	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
N 0		.7411986945+000	.3643844779-063	0	-.2057677407+000
1		.3643845482+000	-.1806071691-003	1	-.8994809460+000
2		,9968954757-001	-.1343339128-003	2	-.1869954200+001
3		.190331298-001	-.4112505379-004	3	-.6292636231+001
4		.2797555080-002	-.8273274782-005	4	-.3201337916+002
5		.3346086394-003	-.1253206539-005	5	-.2153376969+003
6		.3375527314-004	-.1528495038-006	6	-.1790067486+004
7		.2945068038-005	-.1563180162-007	7	-.1768525409+005
8		.2263997788-006	-.1377689503-008	8	-.2022694858+006
9		.1555656118-007	-.10673545066-009	9	-.2627361778+007
10		.9664115241-009	-.7379292061-011	10	-.3819738576+008
11		.5478436044-010	-.4607147892-012	11	-.6144029825+009
12		.2855934117-011	-.2622539474-013	12	-.1083192613+011
13		.1378049575-012	-.1371905506-014	13	-.2076901521+012
14		.6189070010-014	-.6639408504-016	14	-.4302694658+013
15		.2599659569-015	-.2989524117-017	15	-.9577459318+014
16		.1025616214-016	-.1258545380-018	16	-.2279530939+016
17		.3814379274-018	-.4974897905-020	17	-.5776860560+017
18		.1341746912-019	-.1853443700-021	18	-.1553011643+019
19		.4477178594-021	-.6529820792-023	19	-.4414281013+020
20		.1420940549-022	-.2181933798-024	20	-.1322714871+022
30		.1450166874-038	-.3344137229-040	30	-.8698918833+037
31		.2993590637-040	-.7133921365-042	31	-.4079805432+039
40		.5530240522-056	-.1701282124-057	40	-.1716446499+055
41		.8663693260-058	-.273194679-059	41	-.1069169060+057
50		.1792831185-074	-.6896638852-076	50	-.4243112987+073
51		.2263083354-076	-.8879999177-078	51	-.3295913656+075
60		.8071569213-094	-.3727131362-095	60	-.7860911530+092
61		.8531561601-096	-.4005321779-097	61	-.7315567133+094
70		.6998793954-114	-.3771588908-115	70	-.7773391760+112
71		.6362794805-116	-.3477951275-117	71	-.8430053703+114
80		.1476554939-134	-.9096795500-135	80	-.3223826765+133
81		.1177638692-136	-.7346172193-138	81	-.3992127896+135
90		.9033413516-156	-.6263266223-157	90	-.4682360173+154
91		.6417157063-158	-.4498907238-159	91	-.6518590557+156
99		.2840750214-175	-.2167347067-176	99	-.1352885982+174
100		.1837269396-177	-.1415959665-178	100	-.2070742949+176

REAL X = .130000000+001	FIRST KIND	IMAGINARY X = -.100000000-001	SECOND KIND
REAL BESSEL	IMAGINARY BESSEL	REAL BESSEL	IMAGINARY BESSEL
N 0	.3643879597-002	0 -.2057094298+000	-.89944899805-002
1	-.1806086857-002	1 -.8993830762+000	-.1177945207-001
2	-.1343358287-002	2 -.1869458083+001	-.3415168816-001
3	-.4112489318-003	3 -.6289404543+001	-.1748715610+000
4	-.8272920964-004	4 -.3198731982+002	-.1167901163+001
5	-.1253079807-004	5 -.2150859761+003	-.9613485569+001
6	-.1528221280-005	6 -.1787237563+004	-.9417101429+702
7	-.1562747708-006	7 -.1764898868+005	-.1069512616+004
8	-.1337147049-007	8 -.2017479689+006	-.1381201461+005
9	-.1066778980-008	9 -.2619048290+007	-.1998314267+006
10	-.7374226056-010	10 -.3805192033+008	-.3201060132+007
11	-.4503175701-011	11 -.6116317075+009	-.562360729+008
12	-.2619766529-012	12 -.1077483140+011	-.1074894940+010
13	-.1370160412-013	13 -.2064254055+012	-.2220741453+011
14	-.6629468320-015	14 -.4272720661+013	-.4931059876+012
15	-.2984263051-016	15 -.9501786203+014	-.1171034375+014
16	-.1255986810-017	16 -.2259255848+016	-.2961653109+015
17	-.4963528540-019	17 -.5719410190+017	-.7947017701+016
18	-.184855064-020	18 -.1535845105+019	-.2254935756+018
19	-.6510433165-022	19 -.4360336854+020	-.6745797538+019
20	-.2174689733-023	20 -.1304931183+022	-.2121981789+021
30	-.3317733862-039	30 -.8447942335+037	-.2051568234+037
31	-.7073573849-041	31 -.3954529476+039	-.9926548232+038
40	-.1676787932-056	40 -.1630727959+055	-.5317574800+054
41	-.2690577394-058	41 -.1013191235+057	-.3390362004+056
50	-.6739365195-075	50 -.3918144222+073	-.1620513977+073
51	-.8669109759-077	51 -.3033716164+075	-.1292146082+075
60	-.3603609118-094	60 -.7006886854+092	-.3551437758+092
61	-.3868267849-096	61 -.6495214319+094	-.3355155960+094
70	-.3601065724-114	70 -.6639039802+112	-.4034467350+112
71	-.3316140307-116	71 -.7166161485+114	-.4430601894+114
80	-.85568831784-135	80 -.2617076286+133	-.1880164561+133
81	-.6900792302-137	81 -.3222830812+135	-.2353152069+135
90	-.5794674957-156	90 -.3580760632+154	-.3015504027+154
91	-.4154839747-158	91 -.4952669519+156	-.4236391911+156
99	-.1971460425-175	99 -.9720827703+173	-.9409952737+173
100	-.1285417472-177	100 -.1476802019+176	-.1451745519+176

REAL X = .1300000000+001	FIRST KIND REAL BESSEL.	IMAGINARY BESSEL	SECOND KIND REAL BESSEL	IMAGINARY BESEL
N 0	.7421020230+000	*.3647362616-001	0	-.1999041293+000
1	*.3654401455+000	-.1807603937-001	1	-.8896980809+000
2	.9945055315-001	-.1345274961-001	2	-.1820562145+001
3	*.1876866051-001	-.4110781735-002	3	-.5972668893+001
4	*.2709657348-002	-.8237512345-003	4	-.2945054823+002
5	*.3162613006-003	-.1240405187-003	5	-.1907726250+003
6	*.3091981054-004	-.1500875760-004	6	-.1516298036+004
7	*.2595278660-005	-.1519628100-005	7	-.1421081429+005
8	*.1904105499-006	-.1323188481-006	8	-.1528369059+006
9	*.1237733652-007	-.1010637626-007	9	-.1848517428+007
10	*.7202306127-009	-.6873601706-009	10	-.2474133024+008
11	*.3781176772-010	-.4212278498-010	11	-.3615346090+009
12	*.1801305063-011	-.2348185380-011	12	-.5698210953+010
13	*.7816052593-013	-.1200163065-012	13	-.9574086540+011
14	*.3094047019-014	-.5661054226-014	14	-.1693522416+013
15	*.1116092750-015	-.2478158435-015	15	-.3106109660+014
16	*.3646802826-017	-.1011620892-016	16	-.5779816667+015
17	*.1066842481-018	-.3866937509-018	17	-.1049856069+017
18	*.2703890186-020	-.1389155095-019	18	-.1697244625+018
19	*.5449096774-022	-.4704884096-021	19	-.1617377284+019
20	*.5785558378-024	-.1506528367-022	20	-.4732760101+020
30	-.1057260261-038	-.1180701598-038	30	-.5734268684+037
31	-.2370178053-040	-.2269330042-040	31	-.2870781443+039
40	-.6209823165-056	-.4496520340-057	40	-.1521577775+055
41	-.9782732435-058	-.4426642938-060	41	-.9419129959+056
50	-.1596078159-074	-.1332775381-074	50	-.2616365720+073
51	-.1886320633-076	-.1837433535-076	51	-.1868916466+075
60	-.1031305242-094	-.9589586436-094	60	-.1997768215+091
61	-.3102172691-097	-.1022030333-095	61	-.2628631372+093
70	*.5267988348-114	*.6803177902-114	70	-.4245578747+112
71	*.5283509887-116	*.5815322735-116	71	-.4964976872+114
80	*.1854198481-134	*.2655185033-135	80	-.2538109202+133
81	*.1495192433-136	*.9800038129-138	81	-.3140416006+135
90	*.9572256278-156	-.6914599128-156	90	-.2739463386+154
91	*.6422393498-158	-.5435403487-158	91	-.3544691252+156
99	*.9594628111-176	-.3692619982-175	99	-.1783357510+173
100	*.4368381124-176	-.2436099239-177	100	-.1549641384+175

REAL X = .1300000000+001	IMAGINARY X = -.5000000000+000	FIRST KIND REAL BESSSEL	SECOND KIND IMAGINARY BESSSEL	REAL BESSSEL	IMAGINARY BESSSEL
N 0		.1866270698+000		0	-.7272030349-001
1		-.9223396295-001		1	-.7059915225+000
2		-.6961116299-001		2	-.9731422112+000
3		-.2034225028-001		3	-.1133786329+001
4		-.3681389533-002		4	.3710405858+001
5		-.4661479781-003		5	.7428069990+002
6		-.4282900955-004		6	.8809941325+003
7		-.2754007125-005		7	.9758657138+004
8		-.9351143204-006		8	.1070315163+006
9		-.3886434318-007		9	.1153298082+007
10		-.1698189186-008		10	.1155206409+008
11		-.7571503139-010		11	.8934848242+008
12		-.2130174357-011		12	-.1429030675+009
13		-.1503399148-013		13	-.3078159544+011
14		-.6462470917-014		14	-.1060634019+013
15		-.5141694398-015		15	-.2873804242+014
16		-.2825115260-016		16	-.7014522787+015
17		-.1234403069-017		17	-.1585473559+017
18		-.4438465643-019		18	-.3259317424+018
19		-.1297993347-020		19	-.5579858015+019
20		-.2841428466-022		20	-.4935431617+020
30		-.1072779291-039		30	-.3755487364+036
31		-.9367596358-040		31	-.3031562546+038
40		-.4512212176-055		40	-.7995223172+053
41		-.1158596935-056		41	.5639689386+055
50		-.4968357087-073		50	-.1247236047+072
51		-.7580624854-075		51	-.8865099506+073
60		-.5070537728-092		60	-.1076961247+091
61		-.5289310329-094		61	.7306990338+092
70		-.7408450424-112		70	-.3462192142+110
71		-.5093180073-114		71	-.1576908613+112
80		-.1688155006-132		80	.1304538286+130
81		-.3398355273-135		81	-.3579327411+132
90		-.2491196860-154		90	.3613251626+151
91		-.1405175508-155		91	.8132023357+153
99		-.5715414663-173		99	-.7570635860+170
100		.1009549778-174		100	-.1594787948+173

REAL. X = .1300000000+001	FIRST KIND	IMAGINARY X = -.1000000000+001	SECOND KIND	REAL BESSEL	IMAGINARY BESSEL	N	REAL BESSEL	IMAGINARY BESSEL	SECOND KIND	REAL BESSEL	IMAGINARY BESSEL
N	REAL BESSEL			4008080115+000	4008080115+000	0	.2214761296+000	-.7006912308+000			
0	.8354153576+000			.1964288618+000	.1964288618+000	1	-.4679022724+000	-.6570988927+000			
1	.4762091978+000			.1545050255+000	.1545050255+000	2	-.1670234100+000	-.7738041219+000			
2	.7406510959+001			.3924292912+001	.3924292912+001	3	.1502611731+001	-.1523140454+001			
3	-.1005739868+001			.4421534291+002	.4421534291+002	4	.9213770597+001	-.4686851020+000			
4	-.5969133429+002			.4064210934+004	.4064210934+004	5	.4014024399+002	.3031136338+002			
5	-.1111765819+002			.9133286228+004	.9133286228+004	6	.8022135650+002	.3257457038+003			
6	-.1071916314+003			.1513267302+004	.1513267302+004	7	-.1110383078+004	.2403881956+004			
7	-.3054173758+005			.1334244622+005	.1334244622+005	8	-.2153401294+005	.1090843718+005			
8	.6687750229+005			.5542420426+007	.5542420426+007	9	-.2447428207+006	.4887293708+005			
9	.1165415757+005			.2174813976+008	.2174813976+008	10	-.1880533595+007	-.2188334139+007			
10	.9855846732+008			.5541820197+009	.5541820197+009	11	-.1756576966+007	-.3684061684+008			
11	.4605466892+009			.4729328644+010	.4729328644+010	12	.2973498779+009	-.4223230836+009			
12	.1600278966+011			.2332788942+011	.2332788942+011	13	.7519209410+010	-.2302101120+010			
13	-.1683779386+011			.4609472824+013	.4609472824+013	14	.1209223455+012	.4585537319+011			
14	-.1561730474+012			.3127370015+014	.3127370015+014	15	.1192840122+013	.1948582989+013			
15	-.8033536879+014			.3673558799+015	.3673558799+015	16	-.4706281351+013	.4289315513+014			
16	-.2210071509+015			.1996502817+016	.1996502817+016	17	-.6024469625+015	.6243744915+015			
17	.2328400376+017			.6377242058+018	.6377242058+018	18	-.1830921342+017	.267958769+016			
18	.6228501855+018			.5228766480+020	.5228766480+020	19	-.3636417315+018	-.2045478391+018			
19	.3713802706+019			-.7422296801+021	-.7422296801+021	20	-.3869895270+019	-.9130041257+019			
20	.1304490843+020			.1119393843+035	.1119393843+035	30	-.7410135139+033	-.6368995146+034			
30	.108570544+035			.4034173432+037	.4034173432+037	31	.1227066803+036	-.2044310837+036			
31	.4610442760+038			.5347942595+052	.5347942595+052	40	.2020712997+050	-.1224682622+051			
40	-.2861903225+052			-.1182491094+053	-.1182491094+053	41	.447932583+052	-.4183279544+052			
50	.4273870938+070			.9275433490+090	.9275433490+090	60	.1282861105+068	-.2720575255+068			
51	-.1365465678+071			.2890130505+071	.2890130505+071	70	.1647756168+070	-.8457680320+069			
60	-.5650021123+089			.9211504668+088	.9211504668+088	80	.3586600034+086	-.4117462266+086			
61	-.8088116325+090			.97715958597+107	.97715958597+107	90	.3949341391+088	-.7936658909+087			
70	-.2599150688+107			.5126175917+109	.5126175917+109	71	.4428426449+105	-.2894112265+105			
71	-.7850452546+109			.1442847842+126	.1442847842+126	80	.4534368081+107	-.3497244478+106			
80	-.1011433888+126			.5300759798+129	.5300759798+129	81	.2050839712+125	-.6431861828+124			
81	-.1691942426+128			.696738816+147	.696738816+147	90	.1960518615+127	.7271939524+126			
90	-.8532596651+147			.286137465+150	.286137465+150	91	.2733698132+147	-.1978790442+147			
91	-.9868946429+149			.2456188990+165	.2456188990+165	99	.1001184904+164	-.4357202957+163			
99	-.1357009979+167			.9133322408+168	.9133322408+168	100	.1265141458+166	.3216965139+165			

REAL X = .1300000000+001

	FIRST KIND REAL Ressel	IMAGINARY BESSEL	N	SECOND KIND REAL BESSEL	IMAGINARY Ressel
0	.1931741907+001	*2396504548+001	0	*2381422080+001	-.1929645498+001
1	.1943793533+001	-.1096092492+001	1	-.1100611393+001	-.1962853745+001
2	-.2997842637+000	-.1159892661+001	2	-.1130411858+001	.2869296760+000
3	-.4985370128+000	-.2982577260+001	3	*1065608702+001	.5511479470+000
4	-.6601045965+001	*1551506777+000	4	*5677888382+001	.2031754825+000
5	*3442188881+001	*3291094740+001	5	-.4616780783+000	-.1253684326+000
6	.1046057620+001	-.4865469225+002	6	-.102132564+000	-.1876341542+001
7	-.1340461954+003	-.2439848989+002	7	.71456133353+001	-.3153580964+001
8	-.434486360+003	-.1494170309+003	8	.2641182491+002	.2620354192+002
9	-.5127151095+004	*5827772422+004	9	-.7755527730+002	*1833314432+003
10	.5240347782+005	*1068771973+004	10	-.1183147803+004	-.1613470750+002
11	.1667689753+005	-.100300547+006	11	-.2848866468+004	-.7197249977+004
12	.7159439544+007	-.2039399034+006	12	.3967043882+005	-.3350300099+005
13	-.1920419589+007	-.1742322467+007	13	.3935892160+006	.1684634221+006
14	-.2631446681+008	*1218195873+008	14	-.2381970981+005	.3573937295+007
15	.9754282033+011	*3034981152+009	15	-.2956389303+008	.1224174437+008
16	.2787070828+010	*1081462971+010	16	-.2179282023+009	-.2146216224+009
17	.1939361034+011	-.1987569428+011	17	.1142606057+010	-.2891770241+010
18	-.9374691607+013	-.2254342369+012	18	.3348494887+011	-.8706833294+009
19	-.2037379049+013	-.2036754648+015	19	.1585647737+012	.3466662750+012
20	-.6516946387+015	*1481025144+014	20	-.3075647732+013	.3380483281+013
30	-.1572429252+026	*3803715144+027	30	.5397119519+024	.3039568170+025
31	-.1415193740+028	*8260569284+028	31	-.4819627966+026	.3174812632+026
40	-.4716274582+040	-.3934633664+040	40	.5484834498+038	.2746416477+038
41	-.2157412318+041	*1089660966+041	41	-.8596927743+036	.1518948957+040
50	.1254049187+055	-.1991796737+054	50	*1348602835+053	-.6906711313+052
51	-.5641327778+056	-.2873169718+056	51	*3614403538+054	.2979185433+054
60	.7625035494+070	*4850688790+070	60	*4358090741+067	-.2760018934+068
61	-.3782187350+072	-.237112066+071	61	*1001994800+070	-.2577297800+069
70	.7344508805+086	*2903531990+086	70	-.1942209500+084	-.1939218476+084
71	.1275885376+087	-.1276878041+087	71	.4349145541+085	-.1101279472+086
80	.4162928839+103	*1629134331+102	80	-.1114838946+101	.1791485451+100
81	*3229668656+104	*5320166137+105	81	-.2991612028+102	-.4688605125+102
90	-.6651802135+120	*7982849335+120	90	-.7313967947+117	*1451638322+118
91	.8363324478+122	*1656996629+121	91	-.8935412372+119	-.5221851764+118
99	-.4373073940+136	-.1238495754+135	99	.1166885910+134	-.8166511044+132
100	-.2130983231+137	-.1478850353+136	100	.3279312323+135	.6320858947+135

REAL X = .130000000+001	FIRST KIND REAL BESSSEL	IMAGINARY X = -.100000000+002	SECOND KIND IMAGINARY BESSSEL
N	I M A G I N A R Y B E S S E L	N	I M A G I N A R Y B E S S E L
0	.1005891163+004	0	.1005891158+004
1	-.3706793493+003	1	-.3706793486+003
2	-.7509329598+003	2	-.7509329538+003
3	.1845049693+003	3	.1845049687+003
4	.3811684537+003	4	.3811684423+003
5	-.4878436386+002	5	-.4878436431+002
6	-.1330243665+003	6	-.1330243357+003
7	.3824561086+001	7	.3824570076+001
8	.3248969995+002	8	.3248958701+002
9	.1680647392+001	9	.1680568974+001
10	.122402397+001	10	-.5668560823+001
11	-.6748631857+000	11	-.6741609355+000
12	-.3151901704+000	12	.7169638434+000
13	.2289214718+000	13	.1230999502+000
14	.4859145561-001	14	-.4377501066-001
15	-.1844713004-001	15	.6831306780-001
16	-.5250953421-002	16	-.1905048300+000
17	.1087867913-002	17	-.1170925445+001
18	.4243172554-003	18	.1632075517+001
19	-.4427133274-004	19	.1868241203+002
20	-.2658579791-004	20	-.8936304819+001
30	.9228277880-012	30	-.8734209759+009
31	.2131456533-012	31	.221245143+010
40	.2242531339-020	40	.2232686622+018
41	-.3452770282-021	41	.1909943113+019
50	-.8472034486-030	50	.4617539136+027
51	-.3613601005-031	51	-.9253698540+028
60	-.2201275949-042	60	-.2743703595+038
61	.2356087708-041	61	-.8857008999+038
70	.1811273905-051	70	.5631019169+048
71	-.2071396855-051	71	.5183437218+050
80	-.1635273465-061	80	.1834362151+061
81	-.1674672008-064	81	-.1006793726+062
90	-.9165272074-076	90	-.2582852706+073
91	.5165085614-077	91	-.5749535360+074
99	-.1282164021-087	99	-.1028102987+085
100	.2001751490-088	100	-.1178542807+086
	.9060038643-089		-.1898446982+086

REAL X = .130000000+001		IMAGINARY X = -.100000000+003	
FIRST KIND	SECOND KIND	REAL BESEL	IMAGINARY BESEL
N	REAL RESSEL	IMAGINARY BESEL	IMAGINARY RESSEL
0	.3763065198+041	.1290186653+042	.1290186653+042
1	.1277335878+042	-.3723763945+041	-.3723763945+041
2	-.7646390388+041	-.1252018254+042	-.1252018254+042
3	-.1214982518+042	.3533338489+041	.3533338489+041
4	.338804013+041	.1167305328+042	.1167305328+042
5	.1110339125+042	-.3214810887+041	-.3214810887+041
6	-.3018599402+041	-.1045648302+042	-.1045648302+042
7	-.9749378716+041	.2804790802+041	.2804790802+041
8	.2578943795+041	.8999791736+041	.8999791736+041
9	.8225371144+041	-.2346558258+041	-.2346558258+041
10	-.2112859828+041	-.7443030311+041	-.7443030311+041
11	-.6668366020+041	.1882616628+041	.1882616628+041
12	.1659996123+041	.5915193354+041	.5915193354+041
13	.5195211632+041	-.1448466590+041	-.1448466590+041
14	-.1250741115+041	-.4517806490+041	-.4517806490+041
15	-.36899936394+c41	.1068782833+041	.1068782833+041
16	.9038034354+040	.3316421790+041	.3316421790+041
17	.2799626035+041	-.7563530501+040	-.7563530501+040
18	-.62633844525+040	-.2340159073+041	-.2340159073+041
19	-.1936925905+041	.5133742209+040	.5133742209+040
20	.4163877821+040	.1587487979+041	.1587487979+041
30	-.2894695455+039	-.1269777141+040	-.1269777141+040
31	-.9352912820+039	.209404586+039	.209404586+039
40	.7099782764+037	.3894342051+036	.3894342050+036
41	.2610145092+038	-.4624636251+037	-.4624636261+037
50	-.5975286644+035	-.4712048262+036	-.4712036090+036
51	-.2882774172+036	.3481526548+035	.3481629822+035
60	.1459156425+033	.2324891226+034	.2095146552+034
61	.1302828535+034	-.7286321530+032	-.3193534089+033
70	.4323192080+029	-.4848140138+031	.1007260977+036
71	-.2497698893+031	-.4117341159+029	.1371430+036
80	-.3894574767+027	.4434498347+028	-.9857257092+038
81	.2108192907+028	.2026271581+027	-.1707398301+039
90	.3215463143+024	-.1846511954+025	.2067104321+042
91	-.8130512979+024	-.1489523863+024	.4571016174+042
99	-.8805341510+021	-.2279061954+021	.4269800601+045
100	-.9752606223+020	.3629646504+021	-.8916921057+045

REAL X = .1500000000+001	FIRST KIND REAL BESSSEL	IMAGINARY X = .000000000	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
N	0	.6649966577+000	.000000000	.000000000
1	.3961729707+000	.000000000	.4715813445+001	.000000000
2	.1273492837+000	.000000000	.6964354140+000	.000000000
3	.283246415H+001	.000000000	.1345712694+001	.000000000
4	.4832377030-002	.000000000	.3789273565+001	.000000000
5	.6696205965-003	.000000000	.1633756394+002	.000000000
6	.7817400966-004	.000000000	.9423611009+002	.000000000
7	.7887487444-005	.000000000	.6747272434+003	.000000000
8	.7008647775-006	.000000000	.5753399999+004	.000000000
9	.5564670144-007	.000000000	.5685927275+005	.000000000
10	.3993440699-008	.000000000	.6386516911+006	.000000000
11	.2614683536-009	.000000000	.8032728815+007	.000000000
12	.1574072188-010	.000000000	.1118195517+009	.000000000
13	.8770110325-012	.000000000	.1706533731+010	.000000000
14	.4547670923-013	.000000000	.2833040930+011	.000000000
15	.2205345682-014	.000000000	.5082408336+012	.000000000
16	.1004389961-015	.000000000	.9797659040+013	.000000000
17	.4312032068-017	.000000000	.2019767127+015	.000000000
18	.1750854984-015	.000000000	.4433690020+016	.000000000
19	.6743558830-020	.000000000	.1932507904+018	.000000000
20	.2470312039-021	.000000000	.2542419140+019	.000000000
30	.1056904243-036	.000000000	.6599964685+020	.000000000
31	.2517822809-038	.000000000	.1035308275+036	.000000000
40	.1688097892-053	.000000000	.4207619750+037	.000000000
41	.3051734815-055	.000000000	.4878956255+052	.000000000
50	.2291229428-071	.000000000	.4233709650+054	.000000000
51	.3337436360-073	.000000000	.1035308275+070	.000000000
60	.4318156903-090	.000000000	.4207619750+072	.000000000
61	.5266815867-092	.000000000	.1276316879+089	.000000000
70	.1567281210-109	.000000000	.1029401376+091	.000000000
71	.1644179702-111	.000000000	.3017456685+108	.000000000
80	.1384039315-129	.000000000	.2836083621+110	.000000000
81	.1273762381-131	.000000000	.2992332561+128	.000000000
90	.3544286196-150	.000000000	.3211487961+130	.000000000
91	.2905345721-152	.000000000	.1039348162+149	.000000000
99	.4043136538-169	.000000000	.1254059680+151	.000000000
100	.3017432473-171	.000000000	.8286795426+167	.000000000
			.-1099318425+170	.000000000

REAL X = .1500000000+001	IMAGINARY X = -.1000000000-002	FIRST KIND REAL BESSEL	IMAGINARY BESSEL	SECOND KIND REAL BESSEL	IMAGINARY BESSEL
N 0	.6649967261+000	.3961730084-003	0	-.4715769373-001	-.6964352311-003
1	.3961730839+000	-.1367660403-003	1	-.6964348651+000	-.8814219218-003
2	.1273492719+000	-.1414744238-003	2	-.1345710242+001	-.1994987237-002
3	.2832461476-001	-.5181690653-004	3	-.3789259515+001	-.8758998454-002
4	.4832366113-002	-.1221671467-004	4	-.1633746572+002	-.5066912285-001
5	.6696179029-003	-.2153893079-005	5	-.9423528856+002	-.3606054374+000
6	.7817352233-004	-.3048081494-006	6	-.6747192470+003	-.3054475226+001
7	.7887417304-005	-.3610733565-007	7	-.5753311271+004	-.3000987757+002
8	.70985635690-006	-.3682287929-008	8	-.5685816783+005	-.3353995585+003
9	.5564585625-007	-.32988654540-009	9	-.6386364370+006	-.4200776284+004
10	.3993362653-008	-.2636133341-010	10	-.8032497632+007	-.5826736257+005
11	.2614620824-009	-.1901681508-011	11	-.1118157366+009	-.8865118797+006
12	.1574026744-010	-.1250477658-012	12	-.1706465639+010	-.1467791355+008
13	.8769810376-012	-.7555212952-014	13	-.2832910253+011	-.2627059928+009
14	.4547489122-013	-.4222391311-015	14	-.5082140007+012	-.5053976935+010
15	.2205244002-014	-.2195272751-016	15	-.9797072071+013	-.1039977822+012
16	.1004336867-015	-.1067020838-017	16	-.2019630860+015	-.2279214368+013
17	.4311773471-017	-.4869375368-019	17	-.4435355416+016	-.5300082042+014
18	.1750736757-018	-.2094240574-020	18	-.1032421262+018	-.1303369322+016
19	.6743049532-020	-.8516946426-022	19	-.2542183192+019	-.3379452014+017
20	.2470104615-021	-.3285039299-023	20	-.6599290572+020	-.9214182530+018
30	.1056700426-036	-.2111164027-038	30	-.1035020592+036	-.21363636398+034
31	.2517303694-038	-.5197353015-040	31	-.4206634578+037	-.8965158732+035
40	.1687503542-053	-.4498022904-055	40	-.4677391872+052	-.1332476599+051
41	.3050624178-055	-.8335059585-057	41	-.2632654082+054	-.7368476517+052
50	.2289983209-071	-.7632765298-073	50	-.2880412979+070	-.9792807815+068
51	.3335546947-073	-.1134045844-074	51	-.1938996714+072	-.6721664488+070
60	.4314762493-090	-.1726298703-091	60	-.1275245014+089	-.5187245969+087
61	.5262535324-092	-.2140645271-093	61	-.1028508516+091	-.4252313129+089
70	.1565600051-109	-.7309794826-111	70	-.3014031070+108	-.1427381530+107
71	.1642364922-111	-.7777967331-113	71	-.2832773193+110	-.1360474079+109
80	.1382096624-129	-.7376902233-131	80	-.2987918533+128	-.1614763170+127
81	.1271929211-131	-.6873940843-133	81	-.3206633673+130	-.1754408103+129
90	.3537980907-150	-.2125048184-151	90	-.1037415663+149	-.6300514011+147
91	.2900060962-152	-.1761295636-153	91	-.1251676716+151	-.7685548933+149
99	.4034424542-169	-.2666290411-170	99	-.8268207593+167	-.5519685847+166
100	.3010797951-171	-.2009953782-172	100	-.1096803272+170	-.7395491532+168

REAL X = .1500000000+001	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	REAL BESSSEL	SECOND KIND REAL BESSSEL	IMAGINARY BESSEL
N			N		
0	.6650034961+000	.3961767436-002	0	-.4711406456-001	-.6964171174-002
1	.3961842895+000	-.1367670523-002	1	-.6963805260+000	-.8813728419-002
2	.1273481029+000	-.1414764490-002	2	-.1345467579+001	-.1994716328-001
3	.2832195901-001	-.5181694538-003	3	-.3787863832+001	-.8757181159-001
4	.4831285371-002	-.1221637061-003	4	-.16327744371+002	-.5065426994+000
5	.6693512600-003	-.2153738102-004	5	-.9415397873+002	-.3604630035+001
6	.7812527823-004	-.3047683735-005	6	-.6739278626+003	-.3052911493+002
7	.7880473893-005	-.3609997889-006	7	-.5744530762+004	-.2999055977+003
8	.7000240094-006	-.3681213852-007	8	-.5674883393+005	-.3351345274+004
9	.5556019549-007	-.3297553787-006	9	-.6371271356+006	-.4156781861+005
10	.3985637607-008	-.2634784722-009	10	-.8009625763+007	-.5820166544+006
11	.2608413943-009	-.1900457703-010	11	-.1114383308+009	-.8853437863+007
12	.1569529240-010	-.1249489599-011	12	-.1699730529+010	-.1465556314+009
13	.8740127415-012	-.7548024889-013	13	-.2819986159+011	-.2622462419+010
14	.4529499527-013	-.4217631357-014	14	-.5055605352+012	-.5043986301+011
15	.2195163634-014	-.2192379680-015	15	-.9739035249+013	-.1637663103+013
16	.990840907-016	-.1065395708-016	16	-.2006159290+015	-.2273540753+014
17	.4286192040-017	-.4860888641-018	17	-.4400280875+016	-.5285414353+015
18	.1739042620-018	-.2090099570-019	18	-.1023858275+018	-.1299380771+017
19	.6692679339-020	-.8497984270-021	19	-.2518867893+019	-.3368071698+018
20	.2449592710-021	-.3276859248-022	20	-.6532689152+020	-.9180187790+019
30	.1036578768-036	-.2098645469-037	36	-.1012633261+036	-.2120366632+035
31	.2466065336-038	-.5164333357-039	31	-.4109530801+037	-.8891742617+036
40	.1629953128-053	-.4449352712-054	40	-.4693806023+052	-.1314926970+052
41	.2941272535-055	-.8240132570-056	41	-.2528915854+054	-.7266821439+053
50	.2167634134-071	-.7501854666-072	50	-.2714193846+070	-.9596322935+069
51	.3150117833-073	-.1113788594-073	51	-.1822756169+072	-.6581641781+071
60	.3982809235-090	-.1683304359-090	60	-.1170704308+089	-.5040084831+088
61	.4844103936-092	-.2085505438-092	61	-.9414678316+090	-.4127817255+090
70	.1401954863-109	-.7060796327-110	70	-.2681621407+108	-.1373047483+108
71	.1465302335-111	-.7505304194-112	71	-.2511717641+110	-.1307265096+110
80	.1194011449-129	-.7047875790-130	80	-.2562090440+128	-.1535436483+128
81	.1094550532-131	-.6559588501-132	81	-.2738625749+130	-.1666151027+130
90	.2931264792-150	-.2004995167-150	90	-.8522093014+148	-.5912894701+143
91	.2391877298-152	-.1659568919-152	91	-.1023458722+151	-.7202637537+150
99	.3201291424-169	-.2484105052-169	99	-.6498469309+167	-.5112369313+167
100	.2376794409-171	-.1869841421-171	100	-.8575207976+169	-.6839195335+169

REAL X = .1500000000+001	IMAGINARY X = -.100000000+000	FIRST KIND	SECOND KIND	REAL BESSEL	IMAGINARY BESSEL	REAL BESSEL	IMAGINARY BESSEL
N 0	6656807435+000	.3965503917-001	0	-.4226335870-001	-.6946144456-001	-.4226335870-001	-.6946144456-001
1	.3973054959+000	-.1368662814-001	1	-.6909899884+000	-.8764995107-001	-.6909899884+000	-.8764995107-001
2	.1272311060+000	-.1416790549-001	2	-.1321466713+001	-.1967871306+000	-.1321466713+001	-.1967871306+000
3	.2805611814-001	-.5182082555-002	3	-.3650871420+001	-.8577645775+000	-.3650871420+001	-.8577645775+000
4	.4723185287-002	-.1218193683-002	4	-.1537486723+002	-.4919203161+001	-.1537486723+002	-.4919203161+001
5	.6427206612-003	-.2138236219-003	5	-.8623117492+002	-.3464959081+002	-.8623117492+002	-.3464959081+002
6	.7331776259-004	-.3007934077-004	6	-.5973241754+003	-.2980243906+003	-.5973241754+003	-.2980243906+003
7	.7190628026-005	-.3536578869-005	7	-.4900843914+004	-.2811366873+004	-.4900843914+004	-.2811366873+004
8	.6176351591-006	-.3574216022-006	8	-.4632631200+005	-.3095202007+005	-.4632631200+005	-.3095202007+005
9	.4712121378-007	-.3168265296-007	9	-.4945476171+006	-.3812747580+006	-.4945476171+006	-.3812747580+006
10	.3228395446-008	-.2501098364-008	10	-.5869682771+007	-.5192928987+007	-.5869682771+007	-.5192928987+007
11	.2003628247-009	-.1779523634-009	11	-.7649211452+008	-.7745217520+008	-.7649211452+008	-.7745217520+008
12	.1134255638=010	-.1152200729-010	12	-.1082996666+010	-.1254998181+010	-.1082996666+010	-.1254998181+010
13	.5888932586-012	-.6843102271-012	13	-.1650531298+011	-.2194463784+011	-.1650531298+011	-.2194463784+011
14	.2815803853-013	-.3752917257-013	14	-.2684810093+012	-.4117194167+012	-.2684810093+012	-.4117194167+012
15	.1243589414-014	-.1911319296-014	15	-.4622847606+013	-.8247254280+013	-.4622847606+013	-.8247254280+013
16	.5080994744-016	-.9083631345-016	16	-.8353502562+014	-.1756184362+015	-.8353502562+014	-.1756184362+015
17	.1920423614-017	-.4045610925-017	17	-.1568581992+016	-.3960238664+016	-.1568581992+016	-.3960238664+016
18	.6698972701-019	-.1694790030-018	18	-.3022165050+017	-.9425029609+017	-.3022165050+017	-.9425029609+017
19	.2143713007-020	-.6699992540-020	19	-.5862966866+018	-.2360071416+019	-.5862966866+018	-.2360071416+019
20	.6212334501-022	-.2506797092-021	20	-.1107335253+020	-.6200784480+020	-.1107335253+020	-.6200784480+020
30	-.4646272779-037	-.1029718024-036	30	-.4550706155+035	-.8526097543+035	-.4550706155+035	-.8526097543+035
31	-.1270572572-038	-.2379168125-038	31	-.2071548175+037	-.33268862557+037	-.2071548175+037	-.33268862557+037
40	-.1636717509-053	-.8529738523-054	40	-.4078004852+052	-.1792815837+052	-.4078004852+052	-.1792815837+052
41	-.3059912959-055	-.1344741506-055	41	-.2255882635+054	-.8172850419+053	-.2255882635+054	-.8172850419+053
50	-.2516134497-071	-.4718037979-072	50	-.2492698890+070	-.6414302056+069	-.2492698890+070	-.6414302056+069
51	-.3619191245-073	-.9316712513-074	51	-.1641880371+072	-.5413086324+071	-.1641880371+072	-.5413086324+071
60	-.3250829492-090	-.3710073632-090	60	-.6773180538+086	-.8854573801+086	-.6773180538+086	-.8854573801+086
61	-.3663234501-092	-.4789544509-092	61	-.4964522651+090	-.7472660244+090	-.4964522651+090	-.7472660244+090
70	-.9818944115-111	-.1827863520-109	70	-.3317939607+106	-.2577622083+108	-.3317939607+106	-.2577622083+108
71	-.2485720594-113	-.1924412783-111	71	-.1918818442+109	-.2409895202+110	-.1918818442+109	-.2409895202+110
80	.9496899190-130	-.1352613687-129	80	-.1569636117+128	-.1946243977+128	-.1569636117+128	-.1946243977+128
81	.9570231644-132	-.1186561493-131	81	-.1815800657+130	-.1967712603+130	-.1815800657+130	-.1967712603+130
90	.4142945438-150	-.12496269438-150	90	-.8277529859+148	-.1906028833+148	-.8277529859+148	-.1906028833+148
91	.3464359307-152	-.7976229567-153	91	-.1009599164+151	-.1626623826+150	-.1009599164+151	-.1626623826+150
99	.4801319138-169	-.1518517607-169	99	-.6182477282-67	-.2418388207+157	-.6182477282-67	-.2418388207+157
100	.3507708330-171	-.1372194821-171	100	-.7952364486+169	-.3738432994+169	-.7952364486+169	-.3738432994+169

REAL X = .150000000+001		IMAGINARY X = -.500000000+000	
FIRST KIND		SECOND KIND	
N	REAL BESSSEL	IMAGINARY BESSSEL	REAL BESSSEL
0	.6822529130+000	.2028437552+000	.5609892777-001
1	.4248819245+000	-.6967015822-001	-.5830281575+000
2	.1243366461+000	-.7332088527-001	-.8725575117+000
3	.2144689902-001	-.2595585149-001	-.1313678178+001
4	.2086921871-002	-.5665232363-002	-.9389005158+000
5	.1789733843-004	-.8799439017-003	.1826869298+002
6	-.3292285361-004	-.1030232442-003	.2647721332+003
7	-.6835161575-005	-.9236822685-005	.3028069922+004
8	-.8831325069-006	-.6136446566-006	.3355732395+005
9	-.863981261-007	-.2500353576-007	.3740958846+006
10	-.6793870955-003	.2936110793-009	.4186421263+007
11	-.4377779628-009	.1685773476-009	.4579780232+008
12	-.2292073006-010	.1897768934-010	.4562329861+009
13	-.9214347927-012	.1484342222-011	.3178323339+010
14	-.2196158665-013	.9290678082-013	-.1971810660+011
15	.4438562151-015	.4858561268-014	-.1672682375+013
16	.9423239195-015	.2143672891-015	.5497308601+014
17	.7121037272-017	.7844844168-017	.1489680952+016
18	.3954815796-018	.2216992978-018	.3712222518+017
19	.1807899075-019	.3443930909-020	-.8758510651+018
20	.7041436566-021	-.9518639874-022	.1955405029+020
30	-.5024194610-035	.1101519294-036	.1734140560+035
31	-.1109113874-037	.6617420207-038	.5082754931+036
40	.1330677253-052	-.4037851990-053	-.4586000021+051
41	.2161881297-054	-.1532239409-054	-.1701912688+053
50	-.2976569473-070	.1162321430-070	.1507279827+069
51	-.3770838110-072	.3138741423-072	.6599101655+070
60	.9184448103-089	-.4429561734-089	-.3677726041+087
61	.9400242789-091	-.9137526058-091	-.18n4803219+089
70	-.5419124959-103	.3147157917-108	.4757015344+106
71	-.4584058101-110	.5196846498-110	.2493081527+108
80	.7715812615-123	-.5312081468-128	-.2525511412+126
81	-.5474551459-130	-.7257304300-130	-.1361671952+128
90	-.3162010181-143	.2552383067-148	.4640910078+146
91	-.1894420119-150	.2956313071-150	.2418504169+148
99	-.6757747743-167	-.3129123119-167	-.3107408485+165
100	.42644767871-169	-.4016551950-169	-.2545429519+167

REAL X = .1500000000+001	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	N	SECOND KIND REAL BESSSEL	IMAGINARY BESSEL
N 0	.735985..1224000	.4352367789+000	0	.3103161507+000	-.5746274321+000
1	.5160828090+000	-.1472918074+000	1	-.4159543327+000	-.6049675473+000
2	.1145522532+000	-.1627951500+000	2	-.3278213369+000	-.6469777867+000
3	-.1277378476+002	-.5215507236+001	3	-.6547939953+000	-.1392398633+001
4	-.6345166282+002	-.8457129710+002	4	-.5442322072+001	-.2441215342+001
5	-.1659722267+002	-.5457730611+003	5	-.2871206325+002	*6323011411+001
6	-.2338840958+003	.6976034345+004	6	-.1189256527+003	*1317219489+003
7	-.1862368201+004	.2279873858+004	7	-.1579540576+003	*1259711293+004
8	-.2740346164+006	.3121622047+005	8	-.4639449963+004	*9318374960+004
9	-.1450796983+006	.2605764100+006	9	-.6587128982+005	*4653964775+005
10	-.2290218912+007	.1159086149+007	10	-.1029032879+007	-.1090643891+006
11	-.2000568257+008	-.2508382582+009	11	-.9182108251+007	-.7752760789+007
12	-.1097754355+009	-.9573840010+010	12	-.4157638605+008	-.1471705470+009
13	-.2520615427+011	-.9409161873+011	13	-.6615299383+009	-.2010191136+010
14	-.1962677364+012	-.5737350752+012	14	-.2498530709+011	-.1940711642+011
15	-.2810138219+013	-.2137355148+013	15	-.5069283884+012	-.3480078081+011
16	-.1927394688+014	-.1150761369+015	16	-.7559936006+013	*4356805188+013
17	-.8585612615+016	-.5038425530+016	17	-.7039838271+014	*1431547223+015
18	-.2111637566+017	-.4371210138+017	18	-.4120215326+015	*30662278985+016
19	-.3130769161+019	-.2223824535+018	19	-.4201486530+017	*4752874895+017
20	-.6586572253+020	-.7366325459+020	20	-.1326200541+019	*3482728185+018
30	-.677006212+035	-.2499086560+034	30	-.2741545957+033	*2070792543+033
31	-.6060087067+036	-.4555087985+036	31	-.116017198+035	*6744884189+033
40	-.1589700124+051	-.2650027905+050	40	-.1298236716+049	*2230177617+049
41	-.2908142875+052	-.4980381854+052	41	-.1011205784+051	*5095949012+050
50	-.1003805639+067	-.2028271723+067	50	-.3094981534+065	*2407604435+066
51	-.5084917435+070	-.3928675106+069	51	-.8926795806+067	*1025735523+068
60	-.2031429147+085	-.1747629569+085	60	-.4609394035+083	*1647772152+083
61	-.1955863053+087	-.3783337511+087	61	-.3562579426+085	*1091659716+086
70	-.5822708996+104	-.1858676222+104	70	-.4018117762+102	*5029168925+102
71	-.4807381396+106	-.6022543438+106	71	-.4321862974+103	*5015819795+104
80	-.3377835551+123	-.3146536478+124	80	-.8938270115+121	*4823819157+121
81	-.3301431156+125	-.1783184328+125	81	-.4251029794+123	*8012457421+123
90	-.4805204686+143	-.2594218174+143	90	-.5588398479+141	*5199934780+140
91	-.5356451364+145	-.4998797115+146	91	-.4378368401+143	*3546971312+143
99	-.2776955988+162	-.3246441529+161	99	-.5334144463+159	*6688996001+159
100	-.1822604364+163	-.2284496507+163	100	-.8994836077+161	*2876686165+161

REAL X = .150000000+001	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	N	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
0	.1527962033+001	*2583499773+001	0	*2569786906+001	-.1522279532+001
1	*2084581904+001	*7703563536+000	1	-.7793825701+000	-.2101193869+001
2	*7784418810-001	-.1223976791+001	2	-.1200584839+001	.5829592849-001
3	*5045089755+000	-.1494204243+000	3	-.9873522735-001	.5392780356+000
4	*1141127303+000	.1427676403+000	4	.1017796272+000	.2607244804+000
5	*2493136237-001	.4687104010-001	5	-.4048679729+000	.1786244599-001
6	*1319034414-001	-.8914519089-003	6	-.7479824957+000	-.1422138947+001
7	*1022267422-002	-.26896697050-002	7	.4038446663+001	-.5075909272+001
8	=.3870210946-003	-.39888725026-003	8	.2912851291+002	.7424107053+001
9	=.9129322487-004	*3109041543-004	9	.2833023062+002	*1539531438+003
10	=.1779846579-005	.1508254905-004	10	-.7373878572+003	.5261303590+003
11	*1847379782-005	.1173581056-005	11	-.5039346241+004	-.2810160139+004
12	*2471807672-006	-.1529711438-006	12	.2519041568+004	-.4005194506+005
13	-.5636266698-008	*3561308751-007	13	.2804491186+006	-.1139027130+006
14	-.3657097241-008	-.1417091494-008	14	.1827197319+007	.16492355832+007
15	-.3190017448-009	*3054483947-009	15	-.5969376582+007	.2062127386+008
16	.135163302-010	.4253043568-010	16	-.1969698178+009	.3423851633+008
17	.4207096096-011	.6318928730-012	17	-.1161996765+010	-.1603306199+010
18	*2186152765-012	-.3153720464-012	18	*9738509433+010	-.1836163725+011
19	-.1595654091-013	-.2875090743-013	19	*2303734642+012	*7105855485+010
20	-.2675851946-014	*1273023595-015	20	-.1114302607+013	*2451196113+013
30	-.5397151516-027	-.34222065261-026	30	*1337810730+025	-.4315299562+024
31	-.1756371588-027	*5530093801-028	31	*1788857857+026	.1833081258+026
40	*1646986714-039	-.4195440491-040	40	-.4650861170+037	-.2110561438+038
41	*1449768048-041	-.6705781624-041	41	*4065410976+039	-.3281766717+039
50	*2351320676-054	*6734738568-054	50	-.4096056986+052	.5337091157+051
51	*2302805989-055	*2938389657-056	51	-.6951597008+053	-.1033192719+054
60	*3810783205-069	*1696802473-069	60	*2711700216+066	.5895068374+067
61	*5018899418-072	*1135916944-070	61	*1859913329+069	.1037895152+069
70	*2256483826-085	*4131134158-085	70	*4486136363+083	.1587857402+082
71	-.1102988882-086	*4051771906-088	71	*7831724449+084	.1717589995+085
80	*1082606047-101	*7088293806-102	80	*1646374286+099	-.1420809809+100
81	-.3091374777-104	*2644056324-103	81	*6455957160+101	-.2341512029+101
90	*6318805996-119	*8164747243-119	90	*1564752461+117	-.3081340124+116
91	*1855950439-120	-.3670482577-121	91	*2287182495+118	-.8298532918+118
99	*1530937529-134	*594506267-135	99	*6757141594+132	.6124063837+132
100	-.2029671666-136	*1841462765-136	100	-.1458388355+134	.5211271024+134

REAL X = .150000000+001		IMAGINARY X = -.100000000+002	
N	FIRST KIND	IMAGINARY BESSSEL	SECOND KIND
0	REAL BESSSEL	REAL BESSSEL	IMAGINARY BESSSEL
0	.2373488478+003	.1062962135+004	-.2373488474+003
1	.9624868439+003	-.1985426696+003	-.9624868488+003
2	-.1367378856+003	-.7893077264+003	.1367378849+003
3	-.5865469693+003	.7378274565+002	.5865469771+003
4	.2599426333+002	.3953363912+003	-.2599426100+002
5	.2420056231+003	.1293293291+001	-.2420056402+003
6	.1166667083+002	-.1347793460+003	-.1166668103+002
7	-.6842307968+002	-.1216400271+002	-.1216397952+002
8	-.8878591476+001	.3172651456+002	.3172641485+002
9	.1346061947+002	.5314766238+001	.5314625682+001
10	.2754601935+001	-.5232739142+001	-.5232300033+001
11	-.1865067576+001	-.1269434959+001	-.1268391830+001
12	-.5284365204+000	.6091592054+000	.6068440908+000
13	.1818769070+000	.2008172579+000	.1914575891+000
14	.7020238459+001	-.4935613606+001	-.3614376480+001
15	-.1202768271+001	-.2270772622+001	-.772467397+001
16	-.6827246369+002	.2564048911+002	-.569218041+001
17	-.4473909219+003	.1914856974+002	-.1245947451+001
18	.5024354392+003	-.4945904480+004	-.3950736540+000
19	.4296251245+005	-.1235989249+003	-.1784559963+002
20	-.2854877516+004	-.4868574967+005	-.2546842074+002
30	.2200512256+013	.1687855548+011	-.9030780611+009
31	.2525328112+012	.3405511554+013	-.1626341038+010
40	.4287402138+020	.6449291579+021	-.2248106413+016
41	-.2346276125+023	-.5210652270+021	.2198325913+019
50	-.2663559116+030	.9899060426+030	.9395619947+027
51	.9819989474+031	.1173727063+031	.3372922145+027
60	-.320116438+040	.1242332350+040	-.5064580081+037
61	.6209882231+042	.2735577173+041	-.2822770113+039
70	.1031565528+051	.2036637829+051	-.2890711909+049
71	.1524552724+052	-.5076074717+053	.7197601313+049
80	.3165544638+063	-.2000027228+063	.6524583324+060
81	-.9346618633+065	-.2117397167+064	.2511682868+062
90	-.1095459126+075	-.1425145871+075	.2644962672+073
91	-.8656429600+077	.481173246+077	-.1894115347+074
99	-.4483255472+087	-.3606099273+087	.6329575038+084
100	-.2122144337+086	.1958235163+088	-.9502874832+085

REAL X = .1500000000+001	FIRST KIND REAL BESSEL	IMAGINARY BESSEL	SECOND KIND REAL BESSEL	IMAGINARY BESSEL
N				
0	*.1151594066+041	*.1338964295+042	0	*.1338964295+042
1	*.1325594934+042	-.1138072721+041	1	-.1138072721+041
2	-.1111495729+041	-.1299256595+042	2	-.1299256595+042
3	-.1260730061+042	.1072768204+041	3	*.1072768204+041
4	*.1023184160+041	.1211137958+042	4	*.1211137958+042
5	*.1151890264+042	-.9643556599+040	5	-.9643556599+040
6	-.8981269855+040	-.1084617614+042	6	-.1084617614+042
7	-.1011066787+042	.8264801303+040	7	*.8264801303+040
8	.7514382932+040	*.9331731293+041	8	*.9331731293+041
9	.8526846148+041	-.5749737946+040	9	-.6749737946+040
10	-.5989260759+043	-.7713918208+041	10	-.7713918208+041
11	-.6909173917+041	.5249342352+040	11	*.5249342352+040
12	*.4543870731+040	.6126976293+041	12	*.6126976293+041
13	*.5379477977+041	..3883920278+040	13	..3883920278+040
14	-.3277628302+040	-.4676416602+041	14	-.4676416602+041
15	-.4025047678+041	.2730243526+040	15	*.2730243526+040
16	*.2244320587+040	.3430201784+041	16	*.3430201784+041
17	*.2894446413+041	-.1820027542+040	17	-.1820027542+040
18	-.1455529988+040	-.2418328725+041	18	-.2418328725+041
19	-.2000673703+041	-.1147415540+040	19	*.1147415540+040
20	*.8911255067+039	.1638912588+041	20	*.1638912588+041
30	-.2204557024+038	-.1302459134+040	30	-.1302459134+040
31	-.9586015833+039	*.1196770925+038	31	*.1196770925+038
40	-.1329651878+037	*.3957893630+038	40	*.3957893628+038
41	*.2649869637+036	*.1042387225+037	41	*.1042387225+037
50	*.4560864850+035	-.4730778331+036	50	-.4730764226+036
51	-.2890188013+036	-.2986692742+035	51	-.2986692742+035
60	-.3928936479+035	*.2298121784+034	60	*.2298121784+034
61	*.1285570214+034	*.2301976445+033	61	*.2301976445+033
70	*.1209937439+031	-.4700542080+031	70	-.4700542080+031
71	-.2416422166+031	-.6445399904+030	71	-.6445399904+030
80	-.1498038428+028	*.4198545883+028	80	*.4198545883+028
81	*.1990735971+028	.7316508031+027	81	*.7316508031+027
90	*.8006561994+024	-.1698177812+025	90	-.1698177812+025
91	-.7453163320+024	-.3606791931+024	91	-.3606791931+024
99	-.7845096659+021	*.4637453909+021	99	*.4637453909+021
100	-.1950709148+021	.3221219781+021	100	.3221219781+021

REAL X = .1600000000+001	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	N	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
	0	.000000000	0	.1824970144-001	.000000000
	1	.4087081401+000	1	-.6135274385+000	.000000000
	2	.1415942608+000	2	-.1168238649+001	.000000000
	3	.3377392499-001	3	-.3037418338+001	.000000000
	4	.6166660979-002	4	-.1212046658+002	.000000000
	5	.9135430196-003	5	-.6514020619+002	.000000000
	6	.1139472806-003	6	-.4357184509+003	.000000000
	7	.1227863571-004	7	-.3475072208+004	.000000000
	8	.1164929119-005	8	-.3214308350+005	.000000000
	9	.9873618030-007	9	-.3380451899+006	.000000000
	10	.7563022131-008	10	-.3982143547+007	.000000000
	11	.5284851738-009	11	-.5192758887+008	.000000000
	12	.3395224174-010	12	-.7424769464+009	.000000000
	13	.2018603366-011	13	-.1154927470+011	.000000000
	14	.1116900695-012	14	-.1941515336+012	.000000000
	15	.5779142917-014	15	-.3507447272+013	.000000000
	16	.2808245374-015	16	-.6776263936+014	.000000000
	17	.1286316675-016	17	-.1394096989+016	.000000000
	18	.5572352170-018	18	-.3042810900+017	.000000000
	19	.2289764450-019	19	-.7022559237+018	.000000000
	20	.8948677491-021	20	-.1708706003+020	.000000000
	30	.7308499455-036	30	-.1403850995+035	.000000000
	31	.1857288618-037	31	-.5348371962+036	.000000000
	40	.2227063963-052	40	-.3467382001+051	.000000000
	41	.4294694276-054	41	-.1754659588+053	.000000000
	50	.5765687014-070	50	-.1073805818+069	.000000000
	51	.8958528054-072	51	-.6776663323+070	.000000000
	60	.2072404217-088	60	-.2493286287+087	.000000000
	61	.2696259375-090	61	-.1885212461+089	.000000000
	70	.1434454527-107	70	-.3090907550+106	.000000000
	71	.1605182291-109	71	-.273506443+108	.030000000
	80	.2415646041-127	80	-.1607335943+120	.000000000
	81	.2371412041-129	81	-.161722031-128	.000000000
	90	.1179630617-147	90	-.2927677926+146	.000000000
	91	.1031449032-149	91	-.3311673941+148	.000000000
	99	.2405620527-166	99	-.1305737818+165	.000000000
	100	.1915041973-168		.1623905355+167	.000000000

REAL X = .160000000+001		IMAGINARY X = -.100000000-002		
FIRST KIND		SECOND KIND		
N	REAL BESSEL	IMAGINARY BESSEL	REAL BESSEL	
0	.6247335588+000	.4087081787-003	0	.1825009389-001
1	.40970825560+000	-.1138483343-003	1	-.6133270150+000
2	.1415942552+000	-.1432189218-003	2	-.1168236878+001
3	.3377359844-001	-.5715944984-004	3	-.3037408722+001
4	.6166619038-002	-.1450310608-004	4	-.1212040352+002
5	.9135398366-003	-.2740872959-005	5	-.6513971198+002
6	.1139465623-003	-.4150231941-006	6	-.4357139439+003
7	.1227854040-004	-.5255400809-007	7	-.3475025350+004
8	.1164915898-005	-.5725894701-008	8	-.3214253673+005
9	.9873443647-007	-.5478260852-009	9	-.3380381164+006
10	.7562842639-008	-.4674019178-010	10	-.3982043085+007
11	.5284740627-009	-.3599362834-011	11	-.5192603516+008
12	.3395138212-010	-.2526214424-012	12	-.7424509576+009
13	.2018547802-011	-.1628932500-013	13	-.1154680724+011
14	.1116861515-012	-.9714992594-015	14	-.1941425371+012
15	.5778908597-014	-.5389801062-016	15	-.3507262816+013
16	.2808115662-015	-.2795344453-017	16	-.6775862560+014
17	.1286242548-016	-.1361118073-018	17	-.1394004609+016
18	.5572021780-018	-.6245888979-020	18	-.30425856679+017
19	.2289612591-019	-.2710093067-021	19	-.7021986879+018
20	.8948017683-021	-.1115225883-022	20	-.1708552720+020
30	.7307261249-036	-.1368414243-037	30	-.1403579734+035
31	.1856952168-037	-.3563719258-039	31	-.5347271664+036
40	.2226386522-052	-.5562829375-054	40	-.3466217673+051
41	.4293320795-054	-.1099595212-055	41	-.1754041598+053
50	.5762931072-070	-.1800605891-071	50	-.1073250220+069
51	.8954071032-072	-.2853710638-073	51	-.6773019379+070
60	.2070972517-088	-.7767090170-090	60	-.2491446075+087
61	.2694333531-090	-.1027367066-091	61	-.1883775403+089
70	.1433102285-107	-.6272218034-109	70	-.3087823582+106
71	.1603625164-109	-.7116987060-111	71	-.2720712479+108
80	.2412666035-127	-.1207101686-128	80	-.1605252088+126
81	.2368412495-129	-.1199803755-130	81	-.1615071564+128
90	.1177786163-147	-.6631009524-149	90	-.2922893557+146
91	.1029800047-149	-.5862416920-151	91	-.3306143105+148
99	.2401064635-165	-.1487365538-167	99	-.1303163586+165
100	.1911341158-163	-.1195994704-169	100	-.1620639838+167

REAL X = .160000000+001	IMAGINARY X = -.100000000-001	REAL BESSSEL	IMAGINARY BESSSEL
FIRST KIND	SECOND KIND	REAL BESSSEL	IMAGINARY BESSSEL
N			
0	REAL BESSSEL	IMAGINARY BESSSEL	IMAGINARY BESSSEL
0	.6247391943+000	.4087120021-002	.1828894601-001
1	.4087197260+000	-.1138490842-002	-.6132850930+000
2	.1415936986+000	-.1432209768-002	-.1168061605+001
3	.3377127036-001	-.5715959550-003	-.3036456859+001
4	.6165466900-002	-.1450277509-003	-.1211416172+002
5	.9132247254-003	-.2740704977-004	-.6509079666+002
6	.1138854464-003	-.4149764089-005	-.4352678700+003
7	.1226910505-004	-.5254470058-006	-.3470388018+004
8	.1163707161-005	-.5724438088-007	-.3208842942+005
9	.9860181361-007	-.5476373161-008	-.3373381861+006
10	.7550975121-008	-.4671926802-009	-.3972103193+007
11	.52273743091-009	-.3597334116-010	-.5177232226+008
12	.3386630448-010	-.2524465049-011	-.7398800520+009
13	.2012548998-011	-.1627573602-012	-.11502556951+011
14	.1112984343-012	-.9705386016-014	-.1932527664+012
15	.5755722497-014	-.5383568683-015	-.3489021846+013
16	.2795221701-015	-.2791607958-016	-.6736175213+014
17	.1279548520-016	-.1359035689-017	-.1384871347+016
18	.5539338482-018	-.6235046177-019	-.3020421913+017
19	.2274591744-019	-.2704795026-020	-.6965416204+018
20	.8882753256-021	-.1112787197-021	-.1693404825+020
30	.7184969305-036	-.1361284542-036	-.1376822653+035
31	.1823731281-037	-.3573655703-038	-.5238762598+036
40	.2159625759-052	-.5509919069-053	-.3351656219+051
41	.4157999844-054	-.1088586663-054	-.1693253333+053
50	.549208835-070	-.1773451308-070	-.1018755953+069
51	.8516190076-072	-.2808687290-072	-.6415739518+070
60	.1930752381-088	-.7596944591-089	-.2311641653+087
61	.2505786619-090	-.1004090031-090	-.174342134+089
70	.1301198186-107	-.6084229760-108	-.2787837952+106
71	.1451809570-109	-.6899396980-110	-.2449065625+106
80	.2123365815-127	-.1159711440-127	-.1403587132+126
81	.2077367043-129	-.1151505926-129	-.1407269837+126
90	.9996940192-148	-.6301123946-148	-.2462559120+146
91	.8706714921-150	-.5564236489-150	-.2774313721+148
99	.1963544130-166	-.1397830390-166	-.10566906964+165
100	.1556162579-168	-.1122541335-168	-.1308464232+167

REAL X = .1600000000+001	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	N	SECOND KIND REAL BESSSEL	IMAGINARY BESSEL
0	.6253029329+000	*4090944659-001	0	*2216553716-001	-.6119217844-001
1	*4098673846+000	-.1139244886-001	1	-.6091223581+000	-.7814327219-001
2	*1415379888+000	*1434265558-001	2	-.1150704190+001	-.1558601227+000
3	*3350819455-001	*5717416142-002	3	-.2942513228+001	-.6303968354+000
4	*6047213604-002	*1446964886-002	4	-.1150086016+002	-.3395036304+001
5	*8817448607-003	*2723901281-003	5	-.6030918077+002	-.2241941325+002
6	*1077819954-003	*4103001991-004	6	-.3919155706+003	-.1759519567+003
7	*1133083211-004	*5161552619-005	7	-.3022611568+004	-.1599872782+004
8	*1043802221-005	*5579254182-006	8	-.2690102936+005	-.1652866443+005
9	*8546891090-007	*5288593580-007	9	-.2707553141+006	-.1911283071+006
10	*6290451556-008	*4464277326-008	10	-.3034506661+007	-.2444457964+007
11	*4198652416-009	*3396555984-009	11	-.3740475523+008	-.3424710187+008
12	*2559854759-010	*2351876982-010	12	-.5019175004+009	-.5214171319+009
13	*1433913292-011	*1493982798-011	13	-.7267325668+010	-.8563441236+010
14	*7414025403-013	*8764691040-013	14	-.1126541049+012	-.1511601551+012
15	*3651232575-014	*4775920156-014	15	-.1856073537+013	-.2847667174+013
16	*1579904124-015	*2429023426-015	16	-.3227391367+014	-.5704655183+014
17	*6538437917-017	*1157997173-016	17	-.587952839+015	-.1210600524+016
18	*2517761156-018	*5194023088-018	18	-.1113047304+017	-.2712251160+017
19	*9007447048-020	*2199132095-019	19	-.2167547362+018	-.6395813983+018
20	*2981441334-021	*8814981680-021	20	-.4281137264+019	-.1563094081+020
30	*2284336847-036	*7404917630-036	30	*4673224626+034	-.1236023829+035
31	*6982668647-038	*1845449901-037	31	*2067051343+036	-.4579650153+036
40	*1921516375-052	*1450971819-052	40	*2669557787+051	-.1766029391+051
41	*3880463379-054	*2566297873-054	41	*1401347353+053	-.8060441022+052
50	*6354684982-070	*1411348142-071	50	*9713553361+068	*3902094995+067
51	*9887377740-072	*398107349-073	51	*6090912573+070	*6271352858+069
60	*1919781630-068	*1319701651-088	60	*1742505474+087	*1365284798+087
61	*2390341612-090	*1873125362-090	61	*1248116502+089	*1110350323+089
70	*5548215247-108	*1547793465-107	70	*7484245985+105	*2585148970+106
71	*5125777322-110	*1770821306-109	71	*5150469412+107	*2310067288+108
80	*7806274492-128	*2713342582-127	80	*4609891495+125	*1292792489+126
81	*9328423900-130	*2615749436-129	81	*5430152961+127	*1266798589+128
90	*1105128317-147	*8690259050-148	90	-.2017990954+146	*13923677254+146
91	*1013803141-149	*6994576483-150	91	-.2371858656+148	*1426728291+148
99	*2901835193-166	*3044067368-167	99	-.1073499302+165	*4523883229+163
100	*2325209267-168	*9793179308-170	100	-.1333385529+167	-.2708535792+165

REAL X = .1600000000+001	FIRST KIND REAL BESSSEL	IMAGINARY X = -.5000000000+000	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
N 0	.6390834062+000	.2092233982+000	0 *1114300282+000	-.2907238112+000
1	.4380925730+000	-.5787714212-001	1 *5239054877+000	-.3549326807+000
2	.1401550506+000	-.7423102192-001	2 *81168917080+000	-.5952317400+000
3	.2696719905-001	-.2876352263-001	3 *1272199250+001	-.206449237+001
4	.3156447138-002	-.6824984072-002	4 *1679926538+001	-.9225739376+001
5	.1378782153-003	-.1156576124-002	5 *7437638765+001	-.4790163490+002
6	-.2910718319-004	-.1491830458-003	6 *1420220740+003	-.2762410795+003
7	-.8248184322-005	-.1502673818-004	7 *1682820779+004	-.1668351380+004
8	-.1232990246-005	-.1173928861-005	8 *1866371958+005	-.9481508844+004
9	-.1357798697-006	-.6624477779-007	9 *2078509863+006	-.3359336538+005
10	-.1198578584-007	-.1782885176-008	10 *2343525161+007	*3487505701+006
11	-.8756853812-009	-.1395488842-009	11 *2651211108+008	*1296065150+008
12	-.5337223951-010	-.2666348764-010	12 *2918077473+009	*2778828873+009
13	-.2671620903-011	-.2581547007-011	13 *2891201886+010	*5240744809+010
14	-.1028166453-012	-.1891630560-012	14 *1897860741+011	*9418169045+011
15	-.22427366538-014	-.1445099325-013	15 *1754987207+012	*1647862546+013
16	-.6571332317-016	-.5902708066-015	16 *1220638288+014	*2802459128+014
17	-.1148931188-016	-.2607736064-016	17 *3937400785+015	*4532607148+015
18	-.8516783039-018	-.9730204080-018	18 *1055736903+017	*6552811229+016
19	.4751304401-019	-.2899408049-019	19 *2672728984+018	*6743467442+017
20	-.221153951-020	-.5507595104-021	20 *6392476068+019	-.3638118273+018
30	-.2782120457-035	-.1018510005-035	30 *3501038163+034	-.1616014639+035
31	-.7878636591-037	-.3757903956-038	31 *1163211176+036	*3024927610+035
40	-.1287997456-051	-.6391277738-052	40 *5061677708+050	*8076165140+049
41	.2868946319-053	-.4556496204-054	41 *2449922163+052	-.3575336451+051
50	-.4987504887-069	-.3207317729-069	50 *9607016655+067	-.2647629630+067
51	-.9306897787-071	-.2560291719-071	51 *5999289734+069	*204818874+068
60	-.2633915675-087	-.2142910348-087	60 *1348646910+086	*391402379+085
61	.4298158054-089	-.1716638742-089	61 *1045094073+088	*8095412182+086
70	-.2622713912-106	-.2672515180-106	70 *9690688704+104	-.5339542877+104
71	-.3869542063-108	-.2073126255-108	71 *9335590480+106	-.1766828728+106
80	.6190953874-126	-.7912456294-126	80 *3035883927+124	*2095278991+124
81	.8505223447-128	-.5867760594-128	81 *338083016+126	*1050779806+126
90	-.4097252847-146	-.6656936170-146	90 *3180965038+144	-.2768795885+144
91	-.5401723369-148	-.4700869510-148	91 *416531908+146	-.1628820577+146
99	*3298662556-165	*2401727601-164	99 *5259688887+162	*1119272765+163
100	*8601452391-167	*1829836548-166	100 *9922850126+164	*1081897702+165

REAL X = .1600000000+001	FIRST KIND	IMAGINARY X = -.1000000000+001	SECOND KIND
N	REAL BESSSEL	IMAGINARY BESSEL	REAL BESSSEL
0	.6835845389+000	.4486874077+000	.3502223706+000
1	.5314155881+000	-.1216231847+000	-.3814344354+000
2	.1354223087+000	-.1648515994+000	-.3741464385+000
3	.4437351804+002	-.5862997584+001	-.3703275821+000
4	-.6178440384+002	-.1087712725+001	-.1271056024+001
5	-.1930440639+002	-.9870454825+003	-.2679929508+001
6	-.3154514522+003	-.3250716379+004	-.6405560414+000
7	-.3135243280+004	-.2504551839+004	-.2274023801+002
8	-.142132910+005	-.4236080425+005	-.1064059130+003
9	-.1054152786+006	-.4334501734+006	-.3210219644+003
10	-.2895065562+007	-.2790147494+007	-.1450429702+004
11	-.3239512145+008	-.66929415+009	-.6889656024+004
12	-.2340832759+009	-.8827784142+010	-.5234596631+008
13	-.1056568436+010	-.1397204055+010	-.1119979765+010
14	-.9724639306+013	-.1137516482+011	-.488124246+005
15	-.3191733481+013	-.6184129116+013	-.1399173043+006
16	-.3431724788+014	-.2024366541+014	-.8360392879+007
17	-.2149609627+015	-.6046392159+017	-.2360392879+012
18	-.9128481268+017	-.6098075895+017	-.6598779009+007
19	-.2173797264+018	-.48514888595+018	-.5671704515+008
20	-.3396872101+020	-.2424980919+019	-.1119979765+010
30	-.5382209724+034	-.8854202752+034	-.3877357793+014
31	-.4096163869+037	-.3104154558+035	-.1463902788+034
40	-.1548576885+049	-.5365633061+050	-.2510462387+048
41	-.2337946504+051	-.2901796286+051	-.2061327742+049
50	-.2062790464+066	-.7762149285+067	-.8969408729+030
51	-.3958275883+068	-.7982250347+069	-.1463902788+034
60	-.2031976100+084	-.3580182247+084	-.2510462387+048
61	-.5555127086+086	-.3004282862+086	-.2061327742+049
70	-.2638991552+103	-.1457304879+102	-.8969408729+030
71	-.7241571741+105	-.1815120532+104	-.1463902788+034
80	-.9950765703+122	-.8310772102+122	-.2510462387+048
81	-.4667582566+124	-.1426397224+123	-.2061327742+049
90	-.3291427827+141	-.9467752102+145	-.8969408729+030
91	-.2878231100+143	-.1798121580+143	-.1463902788+034
99	-.9182796787+160	-.2813331601+159	-.2061327742+049
100	-.2130857625+161	-.1782513395+161	-.8969408729+030

REAL X = .160000000+001	FIRST KIND REAL BESSSEL	IMAGINARY X = -.300000000+001	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
N 0	2652087862+001	0	2639374004+001	.1309675828+001
1	.6008381291+000	1	-.6117485556+000	-.2148399161+001
2	-.1240625815+001	2	-.1220758140+001	-.5866785452+001
3	-.2101355121+000	3	-.1569406575+000	.5237698410+000
4	-.1319977279+000	4	-.1172199028+000	.2810267136+000
5	-.5311024213-001	5	-.3534187429+000	-.1000815475+000
6	-.1562524576-002	6	-.9409968010+000	-.1137547758+001
7	-.2650472190-002	7	-.2498023338+001	-.5321523469+001
8	-.3183102807-003	8	-.2684247744+002	-.1864585616+000
9	-.8349923541-005	9	-.6148335842+002	.1233054920+003
10	-.1596468900-004	10	-.4731503451+003	.6276119246+003
11	-.1926639124-005	11	-.4857106442+004	-.8776922633+003
12	-.3315244195-006	12	-.9750098003+004	-.3241322886+005
13	-.4116762884-007	13	-.1814118854+006	-.1745356732+006
14	-.3298785371-008	14	-.1910648279+007	.6513076339+006
15	-.1898807392-009	15	-.2585916490+007	.1716822724+008
16	-.5481762116-010	16	-.1289334576+009	.9381532772+008
17	-.3033646671-011	17	-.1394921903+010	-.6928570678+009
18	-.2267805198-012	18	-.3532217721+009	-.1612035474+011
19	-.42339954084-013	19	-.1544670886+012	-.8506003371+011
20	-.1635142494-014	20	-.1695240955+013	.1120242783+013
30	-.4174782982-026	30	-.392298474+024	-.8374496136+024
31	-.2526279150-027	31	-.1660134616+026	-.8177626226+024
40	-.210917171-039	40	-.1194919097+038	-.3325138659+037
41	-.1650625414-040	41	-.6369901625+038	-.288460545+039
50	-.1169070262-053	50	-.1993287906+051	.2059914114+052
51	-.4592911122-056	51	-.5683822289+053	.2353216343+053
60	-.3742237268-069	60	-.2570205487+067	-.2127421619+066
61	-.2593465061-070	61	-.4969553611+068	.7721277483+068
70	-.2739536885-084	70	-.4467260847+082	-.1652834351+083
71	-.2794768009-086	71	-.5180270246+084	-.4859311975+084
80	-.3831077385-101	80	-.4294014250+099	.2057409531+099
81	-.3447556301-103	81	-.1816450326+101	-.1336674582+101
90	-.4894475116-118	90	-.2732360659+116	.3742551336+116
91	-.5262324282-120	91	-.1074326045+118	.2221157128+118
99	-.1035346242-134	99	-.7495101899+131	.2221415829+132
100	-.1010167978-135	100	-.9411786999+133	-.9988580369+133

REAL X = .1600000000+001	FIRST KIND	IMAGINARY X = -.1000000000+002	SECOND KIND
REAL BESSEL	IMAGINARY BESSEL	REAL BESSEL	IMAGINARY BESSEL
N	1078392150+004	0	.1078392146+004
0	.1403846302+003	1	-.1098729909+003
1	.9754347932+003	2	-.7982085161+003
2	-.6259332064+002	3	-.1709478791+002
3	-.5911751449+003	4	-.3965819604+003
4	-.1363324556+002	5	-.2662389192+002
5	.2412463605+003	6	-.33266058+003
6	.2647750345+002	7	-.2008975780+002
7	-.6695502543+002	8	-.3063922268+002
8	-.1276316004+002	9	-.7059820690+001
9	.1278355694+002	10	-.4864121583+001
10	.3473516906+001	11	-.1539812303+001
11	-.1685899958+001	12	-.5286278826+000
12	-.6224760335+000	13	-.2205770884+000
13	.1502501007+000	14	-.3618014643-001
14	.7876062995-001	15	-.1330278889+C01
15	-.8050508355-002	16	-.7683295494-001
16	-.7329370768-002	17	-.1010191217-001
17	.7649914988-004	18	-.1202320206+001
18	.5143867498-003	19	-.1330278889+C01
19	.3058834525-004	20	-.1612155965+002
20	-.2756341099-004	21	-.3967256489+002
30	-.5131484339-012	31	-.7790331375+009
31	.2496571691-012	32	-.3138973794+010
40	.4451391168-020	41	-.1052746955+018
41	.2193423431-021	42	-.1754821500+019
50	.2524989739-030	51	-.8081228301+027
51	-.9873123113-031	52	-.4635378678+028
60	-.3661903219-040	53	-.8088190524+037
61	-.1140940245-041	54	-.2208252618+039
70	-.5574273529-052	55	-.2536663857+049
71	.1660555835-052	56	-.1969426219+050
80	.4117102827-063	57	-.5413708461+060
81	.9728147851-065	58	-.1970515702+062
90	.4671762382-076	59	-.2437627859+073
91	-.1051833292-076	60	-.2457939305+074
99	.5225323389-088	61	-.7184043481+084
100	-.3263716466-088	62	-.5623537338+085

REAL X = .160000000+001		IMAGINARY X = -.100000000+003	
FIRST KIND	SECOND KIND	REAL BESSEL	IMAGINARY BESSEL
N	REAL BESSEL	1343769397+042	174555796+040
0	IMAGINARY BESSEL	1343769397+042	174555796+040
1	1778309577+040	1778309577+040	130332304+042
2	-1303861109+042	-1303861109+042	-1785059760+040
3	-1793361625+040	-1793361625+040	1265141657+042
4	121530378+042	121530378+042	1801216176+040
5	1806252613+040	1806252613+040	1155766379+042
6	-1088170232+042	-1088170232+042	-1805942061+040
7	-1797821711+040	-1797821711+040	104302901+042
8	-1779708217+040	-1779708217+040	179708217+040
9	8551717278+041	1749881191+040	8551717278+041
10	-1735263737+041	-7735263737+041	-1707221552+040
11	-1651294764+040	-1651294764+040	6927154155+041
12	-1582374990+040	-6141818527+041	1582374990+040
13	5391459711+041	1501412128+040	5391459711+041
14	1409948916+040	-4685848523+041	-1409948916+040
15	-4032257379+041	-1309999315+040	4032257379+041
16	-1203901842+040	34355119061+041	1203901842+040
17	2898190750+041	1094162368+040	2898190750+041
18	9833001697+039	-242079935+041	9833001697+039
19	-2002142279+041	-8737090619+039	-8737090619+039
20	-7675425472+039	1639618638+041	1639618638+041
30	1127123489+039	-1297923575+040	-1297923575+040
31	-9548016507+039	-8751408993+038	-8751408993+038
40	-5548393823+037	3921957652+038	3921957650+038
41	2624066202+038	3876133881+037	3876133877+037
50	9782196621+035	-4652611026+036	-46525994980+036
51	-2839964431+036	-6188475067+035	-6188416695+035
60	-6565521887+033	2238265707+034	1930936750+034
6*	1250700559+034	3782836714+033	2108434255+033
70	1771857039+031	-4522934512+031	1368003470+036
71	-2321413553+031	-9346201524+030	1070509699+036
80	-2021533070+028	3976942685+028	-1359183513+039
81	1882353953+028	9809135156+027	-1482536543+039
90	1021430137+025	-1577377810+025	2892634868+042
91	-6907588067+024	-4579744851+024	4311056601+042
99	-7127219190+021	-5695068131+021	4245813601+045
100	-23866670936+021	.2918295675+021	.1265498976+046

REAL X = .2000000000+001		IMAGINARY X = .000000000	
FIRST KIND		SECOND KIND	
	REAL BESSSEL	IMAGINARY BESSSEL	IMAGINARY BESSSEL
N			
0	*4546487134+000	*000000000	*000000000
1	*435397753+000	*000000000	*000000000
2	*1984479491+000	*000000000	*000000000
3	*6072209765-001	*000000000	*000000000
4	*1407939276-001	*000000000	*000000000
5	*2635169771-002	*000000000	*000000000
6	*4140409734-003	*000000000	*000000000
7	*5609655705-004	*000000000	*000000000
8	*6683204324-005	*000000000	*000000000
9	*7106797192-006	*000000000	*000000000
10	*6825300865-007	*000000000	*000000000
11	*5976871612-008	*000000000	*000000000
12	*4810148901-009	*000000000	*000000000
13	*3581451402-010	*000000000	*000000000
14	*2481049219-011	*000000000	*000000000
15	*1606982166-012	*000000000	*000000000
16	*9773237728-014	*000000000	*000000000
17	*5602059151-015	*000000000	*000000000
18	*3036578644-016	*000000000	*000000000
19	*1531133992-017	*000000000	*000000000
20	*7632641101-019	*000000000	*000000000
30	*5836617888-033	*000000000	*000000000
31	*1854707915-034	*000000000	*000000000
40	*1660978779-048	*000000000	*000000000
41	*4004630255-050	*000000000	*000000000
50	*4011575290-065	*000000000	*000000000
51	*7792349663-067	*000000000	*000000000
60	*1344412351-082	*000000000	*000000000
61	*2186605360-084	*000000000	*000000000
70	*8673626016-101	*000000000	*000000000
71	*1213328655-102	*000000000	*000000000
80	*1361180595-119	*000000000	*000000000
81	*1670408709-121	*000000000	*000000000
90	*6193531370-139	*000000000	*000000000
91	*6769686681-141	*000000000	*000000000
99	*9413748726-157	*000000000	*000000000
100	*9367832591-159	*000000000	*000000000

REAL X = .200000000+001	FIRST KIND	IMAGINARY X = -.100000000-002	SECOND KIND
N	REAL BESSSEL	IMAGINARY BESSSEL	REAL BESSSEL
0	.4546487230+000	.4353978145-003	.2080736976+000
1	.4353978935+000	-.1925093522-004	-.3506118126+000
2	.1984479683+000	-.1377258716-003	-.7339908660+000
3	.6072207544+001	-.7700375941-004	-.1484363956+001
4	.1407937737-001	-.2552361348-004	-.446127769+001
5	.2635164293-002	-.6173881369-005	-.1859135923+002
6	.4140395997-003	-.1186025569-005	-.9779103134+002
7	.5609628723-004	-.1896545394-006	-.6170491336+003
8	.6683160528-005	-.2602209633-007	-.4530067425+004
9	.7106736443-006	-.3129798942-008	-.3788843033+005
10	.6825227194-007	-.3352872212-009	-.3554090524+006
11	.5976792178-008	-.3239166287-010	-.3693895623+007
12	.4810071760-009	-.2850262235-011	-.4212425460+008
13	.3581383230-010	-.2303120635-012	-.5228574670+009
14	.2480993836-011	-.1720653663-013	-.7016425364+010
15	.1606940737-012	-.1195454520-014	-.1012149071+012
16	.9772949138-014	-.7762502958-016	-.1561808022+013
17	.5601871331-015	-.4731337964-017	-.2566850233+014
18	.3036463935-016	-.2717279095-018	-.4476348626+015
19	.1561067997-017	-.1475426085-019	-.8255535286+016
20	.7632282191-019	-.7596959772-021	-.160534624+018
30	.5835985991-033	-.8736085628-035	-.1407220086+032
31	.1854493208-034	-.2868981698-036	-.4287211033+033
40	.1660655708-048	-.3317748599-050	-.3720130331+047
41	.4003811284-050	-.8199532627-052	-.1505694546+049
50	.4010348770-065	-.1002016550-066	-.1234613189+064
51	.7789869794-067	-.1985362022-068	-.6232220358+065
60	.1343818151-082	-.4030476382-084	-.3073863055+081
61	.2185606135-084	-.6664664865-085	-.1859141558+083
70	.8668394089-101	-.3033963060-102	-.4067405369+099
71	.1212575547-102	-.4304777112-104	-.2880960665+101
80	.1360106069-119	-.5441655475-121	-.2280352717+118
81	.1669056676-121	-.6761350542-123	-.1835359408+120
90	.6187334143-139	-.2785503398-140	-.4456611265+137
91	.6762760692-141	-.3078448334-142	-.4032642370+139
99	.9402339073-157	-.4657024522-158	-.2666206502+155
100	.9356246830-159	-.4681101168-160	-.2652537727+157

REAL X = .200000000+001	IMAGINARY X = -.100000000-001
FIRST KIND	SECOND KIND
REAL BESSEL	IMAGINARY BESSEL
N	N
0	4354017242-002
1	.1925061758-003
2	-.1377278755-002
3	-.7700432202-003
4	-.2552338800-003
5	-.6173675140-004
6	-.1185946939-004
7	-.1896341557-005
8	-.2601801270-006
9	-.3129127155-007
10	-.3351931359-008
11	-.3238016925-009
12	-.2849015804-010
13	-.2301904533-011
14	-.1719574834-012
15	-.1194576821-013
16	-.7755907564-015
17	-.4726732769-016
18	-.2714275773-017
19	-.1473586539-018
20	-.7586370872-020
30	-.8706992772-034
31	-.2858742287-035
40	-.3297553725-049
41	-.8146993518-051
50	-.9923369736-066
51	-.1965385047-067
60	-.3973869915-083
61	-.6567844264-085
70	-.2975607307-101
71	-.4219554910-103
80	-.5304409845-120
81	-.1536914432-121
90	-.2696374590-139
91	-.297727623-141
99	-.4476507363-157
10n	-.4495951339-159

REAL X = .2000000000+001	IMAGINARY X = -.1000000000+000	REAL BESSEL	IMAGINARY BESSEL	REAL BESSEL	IMAGINARY BESSEL
FIRST KIND	SECOND KIND	N	N	N	N
REAL BESSEL	IMAGINARY BESSEL	0	0	.2108645255+000	-.3499745775-001
• 4547448879+000	• 4357928247-001	1	1	-.3487027939+000	-.5577590664-001
• 4365831907+000	• 1921833254-002	2	2	-.7284415807+000	-.7454525498-001
• 1986405758+000	• 1379283416-001	3	3	-.1458564832+001	-.2209506121+000
• 6049964597-001	• 7706060323-002	4	4	-.4325234783+001	-.9514657055+000
• 1392533089-001	• 2550081632-002	5	5	-.1774290823+002	-.5020718716+001
• 2580411234-002	• 6153041668-003	6	6	-.9164014935+002	-.3146075644+002
• 4003254330-003	• 1178084364-003	7	7	-.5662333763+003	-.2286730123+003
• 5340727108-004	• 1875975040-004	8	8	-.4058981238+004	-.1891117905+004
• 6247573983-005	• 2561041194-005	9	9	-.3304734808+005	-.1752650826+005
• 6504060853-006	• 3062158918-006	10	10	-.3008035777+006	-.17985338385+006
• 6096502818-007	• 3258282827-007	11	11	-.3023326019+007	-.2023757464+007
• 5193696049-008	• 3123815987-008	12	12	-.3321998313+008	-.2476339633+008
• 4052448895-009	• 2725419204-009	13	13	-.3957486605+009	-.3275322960+009
• 2914666360-010	• 2181598250-010	14	14	-.5075530757+010	-.4652354137+010
• 1942820441-011	• 1613107855-011	15	15	-.6965137276+011	-.7063395877+011
• 19205679157-012	• 1108198266-012	16	16	-.1017223681+013	-.1141288967+013
• 6993083563-014	• 7108780289-014	17	17	-.1573346817+014	-.1955078998+014
• 3803362208-015	• 4276355937-015	18	18	-.2565675660+015	-.3538767751+015
• 1945011081-016	• 2421591685-016	19	19	-.4392410127+016	-.6747576730+016
• 9373682964-018	• 1295188694-017	20	20	-.7861935280+017	-.1351676655+018
• 4264805318-019	• 6562474230-019	21	21	-.3499228004+030	-.1353411355+032
• 4554C48915-034	• 6042709130-033	22	22	• 1012886983+032	-.4118270166+033
• 4851566031-036	• 1927433474-034	23	23	• 1616597381+047	-.3143740639+047
• 7201723225-049	• 1590704452-048	24	24	• 716221594+048	-.1236568491+049
• 1928310030-050	• 3748266567-050	25	25	• 9591639349+063	-.6502119873+063
• 3410714816-065	• 2569321230-065	26	26	• 4993594982+065	-.3032386040+065
• 6874605593-067	• 4659301017-067	27	27	• 2835620935+081	-.2726160901+080
• 1433687543-032	• 2104015419-083	28	28	• 1719627460+083	-.7885794360+081
• 2348920670-034	• 2255537731-085	29	29	• 3441605321+099	• 1471400372+099
• 8878787724-101	• 3282287575-101	30	30	• 2368037639+101	• 1155577457+101
• 1219059998-102	• 521274763-103	31	31	• 1276065405+118	• 1620585186+118
• 9883835778-120	• 11338868204-119	32	32	• 9594343504+119	• 1352355479+120
• 1143324331-121	• 1452143371-121	33	33	• 6630653572+136	• 3926466408+137
• 1493616272-139	• 6767358181-139	34	34	• 4212521342+138	• 3574084447+139
• 1262626961-141	• 7478534655-141	35	35	• 6566615001+154	• 2262845583+155
• 2454415451-157	• 1036585464-156	36	36	• 2213096034+157	
• 2958307845-159	• 1019314084-158	37	37	-.7639894658+156	
100	100				

REAL X = .2000000000+001	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	REAL X = -.5000000000+000	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
N 0	.4570043990+000	.2226771812+000	0	.2765720627+000	-.1677722945+000
1	.46544356410+000	-.9217809366-002	1	-.3071149230+000	-.2690909595+000
2	.2033345562+000	-.7141915645-001	2	-.6151727919+000	-.3205143270+000
3	.5500947754-001	-.3921870213-001	3	-.9518126303+000	-.8469267464+000
4	.1017220682-001	-.1246961025-001	4	-.1822740905+001	-.3253207710+001
5	.1275526892-002	-.2823192867-002	5	-.3323458334+001	-.1486132569+002
6	.8406433069-004	-.4938827358-003	6	-.3851260419+001	-.7797695369+002
7	-.5900919614-005	-.6963842266-004	7	-.1461429807+003	-.4562839927+003
8	-.2826546756-005	-.8095988316-005	8	-.1832953296+004	-.2884951853+004
9	-.5194778787-006	-.7825773787-006	9	-.02028738709+005	-.1895742424+005
10	-.6890600885-007	-.6235997528-007	10	-.2219355737+006	-.1212684466+006
11	-.7409799257-008	-.394281257-006	11	-.2472562668+007	-.6311487487+006
12	-.6755279449-009	-.1646433686-009	12	-.2824773356+008	-.1952487503+005
13	-.5334312850-010	-.4535524770-012	13	-.3299111408+009	-.8348301369+008
14	-.3684266279-011	-.9632742797-012	14	-.3898383071+010	-.2108697911+010
15	-.2227353158-012	-.1224586233-012	15	-.4567717094+011	-.4199440719+011
16	-.1166271966-013	-.1085213257-013	16	-.5092948594+012	-.7771029241+012
17	-.5116689043-015	-.7898178738-015	17	-.4846384588+013	-.1400321928+014
18	-.1695941794-016	-.4976045171-016	18	-.2165319543+014	-.2498198571+015
19	-.2288095654-018	-.2776054250-017	19	-.7152771831+015	-.4430056437+016
20	-.2289935760-019	-.1384765182-018	20	-.3347523456+017	-.7777288532+017
30	-.7220998824-033	-.1259685317-032	30	-.1498687195+031	-.5279133914+031
31	-.1291574588-034	-.4576921950-034	31	-.5039841619+031	-.1621311001+033
40	-.529334244-048	-.1982163252-048	40	-.8807464012+046	-.6112294282+046
41	-.141054704-049	-.7933955099-050	41	-.277213824+048	-.3168172543+048
50	-.1731405042-064	-.5875403670-065	50	-.2619725443+063	-.2167871830+062
51	-.3648496167-066	-.2997960140-067	51	-.1270381057+065	-.2084236321+064
60	-.4360110500-082	-.7057239988-082	60	-.3462128978+080	-.3375101916+080
61	-.9962119149-084	-.9733852587-084	61	-.2451392580+082	-.1428265528+082
70	-.9913644851-101	-.777779526-100	70	-.5097398958+097	-.4722166407+098
71	-.1124395000-102	-.2038725374-101	71	-.1121648098+100	-.3048041534+100
80	-.1134238167-118	-.1041084317-118	80	-.1078262797+117	-.1633739395+117
81	-.1072380873-120	-.1625636341-120	81	-.5073061272+118	-.1441861902+119
90	-.9472441119-138	-.4879397306-139	90	-.2702939155+136	-.8252382223+135
91	-.1022002543-139	-.3122315890-140	91	-.2126215881+138	-.1278459149+138
99	-.1199521878-155	-.1465371580-155	99	-.1032669575+154	-.7687899927+153
100	-.155827478-157	-.1159722844-157	100	-.1146966658+156	-.4780787714+155

REAL X = +200000000+001		IMAGINARY X = -.100000000+001	
N	FIRST KIND REAL BESSEL	N	SECOND KIND REAL BESSEL
0	.4634364484+000	0	.4705807342+000
1	.5607960428+000	1	-.2154014861+000
2	.2189073104+000	2	-.4280211908+000
3	.3592432091-001	3	-.2083306943+000
4	-.2263883374-002	4	.9519637152+000
5	-.2672744772-002	5	-.7368401543+001
6	-.7370267467-003	6	-.4238443994+002
7	-.12662744381-003	7	-.2222515878+003
8	-.1501048756-004	8	-.1000967178+004
9	-.1179713747-005	9	-.233227151+004
10	-.3462779474-007	10	-.2815694879+005
11	.b2969n8024-008	11	-.6478199775+006
12	.1310986027-c08	12	-.9095983373+007
13	.1473033400-c09	13	-.1065672513+009
14	.1190208572-c10	14	-.1068080853+010
15	.7126518960-c12	15	-.8071134314+010
16	.2796426273-c013	16	-.8461222069+010
17	.9890915142-c016	17	-.1417157278+013
18	-.9767974376-c016	18	-.4142817444+014
19	-.1036503481-c016	19	-.8559827344+015
20	-.7050989950-c018	20	-.1470712391+017
30	.4290748997-c032	30	-.8809871761+029
31	-.1209721659-c033	31	-.7402707356+031
40	.1372232453-c046	40	-.3778263769+045
41	.3870083480-c048	41	-.1140207081+047
50	-.4145247272-c063	50	-.2650377060+060
51	.1505755891-c065	51	-.9444651097+062
60	-.9713358307-c080	60	-.3390718658+078
61	-.1982672211-c081	61	-.1647630211+080
70	.1113067533-c097	70	-.1213075265+095
71	.2733123449-c100	71	-.3472711744+097
80	.83625n3570-c116	80	-.2671689162+114
81	.1392207426-c117	81	-.1855908546+116
90	-.9121623276-c135	90	-.3963759021+132
91	-.3978733627-c137	91	-.3239400829+134
99	-.19615n6034-c152	99	-.2730306482+150
100	-.47285337873-c154	100	-.3225369884+152

REAL X = .2000000000+001		IMAGINARY X = -.3000000000+001	
N	FIRST KIND	REAL BESSSEL	IMAGINARY BESSSEL
		SECOND KIND	REAL BESSSEL
0	• 4463290318+000	• 2753947028+001	• 2746687313+001
1	• 2179827080+001	• 9210018742-001	• 7652662656-001
2	• 4959833370+000	• 1202328193+001	• 1197321542+001
3	• 4109996749+000	• 4446795627+000	• 3954652248+000
4	• 2202698471+000	• 5951995875-001	• 1187480666+000
5	• 1760772011-001	• 6960828461-001	• 100778326+000
6	• 1377421370-001	• 1358215647-001	• 1007754362+001
7	• 4409678107-002	• 1121330571-002	• 1629882217+001
8	• 2834954428-003	• 9055720312-003	• 9348684714+001
9	• 1155997495-003	• 1349141586-003	• 7949330278+002
10	• 2985570729-004	• 4347127456-005	• 2030088137+003
11	• 1923999421-005	• 4273373550-005	• 124354293+004
12	• 3659574148-006	• 5620435617-006	• 1623918608+005
13	• 8896893016-007	• 3747657234-009	• 6573178990+005
14	• 5940912272-008	• 9255408315-008	• 3218438818+006
15	• 5232813011-009	• 1160181556-008	• 6829433433+007
16	• 1368011911-009	• 2123918292-010	• 4158584235+008
17	• 9503276078-011	• 1055817216-010	• 1264257379+009
18	• 3521601225-012	• 1533649319-012	• 5071603321+010
19	• 1205664325-012	• 4027577858-013	• 4441034731+011
20	• 8756464159-014	• 6896757252-014	• 3918317205+011
30	-• 1317306769-025	• 2682781405-025	• 7537476374+023
31	• 8625747306-027	• 1474633419-026	• 2564971908+025
40	• 9212290277-040	• 3029714337-038	• 9166357969+036
41	-• 1073408623-039	-• 7609847212-040	• 2370975893+038
50	• 9907441320-053	• 2432530728-052	• 1022894168+051
51	• 9006668435-054	• 1826867110-054	• 2080170932+052
60	-• 2272004597-067	-• 2209278115-067	• 7069532152+065
61	-• 9078317554-069	-• 1955596620-069	• 8942114441+066
70	• 6898970538-083	• 2608027395-083	• 2169250409+081
71	• 1511038242-084	-• 1083189986-084	• 3416419683+081
80	-• 4176051799-099	-• 1959107837-100	• 2149595991+097
81	-• 4758996856-101	-• 7927013864-101	• 7855890636+098
90	• 6179788790-116	-• 3016174178-116	• 2991041632+113
91	• 1804205596-118	-• 1342582157-117	• 8391583514+115
99	-• 2081802324-131	-• 2566015784-132	• 4336295694+129
100	-• 2453293108-133	-• 2852214315-133	• 9845918449+130

REAL X = .200000000+001	FIRST KIND REAL BESSSEL	IMAGINARY X = -.100000000+002	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
N	1051050842+004	N	1051050839+004	.2481020363+003
0	-.2481020336+003	0	-.2444585847+003	-.9452170686+003
1	+.9452170647+003	1	+.2444585847+003	-.9452170686+003
2	-.2321168871+003	2	-.7642886935+003	-.2321168906+003
3	-.5554516460+003	3	-.2063532279+003	-.5554516517+003
4	-.1679976284+003	4	-.3626486819+003	.1679976363+003
5	+.2125445366+003	5	-.1237367709+003	-.2125445477+003
6	-.8208352778+002	6	-.1116668792+003	-.8208355213+002
7	-.5244005567+002	7	-.4904909431+002	.5244008143+002
8	-.2646658089+002	8	-.2188340632+002	.2646668178+002
9	+.8016565972+001	9	-.12940460455+002	-.8016625050+001
10	-.5754222050+001	10	-.2509457307+001	-.57542756873+001
11	-.6255731204+000	11	-.2334937012+001	.6255434631+000
12	-.8671148457+000	12	-.9380868845+001	.870581782+000
13	-.153900041+001	13	-.2859626424+000	.1850683524+001
14	+.9236925932+001	14	-.6625322832-002	-.1195688461+000
15	-.1063685809+001	15	-.4835691616-001	-.6615731074+001
16	-.6974950790+002	16	-.2194025150+000	.2232697186+000
17	-.1472889730+002	17	-.6175726965+000	.9040267661+000
18	+.3603269236+003	18	-.3677480947+001	-.1693158470+001
19	-.12532835697+003	19	-.4024640425+001	-.1519212181+002
20	-.1062414949+004	20	-.5366641807+002	.5391468704+001
30	-.2146507918+011	30	-.1175359365+009	.7020093685+009
31	-.4652762861+013	31	-.4099340175+010	.151044040769+010
40	-.1663151387+020	40	-.1723841553+018	.9162092181+017
41	-.6508729732+021	41	-.989378773+018	-.1223614785+019
50	-.1238154149+029	50	-.461602543+027	-.4117366541+027
51	-.1117172707+030	51	-.315228327+028	-.5320725865+028
60	-.4803658268+040	60	-.4944887171+037	-.1320454401+038
61	-.1673891892+041	61	-.1661574657+039	.2743615071+038
70	-.7368612812+052	70	-.167557616+049	-.3533350877+047
71	-.2917242775+052	71	-.5001219599+049	.2274162858+050
80	-.7187953475+063	80	-.3254571882+060	.7562832364+060
81	-.1790600154+064	81	-.1075162484+062	.7399892526+061
90	-.2154642720+075	90	-.981742570+072	.1002051030+073
91	-.1498589672+076	91	-.2090174249+074	-.1366409183+074
99	-.9443991710+087	99	-.2023678906+084	.3091988425+084
100	-.3695137214+088	100	-.6704468032+085	-.2702315674+085

REAL X = .200000000+001	FIRST KIND	IMAGINARY X = -.100000000+003	SECOND KIND	REAL BESSSEL	N	IMAGINARY BESSSEL	REAL BESSSEL	IMAGINARY BESSSEL	IMAGINARY BESSSEL
N	REAL BESSSEL								
0	-.5346688749+041	.1232842378+042	0	.1232842378+042			.5346688749+041		
1	*1220411992+042	*5295707938+041	1	*5295707938+041			-1220411992+042		
2	*5195200578+041	-1195927041+042	2	-1195927041+042			-5195200578+041		
3	-.1160120237+042	-.5048006260+041	3	-.5048006260+041			.1160120237+042		
4	-4358216616+041	*1114044657+042	4	*1114044657+042			.4658216616+041		
5	*1059022178+042	*4630986377+041	5	*4630986377+041			-.1059022178+042		
6	*4372300969+041	-.9965803861+041	6	-.9965803861+041			-.4372300969+041		
7	-.9283821854+041	-.4088715249+041	7	-.4088715249+041			.9283821854+041		
8	-.37887079236+041	*8561526148+041	8	*8561526148+041			.37887079236+041		
9	*7816073438+041	*3474266747+041	9	*3474266747+041			-.7816073438+041		
10	*3156921696+041	-.7063869044+041	10	-.7063869044+041			-.3156921696+041		
11	-.6320000297+041	-.2841234654+041	11	-.2841234654+041			.6320000297+041		
12	-.2532759392+041	*5597785729+041	12	*5597785729+041			.2532759392+041		
13	*4908454686+041	*2236275718+041	13	*2236275718+041			-.4908454686+041		
14	*1955701426+041	-.4260961805+041	14	-.4260961805+041			-.1955701426+041		
15	-.3651931304+041	-.1694052772+041	15	-.1694052772+041			.3651931304+041		
16	-.1453449942+041	*3115718071+041	16	*3115718071+041			.1453449942+041		
17	*2624566517+041	*1235161587+041	17	*1235161587+041			-.2624566517+041		
18	*1039680859+041	-.2188844408+041	18	-.2188844408+041			-.1039680859+041		
19	-.1807327343+041	-.8668244528+040	19	-.8668244528+040			.1807327343+041		
20	-.7158460101+040	*1477510048+041	20	*1477510048+041			.7158460101+040		
30	*6260652896+039	-.1143377228+040	30	-.1143377228+040			-.6260652896+039		
31	*8387382536+039	-.4657899903+039	31	-.4657899903+039			.8387382536+039		
40	-.2134194086+038	*3341758704+038	40	*3341758704+038			.2134194086+038		
41	*2226972913+038	*1446330665+038	41	*1446330665+038			-.2226972916+038		
50	*2888304513+036	-.3785918233+036	50	-.3785918233+036			-.2888302797+036		
51	-.2298442267+036	-.1786998409+036	51	-.1786998409+036			.2298465308+036		
60	-.1592314286+034	*1711573120+034	60	*1711573120+034			.1585495023+034		
61	*9494498512+033	*9020349530+033	61	*9020349530+033			-.14433706325+039		
70	*3689533485+031	-.3179913071+031	70	-.3179913071+031			.1269600167+036		
71	-.1616353470+031	-.1920136438+031	71	-.1920136438+031			.2354457841+035		
80	-.3719582322+028	*2492163616+028	80	*2492163616+028			-.1293706325+039		
81	*1163354367+028	*1784713392+028	81	*1784713392+028			-.5939168981+038		
90	*1691303298+025	-.8376549086+024	90	-.8376549086+024			.2818840230+042		
91	-.3593447502+024	-.7508938144+024	91	-.7508938144+024			.6329207883+042		
99	-.3018566670+021	-.865784664+021	99	-.865784664+021			.5268758645+045		
100	-.3595318867+021	*1196574257+021	100	*1196574257+021			.6413862873+045		

REAL X = .3000003000+001	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL .0000000000	SECOND KIND REAL BESSSEL	IMAGINARY BESSEL .0000000000
0	.4704000269-.001	.0000000000	0	.3299974989+.000
1	.3456774998+.000	.0000000000	1	.6295916360-.001
2	.2986374971+.000	.0000000000	2	.2670383353+.000
3	.1520516620+.000	.0000000000	3	.5080230557+.000
4	.5614971433-.001	.0000000000	4	.9183407947+.000
5	.1639746096-.001	.0000000000	5	.224702328+.001
6	.3974382510-.002	.0000000000	6	.7320736743+.001
7	.8248432532-.003	.0000000000	7	.2947616922+.002
8	.1498337563-.003	.0000000000	8	.-1400601094+.003
9	.2421469897-.004	.0000000000	9	.-7641977839+.003
10	.3526003895-.005	.0000000000	10	.4699859189+.004
11	.46673282793-.006	.0000000000	11	.3213481654+.005
12	.5684524784-.007	.0000000000	12	.2416670676+.006
13	.6390452741-.008	.0000000000	13	.-1981757413+.007
14	.6678268289-.009	.0000000000	14	.-1759414965+.008
15	.6520660515-.010	.0000000000	15	.-1680950226+.009
16	.5974757643-.011	.0000000000	16	.-1719387750+.010
17	.5157289240-.012	.0000000000	17	.-1874517023+.011
18	.4207980399-.013	.0000000000	18	.-2169742649+.012
19	.3255325114-.014	.0000000000	19	.-2657270764+.013
20	.2394224927-.015	.0000000000	20	.-3432754567+.014
30	.1075567526-.027	.0000000000	30	.-5105339782+.026
31	.5133054971-.029	.0000000000	31	.-1035482834+.028
40	.1782055445-.041	.0000000000	40	.-2315623857+.040
41	.6449401738-.043	.0000000000	41	.-6243377856+.041
50	.2496493438-.056	.0000000000	50	.-1324326072+.055
51	.7277401060-.058	.0000000000	51	.-4454547564+.056
60	.4843699349-.072	.0000000000	60	.-56594438845+.070
61	.1182082428-.073	.0000000000	61	.-2295320499+.072
70	.1807148676-.088	.0000000000	70	.-1309360965+.087
71	.3792867984-.060	.0000000000	71	.-6151169237+.088
80	.1638905466-.105	.0000000000	80	.-126415386+.104
81	.3017403091-.107	.0000000000	81	.-6781919876+.105
90	.4307423096-.123	.0000000000	90	.-4277809243+.121
91	.7063227512-.125	.0000000000	91	.-2580227755+.123
99	.2519966196-.139	.0000000000	99	.-6650104431+.137
100	.3761973541-.141	.0000000000	100	.-4410222995+.139

REAL X = .3000000000+001	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	N	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
0	* 4703991098~001	* 3456775242~003	0	* 32999976429+000	* 6295920377~004
1	* 3456775731+000	* 1834116886~003	1	* 6295928409~001	- 2880247246~003
2	* 2986375625+000	- * 470400113~004	2	- 2670382698+000	- 32999974706~003
3	* 1520516687+000	- * 959019598~004	3	- * 508028343+000	- 4103255765~003
4	* 5614969950~001	- * 5846880790~004	4	- * 9183478927+000	- 1022557595~002
5	* 1639746961~001	- * 2335475106~004	5	- * 2247019515+001	- 3575694660~002
6	* 3974377598~002	- * 7123920301~005	6	- * 7320718377+001	- 1483467825~001
7	* 8248416911~003	- * 1774799808~005	7	- * 2947606850+002	- 7128227374~001
8	* 1498333570~003	- * 3753417545~006	8	- * 1400594889+003	- 3907034262+000
9	* 2421461305~004	- * 6911803279~007	9	- * 7641935426+003	- 2407260345+001
10	* 3525987870~005	- * 1128600485~007	10	- * 4699827328+004	- 1646857437+002
11	* 4673256381~006	- * 1656688290~008	11	- * 3213455567+005	- 1238390100+003
12	* 5684585726~007	- * 2206941251~009	12	- * 2416647556+006	- 1015085363+004
13	* 6390400330~008	- * 2702407349~010	13	- * 1981735364+007	- 6006495655+004
14	* 6678203886~009	- * 305130288~011	14	- * 1759392452+008	- 8598857196+005
15	* 6520587502~010	- * 320572426~012	15	- * 1680925724+009	- 8789078025+006
16	* 5974680795~011	- * 3134952847~013	16	- * 1719359436+010	- 9575043174+007
17	* 5157213747~012	- * 2880371776~014	17	- * 1874482402+011	- 1107508726+009
18	* 4207910859~013	- * 2492222849~015	18	- * 2169697991+012	- 1355414857+010
19	* 3255264811~014	- * 2037752448~016	19	- * 2657210162+013	- 1749801736+011
20	* 2394175524~015	- * 1579357925~017	20	- * 343268265+014	- 237633617+012
30	* 1075516061~027	- * 1070418553~029	30	- * 5105061064+026	- 5249386778+024
31	* 5132792252~029	- * 5280332429~031	31	- * 1035422621+028	- 1099387023+026
40	* 1781901871~041	- * 236955986~043	40	- * 2315403520+040	- 3155774360+038
41	* 6448617283~043	- * 8791139505~045	41	- * 6242754647+041	- 8717268777+039
50	* 2496154869~056	- * 4153364780~058	50	- * 1324131635+055	- 2247223123+053
51	* 7276373687~058	- * 1235021425~059	51	- * 453867813+056	- 7707565285+054
60	* 4842749166~072	- * 9674966351~074	60	- * 5693245321+070	- 1156349276+069
61	* 1181846661~073	- * 2400572018~075	61	- * 2294823600+072	- 473614956+070
70	* 1806664669~088	- * 4212522034~090	70	- * 30889789+087	- 3095692835+085
71	* 3791822647~090	- * 8967802923~092	71	- * 6149376307+088	- 474823955+087
80	* 1638330873~105	- * 4366899560~107	80	- * 1263690582+104	- 3410406874+102
81	* 301315779~107	- * 844054882~109	81	- * 6779359159+105	- 1852221755+104
90	* 4305508558~123	- * 129133511~124	90	- * 427582190+121	- 296679724+120
91	* 7060017470~125	- * 214049393~126	91	- * 257902692+123	- 7907141737+121
99	* 2518609298~139	- * 831064689~141	99	- * 6646376704+137	- 2215266223+136
100	* 3759906500~141	- * 125321023~142	100	- * 4407701355+139	- 1483821588+138

REAL X = .3000000000+001	FIRST KIND	IMAGINARY X = -.1000000000-001	REAL BESSSEL	SECOND KIND	IMAGINARY BESSSEL
N 0	REAL BESSSEL	IMAGINARY BESSSEL	N 0	REAL BESSSEL	IMAGINARY BESSSEL
0	.4703083204+001	.3456799429+002	0	.3300119001+000	.6295318001-003
1	.3456848291+000	.1834141373-002	1	.6297121282-001	.288048679-002
2	.2986440424+000	-.4704684742-003	2	-.2670317862+000	-.3299946766-002
3	.1520523246+000	-.9590316511-003	3	-.508009121+000	-.4103094929-002
4	.5614823190-001	-.5846911307-003	4	-.9182585924+000	-.1022490933-001
5	.1639634640-001	-.2335461711-003	5	-.2246642009+001	-.3575377613-001
6	.3973891338-002	-.7123775259-004	6	-.7318900259+001	-.1483294660+000
7	.8246870389-003	-.1774731195-004	7	-.2946609755+002	-.7127163750+000
8	.1497938266-003	-.3753189964-005	8	-.1399980720+003	-.3906308983+001
9	.2420610655-004	-.6911206939-006	9	-.7637737109+003	-.2406716722+002
10	.3524401682-005	-.1128470025-006	10	-.4696673605+004	-.1646413224+003
11	.4670641765-006	-.1656442139-007	11	-.3210873464+005	-.1237997117+004
12	.5680719279-007	-.2209531896-008	12	-.2414359195+006	-.1014711189+005
13	.6385212097-008	-.2701797807-009	13	-.1979553045+007	-.902680787+005
14	.6671828726-009	-.3050487831-010	14	-.1757164276+008	-.8594710878+006
15	.6513360185-010	-.3199557215-011	15	-.1678500792+009	-.8784292482+007
16	.5967074074-011	-.3133797564-012	16	-.1716557338+010	-.9569198116+008
17	.5149741243-012	-.2879151933-013	17	-.1871056217+011	-.1106755541+010
18	.4201027864-013	-.2491021218-014	18	-.2165278692+012	-.1354393742+011
19	.3249296247-014	-.2036642959-015	19	-.2651213353+013	-.1748348857+012
20	.2389285926-015	-.1578393813-016	20	-.3424128667+014	-.2374168958+013
30	.1070424574-027	-.1068843291-028	30	-.5077496349+026	-.5239316953+025
31	.5106802448-029	-.5272000707-030	31	-.1029468060+028	-.1097145231+027
40	.1766717770-041	-.2363165442-042	40	-.2293628164+040	-.3145388774+039
41	.6391035059-043	-.8766160690-044	41	-.6181169512+041	-.8637208958+040
50	.2462706171-056	-.4135544742-057	50	-.1304933199+055	-.2235923932+054
51	.7174884173-058	-.1229501205-058	51	-.4386756794+056	-.7667318101+055
60	.4748967909-072	-.9614532542-073	60	-.5575525786+070	-.1148106360+070
61	.1158180591-073	-.2385059614-074	61	-.2245819395+072	-.4702753897+071
70	.1758949402-088	-.4176441736-089	70	-.1272426494+087	-.3066003370+086
71	.3688782249-090	-.8888735897-091	71	-.5972784971+088	-.1460287160+088
80	.1581761018-105	-.4317794406-106	80	-.1217872546+104	-.3368073603+103
81	.2909539787-107	-.8046659916-108	81	-.6527517510+105	-.1628670848+105
90	.4117307802-123	-.1272687827-123	90	-.4080661578+121	-.1276459657+121
91	.6744518916-125	-.2109773266-125	91	-.2458719905+123	-.7781169647+122
99	.2385429812-139	-.8166679003-140	99	-.6280904480+137	-.2173705436+137
100	.3557062917-141	-.1231051948-141	100	-.4160522951+139	-.1455434967+139

REAL X	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	N	IMAGINARY X = -.1000000000+000	
				SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
0	• 4612232584-001	• 3459218784-001	0	• 3314376592+000	• 6336077784-002
1	• 3464107734+000	• 1836591087-001	1	• 6416395273-001	• 2880395262-001
2	• 2992924563+000	-• 4712450897-002	2	-• 2663858545+000	-• 3297163692-001
3	• 1521178693+000	-• 9602374275-062	3	-• 5058178927+000	-• 4087057357-001
4	• 5600131909-001	-• 5849963231-002	4	-• 9093706766+000	-• 1015849191+000
5	• 1628397117-001	-• 2334120736-002	5	-• 2209119049+001	-• 3543820818+000
6	• 3925271530-002	-• 7109264469-003	6	-• 7138477083+001	-• 1466077640+001
7	• 8092357145-003	-• 1767869713-003	7	-• 2847841761+002	-• 7021538912+001
8	• 1458480718-003	-• 3730442280-004	8	-• 1339266155+003	-• 3834378667+002
9	• 2335797941-004	-• 6851634789-005	9	-• 7223620877+003	-• 2352879357+003
10	• 3366460062-005	-• 1115446468-005	10	-• 4386338859+004	-• 1602488655+004
11	• 4410684839-006	-• 1631888883-006	11	-• 2957443280+005	-• 1199202582+005
12	• 5296944188-007	-• 2168735885-007	12	-• 2190381011+006	-• 9778385726+005
13	• 5871198431-008	-• 2641112774-008	13	-• 1766556161+007	-• 8627454378+006
14	• 6041516224-009	-• 2968696619-009	14	-• 1540404573+008	-• 8187694544+007
15	• 5800391826-010	-• 3098721310-010	15	-• 1443385940+009	-• 8315514113+008
16	• 5218495060-011	-• 3019202808-011	16	-• 1445828841+010	-• 8997898600+009
17	• 4416289299-012	-• 2758328827-012	17	-• 1541257025+011	-• 1033309695+011
18	• 3527327898-013	-• 2372187952-013	18	-• 1741539533+012	-• 1255063339+012
19	• 2666843779-014	-• 1927105553-014	19	-• 2078562500+013	-• 1607377524+013
20	• 1913640634-015	-• 1483379043-015	20	-• 2612141099+014	-• 2164692031+014
30	• 5956650575-028	-• 9172835120-028	30	-• 2592483297+026	-• 4296185800+026
31	• 2696172922-029	-• 4472803092-029	31	-• 4960717828+027	-• 867939467+027
40	• 4359269486-042	-• 1769275454-041	40	-• 4683628369+039	-• 2214370043+040
41	• 1363663260-043	-• 6455845588-043	41	-• 1062041244+041	-• 6005907354+041
50	-• 2368652936-057	-• 2555962540-056	50	-• 1611833006+054	-• 1277154242+055
51	-• 9387238878-059	-• 7427698865-058	51	-• 6848546612+055	-• 4273022030+056
60	-• 2069563878-072	-• 4560356638-072	60	-• 2440099712+070	-• 4934182550+070
61	-• 5422077864-074	-• 1096076455-073	61	-• 1048770951+072	-• 1953876871+072
70	-• 1293791135-088	-• 1362398748-088	70	-• 8966308263+086	-• 8833926828+086
71	-• 281029153-090	-• 2768823856-090	71	-• 4345859814+088	-• 4005049101+088
80	-• 1521549543-105	-• 7877966901-106	80	-• 1091095915+104	-• 5196501308+103
81	-• 2849711805-107	-• 1356976091-107	81	-• 5939878899+105	-• 2569675994+105
90	-• 4481176500-123	-• 6513555091-124	90	-• 4041863550+121	-• 4507378882+120
91	-• 7383759998-125	-• 8230105582-126	91	-• 2444264170+123	-• 1903490540+122
99	-• 2630227633-139	-• 4128494933-140	99	-• 6178760594+137	-• 1181787996+137
100	-• 3906022903-141	-• 7472725116-142	100	-• 4666980145+139	-• 9193683235+138

REAL X = .3000000000+001		IMAGINARY X = -.5000000000+000	
FIRST KIND		SECOND KIND	
N	REAL BESSSEL	N	REAL BESSSEL
0	.2372449025-001	0	.3660315914+000
1	*.3642171434+000	1	*.9301586694-001
2	*.3152713345+000	2	-.2521307712+000
3	*.1536786193+000	3	-.4581461284+000
4	*.5234655237-001	4	-.7175182402+000
5	*.1352661508-001	5	-.1424926485+001
6	*.2750552081-002	6	-.3515340759+001
7	*.4431660757-003	7	-.9519784012+001
8	*.5461636417-004	8	-.2309447033+002
9	*.4316090424-005	9	-.7157719317+001
10	-.5877528897-007	10	-.6576952079+003
11	-.1004894174-006	11	-.8980799659+004
12	-.2338895743-007	12	-.9810878523+005
13	-.3837096220-008	13	-.1023688970+007
14	-.5186580729-009	14	-.1071233419+008
15	-.6095852873-010	15	-.1144777237+009
16	-.6394708083-011	16	-.1258267495+010
17	-.5078617344-012	17	-.1425649988+011
18	-.5286360714-013	18	-.16644556447+012
19	-.4232769842-014	19	-.1998854495+013
20	-.3133013325-015	20	-.2460584990+014
30	*.3518985681-28	30	-.1241126680+026
51	*.2946884120-49	31	-.3471205192+027
49	*.2945007688-041	40	-.1176092824+040
41	*.1009707565-042	41	-.2823920681+041
50	-.1879966979-056	50	-.3456853535+054
51	*.7712599562-058	51	-.1437047130+056
60	-.9824749300-072	60	-.1983188967+070
61	-.2193364552-073	61	-.6817979898+071
71	*.2483976540-088	70	-.3258224837+086
71	*.617926497-090	71	-.1773096660+088
80	*.3947011644-105	80	-.2897593982+103
81	*.6371238695-107	81	-.1252087573+105
90	*.9730463530-123	90	-.9494613813+120
91	*.1900127149-124	91	-.6535493795+122
99	-.7883836275-139	99	-.1177496036+137
100	-.1032551724-140	100	-.6295233060+138

IMAGINARY BESSSEL
 1.3649294066-001
 1.1442931894+000
 -.1618026601+000
 -.1862329543+000
 -.4343490684+000
 -.1430659687+001
 -.5516879616+001
 -.2429993706+002
 -.120417742+003
 -.6608470341+003
 -.3959179985+004
 -.2555780587+005
 -.1755229183+006
 -.1265021552+007
 -.9407930551+007
 -.7042807165+008
 -.5068521717+009
 -.3109782883+010
 -.7821629434+010
 *.421615191+012
 *.7284638969+013
 *.3091841722+026
 *.5690776239+027
 *.5957821363+039
 *.2078555825+041
 *.5595042755+054
 *.1642157026+056
 *.1466357245+070
 *.7048710173+071
 *.3721015589+086
 *.1452359991+088
 *.1813407602+105
 *.7801446165+120
 *.3649153980+122
 *.1210670670+137
 *.9078792797+138

REAL X = .300000000+000		IMAGINARY X = -.100000000+001	
FIRST KIND		SECOND KIND	
REAL BESSEL	IMAGINARY BESSEL	REAL BESSEL	IMAGINARY BESSEL
N 0	.51016170884801	.3706088643+000	0 .4748759152+000
1	.4224902575+000	.2091513066+000	1 .1831778950+000
2	.3685120107+000	-.5582481105-001	2 -.2222906133+000
3	.1581981640+000	-.1086325179+000	3 -.3609974523+000
4	.3973009625-001	-.61570356166-001	4 -.3359000855+000
5	.4494421318-002	-.2185037201-001	5 -.5887316816-001
6	-.8630966680-003	-.5592002532-002	6 .1767321649+001
7	-.5906950316-003	-.1080463531-002	7 .1267232745+002
8	.1752356774-003	-.1564259042-003	8 .7533905627+002
9	-.3688288812-004	-.1520923293-004	9 .4341738601+003
10	-.6099242205-005	-.3842110123-006	10 .2487587886+004
11	-.829398162-006	-.2322949121-006	11 .1398318212+005
12	-.89540304030-007	-.6220828830-007	12 .7321893929+005
13	-.643156770-008	-.1039469943-007	13 .300182345+006
14	-.4268580135-009	-.1353873841-008	14 .-1106727221+005
15	.3257914273-011	.1459147419-009	15 .-2310643263+008
16	.4820916368-011	.1323279292-010	16 .-4232572120+009
17	.8009411345-012	.9989320397-012	17 .-5967865768+010
18	.9270340517-013	.5928746697-013	18 .-7602306747+011
19	.8793035114-014	.2161442810-014	19 .-9115847746+012
20	.6924787836-015	-.5674915078-016	20 .-1033939703+014
21	-.5180757897-027	.9428808817-028	21 .-8683849132+025
22	-.2320021636-028	.1277242479-028	22 .-1295545912+027
23	-.1422443666-046	-.389740879-041	23 .-2209068620+039
24	-.4673768098-042	-.3129779806-042	24 .-4166488177+040
25	-.3282108551-055	-.1199613149-055	25 .-7028406442+053
26	-.8397363193-057	-.6590147745-057	26 .-1563373207+055
27	-.1078744930-098	-.1186337802-088	27 .-5595103838+086
28	-.92466563354-104	-.6177669412-104	28 .-1084284784+102
29	-.1323221577-105	-.1795199250-105	29 .-2987724620+103
30	-.6321434762-087	-.3539295936-087	30 .-1943369962+119
31	-.1078744930-098	-.1186337802-088	31 .-5595103838+086
32	-.92466563354-104	-.6177669412-104	32 .-1084284784+102
33	-.1323221577-105	-.1795199250-105	33 .-2987724620+103
34	-.3898664036-121	-.3060724966-121	34 .-1943369962+119
35	-.4702176135-123	-.7145057233-123	35 .-5209003172+120
36	-.4241386735-137	-.1906564550-137	36 .-2515540870+135
37	-.5382214547-139	-.4957525238-139	37 .-1040600941+137

REAL X = .360000000+001	FIRST KIND	IMAGINARY X = -.300000000+001	SECOND KIND	REAL BESSEL	IMAGINARY BESSEL
N 0	REAL BESSEL	IMAGINARY BESSEL	N 0	.1899728259+001	.14295531207+001
1	-.1416145411+001	.1889728259+001	1	.1494685555+001	-.1336011046+001
2	+.1345793126+001	.1504461662+001	2	-.4814237703+000	-.1346193952+001
3	-.1338811133+001	-.464508549+000	3	-.77440437368+000	-.1870037233+000
4	-.1553635310+000	-.7776197831+000	4	-.2034562454+000	.2249719157+000
5	-.2483072668+000	-.261344392+000	5	-.1314044952+000	.2192772286+000
6	-.1358322724+000	-.134672412-001	6	-.4235073387-001	.4179390782+000
7	-.2482089347-001	.3641703410-001	7	-.9451762414+000	.7780173642+000
8	-.3148145976-002	.198019724-001	8	-.4350334743+001	.8358362712+000
9	-.2740765304-002	.1402923944-002	9	-.9012569442+001	-.1547216858+002
10	-.6424045450-003	-.2397443705-003	10	-.2480573203+002	-.7669916748+002
11	-.5270626153-004	-.1278333916-003	11	-.3642797177+003	-.1661548555+003
12	-.1051575914-004	-.2320058468-004	12	-.2088256799+004	.8361778061+003
13	-.4081096937-005	-.1412592059-005	13	-.452057751+004	.1201909071+005
14	-.6030070153-005	.3102096997-005	14	-.3575215011+005	.7359201526+005
15	-.2837828550-007	.9500513458-007	15	-.53301735070+006	.1708735909+006
16	-.6653819278-008	.1182007086-007	16	-.3601017489+007	.1944667882+007
17	-.1685985657-008	.4432978093-009	17	-.8576605531+007	-.306724313+008
18	-.1809638827-009	-.1090117673-009	18	-.1324899035+009	-.2207081160+009
19	-.55369142634-011	-.2357731137-011	19	-.2225481356+023	-.5521901672+009
20	-.1412445051-011	-.2223575361-011	20	-.1752237502+011	-.11103400886+011
21	-.2666008196-012	-.5662630858-013	21	-.6034392490+021	.8226819668+021
22	-.5391350402-024	-.3748284667-023	22	-.1451043436+023	.2156516956+022
23	-.1537082600-024	.2034835283-024	23	-.1154602070+034	-.9175131483+033
24	-.1961481165-035	.2135273525-036	24	-.3122040580+034	-.2798279150+035
25	-.7845257677-037	-.6337882003-037	25	-.1706547618+048	-.2048894225+047
26	-.7637400256-050	-.8718339986-049	26	-.6322719173+047	-.5649053537+047
27	-.2321457686-050	-.2757899813-050	27	-.1022321683-094	.23529149324+061
28	-.5380535395-063	-.3944014773-064	28	-.2738733010+061	-.5263064800+091
29	-.149703635-064	-.121775932-064	29	-.7652316713+061	-.1026914593+063
30	-.4030367800-079	.6395352242-078	30	-.1721387047+076	.1960089558+076
31	-.12568365156-079	.1425142032-079	31	-.8651992715+077	.5530057687+076
32	-.1849656750-093	.1022321683-094	32	-.585348286+091	-.5263064800+091
33	-.3590277968-095	-.3218520317-095	33	-.1675574627+092	-.2994294995+093
34	-.7636072810-111	-.1551416411-109	34	-.5622677327+107	-.6218548290+107
35	-.2419541495-111	-.2667199956-111	35	-.3572204055+109	-.1777699024+108
36	-.1384359638-124	-.1514234213-124	36	-.5766988211+122	-.2636498782+121
37	-.4326343325-126	-.1919340721-127	37	-.1999323992+124	-.1826192644+124

REAL X = .300000000+001	IMAGINARY X = -.100000000+002	
FIRST KIND	SECOND KIND	
REAL BESSSEL	IMAGINARY BESSSEL	IMAGINARY BESSSEL
N	4426690726+003	9575010734+003
0	.8818404911+003	.4426690732+003
1	-.3757039913+003	-.8818404664+003
2	-.7458141076+003	-.2564517880+003
3	-.1508434321+003	-.5763916051+003
4	-.4047159398+003	-.5853193795+002
5	-.2263574946+001	-.58567212164+003
6	-.1463247855+003	-.2147534482+002
7	-.2447836823+002	-.7452157823+002
8	-.3366640651+002	-.18555530615+002
9	-.1129107178+002	-.1333249823+002
10	-.4521756558+001	-.5845661752+001
11	-.2642265773+001	-.1242152655+001
12	-.2260708796+000	-.1056513178+001
13	-.3760199161+000	-.7904301428+002
14	-.3177730222+001	-.1192138586+000
15	-.3348189502+001	-.1851153130-001
16	-.7696949318+002	-.8195878198-002
17	-.1677878617+002	-.2652803473-002
18	-.7950781200+003	-.2527416800-003
19	-.1028143393+004	-.2112935832-003
20	-.5010959084+004	-.1084647105-004
30	-.4092514393+011	-.8940846058-012
31	-.4249239181+013	-.6778954481-012
40	-.1275694506+019	-.7842722546-020
41	-.4923934341+021	-.1793339591-020
50	-.3226025898+029	-.3644840781-029
51	-.2599915282+030	-.4144759050-030
60	-.9918261406+040	-.2047372212-039
61	-.1419236147+040	-.1292620199-040
70	-.3957126589+051	-.2052047089-050
71	-.1348088562+051	-.7002875589-052
80	-.2930435149+063	-.4722630152-062
81	-.2942823415+063	-.6805938042-064
90	-.9528098390+075	-.2985475966-074
91	-.1782760731+075	-.3428895923-077
99	-.8921498206+086	-.9992959799-086
100	-.3640600585+087	-.5911544951-087
		100

REAL X = .300000000+001	IMAGINARY X = -.100000000+003	
FIRST KIND	IMAGINARY BESSEL	SECOND KIND
N	REAL BESSEL	REAL BESSEL
0	.2293853466+041	.2293853466+041
1	.1323726340+042	.1310569733+042
2	.2266967949+041	.2214121059+041
3	.1284648445+042	.2214121059+042
4	.2137103942+041	.1246726887+042
5	.1197904425+042	.2038500220+041
6	.1921494656+041	.1139562332+042
7	.1073299880+042	.1789754122+041
8	.1647214818+041	.1000856327+042
9	.9240459324+041	.1497896037+041
10	.1345717497+041	.8446730103+041
11	.7644687389+041	.1194336554+041
12	.1047014123+041	.6850306853+041
13	.6077751452+041	.9065152280+040
14	.7750469508+040	.5339028005+041
15	.4643782344+041	.6542334781+040
16	.5451252652+040	.3999228776+041
17	.3410201311+041	.4482372149+040
18	.3636093557+040	.2879307820+041
19	.2407164205+041	.2908828272+040
20	.2293839898+040	.1992683825+041
30	.1633397696+041	.1782100759+040
31	.1305417114+040	.441368310+038
40	.2408726302+038	.9611551460+039
41	.3970456519+038	.2655092299+037
50	.2089850250+037	.2657254981+038
51	.4700150427+036	.9137408988+035
60	.5981447417+035	.2866306614+036
61	.2222112668+034	.7819615520+033
70	.4576723156+033	.1238105064+034
71	.4309142721+034	.2373754572+031
80	.1262050287+031	.2199324801+031
81	.3516807032+028	.2866190208+028
90	.1396530540+028	.1644761849+028
91	.1219836866+025	.1477471015+025
92	.6625966116+024	.5248470482+024
93	.8171439056+021	.4502836181+021
100	.1789056661+021	.3416700197+021

REAL X = .5000000000+001	FIRST KIND REAL BESSEL	IMAGINARY BESSEL	SECOND KIND REAL BESSEL	IMAGINARY BESSEL
N	0	.0000000000	0	.0000000000
0	-.1917848549+000	.0000000000	-.5673243709-001	.0000000000
1	-.9508940808-001	.0000000000	-.18043835675+000	.0000000000
2	.1347312101+000	.0000000000	.2	.1649954576+000
3	.2298206182+000	.0000000000	3	-.1544290991-001
4	.1870176553+000	.0000000000	4	-.1866155315+000
5	.1068111615+000	.0000000000	5	-.3204650467+000
6	.4796689986-001	.0000000000	6	-.5184075714+000
7	.1790277816-001	.0000000000	7	-.1027394639+001
8	.5741434675-002	.0000000000	8	-.2563776345+001
9	.1618099715-002	.0000000000	9	-.7689444934+001
10	.4073442442-003	.0000000000	10	-.2665611441+002
11	.9274611037-004	.0000000000	11	-.1042662356+003
12	.1928786347-004	.0000000000	12	-.4529685692+003
13	.3693206998-005	.0000000000	13	-.2160576611+004
14	.6554543131-006	.0000000000	14	-.1121414513+005
15	.1084280182-006	.0000000000	15	-.6288146513+005
16	.1679939976-007	.0000000000	16	-.3786509387+006
17	.2448020198-008	.0000000000	17	-.2436214730+007
18	.3367416303-009	.0000000000	18	-.1667485217+008
19	.4386786530-010	.0000000000	19	-.1209576913+009
20	.5427726761-011	.0000000000	20	-.9267951403+009
30	.4282730217-021	.0000000000	30	-.7760717570+019
31	.3419992523-022	.0000000000	31	-.9401810041+020
40	.1210347585-032	.0000000000	40	-.2055758716+031
41	.7317268114-034	.0000000000	41	-.3517264059+032
50	.2857479350-045	.0000000000	50	-.6964109188+043
51	.1390347013-046	.0000000000	51	-.1403223624+045
60	.9285901110-059	.0000000000	60	-.1786114181+057
61	.3780914088-060	.0000000000	61	-.4314878111+058
70	.5782161370-073	.0000000000	70	-.2459324803+071
71	.2024178147-074	.0000000000	71	-.6926437806+072
80	.8732233016-088	.0000000000	80	-.1425359371+086
61	.2681093536-089	.0000000000	81	-.4585106079+087
90	.3816013506-103	.0000000000	90	-.2900049665+101
91	.1043397839-104	.0000000000	91	-.1049007269+103
99	.2223967141-117	.0000000000	99	-.4524781791+115
100	.55356503-119	.0000000000	100	-.1799713983+117

REAL X = .5036000000+001	IMAGINARY X = -.100000000-002
FIRST KIND	SECOND KIND
REAL BESSSEL	REAL BESSSEL
N	IMAGINARY BESSSEL
0	-9508943291-004
1	-15337491038-003
2	-1759281549-003
3	-4912528735-004
4	-4280297601-004
5	-5684426725-004
6	-3965750312-004
7	-193245416-004
8	-7566194912-005
9	-2505234727-005
10	-7219421520-006
11	-1847534993-006
12	-4259764120-007
13	-8946877497-008
14	-1726842550-008
15	-3084843319-009
16	-5130999573-010
17	-7986515595-011
18	-1168400079-011
19	-1612698630-012
20	-2107136937-013
30	-2535424902-023
31	-2093923207-024
40	-9609514644-035
41	-7317031661-034
50	-2857340736-045
51	-1390276768-046
60	-9285248243-059
61	-3780391819-060
70	-5781605672-073
71	-2823977945-074
80	-8731133556-088
81	-2680747397-089
90	-3815404063-103
91	-1043227301-104
99	-2223536717-117
100	-5534557020-119

REAL X = .500000000+001	FIRST KIND REAL BESSSEL	IMAGINARY X = -.105000000-001	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
N 0	-.1917925424+000	-.9509269112-003	0	-.5673888254-001
1	-.9509685723+001	-.1537503017-002	1	+.1604440895+000
2	.1347328113+000	.1759301259-002	2	.16500335563+000
3	.2298256110+000	.4912557498-003	3	-.1543976445-001
4	.1870203816+000	.4280368236-003	4	-.1866139743+000
5	.1058112702+000	.5884482698-003	5	-.3204578834+000
6	.4796606213-001	-.3965764825-003	6	-.5193818400+000
7	.1790205465+001	-.1932239350-003	7	-.1027308434+001
8	.5741046344+002	-.7568110549-004	8	-.2563463614+001
9	.1617939468+002	-.2505183544-004	9	-.7688189061+001
10	.4072894351-003	-.7219197622-005	10	-.2665056408+002
11	.9272995802+004	-.184745723-005	11	-.1042394526+003
12	.1928346210+004	-.4259525094-006	12	-.4528284326+003
13	.3692226295+005	-.8946245526-007	13	-.2159786322+004
14	.6552463392+006	-.1726693217-007	14	-.11209366671+005
15	.1083875656-006	-.3084523614-008	15	-.6285062925+005
16	.1679212743+007	-.5130372993-009	16	-.3784394196+005
17	.2446804216+008	-.7985382187-010	17	-.2434677946+007
18	.3365515177-009	-.1168209591-010	18	-.166630347+008
19	.4383994780-010	-.1612399522-011	19	-.1208624836+009
20	.5423860645+011	-.2106696065-012	20	-.9259876827+009
30	.4275487326+021	-.2534108097-022	30	-.7745727082+019
31	.3413798668-022	-.2092755569-023	31	-.9382446557+020
40	.1206632063-032	-.9600276222-034	40	-.2048788425+031
41	.7293636177-034	-.5950876292-035	41	-.3305459774+032
50	.2843628098-045	-.2839166416-046	50	-.6927561398+043
51	.1385329878-046	-.1409237512-047	51	-.1395568130+045
60	.9220685028+059	-.1108013633-059	60	-.1772712738+057
61	.3753454925+060	-.4586801057-061	61	-.4281435735+058
70	.5726674627-073	-.8049582850-074	70	-.2434350216+071
71	.2004188752-074	-.2858168088-075	71	-.6854111684+072
80	.6622507855-088	-.1388777564-088	80	-.14066520965+086
81	.2646549743-089	-.4317067802-090	81	-.4523073052+087
90	.3755224548-103	-.6822747882-104	90	-.2851778360+101
91	.1026402736-104	-.1886083248-105	91	-.1031162749+103
99	.2181056462-117	-.4370172020-118	99	-.4433927806+115
100	.5426663579-119	-.10986445353-119	100	-.1762855147+117

REAL X = .500000000+001	IMAGINARY X = -.100000000+000
FIRST KIND	SECOND KIND
REAL BESSSEL	IMAGINARY BESSSEL
N	-9533781903-002
0	0
1	-.1538701211-001
2	.1761273931-001
3	.4915434416-C02
4	-.4287495133-002
5	-.589081755-002
6	-.3967215877-002
7	-.1931632027-002
8	-.5702601951-002
9	-.250064773-003
10	-.7196812120-004
11	-.1839532678-004
12	-.4235642428-005
13	-.8883124633-006
14	-.1711784057-006
15	-.3052619002-007
16	-.5067874548-008
17	-.7872389517-009
18	-.149230026-009
19	-.1582615413-010
20	-.2062823973-011
30	-.2404196310-021
31	-.1977684977-022
40	-.8700295443-033
41	-.5363995689-034
50	-.2420939195-045
51	-.1193303908-046
60	-.8745153609-059
61	-.3568858367-060
70	-.5774835067-073
71	-.2028754953-074
80	-.8870336416-088
81	-.2722078127-089
90	-.3786412055-103
91	-.1030529996-104
99	-.2083674007-117
100	-.5141742899-119
	.1806291374-001
	.1291550159-001
	-.8145450777-002
	-.1774330735-001
	-.1710867584-001
	-.1974989026-001
	-.4038710890-001
	-.1120276033+000
	-.3566648784+000
	-.1272297282+001
	-.5050797343+001
	-.2212442967+002
	-.1060247620+003
	-.5516753741+003
	-.3096618282+004
	-.1864695775+005
	-.1198842671+006
	-.8194765101+006
	-.5933864716+007
	-.4536855992+008
	-.3652000744+009
	-.4426717531+019
	-.5854827597+043
	-.5515760292+020
	-.1481668603+031
	-.2435466095+032
	-.3638105879+043
	-.7090576641+044
	-.61356174666+056
	-.14046833+058
	-.4024498379+058
	-.3733168768+070
	-.9157540317+071
	-.6426316775+084
	-.2969140544+086
	-.2395655836+071
	-.6765493059+072
	-.1400922042+086
	-.4500614532+087
	-.2761830593+101
	-.9935848375+102
	-.4037979583+115
	-.1590343039+117

REAL X = .500000000+001	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
				N
-2111933480+000	-5068234144-001	-7323444346-001	-7323444346-001	0
-1140512977+000	-7839658951-001	-1948575227+000	-1948575227+000	1
1387828787+000	-9047924822-001	-1849772268+000	-1849772268+000	2
2425017471+000	-2492770365-001	-7662502083-002	-7662502083-002	3
1939028316+000	-2231189208-001	-1831579718+000	-1831579718+000	4
1070440326+000	-3013453143-001	-3036857399+000	-3036857399+000	5
4582634518-001	-200111538-001	-4579451111+000	-4579451111+000	6
1607616438-001	-9582463276-002	-8274341693+000	-8274341693+000	7
4770914349-002	-3676504492-002	-1850741816+001	-1850741816+001	8
1221974543-002	-11187838103-002	-4880777918+001	-4880777918+001	9
2735230202-003	-3328365617-003	-1450296853+002	-1450296853+002	10
5385520024-004	-8249248195-004	-4695300164+002	-4695300164+002	11
9328923161-005	-1834366099-004	-1604265930+003	-1604265930+003	12
1408607983-005	-3699442183-005	-5540892044+003	-5540892044+003	13
1801678155-006	-6824176982-006	-1772575585+004	-1772575585+004	14
1790250724-007	-11159294178-006	-3767267568+004	-3767267568+004	15
8933566891-009	-1823857522-007	-1404837824+005	-1404837824+005	16
1464539801-009	-2669573262-008	-3217511922+007	-3217511922+007	17
1894838821-010	-6824176982-009	-3737180826+007	-3737180826+007	18
1248438821-010	-4673185278-010	-3778853371+008	-3778853371+008	19
2139157711-011	-5620422940-011	-3671426476+009	-3671426476+009	20
489140882-021	-9480619255-022	-6607469308+019	-6607469308+019	30
398145394-022	-3615234862-023	-8001129594+020	-8001129594+020	31
1044549600-032	-1076307234-032	-1023220608+031	-1023220608+031	40
5477561914-034	-7123933805-034	-1421402165+032	-1421402165+032	41
8960468154-046	-3557905285-045	-1827104880+043	-1827104880+043	50
6098701718-047	-168722725-046	-4663115281+044	-4663115281+044	51
187919690-058	-3981835046-059	-1284153115+057	-1284153115+057	60
4999235230-060	-1135938416-060	-3141842563+058	-3141842563+058	61
6394677216-073	-5130188076-073	-1232679397+071	-1232679397+071	70
2058495451-074	-2020273865-074	-3099583967+072	-3099583967+072	71
135274753-088	-1294059131-087	-1923079908+085	-1923079908+085	80
8133936126-090	-3931479939-089	-909866213+086	-909866213+086	81
5332174812-103	-2696971191-103	-1718822367+101	-1718822367+101	90
1531774156-104	-5913956303-105	-6394083637+102	-6394083637+102	91
3310242356-117	-1518039651-117	-2373132415+115	-2373132415+115	99
7861018148-119	-4603419752-119	.8798015675+116	.8798015675+116	100

REAL X = .5030000000+001	FIRST KIND REAL BESSSEL	IMAGINARY X = -.1000000000+001	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
N 0	-.2717356636+000	-.1210191605+000	0	-.1275191184+000
1	-.1751213937+000	-.1661576796+000	1	.2395246883+000
2	.1515320504+000	.1966730456+000	2	.2478735248+000
3	.2030035467+000	.5209179793-001	3	.1479167682-001
4	.2154095506+000	.5035620958-001	4	-.1776776584+000
5	.1072516692+000	-.6468193070-001	5	-.2654173530+000
6	.3883441250-001	-.4109524533-001	6	-.3164276783+000
7	.1036198475-001	-.1863897638-001	7	-.3832990227+000
8	.1866876052-002	-.6681426101-002	8	-.3791792054+000
9	.898863580-004	-.1983497685-002	9	.4427004580+000
10	-.8895772853-004	-.5002814367-003	10	.6404941107+001
11	-.4506753292-004	-.1087201286-003	11	.4135978732+002
12	-.1420393790-004	-.2046348836-004	12	.2371078553+003
13	-.3544198962-005	-.3319659508-005	13	.1335656939+004
14	-.7512949096-006	-.4537195526-006	14	.7621133668+004
15	-.1396431485-006	-.4868231845-007	15	.4492798233+005
16	-.2314878803-007	-.2999561339-008	16	.2662572845+006
17	-.3455486619-008	-.2654866786-009	17	.1628886250+007
18	-.46666780178-009	-.1348748796-009	18	.1012281373+008
19	-.5704472515-010	-.3008124714-010	19	.6320830791+008
20	-.6279291533-011	-.5167386200-011	20	.3890425431+009
30	.7031122326-021	.3320031207-021	30	-.4059617025+019
31	.6147172533-022	.1512620635-022	31	-.4971875025+020
40	.4964311021-034	-.26667754637-032	40	.1597809680+030
41	-.2948250412-034	-.1618161119-033	41	.5294291468+031
50	-.7061467356-045	.2955190402-045	50	.2115246732+043
51	-.3146002962-046	.2127789449-046	51	.3544035246+044
60	.2184993388-058	.2090711245-058	60	-.4534815249+056
61	.1060281155-059	.672600403-060	61	-.1188031127+058
70	.7947728844-073	-.2147352377-072	70	-.9586984075+069
71	.1274855437-074	-.8073980591-074	71	.6693121447+070
80	-.4199378365-087	.2226883230-088	80	.2812076048+085
81	-.1275503357-088	.3267067088-089	81	.8253425460+086
90	.9912704288-103	.2003275016-102	90	-.2962288506+100
91	.3607234924-104	.4934124877-104	91	-.1298253584+102
99	.1220008507-116	-.9620260310-117	99	-.4121279316+114
100	.2556995145-118	-.3002463246-118	100	-.1206062898+116

REAL X = .500000000+001	FIRST KIND	IMAGINARY X = -.300000000+001	SECOND KIND
N	REAL BESSSEL	IMAGINARY BESSSEL	REAL BESSSEL
0	-.1168926779+001	-.1269730527+001	-.1267594864+001
1	-.1327469638+001	.8708488017+000	.8801593195+000
2	.3528196093+000	.1302539506+001	.1304218033+001
3	.1012246039+001	.2425565448+000	.2295299988+000
4	.5393840356+000	.4276381560+000	.4475950016+000
5	.4123960250+001	.3802138407+000	.3847448046+000
6	-.1036418333+000	-.1473869721+000	-.9740112474+001
7	-.7031687461+001	-.2043865000+001	.1433266344+000
8	-.2441776512+001	.9235263028+002	.3341215956+000
9	-.4580432732+002	.6900159895+002	.2810266462+000
10	.5158207487+004	.2365634746+002	.1436736703+001
11	.3563482875+003	.5010553698+003	.1091342789+002
12	.1368659413+003	.5228876519+004	.4874347334+002
13	.3149245566+004	-.6907097917+005	.1608357597+003
14	.4632777718+005	-.4687662561+005	-.2885386218+003
15	.2603917480+006	-.1230796491+005	.1187199884+004
16	-.7910728697+007	-.2108734272+006	.1766311489+005
17	-.30280495570+007	-.2290165251+007	.1305597123+006
18	-.6024881682+008	-.5174416053+009	.7189122384+006
19	-.8121940937+009	-.4166947546+009	.2764607975+007
20	-.6721051075+010	.1124053756+009	.1158127605+007
30	-.4475743520+019	.1217510840+019	.4303994392+017
31	-.2960758790+020	.3131553911+020	.1465888857+018
40	-.5089845728+030	-.3159+65665+030	.3550326202+028
41	-.4217782530+031	-.4552+875537+033	.4268661310+029
50	-.1111515508+042	-.6414000336+042	.1697813969+040
51	-.2419045485+043	-.717822938+043	.4293571779+041
60	.6171684998+055	-.7575553189+055	.2133933092+052
61	.6528210113+057	-.4590823792+056	.116018365+054
70	.281531454+068	-.7117821348+070	.3658963140+066
71	.9692940682+070	-.6173922764+070	.4697872367+067
80	.1314419735+082	.1468820082+082	.5164827824+080
81	.6741639933+084	.2080112619+084	.1450679630+082
90	-.5533276479+098	.3956919092+097	.9236269070+094
91	.4987677469+099	.1171945722+098	.5951912527+096
99	-.9267424030+111	.1835124033+112	.7890071066+108
100	-.2277778765+112	.1431084094+112	.1440177878+110

REAL X = .5000000000+001		IMAGINARY X = -.1000000000+002	
N	FIRST KIND REAL BESSSEL	SECOND KIND IMAGINARY BESSSEL	REAL BESSSEL IMAGINARY BESSSEL
0	-.1725112391+003	-.9698300194+003	-.9698300165+003
1	-.8991440645+003	1.199171364+003	1.199171395+003
2	.3583393861+002	.7684255003+003	.7684254970+003
3	.5989406321+003	.4810149910+002	.4810149376+002
4	.1049326989+003	-.4195503266+003	-.4195503227+003
5	-.2590886253+003	-.1235880735+003	-.1235880611+003
6	-.1101741893+003	-.1371735840+003	-.1371735824+003
7	.5913751947+002	.8033718029+002	.8033714580+002
8	.4925208466+002	-.1800625248+002	-.1800627800+002
9	-.1157598523+001	-.2559859683+002	-.2559850001+002
10	-.1122199236+002	-.3208230863+001	-.3208010303+001
11	-.2879047298+001	-.4050735743+001	-.4050580551+001
12	-.1119915160+001	-.1637476083+001	-.1636044572+001
13	-.7240406019+000	-.1734445402+000	-.1748974760+000
14	-.3668838971-301	-.2608532866+000	-.2538587394+000
15	-.7630185637-001	-.4402730391-001	-.1866597102-001
16	-.2211616236-001	-.1703116445-001	-.1261934112-001
17	-.2146247909-002	-.8121499345-002	-.2451818802+000
18	-.2380711267-002	-.348428782-003	-.5956289739+000
19	-.3458555834-003	-.55889194028-003	-.1355387055+001
20	-.9734802033-004	-.14127356265-003	-.1158504930+002
30	-.1521244069-010	-.2472313318-010	-.2348954821+008
31	-.2765650705-011	-.4233176231-011	-.2694929991+009
40	-.2022844302-018	-.6089570789-019	-.3610525330+016
41	-.1903073911-019	-.2074545434-019	-.1238146302+017
50	-.1417724794-028	-.1377956816-027	-.5250509948+025
51	-.1267372484-028	-.7894893985-029	-.4941704863+026
60	-.1297720173-037	-.6617389849-039	-.2327053472+035
61	-.4644986136-039	-.10795664736-038	-.3889127334+036
70	-.4346071517-049	-.2348320814-048	-.2525594058+046
71	-.1790077902-049	-.5067596655-050	-.2272775225+047
80	-.1030939145-059	-.3204981362-060	-.8648644133+056
81	-.1165920639-061	-.7291838755-061	-.5971933071+058
90	-.5690479405-072	-.1307134022-071	-.3444337871+069
91	-.6679695209-073	-.4353600707-074	-.2780405672+070
99	-.9374805676-083	-.6363123003-083	-.3456988952+080
100	-.5480144073-084	-.3088912906-084	-.3149496482+080

REAL X	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
0	.3160260071+041	-.1304651691+042	0	-.1304651691+042
1	-.1291490090+042	-.3135243271+041	1	-.3135243271+041
2	-.3085761221+041	.1265534794+042	2	-.1265534794+042
3	.1227591631+042	.3012899439+041	3	.3012899439+041
4	.2918242764+041	-.1178765787+042	4	-.1178765787+042
5	-.1120457336+042	-.2803824737+041	5	-.2803824737+041
6	-.2672062646+041	.1054284580+042	6	.1054284580+042
7	.9820096197+041	.2525680452+041	7	.2525680452+041
8	.2367622401+041	-.9054609354+041	8	-.9054609354+041
9	-.8264576615+041	-.2200960623+041	9	-.2200960623+041
10	-.2028800415+041	.7467398693+041	10	.7467398693+041
11	.6679094215+041	-.1854187156+041	11	-.1854187156+041
12	.1680018792+041	-.5913770247+041	12	-.5913770247+041
13	-.518380678+041	-.1508967634+041	13	-.1508967634+041
14	-.1343414680+041	.4497427259+041	14	.4497427259+041
15	.3862948340+041	-.1185398994+041	15	-.1185398994+041
16	.1036583769+041	-.3284571728+041	16	-.3284571728+041
17	-.2794681705+041	-.8982396822+040	17	-.8982396822+040
18	-.7712451561+040	.2303666200+041	18	.2303666200+041
19	.1900218334+041	.6561021430+040	19	.6561021430+040
20	.5529652775+040	-.1551667056+041	20	-.1551667056+041
30	-.5913438426+039	.1174032281+040	30	.1174032281+040
31	.8580002679+039	.4483146858+039	31	.4483146858+039
40	.2386906381+038	-.3241300699+038	40	-.3241300699+038
41	-.2141393004+038	-.1640847309+038	41	-.1640847309+038
50	-.363711515+035	.3242436788+036	50	.3242436788+036
51	.1932779606+036	.2270717394+036	51	.2270717394+036
60	.2136296901+034	-.1124095226+034	60	-.1124095226+034
61	-.5987910359+033	-.1213996512+034	61	-.1213996512+034
70	-.4968283277+031	.1056093307+031	70	.1056093307+031
71	.4700712755+030	.2577473039+031	71	.2577473039+031
80	.4697414021+028	.4368207127+027	80	.4368207127+027
81	.2785941357+027	-.2229828866+028	81	-.2229828866+028
90	-.1836807730+025	-.8168786075+024	90	-.8168786075+024
91	-.3878427535+024	.7984049663+024	91	.7984049663+024
99	-.6570776301+021	.7356221331+021	99	.7356221331+021
100	.2945241870+021	.2824604781+021	100	.2824604781+021

REAL X =	FIRST KIND REAL BESSSEL	IMAGINARY X =	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
N 0	• 5000000000+001			• 0000000000
1	-• 1917848549+000	• 000000000	0	-• 5673243709-001
2	-• 9508940808-001	• 000000000	1	• 1804383675+000
3	• 1347312101+000	• 000000000	2	• 1649954576+000
4	• 2236206182+000	• 000000000	3	-• 1544290991-001
5	• 1870176553+000	• 000000000	4	• 1866155345+000
6	• 1068111615+000	• 000000000	5	-• 3204650467+000
7	• 479689986-001	• 000000000	6	-• 5184075714+000
8	• 1790277818-001	• 000000000	7	• 1027394639+001
9	• 5741434675-002	• 000000000	8	-• 2563776345+001
10	• 1618099715-002	• 000000000	9	• 7689444934+001
11	• 4073442442-003	• 000000000	10	-• 2665611441+002
12	• 9274611037-004	• 000000000	11	-• 1042662356+003
13	• 1928786347-004	• 000000000	12	-• 4529685692+003
14	• 3693206998-005	• 000000000	13	-• 2160576611+004
15	• 6554543131-006	• 000000000	14	-• 1121414513+005
16	• 1084280182-006	• 000000000	15	-• 6288146513+005
17	• 1679933976-007	• 000000000	16	-• 3786509387+006
18	• 2448020198-008	• 000000000	17	-• 2436214730+007
19	• 3367416303-009	• 000000000	18	-• 1667485217+008
20	• 4386786630-010	• 000000000	19	-• 1209576913+009
21	• 5427726761-011	• 000000000	20	-• 9267951403+009
22	• 4282730217-021	• 000000000	23	-• 7760717570+019
23	• 3419992523-022	• 000000000	24	-• 9401810041+020
24	• 1210347583-032	• 000000000	25	-• 2055758716+031
25	• 7317268114-034	• 000000000	26	-• 9264591403+032
26	• 2857479350-045	• 000000000	27	-• 3317264059+032
27	• 1390347013-046	• 000000000	28	-• 6964109188+043
28	• 9285901118-059	• 000000000	29	-• 1403223624+045
29	• 3780914088-060	• 000000000	30	-• 1786114181+057
30	• 5782161378-073	• 000000000	31	-• 3317264059+058
31	• 2024178147-074	• 000000000	32	-• 4314878111+058
32	• 8732232016-088	• 000000000	33	-• 2459324803+071
33	• 2631093536-089	• 000000000	34	-• 5926437806+072
34	• 3616013506-103	• 000000000	35	-• 1425339371+036
35	• 1643397689-104	• 000000000	36	-• 458510679+087
36	• 2223967141-117	• 000000000	37	-• 290049565+101
37	• 5535650303-119	• 000000000	38	-• 1049007269+103
38			39	-• 4524781791+115
39			40	-• 1799713983+117

REAL X = .500000000+001		IMAGINARY X = -.100000000-002		
FIRST KIND		SECOND KIND		
N	REAL BESSSEL	IMAGINARY BESSSEL	REAL BESSSEL	
0	-.1917849318+000	-.95088943291-004	0	-.5673250155-001
1	-.95088948257-001	.1537491038-003	1	.1804384247+000
2	.1347312261+000	.1759281540-003	2	.16499553566+000
3	.22968206681+000	.4912528735-004	3	.1544297846-001
4	.1870176826+000	.4280297001-004	4	.1865155159+000
5	.1068111625+000	.5884426725-004	5	.3204649751+000
6	.4795689148-001	.3965750312-004	6	.5184073141+000
7	.2750277094-001	.1932245416-004	7	.1027393777+001
8	.5741430791-002	.7568194012-005	8	.2563773218+001
9	.1618098114-002	.2505234727-005	9	.7689432375+001
10	.4073436962-003	.7219421520-006	10	.2665605890+002
11	.9274594885-004	.1847534993-006	11	.1042659677+003
12	.1928782146-004	.4259764120-007	12	.4529671577+003
13	.3693197190-005	.8946877497-038	13	.2160568707+004
14	.6554522333-006	.1726842550-008	14	.1121409734+005
15	.1084276137-006	.3084843319-009	15	.6288115674+005
16	.1679932703-007	.5130999573-010	16	.3786488232+006
17	.2448008038-008	.7986515595-011	17	.2435199360+007
18	.3367397291-009	.116840079-011	18	.16677473427+008
19	.4386758709-010	.1612698630-012	19	.1209567391+009
20	.5427688096-011	.2107136937-013	20	.9267870643+009
30	.4282657771-021	.2535424902-023	30	.7760567611+019
31	.3419930568-022	.2093923207-024	31	.9401616332+020
40	.1210310411-032	.9606514644-035	40	.2055688970+031
41	.7317031681-034	.5956909658-036	41	.3317145640+032
50	.2857340736-045	.284351767-047	50	.6963743568+043
51	.1390276786-046	.1411495637-048	51	.1403146994+045
60	.9285248243-058	.111052070-060	60	.1759799399+057
61	.3780639189-060	.4597459905-062	61	.4314543231+058
70	.5781605672-073	.8074532905-075	70	.2459074615+071
71	.2023977945-074	.2867252988-076	71	.6925713225+072
80	.873133596-088	.1394419137-089	80	.1425150755+086
91	.1043227301-104	.1896606821-106	91	.1046828298+103
99	.22235356717-117	.439761317-119	99	.4523870102+115
100	.55345557020-119	-.1105694445-120	100	-.1799344092+117
			-.3630643766+115	

REAL X = .500000000+001		IMAGINARY X = -.100000000-001	
FIRST KIND	REAL BESSSEL	SECOND KIND	REAL BESSSEL
N	IMAGINARY BESSSEL	IMAGINARY BESSSEL	IMAGINARY BESSSEL
0	-9509189112-003	0	-5673888254-001
1	-1917925424+000	1	-1804440095+000
2	-9509685725-001	2	-1650033563+000
3	-1347328113+000	3	-1543976445-001
4	-2298256110+000	4	-1866132743+000
5	-1670203816+000	5	-3204578834+000
6	-1068112702+000	6	-518-818400+000
7	-4796606213-001	7	-1027308434+001
8	-1790205465-001	8	-2563463614+001
9	-5741046344-002	9	-7686189061+001
10	-1617939466-002	10	-2665056408+002
11	-4072894351-003	11	-1042394526+003
12	-9272905802-004	12	-4528284326+003
13	-1928366210-004	13	-2159786322+004
14	-369226295-005	14	-1120936671+005
15	-6552463392-006	15	-6285062925+005
16	-1093875656-006	16	-3784394196-006
17	-1679212745-007	17	-243467794+007
18	-2446804216-008	18	-1666306347+008
19	-3365515177-009	19	-1208624836+009
20	-4275487326-011	20	-9259876827+009
30	-5425860645-011	30	-7745727082+019
31	-1612399522-011	31	-9382446557+020
40	-1206632065-032	40	-2048788425+031
41	-7293636177-034	41	-3305459774+032
50	-2843628098-045	50	-6927561398+043
51	-1383329876-046	51	-1395568130+045
60	-9220685028-059	60	-1772712738+057
61	-3753454925-060	61	-4281435735+058
70	-5726674627-073	70	-2434350216+071
71	-2064188752-074	71	-685411684+072
80	-8622567856-088	80	-1406520965+086
81	-2646549745-089	81	-4523073052+087
90	-375522454H-103	90	-2851778360+101
91	-1026402736-104	91	-1031162749+103
99	-2181056462-117	99	-4433927806+115
100	-5426663579-119	100	-1762855147+117

REAL X = .5000000000+001	FIRST KIND	IMAGINARY X = -.1000000000+000	SECOND KIND	IMAGINARY RESSEL
N	REAL BESSEL	IMAGINARY BESSEL	N	REAL BESSEL
0	-.1925539029+000	-.953378103-002	0	-.5737759402-001
1	-.95838914565/-001	*153870121-001	1	*1810107497+000
2	*13488914094+000	*1761273931-001	2	*1657856946+000
3	*230320175+000	*4915434416-002	3	*1512849902-001
4	*1872403898+000	*4267495133-002	4	*1864605107+030
5	*1068219770+000	*5890081765-002	5	*3197505563+000
6	*4788315398-001	*3967215877-002	6	*5158407974+000
7	*1783059740-001	*1931632027-002	7	*2018799967+001
8	*570261951-002	*7559670859-003	8	*2532618064+001
9	*1602092008-002	*250064773-003	9	*7564414954+001
10	*401A683838-003	*7196812120-004	10	*2610400952+002
11	*9113323978-004	*1839532678-004	11	*1016044905+003
12	*1886859434-004	*4235642428-005	12	*4390551355+003
13	*3595404996-005	*8983124633-006	13	*2082195191+004
14	*634720032-006	*1711784057-006	14	*1074074603+005
15	*1043999958-006	*3052619002-007	15	*5983015315+005
16	*160759144-907	*5067874548-008	16	*3577465230+006
17	*2327157085-008	*7872389517-009	17	*2284535083+007
18	*3178641059-009	*1149230026-009	18	*1551292398+008
19	*4109859788-010	*1582615413+010	19	*1115873416+009
20	*5044674590-011	*2062823973-011	20	*8474456620+009
30	*357575205,-021	*2404196310-021	30	*6315102468+019
31	*2816535690-022	*1977684977-022	31	*7538686878+020
40	*8544495685-033	*8700295443-033	40	*1400549663+031
41	*566572691/-034	*5363995689-034	41	*2210905560+032
50	*1371613987-045	*2420939195-045	50	*3638105879+043
51	*7410203948-047	*119330390/-046	51	*709057641+044
60	*344260748-059	*87451536/9-059	60	*6135617466+056
61	*1330255449-060	*3588858367-060	61	*1401468833+058
70	*1017965987-073	*5774835067-073	70	*3733168768+070
71	*3158317186-075	*2028754953-074	71	*9157540317+071
80	*229871076/-089	*8870336416-088	80	*6426316775+084
81	-.1251803312-090	*2722078127-089	81	*2969140544+086
90	-.8715169865-104	*3786412055-103	90	*6939415730+100
91	-.2590319971-105	*1030529996-104	91	*2709155397+102
99	-.8968504821-118	*2083674007-117	99	*1834524044+115
100	-.2336194560-119	-.5141742899-119	100	.7614531975+116
				-.1590843039+117

REAL X = .50000000+001	FIRST KIND	IMAGINARY BESSEL	N	REAL BESSEL	SECOND KIND	IMAGINARY BESSEL
0	REAL BESSEL	- .5068234144-001	0	- .7323444346-001		.9261474322-001
1	- .2111933480+000	.7839658051-001	1	* 1948575227+000		.6757170755-001
2	- .1140512977+000	.9047924822-001	2	* 1849772268+000		-.4089744036-001
3	- .1387828787+000	.2492770365-001	3	- .7662502063-002		-.8974964585-001
4	- .2425017471+000	.2231189208-001	4	* 1831579718+000		-.8457013834-001
5	- .1939028516+000	.3013453143-001	5	* 3036457399+000		-.9361142735-001
6	- .1070440326+000	.2001115938-001	6	* 4579451111+000		-.1854853101+000
7	- .4582634518-001	-.9582463276-002	7	* 8274341693+000		-.5017623699+000
8	- .1607616438-001	-.3676504492-002	8	* 1850741816+001		-.1550670492+001
9	- .4770914349-002	-.1187838183-002	9	* 4880777918+201		-.5341332513+001
10	- .1221974543-002	-.3328365617-003	10	* 1450296853+002		-.2038178689+002
11	- .5385520024-004	-.8249248195-004	11	* 4695300164+002		-.8544554439+002
12	- .9328923161-005	-.1834366099-004	12	* 1604265930+003		-.3901606734+003
13	- .1408607983-005	-.3699442183-005	13	* 5540892044+003		-.192546204+004
14	- .1801678156-006	-.6924176982-006	14	* 1772575585+004		-.1020063458+005
15	- .1790250724-007	-.1159294178-006	15	* 3767267568+004		-.5767035419+005
16	- .8933566891-009	-.1823857522-007	16	* 1404837824+005		-.3461279811+006
17	- .1464579801-009	-.2669573262-008	17	* 3217511922+006		-.2194975923+007
18	- .5918498376-010	-.364920429-009	18	* 3737180826+007		-.1464358060+008
19	- .1248438821-010	-.4673185278-010	19	* 3778853371+008		-.1023564920+009
20	- .2139157711-011	-.5620422040-011	20	* 3671426476+009		-.7466490744+009
30	- .4891140882-021	-.9480619255-022	30	* 6607469308+019		-.6266307893+018
31	- .3981745394-022	-.3615234862-023	31	* 8001129594+020		.5228611964+018
40	- .1014549600-032	-.1076307234-032	40	* 102320608+031		.1324548276+031
41	- .5477561914-034	-.7123933605-034	41	* 1421402165+032		.2280882288+032
50	- .8960468154-046	-.3557905285-045	50	* 1827104880+043		.5077660142+043
51	- .6098701718-047	-.1687227255-046	51	* 46631515281+044		.976365840+044
60	- .1187919690-058	-.3981835046-059	60	* 1284153115+057		.2931588970+056
61	- .4999235230-060	-.1135938416-060	61	* 3141842563+058		.3929557684+057
70	- .6394677216-073	-.5130188076-073	70	* 1232679397+071		-.1207983459+071
71	- .2058495451-074	-.2020273865-074	71	* 3099583967+072		-.3713053698+072
80	- .1352774753-088	-.1294059131-087	80	* 1923079908+085		-.9322024058+085
81	- .8133936126-090	-.3931479939-089	81	* 9099866213+086		-.2907666991+087
90	- .5332174212-103	-.2696971191-103	90	* 1718822387+101		-.6645094634+100
91	- .1531774156-104	-.5913956303-105	91	* 6394083637+102		-.1763315165+102
99	- .3310242356-117	-.1518039651-117	99	* 2373132415+115		-.1388510782+115
100	- .7861018148-119	-.4603419752-119	100	* 8708015675+116		.6403789615+116

REAL X = .500000000+001		IMAGINARY X = -.100000000+001	
FIRST KIND	SECOND KIND	REAL BESSSEL	IMAGINARY BESSSEL
N			
0	-2717356636+000	-.1210191605+000	-.1275191184+000
1	-.1751213937+000	.1661576796+000	.2395249883+000
2	.1515320504+000	.1966730456+000	.2478735248+000
3	.2830035487+000	.5209179703-001	.1479167682-001
4	.2154095506+000	-.5035620958-001	-.1776776584+000
5	.1072516692+000	-.6468193070-001	-.2654173530+000
6	.3883441250-001	-.4109524533-001	-.3164276783+000
7	.1038198475-001	-.1863897638-001	-.3832990227+000
8	.1866876052-002	-.6691426101-002	-.3791792054+000
9	.8988863580-004	-.1983497685-002	-.4427004580+000
10	-.8895772853-004	-.5002814367-003	-.6404941107+001
11	-.4506753292-004	-.1087201286-003	-.4135978732+002
12	-.1420393790-004	-.2046348836-004	-.2371078553+003
13	-.3544198962-005	-.3319659508-005	-.133551569394+004
14	-.7512949096-006	-.4537195526-006	-.7621133668+004
15	-.1396431485-006	-.4868231845-007	-.449279823+005
16	-.2314878803-007	-.299549613339-008	-.2662572845+006
17	-.3455486191-008	-.2654866786-009	-.1628886250+007
18	-.4666680178-009	-.1348748796-009	-.1012281373+008
19	-.5704472515-010	-.3008124714-010	-.6320830791+008
20	-.6279291533-011	-.5167386200-011	-.3890425431+009
30	.7031122326-021	.3320031207-021	-.4059617025+019
31	.6147172535-022	.1512620635-022	-.49171875025+020
40	.4964511021-034	-.26677254637-032	-.6320830791+008
41	-.2948250412-034	-.1618161119-033	-.5294291468+031
50	-.7061467356-045	.2955190402-045	.2115246732+043
51	-.3146092962-046	.2127789449-046	.3544035246+044
60	.2184993388-058	.2090711245-058	.4534815249+056
61	.1060281155-059	.6726094093-060	-.1188031127+058
70	.794728844-073	-.2147352377-072	-.9586984975+069
71	.1274855437-074	-.8073980591-074	.6693121447+070
80	-.4199378365-087	.2226883230-088	.2812076048+085
81	-.1275508357-088	.3267067086-089	.8253425460+086
90	.9912704288-103	.2093275016-102	-.2962288506+100
91	.3807234924-104	.4934124877-104	-.1298253584+102
99	.1220008507-116	-.9620260310-117	-.4121279316+114
100	.2556995145-118	-.3002463246-118	-.1206062898+116

REAL X = .500000000+001	FIRST KIND	IMAGINARY X = -.300000000+001	SECOND KIND	
N	REAL BESSSEL	IMAGINARY BESSSEL	REAL BESSSEL	
0	-.1168906779+001	-.1269730527+001	0	-.1267594864+001
1	-.1327469638+001	-.8708488017+000	1	-.8801593195+000
2	-.3528196093+000	-.1302539506+001	2	-.1304218033+001
3	-.1012246039+001	-.242556548+000	3	-.2295299988+000
4	-.539340356+000	-.4276381560+000	4	-.4475950016+000
5	-.4123960250+001	-.3802138407+000	5	-.3847448046+000
6	-.1036418335+000	-.1473869721+000	6	-.9740112474+001
7	-.7031687461+001	-.204386500+001	7	-.143329634+000
8	-.2441776512+001	-.9235263028+002	8	-.3341215956+000
9	-.4580432732+002	-.6900159865+002	9	-.2810266462+000
10	-.5158207487+004	-.2365634746+002	10	-.1436736703+001
11	-.3563492875+003	-.501053608+003	11	-.1091342789+002
12	-.1388659413+003	-.5228876519+004	12	-.4874347334+002
13	-.3149245566+004	-.6907097417+005	13	-.1608357597+003
14	-.463277718+005	-.4687862551+005	14	-.2865386218+003
15	-.2603917480+005	-.1230766491+005	15	-.1187199884+004
16	-.7910728697+007	-.2108734272+006	16	-.1766311489+005
17	-.3028095570+007	-.2290916525+007	17	-.1305597123+006
18	-.8024381682+008	-.5174416053+009	18	-.7189122384+006
19	-.8121940937+009	-.4166947546+009	19	-.2764607975+007
20	-.6721051075+010	-.1124053756+009	20	-.1158127605+007
30	-.4475743520+019	-.1217510840+019	30	-.430299643692+017
31	-.2960758790+020	-.313155301+020	31	-.1465888857+018
40	-.5089845728+030	-.315626565+030	40	-.3550326202+028
41	-.4217792530+031	-.4555875537+033	41	-.4268661310+029
50	-.1111515508+042	-.6414000336+042	50	-.1697813969+040
51	-.2419045485+043	-.2787229236+043	51	-.4293571779+041
60	-.61716496+055	-.7575553189+055	60	-.2133933092+052
61	-.6528210115+057	-.4590823792+056	61	-.1160018365+054
70	-.2815311454+068	-.7117821348+070	70	-.3658963140+066
71	-.9692940682+070	-.6173922764+070	71	-.4697872367+067
80	-.1314419735+082	-.1468820082+082	80	-.5164827824+080
91	-.6741639935+084	-.2080112619+084	91	-.1450679630+082
70	-.5533276474+098	-.3956919092+097	70	-.9236269070+094
91	-.4987677466+093	-.171945722+098	91	-.5951912527+096
99	-.9267424030+111	-.1835124033+112	99	-.7990071066+108
100	-.2277778765+112	-.1431084094+112	100	-.1440177878+110

REAL X = .5000000000+001		IMAGINARY X = -.1000000000+002	
FIRST KIND		SECOND KIND	
N	REAL BESSEL	IMAGINARY BESSEL	REAL BESSEL
0	-.1725112391+003	-.9698300194+003	-.9698300165+003
1	-.8991440645+003	*1199171364+003	*1199171395+003
2	.35835383861+002	*7684255003+003	*7684254970+003
3	.5989406321+003	.4810149910+002	.4810149376+002
4	.1049326989+003	-.4195503266+003	-.4195503227+003
5	-.25908A6253+003	-.1235880735+003	-.1235880611+003
6	-.1101741893+003	.1371735840+003	.1371735824+003
7	.5913751947+002	.3033718029+002	.3033714580+002
8	.4925208466+002	-.1800625249+002	-.1800627800+002
9	-.1157599523+001	-.2559859683+002	-.2559850001+002
10	-.1122199236+002	-.3208230863+001	-.3208010303+001
11	-.2879047208+001	.4050735743+001	.4050580551+001
12	.1119915169+001	.1637460883+001	.1636044572+001
13	.7240406019+000	-.1734445402+000	-.1748974760+000
14	.3668889711-001	-.2608532966+000	-.2538587394+000
15	-.76301A5637-001	-.4402703091-001	-.18666597102-001
16	-.2211616236-001	.1703116445-001	.1261934112-001
17	.2146247909-002	.8121499345-002	-.2451818802+000
18	.238071126/-002	.3484287782-003	-.5956289739+000
19	.3458555834-003	-.5589194028-003	.1355387055+001
20	-.9734802033-C04	-.1412736265-003	.1158504930+002
30	.1521244069-C10	-.2472313318-010	.2348954821+008
31	-.2765650705-011	-.4233176231-011	.2694929991+009
40	.2022344302-018	.6089570789-019	-.3610525330+016
41	.193073911-019	-.2074545434-019	.1238146302+017
50	-.1417724794-028	.1377956816-027	-.5250509948+025
51	.1267372484-028	.7894893955-029	-.4941704863+026
60	-.1297720174-037	.6617389849-039	.2327053472+035
61	-.4644986136-039	.1079664736-038	-.3869127334+036
70	-.434607151/-049	.2348320814-048	.2525594058+046
71	-.1790077902-049	-.5067596655-050	.2272775225+047
80	.1030939145-059	-.3204981362-060	-.8648644133+056
81	.1165920639-061	-.7291838755-061	.5971933071+058
90	.5690479405-072	.1307134022-071	-.3444337871+069
91	.8679605209-073	.4353600707-074	-.2780405672+070
99	-.9374805670-083	-.6363123003-083	.34569886952+080
100	-.5480144073-084	.3088912906-084	-.3149496482+080
		105	.7040381810+081

REAL X = .500000000+001	IMAGINARY X = .100000000+005	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	N	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
0	.5160260071+041	-.1304651691+042	0	-.1304651691+042	-.3160260071+041	-.3160260071+041
1	-.1291460090+042	-.3135243271+041	1	-.3135243271+041	-.1291480090+042	-.1291480090+042
2	-.3085761221+041	-.1265534794+042	2	-.1265534794+042	-.3085761221+041	-.3085761221+041
3	-.1227591631+042	-.3012899439+041	3	-.3012899439+041	-.1227591631+042	-.1227591631+042
4	-.2918242764+041	-.1178765787+042	4	-.1178765787+042	-.2918242764+041	-.2918242764+041
5	-.1120457336+042	-.2803824737+041	5	-.2803824737+041	-.1120457336+042	-.1120457336+042
6	-.2672062646+041	-.1054284580+042	6	-.1054284580+042	-.2672062646+041	-.2672062646+041
7	-.9820096197+041	-.2525680452+041	7	-.2525680452+041	-.9820096197+041	-.9820096197+041
8	-.2367622404+041	-.9054609354+041	8	-.9054609354+041	-.2367622404+041	-.2367622404+041
9	-.8264576615+041	-.2200960623+041	9	-.2200960623+041	.8264576615+041	.8264576615+041
10	-.2028800415+041	-.7467398698+041	10	-.7467398698+041	.2028800415+041	.2028800415+041
11	-.6679084215+041	-.1854187156+041	11	-.1854187156+041	-.6679084215+041	-.6679084215+041
12	-.1680018792+041	-.5913770247+041	12	-.5913770247+041	-.1680018792+041	-.1680018792+041
13	-.5183380678+041	-.1508996763+041	13	-.1508996763+041	.5183380678+041	.5183380678+041
14	-.1343414680+041	-.4497427259+041	14	-.4497427259+041	.1343414680+041	.1343414680+041
15	-.3862948340+041	-.1185398994+041	15	-.1185398994+041	-.3862948340+041	-.3862948340+041
16	-.1036583769+041	-.3284571728+041	16	-.3284571728+041	-.1036583769+041	-.1036583769+041
17	-.2764641705+041	-.8982396822+040	17	-.8982396822+040	.2764641705+041	.2764641705+041
18	-.77151561+040	-.2303666200+041	18	-.2303666200+041	.7712451561+040	.7712451561+040
19	-.1900218334+041	-.6561021430+040	19	-.6561021430+040	-.1900218334+041	-.1900218334+041
20	-.5529652775+040	-.1551667056+041	20	-.1551667056+041	-.5529652775+040	-.5529652775+040
20	-.5913438426+039	-.1174032281+040	30	-.1174032281+040	.5913438426+039	.5913438426+039
30	-.8580002679+039	-.4483146858+039	31	-.4483146858+039	.8580002679+039	.8580002679+039
31	-.1932779606+036	-.2270717394+036	51	-.2270717394+036	-.1932804186+036	-.1932804186+036
40	-.2386906381+038	-.3241300699+033	40	-.3241300699+033	-.2386906382+036	-.2386906382+036
41	-.2141393004+038	-.1640847309+038	41	-.1640847309+038	.2141393007+038	.2141393007+038
50	-.3637711515+036	-.3242436788+036	50	-.3242436788+036	.36377118313+036	.36377118313+036
51	-.4700712755+030	-.2577473039+031	71	-.2577473039+031	-.1624399796+036	-.1624399796+036
60	-.2136296901+034	-.1124095226+034	60	-.1124095226+034	-.1419917773+039	-.1419917773+039
61	-.5987910359+033	-.1213996512+034	61	-.1213996512+034	.9575277816+038	.9575277816+038
70	-.4968283277+031	-.1056093307+031	70	-.1056093307+031	.3364680709+042	.3364680709+042
71	-.4700712755+030	-.2577473039+031	71	-.2577473039+031	.1206889256+041	.1206889256+041
80	-.4697414021+028	-.4368207127+027	80	-.4368207127+027	.1879490343+045	.1879490343+045
81	-.2785941357+027	-.2229828866+028	81	-.2229828866+028	-.5048906699+045	-.5048906699+045
90	-.1836807730+025	-.8168786075+024	90	-.8168786075+024	-.6282562838+045	-.6282562838+045
91	-.3878427535+024	-.7984049663+024	91	-.7984049663+024	-.5048906699+045	-.5048906699+045
99	-.6570776301+021	-.7356221331+021	99	-.7356221331+021	-.2945241870+021	-.2945241870+021
100	-.2945241870+021	-.2824604781+021	100	-.2824604781+021	-.1494135545+046	-.1494135545+046

REAL X = .100000000+002	FIRST KIND REAL BESSSEL	IMAGINARY X = .000000000	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL	IMAGINARY BESSSEL
N 0	-.5440211i39-001	.000000000	0	*8390715291-001	*000000000
1	.7846694180-001	.669300000	1	*6279282638-001	*000000000
2	.7794219363-001	.000000000	2	*6506930499-001	*000000000
3	-.3949584498-001	.000000000	3	*9532747800-001	*000000000
4	-.1055892851+000	.000000000	4	-.1659930220-002	*000000000
5	-.5553451162-001	.000000000	5	*9383354168-001	*000000000
6	.4450132233-001	.000000000	6	*1048768261+000	*000000000
7	.1133862307+000	.000000000	7	*4250633221-001	*000000000
8	.1255780236+000	.000000000	8	*4111732775-001	*000000000
9	.1000964095+000	.000000000	9	-.1124057894+000	*000000000
10	.6460515449-001	.000000000	10	-.1724536721+000	*000000000
11	.3557441489-001	.000000000	11	-.2497469220+000	*000000000
12	.1721509974-001	.000000000	12	*40196442485+000	*000000000
13	.7465584477-002	.000000000	13	-.7551636993+000	*000000000
14	.2941078342-002	.000000000	14	-.1636977739+001	*000000000
15	.1063542715-002	.000000000	15	-.3992071745+001	*000000000
16	.3559040735-003	.000000000	16	-.1073844467+002	*000000000
17	.1109407280-003	.000000000	17	-.3144479567+002	*000000000
18	.3238847439-004	.000000000	18	-.9931834017+002	*000000000
19	.8896627269-005	.000000000	19	-.3360350630+003	*000000000
20	.2308371961-005	.000000000	20	-.1211210605+004	*000000000
30	.2512057385-012	.000000000	30	-.6908318696+010	*000000000
31	.4089663774-013	.000000000	31	-.4093269153+011	*000000000
40	.8435671634-021	.000000000	40	-.1510304961+016	*000000000
41	.1031165119-021	.000000000	41	-.1203903623+020	*000000000
50	.2230696023-030	.000000000	50	-.4528227272+028	*000000000
51	.2186121214-031	.000000000	51	-.4527283158+029	*000000000
60	.7802678576-041	.000000000	60	-.1063059842+039	*000000000
61	.6450906511-042	.000000000	61	-.1277304015+040	*000000000
70	.5247541705-052	.000000000	70	-.1365335609+050	*000000000
71	.3687477631-053	.000000000	71	-.1915248513+051	*000000000
80	.8382570331-064	.000000000	80	-.7467487328+061	*000000000
81	.5161944294-065	.000000000	81	-.197549956+063	*000000000
90	.3847244364-076	.000000000	90	-.1444906012+074	*000000000
91	.2108565657-077	.000000000	91	-.2507162439+075	*000000000
99	.1169360214-087	.000000000	99	-.4319200281+085	*000000000
100	.5832040182-089	.000000000	100	-.8573226309+086	*000000000

REAL X = .100000000+002	IMAGINARY X = -.100000000-002	FIRST KIND REAL BESSSEL	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
N				
0	-5440214614-001	.7846695228-004	0	.8390718858-001
1	.7846697324-001	.7009551271-004	1	.6279286428-001
2	.7794223577-001	-.5508428950-004	2	-.8231363186-004
3	-.3949585299-001	-.9374054543-004	3	-.2693831471-004
4	-.1055893260+000	-.1329880133-004	4	-.9449752539-004
5	-.5553453829-001	.7226858511-004	5	.5796006266-004
6	.4450132657-001	.86668544501-004	6	-.2041976464-004
7	.1133862510+000	.4620766466-004	7	-.7087176496-004
8	.1255783413+000	-.3660112264-006	8	-.7951192950-004
9	.1000964171+c00	-.2548161694-004	9	-.7128845911-004
10	.6460515417-001	-.2903074142-004	10	-.7729324095-004
11	.3557441139-001	-.2191585719-004	11	-.1272426126-003
12	.1721599624-001	-.1319361507-004	12	-.2728065445-003
13	.7455582092-002	-.6764181143-005	13	-.6552647679-003
14	.2941077030-002	-.3053966687-005	14	-.1700302407-002
15	.1063542094-002	-.1239409832-005	15	-.4750335391-002
16	.5559038137-003	-.4585057063-006	16	-.1426327837-001
17	.1109406293-003	-.1562107269-006	17	-.4586216596-001
18	.3238844014-004	-.4940261252-007	18	-.1572599663+000
19	.8896616274-005	-.1459521485-007	19	-.5727474388+000
20	.2308368675-005	-.4049044520-008	20	-.2207507710+001
30	.251204763-012	-.7127197321-015	30	-.2020770338+008
31	.4089646737-013	-.1203363433-015	31	-.1240760828+009
40	.8435609951-U21	-.3271144607-023	40	-.5997801563+016
41	.1031157167-021	-.4104768146-024	41	-.4905350935+017
50	.2230669791-030	-.1093482695-032	50	-.2263159503+026
51	.218604415-031	-.1093908707-033	51	-.2308894341+027
60	.7882542930-041	-.4665072252-043	60	-.6394640537+036
61	.6450791635-042	-.3883094276-044	61	-.7812927709+037
70	.5247417564-052	-.3636376586-054	70	-.9595053405+047
71	.3687387816-053	-.2592537373-055	71	-.1365313508+049
60	.8382309583-064	-.6654369590-066	80	-.6001442647+059
81	.5161779597-065	-.4149732991-067	81	-.9745123172+060
90	.3847092186-076	-.3441389923-078	90	-.1306748312+072
91	.2128480355-077	-.1907338815-079	91	-.2384124168+073
99	.1169304067-087	-.1151816515-089	99	-.4297144964+083
100	.5831754385-089	-.5803148683-091	100	-.8615617144+084

REAL X = .100000000+002	IMAGINARY Y = -.100000000-001	
FIRST KIND	SECOND KIND	
N	REAL BESSEL	IMAGINARY BESSEL
0	-.5440561590-001	.7846798978-003
1	.7847008574-001	.7009682535-003
2	-.7794640779-001	-.5508486298-003
3	-.3949664540-001	-.9374191280-003
4	-.1055933757+030	-.1329017277-003
5	-.5553717803-001	.7226927497-003
6	.4450174602-001	.8668621227-005
7	.1133882631+010	.4620790948-003
8	.1255797854+000	-.3661948954-005
9	.1000971648+000	-.2548189801-003
10	.6460512177-001	-.2903092061-003
11	.35574n6485-001	-.2191591230-003
12	.1721564963-001	-.1315360054-003
13	.7465346029-002	-.6764147967-004
14	.2940947122-002	-.3053939292-004
15	.10634R0661-002	-.1239393311-004
16	.3558780510-003	-.4584974547-005
17	.1109308633-003	-.1562071371-005
18	.3238504945-004	-.4940121516-006
19	.8895527709-005	-.1459471987-006
20	.2308043118-005	-.4048883094-007
30	.2511086206-012	-.7126360119-014
31	.4087960221-013	-.1203210562-014
40	.8429503952-021	-.3270398739-022
41	.1030369983-021	-.4103779376-023
50	.2228073240-030	-.1093076419-031
51	.2183441617-031	-.1093484588-032
60	.7869117540-041	-.4662515566-042
61	.6439421882-042	-.3880890572-043
70	.5235132189-052	-.3633621953-053
71	.3678499503-053	-.2590514463-054
80	.8356508204-064	-.6647715548-065
81	.5145482868-065	-.4145475341-066
90	.3832035983-076	-.3437001043-077
91	.210040860-077	-.1904850366-078
99	.1163749841-087	-.1150029692-088
100	.5803482698-089	-.5793958704-090

REAL X = .100000000+002		IMAGINARY X = -.100000000+000		
FIRST KIND		SECOND KIND		
N	REAL BESSSEL	IMAGINARY BESSSEL	REAL BESSSEL	
0	-.5475292017..001	.785177608..002	0	.8426411916..001
1	.7878151823..001	.7022815605..002	1	.6317219824..001
2	.7336394609..001	-.5514222658..002	2	-.6529292543..001
3	-.3957589463..001	-.9387870703..002	3	-.9577417401..001
4	-.1059985938..000	-.1553633301..002	4	-.1761156648..002
5	-.5580129934..001	.7233828792..002	5	-.9410414763..001
6	.4454373786..001	.8676296413..002	6	.1052015371..000
7	.1135895879..000	.4623239431..002	7	.4267073462..001
8	.1257542656..000	-.3845723297..004	8	-.4109546828..001
9	.1001719412..000	-.2551001436..002	9	-.1123908491..000
10	.6460185614..001	-.2904884827..002	10	-.1722904062..000
11	.3553938812..001	-.2192142255..002	11	-.2492207149..000
12	.1718097752..001	-.1319214572..002	12	-.4005677933..000
13	.7441737942..002	-.6760829134..003	13	-.7514181014..000
14	.2927958265..002	-.3051199367..003	14	-.1626293563..001
15	.1057339598..002	-.1237741277..003	15	-.3959445845..001
16	.3533033601..003	-.4575724286..004	16	-.1063208310..002
17	.1099550798..003	-.1558482697..004	17	-.3107606427..002
18	.3204635323..004	-.4926154398..005	18	-.9796351321..002
19	.8766820672..095	-.1454525299..005	19	-.3307740013..003
20	.2275541684..005	-.4032753191..006	20	-.1189706108..004
30	.2415461236..012	-.7042888498..013	30	-.6604029117..010
31	.3920302277..013	-.1187972948..013	31	-.3900071340..011
40	.7025510580..021	-.3196268188..021	40	-.1389830603..019
41	.9525526390..022	-.4005543729..022	41	-.1102959562..020
50	.1973048556..030	-.1052864978..030	50	-.3964054747..023
51	.1923102446..031	-.1051526872..031	51	-.3940743975..029
60	.6562076584..041	-.4410768393..041	60	-.8737641756..038
61	.5333586631..042	-.3664024068..042	61	-.1042445484..040
70	.4051573868..052	-.3364050324..052	70	-.1038119114..050
71	.2823189251..053	-.2392683132..053	71	-.1443632649..051
80	.5961008953..064	-.6001194842..064	80	-.5161904798..061
81	.3596574344..065	-.3732112460..065	81	-.8190709098..062
90	.2418983223..076	-.3014040304..076	90	-.8891388234..073
91	.1309157445..077	-.1665245394..077	91	-.1583672536..075
99	.6497402909..088	-.9792415035..088	99	-.2340470492..085
100	.3191417748..089	-.4916407855..089	100	-.4573255716..086

REAL X = .1000000000+002	FIRST KIND	IMAGINARY X = -.5000000000+000	SECOND KIND
N	REAL BESSSEL	IMAGINARY BESSSEL	REAL BESSSEL
0	- .6337298175-001	.4055497439-001	.9296603496-001
1	- .8644227135-001	.3672629570-001	.7248182819-001
2	- .8869147248-001	-.2827116114-001	-.7072509136-001
3	- .4150210647-001	-.4861486803-001	-.10656857419+000
4	- .1159732233+000	-.7123333968-002	-.4244455828-002
5	- .6229375388-001	.3701407444-001	.1906885295+000
6	- .4559027626-001	.4431966855-001	.1130843120+000
7	- .1185397196-000	.2341379297-001	.4662650831-001
8	- .1300242326+000	-.4182536688-003	-.4062378879-001
9	- .1019857135+000	-.1309855255-001	-.1121189432+000
10	- .6450665850-001	-.1474245162-001	-.1685225479+000
11	- .3468455108-001	-.1102708263-001	-.2369637051+000
12	- .1633382226-001	-.65778614380-002	-.3681419577+000
13	- .6868349174-032	-.3339808313-002	-.6649493277+000
14	- .2614224493-002	-.1492265725-002	-.1381283988+001
15	- .9098349247-003	-.5988530861-003	-.321662394533+001
16	- .2918208889-003	-.2188765723-003	-.8229113603+001
17	- .8679706301-004	-.736080317-004	-.2281279066+002
18	- .2406052886-004	-.2295736791-004	-.786276021+002
19	- .6241409978-005	-.6682334436-005	-.2149894683+003
20	- .1520073945-005	-.1824706262-005	-.7207636060+003
30	- .3994449714-013	-.2582812349-012	-.7246851039+009
31	- .4288919263-014	-.4238189424-013	-.2216252930+010
40	- .3182074790-021	-.8291981761-021	-.5751431311+018
41	- .4411041069-022	-.9934610505-022	-.5111795343+019
50	- .1629466354-030	-.1518162688-030	-.3391495527+028
51	- .1868581437-031	-.1396370356-031	-.3512046555+029
60	- .8359498726-041	-.1564451147-041	-.9749044822+038
61	- .6905635554-042	-.9336409224-043	-.11765767-99+040
70	- .5440220645-052	-.1805006482-052	-.1164218948+050
71	- .3758693027-053	-.1461352740-053	-.1597181864+051
80	- .6295197270-064	.6804936670-064	.4330766843+061
81	- .3665344591-065	.4385609140-065	.6511039956+062
90	- .1038745593-076	.4180592513-076	.2487151171+073
91	- .4540491356-078	.2319847499-077	.3331404236+074
99	- .2741359367-088	.1295337972-087	-.9720831636+084
100	- .1691803521-089	.6391520301-089	-.2291234350+086

REAL X = .100000000+002	IMAGINARY X = -.100000000+001	FIRST KIND REAL BESSSEL	SECOND KIND IMAGINARY BESSSEL	IMAGINARY BESSEL
N				
0	-.9287883440~001	* 8931990281~001	0	* 1218635249+000
1	* 1117832453+000	* 8404374070~001	1	* 1041908688+000
2	* 1235854298+000	-. 6103612106~001	2	-. 88522337417~001
3	-. 4758074927~001	-. 1081415516+000	3	-. 1432138916+000
4	-. 1490672277+000	-. 1721114487~001	4	-. 1268889286~001
5	-. 8371776745~001	* 7952166058~001	5	* 1224102547+000
6	* 4922868527~001	* 9470112716~001	6	* 1388579444+000
7	* 1348921678+000	. 4870723576~001	7	* 5911753228~001
8	* 1438724695+000	-. 2350158642~002	8	-. 3980727576~001
9	* 1076616193+000	-. 2841312572~001	9	-. 1123192643+000
10	* 6400433311~001	-. 3086710057~001	10	-. 1585173807+000
11	* 3183460905~001	-. 2245816264~001	11	-. 2029606448+000
12	* 1360455621~001	-. 1302578457~001	12	-. 2792753373+000
13	* 5064239130~002	-. 6416413970~002	13	-. 4335277958+000
14	* 1648787778~002	-. 2773198749~002	14	-. 7433574988+000
15	+ 4661689828~003	-. 1072821591~002	15	-. 1339777107+001
16	* 1113007861~003	-. 3765384272~003	16	-. 2351524822~001
17	* 2054306380~004	-. 1210839338~003	17	-. 329609077+001
18	* 1841600180~005	-. 3594020246~004	18	-. 6071739597+000
19	-. 0311949189~005	-. 9903548407~005	19	-. 3797523709+002
20	-. 4547450367~005	-. 2544950816~005	20	-. 2604809139+003
30	-. 2797425554~012	-. 9093391609~013	30	-. 5715903134+010
31	-. 470610872~013	-. 0999811033~014	31	-. 3434460170+011
40	-. 7767203439~021	. 6852782271~021	40	* 8381344269+018
41	-. 8627859176~022	. 9350246650~022	41	* 5887188829+019
50	* 495044363~031	. 2832093388~030	50	-. 9276362998+027
51	* 7678108422~032	. 2725257732~031	51	-. 1256714190+029
60	* 9888239675~041	. 4005748140~041	60	-. 7492389074+038
61	* 8422689336~042	. 2457608689~042	61	-. 9180469731+039
70	* 6057047315~052	-. 4354917082~052	70	-. 7177608147+049
71	* 3946688486~053	-. 3489544751~053	71	-. 9083151332+050
80	-. 7248789671~065	-. 1249827717~063	80	-. 7730271211+060
81	-. 1221719717~065	-. 7650527628~065	81	-. 2013989998+062
90	-. 5270361590~075	-. 2943905365~076	90	-. 8399147220+073
91	-. 3050579320~077	-. 1322759743~077	91	-. 1566287892+075
99	-. 1772505139~087	-. 7338780149~088	99	-. 2509825096+085
100	-. 8471681937~089	-. 4548210709~089	100	-. 4295208836+086

REAL X = .1000000000+002	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	N	IMAGINARY X = -.3000000000+001	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
N	-7338282764+000	.6204227004+000	0	.6250007258+000	-.324937624+000	
0	-.5406011215+000	.7692161512+000	1	.7710080138+000	-.5360195830+000	
1	-.8191069157+000	-.3640750433+000	2	-.3685381876+000	-.8163608759+000	
2	-.1147628515+000	-.8235021918+000	3	-.8277189885+000	-.1108258526+000	
3	-.7341494439+000	-.1868898494+000	4	-.1843762353+000	-.7280646458+000	
4	-.4451217726+000	+.4873359401+000	5	+.4951354416+000	+.4466572645+000	
5	+.1374019118+000	+.5439351239+000	6	+.5494331972+000	+.1294245663+000	
6	+.4143766230+000	+.2105561761+000	7	+.2064597301+000	-.4024306492+000	
7	+.3459142857+000	-.8310600048-001	8	-.9917320875-001	-.3591434110+000	
8	+.1640071807+000	-.1783212358+000	9	-.2024517625+000	-.1729107592+000	
9	-.3322034513-001	-.1419639583+000	10	-.1633031362+000	-.6612993497-001	
10	-.1795211781-001	-.7598655776-001	11	-.7279110637-001	-.5273496492-001	
11	-.2299937826-001	-.2973883449-001	12	-.4308990794-001	-.8922445284-001	
12	-.1433624896-001	-.8047038495-002	13	-.2330141426+000	-.1222592563+000	
13	-.6532521755-002	-.8477394504-003	14	-.6249542963+000	-.4646227795-001	
14	-.2367218712-002	-.5775537868-003	15	-.1462003877+001	.5134240560+000	
15	-.6927103820-003	-.4705865488-003	16	-.3094979324+001	.2748056938+001	
16	-.1573913288-003	-.2179988121-003	17	-.5412175389+001	.1061741762+002	
17	-.3871545188-012	-.9092460728-012	30	-.1022081763+010	-.3655813189+002	
18	-.2267347422-014	-.77799413658-004	18	-.4055777890+001	-.5394877622+010	
19	-.1204772596-005	-.2298352642-004	19	-.2887377925+002	.1176091892+003	
20	-.2313737720-005	-.5733695509-005	20	-.2336066866+003	.3532524334+003	
30	-.3871545188-012	-.9092460728-012	30	-.1022081763+010	-.1321696986+010	
31	-.1091478659-012	-.1270754817-012	31	-.7835450232+010	-.5394877622+010	
40	-.1461672144-020	-.4784661287-020	40	-.1309016440+018	.2048674656+018	
41	-.3582967064-021	-.5273579717-021	41	-.1420878972+019	-.1199117032+019	
50	-.2845834256-030	-.1991688944-029	50	-.1962158571+027	-.4379936554+027	
51	-.8742866111-031	-.1861594543-030	51	-.3029405073+028	-.3462318268+028	
60	-.3984603687-041	-.1084866645-039	60	-.1800524733+037	.7160735395+037	
61	-.2371523091-041	-.8961085817-041	61	-.4386697121+038	.7284322382+038	
70	-.2511634862-051	-.1077084257-050	70	-.3482761703+047	-.6189142886+048	
71	-.5291779063-053	-.8093032987-052	71	-.2863413967+049	-.7825521688+049	
80	-.1128844778-062	-.2460890685-062	80	-.3160599891+059	.2190217236+060	
81	-.2365485696-064	-.1723886628-063	81	-.5098613893+060	.3361931862+061	
90	-.1153342347-074	-.1532399840-074	90	-.9548756314+071	-.2623622085+072	
91	-.3672592799-076	-.1026588610-075	91	-.2688374191+072	-.4819266871+073	
99	-.7741791649-086	-.3553368352-086	99	-.4272495253+083	.3737445636+063	
100	-.3324372860-087	-.2934799508-087	100	-.5725756515+084	.9151031474+024	

REAL X = .100000000+002	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	N	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
0	-.7616160678+003	.1624729470+003	0	.1624729502+003	.7616160685+003
1	.1162684994+003	.73165591124+003	1	.73165891119+003	-.1162684961+003
2	.6693075058+003	-.3528383525+002	2	-.3528383897+002	-.6693075061+003
3	.5987933588+002	-.5731529948+003	3	-.5731529951+003	-.5987934017+002
4	-.4477461901+003	-.1443619454+003	4	-.1443619403+003	.4477461888+003
5	-.1964022460+003	.3067043338+003	5	.3067043357+003	.1964022520+003
6	.1710375712+003	.2050280937+003	6	.2050280877+003	-.1710375648+003
7	.1743084644+003	-.6226165161+002	7	-.6226166337+002	-.1743084125+003
8	.6389972264+001	-.1209930276+003	8	-.1209930252+003	.6389992145+001
9	-.6603285654+002	-.3515094541+012	9	-.3515091469+002	.6603284782+002
10	-.3572778784+002	.2486841572+002	10	.2486845077+002	.3572782862+002
11	.2406842803+001	.2374860469+002	11	.2374856795+002	-.2406754469+001
12	.1118476167+002	.5210348890+001	12	.5210170012+001	-.1118474312+002
13	.5061173178+001	-.3254716480+001	13	-.3254926531+001	-.5061461916+001
14	.4168936465+001	-.2771632347+001	14	-.2771347242+001	-.4238128291-001
15	-.9818566964+000	-.7037006443+000	15	-.7020741099+000	.9815555550+000
16	-.4728309353+000	-.1590181590+000	16	-.1617212615+000	.4755775227+000
17	-.6369430928+001	-.1859097634+000	17	-.1842112789+000	.6998743897-001
18	.4127380822+001	.6010888563-001	18	.3817045835-001	-.3072976647-001
19	.2584941609-001	.1648229262-002	19	-.5674586295-001	-.5622215900-001
20	.5916523640-002	-.6488494474-002	20	-.3919168107-001	-.1895578763+000
30	-.1910754896-007	-.2690094482-009	30	.4718243957+005	.3702475745+005
31	-.2917146099-008	.3125199360-008	31	.1691069437+005	.2593740814+006
40	.5916460986-015	.1540891706-014	40	-.4675116842+012	.2430903411+012
41	.2597608499-015	.1069313384-015	41	-.2852533333+013	.9995867057+012
50	.1015042463-022	-.6946357509-023	50	-.1264686704+020	-.5540808190+020
51	.2802199080-024	-.1664513468-023	51	.2229020550+021	-.3395048314+021
60	-.8794051637-032	-.9291898276-032	60	.4557552341+029	-.2500977756+028
61	-.1470439275-032	-.2135014649-034	61	.2873026111+030	.2646912896+030
70	-.1653253964-041	-.1965770966-041	70	-.1287681577+038	.1947389376+039
71	.2429031194-043	.2528215424-042	71	-.1476928520+040	.1267332247+040
80	.1027060380-051	.7231707458-052	80	-.3452869235+049	-.5448102179+048
81	.1072270290-052	-.1944100599-053	81	-.2315994624+050	-.3236620634+050
90	.9262814581-063	-.1522959424-062	90	.4926429429+059	-.2135223643+060
91	-.3339362458-054	-.1336364749-063	91	.2387487604+061	-.1471913812+061
99	-.3395046755-073	-.1446507397-072	99	.2536725455+070	-.1444346737+070
100	-.7412417518-074	-.3978517141-074	100	.4015124296+071	.1167359209+071

REAL X	FIRST KIND REAL BESSSEL	IMAGINARY X = -.1000000000+002	IMAGINARY X = -.1000000000+003	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
N	.1188990994+042	-.6122971374+041	0	-.6122971374+041	.1188990994+042
0	-.6074120084+041	.1176612571+042	1	.1176612571+042	.6074120084+041
1	.1152237912+042	.5977500854+041	2	.5977500854+041	-.1152237912+042
2	.5835245680+041	-.1116611932+042	3	-.1116611932+042	-.5835245680+041
3	-.1070804736+042	-.5650466832+041	4	-.5650466832+041	.1070804736+042
4	-.5427156979+041	.1016158618+042	5	.1016158618+042	.5427156979+041
5	.9542232306+041	.5170061070+041	6	.5170061070+041	-.9542232306+041
6	.4884524386+041	-.8866832724+041	7	-.8866832724+041	-.4884524386+041
7	-.8152833520+041	-.4576322291+041	8	-.4576322291+041	.8152833520+041
8	-.4251478228+041	.7417546409+041	9	.7417546409+041	.4251478228+041
9	.6677475199+041	.3916077260+041	10	.3916077260+041	-.6677475199+041
10	.3576082935+041	-.5947737088+041	11	-.5947737088+041	-.3576082935+041
11	-.5241604468+041	-.3237165258+041	12	-.3237165258+041	.5241604468+041
12	-.2904547091+041	.4570182387+041	13	.4570182387+041	.2904547091+041
13	.3942226235+041	.2582875366+041	14	.2582875366+041	-.3942226235+041
14	.2276122046+041	-.3364094274+041	15	-.3364094274+041	-.2276122046+041
15	-.2839821276+041	-.1987518028+041	16	-.1987518028+041	.2839821276+041
16	-.1719521207+041	.2371293170+041	17	.2371293170+041	.1719521207+041
17	-.1958498652+041	.1473817868+041	18	.1473817868+041	-.1958498652+041
18	-.1251354711+041	-.1599832019+041	19	-.1599832019+041	-.1251354711+041
19	-.1292422095+041	-.1052397186+041	20	-.1052397186+041	.1292422095+041
20	-.8093821370+039	.1085669518+040	30	.1085669518+040	-.8093821370+039
30	.8185428652+039	-.5733407586+039	31	-.5733407586+039	-.8185428652+039
31	-.1281192103+038	-.4048052317+038	40	-.4048052317+038	.1281192101+038
40	-.2750845560+038	.7571837340+037	41	.7571837340+037	.2750845559+038
41	-.5649362783+035	.5257662822+036	50	.5257672206+036	.5649488046+035
50	.3208059111+036	.4928619305+035	51	.4928423054+035	-.3208042988+036
51	-.1115641891+031	.2839340243+031	71	.3653637367+035	.2448416086+036
71	-.1508378875+034	-.2245178441+034	60	-.2509482666+034	-.1635961776+034
60	-.1217385503+034	-.9132191410+033	61	-.7117727716+033	.7387055171+033
61	-.5351017605+031	.2468440436+031	70	.1282240347+036	-.1168495160+035
70	.1115641891+031	.2839340243+031	71	.3653637367+035	.2448416086+036
71	-.5597791317+028	.9565638280+027	80	-.9855559883+038	.8072763326+038
80	-.6245680566+027	.2642457213+028	81	-.1804618786+039	-.1942779249+039
81	-.1719325619+025	-.1834622451+025	90	.6555957273+041	-.2660272174+042
90	-.8625611776+024	.7057983358+024	91	.6056669299+042	.1070725643+042
91	-.1266514018+022	.1711870879+021	99	.4801758952+045	-.18749889045+045
99	.3382960410+020	.5297732654+021	100	.5286083618+045	.1116015223+046

REAL X = FIRST KIND	IMAGINARY X = .000000000	REAL X = .200000000+002	IMAGINARY X = .000000000
REAL RESSEL	IMAGINARY BESSEL	REAL BESSEL	SECOND KIND
0	.000000000	0	-.2040410309-001
1	.000000000	1	-.45666746769-001
2	.000000000	2	-.1340398294-001
3	.000000000	3	*5001846343-001
4	.000000000	4	*4102479262-002
5	.000000000	5	-.4817234776-001
6	.000000000	6	-.3059727053-001
7	.000000000	7	.2828412191-001
8	.000000000	8	*5181036196-001
9	.000000000	9	*1575468576-001
10	.000000000	10	-.3684341050-001
11	.000000000	11	-.5444026678-001
12	.000000000	12	-.2576289630-001
13	.000000000	13	*2223664641-001
14	.000000000	14	*5578236894-001
15	.000000000	15	.58864778856-001
16	.000000000	16	*3512170333-001
17	.000000000	17	-.6969780704-003
18	.000000000	18	-.3634141495-001
19	.000000000	19	-.6653463959-001
20	.000000000	20	-.9340113225-001
30	.000000000	30	-.5161670075+002
31	.000000000	31	-.1370732347+093
40	.000000000	40	-.5000783832+007
41	.000000000	41	-.1889023509+008
50	.000000000	50	*9542541667+013
51	.000000000	51	*4617407569+014
60	.000000000	60	-.1664999491+021
61	.000000000	61	-.9784867641+021
70	.000000000	70	-.1726303096+029
71	.000000000	71	-.1191659525+030
80	.000000000	80	-.8010434261+037
81	.000000000	81	-.6345970184+038
90	.000000000	90	-.1358214079+047
91	.000000000	91	-.1213811516+048
99	.000000000	99	-.7332789791+055
100	.000000000	100	-.7220889358+056

REAL X = .200000000+002		IMAGINARY X = -.100000000-002	
FIRST KIND	SECOND KIND	FIRST KIND	SECOND KIND
REAL BESSEL	IMAGINARY BESSEL	REAL BESSEL	IMAGINARY BESSEL
N	N	N	N
0	-1.812174218-004	0	-.2040411096-001
1	-.4745944458-004	1	-.4666749169-001
2	-.1812174661-001	2	.1340398710-001
3	-.4836554789-001	3	.5001848785-001
4	-.03035952/-002	4	.4102483660-002
5	-.5047617286-001	5	-.4817236911-001
6	-.1668301805-001	6	-.3059728609-001
7	-.4130001670-001	7	.2828413198-001
8	-.4352892783-001	8	.5181038345-001
9	-.8653320014-002	9	.1575469406-001
10	-.5088424781-001	10	-.3684342205-001
11	-.3968671448-001	11	-.5444028522-001
12	-.9213196177-002	12	-.2576290604-001
13	-.53633416155-001	13	.2223665040-001
14	-.22130081128-001	14	.5576238121-001
15	-.2154923607-001	15	.5864780074-001
16	-.5553229405-001	16	.3512171039-001
17	-.7007904677-001	17	-.6969763649-003
18	-.6710603685-001	18	-.3634141590-001
19	-.5406712164-001	19	-.6653463975-001
20	-.3832495137-001	20	-.9340112834-001
30	-.2106356419-004	30	-.5161666357+002
31	-.7502462540-005	31	-.1370731249+003
40	-.1419797129-009	40	-.5000775636+007
41	-.3640105239-010	41	-.1889020214+008
50	-.5650066257-016	50	-.9542514906+013
51	-.1140914986-016	51	-.4617394019+014
60	-.2629711925-023	60	-.1664992467+021
61	-.4393282686-024	61	-.9784824842+021
70	-.2142176191-031	70	-.1726232941+029
71	-.3056155890-032	71	-.1191652300+030
80	-.4002419048-040	80	-.8010371810+037
81	-.4986209334-041	81	-.6345919409+038
90	-.2085419706-049	90	-.1358200552+047
91	-.2306723404-050	91	-.1213799148+048
99	-.3497834183-058	99	-.7332700919+055
100	-.3515229351-059	100	-.7220800019+056

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REAL X	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL N	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
0	.4564963555-001	-.1812196138-003	0	-.2040488996-001
1	-.1812240425-001	-.4746024161-003	1	-.46666986810-001
2	-.4836795989-001	-.1086700893-003	2	-.1340439969-001
3	-.6030403694-002	-.4957239381-003	3	-.5002090634-001
4	-.5047851390-001	-.6588856610-004	4	-.4102919099-002
5	-.1668490706-001	-.4547164280-003	5	-.417448297-001
6	-.4130169227-001	-.3113941907-003	6	-.3059882709-001
7	-.4353089912-001	-.2388872080-003	7	-.2828512858-001
8	-.8653436509-002	-.4742354688-003	8	-.5181251105-001
9	-.5088611676-001	-.1678905493-003	9	-.1575551592-001
10	-.3968328258-001	-.2905685875-003	10	-.3684456598-001
11	-.9213277921-002	-.4521511467-003	11	-.5444211143-001
12	-.5028328955-001	-.2347027347-003	12	-.2576387054-001
13	-.5364067162-001	-.1273457535-003	13	-.22233704571-001
14	-.2213168499-001	-.3704120147-003	14	-.5578359578-001
15	-.2154946786-001	-.3937060659-003	15	-.5864900584-001
16	-.5553304670-001	-.2565330684-003	16	-.3512240925-001
17	-.7007982466-001	-.7538814311-004	17	-.6968075166-003
18	-.6710654981-001	-.6328401967-004	18	-.3634150929-001
19	-.5406731999-001	-.1303900072-003	19	-.6653465496-001
20	-.3832482496-001	-.1382608070-003	20	-.9340074107-001
30	-.2106230195-004	-.2459248784-006	30	-.5161298296+002
31	-.7501957759-005	-.9059452503-007	31	-.1370622530+003
40	-.1419591519-009	-.2475475834-011	40	-.49999964293+007
41	-.3639542180-010	-.6553442645-012	41	-.1888694025+008
50	-.5648627310-016	-.1298322816-017	50	-.95398656568+013
51	-.1140610326-016	-.2683464654-018	51	-.4616052587+014
60	-.2628687968-023	-.7448898801-025	60	-.1664297108+021
61	-.4391506860-024	-.1267633224-025	61	-.9780588084+021
70	-.2141000407-031	-.7190754838-033	70	-.1725287679+029
71	-.3054425538-032	-.104177342-033	71	-.1190937128+030
80	-.3999484732-040	-.1550744638-041	80	-.8004190096+037
81	-.4982455100-041	-.1957604361-042	81	-.6340893367+038
90	-.2083454927-049	-.9150969055-051	90	-.1356861622+047
91	-.2304498771-050	-.1024011683-051	91	-.1212574934+048
99	-.3493806716-058	-.1695651821-059	99	-.7323904417+055
100	-.3511095771-059	-.1721995362-060	100	-.7211957289+055

REAL X = .20000000000+002 IMAGINARY X = -.10000000000+000

FIRST KIND	REAL BESSEL	IMAGINARY BESSEL	SECOND KIND	REAL BESSEL	IMAGINARY BESSEL
N			N		
0	.4588476105-001	-.1814388888-002	0	-.2048283489-001	-.4674752110-002
1	-.1818320061-001	-.4753998383-002	1	-.4690770854-001	.1575536545-002
2	-.4860935753-001	*.108766149-002	2	*.1344567289-001	.4875896782-002
3	*.6034805476-002	*.4955147945-002	3	*.5026294801-001	-.33978861527-003
4	*.5071279785-001	*.606528336-003	4	*.4146513736-002	-.4906861902-002
5	*.1678389662-001	-.4553760659-002	5	-.4838602331-001	-.1858916675-002
6	-.4146936296-001	-.5119004022-002	6	-.3075304937-001	.3751424153-002
7	-.4372817217-001	*.2391686667-002	7	*.2838484912-001	.4197336503-002
8	*.8665085108-002	*.4748747633-002	8	*.5202541439-001	-.4970599503-003
9	*.5107312871-001	*.1681473603-002	9	*.1583776005-001	-.4398724415-002
10	*.3984518741-001	-.2908796347-002	10	-.3695902506-001	-.3606396297-002
11	-.9221457041-002	-.4526451409-002	11	-.5462483311-001	*.4180729376-003
12	-.5042357145-001	-.2349514694-002	12	-.2586036645-001	*.3773083216-002
13	-.5379174748-001	*.1274492019-002	13	*.2227660198-001	*.4136539929-002
14	-.2220207482-001	*.3706950689-002	14	*.5590510636-001	*.1961469386-002
15	*.2157266907-001	*.3939491087-002	15	*.5876955544-001	-.8871785324-003
16	*.5560834567-001	*.2566291851-002	16	*.3519230276-001	*.2881109066-002
17	*.7015763612-001	*.7535419925-003	17	-.6799389693-003	*.3576203344-002
18	*.6715785489-001	*.6337623610-003	18	-.3635087522-001	-.3363039648-002
19	*.5408715161-001	*.1304778422-002	19	-.6653620666-001	-.3018500733-002
20	*.3832217534-001	*.1383155410-002	20	-.9336205456-001	-.3151601431-002
30	*.2093616511-004	*.2405191681-005	30	-.5124549353+002	-.5948373975+001
31	*.7451520511-005	*.9042013582-006	31	-.1359768999+003	-.1671927225+002
40	*.1399073025-009	*.2464451257-010	40	-.4919084094+007	-.8836623981+006
41	*.3583361541-010	*.6522150599-011	41	-.1856183168+008	-.3445337360+007
50	*.5505285375-016	*.1287893629-016	50	-.9276302021+013	-.2209925442+013
51	*.1110267440-016	*.2660828599-017	51	-.4482628557+014	-.1093798083+014
60	*.2526909224-023	*.7356364341-024	60	-.1595286732+021	-.4720215681+020
61	*.4215036884-024	*.1251273225-024	61	-.9360226328+021	-.2823629684+021
70	*.2024435157-031	*.7064071018-032	70	-.1625805686+029	-.5756429104+026
71	*.2882930156-032	*.1022832729-032	71	-.1120184674+030	-.4032093922+029
80	*.3709461758-040	*.1514130392-040	80	-.7394440586+037	-.3058638290+037
81	*.4611513774-041	*.1910125316-041	81	-.5845310444+038	-.2453282102+038
90	*.1889928223-049	*.8872838927-050	90	-.1225280061+047	-.5823533245+046
91	*.2085457569-050	*.921497058-051	91	-.1092314162+048	-.5260409460+047
99	*.3098481367-058	*.1632632750-058	99	-.6462620975+055	-.34448890510+055
100	*.3105519423-059	*.1656635034-059	100	-.6346520433+056	-.3424724260+056

REAL X = .200000000+002	IMAGINARY X = -.500000000+000	FIRST KIND REAL BESSEL	SECOND KIND IMAGINARY BESSEL
N 0	-9339818985-002	-9339818985-002	-2239953238-001
1	-2474866699-001	-2474866699-001	-5279539685-001
2	*5555618188-002	*5555618188-002	*1445493103-001
3	*2579577815-001	*2579577815-001	*5624843247-001
4	*3520889298-002	*3520889298-002	*5234412918-002
5	*2357717693-001	*2357717693-001	*5360823996-001
6	*1621594607-001	*1621594607-001	*3456696366-001
7	*1230280494-001	*1230280494-001	*3083910559-001
8	*2452653211-001	*2452653211-001	*5727439690-001
9	*8721729387-002	*8721729387-002	*1786679118-001
10	*1492454112-001	*1492454112-001	*3977393181-001
11	*2323611759-001	*2323611759-001	*5911588963-001
12	*1205103611-001	*1205103611-001	*2822743909-001
13	*6499387024-002	*6499387024-002	*2325065775-001
14	*1888049241-001	*1888049241-001	*5888394898-001
15	*1999366957-001	*1999366957-001	*6171558756-001
16	*1294805514-001	*1294805514-001	*3b89120162-001
17	*3725789409-002	*3725789409-002	*2809133444-003
18	*3281416158-002	*3281416158-002	*3659379491-001
19	*6630819240-002	*6630819240-002	*6659178162-001
20	*6982206480-002	*6982206480-002	*9244855201-001
30	*1153803325-004	*1153803325-004	*4267651871+002
31	*4311663156-005	*4311663156-005	*1107567409+003
40	*1102332896-009	*1102332896-009	*3106978360+007
41	*2893258399-010	*2893258399-010	*1131140664+008
50	*5242670342-016	*5242670342-016	*3666504923+013
51	*1071427977-016	*1071427977-016	*1659083258+014
60	*2650427217-023	*2650427217-023	*2159107755+020
61	*4445867655-024	*4445867655-024	*1016135554+021
70	*2178936177-031	*2178936177-031	*2191927891+028
71	*3099735827-032	*3099735827-032	*1813134920+029
80	*3834278959-040	*3834278959-040	*2965825172+037
81	*4729333093-041	*4729333093-041	*2495637714+038
90	*1742642428-049	*1742642428-049	*7953481695+046
91	*1892024352-050	*1892024352-050	*7344417106+047
99	*2373234714-058	*2373234714-058	*5462382652+055
100	*2315264719-059	*2315264719-059	*5489676662+056

REAL X = .200000000+002	FIRST KIND	IMAGINARY X = -.100000000+001	SECOND KIND	REAL BESSEL	IMAGINARY BESSEL	N															
N	0	.7145770890-001	-2040604086-001	-.287311270-001	-.5508127305-001	0	-.287311270-001	-.5508127305-001	0	-.287311270-001	-.5508127305-001	0	-.287311270-001	-.5508127305-001	0	-.287311270-001	-.5508127305-001	0	-.287311270-001	-.5508127305-001	0
1	-	.2511624931-001	-.5592083193-001	-.7275332231-001	-.1758719654-001	1	-.7275332231-001	-.1758719654-001	1	-.7275332231-001	-.1758719654-001	1	-.7275332231-001	-.1758719654-001	1	-.7275332231-001	-.1758719654-001	1	-.7275332231-001	-.1758719654-001	1
2	-	.7479739085-001	.1185093198-001	.1771375377-001	.5716848459-001	2	.1771375377-001	.5716848459-001	2	.1771375377-001	.5716848459-001	2	.1771375377-001	.5716848459-001	2	.1771375377-001	.5716848459-001	2	.1771375377-001	.5716848459-001	2
3	-	.6315766155-002	.5794354076-001	.7645789327-001	.3109846844-002	3	.7645789327-001	.3109846844-002	3	.7645789327-001	.3109846844-002	3	.7645789327-001	.3109846844-002	3	.7645789327-001	.3109846844-002	3	.7645789327-001	.3109846844-002	3
4	-	.7599091323-001	.8488983411-002	.9034061653-002	.5691954021-001	4	.9034061653-002	.5691954021-001	4	.9034061653-002	.5691954021-001	4	.9034061653-002	.5691954021-001	4	.9034061653-002	.5691954021-001	4	.9034061653-002	.5691954021-001	4
5	-	.2760434240-001	.5242749280-001	.7112520759-001	.2223731197-001	5	.7112520759-001	.2223731197-001	5	.7112520759-001	.2223731197-001	5	.7112520759-001	.2223731197-001	5	.7112520759-001	.2223731197-001	5	.7112520759-001	.2223731197-001	5
6	-	.5940822558-001	.3649497007-001	.4744537147-001	.4276845314-001	6	.4744537147-001	.4276845314-001	6	.4744537147-001	.4276845314-001	6	.4744537147-001	.4276845314-001	6	.4744537147-001	.4276845314-001	6	.4744537147-001	.4276845314-001	6
7	-	.6494026270-001	.2683896624-001	.3897611414-001	.4842935184-001	7	.3897611414-001	.4842935184-001	7	.3897611414-001	.4842935184-001	7	.3897611414-001	.4842935184-001	7	.3897611414-001	.4842935184-001	7	.3897611414-001	.4842935184-001	7
8	-	.9820536543-002	.5414481030-001	.7479298734-001	.5079058469-002	8	.7479298734-001	.5079058469-002	8	.7479298734-001	.5079058469-002	8	.7479298734-001	.5079058469-002	8	.7479298734-001	.5079058469-002	8	.7479298734-001	.5079058469-002	8
9	-	.7097148626-001	.1948568369-001	.2465470803-001	.4956501043-001	9	.2465470803-001	.4956501043-001	9	.2465470803-001	.4956501043-001	9	.2465470803-001	.4956501043-001	9	.2465470803-001	.4956501043-001	9	.2465470803-001	.4956501043-001	9
10	-	.5651047665-001	.3231663513-001	.4908095679-001	.4072209991-001	10	.4908095679-001	.4072209991-001	10	.4908095679-001	.4072209991-001	10	.4908095679-001	.4072209991-001	10	.4908095679-001	.4072209991-001	10	.4908095679-001	.4072209991-001	10
11	-	.1009052933-001	.5037431273-001	.7392861765-001	.4343110042-002	11	.7392861765-001	.4343110042-002	11	.7392861765-001	.4343110042-002	11	.7392861765-001	.4343110042-002	11	.7392861765-001	.4343110042-002	11	.7392861765-001	.4343110042-002	11
12	-	.6519684772-001	.2604791806-001	.3597404482-001	.4146392638-001	12	.3597404482-001	.4146392638-001	12	.3597404482-001	.4146392638-001	12	.3597404482-001	.4146392638-001	12	.3597404482-001	.4146392638-001	12	.3597404482-001	.4146392638-001	12
13	-	.6957836321-001	.1383097053-001	.2648816734-001	.4511477541-001	13	.2648816734-001	.4511477541-001	13	.2648816734-001	.4511477541-001	13	.2648816734-001	.4511477541-001	13	.2648816734-001	.4511477541-001	13	.2648816734-001	.4511477541-001	13
14	-	.2943063360-001	.3998833771-001	.6860624290-001	.2107263034-001	14	.6860624290-001	.2107263034-001	14	.6860624290-001	.2107263034-001	14	.6860624290-001	.2107263034-001	14	.6860624290-001	.2107263034-001	14	.6860624290-001	.2107263034-001	14
15	-	.2411706251-001	.4187909912-001	.7121885162-001	.9674110479-002	15	.7121885162-001	.9674110479-002	15	.7121885162-001	.9674110479-002	15	.7121885162-001	.9674110479-002	15	.7121885162-001	.9674110479-002	15	.7121885162-001	.9674110479-002	15
16	-	.6348304511-001	.2662687000-001	.4225556614-001	.3052441112-001	16	.4225556614-001	.3052441112-001	16	.4225556614-001	.3052441112-001	16	.4225556614-001	.3052441112-001	16	.4225556614-001	.3052441112-001	16	.4225556614-001	.3052441112-001	16
17	-	.7817660871-001	.7169964940-002	.8409469432-003	.3708817795-001	17	.8409469432-003	.3708817795-001	17	.8409469432-003	.3708817795-001	17	.8409469432-003	.3708817795-001	17	.8409469432-003	.3708817795-001	17	.8409469432-003	.3708817795-001	17
18	-	.7235904298-001	.7287326948-002	.3755045620-001	.3414464479-001	18	.3755045620-001	.3414464479-001	18	.3755045620-001	.3414464479-001	18	.3755045620-001	.3414464479-001	18	.3755045620-001	.3414464479-001	18	.3755045620-001	.3414464479-001	18
19	-	.5602619155-001	.1394137978-001	.6698554976-001	.2938664505-001	19	.6698554976-001	.2938664505-001	19	.6698554976-001	.2938664505-001	19	.6698554976-001	.2938664505-001	19	.6698554976-001	.2938664505-001	19	.6698554976-001	.2938664505-001	19
20	-	.3797547876-001	.1438163754-001	.8988757287-001	.2953121451-001	20	.8988757287-001	.2953121451-001	20	.8988757287-001	.2953121451-001	20	.8988757287-001	.2953121451-001	20	.8988757287-001	.2953121451-001	20	.8988757287-001	.2953121451-001	20
30	-	.9180864013-005	.2012138388-004	.1978678796-002	.4479614553-002	30	.1978678796-002	.4479614553-002	30	.1978678796-002	.4479614553-002	30	.1978678796-002	.4479614553-002	30	.1978678796-002	.4479614553-002	30	.1978678796-002	.4479614553-002	30
31	-	.2809159398-005	.7364976172-005	.439668234-002	.1222216202-003	31	.439668234-002	.1222216202-003	31	.439668234-002	.1222216202-003	31	.439668234-002	.1222216202-003	31	.439668234-002	.1222216202-003	31	.439668234-002	.1222216202-003	31
40	-	.2561412598-010	.1481427271-009	.9596497599-006	.4614920058-007	40	.9596497599-006	.4614920058-007	40	.9596497599-006	.4614920058-007	40	.9596497599-006	.4614920058-007	40	.9596497599-006	.4614920058-007	40	.9596497599-006	.4614920058-007	40
41	-	.8720035070-011	.3758528626-010	.4621074630-007	.1717792284-008	41	.4621074630-007	.1717792284-008	41	.4621074630-007	.1717792284-008	41	.4621074630-007	.1717792284-008	41	.4621074630-007	.1717792284-008	41	.4621074630-007	.1717792284-008	41
50	-	.4510949541-016	.4525289562-016	.6170722815-013	.6416544273-013	50	.6170722815-013	.6416544273-013	50	.6170722815-013	.6416544273-013	50	.6170722815-013	.6416544273-013	50	.6170722815-013	.6416544273-013	50	.6170722815-013	.6416544273-013	50
51	-	.8591249925-017	.8696211272-017	.3147186058-014	.2934223840-014	51	.3147186058-014	.2934223840-014	51	.3147186058-014	.2934223840-014	51	.3147186058-014	.2934223840-014	51	.3147186058-014	.2934223840-014	51	.3147186058-014	.2934223840-014	51
60	-	.2710114248-023	.8715305889-024	.1481276433-021	.4056789822-020	60	.1481276433-021	.4056789822-020	60	.1481276433-021	.4056789822-020	60	.1481276433-021	.4056789822-020	60	.1481276433-021	.4056789822-020	60	.1481276433-021	.4056789822-020	60
61	-	.4603474396-024	.1216558598-024	.8809027934-021	.1917387029-021	61	.8809027934-021	.1917387029-021	61	.8809027934-021	.1917387029-021	61	.8809027934-021	.1917387029-021	61	.8809027934-021	.1917387029-021	61	.8809027934-021	.1917387029-021	61
70	-	.2293566910-031	.495624943-032	.1521555771-029	.4021914632-028	70	.1521555771-029	.4021914632-028	70	.1521555771-029	.4021914632-028	70	.1521555771-029	.4021914632-028	70	.1521555771-029	.4021914632-028	70	.1521555771-029	.4021914632-028	70
71	-	.3234808696-032	.8773179663-033	.31347186058-030	.3315949093-029	71	.31347186058-030	.3315949093-029	71	.31347186058-030	.3315949093-029	71	.31347186058-030	.3315949093-029	71	.31347186058-030	.3315949093-029	71	.31347186058-030	.3315949093-029	71
80	-	.3304894381-040	.2960609718-040	.5144360851-037	.5060423640-037	80	.5144360851-037	.5060423640-037	80	.5144360851-037	.5060423640-037	80	.5144360851-037	.5060423640-037	80	.5144360851-037	.5060423640-037	80	.5144360851-037	.5060423640-037	80
81	-	.3926588641-041	.3900134637-041	.3858592674-038	.4208727150-038	81	.3858592674-038	.4208727150-038	81	.3858592674-038	.4208727150-038	81	.3858592674-038	.4208727150-038	81	.3858592674-038	.4208727150-038	81	.3858592674-038	.4208727150-038	81
90	-	.751059946-050	.2216245062-049	.3333147079-046	.1161976137-047	90	.3333147079-046	.1161976137-047													

REAL X = .200000000+002	FIRST KIND	IMAGINARY X = -.300000000+001	SECOND KIND	REAL BESSEL	IMAGINARY BESSEL	REAL BESSEL	IMAGINARY BESSEL
N	REAL BESSEL	IMAGINARY BESSEL	N	REAL BESSEL	IMAGINARY BESSEL	REAL BESSEL	IMAGINARY BESSEL
0	.4794347904+000	-.1324905542+000	0	-.1338174359+000	-.4773611823+000	-.4773611823+000	-.4773611823+000
1	-.1094013787+000	-.4803233004+000	1	-.4824770035+000	-.1081661431+000	-.1081661431+000	-.1081661431+000
2	-.4849144310+000	.5962009306-001	2	-.6065822931-001	.4826122227+000	.4826122227+000	.4826122227+000
3	-.1134616289-001	.4771151924+000	3	-.4796081517+000	.1205658478-001	.1205658478-001	.1205658478-001
4	.456533250+000	.1031133972+000	4	-.1028917779+000	-.4538599170+000	-.4538599170+000	-.4538599170+000
5	.205458449+000	-.4015983214+000	5	-.4043642940+000	-.2050069688+000	-.2050069688+000	-.2050069688+000
6	-.3136149071+000	-.3025547224+000	6	-.3038573395+000	.3109612499+000	.3109612499+000	.3109612499+000
7	-.3759724832+000	.1793606461+000	7	-.1815515873+000	.3737098752+000	.3737098752+000	.3737098752+000
8	.1810641302-001	.3927489329+000	8	-.3959075396+000	-.1687131350-001	-.1687131350-001	-.1687131350-001
9	.3420506857+000	-.1493876773+000	9	-.1496684627+000	-.3383574842+000	-.3383574842+000	-.3383574842+000
10	.2788719806+000	-.2062838804+000	10	-.2095949175+000	-.2766459032+000	-.2766459032+000	-.2766459032+000
11	-.2390370211-001	-.3132637042+000	11	-.3223961582+000	.2198103153-001	.2198103153-001	.2198103153-001
12	-.2520639301+000	-.1556981718+000	12	-.1566057718+000	.2469792860+000	.2469792860+000	.2469792860+000
13	-.2556919023+000	.8170164875-001	13	-.8565340427-001	.2512325629+000	.2512325629+000	.2512325629+000
14	-.1017049226+000	.2129300697+000	14	-.2199362919+000	.1016845519+000	.1016845519+000	.1016845519+000
15	.6617167936-001	.1986189189+000	15	-.2046069705+000	-.6025890641-001	-.6025890641-001	-.6025890641-001
16	.1568513327+000	.1032012161+000	16	-.1039259477+000	-.1464941209+000	-.1464941209+000	-.1464941209+000
17	.1619578052+000	.5882510357-002	17	-.1443050040-002	-.1509898051+000	-.1509898051+000	-.1509898051+000
18	.1188278851+000	-.5155494031-001	18	-.6763305161-001	-.1122941035+000	-.1122941035+000	-.1122941035+000
19	.6702809533-001	-.6691126485-001	19	-.9044891255-001	-.705380808-001	-.705380808-001	-.705380808-001
20	.2814163166-001	-.5687659863-001	20	-.8468283185-001	-.4810253561-001	-.4810253561-001	-.4810253561-001
30	-.3145358022-004	.8401995661-005	30	-.3089323716+002	.9534914010+001	.9534914010+001	.9534914010+001
31	-.1049696963-004	.5077304092-005	31	-.7518624344+002	.4108605926+002	.4108605926+002	.4108605926+002
40	.1082758986-009	.2103096991-009	40	-.1608086644+007	.2474091188+007	.2474091188+007	.2474091188+007
41	.3677195491-010	.4891214682-010	41	-.7521614870+007	.8098154296+007	.8098154296+007	.8098154296+007
50	.879123898b-016	-.5464632945-016	50	-.4002692025+013	-.3218703597+013	-.3218703597+013	-.3218703597+013
51	.159070655b-016	-.1388017780-016	51	-.1643028714+014	-.1832338724+014	-.1832338724+014	-.1832338724+014
60	-.2916718998-023	-.4465813835-023	60	-.5276952760+020	-.6150509220+020	-.6150509220+020	-.6150509220+020
61	-.6043976671-024	-.6674083321-024	61	-.3593964253+021	-.304990125+021	-.304990125+021	-.304990125+021
70	-.4063659786-031	.2603118827-031	70	-.5762404342+028	.4908179204+028	.4908179204+028	.4908179204+028
71	-.5209516594-032	.4613034510-032	71	-.3369581036+029	.3921304845+029	.3921304845+029	.3921304845+029
80	.5175409534-040	.8594514365-040	80	-.1988161187+037	.2453292056+037	.2453292056+037	.2453292056+037
81	.8095805604-041	.9698547486-041	81	-.1834437432+038	.1661381876+038	.1661381876+038	.1661381876+038
90	.5104282779-049	-.2801639793-049	90	-.3847105431+046	-.2883395533+046	-.2883395533+046	-.2883395533+046
91	.516506267b-050	-.3963658958-050	91	-.2973686327+047	-.3036900565+047	-.3036900565+047	-.3036900565+047
99	-.3197906657-058	-.1028271543-057	99	-.1011508864+055	-.2125938495+055	-.2125938495+055	-.2125938495+055
100	-.4792534952-059	-.9834950010-059	100	-.1287589452+056	-.1897729755+056	-.1897729755+056	-.1897729755+056

REAL X = .2000000000+002	IMAGINARY X = -.1000000000+002	FIRST KIND REAL BESSEL	IMAGINARY BESSEL	SECOND KIND REAL BESSEL	IMAGINARY BESEL
N 0		4920652032+003	.2131745264+002	0	.2131746107+002
1		* 4057371995+002	* 481371993+003	1	- 4813712007+003
2		= 4583140848+003	- 7664758336+002	2	- 7664758186+002
3		- 1245717786+003	* 4202102741+003	3	* 4202102760+003
4		* 3646045484+003	* 1768664111+003	4	* 1768664099+003
5		* 2239934520+003	- 2909095474+003	5	- 2909095501+003
6		- 2020473247+003	- 2555890504+003	6	- 25558890502+003
7		- 2626051778+003	* 1054714568+003	7	* 1054714604+003
8		* 1284278101+002	* 2400693711+003	8	* 2400693733+003
9		* 1897078827+003	* 6215586108+002	9	* 6215585772+002
10		* 1077159826+003	- 1207619213+003	10	- 1207619276+003
11		- 4850645034+002	* 1183551623+003	11	- 1183551634+003
12		- 9789854228+002	- 1043779516+002	12	- 1043778607+002
13		- 4417319436+002	* 5896809597+002	13	* 5896810928+002
14		* 1834872055+002	* 5026981384+002	14	* 5026981555+002
15		* 5630121817+002	* 9987146010+001	15	* 9987122732+001
16		* 2047275945+002	- 1537899753+002	16	- 1537903940+002
17		* 8729626805+000	- 1677540151+002	17	- 1677542531+002
18		- 7507830645+001	- 7495490707+001	18	- 7495438584+001
19		- 6437888911+001	* 1262805847+000	19	* 1264491738+000
20		- 2633774913+001	* 2670935068+001	20	* 2671172822+001
30		- 8474033095-003	* 1551415879-002	30	* 1467931451+000
31		* 5494800232-004	* 6645989860-003	31	- 3313414505+000
40		- 2390588356-007	* 80084992007-008	40	* 1899647588+005
41		- 4657893582-008	* 5311314746-008	41	* 3157450130+005
50		- 1782235304-013	- 1854959489-013	50	* 1652917802+011
51		- 5475782700-014	- 1703888934-014	51	* 7958346215+011
60		* 1702320862-020	- 2821507468-020	60	- 1610276635+017
61		* 3153978408-022	- 6097172490-021	61	* 2148880175+018
70		* 7101297917-028	* 2833455106-028	70	- 4268108940+025
71		* 1206058841-028	- 1260382731-029	71	- 2294509105+026
80		- 1135644444-036	* 3989802672-036	80	- 1050814560+033
81		* 1152722398-037	* 5636934194-037	81	- 2887406476+034
90		- 6206444122-045	- 1355765953-045	90	* 3861737132+042
91		- 7566137393-046	* 2018502506-046	91	* 2430174499+043
99		* 1723366103-053	- 2246565865-053	99	* 1691585364+050
100		* 5702215275-055	- 3121265868-054	100	* 18468891577+051

REAL X = .200000000+002		IMAGINARY X = -.100000000+003	
FIRST KIND	SECOND KIND	REAL BESSSEL	IMAGINARY BESSSEL
N	REAL BESSSEL	IMAGINARY BESSSEL	IMAGINARY BESSSEL
0	.7633620871+041	.1074379472+042	.7633620871+041
1	.1065516904+042	-.7539559527+041	-.1065516904+042
2	-.7354661448+041	-.1047993153+042	.7354661448+041
3	-.1022204407+042	.7085201452+041	.1022204407+042
4	.6740168449+041	.9887287044+041	.6740168449+041
5	.9483070226+041	-.6330791532+041	.9483070226+041
6	-.5869962090+041	-.9018190591+041	.5869962090+041
7	-.8502545455+041	.5371591506+041	.8502545455+041
8	.4849947581+041	.7946811675+041	.4849947581+041
9	.7362103371+041	-.4319012000+041	-.7362103371+041
10	-.3791897380+041	-.6759622074+041	.3791897380+041
11	-.6150314000+041	.3280355676+041	.6150314000+041
12	.2794400987+041	.5544549133+041	-.2794400987+041
13	.4951835891+041	-.2342059808+041	.4951835891+041
14	-.1929251673+041	-.4330583305+041	.1929251673+041
15	-.3837919966+041	.1559793632+041	.3837919966+041
16	.1235514110+041	.3529575628+041	.1235514110+041
17	.2859827635+041	-.9564555515+040	.2859827635+041
18	-.7211416438+040	-.2431510450+041	.7211416438+040
19	-.2046083033+041	.5268841867+040	.2046083033+041
20	.3701038465+040	.1703745627+041	.3701038463+040
30	.3995754981+039	-.1464906856+040	.3995754981+039
31	-.1071036640+040	-.3596281777+039	-.1071036640+040
40	-.4143640618+038	.3172062416+038	.4143640619+038
41	.1939715014+038	.2964549793+038	.1939715016+038
50	.7170240971+036	.1113651094+036	.7170244382+036
51	.1083660736+036	-.4374863090+036	.1083677803+036
60	-.1900656035+034	-.3751144021+034	.195679164+034
61	-.2237583754+034	.8604775750+033	.2237583753+034
70	-.5951139626+031	.8646582859+031	.5951139626+031
71	.4157020528+031	.3618141782+031	.4157020528+031
90	-.5041460872+024	-.5989945203+025	.5041460872+024
91	-.2702344660+025	-.1302404232+024	.2702344660+025
96	-.1487723105+022	-.3178433307+022	.1487723105+022
100	-.1414861794+022	.4359043952+021	.1414861794+022

REAL X = .300000000+002		IMAGINARY X = .000000000	
FIRST KIND		SECOND KIND	
N	REAL BESSEL	IMAGINARY BESSEL	REAL BESSEL
0	-.3293438747-001	.000000000	-.5141714996-002
1	-.6239527912-002	.000000000	*.3276299697-001
2	*.3231043468-001	.000000000	*.8418014693-002
3	*.1162460036-001	.000000000	*.3135999452-001
4	-.2959802793-001	.000000000	*.1573534675-001
5	-.20504n0874-001	.000000000	*.2663939050-001
6	*.2207988139-001	.000000000	*.2550312326-001
7	*.3007166167-001	.000000000	*.1558803708-001
8	-.704391055b-002	.000000000	*.000000000
9	-.3406351099-001	.000000000	*.000000000
10	-.1452954640-001	.000000000	*.000000000
11	*.2389275850-001	.000000000	*.000000000
12	*.3284742792-001	.000000000	*.1195014735-001
13	*.34800980999-002	.000000000	*.3509251314-001
14	-.297153984-001	.000000000	-.1963311448-001
15	-.3220492641-001	.000000000	*.1611383581-001
16	-.356363084525-002	.000000000	*.3628407815-001
17	*.2928553366-001	.000000000	*.2379865016-001
18	*.3656287354-001	.000000000	*.8518986306-002
19	*.1680867710-001	.000000000	*.3430539993-001
20	-.1471159335-001	.000000000	*.3667803361-001
30	*.2805024955-001	.000000000	*.6543068078-001
31	*.191931787-001	.000000000	*.84381912151-001
40	*.5454702353-004	.000000000	*.11254586801+002
41	*.2315151304-004	.000000000	*.2514671280+002
50	*.2690163719-008	.000000000	*.1525515723+006
51	*.8621656198-009	.000000000	*.4619182927+006
60	*.115256392-013	.000000000	*.2752553256+011
61	*.2997924929-014	.000000000	*.000000000
70	*.7455913894-020	.000000000	*.1035606925+012
71	*.1638582604-020	.000000000	*.350390587+017
80	*.1015241324-026	.000000000	*.1567246504+018
81	*.1935577554-027	.000000000	*.2197658363+024
90	*.3649576412-034	.000000000	*.5348590195+031
91	*.6150915810-035	.000000000	*.3134637311+032
99	*.2677743510-041	.000000000	*.6560775885+038
100	*.4088659674-042	.000000000	*.4249612402+039

REAL X = .300000000+002		IMAGINARY X = -.100000000-002	
FIRST KIND		SECOND KIND	
REAL BESSSEL	IMAGINARY BESSSEL	REAL BESSSEL	IMAGINARY BESSSEL
N	- 3293440373-001	- 6239529311-005	0 - 5141718659-002
0	- 6239532109-002	* 3251842424-004	1 * 3276301307-001
1	* 3231045041-001	* 9470573291-005	2 * 8418019338-002
2	* 1162460712-001	* 3076049206-004	3 * 3136000957-001
3	- 2959804186-001	- 1655760801-004	4 - 1573535540-001
4	- 2050401950-001	- 2549723005-004	5 * 2663940267-001
5	* 2207990106-001	* 2565598767-004	6 * 2550313611-001
6	* 300719624-001	* 1406070350-004	7 * 1558804340-101
7	- 7043912722-002	- 3218513980-004	8 - 332971573-001
8	- 3406352617-001	- 4310594052-005	9 - 32890345823-002
9	- 1452965374-001	* 2873597802-004	10 * 3121960428-001
10	* 2389276790-001	* 2408675339-004	11 * 2513406845-001
11	* 3284744182-001	* 9658874153-005	12 * 1195015128-001
12	* 3480100528-002	- 3122338624-004	13 - 3509252699-001
13	- 2971535042-001	- 1833777042-004	14 - 1963312285-001
14	- 3220493864-001	* 1253938023-004	15 * 1611384078-001
15	- 3563086574-002	* 3016584876-004	16 * 3628409066-001
16	* 2826554231-001	* 2053440685-004	17 * 2379865874-001
17	* 3656288510-001	- 5129647476-005	18 - 8518987974-002
18	* 1680868281-001	- 2535709124-004	19 - 3430540936-001
19	- 1471159637-001	- 2710679484-004	20 - 3607804353-001
20	* 2805024937-001	- 8857073946-005	21 - 6543067906-001
21	* 1919317515-001	- 7577528734-005	22 - 8438190637-001
22	* 5454700276-004	- 4957784642-007	23 - 1125486304+002
23	* 2315150321-004	- 2213490260-007	24 - 25467051+002
24	* 2690161373-008	- 3621439607-011	25 - 1525514256+006
25	* 8621648204-009	- 1195742969-011	26 - 4619178215+006
26	* 1152588691-013	- 2005387355-016	27 - 2752548874+011
27	* 2997920307-014	- 5330189795-017	28 - 1035605205+012
28	* 7455897561-020	- 1575853875-022	29 - 3503897414+017
29	* 1638578887-020	- 3523313081-023	30 - 1567242723+018
30	* 1015238261-026	- 2513749794-029	31 - 2197651367+024
31	* 1935571542-027	- 4861829717-030	32 - 1136325608+025
32	* 3649561976-034	- 1033362439-036	33 - 5348568024+031
33	* 6150890865-035	- 1763293242-037	34 - 3134623996+032
34	* 2677730402-041	- 842654185-044	35 - 6560742886+038
35	* 4088639210-042	- 1301158632-044	36 - 4249590227+039
36		100	- 1365092655+037

REAL X = .3000000000+002 IMAGINARY X = -.1000000000-001

FIRST KIND N	SECOND KIND	
	REAL BESSEL	IMAGINARY BESSEL
0	- .3293601340-001	- .6239667805-004
1	- +6239947594-002	.3251894920-003
2	* .3231200787-001	- .9470762541-004
3	- .1162527658-001	- .3076097782-003
4	- .2959941976-001	- .1655790443-003
5	- .2050508476-001	.2549761287-003
6	.2208085835b-001	.2565641043-003
7	* .30073419859-001	- .1406089056-003
8	- .7044127292-002	- .3218563135-003
9	- .3406502949-001	- .4310687567-004
10	- .1453037989-001	.2873637898-003
11	* .2389369765-001	.2408710846-303
12	.3284881782-001	- .9658981231-004
13	.3480340996-002	- .3122379153-003
14	- .2971641761-001	- .1833801780-003
15	- .3220614907-001	.1253951405-003
16	- .35563309258-002	.3018619143-003
17	* .2828639864-001	.2053463817-003
18	* .3656402414-001	- .5129089729-004
19	* .1690924722-001	- .2535732731-003
20	- .1471189531-001	- .2710703148-003
30	* .2805023232-001	- .8857101013-004
31	.1919310303-001	- .7577540548-004
40	* .5454494631-004	- .4957732703-006
41	* .2315052958-004	- .2213463858-006
50	* .2689929195-008	- .3621343470-010
51	.8620856892-009	- .1195709071-010
60	* .1152420350-013	- .2005294707-015
61	* .2997462706-014	- .5329932000-016
70	* .7454280613-020	- .1575744357-021
71	* .1638210933-020	- .3523059301-022
80	* .1014934993-026	- .2513507532-0-8
81	* .1934976340-027	- .4861346688-029
90	* .5648132870-034	- .1033231126-035
91	* .6148421433-035	- .1763063420-036
99	* .2676432832-041	- .8426324610-043
100	* .4086813348-042	- .1300948682-043

REAL X = .3000000000+002	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
N	-3309711217-001	-.6253525879-003	0	-.5178383900-002
0	-.6281539231-002	.3257147006-002	1	.3292413667-001
1	-.3246797952-001	.9489698464-003	2	.8470516265-002
2	-.1169226516-001	-.3080949612-002	3	-.3151062339-001
3	-.2973731836-001	-.1658756219-006	4	-.1582193156-001
4	-.2061170281-001	.2553591288-002	5	.2676121847-001
5	-.22176569b-001	.2569870820-002	6	.2563169048-001
6	-.3021776872-001	-.1407960380-002	7	-.1565128333-001
7	-.7065503894-002	-.3223480799-002	8	-.3345229400-001
8	-.3421547204-001	-.432044177-003	9	-.3305864562-002
9	-.1460305229-001	.2877649181-002	10	.3135179449-001
10	-.2398673457-001	.2412263053-002	11	.2524843488-001
11	-.3298651320-001	-.9669693040-003	12	-.1198946001-001
12	-.3554466996-002	-.3126433667-002	13	-.3523110876-001
13	-.2982320275-001	-.1836276628-002	14	-.1971685522-001
14	-.3232726584-001	-.1255290064-002	15	.1616353949-001
15	-.358559118-002	.3022047048-002	16	.3640925913-001
16	-.437207864-001	.2055777732-002	17	.2388456749-001
17	-.3657768722-001	-.5133317075-003	18	-.8535673645-002
18	-.1666571332-001	-.2538094198-002	19	-.3439976714-001
19	-.1474180524-001	-.2713070143-002	20	-.3617730176-001
20	-.2804852394-001	-.8859807743-003	30	-.6541347341-001
30	-.1918588866-001	-.7578721835-003	31	-.8433061557-001
31	-.6433938750-004	-.4952539756-005	40	-.1120526583+002
40	-.230532145b-004	-.2210824239-005	41	-.2502402075+002
41	-.2666739828-008	-.3611736223-009	50	-.151086647+006
50	-.854182968b-009	-.1192321739-009	51	-.4572153985+006
51	-.1135623330-013	-.1996041481-014	60	-.2708856222+011
60	-.2951808544-014	-.5304186400-015	61	-.1018456222+012
61	-.7293130047-020	-.1564813744-020	70	-.3422529793+017
70	-.1601544003-020	-.3497732404-021	71	-.1529598989+018
71	-.9847509630-027	-.2489327593-027	80	-.2128089939+024
80	-.1875744922-027	-.4813179885-028	81	-.1099333283+025
81	-.3506112541-034	-.1020147606-034	90	-.5128479463+031
90	-.5903056775-035	-.1740167037-035	91	-.3002477315+032
91	-.2547682268-041	-.8293971491-042	99	-.6228760194+038
99	-.3885834644-042	-.1280051301-042	100	-.4029868759+039

REAL X = .300000000+002		IMAGINARY X = -.500000000+000	
N	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	SECOND KIND REAL BESSSEL
0	-.3708271431-001	-.3297368785-002	0 -.6082274393-002
1	-.731610244-002	.1693010590-001	1 .3687055266-001
2	.3632308945-001	.4977718961-002	2 .9761870018-002
3	.1335453417-001	-.1599984701-001	3 -.3519789172-001
4	-.3314569246-001	-.8658059981-002	4 -.1794675766-001
5	-.2325220226-001	.1323746788-001	5 .2974070141-001
6	.2454137942-001	.1336839299-001	6 .2878149085-001
7	.3378732408-001	-.7268912224-002	7 -.1719475346-001
8	-.7591851312-002	-.1672035696-001	8 -.3724792104-001
9	-.3793030784-001	-.2275006451-002	9 -.3933615193-002
10	-.1639999865-001	.1487965538-001	10 .3458105037-001
11	.2627994903-001	-.1249659257-001	11 .2804420185-001
12	.3638273011-001	-.4965888884-002	12 -.1294677806-001
13	.4099524663-002	-.1612850874-001	13 -.3861232487-001
14	-.3245232207-001	-.9484262185-002	14 -.2175992963-001
15	-.3530863146-001	-.6440236852-002	15 .1737374117-001
16	-.4134016097-002	-.1552940130-001	16 .3945720384-001
17	.3047784999-001	.1056159155-001	17 .2597482523-001
18	.3947632611-001	-.2618505989-002	18 -.8942113928-002
19	.18249990828-001	-.1297895296-001	19 -.3669261927-001
20	-.1547600121-001	-.1385414245-001	20 -.3858573296-001
30	.2800491446-001	-.4462732639-002	30 -.6500934228-001
31	.1900906527-001	-.3803629261-002	31 -.8311432162-001
40	.4940817295-004	-.2413606550-004	40 -.1004322131+002
41	.2072305291-004	-.1073597001-004	41 -.2215531929+002
50	.2121671993-008	-.1691352650-008	50 -.1175177009+006
51	.6688512859-009	-.5558390922-009	51 -.3497151681+006
60	.7504929651-014	-.3893232602-014	60 -.1734437823+011
61	.1907896920-014	-.2350145496-014	61 -.6371308690+011
70	.3706136911-020	-.6562075115-020	70 -.1665106352+017
71	.7880251052-021	-.1457004571-020	71 -.7194801170+017
80	.3357695780-027	-.9710468679-027	80 -.6807785531+023
81	.6069806676-026	-.1862719136-027	81 -.3327413254+024
90	.5716749381-035	-.3653769788-034	90 -.7395387094+030
91	.8549050210-036	-.6174808870-035	91 -.3791703100+031
99	-.7341588418-044	-.2716611106-041	99 .14449575+037
100	-.8361102602-044	-.4147927283-042	100 .1473273164+038

REAL X = .300000000+002		IMAGINARY X = -.100000000+001	
FIRST KIND	SECOND KIND	REAL BESSEL	IMAGINARY BESSEL
N	REAL BESSEL	-9213994118-002	.3839739833-001
0	-5056281630-001	-.7727976811-002	.8996243132-002
1	-.1088897360-001	.3808396645-001	-.3733158023-001
2	.4934832182-001	-.1149589031-001	-.1513246732-001
3	-.1904077029-001	-.3589625818-001	.3343445064-001
4	-.4463152319-001	-.1971445726-001	.2490008537-001
5	-.3221844082-001	.2954266532-001	.2382912759-001
6	.324705308-001	-.3014140144-001	-.2382912759-001
7	.4583849466-001	-.1602738956-001	-.3464544881-001
8	-.9309893630-002	-.3738307501-001	.6153659887-002
9	-.5040290474-001	-.5308499942-002	.3718473789-001
10	-.2246457274-001	-.3296187616-001	.1724209984-001
11	.3392690005-001	-.2783261310-001	-.2407073335-001
12	.4773583904-001	-.1078116391-001	-.3472045021-001
13	.6107959415-002	-.3548242104-001	-.5277973580-002
14	-.4118148554-001	-.2093453658-001	.2848090954-001
15	-.4519873729-001	-.1394267642-001	.3185949088-001
16	-.5951753797-002	-.3377086090-001	.5139483097-002
17	.3742218383-001	-.2294605212-001	-.2439808111-001
18	.4867115579-001	-.5576486669-002	-.3229570731-001
19	.2276795261-001	-.2781738146-001	-.1581158515-001
20	-.1790158595-001	-.2956045646-001	.9849713775-002
30	.2783967877-001	-.913111443-002	-.1806254120-001
31	.1843242374-001	-.7695162753-002	-.2303665691-001
40	.3463809872-004	-.4442541643-004	-.8516247924+001
41	.1379664671-004	-.1952801676-004	-.1978532504+002
50	.6216261049-009	-.2713715716-008	-.1439969377+006
51	.1637179105-009	-.8774065547-009	-.4393893371+006
60	-.2006972051-014	-.1180611377-013	-.2598902230+011
61	-.6387406123-015	-.3050076447-014	-.9693885727+011
70	-.4014157588-020	-.6667600054-020	-.2627864442+017
71	-.9357339619-021	-.1432723160-020	-.1233651947+018
80	-.8370300450-027	-.6584615676-027	-.1247956435+024
81	-.1640550807-027	-.1198053900-027	-.6133079348+024
90	-.3663130424-034	-.1178391581-034	-.1410878601+031
91	-.6243140310-035	-.1768163816-035	-.7251347366+031
99	-.2836579527-041	-.1274267512-043	.2133704112+037
100	-.4330357517-042	-.1706484020-043	.2780525511+038

REAL X = .3000000000+002		IMAGINARY X = -.3000000000+001		
FIRST KIND	SECOND KIND	REAL BESSEL	IMAGINARY BESSEL	
N	REAL BESSEL	IMAGINARY BESSEL	N	
0	-.3231894805+000	-.8382800580-001	0	-.8391911496-001
1	-.9430677436-001	.3177074302+000	1	*.3193586824+000
2	.3107063600+000	.1143504368+000	2	*.1146064801+000
3	.1436934800+000	-.2937105535+000	3	-.2953467941+000
4	-.2707244541+000	-.1788847087+000	4	-.1795285209+000
5	-.2187932770+000	*.2325351612+000	5	*.2340274259+000
6	*.18283526610+000	.25533604238+000	6	*.2565791684+000
7	.2862888646+000	-.1151294188+000	7	-.11611551337+000
8	-.3542604417-001	-.2981824695+000	8	-.2999847292+000
9	-.2894351534+000	-.5415527614-001	9	-.5410669236-001
10	-.1426720710+000	.2460743164+000	10	.2480306571+000
11	.1734988644+000	.2148136687+000	11	.2161643814+000
12	.2580648910+000	-.6984455507-001	12	-.7050257822-001
13	.4518871515-001	-.25114487067+000	13	-.253532874+000
14	-.1954181313+000	-.1499246050+000	14	-.1509851337+000
15	-.2178733506+000	.8895312499-001	15	.9054780932-001
16	-.3658941178+001	.2186420798+000	16	.2215594071+000
17	.1542109924+000	.1451869270+000	17	.1467454761+000
18	.1979501541+000	-.3312125743-001	18	-.3455710759-001
19	.9155482778-001	-.1614598958+000	19	-.16511561346+000
20	-.5932533964-001	-.1629141257+000	20	-.1663526751+000
20	.2302693375-001	-.3403039435-001	30	-.6012638035-001
31	.9863681476-002	-.2546352527-001	31	-.5447026303-001
40	-.6635760736-004	-.2995345758-004	40	.7418848368+001
41	-.2967561187-004	-.8639726900-005	41	.1763902235+002
50	-.2325354461-008	.2823722005-008	50	.6659668499+005
51	-.6319904117-009	.9918827593-009	51	.166116407+006
60	.761659149-014	.1134588705-013	60	-.102187707+011
61	.201559245-014	.3496087379-014	61	-.45140528869011
70	.1061524392-019	-.3767782251-021	70	-.2354888075+017
71	.2362186086-020	-.3476275759-021	71	-.029424774+018
80	.6810852096-027	-.1402027623-026	80	-.5127068226+023
81	.1009904167-027	-.2809145485-027	81	-.1890587847+024
90	-.3363793205-034	-.4805266887-034	90	.2126729313+031
91	-.6520265468-035	-.749172592-035	91	.1339886837+032
99	-.4487865665-041	-.6983832838-043	99	.38816525251+038
100	-.68588888578-042	-.6108590648-043	100	.2469416662+039
				.4460992794+038

REAL X = .300000000+002	FIRST KIND REAL BESSEL	IMAGINARY X = -.100000000+002	SECOND KIND REAL BESSEL	IMAGINARY BESSEL	IMAGINARY BESSEL
N 0	-.3094546009+003	-.1597784383+003	0	-.1597784380+003	.3094545995+003
1	-.1674642917+003	-.3015667003+003	1	-.3015667017+003	.1674642913+003
2	*2853358136+003	.1818955125+003	2	.1818955124+003	-.2853358121+003
3	*.2011698881+003	-.2600155827+003	3	-.2600155843+003	-.2011698881+003
4	-.2248890463+003	-.2244168927+003	4	-.2244168929+003	.2248890447+003
5	-.2418724102+003	.1797230075+003	5	.1797230091+003	.2418724098+003
6	*.1253016201+003	.2551195201+003	6	.2551195209+003	-.1253016185+003
7	*.2575745045+003	-.6393718407+002	7	-.6393718559+002	-.2575745033+003
8	*.1974845025+000	-.2452550773+003	8	-.2452550789+003	-.1974857986+0~0
9	-.2157804242+003	-.6110933296+002	9	-.6110933207+002	.2157804221+003
10	-.1115815531+003	.1694244769+003	10	.1694244794+003	.1115815533+003
11	*.1099049057+003	.1444146272+003	11	.1444146279+003	-.1099049028+003
12	*.1542005737+003	-.4450025576+002	12	-.44500255852+002	-.1542005718+003
13	*.1687058855+002	-.1392396756+003	13	-.1392396788+003	-.1687059067+002
14	-.1029406846+003	-.6372882260+002	14	-.63728832187+002	.1029406801+003
15	-.8794762555+002	.5394280146+002	15	.5394280659+002	.8794762403+002
16	*.4427124338+001	.8663186404+002	16	.8663186855+002	-.4427119726+001
17	*.6374196351+002	.3328369497+002	17	.3328369278+002	.6374195593+002
18	*.5085264411+002	-.2937429709+002	18	-.2937430655+002	.5085264153+002
19	*.3572961374+001	-.4707363642+002	19	-.4707369568+002	-.3572969588+001
20	-.2831354160+002	-.2430846108+002	20	-.2430845926+002	.2831352580+002
30	-.8752294514+000	.5039368538+000	30	.5045598981+000	.8753351889+000
31	-.2660704767+000	.5351238704+000	31	.5353555250+000	.2660284898+000
40	-.921864553/-003	-.7168715791-003	40	.3345718507+000	-.2538000010+000
41	-.4972103131--003	-.1073857452-003	41	.9386851924+000	-.1742582039+000
50	*.6652356626--007	-.2545660066-007	50	-.4473561260+004	-.2572608302+004
51	*.1714608798--007	-.162077774-007	51	-.9174116865+004	-.1210316226+005
60	-.2325762448--012	.3785755741-012	60	.2149393421+009	.6222082916+009
61	-.2195947165--013	.1184681204-012	61	-.930813116+008	.2377546005+010
70	*.3638681076--019	-.4432699079-018	70	.9177816590+014	-.5399578238+015
71	*.2752635591--019	-.9853067027-019	71	.11174057687+016	-.2026871829+016
80	*.2669026915--025	.2276650660-025	80	-.1131474732+022	.1848533477+022
81	*.1131448797--025	.1563842107-025	81	-.8352290223+022	.6670352826+022
90	-.3055966545--032	-.4721734786-032	90	.2464905330+029	-.2140810433+029
91	-.7890970190--033	-.6068660492-033	91	.1696868008+030	-.664766642+029
99	*.3000622384--039	.5688454520-039	99	-.1799934992+036	.1840505539+036
100	.7565907014--040	.7020267868-040	100	-.1423004405+037	.7023356793+036

REAL X = .3000000000+002	FIRST KIND REAL BESSEL	IMAGINARY BESSEL	SECOND KIND REAL BESSEL	IMAGINARY BESSEL
N			N	
0	-.1752924115+041	-.1275384649+042	0	-.1275384649+042
1	-.1264166329+042	-.1701739912+041	1	-.1701739912+041
2	.1601706530+041	.1241996187+042	2	.1241996187+042
3	.1209398210+042	-.1457350229+041	3	-.1457350229+041
4	-.1275111906+041	-.1167136151+042	4	-.1167136151+042
5	-.1116187704+042	.1062958640+041	5	.1062958640+041
6	.8299124635b+040	.1057711487+042	6	.1057711487+042
7	.9930080392+041	-.5855310252+040	7	-.5855310252+040
8	-.3393773521+040	-.9234763342+041	8	-.9234763342+041
9	-.8505675325b+041	.1005153552+040	9	.1005153552+040
10	-.1229358690+040	.7757378997+041	10	.7757378997+041
11	.7004028950+041	.3241620249+040	11	.3241620249+040
12	.4979090174+040	-.6258944283+041	12	-.6258944283+041
13	-.5534231475+041	-.6406240128+040	13	-.6406240128+040
14	-.7504817386+040	.4840473601+041	14	.4840473601+041
15	.4186498214+041	.8273042872+040	15	.8273042872+040
16	.8723899999+340	-.3579231633+041	16	-.3579231633+041
17	-.3023642205+341	-.8862723897+040	17	-.8862723897+040
18	-.8784532064+040	.2522769823+041	18	.2522769823+041
19	.2077834021+041	.8469945585+040	19	.8469945585+040
20	.7984136676+040	-.1688408693+041	20	-.1688408693+041
30	-.1639298015+040	.7717322318+039	30	.7717322318+039
31	.4774402034+039	.1279407986+040	31	.1279407986+040
40	.6317359113+038	-.3424091694+038	40	-.3424091693+038
41	.2812342854+038	-.4082264644+038	41	-.4082264643+038
50	.1075024664+036	-.1182945378+037	50	-.1182944732+037
51	-.7338034437+036	-.1631801381+036	51	-.1631798414+036
60	-.8332326883+034	.9134640517+033	60	.9087879470+033
61	-.1872104674+033	.4875487981+034	61	.4723099384+034
70	.324388682+031	.2575273219+032	70	-.2760138331+035
71	.1392558439+032	.5491297639+030	71	-.3918060648+034
72	.3633979378+029	.7376461350+027	70	-.7810054066+036
81	.3587903640+028	-.1769779364+029	81	.3707276899+038
90	.7179869312+025	-.2264739603+026	90	.2636758224+041
91	-.9616801903+025	-.5250926053+025	91	.2877860557+041
99	.8497965186+022	-.1508152982+023	99	.3191604107+044
100	-.5647850945+022	-.4915084915+022	100	.5430772419+044

REAL X = .5000000000+002		IMAGINARY X = .000000000		SECOND KIND	
FIRST KIND		IMAGINARY BESSEL		REAL BESSSEL	
N	REAL BESSSEL	IMAGINARY BESSEL	N	REAL BESSEL	IMAGINARY BESSSEL
0	-.5247497074-002	.9000000000	0	-.1929932057-001	.0000000000
1	-.1940427051-011	.0000000000	1	*4861510663-002	.0000000000
2	*4083240843-002	-.0000000000	2	*1959101121-001	.0000000000
3	*1981259460-001	.0000000000	3	-.2902409542-002	.0000000000
4	-.1309477600-002	-.0000000000	4	-.1999734855-001	.0000000000
5	-.2004830056-001	-.0000000000	5	-.6971131965-003	.0000000000
6	-.3101143524-002	-.0000000000	6	*1984398364-001	.0000000000
7	-.192420195-001	-.0000000000	7	.5856548943-002	.0000000000
8	*8873749108-002	-.0000000000	8	-.1808701896-001	.0000000000
9	-.1622492725-001	-.0000000000	9	-.1200613539-001	.0000000000
10	-.1503922146-001	-.0000000000	10	*1352468751-001	.0000000000
11	*9908454236-002	-.0000000000	11	*1768650414-001	.0000000000
12	*1959711041-001	-.0000000000	12	-.5388895605-002	.0000000000
13	-.1098990300-003	-.0000000000	13	-.2038095195-001	.0000000000
14	-.1965645549-001	-.0000000000	14	-.5616818446-002	.0000000000
15	-.1129084539-001	-.0000000000	15	*1712319725-001	.0000000000
16	*1265613175-001	-.0000000000	16	*1623320074-001	.0000000000
17	*1964389234-001	-.0000000000	17	-.6409284759-002	.0000000000
18	*1094592888-002	-.0000000000	18	-.2071970007-001	.0000000000
19	-.1883389360-001	-.0000000000	19	-.8923293294-002	.0000000000
20	-.1578502990-001	-.0000000000	20	*1375953130-001	.0000000000
30	-.1494673454-002	-.0000000000	30	-.2241226812-001	.0000000000
31	-.1870384803-001	-.0000000000	31	-.1284270942-001	.0000000000
40	-.2606336952-001	-.0000000000	40	*4978797221-004	.0000000000
41	-.2182508230-001	-.0000000000	41	*1538890151-001	.0000000000
50	*1882910737-001	-.0000000000	50	-.4190000150-001	.0000000000
51	*1381865849-001	-.0000000000	51	-.5199406389-001	.0000000000
60	-.1339715305-003	-.0000000000	60	-.2199701186+001	.0000000000
61	*6821076931-004	-.0000000000	61	-.4105673109+001	.0000000000
70	*5341552371-007	-.0000000000	70	-.3768476574+004	.0000000000
71	*2170135398-007	-.0000000000	71	-.9019494907+004	.0000000000
80	*2925097307-011	-.0000000000	80	-.5419583184+008	.0000000000
81	*1000688737-011	-.0000000000	81	-.1552882215+009	.0000000000
90	*3333197496-016	-.0000000000	90	-.3977400210+013	.0000000000
91	*9900233244-017	-.0000000000	91	-.1318185287+014	.0000000000
99	*3828251339-021	-.0000000000	99	-.3036620168+018	.0000000000
100	*1039012263-021	-.0620000000	100	-.1125692891+019	.0000000000

REAL X =	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
N 0	-.5247499310-002	-.1940427377-034	0	-.1929933032-001
1	-.1940428030-001	-.4471326867-005	1	+.4861512702-002
2	.4083242487-002	-.1964926825-004	2	-.1959102106-001
3	.1981260450-001	-.2498233558-005	3	-.2902410589-002
4	-.1309477851-002	-.1994354565-004	4	-.1999735848-001
5	-.2004831045-001	-.1096318778-005	5	-.6971139391-003
6	-.3101150441-002	-.1961414296-004	6	-.1984399333-001
7	.1924201123-001	-.6179869963-005	7	+.5856552184-002
8	.8873753770-002	-.1764472990-004	8	-.1808702756-001
9	-.1622493483-001	-.1211873660-004	9	-.1200614149-001
10	-.1503922891-001	-.1291630049-004	10	+.1352469368-001
11	.9908458580-002	-.1741725328-004	11	+.1768651271-001
12	.1959711970-001	-.4813206165-005	12	-.5388897749-002
13	-.1098986884-003	-.1962788517-004	13	-.2038096139-001
14	-.1965646478-001	-.5787038727-005	14	-.5616821393-002
15	-.1129085081-001	-.1604338771-004	15	-.1712320477-001
16	.1265613708-001	-.1559393256-004	16	-.1623320821-001
17	.1964390107-001	-.5584331223-005	17	-.6409287201-002
18	.1094593745-002	-.1922794980-004	18	-.2071970898-001
19	-.1883390142-001	-.8628151533-005	19	-.8923297420-002
20	-.1578503671-001	-.1220418266-004	20	-.1375953673-001
30	-.1494673567-002	-.1780704581-004	30	-.2241227517-001
31	-.1870385346-001	-.1047579036-004	31	-.1284271358-001
40	-.2606337399-001	-.9743866847-006	40	-.4978/673779-004
41	-.2182508585-001	-.773030842-005	41	-.1536890365-001
50	.1882910728-001	-.5010448991-005	50	-.419000088-001
51	.1381865816-001	-.4457702596-005	51	-.5199406206-001
60	.1339715013-003	-.9255506183-007	60	-.2199700646+001
61	.6821075281-004	-.4939017324-007	61	-.4105671998+001
70	.5341549839-007	-.5308037152-010	70	-.3768474637+004
71	.2170134308-007	-.2216557056-010	71	-.9019490012+004
80	.2925095052-011	-.3679466058-014	80	-.5419578733+008
81	.1000687933-011	-.1283967452-014	81	-.1552880889+009
90	.3333193803-016	-.5009730389-019	90	-.3977395563+013
91	.9900221919-017	-.1511554024-019	91	-.1318183698+014
99	.3828245805-021	-.6560922326-024	99	-.3036615569+018
100	.1019010749-021	-.1769845719-024	100	-.1125691141+019

REAL X = .5000000000+002		IMAGINARY X = -.1000000000-001	
N	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	SECOND KIND REAL BESSSEL
0	-.5247729642-002	-.1940459664-003	0
1	-.1940524890-001	.4471387622-004	1
2	.4083405218-002	.1964959359-003	2
3	.1981358548-001	-.2498261532-004	3
4	-.1309502663-002	-.1994387215-003	4
5	-.2004928877-001	-.1096349521-004	5
6	-.3101340207-002	-.1961445840-003	6
7	.1924203014-001	.6179981533-004	7
8	.8874215311-002	-.1764500644-003	8
9	-.1622568506-001	-.1211893882-003	9
10	-.1503996618-001	.1291649467-003	10
11	.9908888669-002	.1741753065-003	11
12	.1959803876-001	-.4813269117-004	12
13	-.1098648686-003	-.1962818474-003	13
14	-.196573459-001	-.5787136757-004	14
15	-.1129138782-001	.1604362036-003	15
16	.126566452-001	.1559416778-003	16
17	.1964476549-001	-.5584402074-004	17
18	.1094676588-002	-.1922822237-003	18
19	-.1883467491-001	-.8628280668-004	19
20	-.1578571097-001	.1220434280-003	20
30	-.1494684772-002	-.1780722988-003	30
31	-.1870439119-001	-.1047589675-003	31
40	-.2606381586-001	-.9743868097-005	40
41	-.2182543736-001	.7730345669-004	41
50	.1882909856-001	-.5010460064-004	50
51	.1381862540-001	-.4457708177-004	51
60	.1339686075-003	-.9255452004-006	60
61	.6820911917-004	-.4938984458-006	61
70	.5341299116-007	-.530796002-009	70
71	.2170026464-007	-.2216523182-009	71
80	.2924871830-011	-.3679377338-013	80
81	.1000608408-011	-.1283935151-013	81
90	.3332828204-016	-.5009554271-018	90
91	.98991100811-017	-.1511499107-018	91
99	.3827697892-021	-.6560619119-023	99
100	.1018860916-021	-.1769761636-023	100

REAL X = .500000000+002		IMAGINARY X = -.100000000+000		
FIRST KIND		SECOND KIND		
N	REAL BESSEL	IMAGINARY BESSEL	REAL BESSEL	
0	-.5269869051-002	-.1943689957-002	0	-.1939687128-001
1	-.1950219049-001	.4477465475-003	1	*4881913704-002
2	*4099688573-002	.1968214389-002	2	*1968955061-001
3	*1991176406-001	-.2501059615-003	3	-.2912892702-002
4	-.1311982726-002	-.1997653812-002	4	-.2009679798-001
5	-.2014720086-001	-.1099425983-003	5	-.7045489677-003
6	-.3120335359-002	.1964601804-002	6	.1994092019-001
7	*1933489532-001	.6191144553-003	7	.5888986404-002
8	.8920409286-002	-.1767267319-002	8	-.1817309511-001
9	-.1630076656-001	-.1213917087-002	9	-.1206719332-001
10	-.1511375323-001	.1293592138-002	10	*1358638602-001
11	.9951928980-002	.1744528110-002	11	-.1777219210-001
12	.1969001729-001	-.4819566795-003	12	-.541035352-002
13	-.1064777613-003	-.1965815548-002	13	-.2047544720-001
14	-.1974539198-001	-.5796944656-003	14	-.5646307410-002
15	-.1134513133-001	.1606689539-002	15	.1719843001-001
16	.127094640-001	.15611770089-002	16	*1630791326-001
17	.1973127087-001	-.5591490017-003	17	-.6433716450-002
18	.1103170772-002	-.1925549156-002	18	-.2080889726-001
19	-.1891207797-001	-.8641189876-003	19	-.8964588766-002
20	-.1585318456-001	.1222036318-002	20	*1381386683-001
30	-.1495806268-002	-.1782564213-002	30	-.2248280041-001
31	-.1875819130-001	-.1048653945-002	31	-.1288430204-001
40	-.2610801676-001	-.9743988434-004	40	4680542757-004
41	-.2186059618-001	-.7734829482-003	41	*1541027922-001
50	-.1882822516-001	-.5011567316-003	50	-.4189379699-001
51	.1381534796-001	-.4458266210-003	51	-.5197582925-001
60	.1336792923-003	-.9250034543-005	60	-.2194307656-001
61	.6804579847-004	-.4935698169-005	61	-.409457479+001
70	.5316243410-007	-.5300338619-008	70	-.3749130784+004
71	.2159249610-007	-.2213137068-008	71	-.8970584082+004
80	.2902575359-011	-.3670511113-012	80	-.5375138910+008
81	.9926654850-012	-.1280707173-012	81	-.1539637919+009
90	.3296330567-016	-.4991959705-017	90	-.3931030138+013
91	.9787187603-017	-.1506012981-017	91	-.1302333212+014
99	.3773030320-021	-.6530338124-022	99	-.2990752444+018
100	.1003912386-021	-.1761364691-022	100	-.1108236375+019

REAL X = .500000000+002	FIRST KIND	IMAGINARY X = -.500000000+000	SECOND KIND	IMAGINARY BESSEL	REAL BESSEL	IMAGINARY BESSEL	REAL BESSEL	IMAGINARY BESSEL
N	REAL BESSEL	IMAGINARY BESSEL	N	REAL BESSEL	IMAGINARY BESSEL	N	REAL BESSEL	IMAGINARY BESSEL
0	-.5816064493-c62	-.1011494599-001	0	-.2178758069-001	-.2516570284-002	0	-.2178758069-001	-.2516570284-002
1	-.2190186756-001	.2313128495-002	1	-.5379853186-002	-.1016091529-001	1	-.5379853186-002	-.1016091529-001
2	.4500696099-c02	.1024058002-001	2	.2210424366-001	-.1903748737-002	2	.2210424366-001	-.1903748737-002
3	.2234165261-001	-.1284672643-002	3	-.3167746282-002	-.1032916909-001	3	-.3167746282-002	-.1032916909-001
4	-.1371379124-002	-.1038914102-001	4	-.2253322441-001	.4533752570-003	4	-.2253322441-001	.4533752570-003
5	-.2256977759-c01	-.5876539902-003	5	-.8886445479-003	.1037021273-001	5	-.8886445479-003	.1037021273-001
6	-.3592182751-002	-.1021022152-001	6	.22331492997-001	.1825888599-002	6	.22331492997-001	.1825888599-002
7	.2160935954-c01	.3232707406-002	7	.66885199374-002	-.9837516144-002	7	.66885199374-002	-.9837516144-002
8	.1006464524-c01	-.9175684676-002	8	-.2028006110-001	-.4756794753-002	8	-.2028006110-001	-.4756794753-002
9	-.1815652811-c01	-.6317911881-002	9	-.1356355921-001	.8151422330-002	9	-.1356355921-001	.8151422330-002
10	-.1693943038-001	.6706130310-002	10	.1509545165-001	.7802489144-002	10	.1509545165-001	.7802489144-002
11	-.1101451580-001	.9063066488-002	11	.1987024778-001	-.4811310004-002	11	.1987024778-001	-.4811310004-002
12	.2196391510-001	-.2486874878-002	12	-.5933921801-002	-.9924076447-002	12	-.5933921801-002	-.9924076447-002
13	-.2122321018-004	-.1019657110-001	13	-.2278729659-001	-.1798987083-003	13	-.2278729659-001	-.1798987083-003
14	-.2192031851-001	-.3018837497-002	14	-.6369016612-002	.9703901761-002	14	-.6369016612-002	.9703901761-002
15	-.1267378277-001	.8318695193-c02	15	.1903735932-001	.5770662357-002	15	.1903735932-001	.5770662357-002
16	-.1401178814-c01	.8097343213-002	16	.1813522466-001	-.6008429019-002	16	.1813522466-001	-.6008429019-002
17	.2186720115-c01	-.2882514489-002	17	-.7029656182-002	-.9616148478-002	17	-.7029656182-002	-.9616148478-002
18	.1313897687-002	-.9961846497-002	18	-.2296818566-001	-.7714045255-003	18	-.2296818566-001	-.7714045255-003
19	-.2082130377-001	-.4478792945-002	19	-.9974192425-002	.8875270543-002	19	-.9974192425-002	.8875270543-002
20	-.1751795963-001	.6306347381-002	20	.1513987328-001	.7615632503-002	20	.1513987328-001	.7615632503-002
30	-.1523573787-002	-.9137762540-002	30	-.2419779624-001	.3055225073-003	30	-.2419779624-001	.3055225073-003
31	-.2007909329-001	-.5373187742-002	31	-.1389483294-001	.7273291939-002	31	-.1389483294-001	.7273291939-002
40	-.2718744719-001	-.487202700-003	40	-.2378264960-004	.7784254540-002	40	-.2378264960-004	.7784254540-002
41	-.2271773096-001	.3922111290-002	41	-.1592813809-001	.6516689824-002	41	-.1592813809-001	.6516689824-002
50	.1880521937-001	-.2519207268-002	50	-.4174746075-001	-.5006090150-002	50	-.4174746075-001	-.5006090150-002
51	.1373517303-c01	-.2235881346-002	51	-.5154197631-001	-.6022500589-002	51	-.5154197631-001	-.6022500589-002
60	.1267043985-c03	-.4559485079-004	60	-.2066640670-001	-.7154005494-000	60	-.2066640670-001	-.7154005494-000
61	.6411259680-004	-.2428124488-004	61	-.3832128682+001	-.1408075147-001	61	-.3832128682+001	-.1408075147-001
70	.4718795916-007	-.2558595359-007	70	-.3296229052+004	-.17865687954+004	70	-.3296229052+004	-.17865687954+004
71	.1902577607-007	-.1065916376-007	71	-.7826929387+004	-.4369128774+004	71	-.7826929387+004	-.4369128774+004
80	.2377451288-011	-.1729520265-011	80	-.4348083010+008	-.5187833782+008	80	-.4348083010+008	-.5187833782+008
81	.8058421388-012	-.6018881752-012	81	-.1234005328+009	-.9293163393+008	81	-.1234005328+009	-.9293163393+008
90	.2448686017-016	-.2287884363-016	90	-.2875205554+013	-.2716730724+013	90	-.2875205554+013	-.2716730724+013
91	.7191919200-017	-.6881777951-017	91	-.9419578067+013	-.9117519926+013	91	-.9419578067+013	-.9117519926+013
99	.2521110300-021	-.290981593-021	99	-.1961745737+018	-.2294860758+018	99	-.1961745737+018	-.2294860758+018
100	.6621457867-022	-.7822840059-022	100	-.7172928423+018	-.8590587952+018	100	-.7172928423+018	-.8590587952+018

REAL X = .500000000+002		IMAGINARY X = -.100000000+001	
N	FIRST KIND REAL BESSSEL	SECOND KIND IMAGINARY BESSSEL	REAL BESSSEL
0	-.7640643168-002	-.2283339743-001	-.2989178842-001
1	-.8603541047-001	.5109483667-002	.7040819717-002
2	-.563310165-002	.2310381609-001	.3028856035-001
3	-.30322289918-001	-.2788369285-002	-.4005007673-002
4	-.1546895394-002	-.2340846350-001	-.3078184968-001
5	-.3076639316-001	-.1429036066-002	-.1536801033-002
6	-.521271932-002	-.2295886328-001	-.3034121448-001
7	-.2026228856-001	-.7368063587-002	-.940046711-002
8	-.1395265673-001	-.2057342466-001	-.2738970370-001
9	-.2441042515-001	-.1426619070-001	-.1863596193-001
10	-.2311656369-001	-.1496899473-001	-.2017228849-001
11	-.1457955365-001	.2035655316-001	-.2695742006-001
12	-.296332567-001	-.5474645159-002	-.7678464880-002
13	-.2856944668-003	-.2279656648-001	-.3057281728-001
14	-.2923204349-001	-.6827493195-002	-.8818908809-002
15	-.1715495304-001	-.1849923715-001	-.2520895403-001
16	-.837182224-001	-.1807979771-001	-.2428181845-001
17	-.2903696455-001	-.5328930737-002	-.9013747440-002
18	-.2034495453-002	-.2210192287-001	-.3028943334-001
19	-.27295056222-001	-.9986854138-002	-.1336497517-001
20	-.2309017959-001	-.1388872295-001	-.1956285475-001
30	-.1618062141-002	-.1972572117-001	-.2983800484-001
32	-.2441762595-001	-.1151813716-001	-.1720783549-001
40	-.3065961548-001	-.9708136944-003	-.2314579805-003
41	-.254513162-001	-.8194780349-002	-.1760681300-001
59	-.1872704064-001	-.6122363792-002	-.4132159502-001
51	-.1347564052-001	-.451354390-002	-.502320472-001
60	-.1055677795-003	-.8742727266-004	-.1689090983-001
61	-.5214320992-004	-.4510678856-004	-.305913541-001
70	-.2972560070-007	-.456403141-007	-.2015747829-004
71	-.155955637-007	-.1887317075-007	-.4609653012-004
80	-.9494097091-012	-.2839982210-011	-.1597348603-008
81	-.2999990848-012	-.9792652217-012	-.420264859-008
60	-.2515519101-017	-.3397864379-016	-.2210365250-012
91	-.4474202-95-018	-.101072423-016	-.4223366789-012
99	-.55722880277-022	-.3876916617-021	-.4610067768-017
100	-.1720557041-022	-.1028441140-021	-.1960091036+018
			-.108213356+018
			-.1082133551+019

REAL X = .5000000000+002	IMAGINARY X = -.3000000000+001	SECOND KIND	REAL BESSEL	IMAGINARY BESSEL
FIRST KIND	IMAGINARY BESSEL	N	N	N
-4.08184146+001	-195803001+000	0	-.1967448808+000	.4076407652+001
-1.97320498+001	.3681264460+001	1	.3711231724+001	.1963802002+000
.2915246355+001	.1972961157+000	2	.1982551196+000	-.2889040538+001
.1.90547113+000	-.1657981432+001	3	-.17184793193+001	-.1980735894+000
4.242678665+002	-.1979986908+001	4	-.1989985908+000	.1115739399+002
5.1974488758+000	-.185454790+001	5	-.1851847065+001	.1961322266+000
6.17303137+001	-.1913403166+000	6	.1923594826+000	.4663500396+001
7.1833617592+001	-.6746686952+001	7	.6770535728+001	-.1823559123+000
8.653329154+001	-.1678841905+000	8	-.1688501028+000	-.9493121487+001
9.1476528347+000	-.1224004945+000	9	-.1229788110+000	.1467628921+000
10.14214572824+000	-.1181827521+000	10	.1189515953+000	.1477072034+000
11.8255691601+001	-.1681359453+000	11	.1690504018+000	.1697614645+000
12.1416733339+000	-.3884725418+001	12	-.392132888+001	-.1806252302+000
13.9.15149131902	-.1820592484+000	13	-.1831874161+000	-.9199264752+002
14.1708912492+000	-.5881784491+001	14	-.5905604987+001	.1477072034+000
15.1058370158+000	-.1421416038+000	15	.1431712663+000	.105259452+000
16.1002389804+000	-.1427064732+000	16	.1436021989+000	-.9942752953+001
17.161265235+000	-.4433796105+001	17	-.4481058335+001	-.1649804737+000
18.174876348+001	-.1666794293+000	18	-.1679527653+000	-.1751983603+001
19.1458578312+000	-.7778869507+001	19	-.7825355137+001	.146319469+000
20.1272215201+000	-.99203371+001	20	.1003894481+000	.1262789556+000
30.3950553291+002	-.1169602726+000	30	-.1219925107+000	.3568644580+002
31.9482338303+001	-.6871367002+001	31	-.697183534+001	.9287629412+001
40.-7812227425+001	-.1543395588+002	40	-.626519567+003	.7385822573+001
41.-6067058632+001	-.3854804792+001	41	.4215662155+001	.5744375428+001
50.1881140670+001	-.1804884567+001	50	-.3942669215+001	-.2195240297+001
51.9819372465+000	-.1474719606+001	51	-.4001888999+001	-.2403566302+001
60.-7731622744+000	-.1411885203+003	60	.7497575620+000	-.1623150695+001
61.-491960111+004	-.6749786531+004	61	.1737798772+001	-.287234008+001
70.-6285697320+007	-.1041166076+007	70	.3093974085+004	-.5140825810+003
71.-2.58058041+007	-.2103319759+008	71	.746528210+004	-.5892305261+003
80.-2842948041+011	-.2059788301+011	80	.3580949616+008	.2718560551+008
81.-9175663374+012	-.7767124268+012	81	.9623963204+008	.8548184413+008
90.-8413255888+017	-.3956393406+016	90	.5717208250+012	.3216454767+013
91.-1657120171+017	-.1191435823+016	91	.1120169384+013	.1075603240+014
92.1926495974+021	-.288854830+021	92	-.1098860595+018	.2207365611+018
100.910428412+022	,1105020168+021	100	-.4625433738+018	.7869584284+018

REAL X	FIRST KIND	SECOND KIND	IMAGINARY X = -100000000+002
'REAL BESSEL	'IMAGINARY BESSEL	'REAL BESSEL	
N 0	-2154868204+003	0	-.2154868212+00
1	-.1049404863+00	1	-.1049404863+00
2	.2136121631+00	2	.2136121631+00
3	-.1008737163+00	3	-.1008737163+00
4	-.20657323576+00	4	-.20657323576+00
5	-.4494149712+00	5	-.4494149712+00
6	.1886294697+00	6	.1886294697+00
7	-.8878668345+00	7	-.8878668345+00
8	-.1530138057+00	8	-.1530138057+00
9	-.1315434561+00	9	-.1315434561+00
10	.9566432024+00	10	.9566432024+00
11	-.1582267683+00	11	-.1582267683+00
12	-.2040827715+00	12	-.2040827715+00
13	-.1526234958+00	13	-.1526234958+00
14	-.5681868721+00	14	-.5681868721+00
15	-.1059490839+00	15	-.1059490839+00
16	-.1094825768+00	16	-.1094825768+00
17	-.2768108263+00	17	-.2768108263+00
18	-.1122165653+00	18	-.1122165653+00
19	-.5017731664+00	19	-.5017731664+00
20	-.6075560452+00	20	-.6075560452+00
21	-.3207814814+00	21	-.3207814814+00
22	-.1059595033+00	22	-.1059595033+00
23	-.3503544074+00	23	-.3503544074+00
24	-.4410789746+00	24	-.4410789746+00
25	-.6423274217-00	25	-.6423274217-00
26	-.7351686543-00	26	-.7351686543-00
27	-.2256572849+00	27	-.2256572849+00
28	-.3424484449+00	28	-.3424484449+00
29	-.4716021364+00	29	-.4716021364+00
30	-.9587828961+00	30	-.9587828961+00
31	-.6994145236+00	31	-.6994145236+00
32	-.1970702267+00	32	-.1970702267+00
33	-.32653713381+01	33	-.32653713381+01
34	-.5134359592-016	34	-.5134359592-016
35	-.12895245608+01	35	-.12895245608+01
36	-.7938430124+01	36	-.7938430124+01
37	-.3293270886+01	37	-.3293270886+01

REAL X = .500000000+002	FIRST KIND REAL BESSSEL	IMAGINARY X = -.100000000+003	SECOND KIND REAL BESSSEL
N 0	.3965178206+041	-.8009060812+041	0 -.8009060812+041
1	-.7909127613+041	-.8925493024+041	1 -.6925493024+041
2	-.8845375905+041	-.7712135833+041	2 -.7712135833+041
3	-.7423724661+041	-.8725900704+041	3 -.8725900704+041
4	-.8565089756+041	-.7052082032+041	4 -.7052082032+041
5	-.6607631524+041	-.8363086195+041	5 ¹ -.8363086195+041
6	-.8119873694+041	-.6102634534+041	6 -.6102634534+041
7	-.5580724100+041	-.7835959327+041	7 -.7835959327+041
8	-.7512662021+041	-.4966360682+041	8 -.4966360682+041
9	-.4364438112+041	-.7151959977+041	9 -.7151959977+041
10	-.6757201401+041	-.3759446653+041	10 -.3759446653+041
11	-.3165246177+041	-.6332543651+041	11 -.6332543651+041
12	-.5883216017+041	-.2594447218+041	12 -.2594447218+041
13	-.2058035613+041	-.5645345169+041	13 -.5645345169+041
14	-.4637576925+041	-.1565054352+041	14 -.1565054352+041
15	-.1122393288+041	-.4451793007+041	15 -.4451793007+041
16	-.3970901357+041	-.7346784835+040	16 -.7346784835+040
17	-.4042791895+040	-.3500452608+041	17 -.3500452608+041
18	-.3047373713+041	-.1314169453+040	18 -.1314169453+040
19	-.8563153591+039	-.2617879697+041	19 -.2617879697+041
20	-.2217236728+041	-.2502552482+040	20 -.2502552482+040
30	-.1260417930+040	-.2605991296+040	30 -.2605991296+040
31	-.2137720757+040	-.7297966736+039	31 -.7297966736+039
40	-.13571357+039	-.1016349208+039	40 *.1016349208+039
41	-.5702673150+038	-.108113136+039	41 *.108113136+039
50	-.2112763762+037	-.3988939850+037	50 *.3988939850+037
51	-.2877711659+037	-.8784727169+036	51 -.8784725392+036
60	-.5516537764+035	-.5480556727+035	60 -.5480556727+035
61	-.714093005+034	-.332841520+035	61 -.332841520+035
70	-.2160462610+033	-.227515448+033	70 *.5098034049+033
71	-.9569663423+032	-.151865030+033	71 -.2888624931+034
80	-.1847746614+030	-.6241042350+030	80 -.1242046905+036
81	-.3951628233+030	-.2128659936+036	81 -.1303935234+037
90	-.9396312027+026	-.1094065641+028	90 -.2528915856+039
91	-.5314024167+027	-.1130219155+027	91 -.1014677284+040
99	-.133246855+025	-.7272267634+024	99 *.2096649332+042
100	-.133253352+024	-.6931765137+024	100 -.4593661856+042

PEAL X = .100000000+003 IMAGINARY X = .000000000
 FIRST KIND REAL BESSEL IMAGINARY BESSEL SECOND KIND REAL BESSSEL IMAGINARY BESSSEL
 N 0 -.5063656411-0C2 .000000000 .000000000 .000000000 .000000000
 1 -.867325287-002 .000000000 .000000000 .000000000 .000000000
 2 -.4803441652-002 .000000000 .000000000 .000000000 .000000000
 3 -.8913997376 012 .000000000 .000000000 .000000000 .000000000
 4 -.4179461837-002 .000000000 .000000000 .000000000 .000000000
 5 -.92900148935-002 .000000000 .000000000 .000000000 .000000000
 6 .3157545454-002 .000000000 .000000000 .000000000 .000000000
 7 .9700629844-012 .000000000 .000000000 .000000000 .000000000
 8 -.1702450977-002 .000000000 .000000000 .000000000 .000000000
 9 -.9990046510-002 .000000000 .000000000 .000000000 .000000000
 10 -.1956578597-003 .000000000 .000000000 .000000000 .000000000
 11 .9948958354-012 .000000000 .000000000 .000000000 .000000000
 12 .2483919282-002 .000000000 .000000000 .000000000 .000000000
 13 -.9327978784-002 .000000000 .000000000 .000000000 .000000000
 14 -.500247255b-002 .000000000 .000000000 .000000000 .000000000
 15 .787726174b-002 .000000000 .000000000 .000000000 .000000000
 16 .7444423697-002 .000000000 .000000000 .000000000 .000000000
 17 -.5420601928-002 .000000000 .000000000 .000000000 .000000000
 18 -.9341634372-002 .000000000 .000000000 .000000000 .000000000
 19 .1964197210-002 .000000000 .000000000 .000000000 .000000000
 20 .1010767128-001 .000000000 .000000000 .000000000 .000000000
 21 .8700628514-002 .000000000 .000000000 .000000000 .000000000
 22 .5797140882-003 .000000000 .000000000 .000000000 .000000000
 23 -.2453400806-002 .000000000 .000000000 .000000000 .000000000
 24 .1043410851-001 .000000000 .000000000 .000000000 .000000000
 25 .3643741786-002 .000000000 .000000000 .000000000 .000000000
 26 .5797140882-003 .000000000 .000000000 .000000000 .000000000
 27 .9573865262-002 .000000000 .000000000 .000000000 .000000000
 28 -.4876469107-002 .000000000 .000000000 .000000000 .000000000
 29 .1102316808-001 .000000000 .000000000 .000000000 .000000000
 30 -.4767399015-002 .000000000 .000000000 .000000000 .000000000
 31 .430547794-002 .000000000 .000000000 .000000000 .000000000
 32 .1154782681-001 .000000000 .000000000 .000000000 .000000000
 33 -.5861866019-002 .000000000 .000000000 .000000000 .000000000
 34 .2855771593-003 .000000000 .000000000 .000000000 .000000000
 35 .1327658222-001 .000000000 .000000000 .000000000 .000000000
 36 .1088047701-001 .000000000 .000000000 .000000000 .000000000
 37 .1410253654-001 .000000000 .000000000 .000000000 .000000000
 38 .1565068008-001 .000000000 .000000000 .000000000 .000000000
 39 .1885459438-001 .000000000 .000000000 .000000000 .000000000
 40 -.2298385049-001 .000000000 .000000000 .000000000 .000000000

REAL X = .100000000+003		IMAGINARY X = -.100000000-002	
FIRST KIND	SECOND KIND	REAL BESSEL	IMAGINARY BESSEL
N	REAL BESSEL	IMAGINARY BESSEL	N
0	-.5063658856-002	-.8673026749-005	0
1	-.8673929672-002	.4890180691-005	1
2	-.4803443366-002	.8817930020-005	2
3	-.8914001866-002	-.4446882468-005	3
4	-.4179463831-002	-.9122971992-005	4
5	-.9290153602-002	.3622053471-005	5
6	-.3157546931-002	.9511178705-005	6
7	-.9700634691-002	-.2381495429-005	7
8	-.1702451724-002	-.9853852067-005	8
9	-.99490051467-002	.7034464096-006	9
10	-.1956530562-013	.9968525787-005	10
11	-.9448963254-002	.13889533124-005	11
12	-.2483919601-002	-.9626050553-005	12
13	-.9327933330-002	-.3789835963-005	13
14	-.5002475090-002	.8577609288-005	14
15	-.7877265529-032	.6262835479-005	15
16	-.7444427384-012	-.6611710767-005	16
17	-.5420604471-002	-.6420133421-005	17
18	-.9341638919-002	.3645691955-005	18
19	-.1964198058-002	.9734475380-005	19
20	-.1010767612-001	.1584138156-006	20
30	-.6780632511-002	-.5063670102-005	30
31	-.2453491816-002	-.9485743602-005	31
40	-.1043411288-001	-.5299016693-006	40
41	-.5643743383-002	-.8903738182-005	41
50	-.5797142113-013	.9284009370-005	50
51	-.9573868735-012	.4398696401-005	51
60	-.4876470572-012	-.8097287473-005	60
61	-.1102317144-001	-.1957895313-005	61
70	-.4767400290-002	.7642659744-005	70
71	-.4305480767-012	.78667345106-005	71
80	-.5616666872-002	.7054494457-005	80
91	-.1154782871-001	.3852552235-005	81
90	-.5861846608-002	.5861238765-005	90
91	-.5855771430-003	.6400577177-005	91
90	-.1327658231-001	-.2263339430-005	99
100	,1088047698-001	-,2287300468-005	100

REAL X = .100000000+003	IMAGINARY X = -.100000000-001	FIRST KIND	IMAGINARY BESSEL	N	SECOND KIND	REAL BESSEL	IMAGINARY BESSEL
REAL BESSEL							
0	-.5063900922-002	-.8673971453-004	0	-.8623624863-002		.4977504557-004	
1	-.8674263785-002	.4890258453-004	1	.4977664625-002		.8722884135-004	
2	.4803672864-002	.8818676926-004	2	.6772954539-002		.4714324736-004	
3	.8914444985-002	-.4446952775-004	3	-.4539016666-002		-.8954213892-004	
4	-.4179661270-002	-.9123123504-004	4	-.9090385076-002		.4084352459-004	
5	-.9290615675-002	.3622109973-004	5	.3720854650-002		.9313623994-004	
6	.3157693158-002	.9511335920-004	6	.9499978059-002		-.305557603889-004	
7	.9701114545-002	-.2381531315-004	7	-.2485857118-002		-.9698522934-004	
8	-.1702525534-002	-.9854013942-004	8	-.9872855168-002		.1597253678-004	
9	-.9990542224-002	.7034546677-005	9	.8074714843-003		.9953272203-004	
10	-.1956775038-003	.99666588297-004	10	.102627286-001		.2954022172-005	
11	.9949447856-002	.13869558931-004	11	.1298645733-002		-.9876182565-004	
12	.2484050168-002	-.9626206017-004	12	-.9727720071-002		-.2562558679-004	
13	-.9328432915-002	-.3769900286-004	13	-.3729975086-002		.9205223602-004	
14	-.5002726006-002	.8577746181-004	14	.8720624323-002		.5037898094-004	
15	.7877639898-002	.6262938748-004	15	.6258954653-002		-.7718943359-004	
16	.7444792404-002	-.6611814505-004	16	-.6780346007-002		-.7411367752-004	
17	-.5420856246-002	-.8420269698-004	17	-.8496466367-002		.5250816883-004	
18	-.9342089129-002	.3645747143-004	18	.3805580971-002		.9219416011-004	
19	.1964281954-002	.9734630398-004	19	.9904897901-002		-.1825548644-004	
20	.1010815529-001	.158+193735-005	20	.5632988415-004		-.9892750874-004	
30	.8701028155-002	.5063743495-004	30	-.5413166484-002		-.8343285175-004	
31	-.2453581826-002	-.9485865346-004	31	-.9967487615-002		.2223508374-004	
40	.1043454519-001	-.5299066596-005	40	-.7048619550-003		-.9548289797-004	
41	.3643901505-002	-.89038583919-004	41	-.9830496959-002		-.3423846586-004	
50	.5797263986-003	.9284123496-004	50	.1074822371-001		-.3745378514-005	
51	.9574212609-002	.4398751172-004	51	.4999568353-002		-.8148246104-004	
60	-.4876615594-002	-.8097372531-004	60	-.1008979711-001		.3753295586-004	
61	-.1102350885-001	-.1957916268-004	61	-.2300507428-002		.8663298131-004	
70	-.4767526558-002	.7642723069-004	70	.1087378315-001		.3544403716-004	
71	-.4305577155-002	.7867408448-004	71	.1115610876-001		-.2841336468-004	
80	-.5616757753-002	.7054534812-004	80	.1169804298-001		-.3111776402-004	
81	-.1154801685-001	.3852572292-004	81	.6246621624-002		-.6575733071-004	
90	-.5861904930-002	.5861257445-004	90	.1410266121-001		.29553403086-004	
91	.5855755254-003	.6400594176-004	91	.15665080718-001		.2960864115-005	
99	.1327659112-001	-.2263344075-004	99	-.1885459949-001		-.4317796573-004	
100	.1088947306-001	-.2287303730-004	100	-.2298383464-001		-.4359086033-004	

REAL X = .1n00000000+003	FIRST KIND REAL BESSEL	IMAGINARY X = -.100000000+000	SECOND KIND REAL BESSEL	IMAGINARY RESSEL
N 0	-.8688449161-003	0	-.8666839152-002	.4985431668-003
1	-.8717711682-002	1	.5001453664-002	.8737436745-003
2	.4626581171-002	2	.8816856399-002	-.4721808393-003
3	-.8958996535-002	3	-.4560587675-002	-.8969118505-003
4	-.419940877-002	4	-.9136034433-002	.4090778317-003
5	-.9336861592-002	5	.3738308582-002	.9329065762-003
6	.3172327223-002	6	.9547145347-002	-.3060469974-003
7	-.9749139867-002	7	-.2497141142-002	-.9714515185-003
8	-.1709921929-002	8	-.9921570426-002	.1599548446-003
9	-.1003965851-001	9	.8104486637-003	.9969571496-003
10	-.1976246619-003	10	.1007536610-001	.2962080952-004
11	.9997947689-002	11	.1305369880-002	-.9886209610-003
12	.249718312-002	12	-.9774903941-002	-.2567031684-003
13	-.9373427692-002	13	-.3749029246-002	.9220015096-003
14	-.5027838757-002	14	.8762418117-002	.5046310902-003
15	.7915106759-002	15	.6289981616-002	-.7731175410-003
16	.7481324927-002	16	-.6622193228-003	-.7423473959-003
17	-.5446053470-002	17	-.9433904121-003	.5258950932-003
18	-.9387146549-002	18	.3661268570-003	.9234222713-003
19	.1972677623-002	19	.9750139733-003	-.1828143607-003
20	.1015510980-001	20	.5757803816-004	-.9908384150-003
30	.8740622728-002	30	-.5436660881-002	-.8355914098-003
31	-.2463589734-002	31	-.1001218453-001	.226548607-003
40	.1047780651-001	40	-.706834476-003	-.9561472266-003
41	.3659724978-002	41	-.9870465571-002	-.3428734414-003
50	.5809457051-003	50	.1078792094-001	-.3748241960-004
51	.9608620960-002	51	.5018570931-002	-.8158043178-003
60	-.4891125590-002	60	-.1012184954-001	.3757130200-003
61	-.1105726100-001	61	-.2308449649-002	.8672162053-003
70	-.4780158324-002	70	.1090051714-001	.5547344673-003
71	.4315219971-002	71	.1118339336-001	-.2843634143-003
80	.5625849094-002	80	.1171873926-001	-.3113695349-003
81	.1156683602-001	81	.6257658214-002	-.6579438349-003
90	-.5867737306-002	90	.1411500578-001	.2958986732-003
91	.5854145480-003	91	.1566339193-001	.2958172242-004
99	.1327747207-001	99	-.1885510612-001	-.4317253787-003
100	.1088016138-001	100	-.2298226624-001	-.4358236187-003

REAL X = .1000000000+003	FIRST KIND	IMAGINARY X = -.5000000000+000	SECOND KIND	
REAL BESSSEL	IMAGINARY BESSSEL	N	REAL BESSSEL	IMAGINARY BESSSEL
- .5667300750-002	- .4521939666-002	0	- .9736681328-002	.2589964178-002
- .9793326822-002	.2544461554-002	1	.5589806876-002	.4547351838-002
.5393126630-002	.4596802642-002	2	.9903689256-002	-.2452708583-002
.100611A2724-001	-.2313278920-002	3	-.5094021630-002	-.4667508341-002
-.4688006704-002	-.4755206566-002	4	-.1025862827-001	.2124208304-002
-.1043159751-001	.1883211477-002	5	.4169812298-002	.4854066042-002
.3534024061-002	.4956589916-002	6	.1071462649-001	-.1587981048-002
.1093778745-001	-.1236573838-002	7	-.2775913514-002	-.5053534084-002
-.18924469553-002	-.5133868219-002	8	-.1112721305-001	.8278880030-003
-.1125513555b-001	.3622295008-003	9	.8836308986-003	.5184813631-002
-.2462968503-003	.5191997992-002	10	.1129017327-001	.1580413881-003
.1119796304-001	-.7278042150-003	11	.1487080277-002	-.5139771384-002
.2820927009-002	-.5011729872-002	12	-.1094224277-001	-.1338449154-002
-.1048646441-001	-.1977179290-002	13	-.4220899562-002	.4791489999-002
-.5649537894-002	.4463748409-002	14	.9796160027-002	.2626421040-002
.8841687109-002	.3263442342-002	15	.7057906734-002	-.4015642862-002
.8385334167-002	-.3438402302-002	16	-.7602039546-002	-.3860299725-002
-.6068922790-002	-.4384251280-002	17	-.9560147734-002	.2729232748-002
-.1050173179-001	.1893332366-002	18	.4251295450-002	.4798777466-002
.2179876587-002	.5065339024-002	19	.1112421021-001	-.9458647728-003
.11341988525-001	.8635112107-004	20	.8888246369-004	-.5145963838-002
.9718921167-002	-.2625531789-002	30	-.6016723417-002	-.4332792285-002
-.2710446840-002	-.4923615798-002	31	-.1111627478-001	.1150514798-002
.1154494440-001	-.2713022093-003	40	-.7552454559-003	-.4942200404-002
.4050192078-002	-.4605893367-002	41	-.1085611827-001	-.1774241525-002
.6108571478-003	.4787449622-002	50	.1176529140-001	-.1909163244-003
.1045554850-001	.2269138518-002	51	.5486407764-002	-.4198870033-002
-.5247590997-002	-.4156886122-002	60	-.1090916532-001	.1925430337-002
-.1188615296-001	-.1005592973-002	61	-.2503431881-002	-.4444365190-002
-.5089413320-002	.3901830015-002	70	.1155552089-001	.1809518827-002
.455159015-002	.4014130649-002	71	.1185152343-001	-.1449867845-002
.5848207105-002	.3578410918-002	80	.1222401755-001	-.1580244585-002
.1202646177-001	.1951674545-002	81	.652676446-002	-.3334841259-002
-.6009242652-002	.2954276390-002	90	.1441563797-001	.1486557000-002
.5819858199-003	.3221800048-002	91	.1596956256-001	.1446094762-003
.1329864204-001	-.1137538991-002	99	-.1886786176-001	-.2152048328-002
.1087238285-001	-.1147769194-002	100	-.2294475228-001	-.21688826195-002

REAL X = .1000000000+003		IMAGINARY X = -.1000000000+001	
N	FIRST KIND	IMAGINARY BESSEL	SECOND KIND
0	- .7711519181-002	- .1021109687-001	0 - .1336444723-001
1	- .1344053371-001	.5714298753-002	1 - .7577306412-002
2	.7306629369-002	.1037847694-001	2 - .1358866363-001
3	.1388063993-001	-.5191773844-002	3 - .6895187998-002
4	-.6337047290-002	-.1073220528-001	4 - .1406390375-001
5	-.1436125914-001	.4220269176-002	5 - .5625275523-002
6	.4752824911-002	.1118059267-001	6 - .1467057557-001
7	.1496453128-001	-.2760759407-002	7 - .3713672000-002
8	-.2504228940-002	-.1157222062-001	8 - .1521047923-001
9	-.1537053682-001	.7894218463-005	9 - .1125023056-002
10	-.4173807964-003	.1169299468-001	10 - .1540201831-001
11	.1525834279-001	.1664985095-002	11 - .2108274198-002
12	.392261964/-002	-.1127499571-001	12 - .1489055649-001
13	-.142496012/-001	-.4473646608-002	13 - .5822945901-u02
14	-.7757549648-002	.1002876183-001	14 - .1328943471-001
15	.1197105631-001	.7359202090-002	15 - .9659298371-002
16	.1144539479-001	-.7710530731-002	16 - .1026740971-001
17	-.8169011477-002	-.9865656783-002	17 - .1301851326-001
18	-.1426973658-001	.4229307439-002	18 - .5689997949-002
19	.2874089994-002	.113775132-001	19 - .1508368860-001
20	.1534615158-001	.2187017258-003	20 - .202376755-003
30	.1301129561-001	-.5838473777-002	30 - .7963575869-002
31	-.3535914803-002	-.1098142629-001	31 - .1482850475-001
40	.1511369092-001	-.5819478097-003	40 - .9140487876-003
41	.535781702/-002	-.1017459068-001	41 - .141490056-001
50	.7088453943-003	.1048049552-001	50 - .1501010144-001
51	.1326442615-001	.4972535176-002	51 - .7039296062-002
60	-.6421166079-002	-.8983881180-002	60 - .1349956-001
61	-.1461117235-001	-.2175625352-002	61 - .3143534453-002
70	-.6093863808-002	.8299283083-002	70 - .1368942618-001
71	.5323134844-002	.8522689951-002	71 - .1402351562-001
80	.6567759399-002	.7468926989-002	80 - .1384744228-001
81	.1350547126-001	.4057543473-002	81 - .7387056669-002
90	-.64528n4092-002	.6052192317-002	90 - .1537220635-001
91	.5772352192-003	.6573811868-002	91 - .1693985921-001
99	.1336246769-001	-.2310408001-002	99 - .1891356220-001
100	.1084554275-001	-.2320248501-002	100 - .2283376183-001

REAL X = .1n00000000+0i03		IMAGINARY X = -.3000000000+0i01		
FIRST KIND		SECOND KIND		
N	REAL BESSEL	IMAGINARY BESSEL	REAL BESSEL	
0	-.4834409074-001	-.8783634882-001	0	-.8825772973-001
1	-.8871440872-001	.4718728085-001	1	.4744789622-001
2	-.4564262125-001	.8917092316-001	2	.8960049689-001
3	-.9086085160-001	-.4266434141-001	3	-.4290387546-001
4	-.3719856661-001	-.9196410541-001	4	-.9241134916-001
5	-.9413747051-001	.3428927335-001	5	.3448919101-001
6	-.2873970279-001	.9542215458-001	6	.9589288646-001
7	-.9744846056-001	-.2178356291-001	7	-.2192301301-001
8	-.14n114628-001	-.9824840732-001	8	-.9874220361-001
9	-.9938082444-001	.5024862746-002	9	.5080956117-002
10	-.4863847484-002	.9863631143-001	10	.9914361718-001
11	-.9773948490-001	.1563952247-001	11	.1568898319-001
12	-.2721589946-001	-.9436865597-001	12	-.9486789856-001
13	-.9023449956-001	-.3900653783-001	13	-.3918237771-001
14	-.5124163823-001	.8311612232-001	14	.8357183420-001
15	-.7466532648-001	.5264313811-001	15	.6295312620-001
16	-.7378501921-001	-.6302044808-001	16	-.6338401908-001
17	-.4971482316-001	-.8269137088-001	17	-.8312493536-001
18	-.9030298256-001	.3358295637-001	18	.3379802636-001
19	-.1596086054-001	.9410443936-001	19	.9462286385-001
20	-.954211110-001	.3271346031-002	20	.3256872814-002
30	-.7720973418-001	-.4486898675-001	30	-.4519739703-001
31	-.1990329365-001	-.8614476642-001	31	-.8671689933-001
40	-.8146070615-001	-.3420398990-002	40	-.3493103445-002
41	-.2986209141-001	-.7426938238-001	41	-.7491953265-001
50	-.2338098009-002	.7124352454-001	50	.7204622511-001
51	-.6229313364-001	.3387381436-001	51	.3421886417-001
60	-.2563313137-001	-.5500588634-001	60	-.5590169000-001
61	-.5900126590-001	-.1320224802-001	61	-.1335485124-001
70	-.2085527165-001	.4472068005-001	70	.4605081829-001
71	-.1727347140-001	.4500813721-001	71	.4632749143-001
80	-.1694448816-001	.3392613198-001	80	.3577468735-001
81	-.3379501171-001	.1761804943-001	81	.1847958859-001
90	-.1125685806-001	.2325061228-001	90	.2730447976-001
91	-.1177830856-002	.2421558082-001	91	.2862484803-001
99	-.1380404882-001	-.8091686433-002	99	-.1993047748-001
100	-.103072235-001	-.7747801501-002	100	-.2219898966-001
			-.1082432680-001	

REAL X = .1000000000+000	FIRST KIND REAL BESSEL	IMAGINARY BESSEL	SECOND KIND REAL BESSEL	IMAGINARY BESSEL
N				
0	-4581218706+002	-00550404623+002	0	-9955040460+002
1	-9990542585+002	*4478118063+002	1	*4478118069+002
2	*427168576+002	*1005837555+003	2	*1005837899+003
3	*1015219252+003	-3959034112+002	3	-3959034136+002
4	-3540112415+002	-1026240572+003	4	-1026240576+003
5	-1037620100+003	*3013016758+002	5	*3013016779+002
6	*2377216084+002	*1047754793+003	6	*1047754798+003
7	*1054731978+003	-1633823549+002	7	-1633823565+002
8	-786517454+001	-1633823549+002	8	-1056355169+003
9	-1050190160+002	-1574363134+001	9	-1574363047+001
10	-2186125795+002	*1033637406+003	10	*1033637406+003
11	*1064036668+002	*2281923564+002	11	*2281923565+002
12	*3420591339+002	-95680368686+002	12	-956803686134+002
13	-695659266+002	-45705044144+002	13	-45705044158+002
14	-5692672735+002	*1268361227+002	14	*1268361227+002
15	*7084484847+002	*7405271134152	15	*7405271134152
16	*76615515040002	-440354524062	16	-440354524062
17	-43044115+002	-1914-7-31-2	17	-6340457125+002
18	-6853230768+002	*2777748469+002	18	*277774874+002
19	*1034733372+002	*792675682+002	19	*9090255650+002
20	*89417794004002	*7723068054001	20	*7723068054001
30	*6145013190+002	-353663665+002	30	-3358664014+002
31	-1259492298+002	-6675130926+002	31	-6673130997+002
40	*4849511664012	-2296734711+001	40	-2296735000+001
41	*1706175920+002	-482414312+002	41	-4382414433+002
50	*2535869213+001	*3631573110+002	50	*3031573288+002
51	*2597541394+002	*1241264311+002	51	*1241264352+002
60	-8539371035+001	-13956440564002	60	-1395664317+002
61	-1516422002+002	-1865-2155+001	61	-150086511+001
70	-1580273664+001	*7189380011+001	70	*7189389249+001
71	*3664214811+001	*627246274001	71	*5627292823+001
80	*1845092475+001	*1818366635+001	80	*1818318922+001
81	*2272169874+001	*3C05264581+000	81	*3005180232+000
90	*1300616259+000	*5978743144+000	90	*5979912621+000
91	*3236871612+000	*3962721421+000	91	*3963350344+000
99	-4434742696-001	-6565158582-001	99	-6576936776-001
100	-454910910-001	-364158096-001	100	-3591373783-001

REAL X = .1000000000+003		IMAGINARY X = -.1000000000+003	
FIRST KIND	SECOND KIND	REAL BESSEL	IMAGINARY BESSEL
N	REAL Ressel	IMAGINARY BESSEL	N
0	.2392109956+041	-.9197960756+041	0
1	-.9140010402+041	-.2426139210+041	1
2	-.2492818024+041	-.9024468511+041	2
3	.8852078239+041	.2589430472+041	3
4	.2712010696+041	-.8624015706+041	4
5	-.8341957050+041	-.2855470698+041	5
6	-.3913767445+041	-.80081517180+041	6
7	.7625531950+041	-.8180106130+041	7
8	-.3347174584+041	-.7197734320+041	8
9	-.6729217479+041	-.1507403626+041	9
10	-.3653256424+041	.6225255590+041	10
11	.5691971994+041	.3777464585+041	11
12	-.3873414794+041	-.5136270383+041	12
13	-.4565761348+041	-.3935321535+041	13
14	-.5468524194+041	.3988624194+041	14
15	.3413424835+041	.3939686038+041	15
16	.3876953638+041	-.2648892009+041	16
17	-.230360296+041	-.3770055862+041	17
18	-.36203735+041	.1785991681+041	18
19	.130349461+041	.343070246+041	19
20	.3205528023+041	-.4628241610+040	20
30	-.4888740295+040	-.780364646+040	30
31	-.723947134+040	.1004414735+040	31
40	-.1430015818+040	.5481911710+039	40
41	.201911754+039	.122756124+040	41
50	-.4500311226+038	.14309596+038	50
51	.9809373334+038	.16601192+038	51
60	.1067320291+037	.47520037+037	60
61	.344467574+037	.122137424+037	61
70	-.2950662835+036	.20773121+036	70
71	-.2010431392+036	.4523275735+035	71
80	-.2021107946+034	.5490560294+034	80
81	.2844248688+034	.25687474+034	81
90	-.6131423453+032	.2304105977+032	90
91	-.2506112855+031	.4043706526+032	91
99	-.2915616546+030	-.644452404+030	99
100	-.2651006883+030	-.3201034204+030	100

REAL X =	FIRST KIND REAL BESSEL	IMAGINARY Y =	.000000000
N	SECOND KIND REAL BESSEL	IMAGINARY BESSEL	IMAGINARY FESSEL
0	.8268795405-003	.000000000	.000000000
1	-.5615521968-003	.000000000	.000000000
2	-.8285641971-003	.000000000	.000000000
3	-.5574093758-003	.000000000	.000000000
4	.9324660628-003	.000000000	.000000000
5	-.5499171812-003	.000000000	.000000000
6	-.8385151517-003	.000000000	.000000000
7	.5390154842-003	.000000000	.000000000
8	.8466603990-003	.000000000	.000000000
9	-.5246242774-003	.000000000	.000000000
10	-.8565692605-003	.000000000	.000000000
11	.5066363440-003	.000000000	.000000000
12	.8682208962-003	.000000000	.000000000
13	-.48493088216-003	.000000000	.000000000
14	-.8813140284-003	.000000000	.000000000
15	.4593727148-003	.000000000	.000000000
16	.8955545825-003	.000000000	.000000000
17	-.4298194135-003	.000000000	.000000000
18	-.9105982620-003	.000000000	.000000000
19	.3961272778-003	.000000000	.000000000
20	.9260472254-003	.000000000	.000000000
30	-.9915016930-003	.000000000	.000000000
31	.1010717271-003	.000000000	.000000000
40	.9756714624-003	.000000000	.000000000
41	.2609242061-003	.000000000	.000000000
50	-.7793195564-003	.000000000	.000000000
51	-.6665907154-003	.000000000	.000000000
60	.3314315694-003	.000000000	.000000000
61	.9629392502-003	.000000000	.000000000
70	.3130314795-003	.000000000	.000000000
71	-.9264626594-003	.000000000	.000000000
80	-.8803982365-003	.000000000	.000000000
81	.4047902507-003	.000000000	.000000000
90	.9381041847-003	.000000000	.000000000
91	.4359464486-003	.000000000	.000000000
99	.9397878358-003	.000000000	.000000000
100	-.2532631123-003	.000000000	.000000000

REAL X = .1000000000+004		IMAGINARY X = -.1000000000-002	
N	FIRST KIND	REAL BESSSEL	IMAGINARY BESSSEL
0	.8268799545-003	-.5615522901-006	-.5623793567-003
1	-.5615524767-003	-.8280027831-006	-.8274423359-003
2	-.6285646120-003	.5590665971-006	.5607242856-006
3	.5574065536-003	.8307939733-006	.8291214822-006
4	-.8324664745-003	-.5532471374-006	-.5565758774-006
5	-.5499174555-003	-.8357657053-006	-.8330119677-006
6	-.8385175715-003	.5440476655-006	.5490737829-006
7	.5390167529-003	.8428274245-006	.8390425918-006
8	-.8466008228-003	-.5313971689-006	-.5381591456-006
9	-.5246245389-003	-.8518467839-006	-.8471023443-006
10	-.8565686890-003	.5152021122-006	.5237493572-006
11	.5066365964-003	.8626480403-006	.8570374062-006
12	.8682213307-003	-.4953495546-006	-.5057407339-006
13	-.4849310531-003	-.8750100737-006	-.8686496125-006
14	-.8813144694-003	.4717111895-006	-.840120871-006
15	.4593729435-003	.886664490-006	.8816943245-006
16	.8955550306-003	-.4441483606-006	-.4584292451-006
17	-.4208106275-003	-.9032914826-006	-.8958780935-006
18	-.9105987176-003	.4125181150-006	.4288505796-006
19	.3961274749-003	.9185209607-006	.9108562588-006
20	.9260476890-003	-.3766803485-006	-.39951335985-006
30	-.9915021884-003	.1308167993-006	.4262306554-006
31	.1010717766-003	.9947161539-006	.9911726347-006
40	.9756719492-003	.2218973849-006	.1000259768-006
41	.2609243375-003	-.6547128062-006	.1000259768-006
50	-.7793199444-003	-.6276248422-006	.7776969728-006
51	-.6665910485-003	.7446569627-006	.6664536485-006
60	.3314317336-003	.9430535127-006	.3298783631-006
61	.9629307301-003	-.2717293807-006	-.2616661365-006
70	.3130316362-003	-.9483750202-006	-.9613904994-006
71	-.9264631199-003	-.3797368543-006	-.313206110-006
80	-.8803986741-003	.4752221880-006	.9237109878-006
81	.4047904508-003	.9135911882-006	.8780204730-006
90	.9381946496-003	.3515090304-006	.4025244751-006
91	.4359466655-003	-.8980872597-006	.3539910762-006
99	.9397683014-003	-.3463021649-006	-.4350239351-006
100	-.2532632367-003	-.9653675695-006	-.9354751998-006
			.2510059583-006

REAL X = .100000000+004	IMAGINARY X = -.100000000-001
FIRST KIND	SECOND KIND
REAL BESSEL	IMAGINARY BESSEL
N	N
0	-.5615615284-005
1	-.8280164636-005
2	.5590757942-005
3	.9308076996-005
4	-.5532562383-005
5	-.8357795132-005
6	.5440566143-005
7	.8428413479-005
8	-.5314059084-005
9	-.8518606554-005
10	.5152105838-005
11	.8626622888-005
12	-.4953576979-005
13	-.8750245247-005
14	.4717189420-005
15	-.886768146-005
16	-.4441556575-005
17	-.9033063965-005
18	.4125248892-005
19	.9185361236-005
20	-.3766865306-005
30	-.1308189231-005
31	.9947525541-005
40	.2219010723-005
41	-.9647286879-005
50	-.6276351971-005
51	.7446691051-005
60	.9430690270-005
61	-.2717338158-005
70	-.9483905803-005
71	-.3797431182-005
80	.4752299497-005
81	.9136061755-005
90	.3515148133-005
91	-.8981019399-005
99	-.3463077919-005
100	-.9653833454-005
REAL BESSEL	IMAGINARY BESSEL
N	N
0	-.5624071127-003
1	-.8274863480-003
2	.5599246625-003
3	.8302829709-003
4	-.5541126813-003
5	-.8352699643-003
6	.5449247109-003
7	.8423540045-003
8	-.5322894000-003
9	-.8514029228-003
10	.5161127435-003
11	.8622412886-003
12	-.4962611927-003
13	-.8746483163-003
14	.4726656869-003
15	.8883556186-003
16	-.4451266613-003
17	-.9030447955-003
18	.413520919-003
19	.9183450355-003
20	-.3777046340-003
30	.1318765631-003
31	.9951782894-003
40	.2211133873-003
41	-.9658538921-003
50	-.6276765593-003
51	.7463517352-003
60	.9444983263-003
61	-.2732247469-003
70	-.9511022736-003
71	-.3797986923-003
80	.4776791360-003
81	.9162783151-003
90	.3520289020-003
91	-.9023545949-003
99	-.3489955139-003
100	-.9700719369-003
REAL BESSEL	IMAGINARY BESSEL
N	N
0	-.8274557290-005
1	-.5607335102-005
2	-.8291354471-005
3	-.5565850334-005
4	-.8330257304-005
5	-.5490828148-005
6	-.8390564534-005
7	-.5381679969-005
8	-.8471163380-005
9	-.5237579702-005
10	-.8570515628-005
11	-.5057490490-005
12	-.8686639594-005
13	-.4840200430-005
14	.8818850-005
15	-.4584367781-005
16	-.8958928861-005
17	-.4288576236-005
18	.9108712964-005
19	-.3951400984-005
20	-.9262459442-005
30	-.9911889782-005
31	-.1000275928-005
40	-.9746660110-005
41	-.2616704783-005
50	-.7777097514-005
51	-.6664646403-005
60	-.3298837553-005
61	-.9614063113-005
70	-.3132112842-005
71	-.9237261387-005
80	-.8780348820-005
81	-.4025310428-005
90	-.9340063494-005
91	-.4350310822-005
99	-.9354904936-005
100	-.2510100267-005

REAL, X = .1000000000+004	IMAGINARY X = -.1000000000+000	FIRST KIND	SECOND KIND	
N	REAL BESSEL	IMAGINARY BESSEL	REAL BESSEL	
0	.8310230096-003	-.5624858205-004	0	-.5651850275-003
1	-.564353998H-003	-.8293852021-004	1	-.8315881863-003
2	-.8327160467-003	-.5599959719-004	2	.5626902461-003
3	.5601903906-003	.8321810184-004	3	.8344015960-003
4	.8366373211-003	-.5541667835-004	4	-.8344015959-003
5	-.5526606050-003	-.4371609H97-004	5	-.8344131654-003
6	-.8427164956-003	.5449519334-004	6	.5476157907-003
7	.5417052198-003	.3442344094-004	7	.8465320614-003
8	.8508419472-003	-.5322802918-004	8	-.5349177291-003
9	-.5272408163-003	-.4532687100-004	9	-.8556255184-003
10	-.8608593605-003	.516051689-004	10	.5166607447-013
11	.5091626616-003	.8640878534-004	11	.8665172137-003
12	.8725699028-003	-.4961724377-004	12	-.4987307325-003
13	-.4873432902-003	-.3754703493-004	13	-.8789852643-003
14	-.885729U699-003	.4724945801-004	14	.4749979997-U03
15	.4616620394-003	.n901470065-004	15	.8927599501-003
16	.90U036317U-003	-.4448857117-004	16	-.4473222991-003
17	-.4319605954-003	-.9047985335-004	17	-.9075212886-U03
18	-.9151576210-003	.4132026447-004	18	.415b5d9040-U03
19	.3980936109-003	.0200531704-004	19	.9228966314-U03
20	.9306831469-003	-.3773050455-004	20	-.3795657814-U03
30	-.9964000263-003	.1310314Hn5-004	30	.1325193324-U13
31	.1015670409-003	.0963913n11-004	31	.1000104420-U14
40	.980543649H-003	.2222699969-004	40	.2222169322-U13
41	.2622373275-003	-.9663176555-004	41	-.9706273144-U03
50	-.7832031628-003	-.6286712126-004	50	-.6307657950-003
51	-.6699250525-003	.7458930401-004	51	.7500326801-003
60	.3330745873-003	.9446212276-004	60	.9491634279-003
61	.9677424423-003	-.2721775387-004	61	-.2745636242-003
70	.3145996493-003	-.9499473711-004	70	-.9557874168-U03
71	-.931071310H-003	-.3803698195-004	71	-.3816799194-U03
80	-.88476n0847-003	.4760065008-004	80	.4800214676-U03
81	.4067932728-003	.9151056501-004	81	.9207913030-U03
90	.9428470623-003	.3520933860-004	90	.3537677924-U03
91	.438187145-003	-.8995706888-004	91	-.9067830198-U03
99	.944447564H-003	-.3468707701-004	99	-.3506980042-U03
100	-.2515080030-003	-.9669617123-004	100	-.9748315093-U03

REAL X = .100000000+004	IMAGINARY X = -.500000000+000	FIRST KIND REAL BESSSEL	IMAGINARY BESSSEL	SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL
N					
0	.9325571334..003	-.2925868180..003	0	-.6339376487..003	-.4312000156..003
1	-.6330049455..003	-.4314921361..003	1	-.9331908553..003	.2921553011..003
2	-.9344555005..003	.2912913924..003	2	.6311376386..003	.4320750815..003
3	.0283319404..003	.4329462565..003	3	.9363454625..003	-.2899933484..003
4	.9388523077..003	-.2882585702..003	4	-.6245822070..003	-.4341017572..003
5	-.6199809751..003	-.4355363582..003	5	-.9419647475..003	.2860836230..003
6	-.9456696015..003	.2834642621..003	6	.6142190239..003	.4372434955..003
7	.6075854439..003	.4392152458..003	7	.9499467508..003	-.2803954665..003
8	.9547790886..003	-.2768714782..003	8	-.5999677233..003	-.4414423018..003
9	-.5913518500..003	-.4439139442..003	9	-.9601424472..003	.2728858495..003
10	-.9660105517..003	.2684314975..003	10	.5817224289..003	.4466180103..003
11	.5710628150..003	.4495408611..003	11	.9723539257..003	-.2635007656..003
12	.9791398235..003	-.2580854931..003	12	-.5593552640..003	-.4526673444..003
13	-.5465810995..003	-.4559807576..003	13	-.9863321455..003	.2521770929..003
14	-.9938913537..003	.2457666369..003	14	.5327208983..003	.4594628087..003
15	.5177546938..003	.4630935768..003	15	.1001774385..002	-.2368449503..003
16	.1009934567..002	-.2314027144..003	16	-.5016621980..003	-.4668514728..003
17	-.4844270435..003	-.4707132006..003	17	-.1010321531..002	.2234305781..003
18	-.1026881132..002	.2149192791..003	18	.4660170433..003	.4746537204..003
19	-.4464244749..003	.4786462146..003	19	.1035555378..002	-.2058597735..003
20	-.1044282349..002	-.1962433761..003	20	-.4256263795..003	-.4826662056..003
30	-.1117956991..002	.6912311941..004	30	.1484259133..003	.5164811261..003
31	-.1136948853..003	.5183353567..003	31	.1122030255..002	.5207850296..004
40	-.1099926202..002	.115634030..003	40	.2495273083..003	-.5078417557..003
41	.2944176908..003	-.5026605172..003	41	-.1088782756..002	-.1363844259..003
50	-.8783585834..003	-.3270511568..003	50	-.7077430804..003	.4051850457..003
51	-.7516296757..003	.3879665870..003	51	.8411322557..003	.3472796813..003
60	-.3733271843..003	.4913608873..003	60	.1064623365..002	-.1718321664..003
61	.1085431658..012	-.1415340812..003	61	-.3076950659..003	-.5009097914..003
70	.3530267587..003	-.4940796627..003	70	-.1071756999..002	-.1632171333..003
71	-.1043987511..002	-.1978767119..003	71	-.4282373553..003	.4812243558..003
80	-.9921405337..003	.2475330714..003	80	.5379849137..003	.457430770..003
81	.4558618756..003	.4759553416..003	81	.1032479970..002	-.2096578211..003
90	.1056839749..002	.1831475515..003	90	.3968048061..003	-.4865200131..003
91	.4913429751..003	-.4678099818..003	91	-.1016370849..002	-.2266489383..003
99	.1058667492..002	-.1803438091..003	99	-.3928234924..003	-.4872883537..003
100	-.2950015743..003	-.5028506677..003	100	-.1092613401..002	.1307032515..003

REAL X = .100000000+004	FIRST KIND REAL BESSSEL	IMAGINARY X = -.100000000+001 SECOND KIND REAL BESSSEL	IMAGINARY BESSSEL REAL BESSSEL	IMAGINARY BESSSEL
N				
0	-127601434-002	-596319601-003	0	-8668236454-003
1	-8655463856-003	-9732750014-003	1	-1277467288-002
2	-1279105155-002	-6567095416-003	2	8629892714-003
3	-8591471327-003	-9765521498-003	3	128177358-002
4	-1285202343-002	-6498676693-003	4	-8540122624-003
5	-8475744744-003	-9823893862-003	5	-1289454648-002
6	-1294514847-002	-6390520736-003	6	8398211809-003
7	-8307374905-003	-9906802262-003	7	130035491-002
8	-130961036-002	-6241794240-003	8	-8203063261-003
9	-8085085641-003	-1001269047-002	9	-1314287758-002
10	-1322303660-002	-6051399695-003	10	7953231951-003
11	-7807275071-003	-1013949206-002	11	1330968374-002
12	-1340237054-002	-5818012044-003	12	-7646972907-003
13	-7472070692-003	-1028460715-002	13	-1350060262-002
14	-1360383856-002	-5540126182-003	14	7282303514-003
15	-7077399105-003	-104487614-002	15	1371143868-002
16	-1382201392-002	-5216115947-003	16	-6857080886-003
17	-6621071271-003	-1061655164-002	17	-1393742465-002
18	-1405427960-002	-4844305274-003	18	63669095241-003
19	-6100884206-003	-1079527075-002	19	141726484-002
20	-1429179284-002	-423052201-003	20	-5816180127-003
30	-1529578604-002	-1533464944-003	30	2022495659-003
31	-15447342268-003	-1688693355-002	31	153510762-002
40	-150438642-002	-2610644723-003	40	3421103029-003
41	-4034961332-003	-113329153-002	41	-1489031274-002
50	-1200948110-002	-7375753470-003	50	-9684798476-003
51	-11028418831-002	-8745137312-003	51	1449677991-002
60	-5096059302-003	-110762502-002	60	1455720736-002
61	-1444072205-002	-3187960181-003	61	-4198513971-003
70	-4832316835-003	-1113549480-002	70	-1464410325-002
71	-1426378891-002	-4462467125-003	71	-5859743600-003
80	-1355731949-002	-5575955024-003	80	7342131915-003
91	-6716098465-003	-1053892121-002	91	-1387390799-002
99	-1445111044-002	-406057046-003	99	-5353770954-003
100	-3881725281-003	-1132798341-002	100	-1491366482-002
				.2941671194-003

REAL X = •1000000000+004

IMAGINARY X = -.3000000000+001

FIRST KIND

N	REAL BESSSEL	IMAGINARY BESSSEL	SECOND KIND	REAL BESSSEL	IMAGINARY BESSSEL
0	.8341570181-002	-.5608818579-002	0	-.5636940994-U02	-.8300486640-002
1	-.5628582672-002	-.8306070384-002	1	-.8347182170-002	.5600501215-002
2	-.8358381023-002	.5583849894-002	2	.5611849268-002	.8317212869-002
3	.5586707386-002	.8333864007-002	3	.8375116407-002	.5558831348-002
4	.8397312613-002	-.5525396051-002	4	-.55553107247-002	-.8355948462-002
5	-.5510983069-002	-.8383365399-002	5	-.84424868314-002	.5483478556-002
6	-.8457656235-002	.5432998001-002	6	.54460253576-002	.8415988165-002
7	.5400822642-002	.8453663891-002	7	.8495522751-002	.5373858747-002
8	.8538267432-002	-.5305951149-002	8	-.532580060-002	-.8496213026-002
9	-.5255402461-002	-.8543428800-002	9	-.8585742493-002	.5229152466-002
10	-.8637652209-002	.5143327907-002	10	.5169154362-002	.8595076645-002
11	.5073689370-002	.8650893547-002	11	.6693752272-002	-.5048331827-002
12	.8753749108-002	-.4944009065-002	12	-.4968851528-002	-.8710587369-002
13	-.4854476815-002	-.8773836136-002	13	-.8817319155-002	.4830196442-002
14	-.8864108126-002	.4706724412-002	14	*4730394811-002	.8840287303-002
15	.4596430517-002	.8909557005-002	15	.8953730271-002	-.4573418877-002
16	.9025767610-002	-.4430103167-002	16	-.4452406346-002	-.8981229323-002
17	-.4298144290-002	-.9054855551-002	17	-.9099769225-002	.4276600192-002
18	-.9175250555-002	.4112734774-002	18	*4133468251-002	.9129953515-002
19	.3958206565-002	.9206006925-002	19	.9251692758-002	-.3938336142-002
20	.9328542129-002	-.3753240629-002	20	-.3772194699-002	-.9282464804-002
30	-.9972118559-002	.1289318002-002	30	*1296041108-002	.9922705876-002
31	.9862085774-003	.9957128917-002	31	*1000673165-001	-.9810199136-003
40	.9792000545-002	.223831417-002	40	.2249719909-002	-.9743272256-002
41	.2649027520-002	-.964229322-002	41	-.9690541043-002	-.2636148499-002
50	-.7797289850-002	-.6286864235-002	50	-.6318114952-002	.7758246794-002
51	-.6706701234-002	.7426569101-002	51	.7463974270-002	.6673494077-002
60	.3290393401-002	.9419123253-002	60	.9466353234-002	-.3273658742-002
61	.9647972807-002	-.2692585919-002	61	-.2706411378-002	-.9599799670-002
70	.3156374044-002	-.9446922533-002	70	-.9494674666-002	-.3140817044-002
71	-.9244977819-002	-.3802937382-002	71	-.3821850194-002	.9198439131-002
80	-.6792148000-002	.4712294292-002	80	.4736442306-002	.8747960113-002
81	.4007910876-002	.9099050132-002	81	.9145061882-002	.3987415551-002
90	.9319988915-002	.3510777353-002	90	.3528375679-002	.9272546749-002
91	.4360860199-002	-.8912648291-002	91	-.8958207184-002	.4339019817-002
99	.9332500484-002	-.3416361283-002	99	-.3434161625-002	-.9285063849-002
100	-.2483084503-002	-.9577739269-002	100	-.9626733386-002	.2470132329-002

REAL X = .1000000000C+004	IMAGINARY X = -.1000000000+002	FIRST KIND	SECOND KIND
N	REAL BESSEL	IMAGINARY BESSEL	REAL BESSEL
0	.9167636330+001	-.6101935368+001	-.6101935394+001
1	-.6092707661+001	-.9173645951+001	-.9167636293+001
2	-.9185637444+001	-.6074234419+001	-.6092707635+001
3	-.6046490385+001	-.9203554851+001	-.9185637407+001
4	-.9227314390+001	-.6009392765+001	-.9203554888+001
5	-.5962902067+001	-.9256803602+001	-.6046480359+001
6	-.9291881608+001	-.5906922254+001	-.9227314353+001
7	.5841351862+001	.9332378089+001	-.9256803640+001
8	.9378093408+001	-.5766074464+001	-.5960960056+001
9	-.5680960080+001	-.9428797438+001	-.9428797476+001
10	-.9464229564+001	-.5585865951+001	-.5585865975+001
11	-.5480638260+001	-.9544097404+001	-.9544097443+001
12	.9608076717+001	-.5365113239+001	-.5365113262+001
13	-.3239119215+001	-.9675810045+001	-.9675810084+001
14	-.9746906584+001	-.5102478070+001	-.5102478091+001
15	.4955007617+001	.9820940793+001	.9820940833+001
16	.9897452274+001	-.4796523448+001	-.4796523469+001
17	-.46268841656+001	-.9975944407+001	-.9975944448+001
18	-.1005588431+002	-.4445781074+001	-.4445781093+001
19	.4253166365+001	.1013670155+002	.1013670160+002
20	.1021778824+002	-.4048830673+001	-.4048830691+001
30	-.1058228482+002	-.1337209433+001	-.1337209439+001
31	.9989522399+000	-.1091528907+002	-.1091528912+002
40	.1063248897+002	.2520696272+001	.2520696282+001
41	.2953318349+001	-.1051611128+002	-.1051611132+002
50	-.8405737060+001	-.6907864768+001	-.6907864796+001
51	-.7323977270+001	-.8038630924+001	-.8038630959+001
60	.3463103953+001	.1024693044+002	.1024693049+002
61	.1043424332+002	-.2849957851+001	-.2849957864+001
70	.3462316925+001	-.1018294989+002	-.1018294993+002
71	-.9904755412+001	-.4173681996+001	-.4173682013+001
80	-.9434966381+001	-.5000962597+001	.5000962620+001
81	.4217113852+001	-.9801442861+001	-.9801442904+001
90	.9880394628+001	-.3816070958+001	-.3816070974+001
91	-.4695108432+001	-.9483942254+001	-.9483942297+001
99	.9883067193+001	-.3562905417+001	-.3562905434+001
100	-.2554393283+001	-.1018007389+002	-.1018007393+002
			.2554393270+001

REAL X = .100000000+004		IMAGINARY X = -.100000000+003	
FIRST KIND		SECOND KIND	
N	REAL BESSSEL	IMAGINARY BESSSEL	REAL BESSSEL
0	.1175209481+041	-.6383494695+040	-.6383494695+040
1	-.637126924+040	-.1175725152+041	-.1175209481+041
2	-.1176752694+041	-.63466679722+040	-.637126929+040
3	-.6309829924+040	-.1178284522+041	-.6346679722+040
4	-.1180309215+041	-.62606432899+040	-.6309829924+040
5	-.6199075064+040	-.1182811552+041	-.62606432899+040
6	-.1185772473+041	-.6125070761+040	-.1182811552+041
7	-.603857130+040	-.1189169065+041	-.6125070761+040
8	-.1192974549+041	-.5939493325+040	-.1189169065+041
9	-.5827772267+040	-.1197158255+041	-.6038567130+040
10	-.1201685605+041	-.570332201+040	-.5827772267+040
11	-.5566058451+040	-.1206518094+041	-.1201685605+041
12	-.1211613271+041	-.5415895373+040	-.5566058451+040
13	-.5252748495+040	-.1216924732+041	-.1211613271+041
14	-.1222402107+041	-.5076536859+040	-.5827772267+040
15	-.4887145556+040	-.1227991060+041	-.1222402107+041
16	-.1233633298+041	-.4684628440+040	-.5076536859+040
17	-.4468811039+040	-.1239266589+041	-.5827772267+040
18	-.1244924789+041	-.4239693643+040	-.1239266589+041
19	-.3997254555+040	-.1250237890+041	-.1244924789+041
20	-.1255432081+041	-.3741493574+040	-.1250237890+041
30	-.1276606558+041	-.4740446990+039	-.3997254555+040
31	-.8170471734+038	-.1273562544+041	-.1276606558+041
40	-.1173055362+041	-.1080234016+041	-.8170471734+038
41	-.4271372581+040	-.1151931373+041	-.1273562544+041
50	-.8506775186+040	-.8169313683+040	-.1151931373+041
51	-.8545376236+040	-.8042809607+040	-.8506775186+040
60	.2825145642+040	-.1080234016+041	-.8545376236+040
61	.1088750828+041	-.2154505039+040	-.8545376236+040
70	.4010389143+040	-.9667631579+040	-.8506775186+040
71	-.9296352534+040	-.4647418409+040	-.9296352534+040
80	-.8832647952+040	-.043305516+040	-.4647418409+040
81	-.3295382704+040	-.9055689110+040	-.8832647952+040
90	.8156944962+040	-.5626156874+040	-.9055689110+040
91	.4307431963+040	-.7727158534+040	-.5626156874+040
99	.7824709187+040	-.2460370107+040	-.7727158534+040
100	-.1657029675+040	-.7950762278+040	-.2460370107+040
			-.7950762278+040
			.1657029675+040

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