

A reconstruction of
Peters's six-place table
of trigonometric functions
for the new division
(1930)

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Introduction

Johann Theodor Peters (1869–1941) was a German astronomer and computer of mathematical and astronomical tables. In 1910 and 1911, together with Julius Bauschinger, he published the first widely available 8-place table of logarithms [15]. This work was the basis of many later tables, most of which have been reconstructed by us.¹

The present table is a table of trigonometrical functions, following the footsteps of the 7-place table published in 1918 [40] and the 6-place table published in 1929 [46].

But contrary to the two previous tables, the present table uses the new (centesimal) division of the quadrant in which the quadrant is divided in 100 degrees (*g*), each degree in 100 minutes (*c*), and each minute in 100 seconds (*cc*). In a first part, Peters gives the values of *csc* and *cot* for every 1000th of a centesimal degree and to six places. In a second part, Peters gives the values of all six functions for every 100th of a centesimal degree, also to six places. The arrangement of these two parts is similar to the one used in the table published in 1929 [46], but the small interpolation tables are set at the bottom of the pages. An appendix of this volume gathers the interpolation tables for differences from 1 to 999. This appendix has not been reproduced here, but in a separate volume [48].

The main table is based on an unpublished manuscript giving the values of the trigonometrical functions to 8 places for each 1000th of the sexagesimal degree. Peters does not give any details about how he constructed the 8-place table, but since this table divided the quadrant in $90 \times 1000 = 90000$ values, and since the new table divides the quadrant in $100 \times 100 = 10000$ values, all that Peters had to do was to drop eight out of nine values of the 8-place table, and to round the remaining values to six places, as well as recomputing a number of these values. It is possible that Peters also used this unpublished manuscript for the calculation of the 6-place table published in 1938 [54].

The present volume also contains three pages with the values of $w \cdot \cot(w)$ and $w \cdot \csc(w)$, two pages of conversion tables between the new division and the old division of the quadrant, and between the new division and time, with a quadrant being equal to 6 hours, as well as one page giving mathematical and geodetical constants. These tables have not (yet) been reproduced.

It should be observed that one critique made for the table published in 1929, namely the order of the values of *csc* and *cot*, has been corrected here, although it may be unrelated to that critique.

¹For more information on Peters's tables, we refer the reader to our summary [90].

cosec 2°																								
c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}													
00	31. 8362	8203	8044	7886	7727	7569	7410	7252	7094	6937	6779	99												
01	6779	6621	6464	6307	6150	5993	5836	5680	5523	5367	5211	98												
02	5211	5055	4900	4744	4588	4433	4278	4123	3968	3813	3659	97												
03	3659	3505	3350	3196	3042	2889	2735	2581	2428	2275	2122	96												
04	2122	1969	1816	1664	1511	1359	1207	1055	0903	0751	0600	95												
05	31. 0600	0449	0297	0146	*9995	*9844	*9694	*9543	*9393	*9243	*9093	94												
06	30. 9093	8943	8793	8643	8494	8345	8195	8046	7897	7749	7600	93												
07	7600	7452	7303	7155	7007	6859	6711	6564	6416	6269	6122	92												
08	6122	5975	5828	5681	5534	5388	5241	5095	4949	4803	4657	91												
09	4657	4512	4366	4221	4076	3931	3786	3641	3496	3352	3207	90												
10	30. 3207	3063	2919	2775	2631	2487	2344	2200	2057	1914	1771	89												
11	1771	1628	1485	1342	1200	1058	0915	0773	0631	0490	0348	88												
12	30. 0348	0206	0065	*9924	*9782	*9641	*9501	*9360	*9219	*9079	*8938	87												
13	29. 8938	8798	8658	8518	8378	8238	8099	7959	7820	7681	7542	86												
14	7542	7403	7264	7126	6987	6849	6710	6572	6434	6296	6159	85												
15	29. 6159	6021	5883	5746	5609	5472	5335	5198	5061	4924	4788	84												
16	4788	4652	4515	4379	4243	4107	3972	3836	3701	3565	3430	83												
17	3430	3295	3160	3025	2890	2756	2621	2487	2353	2218	2084	82												
18	2084	1951	1817	1683	1550	1416	1283	1150	1017	0884	0751	81												
19	29. 0751	0619	0486	0354	0221	0089	*9957	*9825	*9693	*9562	*9430	80												
20	28. 9430	9299	9167	9036	8905	8774	8643	8513	8382	8251	8121	79												
21	8121	7991	7861	7731	7601	7471	7341	7212	7082	6953	6824	78												
22	6824	6695	6566	6437	6308	6180	6051	5923	5794	5666	5538	77												
23	5538	5410	5282	5155	5027	4900	4772	4645	4518	4391	4264	76												
24	4264	4137	4010	3884	3757	3631	3505	3379	3253	3127	3001	75												
25	28. 3001	2875	2750	2624	2499	2374	2249	2124	1999	1874	1749	74												
26	1749	1625	1500	1376	1252	1128	1004	0880	0756	0632	0509	73												
27	28. 0509	0385	0262	0139	0015	*9892	*9770	*9647	*9524	*9401	*9279	72												
28	27. 9279	9157	9034	8912	8790	8668	8546	8424	8303	8181	8060	71												
29	8060	7939	7817	7696	7575	7454	7334	7213	7092	6972	6851	70												
30	27. 6851	6731	6611	6491	6371	6251	6131	6012	5892	5773	5653	69												
31	5653	5534	5415	5296	5177	5058	4940	4821	4703	4584	4466	68												
32	4466	4348	4230	4112	3994	3876	3758	3641	3523	3406	3288	67												
33	3288	3171	3054	2937	2820	2703	2587	2470	2354	2237	2121	66												
34	2121	2005	1889	1773	1657	1541	1425	1310	1194	1079	0964	65												
35	27. 0964	0848	0733	0618	0503	0389	0274	0159	0045	*9930	*9816	64												
36	26. 9816	9702	9588	9474	9360	9246	9132	9018	8905	8791	8678	63												
37	8678	8565	8452	8338	8226	8113	8000	7887	7775	7662	7550	62												
38	7550	7437	7325	7213	7101	6989	6877	6765	6654	6542	6431	61												
39	6431	6319	6208	6097	5986	5875	5764	5653	5542	5432	5321	60												
40	26. 5321	5211	5100	4990	4880	4770	4660	4550	4440	4330	4221	59												
41	4221	4111	4002	3892	3783	3674	3565	3456	3347	3238	3129	58												
42	3129	3021	2912	2804	2695	2587	2479	2371	2263	2155	2047	57												
43	2047	1939	1832	1724	1617	1509	1402	1295	1188	1081	0974	56												
44	26. 0974	0867	0760	0653	0547	0440	0334	0227	0121	0015	*9909	55												
45	25. 9909	9803	9697	9591	9486	9380	9274	9169	9063	8958	8853	54												
46	8853	8748	8643	8538	8433	8328	8223	8119	8014	7910	7805	53												
47	7805	7701	7597	7493	7389	7285	7181	7077	6974	6870	6766	52												
48	6766	6663	6560	6456	6353	6250	6147	6044	5941	5838	5736	51												
49	5736	5633	5531	5428	5326	5224	5121	5019	4917	4815	4713	50												
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c												
	102	103	104	105	106	107	108	109	110	111	112	113	114	115	117	119	121	123						
1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.7	11.9	12.1	12.3	1					
2	20.4	20.6	20.8	21.0	21.2	21.4	21.6	21.8	22.0	22.2	22.4	22.6	22.8	23.0	23.4	23.8	24.2	24.6	2					
3	30.6	30.9	31.2	31.5	31.8	32.1	32.4	32.7	33.0	33.3	33.6	33.9	34.2	34.5	35.1	35.7	36.3	36.9	3					
4	40.8	41.2	41.6	42.0	42.4	42.8	43.2	43.6	44.0	44.4	44.8	45.2	45.6	46.0	46.8	47.6	48.4	49.2	4					
5	51.0	51.5	52.0	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.0	56.5	57.0	57.5	58.5	59.5	60.5	61.5	5					
6	61.2	61.8	62.4	63.0	63.6	64.2	64.8	65.4	66.0	66.6	67.2	67.8	68.4	69.0	70.2	71.4	72.6	73.8	6					
7	71.4	72.1	72.8	73.5	74.2	74.9	75.6	76.3	77.0	77.7	78.4	79.1	79.8	80.5	81.9	83.3	84.7	86.1	7					
8	81.6	82.4	83.2	84.0	84.8	85.6	86.4	87.2	88.0	88.8	89.6	90.4	91.2	92.0	93.6	95.2	96.8	98.4	8					
9	91.8	92.7	93.6	94.5	95.4	96.3	97.2	98.1	99.0	99.9	100.8	101.7	102.6	103.5	105.3	107.1	108.9	110.7	9					

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sec 97°

Figure 1: Excerpt of Peters's table.

c	sin	tang	sec	cosec	cotg	cos					
50	0.007854	157	0.007854	157	1.000031	1	127.3253	127.3213	0.999969	1	50
51	8011	157	8011	157	0032	1	124.8287	124.8247	9968	1	49
52	8168	157	8168	157	0033	2	122.4282	122.4242	9967	2	48
53	8325	157	8325	158	0035	1	120.1183	120.1142	9965	1	47
54	8482	157	8483	157	0036	1	117.8940	117.8897	9964	1	46
55	8639	157	8640	157	0037	2	115.7505	115.7462	9963	2	45
56	8796	157	8797	157	0039	1	113.6836	113.6792	9961	1	44
57	8953	157	8954	157	0040	2	111.6892	111.6847	9960	2	43
58	9110	158	9111	157	0042	1	109.7635	109.7590	9958	1	42
59	9268	157	9268	157	0043	1	107.9032	107.8986	9957	1	41
60	0.009425	157	0.009425	157	1.000044	2	106.1049	106.1002	0.999956	2	40
61	9582	157	9582	157	0046	1	104.3655	104.3607	9954	1	39
62	9739	157	9739	157	0047	2	102.6822	102.6774	9953	2	38
63	0.009896	157	0.009896	157	0049	2	101.0524	101.0475	9951	2	37
64	0.010053	157	0.010053	158	0051	1	99.4735	99.4685	9949	1	36
65	0210	157	0211	157	0052	2	97.9432	97.9381	9948	2	35
66	0367	157	0368	157	0054	1	96.4593	96.4541	9946	1	34
67	0524	157	0525	157	0055	2	95.0196	95.0144	9945	2	33
68	0681	157	0682	157	0057	2	93.6223	93.6170	9943	2	32
69	0838	157	0839	157	0059	1	92.2655	92.2601	9941	1	31
70	0.010995	157	0.010996	157	1.000060	2	90.9475	90.9420	0.999940	2	30
71	1152	157	1153	157	0062	2	89.6666	89.6610	9938	2	29
72	1309	158	1310	157	0064	2	88.4213	88.4156	9936	2	28
73	1467	157	1467	157	0066	2	87.2101	87.2044	9934	2	27
74	1624	157	1624	158	0068	1	86.0316	86.0258	9932	1	26
75	1781	157	1782	157	0069	2	84.8846	84.8787	9931	2	25
76	1938	157	1939	157	0071	2	83.7677	83.7618	9929	2	24
77	2095	157	2096	157	0073	2	82.6799	82.6739	9927	2	23
78	2252	157	2253	157	0075	2	81.6200	81.6138	9925	2	22
79	2409	157	2410	157	0077	2	80.5868	80.5806	9923	2	21
80	0.012566	157	0.012567	157	1.000079	2	79.5796	79.5733	0.999921	2	20
81	2723	157	2724	157	0081	2	78.5972	78.5908	9919	2	19
82	2880	157	2881	157	0083	2	77.6387	77.6323	9917	2	18
83	3037	157	3038	157	0085	2	76.7034	76.6968	9915	2	17
84	3194	157	3195	158	0087	2	75.7903	75.7837	9913	2	16
85	3351	157	3353	157	0089	2	74.8987	74.8920	9911	2	15
86	3508	158	3510	157	0091	2	74.0278	74.0211	9909	2	14
87	3666	157	3667	157	0093	3	73.1770	73.1701	9907	3	13
88	3823	157	3824	157	0096	2	72.3455	72.3385	9904	2	12
89	3980	157	3981	157	0098	2	71.5326	71.5257	9902	2	11
90	0.014137	157	0.014138	157	1.000100	2	70.7379	70.7308	0.999900	2	10
91	4294	157	4295	157	0102	2	69.9606	69.9535	9898	2	09
92	4451	157	4452	157	0104	2	69.2002	69.1930	9896	2	08
93	4608	157	4609	158	0107	3	68.4562	68.4489	9893	3	07
94	4765	157	4767	157	0109	2	67.7280	67.7206	9891	2	06
95	4922	157	4924	157	0111	2	67.0151	67.0076	9889	2	05
96	5079	157	5081	157	0114	3	66.3171	66.3095	9886	3	04
97	5236	157	5238	157	0116	2	65.6334	65.6258	9884	2	03
98	5393	157	5395	157	0118	2	64.9638	64.9561	9882	2	02
99	5550	157	5552	157	0121	3	64.3076	64.2998	9879	3	01
100	0.015707	157	0.015709	157	1.000123	2	63.6646	63.6567	0.999877	2	00
	cos	cotg	cosec	sec	tang	sin	c				
				157 158							
			1	15.7 15.8	1						
			2	31.4 31.6	2						
			3	47.1 47.4	3						
			4	62.8 63.2	4						
			5	78.5 79.0	5						
			6	94.2 94.8	6						
			7	109.9 110.6	7						
			8	125.6 126.4	8						
			9	141.3 142.2	9						

Figure 2: Excerpt of Peters's table.

c	sin		tang		sec		cosec		cotg			cos															
00	0.495459		136		0.570390		208		1.151236		103		2.018332		556		1.753187			640		0.868632		78		100	
01	5595		137		0598		208		1339		104		7776		555		2547			639		8554		78		99	
02	5732		136		0806		209		1443		103		7221		555		1908			639		8476		78		98	
03	5868		136		1015		208		1540		103		6666		555		1269			639		8398		78		97	
04	6004		137		1223		208		1649		103		6111		554		1.750630			638		8320		78		96	
05	6141		136		1431		209		1752		104		5557		554		1.749992			638		8242		78		95	
06	6277		136		1640		208		1856		103		5003		553		9354			638		8164		78		94	
07	6413		137		1848		209		1959		104		4450		553		8716			637		8086		78		93	
08	6550		136		2057		208		2063		103		3897		553		8079			637		8008		78		92	
09	6686		136		2265		209		2166		104		3344		553		7442			637		7930		78		91	
10	0.496822		137		0.572474		208		1.152270		104		2.012791		552		1.740805			636		0.867852		78		90	
11	6959		136		2682		209		2374		103		2239		552		6169			636		7774		78		89	
12	7095		136		2891		208		2477		104		1687		551		5533			635		7696		78		88	
13	7231		137		3099		209		2581		104		1136		551		4898			635		7618		78		87	
14	7368		136		3308		209		2685		104		0585		551		4263			635		7540		78		86	
15	7504		136		3517		209		2789		104		2.010034		550		3628			635		7462		78		85	
16	7640		136		3726		208		2893		103		2.009484		550		2993			634		7384		79		84	
17	7776		137		3934		209		2996		104		8934		550		2359			634		7305		78		83	
18	7913		136		4143		209		3100		104		8384		549		1725			633		7227		78		82	
19	8049		136		4352		209		3204		104		7835		549		1092			633		7149		78		81	
20	0.498185		136		0.574561		209		1.153308		105		2.007286		549		1.740459			633		0.867071		79		80	
21	8321		136		4770		209		3413		104		6737		548		1.739826			632		6992		78		79	
22	8457		137		4979		209		3517		104		6189		548		9194			632		6914		78		78	
23	8594		136		5188		209		3621		104		5641		547		8561			632		6836		78		77	
24	8730		136		5397		209		3725		105		5094		547		7930			631		6758		79		76	
25	8866		136		5606		209		3830		104		4547		547		7299			631		6679		78		75	
26	9002		136		5815		210		3934		104		4000		547		6668			631		6601		79		74	
27	9138		136		6025		209		4038		105		3453		546		6037			630		6522		78		73	
28	9274		136		6234		209		4143		104		2907		546		5407			630		6444		78		72	
29	9410		136		6443		209		4247		105		2361		545		4777			630		6366		78		71	
30	0.499546		137		0.576652		210		1.154352		104		2.001816		545		1.734147			629		0.866287		79		70	
31	9683		136		6862		209		4456		105		1271		545		3518			629		6209		79		69	
32	9819		136		7071		209		4561		105		0726		545		2889			629		6130		79		68	
33	0.499955		136		7280		210		4666		104		2.000181		544		2260			628		6052		79		67	
34	0.500091		136		7490		209		4770		105		1.999637		543		1632			628		5973		79		66	
35	0227		136		7699		210		4875		105		9094		544		1004			627		5894		78		65	
36	0363		136		7909		209		4980		105		8550		543		1.730377			628		5816		79		64	
37	0499		136		8118		210		5085		105		8007		543		1.729749			627		5737		78		63	
38	0635		136		8328		210		5190		105		7464		542		9122			626		5659		79		62	
39	0771		136		8538		209		5295		105		6922		542		8496			626		5580		79		61	
40	0.500907		136		0.578747		210		1.155400		105		1.996380		542		1.727870			626		0.865501		78		60	
41	1043		136		8957		210		5505		105		5838		541		7244			626		5423		79		59	
42	1179		135		9167		210		5610		105		5297		541		6618			625		5344		79		58	
43	1314		136		9377		209		5715		105		4756		541		5993			625		5265		79		57	
44	1450		136		9586		210		5820		106		4215		540		5368			624		5186		78		56	
45	1586		136		0.579796		210		5926		105		3675		540		4744			625		5108		78		55	
46	1722		136		0.580006		210		6031		105		3135		539		4119			623		5029		79		54	
47	1858		136		0216		210		6136		106		2596		540		3496			624		4950		79		53	
48	1994		136		0426		210		6242		105		2056		539		2872			623		4871		79		52	
49	2130		136		0636		210		6347		105		1517		538		2249			623		4792		79		51	
50	0.502266		136		0.580846		210		1.156452		105		1.990979		538		1.721626			623		0.864713		79		50	
		cos			cotg			cosec			sec			tang			sin			c							
		78	79	80	103	104	105	106	107	108	135	136	137	208	209	210	211	212	522								
1		7.8	7.9	8.0	10.3	10.4	10.5	10.6	10.7	10.8	13.5	13.6	13.7	20.8	20.9	21.0	21.1	21.2	52.2	1							
2		15.6	15.8	16.0	20.6	20.8	21.0	21.2	21.4	21.6	27.0	27.2	27.4	41.6	41.8	42.0	42.2	42.4	104.4	2							
3		23.4	23.7	24.0	30.9	31.2	31.5	31.8	32.1	32.4	40.5	40.8	41.1	62.4	62.7	63.0	63.3	63.6	156.6	3							
4		31.2	31.6	32.0	41.2	41.6	42.0	42.4	42.8	43.2	54.0	54.4	54.8	83.2	83.6	84.0	84.4	84.8	208.8	4							
5		39.0	39.5	40.0	51.5	52.0	52.5	53.0	53.5	54.0	67.5	68.0	68.5	104.0	104.5	105.0	105.5	106.0	261.0	5							
6		46.8	47.4	48.0	61.8	62.4	63.0	63.6	64.2	64.8	81.0	81.6	82.2	124.8	125.4	126.0	126.6	127.2	313.2	6							
7		54.6	55.3	56.0	72.1	72.8	73.5	74.2	74.9	75.6	94.5	95.2	95.9	145.6	146.3	147.0	147.7	148.4	365.4	7							
8		62.4	63.2	64.0	82.4	83.2	84.0	84.8	85.6	86.4	108.0	108.8	109.6	166.4	167.2	168.0	168.8	169.6	417.6	8							
9		70.2	71.1	72.0	92.7	93.6	94.5	95.4	96.3	97.2	121.5	122.4	123.3	187.2	188.1	189.0	189.9	190.8	469.8	9							

Figure 3: Excerpt of Peters's table.

References

The following list covers the most important references² related to Peters’s table. Not all items of this list are mentioned in the text, and the sources which have not been seen are marked so. We have added notes about the contents of the articles in certain cases.

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²**Note on the titles of the works:** Original titles come with many idiosyncrasies and features (line splitting, size, fonts, etc.) which can often not be reproduced in a list of references. It has therefore seemed pointless to capitalize works according to conventions which not only have no relation with the original work, but also do not restore the title entirely. In the following list of references, most title words (except in German) will therefore be left uncapitalized. The names of the authors have also been homogenized and initials expanded, as much as possible.

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

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Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cosec 0 ^g																						
c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}											
00	∞	63662	31831	21221	15915	12732	10610	9094.6	7957.7	7073.6	6366.2	99										
01	6366.2	5787.5	5305.2	4897.1	4547.3	4244.1	3978.9	3744.8	3536.8	3350.6	3183.1	98										
02	3183.1	3031.5	2893.7	2767.9	2652.6	2546.5	2448.5	2357.9	2273.6	2195.2	2122.1	97										
03	2122.1	2053.6	1989.4	1929.2	1872.4	1818.9	1768.4	1720.6	1675.3	1632.4	1591.5	96										
04	1591.5	1552.7	1515.8	1480.5	1446.9	1414.7	1384.0	1354.5	1326.3	1299.2	1273.2	95										
05	1273.2	1248.3	1224.3	1201.2	1178.9	1157.5	1136.8	1116.9	1097.6	1079.0	1061.0	94										
06	1061.0	1043.6	1026.8	1010.5	994.72	979.42	964.58	950.18	936.21	922.64	909.46	93										
07	909.46	896.65	884.19	872.08	860.30	848.83	837.66	826.78	816.18	805.85	795.77	92										
08	795.77	785.95	776.37	767.01	757.88	748.96	740.26	731.75	723.43	715.30	707.36	91										
09	707.36	699.58	691.98	684.54	677.26	670.13	663.15	656.31	649.61	643.05	636.62	90										
10	636.62	630.32	624.14	618.08	612.13	606.30	600.58	594.97	589.46	584.06	578.75	89										
11	578.75	573.53	568.41	563.38	558.44	553.58	548.81	544.12	539.51	534.97	530.52	88										
12	530.52	526.13	521.82	517.58	513.40	509.30	505.25	501.28	497.36	493.50	489.71	87										
13	489.71	485.97	482.29	478.66	475.09	471.57	468.10	464.69	461.32	458.00	454.73	86										
14	454.73	451.50	448.32	445.19	442.10	439.05	436.04	433.08	430.15	427.26	424.41	85										
15	424.41	421.60	418.83	416.09	413.39	410.72	408.09	405.49	402.92	400.39	397.89	84										
16	397.89	395.42	392.98	390.56	388.18	385.83	383.51	381.21	378.94	376.70	374.48	83										
17	374.48	372.29	370.13	367.99	365.87	363.78	361.72	359.67	357.65	355.65	353.68	82										
18	353.68	351.72	349.79	347.88	345.99	344.12	342.27	340.44	338.63	336.84	335.06	81										
19	335.06	333.31	331.57	329.86	328.16	326.47	324.81	323.16	321.53	319.91	318.31	80										
20	318.31	316.73	315.16	313.61	312.07	310.55	309.04	307.55	306.07	304.60	303.15	79										
21	303.15	301.72	300.29	298.88	297.49	296.10	294.73	293.37	292.03	290.69	289.37	78										
22	289.37	288.06	286.77	285.48	284.21	282.94	281.69	280.45	279.22	278.00	276.79	77										
23	276.79	275.59	274.41	273.23	272.06	270.90	269.75	268.62	267.49	266.37	265.26	76										
24	265.26	264.16	263.07	261.98	260.91	259.85	258.79	257.74	256.70	255.67	254.65	75										
25	254.65	253.63	252.63	251.63	250.64	249.66	248.68	247.71	246.75	245.80	244.85	74										
26	244.85	243.92	242.99	242.06	241.14	240.23	239.33	238.44	237.55	236.66	235.79	73										
27	235.79	234.92	234.05	233.19	232.34	231.50	230.66	229.83	229.00	228.18	227.36	72										
28	227.36	226.56	225.75	224.95	224.16	223.38	222.60	221.82	221.05	220.28	219.52	71										
29	219.52	218.77	218.02	217.28	216.54	215.80	215.08	214.35	213.63	212.92	212.21	70										
30	212.21	211.50	210.80	210.11	209.42	208.73	208.05	207.37	206.70	206.03	205.36	69										
31	205.36	204.70	204.05	203.39	202.75	202.10	201.46	200.83	200.20	199.57	198.94	68										
32	198.94	198.32	197.71	197.10	196.49	195.88	195.28	194.69	194.09	193.50	192.92	67										
33	192.92	192.33	191.75	191.18	190.61	190.04	189.47	188.91	188.35	187.79	187.24	66										
34	187.24	186.69	186.15	185.60	185.06	184.53	184.00	183.46	182.94	182.41	181.89	65										
35	181.89	181.37	180.86	180.35	179.84	179.33	178.83	178.33	177.83	177.33	176.84	64										
36	176.84	176.35	175.86	175.38	174.90	174.42	173.94	173.47	173.00	172.53	172.06	63										
37	172.06	171.60	171.14	170.68	170.22	169.77	169.31	168.87	168.42	167.97	167.53	62										
38	167.53	167.09	166.66	166.22	165.79	165.36	164.93	164.50	164.08	163.66	163.24	61										
39	163.24	162.82	162.40	161.99	161.58	161.17	160.76	160.36	159.96	159.55	159.16	60										
40	159.16	158.76	158.36	157.97	157.58	157.19	156.80	156.42	156.04	155.65	155.27	59										
41	155.27	154.90	154.52	154.15	153.77	153.40	153.03	152.67	152.30	151.94	151.58	58										
42	151.58	151.22	150.86	150.50	150.15	149.79	149.44	149.09	148.74	148.40	148.05	57										
43	148.05	147.71	147.37	147.03	146.69	146.35	146.01	145.68	145.35	145.02	144.69	56										
44	144.69	144.36	144.03	143.71	143.38	143.06	142.74	142.42	142.10	141.79	141.47	55										
45	141.47	141.16	140.85	140.54	140.23	139.92	139.61	139.31	139.00	138.70	138.40	54										
46	138.40	138.10	137.80	137.50	137.20	136.91	136.61	136.32	136.03	135.74	135.45	53										
47	135.45	135.16	134.88	134.59	134.31	134.03	133.74	133.46	133.19	132.91	132.63	52										
48	132.63	132.35	132.08	131.81	131.53	131.26	130.99	130.72	130.46	130.19	129.92	51										
49	129.92	129.66	129.40	129.13	128.87	128.61	128.35	128.09	127.84	127.58	127.33	50										
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c										
	25	28	31	34	37	40	43	46	49	52	55	58	61	64	67	70	73	76				
1	2.5	2.8	3.1	3.4	3.7	4.0	4.3	4.6	4.9	5.2	5.5	5.8	6.1	6.4	6.7	7.0	7.3	7.6	1			
2	5.0	5.6	6.2	6.8	7.4	8.0	8.6	9.2	9.8	10.4	11.0	11.6	12.2	12.8	13.4	14.0	14.6	15.2	2			
3	7.5	8.4	9.3	10.2	11.1	12.0	12.9	13.8	14.7	15.6	16.5	17.4	18.3	19.2	20.1	21.0	21.9	22.8	3			
4	10.0	11.2	12.4	13.6	14.8	16.0	17.2	18.4	19.6	20.8	22.0	23.2	24.4	25.6	26.8	28.0	29.2	30.4	4			
5	12.5	14.0	15.5	17.0	18.5	20.0	21.5	23.0	24.5	26.0	27.5	29.0	30.5	32.0	33.5	35.0	36.5	38.0	5			
6	15.0	16.8	18.6	20.4	22.2	24.0	25.8	27.6	29.4	31.2	33.0	34.8	36.6	38.4	40.2	42.0	43.8	45.6	6			
7	17.5	19.6	21.7	23.8	25.9	28.0	30.1	32.2	34.3	36.4	38.5	40.6	42.7	44.8	46.9	49.0	51.1	53.2	7			
8	20.0	22.4	24.8	27.2	29.6	32.0	34.4	36.8	39.2	41.6	44.0	46.4	48.8	51.2	53.6	56.0	58.4	60.8	8			
9	22.5	25.2	27.9	30.6	33.3	36.0	38.7	41.4	44.1	46.8	49.5	52.2	54.9	57.6	60.3	63.0	65.7	68.4	9			

sec 99^g

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cotg 0 ^g																			
c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}								
00	∞	6366.2	3183.1	2122.1	1591.5	1273.2	1061.0	909.4	795.7	707.3	636.6	99							
01	6366.2	5787.5	5305.2	4897.1	4547.3	4244.1	3978.9	3744.8	3536.8	3350.6	3183.1	98							
02	3183.1	3031.5	2893.7	2767.9	2652.6	2546.5	2448.5	2357.9	2273.6	2195.2	2122.1	97							
03	2122.1	2053.6	1989.4	1929.2	1872.4	1818.9	1768.4	1720.6	1675.3	1632.4	1591.5	96							
04	1591.5	1552.7	1515.8	1480.5	1446.9	1414.7	1384.0	1354.5	1326.3	1299.2	1273.2	95							
05	1273.2	1248.3	1224.3	1201.2	1178.9	1157.5	1136.8	1116.9	1097.6	1079.0	1061.0	94							
06	1061.0	1043.6	1026.8	1010.5	994.72	979.41	964.58	950.18	936.21	922.64	909.46	93							
07	909.46	896.65	884.19	872.08	860.30	848.83	837.66	826.78	816.18	805.85	795.77	92							
08	795.77	785.95	776.37	767.01	757.88	748.96	740.26	731.75	723.43	715.30	707.35	91							
09	707.35	699.58	691.98	684.54	677.25	670.13	663.15	656.31	649.61	643.05	636.62	90							
10	636.62	630.32	624.14	618.08	612.13	606.30	600.58	594.97	589.46	584.05	578.74	89							
11	578.74	573.53	568.41	563.38	558.44	553.58	548.81	544.12	539.51	534.97	530.52	88							
12	530.52	526.13	521.82	517.58	513.40	509.30	505.25	501.27	497.36	493.50	489.71	87							
13	489.71	485.97	482.29	478.66	475.09	471.57	468.10	464.69	461.32	458.00	454.73	86							
14	454.73	451.50	448.32	445.19	442.10	439.05	436.04	433.07	430.15	427.26	424.41	85							
15	424.41	421.60	418.83	416.09	413.39	410.72	408.09	405.49	402.92	400.39	397.89	84							
16	397.89	395.42	392.97	390.56	388.18	385.83	383.51	381.21	378.94	376.70	374.48	83							
17	374.48	372.29	370.13	367.99	365.87	363.78	361.71	359.67	357.65	355.65	353.68	82							
18	353.68	351.72	349.79	347.88	345.99	344.12	342.27	340.44	338.63	336.83	335.06	81							
19	335.06	333.31	331.57	329.85	328.15	326.47	324.80	323.16	321.52	319.91	318.31	80							
20	318.31	316.73	315.16	313.60	312.07	310.55	309.04	307.54	306.07	304.60	303.15	79							
21	303.15	301.71	300.29	298.88	297.48	296.10	294.73	293.37	292.03	290.69	289.37	78							
22	289.37	288.06	286.76	285.48	284.20	282.94	281.69	280.45	279.22	278.00	276.79	77							
23	276.79	275.59	274.40	273.23	272.06	270.90	269.75	268.61	267.49	266.37	265.26	76							
24	265.26	264.16	263.06	261.98	260.91	259.84	258.79	257.74	256.70	255.67	254.65	75							
25	254.65	253.63	252.63	251.63	250.64	249.65	248.68	247.71	246.75	245.80	244.85	74							
26	244.85	243.91	242.98	242.06	241.14	240.23	239.33	238.43	237.54	236.66	235.78	73							
27	235.78	234.91	234.05	233.19	232.34	231.50	230.66	229.83	229.00	228.18	227.36	72							
28	227.36	226.55	225.75	224.95	224.16	223.37	222.59	221.82	221.05	220.28	219.52	71							
29	219.52	218.77	218.02	217.27	216.54	215.80	215.07	214.35	213.63	212.91	212.21	70							
30	212.21	211.50	210.80	210.10	209.41	208.73	208.04	207.37	206.69	206.02	205.36	69							
31	205.36	204.70	204.04	203.39	202.74	202.10	201.46	200.82	200.19	199.57	198.94	68							
32	198.94	198.32	197.71	197.09	196.49	195.88	195.28	194.68	194.09	193.50	192.91	67							
33	192.91	192.33	191.75	191.18	190.60	190.03	189.47	188.91	188.35	187.79	187.24	66							
34	187.24	186.69	186.14	185.60	185.06	184.53	183.99	183.46	182.93	182.41	181.89	65							
35	181.89	181.37	180.86	180.34	179.83	179.33	178.82	178.32	177.82	177.33	176.84	64							
36	176.84	176.35	175.86	175.38	174.89	174.41	173.94	173.46	172.99	172.52	172.06	63							
37	172.06	171.59	171.13	170.67	170.22	169.76	169.31	168.86	168.42	167.97	167.53	62							
38	167.53	167.09	166.65	166.22	165.78	165.35	164.93	164.50	164.08	163.65	163.23	61							
39	163.23	162.82	162.40	161.99	161.58	161.17	160.76	160.36	159.95	159.55	159.15	60							
40	159.15	158.76	158.36	157.97	157.58	157.19	156.80	156.42	156.03	155.65	155.27	59							
41	155.27	154.89	154.52	154.14	153.77	153.40	153.03	152.66	152.30	151.94	151.57	58							
42	151.57	151.21	150.86	150.50	150.14	149.79	149.44	149.09	148.74	148.39	148.05	57							
43	148.05	147.71	147.36	147.02	146.68	146.35	146.01	145.68	145.34	145.01	144.68	56							
44	144.68	144.36	144.03	143.70	143.38	143.06	142.74	142.42	142.10	141.78	141.47	55							
45	141.47	141.16	140.84	140.53	140.22	139.91	139.61	139.30	139.00	138.69	138.39	54							
46	138.39	138.09	137.79	137.50	137.20	136.91	136.61	136.32	136.03	135.74	135.45	53							
47	135.45	135.16	134.87	134.59	134.31	134.02	133.74	133.46	133.18	132.90	132.63	52							
48	132.63	132.35	132.08	131.80	131.53	131.26	130.99	130.72	130.45	130.19	129.92	51							
49	129.92	129.66	129.39	129.13	128.87	128.61	128.35	128.09	127.83	127.58	127.32	50							
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c							
	79	82	85	88	91	94	97	100	103	106	109	112	115	118	121	124	127	130	
1	7.9	8.2	8.5	8.8	9.1	9.4	9.7	10.0	10.3	10.6	10.9	11.2	11.5	11.8	12.1	12.4	12.7	13.0	1
2	15.8	16.4	17.0	17.6	18.2	18.8	19.4	20.0	20.6	21.2	21.8	22.4	23.0	23.6	24.2	24.8	25.4	26.0	2
3	23.7	24.6	25.5	26.4	27.3	28.2	29.1	30.0	30.9	31.8	32.7	33.6	34.5	35.4	36.3	37.2	38.1	39.0	3
4	31.6	32.8	34.0	35.2	36.4	37.6	38.8	40.0	41.2	42.4	43.6	44.8	46.0	47.2	48.4	49.6	50.8	52.0	4
5	39.5	41.0	42.5	44.0	45.5	47.0	48.5	50.0	51.5	53.0	54.5	56.0	57.5	59.0	60.5	62.0	63.5	65.0	5
6	47.4	49.2	51.0	52.8	54.6	56.4	58.2	60.0	61.8	63.6	65.4	67.2	69.0	70.8	72.6	74.4	76.2	78.0	6
7	55.3	57.4	59.5	61.6	63.7	65.8	67.9	70.0	72.1	74.2	76.3	78.4	80.5	82.6	84.7	86.8	88.9	91.0	7
8	63.2	65.6	68.0	70.4	72.8	75.2	77.6	80.0	82.4	84.8	87.2	89.6	92.0	94.4	96.8	99.2	101.6	104.0	8
9	71.1	73.8	76.5	79.2	81.9	84.6	87.3	90.0	92.7	95.4	98.1	100.8	103.5	106.2	108.9	111.6	114.3	117.0	9

tang 99^g

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cos ec 0^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}								
50	127.33	127.07	126.82	126.57	126.31	126.06	125.82	125.57	125.32	125.07	124.83	49							
51	124.83	124.58	124.34	124.10	123.86	123.62	123.38	123.14	122.90	122.66	122.43	48							
52	122.43	122.19	121.96	121.73	121.49	121.26	121.03	120.80	120.57	120.35	120.12	47							
53	120.12	119.89	119.67	119.44	119.22	119.00	118.77	118.55	118.33	118.11	117.89	46							
54	117.89	117.68	117.46	117.24	117.03	116.81	116.60	116.39	116.17	115.96	115.75	45							
55	115.75	115.54	115.33	115.12	114.91	114.71	114.50	114.30	114.09	113.89	113.68	44							
56	113.68	113.48	113.28	113.08	112.88	112.68	112.48	112.28	112.08	111.89	111.69	43							
57	111.69	111.49	111.30	111.10	110.91	110.72	110.53	110.33	110.14	109.95	109.76	42							
58	109.76	109.57	109.39	109.20	109.01	108.83	108.64	108.45	108.27	108.09	107.90	41							
59	107.90	107.72	107.54	107.36	107.18	107.00	106.82	106.64	106.46	106.28	106.10	40							
60	106.10	105.93	105.75	105.58	105.40	105.23	105.05	104.88	104.71	104.54	104.37	39							
61	104.37	104.19	104.02	103.85	103.69	103.52	103.35	103.18	103.01	102.85	102.68	38							
62	102.68	102.52	102.35	102.19	102.02	101.86	101.70	101.54	101.37	101.21	101.05	37							
63	101.05	100.89	100.73	100.57	100.41	100.26	100.10	99.942	99.785	99.629	99.474	36							
64	99.474	99.318	99.164	99.009	98.856	98.702	98.550	98.397	98.245	98.094	97.943	35							
65	97.943	97.793	97.643	97.493	97.344	97.196	97.047	96.900	96.752	96.606	96.459	34							
66	96.459	96.313	96.168	96.023	95.878	95.734	95.590	95.447	95.304	95.162	95.020	33							
67	95.020	94.878	94.737	94.596	94.456	94.316	94.176	94.037	93.898	93.760	93.622	32							
68	93.622	93.485	93.348	93.211	93.075	92.939	92.804	92.668	92.534	92.399	92.266	31							
69	92.266	92.132	91.999	91.866	91.734	91.602	91.470	91.339	91.208	91.078	90.948	30							
70	90.948	90.818	90.688	90.559	90.431	90.303	90.175	90.047	89.920	89.793	89.667	29							
71	89.667	89.541	89.415	89.289	89.164	89.040	88.915	88.791	88.668	88.544	88.421	28							
72	88.421	88.299	88.176	88.054	87.933	87.812	87.691	87.570	87.450	87.330	87.210	27							
73	87.210	87.091	86.972	86.853	86.735	86.617	86.499	86.382	86.265	86.148	86.032	26							
74	86.032	85.916	85.800	85.684	85.569	85.454	85.340	85.225	85.112	84.998	84.885	25							
75	84.885	84.772	84.659	84.546	84.434	84.322	84.211	84.100	83.989	83.878	83.768	24							
76	83.768	83.658	83.548	83.438	83.329	83.220	83.112	83.003	82.895	82.787	82.680	23							
77	82.680	82.573	82.466	82.359	82.253	82.147	82.041	81.935	81.830	81.725	81.620	22							
78	81.620	81.515	81.411	81.307	81.204	81.100	80.997	80.894	80.791	80.689	80.587	21							
79	80.587	80.485	80.383	80.282	80.181	80.080	79.979	79.879	79.779	79.679	79.580	20							
80	79.580	79.480	79.381	79.282	79.184	79.085	78.987	78.889	78.792	78.694	78.597	19							
81	78.597	78.500	78.404	78.307	78.211	78.115	78.019	77.924	77.829	77.733	77.639	18							
82	77.639	77.544	77.450	77.356	77.262	77.168	77.075	76.982	76.889	76.796	76.703	17							
83	76.703	76.611	76.519	76.427	76.335	76.244	76.153	76.062	75.971	75.881	75.790	16							
84	75.790	75.700	75.610	75.521	75.431	75.342	75.253	75.164	75.075	74.987	74.899	15							
85	74.899	74.811	74.723	74.635	74.548	74.461	74.374	74.287	74.200	74.114	74.028	14							
86	74.028	73.942	73.856	73.770	73.685	73.600	73.515	73.430	73.346	73.261	73.177	13							
87	73.177	73.093	73.009	72.926	72.842	72.759	72.676	72.593	72.510	72.428	72.345	12							
88	72.345	72.263	72.181	72.100	72.018	71.937	71.856	71.775	71.694	71.613	71.533	11							
89	71.533	71.452	71.372	71.292	71.213	71.133	71.054	70.974	70.895	70.817	70.738	10							
90	70.738	70.659	70.581	70.503	70.425	70.347	70.269	70.192	70.115	70.038	69.961	09							
91	69.961	69.884	69.807	69.731	69.654	69.578	69.502	69.427	69.351	69.276	69.200	08							
92	69.200	69.125	69.050	68.975	68.901	68.826	68.752	68.678	68.604	68.530	68.456	07							
93	68.456	68.383	68.309	68.236	68.163	68.090	68.017	67.945	67.872	67.800	67.728	06							
94	67.728	67.656	67.584	67.513	67.441	67.370	67.298	67.227	67.156	67.086	67.015	05							
95	67.015	66.945	66.874	66.804	66.734	66.664	66.595	66.525	66.456	66.386	66.317	04							
96	66.317	66.248	66.179	66.110	66.042	65.973	65.905	65.837	65.769	65.701	65.633	03							
97	65.633	65.566	65.498	65.431	65.364	65.297	65.230	65.163	65.097	65.030	64.964	02							
98	64.964	64.898	64.831	64.766	64.700	64.634	64.568	64.503	64.438	64.373	64.308	01							
99	64.308	64.243	64.178	64.113	64.049	63.984	63.920	63.856	63.792	63.728	63.665	00							
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c							
	15	17	19	21	23	26	63	66	69	72	75	78	81	84	87	90	93	96	1
1	1.5	1.7	1.9	2.1	2.3	2.6	6.3	6.6	6.9	7.2	7.5	7.8	8.1	8.4	8.7	9.0	9.3	9.6	1
2	3.0	3.4	3.8	4.2	4.6	5.2	12.6	13.2	13.8	14.4	15.0	15.6	16.2	16.8	17.4	18.0	18.6	19.2	2
3	4.5	5.1	5.7	6.3	6.9	7.8	18.9	19.8	20.7	21.6	22.5	23.4	24.3	25.2	26.1	27.0	27.9	28.8	3
4	6.0	6.8	7.6	8.4	9.2	10.4	25.2	26.4	27.6	28.8	30.0	31.2	32.4	33.6	34.8	36.0	37.2	38.4	4
5	7.5	8.5	9.5	10.5	11.5	13.0	31.5	33.0	34.5	36.0	37.5	39.0	40.5	42.0	43.5	45.0	46.5	48.0	5
6	9.0	10.2	11.4	12.6	13.8	15.6	37.8	39.6	41.4	43.2	45.0	46.8	48.6	50.4	52.2	54.0	55.8	57.6	6
7	10.5	11.9	13.3	14.7	16.1	18.2	44.1	46.2	48.3	50.4	52.5	54.6	56.7	58.8	60.9	63.0	65.1	67.2	7
8	12.0	13.6	15.2	16.8	18.4	20.8	50.4	52.8	55.2	57.6	60.0	62.4	64.8	67.2	69.6	72.0	74.4	76.8	8
9	13.5	15.3	17.1	18.9	20.7	23.4	56.7	59.4	62.1	64.8	67.5	70.2	72.9	75.6	78.3	81.0	83.7	86.4	9

sec 99^g

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cotg 0 ^g																			
c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}								
50	127.32	127.07	126.81	126.56	126.31	126.06	125.81	125.56	125.32	125.07	124.82	49							
51	124.82	124.58	124.34	124.09	123.85	123.61	123.37	123.13	122.90	122.66	122.42	48							
52	122.42	122.19	121.96	121.72	121.49	121.26	121.03	120.80	120.57	120.34	120.11	47							
53	120.11	119.89	119.66	119.44	119.21	118.99	118.77	118.55	118.33	118.11	117.89	46							
54	117.89	117.67	117.45	117.24	117.02	116.81	116.59	116.38	116.17	115.96	115.75	45							
55	115.75	115.54	115.33	115.12	114.91	114.70	114.50	114.29	114.09	113.88	113.68	44							
56	113.68	113.48	113.27	113.07	112.87	112.67	112.47	112.28	112.08	111.88	111.68	43							
57	111.68	111.49	111.29	111.10	110.91	110.71	110.52	110.33	110.14	109.95	109.76	42							
58	109.76	109.57	109.38	109.19	109.01	108.82	108.64	108.45	108.27	108.08	107.90	41							
59	107.90	107.72	107.53	107.35	107.17	106.99	106.81	106.63	106.46	106.28	106.10	40							
60	106.10	105.92	105.75	105.57	105.40	105.22	105.05	104.88	104.70	104.53	104.36	39							
61	104.36	104.19	104.02	103.85	103.68	103.51	103.34	103.18	103.01	102.84	102.68	38							
62	102.68	102.51	102.35	102.18	102.02	101.86	101.69	101.53	101.37	101.21	101.05	37							
63	101.05	100.89	100.73	100.57	100.41	100.25	100.09	99.937	99.780	99.624	99.468	36							
64	99.468	99.313	99.159	99.004	98.851	98.697	98.545	98.392	98.240	98.089	97.938	35							
65	97.938	97.788	97.638	97.488	97.339	97.190	97.042	96.895	96.747	96.600	96.454	34							
66	96.454	96.308	96.163	96.018	95.873	95.729	95.585	95.442	95.299	95.156	95.014	33							
67	95.014	94.873	94.732	94.591	94.450	94.311	94.171	94.032	93.893	93.755	93.617	32							
68	93.617	93.480	93.342	93.206	93.069	92.934	92.798	92.663	92.528	92.394	92.260	31							
69	92.260	92.127	91.993	91.861	91.728	91.596	91.465	91.333	91.203	91.072	90.942	30							
70	90.942	90.812	90.683	90.554	90.425	90.297	90.169	90.042	89.914	89.788	89.661	29							
71	89.661	89.535	89.409	89.284	89.159	89.034	88.910	88.786	88.662	88.539	88.416	28							
72	88.416	88.293	88.171	88.049	87.927	87.806	87.685	87.564	87.444	87.324	87.204	27							
73	87.204	87.085	86.966	86.847	86.729	86.611	86.493	86.376	86.259	86.142	86.026	26							
74	86.026	85.910	85.794	85.678	85.563	85.448	85.334	85.220	85.106	84.992	84.879	25							
75	84.879	84.766	84.653	84.541	84.428	84.317	84.205	84.094	83.983	83.872	83.762	24							
76	83.762	83.652	83.542	83.432	83.323	83.214	83.106	82.997	82.889	82.781	82.674	23							
77	82.674	82.567	82.460	82.353	82.247	82.140	82.035	81.929	81.824	81.719	81.614	22							
78	81.614	81.509	81.405	81.301	81.197	81.094	80.991	80.888	80.785	80.683	80.581	21							
79	80.581	80.479	80.377	80.276	80.175	80.074	79.973	79.873	79.773	79.673	79.573	20							
80	79.573	79.474	79.375	79.276	79.177	79.079	78.981	78.883	78.785	78.688	78.591	19							
81	78.591	78.494	78.397	78.301	78.205	78.109	78.013	77.917	77.822	77.727	77.632	18							
82	77.632	77.538	77.443	77.349	77.255	77.162	77.068	76.975	76.882	76.789	76.697	17							
83	76.697	76.605	76.512	76.421	76.329	76.238	76.146	76.055	75.965	75.874	75.784	16							
84	75.784	75.694	75.604	75.514	75.424	75.335	75.246	75.157	75.069	74.980	74.892	15							
85	74.892	74.804	74.716	74.629	74.541	74.454	74.367	74.280	74.194	74.107	74.021	14							
86	74.021	73.935	73.849	73.764	73.678	73.593	73.508	73.423	73.339	73.254	73.170	13							
87	73.170	73.086	73.002	72.919	72.835	72.752	72.669	72.586	72.503	72.421	72.339	12							
88	72.339	72.256	72.174	72.093	72.011	71.930	71.849	71.768	71.687	71.606	71.526	11							
89	71.526	71.445	71.365	71.285	71.206	71.126	71.047	70.967	70.888	70.810	70.731	10							
90	70.731	70.652	70.574	70.496	70.418	70.340	70.262	70.185	70.108	70.030	69.953	09							
91	69.953	69.877	69.800	69.724	69.647	69.571	69.495	69.419	69.344	69.268	69.193	08							
92	69.193	69.118	69.043	68.968	68.893	68.819	68.745	68.670	68.596	68.523	68.449	07							
93	68.449	68.375	68.302	68.229	68.156	68.083	68.010	67.937	67.865	67.793	67.721	06							
94	67.721	67.649	67.577	67.505	67.434	67.362	67.291	67.220	67.149	67.078	67.008	05							
95	67.008	66.937	66.867	66.797	66.727	66.657	66.587	66.517	66.448	66.379	66.310	04							
96	66.310	66.241	66.172	66.103	66.034	65.966	65.898	65.829	65.761	65.694	65.626	03							
97	65.626	65.558	65.491	65.423	65.356	65.289	65.222	65.156	65.089	65.022	64.956	02							
98	64.956	64.890	64.824	64.758	64.692	64.626	64.561	64.495	64.430	64.365	64.300	01							
99	64.300	64.235	64.170	64.106	64.041	63.977	63.912	63.848	63.784	63.720	63.657	00							
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c							
	99	102	105	108	111	114	117	120	123	126	129	132	135	140	145	150	153	156	
1	9.9	10.2	10.5	10.8	11.1	11.4	11.7	12.0	12.3	12.6	12.9	13.2	13.5	14.0	14.5	15.0	15.3	15.6	1
2	19.8	20.4	21.0	21.6	22.2	22.8	23.4	24.0	24.6	25.2	25.8	26.4	27.0	28.0	29.0	30.0	30.6	31.2	2
3	29.7	30.6	31.5	32.4	33.3	34.2	35.1	36.0	36.9	37.8	38.7	39.6	40.5	42.0	43.5	45.0	45.9	46.8	3
4	39.6	40.8	42.0	43.2	44.4	45.6	46.8	48.0	49.2	50.4	51.6	52.8	54.0	56.0	58.0	60.0	61.2	62.4	4
5	49.5	51.0	52.5	54.0	55.5	57.0	58.5	60.0	61.5	63.0	64.5	66.0	67.5	70.0	72.5	75.0	76.5	78.0	5
6	59.4	61.2	63.0	64.8	66.6	68.4	70.2	72.0	73.8	75.6	77.4	79.2	81.0	84.0	87.0	90.0	91.8	93.6	6
7	69.3	71.4	73.5	75.6	77.7	79.8	81.9	84.0	86.1	88.2	90.3	92.4	94.5	98.0	101.5	105.0	107.1	109.2	7
8	79.2	81.6	84.0	86.4	88.8	91.2	93.6	96.0	98.4	100.8	103.2	105.6	108.0	112.0	116.0	120.0	122.4	124.8	8
9	89.1	91.8	94.5	97.2	99.9	102.6	105.3	108.0	110.7	113.4	116.1	118.8	121.5	126.0	130.5	135.0	137.7	140.4	9

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cos ec 1^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}								
00	63.665	63.601	63.538	63.474	63.411	63.348	63.285	63.222	63.159	63.097	63.034	99							
01	63.034	62.972	62.910	62.848	62.786	62.724	62.662	62.600	62.539	62.478	62.416	98							
02	62.416	62.355	62.294	62.233	62.173	62.112	62.051	61.991	61.931	61.871	61.810	97							
03	61.810	61.750	61.691	61.631	61.571	61.512	61.452	61.393	61.334	61.275	61.216	96							
04	61.216	61.157	61.099	61.040	60.982	60.923	60.865	60.807	60.749	60.691	60.633	95							
05	60.633	60.576	60.518	60.460	60.403	60.346	60.289	60.232	60.175	60.118	60.061	94							
06	60.061	60.005	59.948	59.892	59.835	59.779	59.723	59.667	59.611	59.556	59.500	93							
07	59.500	59.444	59.389	59.334	59.278	59.223	59.168	59.113	59.058	59.004	58.949	92							
08	58.949	58.895	58.840	58.786	58.732	58.677	58.623	58.570	58.516	58.462	58.408	91							
09	58.408	58.355	58.301	58.248	58.195	58.142	58.089	58.036	57.983	57.930	57.877	90							
10	57.877	57.825	57.772	57.720	57.668	57.616	57.563	57.511	57.460	57.408	57.356	89							
11	57.356	57.304	57.253	57.201	57.150	57.099	57.048	56.997	56.946	56.895	56.844	88							
12	56.844	56.793	56.743	56.692	56.642	56.591	56.541	56.491	56.441	56.391	56.341	87							
13	56.341	56.291	56.241	56.192	56.142	56.093	56.043	55.994	55.945	55.896	55.847	86							
14	55.847	55.798	55.749	55.700	55.652	55.603	55.554	55.506	55.458	55.409	55.361	85							
15	55.361	55.313	55.265	55.217	55.169	55.122	55.074	55.026	54.979	54.931	54.884	84							
16	54.884	54.837	54.790	54.742	54.695	54.649	54.602	54.555	54.508	54.462	54.415	83							
17	54.415	54.369	54.322	54.276	54.230	54.183	54.137	54.091	54.046	54.000	53.954	82							
18	53.954	53.908	53.863	53.817	53.772	53.726	53.681	53.636	53.591	53.546	53.501	81							
19	53.501	53.456	53.411	53.366	53.321	53.277	53.232	53.188	53.143	53.099	53.055	80							
20	53.055	53.011	52.967	52.922	52.879	52.835	52.791	52.747	52.703	52.660	52.616	79							
21	52.616	52.573	52.530	52.486	52.443	52.400	52.357	52.314	52.271	52.228	52.185	78							
22	52.185	52.142	52.100	52.057	52.015	51.972	51.930	51.887	51.845	51.803	51.761	77							
23	51.761	51.719	51.677	51.635	51.593	51.551	51.510	51.468	51.426	51.385	51.344	76							
24	51.344	51.302	51.261	51.220	51.178	51.137	51.096	51.055	51.014	50.974	50.933	75							
25	50.933	50.892	50.852	50.811	50.770	50.730	50.690	50.649	50.609	50.569	50.529	74							
26	50.529	50.489	50.449	50.409	50.369	50.329	50.289	50.250	50.210	50.170	50.131	73							
27	50.131	50.091	50.052	50.013	49.973	49.934	49.895	49.856	49.817	49.778	49.739	72							
28	49.739	49.700	49.662	49.623	49.584	49.546	49.507	49.469	49.430	49.392	49.354	71							
29	49.354	49.316	49.277	49.239	49.201	49.163	49.125	49.087	49.050	49.012	48.974	70							
30	48.974	48.937	48.899	48.861	48.824	48.787	48.749	48.712	48.675	48.637	48.600	69							
31	48.600	48.563	48.526	48.489	48.452	48.416	48.379	48.342	48.305	48.269	48.232	68							
32	48.232	48.196	48.159	48.123	48.087	48.050	48.014	47.978	47.942	47.906	47.870	67							
33	47.870	47.834	47.798	47.762	47.726	47.690	47.655	47.619	47.583	47.548	47.512	66							
34	47.512	47.477	47.442	47.406	47.371	47.336	47.301	47.266	47.231	47.196	47.161	65							
35	47.161	47.126	47.091	47.056	47.021	46.987	46.952	46.917	46.883	46.848	46.814	64							
36	46.814	46.779	46.745	46.711	46.677	46.642	46.608	46.574	46.540	46.506	46.472	63							
37	46.472	46.438	46.404	46.371	46.337	46.303	46.270	46.236	46.202	46.169	46.135	62							
38	46.135	46.102	46.069	46.035	46.002	45.969	45.936	45.903	45.870	45.837	45.804	61							
39	45.804	45.771	45.738	45.705	45.672	45.639	45.607	45.574	45.542	45.509	45.477	60							
40	45.477	45.444	45.412	45.379	45.347	45.315	45.282	45.250	45.218	45.186	45.154	59							
41	45.154	45.122	45.090	45.058	45.026	44.995	44.963	44.931	44.899	44.868	44.836	58							
42	44.836	44.805	44.773	44.742	44.710	44.679	44.647	44.616	44.585	44.554	44.523	57							
43	44.523	44.492	44.460	44.429	44.398	44.368	44.337	44.306	44.275	44.244	44.213	56							
44	44.213	44.183	44.152	44.122	44.091	44.061	44.030	44.000	43.969	43.939	43.909	55							
45	43.909	43.878	43.848	43.818	43.788	43.758	43.728	43.698	43.668	43.638	43.608	54							
46	43.608	43.578	43.548	43.519	43.489	43.459	43.429	43.400	43.370	43.341	43.311	53							
47	43.311	43.282	43.252	43.223	43.194	43.165	43.135	43.106	43.077	43.048	43.019	52							
48	43.019	42.990	42.961	42.932	42.903	42.874	42.845	42.816	42.787	42.759	42.730	51							
49	42.730	42.701	42.673	42.644	42.616	42.587	42.559	42.530	42.502	42.474	42.445	50							
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c							
	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	
1	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	1
2	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0	2
3	8.4	8.7	9.0	9.3	9.6	9.9	10.2	10.5	10.8	11.1	11.4	11.7	12.0	12.3	12.6	12.9	13.2	13.5	3
4	11.2	11.6	12.0	12.4	12.8	13.2	13.6	14.0	14.4	14.8	15.2	15.6	16.0	16.4	16.8	17.2	17.6	18.0	4
5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	5
6	16.8	17.4	18.0	18.6	19.2	19.8	20.4	21.0	21.6	22.2	22.8	23.4	24.0	24.6	25.2	25.8	26.4	27.0	6
7	19.6	20.3	21.0	21.7	22.4	23.1	23.8	24.5	25.2	25.9	26.6	27.3	28.0	28.7	29.4	30.1	30.8	31.5	7
8	22.4	23.2	24.0	24.8	25.6	26.4	27.2	28.0	28.8	29.6	30.4	31.2	32.0	32.8	33.6	34.4	35.2	36.0	8
9	25.2	26.1	27.0	27.9	28.8	29.7	30.6	31.5	32.4	33.3	34.2	35.1	36.0	36.9	37.8	38.7	39.6	40.5	9

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Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cotg 1^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}								
00	63.657	63.593	63.530	63.466	63.403	63.340	63.277	63.214	63.151	63.089	63.026	99							
01	63.026	62.964	62.902	62.840	62.778	62.716	62.654	62.592	62.531	62.470	62.408	98							
02	62.408	62.347	62.286	62.225	62.165	62.104	62.043	61.983	61.923	61.862	61.802	97							
03	61.802	61.742	61.683	61.623	61.563	61.504	61.444	61.385	61.326	61.267	61.208	96							
04	61.208	61.149	61.090	61.032	60.973	60.915	60.857	60.799	60.741	60.683	60.625	95							
05	60.625	60.567	60.510	60.452	60.395	60.338	60.280	60.223	60.166	60.110	60.053	94							
06	60.053	59.996	59.940	59.883	59.827	59.771	59.715	59.659	59.603	59.547	59.492	93							
07	59.492	59.436	59.381	59.325	59.270	59.215	59.160	59.105	59.050	58.995	58.941	92							
08	58.941	58.886	58.832	58.777	58.723	58.669	58.615	58.561	58.507	58.453	58.400	91							
09	58.400	58.346	58.293	58.239	58.186	58.133	58.080	58.027	57.974	57.921	57.869	90							
10	57.869	57.816	57.764	57.711	57.659	57.607	57.555	57.503	57.451	57.399	57.347	89							
11	57.347	57.296	57.244	57.193	57.141	57.090	57.039	56.988	56.937	56.886	56.835	88							
12	56.835	56.784	56.734	56.683	56.633	56.583	56.532	56.482	56.432	56.382	56.332	87							
13	56.332	56.282	56.233	56.183	56.133	56.084	56.035	55.985	55.936	55.887	55.838	86							
14	55.838	55.789	55.740	55.691	55.643	55.594	55.545	55.497	55.449	55.400	55.352	85							
15	55.352	55.304	55.256	55.208	55.160	55.113	55.065	55.017	54.970	54.922	54.875	84							
16	54.875	54.828	54.780	54.733	54.686	54.639	54.593	54.546	54.499	54.452	54.406	83							
17	54.406	54.359	54.313	54.267	54.220	54.174	54.128	54.082	54.036	53.990	53.945	82							
18	53.945	53.899	53.853	53.808	53.762	53.717	53.672	53.626	53.581	53.536	53.491	81							
19	53.491	53.446	53.401	53.357	53.312	53.267	53.223	53.178	53.134	53.090	53.045	80							
20	53.045	53.001	52.957	52.913	52.869	52.825	52.781	52.738	52.694	52.650	52.607	79							
21	52.607	52.563	52.520	52.477	52.433	52.390	52.347	52.304	52.261	52.218	52.176	78							
22	52.176	52.133	52.090	52.048	52.005	51.963	51.920	51.878	51.836	51.793	51.751	77							
23	51.751	51.709	51.667	51.625	51.583	51.542	51.500	51.458	51.417	51.375	51.334	76							
24	51.334	51.292	51.251	51.210	51.169	51.128	51.087	51.046	51.005	50.964	50.923	75							
25	50.923	50.882	50.842	50.801	50.761	50.720	50.680	50.639	50.599	50.559	50.519	74							
26	50.519	50.479	50.439	50.399	50.359	50.319	50.279	50.240	50.200	50.160	50.121	73							
27	50.121	50.081	50.042	50.003	49.963	49.924	49.885	49.846	49.807	49.768	49.729	72							
28	49.729	49.690	49.652	49.613	49.574	49.536	49.497	49.459	49.420	49.382	49.344	71							
29	49.344	49.305	49.267	49.229	49.191	49.153	49.115	49.077	49.039	49.002	48.964	70							
30	48.964	48.926	48.889	48.851	48.814	48.776	48.739	48.702	48.664	48.627	48.590	69							
31	48.590	48.553	48.516	48.479	48.442	48.405	48.368	48.332	48.295	48.258	48.222	68							
32	48.222	48.185	48.149	48.112	48.076	48.040	48.004	47.967	47.931	47.895	47.859	67							
33	47.859	47.823	47.787	47.751	47.716	47.680	47.644	47.609	47.573	47.537	47.502	66							
34	47.502	47.466	47.431	47.396	47.361	47.325	47.290	47.255	47.220	47.185	47.150	65							
35	47.150	47.115	47.080	47.045	47.011	46.976	46.941	46.907	46.872	46.838	46.803	64							
36	46.803	46.769	46.734	46.700	46.666	46.632	46.598	46.563	46.529	46.495	46.461	63							
37	46.461	46.428	46.394	46.360	46.326	46.292	46.259	46.225	46.192	46.158	46.125	62							
38	46.125	46.091	46.058	46.025	45.991	45.958	45.925	45.892	45.859	45.826	45.793	61							
39	45.793	45.760	45.727	45.694	45.661	45.629	45.596	45.563	45.531	45.498	45.466	60							
40	45.466	45.433	45.401	45.368	45.336	45.304	45.271	45.239	45.207	45.175	45.143	59							
41	45.143	45.111	45.079	45.047	45.015	44.983	44.952	44.920	44.888	44.857	44.825	58							
42	44.825	44.793	44.762	44.730	44.699	44.668	44.636	44.605	44.574	44.543	44.511	57							
43	44.511	44.480	44.449	44.418	44.387	44.356	44.325	44.294	44.264	44.233	44.202	56							
44	44.202	44.171	44.141	44.110	44.080	44.049	44.019	43.988	43.958	43.928	43.897	55							
45	43.897	43.867	43.837	43.807	43.776	43.746	43.716	43.686	43.656	43.626	43.596	54							
46	43.596	43.567	43.537	43.507	43.477	43.448	43.418	43.388	43.359	43.329	43.300	53							
47	43.300	43.270	43.241	43.212	43.182	43.153	43.124	43.094	43.065	43.036	43.007	52							
48	43.007	42.978	42.949	42.920	42.891	42.862	42.833	42.805	42.776	42.747	42.718	51							
49	42.718	42.690	42.661	42.632	42.604	42.575	42.547	42.519	42.490	42.462	42.433	50							
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c							
	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	64	
1	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.1	6.2	6.4	1
2	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0	11.2	11.4	11.6	11.8	12.0	12.2	12.4	12.8	2
3	13.8	14.1	14.4	14.7	15.0	15.3	15.6	15.9	16.2	16.5	16.8	17.1	17.4	17.7	18.0	18.3	18.6	19.2	3
4	18.4	18.8	19.2	19.6	20.0	20.4	20.8	21.2	21.6	22.0	22.4	22.8	23.2	23.6	24.0	24.4	24.8	25.6	4
5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	32.0	5
6	27.6	28.2	28.8	29.4	30.0	30.6	31.2	31.8	32.4	33.0	33.6	34.2	34.8	35.4	36.0	36.6	37.2	38.4	6
7	32.2	32.9	33.6	34.3	35.0	35.7	36.4	37.1	37.8	38.5	39.2	39.9	40.6	41.3	42.0	42.7	43.4	44.8	7
8	36.8	37.6	38.4	39.2	40.0	40.8	41.6	42.4	43.2	44.0	44.8	45.6	46.4	47.2	48.0	48.8	49.6	51.2	8
9	41.4	42.3	43.2	44.1	45.0	45.9	46.8	47.7	48.6	49.5	50.4	51.3	52.2	53.1	54.0	54.9	55.8	57.6	9

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Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cosec 1 ^g																
c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}					
50	42.445	42.417	42.389	42.361	42.332	42.304	42.276	42.248	42.220	42.192	42.164	49				
51	42.164	42.136	42.108	42.081	42.053	42.025	41.997	41.970	41.942	41.914	41.887	48				
52	41.887	41.859	41.832	41.804	41.777	41.750	41.722	41.695	41.668	41.640	41.613	47				
53	41.613	41.586	41.559	41.532	41.505	41.478	41.451	41.424	41.397	41.370	41.343	46				
54	41.343	41.316	41.289	41.263	41.236	41.209	41.183	41.156	41.129	41.103	41.076	45				
55	41.076	41.050	41.023	40.997	40.971	40.944	40.918	40.892	40.865	40.839	40.813	44				
56	40.813	40.787	40.761	40.735	40.709	40.683	40.657	40.631	40.605	40.579	40.553	43				
57	40.553	40.527	40.502	40.476	40.450	40.424	40.399	40.373	40.348	40.322	40.297	42				
58	40.297	40.271	40.246	40.220	40.195	40.169	40.144	40.119	40.094	40.068	40.043	41				
59	40.043	40.018	39.993	39.968	39.943	39.918	39.893	39.868	39.843	39.818	39.793	40				
60	39.793	39.768	39.743	39.718	39.694	39.669	39.644	39.620	39.595	39.570	39.546	39				
61	39.546	39.521	39.497	39.472	39.448	39.423	39.399	39.375	39.350	39.326	39.302	38				
62	39.302	39.278	39.253	39.229	39.205	39.181	39.157	39.133	39.109	39.085	39.061	37				
63	39.061	39.037	39.013	38.989	38.965	38.941	38.917	38.894	38.870	38.846	38.823	36				
64	38.823	38.799	38.775	38.752	38.728	38.705	38.681	38.658	38.634	38.611	38.587	35				
65	38.587	38.564	38.541	38.517	38.494	38.471	38.448	38.424	38.401	38.378	38.355	34				
66	38.355	38.332	38.309	38.286	38.263	38.240	38.217	38.194	38.171	38.148	38.125	33				
67	38.125	38.103	38.080	38.057	38.034	38.012	37.989	37.966	37.944	37.921	37.898	32				
68	37.898	37.876	37.853	37.831	37.808	37.786	37.764	37.741	37.719	37.697	37.674	31				
69	37.674	37.652	37.630	37.607	37.585	37.563	37.541	37.519	37.497	37.475	37.453	30				
70	37.453	37.431	37.409	37.387	37.365	37.343	37.321	37.299	37.277	37.255	37.234	29				
71	37.234	37.212	37.190	37.169	37.147	37.125	37.104	37.082	37.060	37.039	37.017	28				
72	37.017	36.996	36.974	36.953	36.931	36.910	36.889	36.867	36.846	36.825	36.803	27				
73	36.803	36.782	36.761	36.740	36.718	36.697	36.676	36.655	36.634	36.613	36.592	26				
74	36.592	36.571	36.550	36.529	36.508	36.487	36.466	36.445	36.424	36.404	36.383	25				
75	36.383	36.362	36.341	36.321	36.300	36.279	36.259	36.238	36.217	36.197	36.176	24				
76	36.176	36.156	36.135	36.115	36.094	36.074	36.053	36.033	36.013	35.992	35.972	23				
77	35.972	35.952	35.931	35.911	35.891	35.871	35.850	35.830	35.810	35.790	35.770	22				
78	35.770	35.750	35.730	35.710	35.690	35.670	35.650	35.630	35.610	35.590	35.570	21				
79	35.570	35.550	35.530	35.511	35.491	35.471	35.451	35.432	35.412	35.392	35.372	20				
80	35.372	35.353	35.333	35.314	35.294	35.275	35.255	35.235	35.216	35.197	35.177	19				
81	35.177	35.158	35.138	35.119	35.100	35.080	35.061	35.042	35.022	35.003	34.984	18				
82	34.984	34.965	34.945	34.926	34.907	34.888	34.869	34.850	34.831	34.812	34.793	17				
83	34.793	34.774	34.755	34.736	34.717	34.698	34.679	34.660	34.641	34.623	34.604	16				
84	34.604	34.585	34.566	34.547	34.529	34.510	34.491	34.473	34.454	34.435	34.417	15				
85	34.417	34.398	34.380	34.361	34.342	34.324	34.305	34.287	34.269	34.250	34.232	14				
86	34.232	34.213	34.195	34.177	34.158	34.140	34.122	34.103	34.085	34.067	34.049	13				
87	34.049	34.031	34.012	33.994	33.976	33.958	33.940	33.922	33.904	33.886	33.868	12				
88	33.868	33.850	33.832	33.814	33.796	33.778	33.760	33.742	33.724	33.706	33.689	11				
89	33.689	33.671	33.653	33.635	33.617	33.600	33.582	33.564	33.547	33.529	33.511	10				
90	33.511	33.494	33.476	33.458	33.441	33.423	33.406	33.388	33.371	33.353	33.336	09				
91	33.336	33.318	33.301	33.284	33.266	33.249	33.232	33.214	33.197	33.180	33.162	08				
92	33.162	33.145	33.128	33.111	33.093	33.076	33.059	33.042	33.025	33.008	32.991	07				
93	32.991	32.973	32.956	32.939	32.922	32.905	32.888	32.871	32.854	32.837	32.821	06				
94	32.821	32.804	32.787	32.770	32.753	32.736	32.719	32.703	32.686	32.669	32.652	05				
95	32.652	32.636	32.619	32.602	32.585	32.569	32.552	32.536	32.519	32.502	32.486	04				
96	32.486	32.469	32.453	32.436	32.420	32.403	32.387	32.370	32.354	32.337	32.321	03				
97	32.321	32.304	32.288	32.272	32.255	32.239	32.223	32.206	32.190	32.174	32.158	02				
98	32.158	32.141	32.125	32.109	32.093	32.077	32.061	32.044	32.028	32.012	31.996	01				
99	31.996	31.980	31.964	31.948	31.932	31.916	31.900	31.884	31.868	31.852	31.836	00				
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c				
		16	17	18	19	20	21	22	23	24	25	26	27	28	29	1
2		1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	1
3		3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8	2
4		4.8	5.1	5.4	5.7	6.0	6.3	6.6	6.9	7.2	7.5	7.8	8.1	8.4	8.7	3
5		6.4	6.8	7.2	7.6	8.0	8.4	8.8	9.2	9.6	10.0	10.4	10.8	11.2	11.6	4
6		8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	5
7		9.6	10.2	10.8	11.4	12.0	12.6	13.2	13.8	14.4	15.0	15.6	16.2	16.8	17.4	6
8		11.2	11.9	12.6	13.3	14.0	14.7	15.4	16.1	16.8	17.5	18.2	18.9	19.6	20.3	7
9		12.8	13.6	14.4	15.2	16.0	16.8	17.6	18.4	19.2	20.0	20.8	21.6	22.4	23.2	8
10		14.4	15.3	16.2	17.1	18.0	18.9	19.8	20.7	21.6	22.5	23.4	24.3	25.2	26.1	9

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cotg 1 ^g																
c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}					
50	42.433	42.405	42.377	42.349	42.321	42.292	42.264	42.236	42.208	42.180	42.152	49				
51	42.152	42.124	42.097	42.069	42.041	42.013	41.985	41.958	41.930	41.902	41.875	48				
52	41.875	41.847	41.820	41.792	41.765	41.738	41.710	41.683	41.656	41.628	41.601	47				
53	41.601	41.574	41.547	41.520	41.493	41.466	41.439	41.412	41.385	41.358	41.331	46				
54	41.331	41.304	41.277	41.250	41.224	41.197	41.170	41.144	41.117	41.091	41.064	45				
55	41.064	41.038	41.011	40.985	40.958	40.932	40.906	40.879	40.853	40.827	40.801	44				
56	40.801	40.775	40.749	40.722	40.696	40.670	40.644	40.618	40.593	40.567	40.541	43				
57	40.541	40.515	40.489	40.463	40.438	40.412	40.386	40.361	40.335	40.310	40.284	42				
58	40.284	40.259	40.233	40.208	40.182	40.157	40.132	40.106	40.081	40.056	40.031	41				
59	40.031	40.005	39.980	39.955	39.930	39.905	39.880	39.855	39.830	39.805	39.780	40				
60	39.780	39.756	39.731	39.706	39.681	39.656	39.632	39.607	39.582	39.558	39.533	39				
61	39.533	39.509	39.484	39.460	39.435	39.411	39.386	39.362	39.338	39.313	39.289	38				
62	39.289	39.265	39.241	39.216	39.192	39.168	39.144	39.120	39.096	39.072	39.048	37				
63	39.048	39.024	39.000	38.976	38.952	38.928	38.905	38.881	38.857	38.833	38.810	36				
64	38.810	38.786	38.762	38.739	38.715	38.692	38.668	38.645	38.621	38.598	38.574	35				
65	38.574	38.551	38.528	38.504	38.481	38.458	38.435	38.411	38.388	38.365	38.342	34				
66	38.342	38.319	38.296	38.273	38.250	38.227	38.204	38.181	38.158	38.135	38.112	33				
67	38.112	38.089	38.067	38.044	38.021	37.998	37.976	37.953	37.930	37.908	37.885	32				
68	37.885	37.863	37.840	37.818	37.795	37.773	37.750	37.728	37.706	37.683	37.661	31				
69	37.661	37.639	37.616	37.594	37.572	37.550	37.528	37.506	37.483	37.461	37.439	30				
70	37.439	37.417	37.395	37.373	37.351	37.329	37.308	37.286	37.264	37.242	37.220	29				
71	37.220	37.199	37.177	37.155	37.133	37.112	37.090	37.068	37.047	37.025	37.004	28				
72	37.004	36.982	36.961	36.939	36.918	36.896	36.875	36.854	36.832	36.811	36.790	27				
73	36.790	36.769	36.747	36.726	36.705	36.684	36.663	36.641	36.620	36.599	36.578	26				
74	36.578	36.557	36.536	36.515	36.494	36.473	36.452	36.432	36.411	36.390	36.369	25				
75	36.369	36.348	36.328	36.307	36.286	36.265	36.245	36.224	36.204	36.183	36.162	24				
76	36.162	36.142	36.121	36.101	36.080	36.060	36.039	36.019	35.999	35.978	35.958	23				
77	35.958	35.938	35.917	35.897	35.877	35.857	35.836	35.816	35.796	35.776	35.756	22				
78	35.756	35.736	35.716	35.696	35.676	35.656	35.636	35.616	35.596	35.576	35.556	21				
79	35.556	35.536	35.516	35.496	35.477	35.457	35.437	35.417	35.398	35.378	35.358	20				
80	35.358	35.339	35.319	35.299	35.280	35.260	35.241	35.221	35.202	35.182	35.163	19				
81	35.163	35.143	35.124	35.105	35.085	35.066	35.047	35.027	35.008	34.989	34.970	18				
82	34.970	34.950	34.931	34.912	34.893	34.874	34.855	34.836	34.816	34.797	34.778	17				
83	34.778	34.759	34.740	34.721	34.702	34.684	34.665	34.646	34.627	34.608	34.589	16				
84	34.589	34.570	34.552	34.533	34.514	34.495	34.477	34.458	34.439	34.421	34.402	15				
85	34.402	34.384	34.365	34.346	34.328	34.309	34.291	34.272	34.254	34.236	34.217	14				
86	34.217	34.199	34.180	34.162	34.144	34.125	34.107	34.089	34.071	34.052	34.034	13				
87	34.034	34.016	33.998	33.980	33.961	33.943	33.925	33.907	33.889	33.871	33.853	12				
88	33.853	33.835	33.817	33.799	33.781	33.763	33.745	33.727	33.709	33.692	33.674	11				
89	33.674	33.656	33.638	33.620	33.603	33.585	33.567	33.549	33.532	33.514	33.496	10				
90	33.496	33.479	33.461	33.444	33.426	33.408	33.391	33.373	33.356	33.338	33.321	09				
91	33.321	33.303	33.286	33.269	33.251	33.234	33.216	33.199	33.182	33.165	33.147	08				
92	33.147	33.130	33.113	33.095	33.078	33.061	33.044	33.027	33.010	32.992	32.975	07				
93	32.975	32.958	32.941	32.924	32.907	32.890	32.873	32.856	32.839	32.822	32.805	06				
94	32.805	32.788	32.771	32.755	32.738	32.721	32.704	32.687	32.670	32.654	32.637	05				
95	32.637	32.620	32.603	32.587	32.570	32.553	32.537	32.520	32.504	32.487	32.470	04				
96	32.470	32.454	32.437	32.421	32.404	32.388	32.371	32.355	32.338	32.322	32.305	03				
97	32.305	32.289	32.273	32.256	32.240	32.224	32.207	32.191	32.175	32.158	32.142	02				
98	32.142	32.126	32.110	32.093	32.077	32.061	32.045	32.029	32.013	31.997	31.981	01				
99	31.981	31.964	31.948	31.932	31.916	31.900	31.884	31.868	31.852	31.836	31.821	00				
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c				
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
1	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	1
2	3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8	2
3	4.5	4.8	5.1	5.4	5.7	6.0	6.3	6.6	6.9	7.2	7.5	7.8	8.1	8.4	8.7	3
4	6.0	6.4	6.8	7.2	7.6	8.0	8.4	8.8	9.2	9.6	10.0	10.4	10.8	11.2	11.6	4
5	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	5
6	9.0	9.6	10.2	10.8	11.4	12.0	12.6	13.2	13.8	14.4	15.0	15.6	16.2	16.8	17.4	6
7	10.5	11.2	11.9	12.6	13.3	14.0	14.7	15.4	16.1	16.8	17.5	18.2	18.9	19.6	20.3	7
8	12.0	12.8	13.6	14.4	15.2	16.0	16.8	17.6	18.4	19.2	20.0	20.8	21.6	22.4	23.2	8
9	13.5	14.4	15.3	16.2	17.1	18.0	18.9	19.8	20.7	21.6	22.5	23.4	24.3	25.2	26.1	9

tang 98^g

cos ec 2^g

c	00 ^{cc}		10 ^{cc}		20 ^{cc}		30 ^{cc}		40 ^{cc}		50 ^{cc}		60 ^{cc}		70 ^{cc}		80 ^{cc}		90 ^{cc}		100 ^{cc}		
00	31.	8362	8203	8044	7886	7727	7569	7410	7252	7094	6937	6779	99										
01		6779	6621	6464	6307	6150	5993	5836	5680	5523	5367	5211	98										
02		5211	5055	4900	4744	4588	4433	4278	4123	3968	3813	3659	97										
03		3659	3505	3350	3196	3042	2889	2735	2581	2428	2275	2122	96										
04		2122	1969	1816	1664	1511	1359	1207	1055	0903	0751	0600	95										
05	31.	0600	0449	0297	0146	*9995	*9844	*9694	*9543	*9393	*9243	*9093	94										
06	30.	9093	8943	8793	8643	8494	8345	8195	8046	7897	7749	7600	93										
07		7600	7452	7303	7155	7007	6859	6711	6564	6416	6269	6122	92										
08		6122	5975	5828	5681	5534	5388	5241	5095	4949	4803	4657	91										
09		4657	4512	4366	4221	4076	3931	3786	3641	3496	3352	3207	90										
10	30.	3207	3063	2919	2775	2631	2487	2344	2200	2057	1914	1771	89										
11		1771	1628	1485	1342	1200	1058	0915	0773	0631	0490	0348	88										
12	30.	0348	0206	0065	*9924	*9782	*9641	*9501	*9360	*9219	*9079	*8938	87										
13	29.	8938	8798	8658	8518	8378	8238	8099	7959	7820	7681	7542	86										
14		7542	7403	7264	7126	6987	6849	6710	6572	6434	6296	6159	85										
15	29.	6159	6021	5883	5746	5609	5472	5335	5198	5061	4924	4788	84										
16		4788	4652	4515	4379	4243	4107	3972	3836	3701	3565	3430	83										
17		3430	3295	3160	3025	2890	2756	2621	2487	2353	2218	2084	82										
18		2084	1951	1817	1683	1550	1416	1283	1150	1017	0884	0751	81										
19	29.	0751	0619	0486	0354	0221	0089	*9957	*9825	*9693	*9562	*9430	80										
20	28.	9430	9299	9167	9036	8905	8774	8643	8513	8382	8251	8121	79										
21		8121	7991	7861	7731	7601	7471	7341	7212	7082	6953	6824	78										
22		6824	6695	6566	6437	6308	6180	6051	5923	5794	5666	5538	77										
23		5538	5410	5282	5155	5027	4900	4772	4645	4518	4391	4264	76										
24		4264	4137	4010	3884	3757	3631	3505	3379	3253	3127	3001	75										
25	28.	3001	2875	2750	2624	2499	2374	2249	2124	1999	1874	1749	74										
26		1749	1625	1500	1376	1252	1128	1004	0880	0756	0632	0509	73										
27	28.	0509	0385	0262	0139	0015	*9892	*9770	*9647	*9524	*9401	*9279	72										
28	27.	9279	9157	9034	8912	8790	8668	8546	8424	8303	8181	8060	71										
29		8060	7939	7817	7696	7575	7454	7334	7213	7092	6972	6851	70										
30	27.	6851	6731	6611	6491	6371	6251	6131	6012	5892	5773	5653	69										
31		5653	5534	5415	5296	5177	5058	4940	4821	4703	4584	4466	68										
32		4466	4348	4230	4112	3994	3876	3758	3641	3523	3406	3288	67										
33		3288	3171	3054	2937	2820	2703	2587	2470	2354	2237	2121	66										
34		2121	2005	1889	1773	1657	1541	1425	1310	1194	1079	0964	65										
35	27.	0964	0848	0733	0618	0503	0389	0274	0159	0045	*9930	*9816	64										
36	26.	9816	9702	9588	9474	9360	9246	9132	9018	8905	8791	8678	63										
37		8678	8565	8452	8338	8226	8113	8000	7887	7775	7662	7550	62										
38		7550	7437	7325	7213	7101	6989	6877	6765	6654	6542	6431	61										
39		6431	6319	6208	6097	5986	5875	5764	5653	5542	5432	5321	60										
40	26.	5321	5211	5100	4990	4880	4770	4660	4550	4440	4330	4221	59										
41		4221	4111	4002	3892	3783	3674	3565	3456	3347	3238	3129	58										
42		3129	3021	2912	2804	2695	2587	2479	2371	2263	2155	2047	57										
43		2047	1939	1832	1724	1617	1509	1402	1295	1188	1081	0974	56										
44	26.	0974	0867	0760	0653	0547	0440	0334	0227	0121	0015	*9909	55										
45	25.	9909	9803	9697	9591	9486	9380	9274	9169	9063	8958	8853	54										
46		8853	8748	8643	8538	8433	8328	8223	8119	8014	7910	7805	53										
47		7805	7701	7597	7493	7389	7285	7181	7077	6974	6870	6766	52										
48		6766	6663	6560	6456	6353	6250	6147	6044	5941	5838	5736	51										
49		5736	5633	5531	5428	5326	5224	5121	5019	4917	4815	4713	50										
	100 ^{cc}		90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c										
	102	103	104	105	106	107	108	109	110	111	112	113	114	115	117	119	121	123					
1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.7	11.9	12.1	12.3	1				
2	20.4	20.6	20.8	21.0	21.2	21.4	21.6	21.8	22.0	22.2	22.4	22.6	22.8	23.0	23.4	23.8	24.2	24.6	2				
3	30.6	30.9	31.2	31.5	31.8	32.1	32.4	32.7	33.0	33.3	33.6	33.9	34.2	34.5	35.1	35.7	36.3	36.9	3				
4	40.8	41.2	41.6	42.0	42.4	42.8	43.2	43.6	44.0	44.4	44.8	45.2	45.6	46.0	46.8	47.6	48.4	49.2	4				
5	51.0	51.5	52.0	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.0	56.5	57.0	57.5	58.5	59.5	60.5	61.5	5				
6	61.2	61.8	62.4	63.0	63.6	64.2	64.8	65.4	66.0	66.6	67.2	67.8	68.4	69.0	70.2	71.4	72.6	73.8	6				
7	71.4	72.1	72.8	73.5	74.2	74.9	75.6	76.3	77.0	77.7	78.4	79.1	79.8	80.5	81.9	83.3	84.7	86.1	7				
8	81.6	82.4	83.2	84.0	84.8	85.6	86.4	87.2	88.0	88.8	89.6	90.4	91.2	92.0	93.6	95.2	96.8	98.4	8				
9	91.8	92.7	93.6	94.5	95.4	96.3	97.2	98.1	99.0	99.9	100.8	101.7	102.6	103.5	105.3	107.1	108.9	110.7	9				

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cotg 2 ^g																								
c	00 ^{cc}		10 ^{cc}		20 ^{cc}		30 ^{cc}		40 ^{cc}		50 ^{cc}		60 ^{cc}		70 ^{cc}		80 ^{cc}		90 ^{cc}		100 ^{cc}			
00	31.	8205	8046	7887	7728	7570	7411	7253	7095	6937	6779	6621											99	
01		6621	6463	6306	6149	5992	5835	5678	5521	5365	5209	5053											98	
02		5053	4897	4741	4585	4429	4274	4119	3964	3809	3654	3500											97	
03		3500	3345	3191	3037	2883	2729	2575	2421	2268	2115	1962											96	
04		1962	1809	1656	1503	1351	1198	1046	0894	0742	0590	0439											95	
05	31.	0439	0287	0136	*9985	*9834	*9683	*9532	*9382	*9231	*9081	*8931											94	
06	30.	8931	8781	8631	8481	8332	8182	8033	7884	7735	7586	7437											93	
07		7437	7289	7140	6992	6844	6696	6548	6401	6253	6106	5958											92	
08		5958	5811	5664	5517	5371	5224	5078	4931	4785	4639	4493											91	
09		4493	4348	4202	4057	3911	3766	3621	3476	3331	3187	3042											90	
10	30.	3042	2898	2754	2610	2466	2322	2178	2035	1891	1748	1605											89	
11		1605	1462	1319	1177	1034	0892	0749	0607	0465	0323	0181											88	
12	30.	0181	0040	*9898	*9757	*9616	*9475	*9334	*9193	*9052	*8911	*8771											87	
13	29.	8771	8631	8491	8350	8211	8071	7931	7792	7652	7513	7374											86	
14		7374	7235	7096	6957	6819	6680	6542	6404	6265	6127	5990											85	
15	29.	5990	5852	5714	5577	5440	5302	5165	5028	4892	4755	4618											84	
16		4618	4482	4346	4209	4073	3937	3802	3666	3530	3395	3260											83	
17		3260	3124	2989	2854	2720	2585	2450	2316	2182	2047	1913											82	
18		1913	1779	1645	1512	1378	1245	1111	0978	0845	0712	0579											81	
19	29.	0579	0447	0314	0181	0049	*9917	*9785	*9653	*9521	*9389	*9257											80	
20	28.	9257	9126	8994	8863	8732	8601	8470	8339	8209	8078	7948											79	
21		7948	7817	7687	7557	7427	7297	7167	7038	6908	6779	6649											78	
22		6649	6520	6391	6262	6133	6005	5876	5748	5619	5491	5363											77	
23		5363	5235	5107	4979	4852	4724	4597	4469	4342	4215	4088											76	
24		4088	3961	3834	3708	3581	3455	3328	3202	3076	2950	2824											75	
25	28.	2824	2699	2573	2447	2322	2197	2071	1946	1821	1697	1572											74	
26		1572	1447	1323	1198	1074	0950	0826	0702	0578	0454	0330											73	
27	28.	0330	0207	0083	*9960	*9837	*9714	*9591	*9468	*9345	*9222	*9100											72	
28	27.	9100	8977	8855	8733	8611	8489	8367	8245	8123	8001	7880											71	
29		7880	7759	7637	7516	7395	7274	7153	7032	6912	6791	6671											70	
30	27.	6671	6550	6430	6310	6190	6070	5950	5831	5711	5591	5472											69	
31		5472	5353	5234	5114	4995	4877	4758	4639	4520	4402	4284											68	
32		4284	4165	4047	3929	3811	3693	3575	3458	3340	3223	3105											67	
33		3105	2988	2871	2754	2637	2520	2403	2287	2170	2054	1937											66	
34		1937	1821	1705	1589	1473	1357	1241	1125	1010	0894	0779											65	
35	27.	0779	0664	0549	0433	0318	0204	0089	*9974	*9859	*9745	*9631											64	
36	26.	9631	9516	9402	9288	9174	9060	8946	8832	8719	8605	8492											63	
37		8492	8378	8265	8152	8039	7926	7813	7700	7588	7475	7363											62	
38		7363	7250	7138	7026	6914	6802	6690	6578	6466	6355	6243											61	
39		6243	6131	6020	5909	5798	5687	5576	5465	5354	5243	5133											60	
40	26.	5133	5022	4912	4801	4691	4581	4471	4361	4251	4141	4031											59	
41		4031	3922	3812	3703	3593	3484	3375	3266	3157	3048	2939											58	
42		2939	2831	2722	2613	2505	2397	2288	2180	2072	1964	1856											57	
43		1856	1748	1641	1533	1425	1318	1211	1103	0996	0889	0782											56	
44	26.	0782	0675	0568	0461	0355	0248	0142	0035	*9929	*9823	*9717											55	
45	25.	9717	9610	9504	9399	9293	9187	9081	8976	8870	8765	8660											54	
46		8660	8554	8449	8344	8239	8135	8030	7925	7820	7716	7611											53	
47		7611	7507	7403	7299	7195	7091	6987	6883	6779	6675	6572											52	
48		6572	6468	6365	6261	6158	6055	5952	5849	5746	5643	5540											51	
49		5540	5438	5335	5232	5130	5028	4925	4823	4721	4619	4517											50	
		100 ^{cc}		90 ^{cc}		80 ^{cc}		70 ^{cc}		60 ^{cc}		50 ^{cc}		40 ^{cc}		30 ^{cc}		20 ^{cc}		10 ^{cc}		00 ^{cc}		c
		125	127	129	131	133	135	137	139	141	143	145	147	149	151	153	155	157	159					
1	12.5	12.7	12.9	13.1	13.3	13.5	13.7	13.9	14.1	14.3	14.5	14.7	14.9	15.1	15.3	15.5	15.7	15.9					1	
2	25.0	25.4	25.8	26.2	26.6	27.0	27.4	27.8	28.2	28.6	29.0	29.4	29.8	30.2	30.6	31.0	31.4	31.8					2	
3	37.5	38.1	38.7	39.3	39.9	40.5	41.1	41.7	42.3	42.9	43.5	44.1	44.7	45.3	45.9	46.5	47.1	47.7					3	
4	50.0	50.8	51.6	52.4	53.2	54.0	54.8	55.6	56.4	57.2	58.0	58.8	59.6	60.4	61.2	62.0	62.8	63.6					4	
5	62.5	63.5	64.5	65.5	66.5	67.5	68.5	69.5	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5					5	
6	75.0	76.2	77.4	78.6	79.8	81.0	82.2	83.4	84.6	85.8	87.0	88.2	89.4	90.6	91.8	93.0	94.2	95.4					6	
7	87.5	88.9	90.3	91.7	93.1	94.5	95.9	97.3	98.7	100.1	101.5	102.9	104.3	105.7	107.1	108.5	109.9	111.3					7	
8	100.0	101.6	103.2	104.8	106.4	108.0	109.6	111.2	112.8	114.4	116.0	117.6	119.2	120.8	122.4	124.0	125.6	127.2					8	
9	112.5	114.3	116.1	117.9	119.7	121.5	123.3	125.1	126.9	128.7	130.5	132.3	134.1	135.9	137.7	139.5	141.3	143.1					9	

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cos ec 2^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}							
50	25. 4713	4612	4510	4408	4307	4205	4104	4003	3901	3800	3699	49						
51	3699	3598	3497	3396	3296	3195	3094	2994	2893	2793	2693	48						
52	2693	2593	2493	2393	2293	2193	2093	1993	1894	1794	1695	47						
53	1695	1595	1496	1397	1298	1198	1099	1001	0902	0803	0704	46						
54	25. 0704	0606	0507	0409	0310	0212	0114	0016	*9917	*9820	*9722	45						
55	24. 9722	9624	9526	9428	9331	9233	9136	9038	8941	8844	8747	44						
56	8747	8650	8553	8456	8359	8262	8165	8069	7972	7876	7779	43						
57	7779	7683	7587	7491	7394	7298	7202	7107	7011	6915	6819	42						
58	6819	6724	6628	6533	6438	6342	6247	6152	6057	5962	5867	41						
59	5867	5772	5677	5583	5488	5393	5299	5205	5110	5016	4922	40						
60	24. 4922	4828	4734	4640	4546	4452	4358	4265	4171	4077	3984	39						
61	3984	3891	3797	3704	3611	3518	3425	3332	3239	3146	3053	38						
62	3053	2961	2868	2775	2683	2591	2498	2406	2314	2222	2130	37						
63	2130	2038	1946	1854	1762	1670	1579	1487	1396	1304	1213	36						
64	1213	1122	1030	0939	0848	0757	0666	0575	0485	0394	0303	35						
65	24. 0303	0213	0122	0032	*9941	*9851	*9761	*9671	*9580	*9490	*9400	34						
66	23. 9400	9310	9221	9131	9041	8951	8862	8772	8683	8594	8504	33						
67	8504	8415	8326	8237	8148	8059	7970	7881	7792	7704	7615	32						
68	7615	7526	7438	7349	7261	7173	7084	6996	6908	6820	6732	31						
69	6732	6644	6556	6469	6381	6293	6206	6118	6031	5943	5856	30						
70	23. 5856	5769	5681	5594	5507	5420	5333	5246	5159	5073	4986	29						
71	4986	4899	4813	4726	4640	4554	4467	4381	4295	4209	4123	28						
72	4123	4037	3951	3865	3779	3693	3608	3522	3436	3351	3266	27						
73	3266	3180	3095	3010	2924	2839	2754	2669	2584	2500	2415	26						
74	2415	2330	2245	2161	2076	1992	1907	1823	1739	1654	1570	25						
75	23. 1570	1486	1402	1318	1234	1150	1066	0983	0899	0815	0732	24						
76	23. 0732	0648	0565	0481	0398	0315	0231	0148	0065	*9982	*9899	23						
77	22. 9899	9816	9733	9651	9568	9485	9403	9320	9238	9155	9073	22						
78	9073	8990	8908	8826	8744	8662	8580	8498	8416	8334	8252	21						
79	8252	8170	8089	8007	7926	7844	7763	7681	7600	7519	7438	20						
80	22. 7438	7356	7275	7194	7113	7032	6952	6871	6790	6709	6629	19						
81	6629	6548	6468	6387	6307	6226	6146	6066	5986	5906	5826	18						
82	5826	5746	5666	5586	5506	5426	5346	5267	5187	5108	5028	17						
83	5028	4949	4869	4790	4711	4631	4552	4473	4394	4315	4236	16						
84	4236	4157	4079	4000	3921	3842	3764	3685	3607	3528	3450	15						
85	22. 3450	3372	3293	3215	3137	3059	2981	2903	2825	2747	2669	14						
86	2669	2591	2514	2436	2358	2281	2203	2126	2049	1971	1894	13						
87	1894	1817	1739	1662	1585	1508	1431	1354	1278	1201	1124	12						
88	1124	1047	0971	0894	0817	0741	0665	0588	0512	0436	0359	11						
89	22. 0359	0283	0207	0131	0055	*9979	*9903	*9827	*9751	*9676	*9600	10						
90	21. 9600	9524	9449	9373	9298	9222	9147	9072	8996	8921	8846	09						
91	8846	8771	8696	8621	8546	8471	8396	8321	8246	8172	8097	08						
92	8097	8022	7948	7873	7799	7724	7650	7576	7501	7427	7353	07						
93	7353	7279	7205	7131	7057	6983	6909	6835	6762	6688	6614	06						
94	6614	6541	6467	6394	6320	6247	6173	6100	6027	5954	5881	05						
95	21. 5881	5807	5734	5661	5588	5516	5443	5370	5297	5224	5152	04						
96	5152	5079	5007	4934	4862	4789	4717	4645	4572	4500	4428	03						
97	4428	4356	4284	4212	4140	4068	3996	3924	3852	3781	3709	02						
98	3709	3637	3566	3494	3423	3351	3280	3208	3137	3066	2995	01						
99	2995	2923	2852	2781	2710	2639	2568	2497	2427	2356	2285	00						
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c						
	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	
1	7.0	7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	1
2	14.0	14.2	14.4	14.6	14.8	15.0	15.2	15.4	15.6	15.8	16.0	16.2	16.4	16.6	16.8	17.0	17.2	2
3	21.0	21.3	21.6	21.9	22.2	22.5	22.8	23.1	23.4	23.7	24.0	24.3	24.6	24.9	25.2	25.5	25.8	3
4	28.0	28.4	28.8	29.2	29.6	30.0	30.4	30.8	31.2	31.6	32.0	32.4	32.8	33.2	33.6	34.0	34.4	4
5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	5
6	42.0	42.6	43.2	43.8	44.4	45.0	45.6	46.2	46.8	47.4	48.0	48.6	49.2	49.8	50.4	51.0	51.6	6
7	49.0	49.7	50.4	51.1	51.8	52.5	53.2	53.9	54.6	55.3	56.0	56.7	57.4	58.1	58.8	59.5	60.2	7
8	56.0	56.8	57.6	58.4	59.2	60.0	60.8	61.6	62.4	63.2	64.0	64.8	65.6	66.4	67.2	68.0	68.8	8
9	63.0	63.9	64.8	65.7	66.6	67.5	68.4	69.3	70.2	71.1	72.0	72.9	73.8	74.7	75.6	76.5	77.4	9

sec 97^g

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cotg 2 ^g																																																				
c	00 ^{cc}		10 ^{cc}		20 ^{cc}		30 ^{cc}		40 ^{cc}		50 ^{cc}		60 ^{cc}		70 ^{cc}		80 ^{cc}		90 ^{cc}		100 ^{cc}																															
50	25.	4517	4415	4313	4212	4110	4008	3907	3806	3704	3603	3502	49																																							
51		3502	3401	3300	3199	3098	2997	2897	2796	2696	2595	2495											48																													
52		2495	2395	2294	2194	2094	1994	1895	1795	1695	1595	1496																					47																			
53		1496	1396	1297	1198	1098	0999	0900	0801	0702	0603	0505																															46									
54	25.	0505	0406	0307	0209	0110	0012	*9914	*9815	*9717	*9619	*9521																																								
55	24.	9521	9423	9326	9228	9130	9032	8935	8837	8740	8643	8546	44																																							
56		8546	8448	8351	8254	8157	8061	7964	7867	7770	7674	7577											43																													
57		7577	7481	7385	7288	7192	7096	7000	6904	6808	6712	6617																					42																			
58		6617	6521	6426	6330	6235	6139	6044	5949	5854	5759	5664																															41									
59		5664	5569	5474	5379	5284	5190	5095	5001	4906	4812	4718																																								
60	24.	4718	4623	4529	4435	4341	4247	4154	4060	3966	3872	3779	39																																							
61		3779	3685	3592	3499	3405	3312	3219	3126	3033	2940	2847											38																													
62		2847	2755	2662	2569	2477	2384	2292	2200	2107	2015	1923																					37																			
63		1923	1831	1739	1647	1555	1463	1372	1280	1189	1097	1006																															36									
64		1006	0914	0823	0732	0641	0549	0458	0368	0277	0186	0095																																								
65	24.	0095	0004	*9914	*9823	*9733	*9642	*9552	*9462	*9372	*9282	*9191	34																																							
66	23.	9191	9101	9012	8922	8832	8742	8653	8563	8473	8384	8295											33																													
67		8295	8205	8116	8027	7938	7849	7760	7671	7582	7493	7404																					32																			
68		7404	7316	7227	7139	7050	6962	6873	6785	6697	6609	6521																															31									
69		6521	6433	6345	6257	6169	6081	5994	5906	5819	5731	5644																																								
70	23.	5644	5556	5469	5382	5295	5208	5121	5034	4947	4860	4773	29																																							
71		4773	4686	4600	4513	4427	4340	4254	4168	4081	3995	3909											28																													
72		3909	3823	3737	3651	3565	3479	3393	3308	3222	3137	3051																					27																			
73		3051	2966	2880	2795	2710	2625	2539	2454	2369	2284	2199																															26									
74		2199	2115	2030	1945	1861	1776	1692	1607	1523	1438	1354																																								
75	23.	1354	1270	1186	1102	1018	0934	0850	0766	0682	0598	0515	24																																							
76	23.	0515	0431	0348	0264	0181	0097	0014	*9931	*9848	*9765	*9682											23																													
77	22.	9682	9599	9516	9433	9350	9267	9185	9102	9019	8937	8854																					22																			
78		8854	8772	8690	8607	8525	8443	8361	8279	8197	8115	8033																															21									
79		8033	7951	7869	7788	7706	7625	7543	7462	7380	7299	7218																																								
80	22.	7218	7136	7055	6974	6893	6812	6731	6650	6569	6489	6408	19																																							
81		6408	6327	6247	6166	6086	6005	5925	5845	5764	5684	5604											18																													
82		5604	5524	5444	5364	5284	5204	5124	5045	4965	4885	4806																					17																			
83		4806	4726	4647	4567	4488	4409	4330	4250	4171	4092	4013																															16									
84		4013	3934	3855	3776	3698	3619	3540	3462	3383	3305	3226																																								
85	22.	3226	3148	3069	2991	2913	2835	2757	2678	2600	2522	2445	14																																							
86		2445	2367	2289	2211	2133	2056	1978	1901	1823	1746	1668											13																													
87		1668	1591	1514	1437	1360	1282	1205	1128	1051	0975	0898																					12																			
88		0898	0821	0744	0668	0591	0514	0438	0361	0285	0209	0132																															11									
89	22.	0132	0056	*9980	*9904	*9828	*9752	*9676	*9600	*9524	*9448	*9372																																								
90	21.	9372	9296	9221	9145	9070	8994	8919	8843	8768	8693	8617	09																																							
91		8617	8542	8467	8392	8317	8242	8167	8092	8017	7942	7868											08																													
92		7868	7793	7718	7644	7569	7495	7420	7346	7271	7197	7123																					07																			
93		7123	7049	6975	6901	6827	6753	6679	6605	6531	6457	6383																															06									
94		6383	6310	6236	6162	6089	6015	5942	5869	5795	5722	5649																																								
95	21.	5649	5576	5503	5429	5356	5283	5210	5138	5065	4992	4919	04																																							
96		4919	4847	4774	4701	4629	4556	4484	4411	4339	4267	4195											03																													
97		4195	4122	4050	3978	3906	3834	3762	3690	3618	3547	3475																					02																			
98		3475	3403	3331	3260	3188	3117	3045	2974	2902	2831	2760																															01									
99		2760	2688	2617	2546	2475	2404	2333	2262	2191	2120	2049																																								
	100 ^{cc}		90 ^{cc}		80 ^{cc}		70 ^{cc}		60 ^{cc}		50 ^{cc}		40 ^{cc}		30 ^{cc}		20 ^{cc}		10 ^{cc}		00 ^{cc}		c																													
		87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102																																			
1		8.7	8.8	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2						10.1	2																												
2		17.4	17.6	17.8	18.0	18.2	18.4	18.6	18.8	19.0	19.2	19.4	19.6	19.8	20.0	20.2	20.4						20.2			2																										
3		26.1	26.4	26.7	27.0	27.3	27.6	27.9	28.2	28.5	28.8	29.1	29.4	29.7	30.0	30.3	30.6						30.6					3																								
4		34.8	35.2	35.6	36.0	36.4	36.8	37.2	37.6	38.0	38.4	38.8	39.2	39.6	40.0	40.4	40.8						40.8							4																						
5		43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	50.5	51.0						51.0									5																				
6		52.2	52.8	53.4	54.0	54.6	55.2	55.8	56.4	57.0	57.6	58.2	58.8	59.4	60.0	60.6	61.2						61.2											6																		
7		60.9	61.6	62.3	63.0	63.7	64.4	65.1	65.8	66.5	67.2	67.9	68.6	69.3	70.0	70.7	71.4						71.4													7																
8		69.6	70.4	71.2	72.0	72.8	73.6	74.4	75.2	76.0	76.8	77.6	78.4	79.2	80.0	80.8	81.6						81.6															8														
9		78.3	79.2	80.1	81.0	81.9	82.8	83.7	84.6	85.5	86.4	87.3	88.2	89.1	90.0	90.9	91.8	91.8	9																																	

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c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}		
00	21. 2285	2214	2144	2073	2003	1932	1862	1791	1721	1651	1580	99	
01	1580	1510	1440	1370	1300	1230	1160	1090	1020	0950	0880	98	
02	0880	0811	0741	0671	0602	0532	0463	0393	0324	0254	0185	97	
03	21. 0185	0116	0046	*9977	*9908	*9839	*9770	*9701	*9632	*9563	*9494	96	
04	20. 9494	9425	9356	9288	9219	9150	9082	9013	8945	8876	8808	95	
05	20. 8808	8739	8671	8603	8534	8466	8398	8330	8262	8194	8126	94	
06	8126	8058	7990	7922	7854	7787	7719	7651	7584	7516	7448	93	
07	7448	7381	7313	7246	7179	7111	7044	6977	6910	6842	6775	92	
08	6775	6708	6641	6574	6507	6441	6374	6307	6240	6173	6107	91	
09	6107	6040	5974	5907	5840	5774	5708	5641	5575	5509	5442	90	
10	20. 5442	5376	5310	5244	5178	5112	5046	4980	4914	4848	4782	89	
11	4782	4717	4651	4585	4519	4454	4388	4323	4257	4192	4127	88	
12	4127	4061	3996	3931	3865	3800	3735	3670	3605	3540	3475	87	
13	3475	3410	3345	3280	3215	3151	3086	3021	2957	2892	2827	86	
14	2827	2763	2698	2634	2570	2505	2441	2377	2312	2248	2184	85	
15	20. 2184	2120	2056	1992	1928	1864	1800	1736	1672	1608	1545	84	
16	1545	1481	1417	1354	1290	1227	1163	1100	1036	0973	0909	83	
17	0909	0846	0783	0720	0656	0593	0530	0467	0404	0341	0278	82	
18	20. 0278	0215	0152	0090	0027	*9964	*9901	*9839	*9776	*9713	*9651	81	
19	19. 9651	9588	9526	9463	9401	9339	9276	9214	9152	9090	9027	80	
20	19. 9027	8965	8903	8841	8779	8717	8655	8593	8532	8470	8408	79	
21	8408	8346	8285	8223	8161	8100	8038	7977	7915	7854	7792	78	
22	7792	7731	7670	7608	7547	7486	7425	7364	7303	7242	7180	77	
23	7180	7120	7059	6998	6937	6876	6815	6754	6694	6633	6572	76	
24	6572	6512	6451	6391	6330	6270	6209	6149	6089	6028	5968	75	
25	19. 5968	5908	5848	5788	5727	5667	5607	5547	5487	5427	5368	74	
26	5368	5308	5248	5188	5128	5069	5009	4949	4890	4830	4771	73	
27	4771	4711	4652	4592	4533	4473	4414	4355	4296	4236	4177	72	
28	4177	4118	4059	4000	3941	3882	3823	3764	3705	3646	3588	71	
29	3588	3529	3470	3411	3353	3294	3236	3177	3118	3060	3002	70	
30	19. 3002	2943	2885	2826	2768	2710	2652	2593	2535	2477	2419	69	
31	2419	2361	2303	2245	2187	2129	2071	2013	1955	1898	1840	68	
32	1840	1782	1724	1667	1609	1552	1494	1437	1379	1322	1264	67	
33	1264	1207	1150	1092	1035	0978	0921	0863	0806	0749	0692	66	
34	0692	0635	0578	0521	0464	0407	0351	0294	0237	0180	0123	65	
35	19. 0123	0067	0010	*9954	*9897	*9840	*9784	*9727	*9671	*9615	*9558	64	
36	18. 9558	9502	9446	9389	9333	9277	9221	9164	9108	9052	8996	63	
37	8996	8940	8884	8828	8772	8716	8661	8605	8549	8493	8438	62	
38	8438	8382	8326	8271	8215	8159	8104	8048	7993	7938	7882	61	
39	7882	7827	7772	7716	7661	7606	7551	7495	7440	7385	7330	60	
40	18. 7330	7275	7220	7165	7110	7055	7000	6946	6891	6836	6781	59	
41	6781	6727	6672	6617	6563	6508	6454	6399	6345	6290	6236	58	
42	6236	6181	6127	6073	6018	5964	5910	5856	5801	5747	5693	57	
43	5693	5639	5585	5531	5477	5423	5369	5315	5262	5208	5154	56	
44	5154	5100	5046	4993	4939	4886	4832	4778	4725	4671	4618	55	
45	18. 4618	4564	4511	4458	4404	4351	4298	4244	4191	4138	4085	54	
46	4085	4032	3979	3925	3872	3819	3766	3713	3661	3608	3555	53	
47	3555	3502	3449	3396	3344	3291	3238	3186	3133	3080	3028	52	
48	3028	2975	2923	2870	2818	2766	2713	2661	2608	2556	2504	51	
49	2504	2452	2400	2347	2295	2243	2191	2139	2087	2035	1983	50	
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c	
			52	53	54	55	56	57	58	59	60	61	
1		5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.1	1	
2		10.4	10.6	10.8	11.0	11.2	11.4	11.6	11.8	12.0	12.2	2	
3		15.6	15.9	16.2	16.5	16.8	17.1	17.4	17.7	18.0	18.3	3	
4		20.8	21.2	21.6	22.0	22.4	22.8	23.2	23.6	24.0	24.4	4	
5		26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	5	
6		31.2	31.8	32.4	33.0	33.6	34.2	34.8	35.4	36.0	36.6	6	
7		36.4	37.1	37.8	38.5	39.2	39.9	40.6	41.3	42.0	42.7	7	
8		41.6	42.4	43.2	44.0	44.8	45.6	46.4	47.2	48.0	48.8	8	
9		46.8	47.7	48.6	49.5	50.4	51.3	52.2	53.1	54.0	54.9	9	

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cotg 3^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}		
00	21. 2049	1979	1908	1837	1767	1696	1626	1555	1485	1414	1344	99	
01	1344	1274	1203	1133	1063	0993	0923	0853	0783	0713	0643	98	
02	21. 0643	0573	0503	0434	0364	0294	0225	0155	0086	0016	*9947	97	
03	20. 9947	9877	9808	9739	9670	9600	9531	9462	9393	9324	9255	96	
04	9255	9186	9117	9049	8980	8911	8842	8774	8705	8637	8568	95	
05	20. 8568	8500	8431	8363	8294	8226	8158	8090	8022	7953	7885	94	
06	7885	7817	7749	7682	7614	7546	7478	7410	7343	7275	7207	93	
07	7207	7140	7072	7005	6937	6870	6802	6735	6668	6601	6533	92	
08	6533	6466	6399	6332	6265	6198	6131	6064	5998	5931	5864	91	
09	5864	5797	5731	5664	5597	5531	5464	5398	5332	5265	5199	90	
10	20. 5199	5133	5066	5000	4934	4868	4802	4736	4670	4604	4538	89	
11	4538	4472	4406	4341	4275	4209	4144	4078	4012	3947	3881	88	
12	3881	3816	3751	3685	3620	3555	3489	3424	3359	3294	3229	87	
13	3229	3164	3099	3034	2969	2904	2840	2775	2710	2645	2581	86	
14	2581	2516	2452	2387	2323	2258	2194	2129	2065	2001	1937	85	
15	20. 1937	1872	1808	1744	1680	1616	1552	1488	1424	1360	1296	84	
16	1296	1233	1169	1105	1042	0978	0914	0851	0787	0724	0660	83	
17	0660	0597	0534	0470	0407	0344	0281	0218	0154	0091	0028	82	
18	20. 0028	*9965	*9902	*9840	*9777	*9714	*9651	*9588	*9526	*9463	*9400	81	
19	19. 9400	9338	9275	9213	9150	9088	9025	8963	8901	8838	8776	80	
20	19. 8776	8714	8652	8590	8528	8465	8403	8341	8280	8218	8156	79	
21	8156	8094	8032	7970	7909	7847	7785	7724	7662	7601	7539	78	
22	7539	7478	7417	7355	7294	7233	7171	7110	7049	6988	6927	77	
23	6927	6866	6805	6744	6683	6622	6561	6500	6439	6379	6318	76	
24	6318	6257	6197	6136	6075	6015	5954	5894	5834	5773	5713	75	
25	19. 5713	5653	5592	5532	5472	5412	5352	5291	5231	5171	5111	74	
26	5111	5051	4992	4932	4872	4812	4752	4693	4633	4573	4514	73	
27	4514	4454	4395	4335	4276	4216	4157	4097	4038	3979	3920	72	
28	3920	3860	3801	3742	3683	3624	3565	3506	3447	3388	3329	71	
29	3329	3270	3211	3153	3094	3035	2977	2918	2859	2801	2742	70	
30	19. 2742	2684	2625	2567	2509	2450	2392	2334	2275	2217	2159	69	
31	2159	2101	2043	1985	1927	1869	1811	1753	1695	1637	1579	68	
32	1579	1521	1464	1406	1348	1290	1233	1175	1118	1060	1003	67	
33	1003	0945	0888	0830	0773	0716	0659	0601	0544	0487	0430	66	
34	19. 0430	0373	0316	0259	0202	0145	0088	0031	*9974	*9917	*9860	65	
35	18. 9860	9804	9747	9690	9633	9577	9520	9464	9407	9351	9294	64	
36	9294	9238	9181	9125	9069	9012	8956	8900	8844	8788	8731	63	
37	8731	8675	8619	8563	8507	8451	8395	8340	8284	8228	8172	62	
38	8172	8116	8061	8005	7949	7894	7838	7782	7727	7671	7616	61	
39	7616	7560	7505	7450	7394	7339	7284	7229	7173	7118	7063	60	
40	18. 7063	7008	6953	6898	6843	6788	6733	6678	6623	6568	6513	59	
41	6513	6459	6404	6349	6294	6240	6185	6131	6076	6022	5967	58	
42	5967	5913	5858	5804	5749	5695	5641	5586	5532	5478	5424	57	
43	5424	5370	5316	5261	5207	5153	5099	5045	4991	4938	4884	56	
44	4884	4830	4776	4722	4669	4615	4561	4508	4454	4400	4347	55	
45	18. 4347	4293	4240	4186	4133	4079	4026	3973	3919	3866	3813	54	
46	3813	3760	3707	3653	3600	3547	3494	3441	3388	3335	3282	53	
47	3282	3229	3176	3124	3071	3018	2965	2912	2860	2807	2754	52	
48	2754	2702	2649	2597	2544	2492	2439	2387	2334	2282	2230	51	
49	2230	2177	2125	2073	2021	1969	1916	1864	1812	1760	1708	50	
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c	
			62	63	64	65	66	67	68	69	70	71	
1			6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.1	1
2			12.4	12.6	12.8	13.0	13.2	13.4	13.6	13.8	14.0	14.2	2
3			18.6	18.9	19.2	19.5	19.8	20.1	20.4	20.7	21.0	21.3	3
4			24.8	25.2	25.6	26.0	26.4	26.8	27.2	27.6	28.0	28.4	4
5			31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	5
6			37.2	37.8	38.4	39.0	39.6	40.2	40.8	41.4	42.0	42.6	6
7			43.4	44.1	44.8	45.5	46.2	46.9	47.6	48.3	49.0	49.7	7
8			49.6	50.4	51.2	52.0	52.8	53.6	54.4	55.2	56.0	56.8	8
9			55.8	56.7	57.6	58.5	59.4	60.3	61.2	62.1	63.0	63.9	9

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Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cosec 3^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}					
50	18. 1983	1931	1879	1827	1775	1724	1672	1620	1568	1517	1465	49				
51	1465	1413	1362	1310	1259	1207	1156	1104	1053	1001	0950	48				
52	0950	0899	0847	0796	0745	0694	0642	0591	0540	0489	0438	47				
53	18. 0438	0387	0336	0285	0234	0183	0132	0081	0030	*9980	*9929	46				
54	17. 9929	9878	9827	9777	9726	9675	9625	9574	9524	9473	9422	45				
55	17. 9422	9372	9322	9271	9221	9170	9120	9070	9019	8969	8919	44				
56	8919	8869	8819	8769	8718	8668	8618	8568	8518	8468	8418	43				
57	8418	8368	8319	8269	8219	8169	8119	8070	8020	7970	7921	42				
58	7921	7871	7821	7772	7722	7673	7623	7574	7524	7475	7425	41				
59	7425	7376	7327	7277	7228	7179	7130	7081	7031	6982	6933	40				
60	17. 6933	6884	6835	6786	6737	6688	6639	6590	6541	6492	6444	39				
61	6444	6395	6346	6297	6248	6200	6151	6102	6054	6005	5957	38				
62	5957	5908	5860	5811	5763	5714	5666	5617	5569	5521	5472	37				
63	5472	5424	5376	5328	5279	5231	5183	5135	5087	5039	4991	36				
64	4991	4943	4895	4847	4799	4751	4703	4655	4608	4560	4512	35				
65	17. 4512	4464	4417	4369	4321	4274	4226	4178	4131	4083	4036	34				
66	4036	3988	3941	3893	3846	3799	3751	3704	3657	3609	3562	33				
67	3562	3515	3468	3420	3373	3326	3279	3232	3185	3138	3091	32				
68	3091	3044	2997	2950	2903	2856	2809	2763	2716	2669	2622	31				
69	2622	2576	2529	2482	2436	2389	2342	2296	2249	2203	2156	30				
70	17. 2156	2110	2063	2017	1971	1924	1878	1832	1785	1739	1693	29				
71	1693	1647	1600	1554	1508	1462	1416	1370	1324	1278	1232	28				
72	1232	1186	1140	1094	1048	1002	0956	0911	0865	0819	0773	27				
73	0773	0728	0682	0636	0591	0545	0499	0454	0408	0363	0317	26				
74	17. 0317	0272	0226	0181	0135	0090	0045	*9999	*9954	*9909	*9863	25				
75	16. 9863	9818	9773	9728	9683	9638	9592	9547	9502	9457	9412	24				
76	9412	9367	9322	9277	9232	9188	9143	9098	9053	9008	8963	23				
77	8963	8919	8874	8829	8785	8740	8695	8651	8606	8561	8517	22				
78	8517	8472	8428	8383	8339	8295	8250	8206	8161	8117	8073	21				
79	8073	8029	7984	7940	7896	7852	7807	7763	7719	7675	7631	20				
80	16. 7631	7587	7543	7499	7455	7411	7367	7323	7279	7235	7192	19				
81	7192	7148	7104	7060	7016	6973	6929	6885	6842	6798	6754	18				
82	6754	6711	6667	6624	6580	6537	6493	6450	6406	6363	6320	17				
83	6320	6276	6233	6190	6146	6103	6060	6017	5973	5930	5887	16				
84	5887	5844	5801	5758	5715	5672	5628	5585	5543	5500	5457	15				
85	16. 5457	5414	5371	5328	5285	5242	5199	5157	5114	5071	5029	14				
86	5029	4986	4943	4900	4858	4815	4773	4730	4688	4645	4603	13				
87	4603	4560	4518	4475	4433	4390	4348	4306	4263	4221	4179	12				
88	4179	4137	4094	4052	4010	3968	3926	3884	3841	3799	3757	11				
89	3757	3715	3673	3631	3589	3547	3505	3464	3422	3380	3338	10				
90	16. 3338	3296	3254	3213	3171	3129	3087	3046	3004	2962	2921	09				
91	2921	2879	2838	2796	2754	2713	2671	2630	2589	2547	2506	08				
92	2506	2464	2423	2382	2340	2299	2258	2216	2175	2134	2093	07				
93	2093	2052	2010	1969	1928	1887	1846	1805	1764	1723	1682	06				
94	1682	1641	1600	1559	1518	1477	1436	1395	1355	1314	1273	05				
95	16. 1273	1232	1192	1151	1110	1069	1029	0988	0947	0907	0866	04				
96	0866	0826	0785	0745	0704	0664	0623	0583	0542	0502	0462	03				
97	0462	0421	0381	0341	0300	0260	0220	0180	0139	0099	0059	02				
98	16. 0059	0019	*9979	*9939	*9898	*9858	*9818	*9778	*9738	*9698	*9658	01				
99	15. 9658	9618	9578	9539	9499	9459	9419	9379	9339	9299	9260	00				
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c				
		39	40	41	42	43	44	45	46	47	48	49	50	51	52	
1	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	1	2
2	7.8	8.0	8.2	8.4	8.6	8.8	9.0	9.2	9.4	9.6	9.8	10.0	10.2	10.4	2	3
3	11.7	12.0	12.3	12.6	12.9	13.2	13.5	13.8	14.1	14.4	14.7	15.0	15.3	15.6	3	4
4	15.6	16.0	16.4	16.8	17.2	17.6	18.0	18.4	18.8	19.2	19.6	20.0	20.4	20.8	4	5
5	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	5	6
6	23.4	24.0	24.6	25.2	25.8	26.4	27.0	27.6	28.2	28.8	29.4	30.0	30.6	31.2	6	7
7	27.3	28.0	28.7	29.4	30.1	30.8	31.5	32.2	32.9	33.6	34.3	35.0	35.7	36.4	7	8
8	31.2	32.0	32.8	33.6	34.4	35.2	36.0	36.8	37.6	38.4	39.2	40.0	40.8	41.6	8	9
9	35.1	36.0	36.9	37.8	38.7	39.6	40.5	41.4	42.3	43.2	44.1	45.0	45.9	46.8	9	

sec 96^g

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cotg 3^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}				
50	18. 1708	1656	1604	1552	1500	1448	1396	1345	1293	1241	1189	49			
51	1189	1138	1086	1034	0983	0931	0880	0828	0776	0725	0674	48			
52	0674	0622	0571	0519	0468	0417	0365	0314	0263	0212	0161	47			
53	18. 0161	0110	0058	0007	*9956	*9905	*9854	*9803	*9752	*9702	*9651	46			
54	17. 9651	9600	9549	9498	9448	9397	9346	9295	9245	9194	9144	45			
55	17. 9144	9093	9043	8992	8942	8891	8841	8790	8740	8690	8639	44			
56	8639	8589	8539	8489	8438	8388	8338	8288	8238	8188	8138	43			
57	8138	8088	8038	7988	7938	7888	7838	7789	7739	7689	7639	42			
58	7639	7590	7540	7490	7441	7391	7341	7292	7242	7193	7143	41			
59	7143	7094	7045	6995	6946	6897	6847	6798	6749	6699	6650	40			
60	17. 6650	6601	6552	6503	6454	6405	6356	6307	6258	6209	6160	39			
61	6160	6111	6062	6013	5965	5916	5867	5818	5770	5721	5672	38			
62	5672	5624	5575	5526	5478	5429	5381	5332	5284	5236	5187	37			
63	5187	5139	5091	5042	4994	4946	4898	4849	4801	4753	4705	36			
64	4705	4657	4609	4561	4513	4465	4417	4369	4321	4273	4225	35			
65	17. 4225	4177	4130	4082	4034	3986	3939	3891	3843	3796	3748	34			
66	3748	3701	3653	3606	3558	3511	3463	3416	3368	3321	3274	33			
67	3274	3226	3179	3132	3085	3037	2990	2943	2896	2849	2802	32			
68	2802	2755	2708	2661	2614	2567	2520	2473	2426	2379	2332	31			
69	2332	2286	2239	2192	2145	2099	2052	2005	1959	1912	1866	30			
70	17. 1866	1819	1773	1726	1680	1633	1587	1540	1494	1448	1401	29			
71	1401	1355	1309	1263	1216	1170	1124	1078	1032	0986	0940	28			
72	0940	0893	0847	0801	0755	0710	0664	0618	0572	0526	0480	27			
73	0480	0434	0389	0343	0297	0251	0206	0160	0114	0069	0023	26			
74	17. 0023	*9978	*9932	*9887	*9841	*9796	*9750	*9705	*9660	*9614	*9569	25			
75	16. 9569	9524	9478	9433	9388	9343	9297	9252	9207	9162	9117	24			
76	9117	9072	9027	8982	8937	8892	8847	8802	8757	8712	8667	23			
77	8667	8622	8578	8533	8488	8443	8399	8354	8309	8265	8220	22			
78	8220	8175	8131	8086	8042	7997	7953	7908	7864	7819	7775	21			
79	7775	7731	7686	7642	7598	7553	7509	7465	7421	7377	7333	20			
80	16. 7333	7288	7244	7200	7156	7112	7068	7024	6980	6936	6892	19			
81	6892	6848	6804	6761	6717	6673	6629	6585	6542	6498	6454	18			
82	6454	6411	6367	6323	6280	6236	6193	6149	6106	6062	6019	17			
83	6019	5975	5932	5888	5845	5802	5758	5715	5672	5629	5585	16			
84	5585	5542	5499	5456	5413	5369	5326	5283	5240	5197	5154	15			
85	16. 5154	5111	5068	5025	4982	4939	4897	4854	4811	4768	4725	14			
86	4725	4682	4640	4597	4554	4512	4469	4426	4384	4341	4299	13			
87	4299	4256	4213	4171	4128	4086	4044	4001	3959	3916	3874	12			
88	3874	3832	3789	3747	3705	3663	3620	3578	3536	3494	3452	11			
89	3452	3410	3368	3325	3283	3241	3199	3157	3115	3074	3032	10			
90	16. 3032	2990	2948	2906	2864	2822	2781	2739	2697	2655	2614	09			
91	2614	2572	2530	2489	2447	2405	2364	2322	2281	2239	2198	08			
92	2198	2156	2115	2073	2032	1991	1949	1908	1867	1825	1784	07			
93	1784	1743	1701	1660	1619	1578	1537	1496	1454	1413	1372	06			
94	1372	1331	1290	1249	1208	1167	1126	1085	1044	1004	0963	05			
95	16. 0963	0922	0881	0840	0799	0759	0718	0677	0637	0596	0555	04			
96	0555	0515	0474	0433	0393	0352	0312	0271	0231	0190	0150	03			
97	16. 0150	0109	0069	0028	*9988	*9948	*9907	*9867	*9827	*9787	*9746	02			
98	15. 9746	9706	9666	9626	9585	9545	9505	9465	9425	9385	9345	01			
99	9345	9305	9265	9225	9185	9145	9105	9065	9025	8985	8945	00			
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c			
		40	41	42	43	44	45	46	47	48	49	50	51	52	
1	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	1	
2	8.0	8.2	8.4	8.6	8.8	9.0	9.2	9.4	9.6	9.8	10.0	10.2	10.4	2	
3	12.0	12.3	12.6	12.9	13.2	13.5	13.8	14.1	14.4	14.7	15.0	15.3	15.6	3	
4	16.0	16.4	16.8	17.2	17.6	18.0	18.4	18.8	19.2	19.6	20.0	20.4	20.8	4	
5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	5	
6	24.0	24.6	25.2	25.8	26.4	27.0	27.6	28.2	28.8	29.4	30.0	30.6	31.2	6	
7	28.0	28.7	29.4	30.1	30.8	31.5	32.2	32.9	33.6	34.3	35.0	35.7	36.4	7	
8	32.0	32.8	33.6	34.4	35.2	36.0	36.8	37.6	38.4	39.2	40.0	40.8	41.6	8	
9	36.0	36.9	37.8	38.7	39.6	40.5	41.4	42.3	43.2	44.1	45.0	45.9	46.8	9	

tang 96^g

cosec 4^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}	
00	15. 9260	9220	9180	9141	9101	9061	9021	8982	8942	8903	8863	99
01	8863	8824	8784	8744	8705	8666	8626	8587	8547	8508	8468	98
02	8468	8429	8390	8350	8311	8272	8233	8193	8154	8115	8076	97
03	8076	8037	7997	7958	7919	7880	7841	7802	7763	7724	7685	96
04	7685	7646	7607	7568	7529	7490	7451	7413	7374	7335	7296	95
05	15. 7296	7257	7219	7180	7141	7102	7064	7025	6986	6948	6909	94
06	6909	6871	6832	6794	6755	6717	6678	6640	6601	6563	6524	93
07	6524	6486	6447	6409	6371	6332	6294	6256	6218	6179	6141	92
08	6141	6103	6065	6027	5988	5950	5912	5874	5836	5798	5760	91
09	5760	5722	5684	5646	5608	5570	5532	5494	5456	5418	5381	90
10	15. 5381	5343	5305	5267	5229	5192	5154	5116	5078	5041	5003	89
11	5003	4965	4928	4890	4852	4815	4777	4740	4702	4665	4627	88
12	4627	4590	4552	4515	4478	4440	4403	4365	4328	4291	4253	87
13	4253	4216	4179	4142	4104	4067	4030	3993	3956	3918	3881	86
14	3881	3844	3807	3770	3733	3696	3659	3622	3585	3548	3511	85
15	15. 3511	3474	3437	3400	3363	3327	3290	3253	3216	3179	3143	84
16	3143	3106	3069	3032	2996	2959	2922	2886	2849	2812	2776	83
17	2776	2739	2703	2666	2630	2593	2557	2520	2484	2447	2411	82
18	2411	2374	2338	2302	2265	2229	2193	2156	2120	2084	2048	81
19	2048	2011	1975	1939	1903	1867	1831	1794	1758	1722	1686	80
20	15. 1686	1650	1614	1578	1542	1506	1470	1434	1398	1362	1326	79
21	1326	1290	1255	1219	1183	1147	1111	1076	1040	1004	968	78
22	0968	0933	0897	0861	0826	0790	0754	0719	0683	0647	0612	77
23	0612	0576	0541	0505	0470	0434	0399	0363	0328	0293	0257	76
24	15. 0257	0222	0186	0151	0116	0081	0045	0010	*9975	*9939	*9904	75
25	14. 9904	9869	9834	9799	9763	9728	9693	9658	9623	9588	9553	74
26	9553	9518	9483	9448	9413	9378	9343	9308	9273	9238	9203	73
27	9203	9168	9133	9099	9064	9029	8994	8959	8925	8890	8855	72
28	8855	8820	8786	8751	8716	8682	8647	8612	8578	8543	8509	71
29	8509	8474	8439	8405	8370	8336	8301	8267	8233	8198	8164	70
30	14. 8164	8129	8095	8061	8026	7992	7958	7923	7889	7855	7820	69
31	7820	7786	7752	7718	7684	7649	7615	7581	7547	7513	7479	68
32	7479	7445	7411	7377	7343	7309	7275	7241	7207	7173	7139	67
33	7139	7105	7071	7037	7003	6969	6935	6902	6868	6834	6800	66
34	6800	6767	6733	6699	6665	6632	6598	6564	6531	6497	6463	65
35	14. 6463	6430	6396	6363	6329	6295	6262	6228	6195	6161	6128	64
36	6128	6094	6061	6028	5994	5961	5927	5894	5861	5827	5794	63
37	5794	5761	5727	5694	5661	5628	5594	5561	5528	5495	5462	62
38	5462	5429	5395	5362	5329	5296	5263	5230	5197	5164	5131	61
39	5131	5098	5065	5032	4999	4966	4933	4900	4867	4834	4802	60
40	14. 4802	4769	4736	4703	4670	4637	4605	4572	4539	4506	4474	59
41	4474	4441	4408	4376	4343	4310	4278	4245	4213	4180	4147	58
42	4147	4115	4082	4050	4017	3985	3952	3920	3887	3855	3823	57
43	3823	3790	3758	3725	3693	3661	3628	3596	3564	3531	3499	56
44	3499	3467	3435	3402	3370	3338	3306	3274	3241	3209	3177	55
45	14. 3177	3145	3113	3081	3049	3017	2985	2953	2921	2889	2857	54
46	2857	2825	2793	2761	2729	2697	2665	2633	2601	2569	2538	53
47	2538	2506	2474	2442	2410	2379	2347	2315	2283	2252	2220	52
48	2220	2188	2157	2125	2093	2062	2030	1998	1967	1935	1904	51
49	1904	1872	1841	1809	1778	1746	1715	1683	1652	1620	1589	50
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c
			31	32	33	34	35	36	37	38	39	40
1		3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	1
2		6.2	6.4	6.6	6.8	7.0	7.2	7.4	7.6	7.8	8.0	2
3		9.3	9.6	9.9	10.2	10.5	10.8	11.1	11.4	11.7	12.0	3
4		12.4	12.8	13.2	13.6	14.0	14.4	14.8	15.2	15.6	16.0	4
5		15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	5
6		18.6	19.2	19.8	20.4	21.0	21.6	22.2	22.8	23.4	24.0	6
7		21.7	22.4	23.1	23.8	24.5	25.2	25.9	26.6	27.3	28.0	7
8		24.8	25.6	26.4	27.2	28.0	28.8	29.6	30.4	31.2	32.0	8
9		27.9	28.8	29.7	30.6	31.5	32.4	33.3	34.2	35.1	36.0	9

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cotg 4^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}	
00	15. 8945	8906	8866	8826	8786	8746	8707	8667	8627	8588	8548	99
01	8548	8508	8469	8429	8390	8350	8311	8271	8232	8192	8153	98
02	8153	8113	8074	8034	7995	7956	7916	7877	7838	7798	7759	97
03	7759	7720	7681	7641	7602	7563	7524	7485	7446	7407	7368	96
04	7368	7329	7289	7250	7211	7173	7134	7095	7056	7017	6978	95
05	15. 6978	6939	6900	6861	6823	6784	6745	6706	6668	6629	6590	94
06	6590	6552	6513	6474	6436	6397	6359	6320	6281	6243	6204	93
07	6204	6166	6128	6089	6051	6012	5974	5936	5897	5859	5821	92
08	5821	5782	5744	5706	5668	5629	5591	5553	5515	5477	5439	91
09	5439	5400	5362	5324	5286	5248	5210	5172	5134	5096	5058	90
10	15. 5058	5020	4983	4945	4907	4869	4831	4793	4756	4718	4680	89
11	4680	4642	4605	4567	4529	4492	4454	4416	4379	4341	4304	88
12	4304	4266	4229	4191	4153	4116	4079	4041	4004	3966	3929	87
13	3929	3892	3854	3817	3780	3742	3705	3668	3630	3593	3556	86
14	3556	3519	3482	3445	3407	3370	3333	3296	3259	3222	3185	85
15	15. 3185	3148	3111	3074	3037	3000	2963	2926	2889	2853	2816	84
16	2816	2779	2742	2705	2669	2632	2595	2558	2522	2485	2448	83
17	2448	2412	2375	2338	2302	2265	2229	2192	2155	2119	2082	82
18	2082	2046	2010	1973	1937	1900	1864	1827	1791	1755	1718	81
19	1718	1682	1646	1610	1573	1537	1501	1465	1428	1392	1356	80
20	15. 1356	1320	1284	1248	1212	1176	1140	1104	1068	1032	0996	79
21	0996	0960	0924	0888	0852	0816	0780	0744	0708	0673	0637	78
22	0637	0601	0565	0529	0494	0458	0422	0387	0351	0315	0280	77
23	15. 0280	0244	0208	0173	0137	0102	0066	0031	*9995	*9960	*9924	76
24	14. 9924	9889	9853	9818	9782	9747	9712	9676	9641	9606	9570	75
25	14. 9570	9535	9500	9464	9429	9394	9359	9324	9288	9253	9218	74
26	9218	9183	9148	9113	9078	9043	9008	8973	8938	8903	8868	73
27	8868	8833	8798	8763	8728	8693	8658	8623	8588	8554	8519	72
28	8519	8484	8449	8414	8380	8345	8310	8276	8241	8206	8172	71
29	8172	8137	8102	8068	8033	7999	7964	7929	7895	7860	7826	70
30	14. 7826	7791	7757	7723	7688	7654	7619	7585	7551	7516	7482	69
31	7482	7448	7413	7379	7345	7310	7276	7242	7208	7174	7139	68
32	7139	7105	7071	7037	7003	6969	6935	6901	6867	6833	6799	67
33	6799	6765	6731	6697	6663	6629	6595	6561	6527	6493	6459	66
34	6459	6425	6392	6358	6324	6290	6256	6223	6189	6155	6122	65
35	14. 6122	6088	6054	6021	5987	5953	5920	5886	5852	5819	5785	64
36	5785	5752	5718	5685	5651	5618	5584	5551	5518	5484	5451	63
37	5451	5417	5384	5351	5317	5284	5251	5217	5184	5151	5118	62
38	5118	5084	5051	5018	4985	4952	4918	4885	4852	4819	4786	61
39	4786	4753	4720	4687	4654	4621	4588	4555	4522	4489	4456	60
40	14. 4456	4423	4390	4357	4324	4291	4259	4226	4193	4160	4127	59
41	4127	4094	4062	4029	3996	3963	3931	3898	3865	3833	3800	58
42	3800	3767	3735	3702	3670	3637	3605	3572	3539	3507	3474	57
43	3474	3442	3410	3377	3345	3312	3280	3247	3215	3183	3150	56
44	3150	3118	3086	3053	3021	2989	2956	2924	2892	2860	2828	55
45	14. 2828	2795	2763	2731	2699	2667	2635	2602	2570	2538	2506	54
46	2506	2474	2442	2410	2378	2346	2314	2282	2250	2218	2186	53
47	2186	2154	2123	2091	2059	2027	1995	1963	1932	1900	1868	52
48	1868	1836	1804	1773	1741	1709	1678	1646	1614	1583	1551	51
49	1551	1519	1488	1456	1425	1393	1361	1330	1298	1267	1235	50
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c
			31	32	33	34	35	36	37	38	39	40
1			3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
2			6.2	6.4	6.6	6.8	7.0	7.2	7.4	7.6	7.8	8.0
3			9.3	9.6	9.9	10.2	10.5	10.8	11.1	11.4	11.7	12.0
4			12.4	12.8	13.2	13.6	14.0	14.4	14.8	15.2	15.6	16.0
5			15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0
6			18.6	19.2	19.8	20.4	21.0	21.6	22.2	22.8	23.4	24.0
7			21.7	22.4	23.1	23.8	24.5	25.2	25.9	26.6	27.3	28.0
8			24.8	25.6	26.4	27.2	28.0	28.8	29.6	30.4	31.2	32.0
9			27.9	28.8	29.7	30.6	31.5	32.4	33.3	34.2	35.1	36.0

tang 95^g

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cosc 4^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}	
50	14. 1589	1558	1526	1495	1463	1432	1401	1369	1338	1307	1276	49
51	1276	1244	1213	1182	1151	1119	1088	1057	1026	0995	0963	48
52	0963	0932	0901	0870	0839	0808	0777	0746	0715	0684	0653	47
53	0653	0622	0591	0560	0529	0498	0467	0436	0405	0374	0344	46
54	0344	0313	0282	0251	0220	0189	0159	0128	0097	0066	0036	45
55	14. 0036	0005	*9974	*9944	*9913	*9882	*9852	*9821	*9790	*9760	*9729	44
56	13. 9729	9698	9668	9637	9607	9576	9546	9515	9485	9454	9424	43
57	9424	9393	9363	9333	9302	9272	9241	9211	9181	9150	9120	42
58	9120	9090	9059	9029	8999	8968	8938	8908	8878	8848	8817	41
59	8817	8787	8757	8727	8697	8667	8636	8606	8576	8546	8516	40
60	13. 8516	8486	8456	8426	8396	8366	8336	8306	8276	8246	8216	39
61	8216	8186	8156	8126	8097	8067	8037	8007	7977	7947	7918	38
62	7918	7888	7858	7828	7798	7769	7739	7709	7680	7650	7620	37
63	7620	7590	7561	7531	7502	7472	7442	7413	7383	7354	7324	36
64	7324	7295	7265	7236	7206	7177	7147	7118	7088	7059	7029	35
65	13. 7029	7000	6970	6941	6912	6882	6853	6824	6794	6765	6736	34
66	6736	6706	6677	6648	6619	6589	6560	6531	6502	6473	6443	33
67	6443	6414	6385	6356	6327	6298	6269	6240	6211	6182	6152	32
68	6152	6123	6094	6065	6036	6007	5978	5949	5921	5892	5863	31
69	5863	5834	5805	5776	5747	5718	5689	5661	5632	5603	5574	30
70	13. 5574	5545	5517	5488	5459	5430	5402	5373	5344	5315	5287	29
71	5287	5258	5230	5201	5172	5144	5115	5086	5058	5029	5001	28
72	5001	4972	4944	4915	4887	4858	4830	4801	4773	4744	4716	27
73	4716	4687	4659	4631	4602	4574	4545	4517	4489	4460	4432	26
74	4432	4404	4376	4347	4319	4291	4263	4234	4206	4178	4150	25
75	13. 4150	4121	4093	4065	4037	4009	3981	3953	3925	3896	3868	24
76	3868	3840	3812	3784	3756	3728	3700	3672	3644	3616	3588	23
77	3588	3560	3532	3504	3477	3449	3421	3393	3365	3337	3309	22
78	3309	3281	3254	3226	3198	3170	3142	3115	3087	3059	3031	21
79	3031	3004	2976	2948	2921	2893	2865	2838	2810	2782	2755	20
80	13. 2755	2727	2700	2672	2645	2617	2589	2562	2534	2507	2479	19
81	2479	2452	2424	2397	2370	2342	2315	2287	2260	2232	2205	18
82	2205	2178	2150	2123	2096	2068	2041	2014	1986	1959	1932	17
83	1932	1905	1877	1850	1823	1796	1768	1741	1714	1687	1660	16
84	1660	1633	1606	1578	1551	1524	1497	1470	1443	1416	1389	15
85	13. 1389	1362	1335	1308	1281	1254	1227	1200	1173	1146	1119	14
86	1119	1092	1065	1038	1011	0985	0958	0931	0904	0877	0850	13
87	0850	0824	0797	0770	0743	0716	0690	0663	0636	0609	0583	12
88	0583	0556	0529	0503	0476	0449	0423	0396	0369	0343	0316	11
89	0316	0290	0263	0236	0210	0183	0157	0130	0104	0077	0051	10
90	13. 0051	0024	*9998	*9971	*9945	*9918	*9892	*9866	*9839	*9813	*9786	09
91	12. 9786	9760	9734	9707	9681	9655	9628	9602	9576	9549	9523	08
92	9523	9497	9471	9444	9418	9392	9366	9340	9313	9287	9261	07
93	9261	9235	9209	9183	9156	9130	9104	9078	9052	9026	9000	06
94	9000	8974	8948	8922	8896	8870	8844	8818	8792	8766	8740	05
95	12. 8740	8714	8688	8662	8636	8610	8584	8558	8532	8507	8481	04
96	8481	8455	8429	8403	8377	8352	8326	8300	8274	8248	8223	03
97	8223	8197	8171	8146	8120	8094	8068	8043	8017	7991	7966	02
98	7966	7940	7914	7889	7863	7838	7812	7787	7761	7735	7710	01
99	7710	7684	7659	7633	7608	7582	7557	7531	7506	7480	7455	00
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c
			25	26	27	28	29	30	31	32		
1			2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	1	
2			5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.4	2	
3			7.5	7.8	8.1	8.4	8.7	9.0	9.3	9.6	3	
4			10.0	10.4	10.8	11.2	11.6	12.0	12.4	12.8	4	
5			12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	5	
6			15.0	15.6	16.2	16.8	17.4	18.0	18.6	19.2	6	
7			17.5	18.2	18.9	19.6	20.3	21.0	21.7	22.4	7	
8			20.0	20.8	21.6	22.4	23.2	24.0	24.8	25.6	8	
9			22.5	23.4	24.3	25.2	26.1	27.0	27.9	28.8	9	

sec 95^g

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cotg 4 ^g												
c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}	
50	14. 1235	1204	1172	1141	1110	1078	1047	1015	0984	0953	0921	49
51	0921	0890	0858	0827	0796	0765	0733	0702	0671	0640	0608	48
52	0608	0577	0546	0515	0484	0452	0421	0390	0359	0328	0297	47
53	14. 0297	0266	0235	0204	0173	0142	0111	0080	0049	0018	*9987	46
54	13. 9987	9956	9925	9894	9863	9832	9801	9771	9740	9709	9678	45
55	13. 9678	9647	9617	9586	9555	9524	9494	9463	9432	9401	9371	44
56	9371	9340	9309	9279	9248	9218	9187	9156	9126	9095	9065	43
57	9065	9034	9004	8973	8943	8912	8882	8851	8821	8790	8760	42
58	8760	8730	8699	8669	8639	8608	8578	8548	8517	8487	8457	41
59	8457	8426	8396	8366	8336	8306	8275	8245	8215	8185	8155	40
60	13. 8155	8125	8094	8064	8034	8004	7974	7944	7914	7884	7854	39
61	7854	7824	7794	7764	7734	7704	7674	7644	7614	7584	7554	38
62	7554	7525	7495	7465	7435	7405	7375	7346	7316	7286	7256	37
63	7256	7227	7197	7167	7137	7108	7078	7048	7019	6989	6960	36
64	6960	6930	6900	6871	6841	6812	6782	6752	6723	6693	6664	35
65	13. 6664	6634	6605	6575	6546	6517	6487	6458	6428	6399	6370	34
66	6370	6340	6311	6282	6252	6223	6194	6164	6135	6106	6077	33
67	6077	6047	6018	5989	5960	5930	5901	5872	5843	5814	5785	32
68	5785	5756	5727	5697	5668	5639	5610	5581	5552	5523	5494	31
69	5494	5465	5436	5407	5378	5349	5320	5292	5263	5234	5205	30
70	13. 5205	5176	5147	5118	5089	5061	5032	5003	4974	4945	4917	29
71	4917	4888	4859	4831	4802	4773	4744	4716	4687	4658	4630	28
72	4630	4601	4573	4544	4515	4487	4458	4430	4401	4373	4344	27
73	4344	4316	4287	4259	4230	4202	4173	4145	4116	4088	4060	26
74	4060	4031	4003	3975	3946	3918	3890	3861	3833	3805	3776	25
75	13. 3776	3748	3720	3692	3663	3635	3607	3579	3551	3522	3494	24
76	3494	3466	3438	3410	3382	3354	3326	3298	3270	3241	3213	23
77	3213	3185	3157	3129	3101	3073	3045	3017	2990	2962	2934	22
78	2934	2906	2878	2850	2822	2794	2766	2739	2711	2683	2655	21
79	2655	2627	2600	2572	2544	2516	2489	2461	2433	2405	2378	20
80	13. 2378	2350	2322	2295	2267	2239	2212	2184	2157	2129	2101	19
81	2101	2074	2046	2019	1991	1964	1936	1909	1881	1854	1826	18
82	1826	1799	1771	1744	1717	1689	1662	1634	1607	1580	1552	17
83	1552	1525	1498	1470	1443	1416	1388	1361	1334	1307	1279	16
84	1279	1252	1225	1198	1171	1143	1116	1089	1062	1035	1008	15
85	13. 1008	0981	0954	0926	0899	0872	0845	0818	0791	0764	0737	14
86	0737	0710	0683	0656	0629	0602	0575	0548	0521	0495	0468	13
87	0468	0441	0414	0387	0360	0333	0306	0280	0253	0226	0199	12
88	13. 0199	0172	0146	0119	0092	0065	0039	0012	*9985	*9959	*9932	11
89	12. 9932	9905	9879	9852	9825	9799	9772	9745	9719	9692	9666	10
90	12. 9666	9639	9613	9586	9560	9533	9507	9480	9454	9427	9401	09
91	9401	9374	9348	9321	9295	9268	9242	9216	9189	9163	9137	08
92	9137	9110	9084	9058	9031	9005	8979	8952	8926	8900	8874	07
93	8874	8847	8821	8795	8769	8742	8716	8690	8664	8638	8612	06
94	8612	8586	8559	8533	8507	8481	8455	8429	8403	8377	8351	05
95	12. 8351	8325	8299	8273	8247	8221	8195	8169	8143	8117	8091	04
96	8091	8065	8039	8013	7987	7961	7936	7910	7884	7858	7832	03
97	7832	7806	7781	7755	7729	7703	7677	7652	7626	7600	7574	02
98	7574	7549	7523	7497	7472	7446	7420	7395	7369	7343	7318	01
99	7318	7292	7267	7241	7215	7190	7164	7139	7113	7088	7062	00
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c
			25	26	27	28	29	30	31	32		
1			2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	1	
2			5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.4	2	
3			7.5	7.8	8.1	8.4	8.7	9.0	9.3	9.6	3	
4			10.0	10.4	10.8	11.2	11.6	12.0	12.4	12.8	4	
5			12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	5	
6			15.0	15.6	16.2	16.8	17.4	18.0	18.6	19.2	6	
7			17.5	18.2	18.9	19.6	20.3	21.0	21.7	22.4	7	
8			20.0	20.8	21.6	22.4	23.2	24.0	24.8	25.6	8	
9			22.5	23.4	24.3	25.2	26.1	27.0	27.9	28.8	9	

tang 95^g

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cosec 5 ^g												
c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}	
00	12. 7455	7430	7404	7379	7353	7328	7303	7277	7252	7226	7201	99
01	7201	7176	7150	7125	7100	7075	7049	7024	6999	6973	6948	98
02	6948	6923	6898	6873	6847	6822	6797	6772	6747	6721	6696	97
03	6696	6671	6646	6621	6596	6571	6546	6521	6496	6471	6445	96
04	6445	6420	6395	6370	6345	6320	6295	6270	6246	6221	6196	95
05	12. 6196	6171	6146	6121	6096	6071	6046	6021	5996	5972	5947	94
06	5947	5922	5897	5872	5847	5823	5798	5773	5748	5724	5699	93
07	5699	5674	5649	5625	5600	5575	5551	5526	5501	5477	5452	92
08	5452	5427	5403	5378	5353	5329	5304	5280	5255	5231	5206	91
09	5206	5181	5157	5132	5108	5083	5059	5034	5010	4985	4961	90
10	12. 4961	4937	4912	4888	4863	4839	4814	4790	4766	4741	4717	89
11	4717	4693	4668	4644	4620	4595	4571	4547	4522	4498	4474	88
12	4474	4450	4425	4401	4377	4353	4329	4304	4280	4256	4232	87
13	4232	4208	4184	4159	4135	4111	4087	4063	4039	4015	3991	86
14	3991	3967	3943	3918	3894	3870	3846	3822	3798	3774	3750	85
15	12. 3750	3726	3702	3679	3655	3631	3607	3583	3559	3535	3511	84
16	3511	3487	3463	3440	3416	3392	3368	3344	3320	3297	3273	83
17	3273	3249	3225	3201	3178	3154	3130	3106	3083	3059	3035	82
18	3035	3012	2988	2964	2941	2917	2893	2870	2846	2822	2799	81
19	2799	2775	2752	2728	2704	2681	2657	2634	2610	2587	2563	80
20	12. 2563	2540	2516	2493	2469	2446	2422	2399	2375	2352	2328	79
21	2328	2305	2282	2258	2235	2211	2188	2165	2141	2118	2095	78
22	2095	2071	2048	2025	2001	1978	1955	1931	1908	1885	1862	77
23	1862	1838	1815	1792	1769	1746	1722	1699	1676	1653	1630	76
24	1630	1606	1583	1560	1537	1514	1491	1468	1445	1422	1398	75
25	12. 1398	1375	1352	1329	1306	1283	1260	1237	1214	1191	1168	74
26	1168	1145	1122	1099	1076	1053	1030	1008	0985	0962	0939	73
27	0939	0916	0893	0870	0847	0824	0802	0779	0756	0733	0710	72
28	0710	0687	0665	0642	0619	0596	0574	0551	0528	0505	0483	71
29	0483	0460	0437	0414	0392	0369	0346	0324	0301	0278	0256	70
30	12. 0256	0233	0211	0188	0165	0143	0120	0098	0075	0052	0030	69
31	12. 0030	0007	*9985	*9962	*9940	*9917	*9895	*9872	*9850	*9827	*9805	68
32	11. 9805	9782	9760	9737	9715	9693	9670	9648	9625	9603	9581	67
33	9581	9558	9536	9513	9491	9469	9446	9424	9402	9379	9357	66
34	9357	9335	9313	9290	9268	9246	9223	9201	9179	9157	9135	65
35	11. 9135	9112	9090	9068	9046	9024	9001	8979	8957	8935	8913	64
36	8913	8891	8869	8846	8824	8802	8780	8758	8736	8714	8692	63
37	8692	8670	8648	8626	8604	8582	8560	8538	8516	8494	8472	62
38	8472	8450	8428	8406	8384	8362	8340	8318	8296	8274	8253	61
39	8253	8231	8209	8187	8165	8143	8121	8099	8078	8056	8034	60
40	11. 8034	8012	7990	7969	7947	7925	7903	7882	7860	7838	7816	59
41	7816	7795	7773	7751	7730	7708	7686	7665	7643	7621	7600	58
42	7600	7578	7556	7535	7513	7491	7470	7448	7427	7405	7383	57
43	7383	7362	7340	7319	7297	7276	7254	7233	7211	7190	7168	56
44	7168	7147	7125	7104	7082	7061	7039	7018	6997	6975	6954	55
45	11. 6954	6932	6911	6890	6868	6847	6825	6804	6783	6761	6740	54
46	6740	6719	6697	6676	6655	6634	6612	6591	6570	6548	6527	53
47	6527	6506	6485	6463	6442	6421	6400	6379	6357	6336	6315	52
48	6315	6294	6273	6252	6230	6209	6188	6167	6146	6125	6104	51
49	6104	6083	6062	6040	6019	5998	5977	5956	5935	5914	5893	50
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c
				21	22	23	24	25	26			
1				2.1	2.2	2.3	2.4	2.5	2.6	1		
2				4.2	4.4	4.6	4.8	5.0	5.2	2		
3				6.3	6.6	6.9	7.2	7.5	7.8	3		
4				8.4	8.8	9.2	9.6	10.0	10.4	4		
5				10.5	11.0	11.5	12.0	12.5	13.0	5		
6				12.6	13.2	13.8	14.4	15.0	15.6	6		
7				14.7	15.4	16.1	16.8	17.5	18.2	7		
8				16.8	17.6	18.4	19.2	20.0	20.8	8		
9				18.9	19.8	20.7	21.6	22.5	23.4	9		

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cotg 5^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}	
00	12. 7062	7037	7011	6986	6960	6935	6909	6884	6858	6833	6807	99
01	6807	6782	6757	6731	6706	6680	6655	6630	6604	6579	6554	98
02	6554	6528	6503	6478	6453	6427	6402	6377	6352	6326	6301	97
03	6301	6276	6251	6225	6200	6175	6150	6125	6100	6075	6049	96
04	6049	6024	5999	5974	5949	5924	5899	5874	5849	5824	5799	95
05	12. 5799	5774	5749	5724	5699	5674	5649	5624	5599	5574	5549	94
06	5549	5524	5499	5474	5450	5425	5400	5375	5350	5325	5300	93
07	5300	5276	5251	5226	5201	5176	5152	5127	5102	5077	5053	92
08	5053	5028	5003	4979	4954	4929	4905	4880	4855	4831	4806	91
09	4806	4781	4757	4732	4708	4683	4658	4634	4609	4585	4560	90
10	12. 4560	4536	4511	4487	4462	4438	4413	4389	4364	4340	4315	89
11	4315	4291	4267	4242	4218	4193	4169	4145	4120	4096	4072	88
12	4072	4047	4023	3999	3974	3950	3926	3901	3877	3853	3829	87
13	3829	3804	3780	3756	3732	3708	3683	3659	3635	3611	3587	86
14	3587	3563	3538	3514	3490	3466	3442	3418	3394	3370	3346	85
15	12. 3346	3322	3298	3274	3250	3226	3202	3178	3154	3130	3106	84
16	3106	3082	3058	3034	3010	2986	2962	2938	2914	2890	2866	83
17	2866	2843	2819	2795	2771	2747	2723	2700	2676	2652	2628	82
18	2628	2604	2581	2557	2533	2509	2486	2462	2438	2415	2391	81
19	2391	2367	2344	2320	2296	2273	2249	2225	2202	2178	2154	80
20	12. 2154	2131	2107	2084	2060	2037	2013	1990	1966	1942	1919	79
21	1919	1895	1872	1849	1825	1802	1778	1755	1731	1708	1684	78
22	1684	1661	1638	1614	1591	1567	1544	1521	1497	1474	1451	77
23	1451	1427	1404	1381	1357	1334	1311	1288	1264	1241	1218	76
24	1218	1195	1171	1148	1125	1102	1079	1055	1032	1009	0986	75
25	12. 0986	0963	0940	0916	0893	0870	0847	0824	0801	0778	0755	74
26	0755	0732	0709	0686	0663	0640	0617	0594	0571	0548	0525	73
27	0525	0502	0479	0456	0433	0410	0387	0364	0341	0318	0295	72
28	0295	0272	0250	0227	0204	0181	0158	0135	0113	0090	0067	71
29	12. 0067	0044	0021	*9999	*9976	*9953	*9930	*9907	*9885	*9862	*9839	70
30	11. 9839	9817	9794	9771	9749	9726	9703	9680	9658	9635	9613	69
31	9613	9590	9567	9545	9522	9500	9477	9454	9432	9409	9387	68
32	9387	9364	9342	9319	9297	9274	9252	9229	9207	9184	9162	67
33	9162	9139	9117	9094	9072	9049	9027	9005	8982	8960	8937	66
34	8937	8915	8893	8870	8848	8826	8803	8781	8759	8736	8714	65
35	11. 8714	8692	8670	8647	8625	8603	8580	8558	8536	8514	8492	64
36	8492	8469	8447	8425	8403	8381	8358	8336	8314	8292	8270	63
37	8270	8248	8226	8204	8181	8159	8137	8115	8093	8071	8049	62
38	8049	8027	8005	7983	7961	7939	7917	7895	7873	7851	7829	61
39	7829	7807	7785	7763	7741	7719	7697	7675	7653	7632	7610	60
40	11. 7610	7588	7566	7544	7522	7500	7479	7457	7435	7413	7391	59
41	7391	7369	7348	7326	7304	7282	7261	7239	7217	7195	7174	58
42	7174	7152	7130	7108	7087	7065	7043	7022	7000	6978	6957	57
43	6957	6935	6913	6892	6870	6849	6827	6805	6784	6762	6741	56
44	6741	6719	6698	6676	6655	6633	6611	6590	6568	6547	6525	55
45	11. 6525	6504	6483	6461	6440	6418	6397	6375	6354	6332	6311	54
46	6311	6290	6268	6247	6225	6204	6183	6161	6140	6119	6097	53
47	6097	6076	6055	6033	6012	5991	5969	5948	5927	5906	5884	52
48	5884	5863	5842	5821	5799	5778	5757	5736	5715	5693	5672	51
49	5672	5651	5630	5609	5588	5567	5545	5524	5503	5482	5461	50
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c
				21	22	23	24	25	26			
1				2.1	2.2	2.3	2.4	2.5	2.6	1		
2				4.2	4.4	4.6	4.8	5.0	5.2	2		
3				6.3	6.6	6.9	7.2	7.5	7.8	3		
4				8.4	8.8	9.2	9.6	10.0	10.4	4		
5				10.5	11.0	11.5	12.0	12.5	13.0	5		
6				12.6	13.2	13.8	14.4	15.0	15.6	6		
7				14.7	15.4	16.1	16.8	17.5	18.2	7		
8				16.8	17.6	18.4	19.2	20.0	20.8	8		
9				18.9	19.8	20.7	21.6	22.5	23.4	9		

tang 94^g

cosec 5^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}	
50	11. 5893	5872	5851	5830	5809	5788	5767	5746	5725	5704	5683	49
51	5683	5662	5641	5621	5600	5579	5558	5537	5516	5495	5474	48
52	5474	5453	5433	5412	5391	5370	5349	5328	5308	5287	5266	47
53	5266	5245	5224	5204	5183	5162	5141	5121	5100	5079	5058	46
54	5058	5038	5017	4996	4976	4955	4934	4914	4893	4872	4852	45
55	11. 4852	4831	4810	4790	4769	4749	4728	4707	4687	4666	4646	44
56	4646	4625	4605	4584	4563	4543	4522	4502	4481	4461	4440	43
57	4440	4420	4399	4379	4358	4338	4318	4297	4277	4256	4236	42
58	4236	4215	4195	4175	4154	4134	4113	4093	4073	4052	4032	41
59	4032	4012	3991	3971	3951	3930	3910	3890	3869	3849	3829	40
60	11. 3829	3809	3788	3768	3748	3728	3707	3687	3667	3647	3626	39
61	3626	3606	3586	3566	3546	3526	3505	3485	3465	3445	3425	38
62	3425	3405	3385	3364	3344	3324	3304	3284	3264	3244	3224	37
63	3224	3204	3184	3164	3144	3124	3104	3084	3064	3044	3024	36
64	3024	3004	2984	2964	2944	2924	2904	2884	2864	2844	2824	35
65	11. 2824	2804	2784	2764	2745	2725	2705	2685	2665	2645	2625	34
66	2625	2605	2586	2566	2546	2526	2506	2487	2467	2447	2427	33
67	2427	2407	2388	2368	2348	2328	2309	2289	2269	2249	2230	32
68	2230	2210	2190	2171	2151	2131	2112	2092	2072	2053	2033	31
69	2033	2013	1994	1974	1955	1935	1915	1896	1876	1857	1837	30
70	11. 1837	1817	1798	1778	1759	1739	1720	1700	1681	1661	1642	29
71	1642	1622	1603	1583	1564	1544	1525	1505	1486	1466	1447	28
72	1447	1428	1408	1389	1369	1350	1331	1311	1292	1272	1253	27
73	1253	1234	1214	1195	1176	1156	1137	1118	1098	1079	1060	26
74	1060	1040	1021	1002	0983	0963	0944	0925	0906	0886	0867	25
75	11. 0867	0848	0829	0810	0790	0771	0752	0733	0714	0694	0675	24
76	0675	0656	0637	0618	0599	0579	0560	0541	0522	0503	0484	23
77	0484	0465	0446	0427	0408	0389	0369	0350	0331	0312	0293	22
78	0293	0274	0255	0236	0217	0198	0179	0160	0141	0122	0103	21
79	11. 0103	0084	0065	0046	0028	0009	*9990	*9971	*9952	*9933	*9914	20
80	10. 9914	9895	9876	9857	9838	9820	9801	9782	9763	9744	9725	19
81	9725	9707	9688	9669	9650	9631	9612	9594	9575	9556	9537	18
82	9537	9519	9500	9481	9462	9444	9425	9406	9387	9369	9350	17
83	9350	9331	9313	9294	9275	9257	9238	9219	9201	9182	9163	16
84	9163	9145	9126	9107	9089	9070	9052	9033	9014	8996	8977	15
85	10. 8977	8959	8940	8921	8903	8884	8866	8847	8829	8810	8792	14
86	8792	8773	8755	8736	8718	8699	8681	8662	8644	8625	8607	13
87	8607	8588	8570	8552	8533	8515	8496	8478	8460	8441	8423	12
88	8423	8404	8386	8368	8349	8331	8313	8294	8276	8258	8239	11
89	8239	8221	8203	8184	8166	8148	8129	8111	8093	8075	8056	10
90	10. 8056	8038	8020	8002	7983	7965	7947	7929	7910	7892	7874	09
91	7874	7856	7838	7819	7801	7783	7765	7747	7729	7710	7692	08
92	7692	7674	7656	7638	7620	7602	7584	7565	7547	7529	7511	07
93	7511	7493	7475	7457	7439	7421	7403	7385	7367	7349	7331	06
94	7331	7313	7295	7277	7259	7241	7223	7205	7187	7169	7151	05
95	10. 7151	7133	7115	7097	7079	7061	7043	7025	7007	6989	6972	04
96	6972	6954	6936	6918	6900	6882	6864	6846	6829	6811	6793	03
97	6793	6775	6757	6739	6722	6704	6686	6668	6650	6633	6615	02
98	6615	6597	6579	6562	6544	6526	6508	6491	6473	6455	6437	01
99	6437	6420	6402	6384	6367	6349	6331	6314	6296	6278	6261	00
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c
				17	18	19	20	21				
				1	1.7	1.8	1.9	2.0	2.1	1		
				2	3.4	3.6	3.8	4.0	4.2	2		
				3	5.1	5.4	5.7	6.0	6.3	3		
				4	6.8	7.2	7.6	8.0	8.4	4		
				5	8.5	9.0	9.5	10.0	10.5	5		
				6	10.2	10.8	11.4	12.0	12.6	6		
				7	11.9	12.6	13.3	14.0	14.7	7		
				8	13.6	14.4	15.2	16.0	16.8	8		
				9	15.3	16.2	17.1	18.0	18.9	9		

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cotg 5^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}	
50	11. 5461	5440	5419	5398	5377	5356	5334	5313	5292	5271	5250	49
51	5250	5229	5208	5187	5166	5145	5124	5103	5082	5061	5040	48
52	5040	5020	4999	4978	4957	4936	4915	4894	4873	4852	4831	47
53	4831	4811	4790	4769	4748	4727	4706	4686	4665	4644	4623	46
54	4623	4602	4582	4561	4540	4519	4498	4478	4457	4436	4416	45
55	11. 4416	4395	4374	4353	4333	4312	4291	4271	4250	4229	4209	44
56	4209	4188	4167	4147	4126	4106	4085	4064	4044	4023	4003	43
57	4003	3982	3961	3941	3920	3900	3879	3859	3838	3818	3797	42
58	3797	3777	3756	3736	3715	3695	3674	3654	3633	3613	3593	41
59	3593	3572	3552	3531	3511	3491	3470	3450	3429	3409	3389	40
60	11. 3389	3368	3348	3328	3307	3287	3267	3246	3226	3206	3186	39
61	3186	3165	3145	3125	3105	3084	3064	3044	3024	3003	2983	38
62	2983	2963	2943	2923	2902	2882	2862	2842	2822	2802	2781	37
63	2781	2761	2741	2721	2701	2681	2661	2641	2621	2600	2580	36
64	2580	2560	2540	2520	2500	2480	2460	2440	2420	2400	2380	35
65	11. 2380	2360	2340	2320	2300	2280	2260	2240	2220	2200	2180	34
66	2180	2161	2141	2121	2101	2081	2061	2041	2021	2001	1982	33
67	1982	1962	1942	1922	1902	1882	1863	1843	1823	1803	1783	32
68	1783	1764	1744	1724	1704	1685	1665	1645	1625	1606	1586	31
69	1586	1566	1546	1527	1507	1487	1468	1448	1428	1409	1389	30
70	11. 1389	1369	1350	1330	1311	1291	1271	1252	1232	1213	1193	29
71	1193	1173	1154	1134	1115	1095	1076	1056	1037	1017	0998	28
72	0998	0978	0958	0939	0920	0900	0881	0861	0842	0822	0803	27
73	0803	0783	0764	0744	0725	0706	0686	0667	0647	0628	0609	26
74	0609	0589	0570	0551	0531	0512	0493	0473	0454	0435	0415	25
75	11. 0415	0396	0377	0357	0338	0319	0300	0280	0261	0242	0223	24
76	0223	0203	0184	0165	0146	0126	0107	0088	0069	0050	0030	23
77	11. 0030	0011	*9992	*9973	*9954	*9935	*9916	*9896	*9877	*9858	*9839	22
78	10. 9839	9820	9801	9782	9763	9744	9724	9705	9686	9667	9648	21
79	9648	9629	9610	9591	9572	9553	9534	9515	9496	9477	9458	20
80	10. 9458	9439	9420	9401	9382	9363	9344	9325	9307	9288	9269	19
81	9269	9250	9231	9212	9193	9174	9155	9137	9118	9099	9080	18
82	9080	9061	9042	9023	9005	8986	8967	8948	8929	8911	8892	17
83	8892	8873	8854	8835	8817	8798	8779	8760	8742	8723	8704	16
84	8704	8686	8667	8648	8629	8611	8592	8573	8555	8536	8517	15
85	10. 8517	8499	8480	8461	8443	8424	8406	8387	8368	8350	8331	14
86	8331	8313	8294	8275	8257	8238	8220	8201	8183	8164	8146	13
87	8146	8127	8109	8090	8072	8053	8035	8016	7998	7979	7961	12
88	7961	7942	7924	7905	7887	7868	7850	7832	7813	7795	7776	11
89	7776	7758	7739	7721	7703	7684	7666	7648	7629	7611	7593	10
90	10. 7593	7574	7556	7538	7519	7501	7483	7464	7446	7428	7409	09
91	7409	7391	7373	7355	7336	7318	7300	7282	7263	7245	7227	08
92	7227	7209	7191	7172	7154	7136	7118	7100	7081	7063	7045	07
93	7045	7027	7009	6991	6973	6954	6936	6918	6900	6882	6864	06
94	6864	6846	6828	6810	6792	6773	6755	6737	6719	6701	6683	05
95	10. 6683	6665	6647	6629	6611	6593	6575	6557	6539	6521	6503	04
96	6503	6485	6467	6449	6431	6413	6395	6377	6360	6342	6324	03
97	6324	6306	6288	6270	6252	6234	6216	6198	6181	6163	6145	02
98	6145	6127	6109	6091	6073	6056	6038	6020	6002	5984	5967	01
99	5967	5949	5931	5913	5895	5878	5860	5842	5824	5807	5789	00
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c
				17	18	19	20	21	22			
1				1.7	1.8	1.9	2.0	2.1	2.2	1		
2				3.4	3.6	3.8	4.0	4.2	4.4	2		
3				5.1	5.4	5.7	6.0	6.3	6.6	3		
4				6.8	7.2	7.6	8.0	8.4	8.8	4		
5				8.5	9.0	9.5	10.0	10.5	11.0	5		
6				10.2	10.8	11.4	12.0	12.6	13.2	6		
7				11.9	12.6	13.3	14.0	14.7	15.4	7		
8				13.6	14.4	15.2	16.0	16.8	17.6	8		
9				15.3	16.2	17.1	18.0	18.9	19.8	9		

tang 94^g

cos ec 6^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}					
00	10.6 2605	2429	2252	2076	1900	1723	1547	1371	1195	1019	0843	99				
01	10.6 0843	0667	0491	0315	0139	*9963	*9788	*9612	*9437	*9261	*9086	98				
02	10.5 9086	8910	8735	8560	8384	8209	8034	7859	7684	7509	7334	97				
03	7334	7160	6985	6810	6636	6461	6287	6112	5938	5763	5589	96				
04	5589	5415	5241	5067	4893	4719	4545	4371	4197	4023	3850	95				
05	10.5 3850	3676	3502	3329	3155	2982	2809	2635	2462	2289	2116	94				
06	2116	1943	1770	1597	1424	1251	1078	0906	0733	0560	0388	93				
07	10.5 0388	0215	0043	*9870	*9698	*9526	*9354	*9182	*9009	*8837	*8665	92				
08	10.4 8665	8494	8322	8150	7978	7806	7635	7463	7292	7120	6949	91				
09	6949	6777	6606	6435	6264	6092	5921	5750	5579	5409	5238	90				
10	10.4 5238	5067	4896	4725	4555	4384	4214	4043	3873	3702	3532	89				
11	3532	3362	3192	3022	2852	2682	2512	2342	2172	2002	1832	88				
12	1832	1663	1493	1323	1154	0984	0815	0646	0476	0307	0138	87				
13	10.4 0138	*9969	*9800	*9631	*9462	*9293	*9124	*8955	*8787	*8618	*8449	86				
14	10.3 8449	8281	8112	7944	7775	7607	7439	7270	7102	6934	6766	85				
15	10.3 6766	6598	6430	6262	6094	5926	5759	5591	5423	5256	5088	84				
16	5088	4921	4753	4586	4419	4251	4084	3917	3750	3583	3416	83				
17	3416	3249	3082	2915	2748	2582	2415	2248	2082	1915	1749	82				
18	1749	1582	1416	1250	1084	0917	0751	0585	0419	0253	0087	81				
19	10.3 0087	*9921	*9756	*9590	*9424	*9258	*9093	*8927	*8762	*8596	*8431	80				
20	10.2 8431	8266	8100	7935	7770	7605	7440	7275	7110	6945	6780	79				
21	6780	6615	6451	6286	6121	5957	5792	5628	5463	5299	5135	78				
22	5135	4970	4806	4642	4478	4314	4150	3986	3822	3658	3494	77				
23	3494	3331	3167	3003	2840	2676	2513	2349	2186	2023	1859	76				
24	1859	1696	1533	1370	1207	1044	0881	0718	0555	0392	0230	75				
25	10.2 0230	0067	*9904	*9742	*9579	*9417	*9254	*9092	*8930	*8767	*8605	74				
26	10.1 8605	8443	8281	8119	7957	7795	7633	7471	7309	7148	6986	73				
27	6986	6824	6663	6501	6340	6178	6017	5855	5694	5533	5372	72				
28	5372	5211	5050	4888	4727	4567	4406	4245	4084	3923	3763	71				
29	3763	3602	3442	3281	3121	2960	2800	2639	2479	2319	2159	70				
30	10.1 2159	1999	1839	1679	1519	1359	1199	1039	0879	0720	0560	69				
31	10.1 0560	0400	0241	0081	*9922	*9762	*9603	*9444	*9285	*9125	*8966	68				
32	10.0 8966	8807	8648	8489	8330	8171	8012	7854	7695	7536	7378	67				
33	7378	7219	7060	6902	6743	6585	6427	6268	6110	5952	5794	66				
34	5794	5636	5478	5320	5162	5004	4846	4688	4531	4373	4215	65				
35	10.0 4215	4058	3900	3743	3585	3428	3270	3113	2956	2799	2641	64				
36	2641	2484	2327	2170	2013	1856	1700	1543	1386	1229	1073	63				
37	10.0 1073	0916	0760	0603	0447	0290	0134	*9978	*9821	*9665	*9509	62				
38	9.9 9509	9353	9197	9041	8885	8729	8573	8417	8261	8106	7950	61				
39	7950	7794	7639	7483	7328	7172	7017	6862	6706	6551	6396	60				
40	9.9 6396	6241	6086	5931	5776	5621	5466	5311	5156	5001	4847	59				
41	4847	4692	4537	4383	4228	4074	3919	3765	3611	3457	3302	58				
42	3302	3148	2994	2840	2686	2532	2378	2224	2070	1917	1763	57				
43	1763	1609	1455	1302	1148	0995	0841	0688	0535	0381	0228	56				
44	9.9 0228	0075	*9922	*9769	*9615	*9462	*9309	*9157	*9004	*8851	*8698	55				
45	9.8 8698	8545	8393	8240	8087	7935	7782	7630	7477	7325	7173	54				
46	7173	7021	6868	6716	6564	6412	6260	6108	5956	5804	5652	53				
47	5652	5500	5349	5197	5045	4894	4742	4591	4439	4288	4136	52				
48	4136	3985	3834	3683	3531	3380	3229	3078	2927	2776	2625	51				
49	2625	2474	2324	2173	2022	1871	1721	1570	1420	1269	1119	50				
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c				
	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	
1	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.3	16.4	1
2	30.0	30.2	30.4	30.6	30.8	31.0	31.2	31.4	31.6	31.8	32.0	32.2	32.4	32.6	32.8	2
3	45.0	45.3	45.6	45.9	46.2	46.5	46.8	47.1	47.4	47.7	48.0	48.3	48.6	48.9	49.2	3
4	60.0	60.4	60.8	61.2	61.6	62.0	62.4	62.8	63.2	63.6	64.0	64.4	64.8	65.2	65.6	4
5	75.0	75.5	76.0	76.5	77.0	77.5	78.0	78.5	79.0	79.5	80.0	80.5	81.0	81.5	82.0	5
6	90.0	90.6	91.2	91.8	92.4	93.0	93.6	94.2	94.8	95.4	96.0	96.6	97.2	97.8	98.4	6
7	105.0	105.7	106.4	107.1	107.8	108.5	109.2	109.9	110.6	111.3	112.0	112.7	113.4	114.1	114.8	7
8	120.0	120.8	121.6	122.4	123.2	124.0	124.8	125.6	126.4	127.2	128.0	128.8	129.6	130.4	131.2	8
9	135.0	135.9	136.8	137.7	138.6	139.5	140.4	141.3	142.2	143.1	144.0	144.9	145.8	146.7	147.6	9

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cotg 6^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}					
00	10.5 7889	7712	7535	7358	7181	7003	6826	6649	6472	6296	6119	99				
01	6119	5942	5765	5589	5412	5236	5059	4883	4706	4530	4354	98				
02	4354	4178	4002	3826	3650	3474	3298	3122	2946	2771	2595	97				
03	2595	2419	2244	2068	1893	1718	1542	1367	1192	1017	0842	96				
04	10.5 0842	0667	0492	0317	0142	*9967	*9793	*9618	*9443	*9269	*9094	95				
05	10.4 9094	8920	8746	8571	8397	8223	8049	7875	7701	7527	7353	94				
06	7353	7179	7005	6831	6658	6484	6311	6137	5964	5790	5617	93				
07	5617	5444	5270	5097	4924	4751	4578	4405	4232	4059	3887	92				
08	3887	3714	3541	3369	3196	3024	2851	2679	2506	2334	2162	91				
09	2162	1990	1818	1646	1474	1302	1130	0958	0786	0615	0443	90				
10	10.4 0443	0271	0100	*9928	*9757	*9586	*9414	*9243	*9072	*8901	*8730	89				
11	10.3 8730	8559	8388	8217	8046	7875	7704	7534	7363	7193	7022	88				
12	7022	6852	6681	6511	6340	6170	6000	5830	5660	5490	5320	87				
13	5320	5150	4980	4810	4640	4471	4301	4132	3962	3793	3623	86				
14	3623	3454	3284	3115	2946	2777	2608	2439	2270	2101	1932	85				
15	10.3 1932	1763	1594	1426	1257	1088	0920	0751	0583	0415	0246	84				
16	10.3 0246	0078	*9910	*9742	*9574	*9405	*9237	*9070	*8902	*8734	*8566	83				
17	10.2 8566	8398	8231	8063	7895	7728	7560	7393	7226	7058	6891	82				
18	6891	6724	6557	6390	6223	6056	5889	5722	5555	5388	5222	81				
19	5222	5055	4889	4722	4556	4389	4223	4056	3890	3724	3558	80				
20	10.2 3558	3392	3226	3060	2894	2728	2562	2396	2230	2065	1899	79				
21	1899	1733	1568	1402	1237	1072	0906	0741	0576	0411	0246	78				
22	10.2 0246	0081	*9916	*9751	*9586	*9421	*9256	*9091	*8927	*8762	*8597	77				
23	10.1 8597	8433	8268	8104	7940	7775	7611	7447	7283	7119	6955	76				
24	6955	6791	6627	6463	6299	6135	5971	5808	5644	5481	5317	75				
25	10.1 5317	5154	4990	4827	4663	4500	4337	4174	4011	3848	3685	74				
26	3685	3522	3359	3196	3033	2870	2708	2545	2382	2220	2057	73				
27	2057	1895	1733	1570	1408	1246	1084	0921	0759	0597	0435	72				
28	10.1 0435	0273	0112	*9950	*9788	*9626	*9465	*9303	*9141	*8980	*8819	71				
29	10.0 8819	8657	8496	8334	8173	8012	7851	7690	7529	7368	7207	70				
30	10.0 7207	7046	6885	6724	6563	6403	6242	6082	5921	5761	5600	69				
31	5600	5440	5279	5119	4959	4799	4638	4478	4318	4158	3998	68				
32	3998	3839	3679	3519	3359	3200	3040	2880	2721	2561	2402	67				
33	2402	2242	2083	1924	1765	1605	1446	1287	1128	0969	0810	66				
34	10.0 0810	0651	0493	0334	0175	0016	*9858	*9699	*9541	*9382	*9224	65				
35	9.9 9224	9065	8907	8749	8591	8432	8274	8116	7958	7800	7642	64				
36	7642	7484	7326	7169	7011	6853	6696	6538	6380	6223	6066	63				
37	6066	5908	5751	5594	5436	5279	5122	4965	4808	4651	4494	62				
38	4494	4337	4180	4023	3867	3710	3553	3397	3240	3083	2927	61				
39	2927	2771	2614	2458	2302	2145	1989	1833	1677	1521	1365	60				
40	9.9 1365	1209	1053	0897	0742	0586	0430	0275	0119	*9964	*9808	59				
41	9.8 9808	9653	9497	9342	9187	9031	8876	8721	8566	8411	8256	58				
42	8256	8101	7946	7791	7636	7481	7327	7172	7017	6863	6708	57				
43	6708	6554	6399	6245	6091	5936	5782	5628	5474	5320	5166	56				
44	5166	5012	4858	4704	4550	4396	4242	4089	3935	3781	3628	55				
45	9.8 3628	3474	3321	3167	3014	2861	2707	2554	2401	2248	2095	54				
46	2095	1942	1789	1636	1483	1330	1177	1024	0872	0719	0566	53				
47	9.8 0566	0414	0261	0109	*9956	*9804	*9652	*9499	*9347	*9195	*9043	52				
48	9.7 9043	8891	8738	8586	8434	8283	8131	7979	7827	7675	7524	51				
49	7524	7372	7220	7069	6917	6766	6614	6463	6312	6161	6009	50				
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c				
		165	166	167	168	169	170	171	172	173	174	175	176	177	178	
1	16.5	16.6	16.7	16.8	16.9	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	1	
2	33.0	33.2	33.4	33.6	33.8	34.0	34.2	34.4	34.6	34.8	35.0	35.2	35.4	35.6	2	
3	49.5	49.8	50.1	50.4	50.7	51.0	51.3	51.6	51.9	52.2	52.5	52.8	53.1	53.4	3	
4	66.0	66.4	66.8	67.2	67.6	68.0	68.4	68.8	69.2	69.6	70.0	70.4	70.8	71.2	4	
5	82.5	83.0	83.5	84.0	84.5	85.0	85.5	86.0	86.5	87.0	87.5	88.0	88.5	89.0	5	
6	99.0	99.6	100.2	100.8	101.4	102.0	102.6	103.2	103.8	104.4	105.0	105.6	106.2	106.8	6	
7	115.5	116.2	116.9	117.6	118.3	119.0	119.7	120.4	121.1	121.8	122.5	123.2	123.9	124.6	7	
8	132.0	132.8	133.6	134.4	135.2	136.0	136.8	137.6	138.4	139.2	140.0	140.8	141.6	142.4	8	
9	148.5	149.4	150.3	151.2	152.1	153.0	153.9	154.8	155.7	156.6	157.5	158.4	159.3	160.2	9	

tang 93^g

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cosec 6 ^g													
c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}		
50	9.8 1119	0968	0818	0668	0518	0367	0217	0067	*9917	*9767	*9617	49	
51	9.7 9617	9467	9317	9167	9018	8868	8718	8568	8419	8269	8120	48	
52	8120	7970	7821	7671	7522	7373	7224	7074	6925	6776	6627	47	
53	6627	6478	6329	6180	6031	5882	5734	5585	5436	5288	5139	46	
54	5139	4990	4842	4693	4545	4397	4248	4100	3952	3804	3655	45	
55	9.7 3655	3507	3359	3211	3063	2915	2768	2620	2472	2324	2177	44	
56	2177	2029	1881	1734	1586	1439	1291	1144	0997	0849	0702	43	
57	9.7 0702	0555	0408	0261	0113	*9966	*9819	*9673	*9526	*9379	*9232	42	
58	9.6 9232	9085	8939	8792	8645	8499	8352	8206	8059	7913	7767	41	
59	7767	7620	7474	7328	7182	7035	6889	6743	6597	6451	6305	40	
60	9.6 6305	6160	6014	5868	5722	5577	5431	5285	5140	4994	4849	39	
61	4849	4703	4558	4413	4267	4122	3977	3832	3687	3542	3397	38	
62	3397	3252	3107	2962	2817	2672	2527	2383	2238	2093	1949	37	
63	1949	1804	1660	1515	1371	1226	1082	0938	0794	0649	0505	36	
64	9.6 0505	0361	0217	0073	*9929	*9785	*9641	*9497	*9354	*9210	*9066	35	
65	9.5 9066	8922	8779	8635	8492	8348	8205	8061	7918	7775	7631	34	
66	7631	7488	7345	7202	7059	6916	6773	6630	6487	6344	6201	33	
67	6201	6058	5915	5773	5630	5487	5345	5202	5060	4917	4775	32	
68	4775	4632	4490	4348	4205	4063	3921	3779	3637	3495	3353	31	
69	3353	3211	3069	2927	2785	2643	2502	2360	2218	2077	1935	30	
70	9.5 1935	1794	1652	1511	1369	1228	1087	0945	0804	0663	0522	29	
71	9.5 0522	0381	0239	0098	*9957	*9817	*9676	*9535	*9394	*9253	*9112	28	
72	9.4 9112	8972	8831	8690	8550	8409	8269	8128	7988	7848	7707	27	
73	7707	7567	7427	7287	7147	7006	6866	6726	6586	6446	6307	26	
74	6307	6167	6027	5887	5747	5608	5468	5328	5189	5049	4910	25	
75	9.4 4910	4770	4631	4492	4352	4213	4074	3935	3795	3656	3517	24	
76	3517	3378	3239	3100	2961	2823	2684	2545	2406	2268	2129	23	
77	2129	1990	1852	1713	1575	1436	1298	1159	1021	0883	0745	22	
78	9.4 0745	0606	0468	0330	0192	0054	*9916	*9778	*9640	*9502	*9364	21	
79	9.3 9364	9227	9089	8951	8813	8676	8538	8401	8263	8126	7988	20	
80	9.3 7988	7851	7713	7576	7439	7302	7164	7027	6890	6753	6616	19	
81	6616	6479	6342	6205	6068	5931	5795	5658	5521	5385	5248	18	
82	5248	5111	4975	4838	4702	4565	4429	4293	4156	4020	3884	17	
83	3884	3748	3612	3475	3339	3203	3067	2931	2795	2660	2524	16	
84	2524	2388	2252	2117	1981	1845	1710	1574	1439	1303	1168	15	
85	9.3 1168	1032	0897	0762	0626	0491	0356	0221	0086	*9951	*9816	14	
86	9.2 9816	9681	9546	9411	9276	9141	9006	8871	8737	8602	8467	13	
87	8467	8333	8198	8064	7929	7795	7660	7526	7392	7257	7123	12	
88	7123	6989	6855	6721	6586	6452	6318	6184	6050	5917	5783	11	
89	5783	5649	5515	5381	5248	5114	4980	4847	4713	4580	4446	10	
90	9.2 4446	4313	4179	4046	3913	3779	3646	3513	3380	3247	3114	09	
91	3114	2981	2848	2715	2582	2449	2316	2183	2050	1918	1785	08	
92	1785	1652	1520	1387	1255	1122	0990	0857	0725	0592	0460	07	
93	9.2 0460	0328	0196	0063	*9931	*9799	*9667	*9535	*9403	*9271	*9139	06	
94	9.1 9139	9007	8875	8743	8612	8480	8348	8216	8085	7953	7822	05	
95	9.1 7822	7690	7559	7427	7296	7165	7033	6902	6771	6639	6508	04	
96	6508	6377	6246	6115	5984	5853	5722	5591	5460	5329	5199	03	
97	5199	5068	4937	4806	4676	4545	4415	4284	4154	4023	3893	02	
98	3893	3762	3632	3502	3371	3241	3111	2981	2851	2721	2590	01	
99	2590	2460	2330	2201	2071	1941	1811	1681	1551	1422	1292	00	
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c	
	129	130	131	132	133	134	135	136	137	138	139	140	
1	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	1
2	25.8	26.0	26.2	26.4	26.6	26.8	27.0	27.2	27.4	27.6	27.8	28.0	2
3	38.7	39.0	39.3	39.6	39.9	40.2	40.5	40.8	41.1	41.4	41.7	42.0	3
4	51.6	52.0	52.4	52.8	53.2	53.6	54.0	54.4	54.8	55.2	55.6	56.0	4
5	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.0	68.5	69.0	69.5	70.0	5
6	77.4	78.0	78.6	79.2	79.8	80.4	81.0	81.6	82.2	82.8	83.4	84.0	6
7	90.3	91.0	91.7	92.4	93.1	93.8	94.5	95.2	95.9	96.6	97.3	98.0	7
8	103.2	104.0	104.8	105.6	106.4	107.2	108.0	108.8	109.6	110.4	111.2	112.0	8
9	116.1	117.0	117.9	118.8	119.7	120.6	121.5	122.4	123.3	124.2	125.1	126.0	9

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cotg 6^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}		
50	9.7 6009	5858	5707	5556	5405	5254	5103	4952	4801	4650	4500	49	
51	4500	4349	4198	4048	3897	3746	3596	3445	3295	3145	2994	48	
52	2994	2844	2694	2544	2394	2244	2094	1944	1794	1644	1494	47	
53	9.7 1494	1344	1194	1045	0895	0745	0596	0446	0297	0147	*9998	46	
54	9.6 9998	9849	9699	9550	9401	9252	9103	8954	8805	8656	8507	45	
55	9.6 8507	8358	8209	8060	7911	7763	7614	7465	7317	7168	7020	44	
56	7020	6871	6723	6575	6426	6278	6130	5982	5833	5685	5537	43	
57	5537	5389	5241	5094	4946	4798	4650	4502	4355	4207	4060	42	
58	4060	3912	3764	3617	3470	3322	3175	3028	2880	2733	2586	41	
59	2586	2439	2292	2145	1998	1851	1704	1557	1411	1264	1117	40	
60	9.6 1117	0971	0824	0677	0531	0384	0238	0092	*9945	*9799	*9653	39	
61	9.5 9653	9506	9360	9214	9068	8922	8776	8630	8484	8338	8193	38	
62	8193	8047	7901	7755	7610	7464	7319	7173	7028	6882	6737	37	
63	6737	6592	6446	6301	6156	6011	5866	5720	5575	5430	5285	36	
64	5285	5141	4996	4851	4706	4561	4417	4272	4128	3983	3838	35	
65	9.5 3838	3694	3550	3405	3261	3117	2972	2828	2684	2540	2396	34	
66	2396	2252	2108	1964	1820	1676	1532	1389	1245	1101	0957	33	
67	9.5 0957	0814	0670	0527	0383	0240	0097	*9953	*9810	*9667	*9523	32	
68	9.4 9523	9380	9237	9094	8951	8808	8665	8522	8379	8236	8094	31	
69	8094	7951	7808	7665	7523	7380	7238	7095	6953	6810	6668	30	
70	9.4 6668	6526	6383	6241	6099	5957	5815	5673	5531	5389	5247	29	
71	5247	5105	4963	4821	4679	4538	4396	4254	4113	3971	3830	28	
72	3830	3688	3547	3405	3264	3123	2981	2840	2699	2558	2417	27	
73	2417	2276	2135	1994	1853	1712	1571	1430	1289	1149	1008	26	
74	9.4 1008	0867	0727	0586	0446	0305	0165	0024	*9884	*9744	*9603	25	
75	9.3 9603	9463	9323	9183	9043	8903	8763	8623	8483	8343	8203	24	
76	8203	8063	7923	7784	7644	7504	7365	7225	7086	6946	6807	23	
77	6807	6667	6528	6389	6249	6110	5971	5832	5693	5554	5415	22	
78	5415	5276	5137	4998	4859	4720	4581	4442	4304	4165	4026	21	
79	4026	3888	3749	3611	3472	3334	3195	3057	2919	2781	2642	20	
80	9.3 2642	2504	2366	2228	2090	1952	1814	1676	1538	1400	1262	19	
81	9.3 1262	1125	0987	0849	0711	0574	0436	0299	0161	0024	*9886	18	
82	9.2 9886	9749	9612	9474	9337	9200	9063	8926	8789	8651	8514	17	
83	8514	8377	8241	8104	7967	7830	7693	7556	7420	7283	7146	16	
84	7146	7010	6873	6737	6600	6464	6328	6191	6055	5919	5783	15	
85	9.2 5783	5646	5510	5374	5238	5102	4966	4830	4694	4558	4422	14	
86	4422	4287	4151	4015	3880	3744	3608	3473	3337	3202	3066	13	
87	3066	2931	2796	2660	2525	2390	2255	2120	1984	1849	1714	12	
88	1714	1579	1444	1309	1175	1040	0905	0770	0635	0501	0366	11	
89	9.2 0366	0231	0097	*9962	*9828	*9693	*9559	*9425	*9290	*9156	*9022	10	
90	9.1 9022	8887	8753	8619	8485	8351	8217	8083	7949	7815	7681	09	
91	7681	7547	7414	7280	7146	7012	6879	6745	6612	6478	6345	08	
92	6345	6211	6078	5944	5811	5678	5544	5411	5278	5145	5012	07	
93	5012	4879	4746	4613	4480	4347	4214	4081	3948	3816	3683	06	
94	3683	3550	3418	3285	3152	3020	2887	2755	2622	2490	2358	05	
95	9.1 2358	2225	2093	1961	1829	1697	1565	1432	1300	1168	1036	04	
96	9.1 1036	0905	0773	0641	0509	0377	0245	0114	*9982	*9850	*9719	03	
97	9.0 9719	9587	9456	9324	9193	9061	8930	8799	8668	8536	8405	02	
98	8405	8274	8143	8012	7881	7750	7619	7488	7357	7226	7095	01	
99	7095	6964	6833	6703	6572	6441	6311	6180	6050	5919	5789	00	
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c	
		141	142	143	144	145	146	147	148	149	150	151	
1	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	1	
2	28.2	28.4	28.6	28.8	29.0	29.2	29.4	29.6	29.8	30.0	30.2	2	
3	42.3	42.6	42.9	43.2	43.5	43.8	44.1	44.4	44.7	45.0	45.3	3	
4	56.4	56.8	57.2	57.6	58.0	58.4	58.8	59.2	59.6	60.0	60.4	4	
5	70.5	71.0	71.5	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	5	
6	84.6	85.2	85.8	86.4	87.0	87.6	88.2	88.8	89.4	90.0	90.6	6	
7	98.7	99.4	100.1	100.8	101.5	102.2	102.9	103.6	104.3	105.0	105.7	7	
8	112.8	113.6	114.4	115.2	116.0	116.8	117.6	118.4	119.2	120.0	120.8	8	
9	126.9	127.8	128.7	129.6	130.5	131.4	132.3	133.2	134.1	135.0	135.9	9	

tang 93^g

cosec 7^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}		
00	9.1 1292	1162	1033	0903	0774	0644	0515	0385	0256	0127	*9997	99	
01	9.0 9997	9868	9739	9610	9480	9351	9222	9093	8964	8835	8706	98	
02	8706	8577	8448	8320	8191	8062	7933	7805	7676	7547	7419	97	
03	7419	7290	7162	7033	6905	6777	6648	6520	6392	6263	6135	96	
04	6135	6007	5879	5751	5623	5495	5367	5239	5111	4983	4855	95	
05	9.0 4855	4727	4600	4472	4344	4216	4089	3961	3834	3706	3579	94	
06	3579	3451	3324	3196	3069	2942	2815	2687	2560	2433	2306	93	
07	2306	2179	2052	1925	1798	1671	1544	1417	1290	1163	1037	92	
08	9.0 1037	0910	0783	0657	0530	0403	0277	0150	0024	*9897	*9771	91	
09	8.9 9771	9645	9518	9392	9266	9140	9013	8887	8761	8635	8509	90	
10	8.9 8509	8383	8257	8131	8005	7879	7754	7628	7502	7376	7251	89	
11	7251	7125	6999	6874	6748	6623	6497	6372	6246	6121	5996	88	
12	5996	5870	5745	5620	5495	5369	5244	5119	4994	4869	4744	87	
13	4744	4619	4494	4369	4245	4120	3995	3870	3746	3621	3496	86	
14	3496	3372	3247	3123	2998	2874	2749	2625	2501	2376	2252	85	
15	8.9 2252	2128	2003	1879	1755	1631	1507	1383	1259	1135	1011	84	
16	8.9 1011	0887	0763	0639	0516	0392	0268	0144	0021	*9897	*9774	83	
17	8.8 9774	9650	9526	9403	9280	9156	9033	8909	8786	8663	8540	82	
18	8540	8416	8293	8170	8047	7924	7801	7678	7555	7432	7309	81	
19	7309	7186	7063	6941	6818	6695	6572	6450	6327	6204	6082	80	
20	8.8 6082	5959	5837	5714	5592	5470	5347	5225	5103	4980	4858	79	
21	4858	4736	4614	4492	4370	4248	4126	4004	3882	3760	3638	78	
22	3638	3516	3394	3272	3151	3029	2907	2786	2664	2542	2421	77	
23	2421	2299	2178	2057	1935	1814	1692	1571	1450	1329	1207	76	
24	8.8 1207	1086	0965	0844	0723	0602	0481	0360	0239	0118	*9997	75	
25	8.7 9997	9876	9756	9635	9514	9393	9273	9152	9031	8911	8790	74	
26	8790	8670	8549	8429	8308	8188	8068	7947	7827	7707	7587	73	
27	7587	7467	7346	7226	7106	6986	6866	6746	6626	6506	6387	72	
28	6387	6267	6147	6027	5907	5788	5668	5548	5429	5309	5190	71	
29	5190	5070	4951	4831	4712	4592	4473	4354	4234	4115	3996	70	
30	8.7 3996	3877	3758	3638	3519	3400	3281	3162	3043	2924	2806	69	
31	2806	2687	2568	2449	2330	2212	2093	1974	1856	1737	1618	68	
32	1618	1500	1381	1263	1145	1026	0908	0789	0671	0553	0435	67	
33	8.7 0435	0316	0198	0080	*9962	*9844	*9726	*9608	*9490	*9372	*9254	66	
34	8.6 9254	9136	9018	8900	8783	8665	8547	8429	8312	8194	8077	65	
35	8.6 8077	7959	7841	7724	7607	7489	7372	7254	7137	7020	6902	64	
36	6902	6785	6668	6551	6434	6316	6199	6082	5965	5848	5731	63	
37	5731	5614	5498	5381	5264	5147	5030	4914	4797	4680	4564	62	
38	4564	4447	4330	4214	4097	3981	3864	3748	3632	3515	3399	61	
39	3399	3283	3166	3050	2934	2818	2702	2585	2469	2353	2237	60	
40	8.6 2237	2121	2005	1890	1774	1658	1542	1426	1310	1195	1079	59	
41	8.6 1079	0963	0848	0732	0617	0501	0385	0270	0155	0039	*9924	58	
42	8.5 9924	9808	9693	9578	9463	9347	9232	9117	9002	8887	8772	57	
43	8772	8657	8542	8427	8312	8197	8082	7967	7852	7737	7623	56	
44	7623	7508	7393	7279	7164	7049	6935	6820	6706	6591	6477	55	
45	8.5 6477	6362	6248	6134	6019	5905	5791	5676	5562	5448	5334	54	
46	5334	5220	5106	4992	4878	4764	4650	4536	4422	4308	4194	53	
47	4194	4080	3967	3853	3739	3625	3512	3398	3284	3171	3057	52	
48	3057	2944	2830	2717	2604	2490	2377	2263	2150	2037	1924	51	
49	1924	1810	1697	1584	1471	1358	1245	1132	1019	0906	0793	50	
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c	
			113	114	115	116	117	118	119	120	121	122	
1		11.3	11.4	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	1	
2		22.6	22.8	23.0	23.2	23.4	23.6	23.8	24.0	24.2	24.4	2	
3		33.9	34.2	34.5	34.8	35.1	35.4	35.7	36.0	36.3	36.6	3	
4		45.2	45.6	46.0	46.4	46.8	47.2	47.6	48.0	48.4	48.8	4	
5		56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	5	
6		67.8	68.4	69.0	69.6	70.2	70.8	71.4	72.0	72.6	73.2	6	
7		79.1	79.8	80.5	81.2	81.9	82.6	83.3	84.0	84.7	85.4	7	
8		90.4	91.2	92.0	92.8	93.6	94.4	95.2	96.0	96.8	97.6	8	
9		101.7	102.6	103.5	104.4	105.3	106.2	107.1	108.0	108.9	109.8	9	

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cotg 7^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}	
00	9.0 5789	5658	5528	5397	5267	5137	5007	4876	4746	4616	4486	99
01	4486	4356	4226	4096	3966	3836	3706	3576	3447	3317	3187	98
02	3187	3057	2928	2798	2669	2539	2410	2280	2151	2021	1892	97
03	1892	1763	1633	1504	1375	1246	1116	0987	0858	0729	0600	96
04	9.0 0600	0471	0342	0214	0085	*9956	*9827	*9698	*9570	*9441	*9312	95
05	8.9 9312	9184	9055	8927	8798	8670	8541	8413	8285	8156	8028	94
06	8028	7900	7772	7643	7515	7387	7259	7131	7003	6875	6747	93
07	6747	6620	6492	6364	6236	6108	5981	5853	5725	5598	5470	92
08	5470	5343	5215	5088	4961	4833	4706	4579	4451	4324	4197	91
09	4197	4070	3943	3815	3688	3561	3434	3308	3181	3054	2927	90
10	8.9 2927	2800	2673	2547	2420	2293	2167	2040	1914	1787	1661	89
11	1661	1534	1408	1281	1155	1029	0902	0776	0650	0524	0398	88
12	8.9 0398	0272	0146	0020	*9894	*9768	*9642	*9516	*9390	*9264	*9138	87
13	8.8 9138	9013	8887	8761	8636	8510	8385	8259	8134	8008	7883	86
14	7883	7757	7632	7507	7381	7256	7131	7006	6881	6755	6630	85
15	8.8 6630	6505	6380	6255	6130	6006	5881	5756	5631	5506	5382	84
16	5382	5257	5132	5008	4883	4759	4634	4510	4385	4261	4136	83
17	4136	4012	3888	3763	3639	3515	3391	3267	3143	3018	2894	82
18	2894	2770	2646	2523	2399	2275	2151	2027	1903	1780	1656	81
19	1656	1532	1409	1285	1162	1038	0915	0791	0668	0544	0421	80
20	8.8 0421	0298	0174	0051	*9928	*9805	*9682	*9559	*9435	*9312	*9189	79
21	8.7 9189	9066	8943	8821	8698	8575	8452	8329	8207	8084	7961	78
22	7961	7839	7716	7593	7471	7348	7226	7103	6981	6859	6736	77
23	6736	6614	6492	6370	6247	6125	6003	5881	5759	5637	5515	76
24	5515	5393	5271	5149	5027	4905	4784	4662	4540	4419	4297	75
25	8.7 4297	4175	4054	3932	3811	3689	3568	3446	3325	3203	3082	74
26	3082	2961	2840	2718	2597	2476	2355	2234	2113	1992	1871	73
27	1871	1750	1629	1508	1387	1266	1145	1025	0904	0783	0663	72
28	8.7 0663	0542	0421	0301	0180	0060	*9939	*9819	*9698	*9578	*9458	71
29	8.6 9458	9337	9217	9097	8977	8857	8736	8616	8496	8376	8256	70
30	8.6 8256	8136	8016	7896	7777	7657	7537	7417	7297	7178	7058	69
31	7058	6938	6819	6699	6580	6460	6341	6221	6102	5982	5863	68
32	5863	5744	5624	5505	5386	5267	5148	5028	4909	4790	4671	67
33	4671	4552	4433	4314	4195	4077	3958	3839	3720	3601	3483	66
34	3483	3364	3245	3127	3008	2890	2771	2653	2534	2416	2297	65
35	8.6 2297	2179	2061	1943	1824	1706	1588	1470	1352	1233	1115	64
36	8.6 1115	0997	0879	0761	0643	0526	0408	0290	0172	0054	*9937	63
37	8.5 9937	9819	9701	9583	9466	9348	9231	9113	8996	8878	8761	62
38	8761	8643	8526	8409	8291	8174	8057	7940	7823	7705	7588	61
39	7588	7471	7354	7237	7120	7003	6886	6769	6652	6536	6419	60
40	8.5 6419	6302	6185	6069	5952	5835	5719	5602	5486	5369	5253	59
41	5253	5136	5020	4903	4787	4671	4554	4438	4322	4206	4090	58
42	4090	3973	3857	3741	3625	3509	3393	3277	3161	3045	2930	57
43	2930	2814	2698	2582	2466	2351	2235	2119	2004	1888	1773	56
44	1773	1657	1542	1426	1311	1195	1080	0965	0849	0734	0619	55
45	8.5 0619	0504	0388	0273	0158	0043	*9928	*9813	*9698	*9583	*9468	54
46	8.4 9468	9353	9238	9123	9009	8894	8779	8664	8550	8435	8320	53
47	8320	8206	8091	7977	7862	7748	7633	7519	7405	7290	7176	52
48	7176	7062	6947	6833	6719	6605	6491	6376	6262	6148	6034	51
49	6034	5920	5806	5692	5578	5465	5351	5237	5123	5009	4896	50
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c
			123	124	125	126	127	128	129	130	131	
1			12.3	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.1	1
2			24.6	24.8	25.0	25.2	25.4	25.6	25.8	26.0	26.2	2
3			36.9	37.2	37.5	37.8	38.1	38.4	38.7	39.0	39.3	3
4			49.2	49.6	50.0	50.4	50.8	51.2	51.6	52.0	52.4	4
5			61.5	62.0	62.5	63.0	63.5	64.0	64.5	65.0	65.5	5
6			73.8	74.4	75.0	75.6	76.2	76.8	77.4	78.0	78.6	6
7			86.1	86.8	87.5	88.2	88.9	89.6	90.3	91.0	91.7	7
8			98.4	99.2	100.0	100.8	101.6	102.4	103.2	104.0	104.8	8
9			110.7	111.6	112.5	113.4	114.3	115.2	116.1	117.0	117.9	9

tang 92^g

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cos ec 7^g

c	00 ^{cc}		10 ^{cc}		20 ^{cc}		30 ^{cc}		40 ^{cc}		50 ^{cc}		60 ^{cc}		70 ^{cc}		80 ^{cc}		90 ^{cc}		100 ^{cc}		
50	8.5	0793	0680		0567		0454		0342		0229		0116		0003		*9891		*9778		*9665		49
51	8.4	9665	9553		9440		9328		9215		9103		8990		8878		8765		8653		8541		48
52		8541	8428		8316		8204		8092		7980		7867		7755		7643		7531		7419		47
53		7419	7307		7195		7083		6971		6859		6748		6636		6524		6412		6301		46
54		6301	6189		6077		5965		5854		5742		5631		5519		5408		5296		5185		45
55	8.4	5185	5073		4962		4851		4739		4628		4517		4406		4294		4183		4072		44
56		4072	3961		3850		3739		3628		3517		3406		3295		3184		3073		2962		43
57		2962	2852		2741		2630		2519		2409		2298		2187		2077		1966		1856		42
58		1856	1745		1634		1524		1414		1303		1193		1082		0972		0862		0752		41
59	8.4	0752	0641		0531		0421		0311		0201		0091		*9981		*9871		*9761		*9651		40
60	8.3	9651	9541		9431		9321		9211		9101		8991		8882		8772		8662		8552		39
61		8552	8443		8333		8224		8114		8005		7895		7786		7676		7567		7457		38
62		7457	7348		7239		7129		7020		6911		6802		6692		6583		6474		6365		37
63		6365	6256		6147		6038		5929		5820		5711		5602		5493		5384		5275		36
64		5275	5167		5058		4949		4840		4732		4623		4515		4406		4297		4189		35
65	8.3	4189	4080		3972		3863		3755		3647		3538		3430		3322		3213		3105		34
66		3105	2997		2889		2781		2672		2564		2456		2348		2240		2132		2024		33
67		2024	1916		1808		1700		1593		1485		1377		1269		1161		1054		0946		32
68	8.3	0946	0838		0731		0623		0516		0408		0301		0193		0086		*9978		*9871		31
69	8.2	9871	9763		9656		9549		9441		9334		9227		9120		9013		8905		8798		30
70	8.2	8798	8691		8584		8477		8370		8263		8156		8049		7942		7835		7729		29
71		7729	7622		7515		7408		7301		7195		7088		6981		6875		6768		6662		28
72		6662	6555		6449		6342		6236		6129		6023		5916		5810		5704		5597		27
73		5597	5491		5385		5279		5173		5066		4960		4854		4748		4642		4536		26
74		4536	4430		4324		4218		4112		4006		3900		3795		3689		3583		3477		25
75	8.2	3477	3372		3266		3160		3055		2949		2843		2738		2632		2527		2421		24
76		2421	2316		2211		2105		2000		1894		1789		1684		1579		1473		1368		23
77		1368	1263		1158		1053		0948		0843		0738		0633		0528		0423		0318		22
78	8.2	0318	0213		0108		0003		*9898		*9793		*9689		*9584		*9479		*9375		*9270		21
79	8.1	9270	9165		9061		8956		8852		8747		8643		8538		8434		8329		8225		20
80	8.1	8225	8120		8016		7912		7808		7703		7599		7495		7391		7287		7182		19
81		7182	7078		6974		6870		6766		6662		6558		6454		6350		6247		6143		18
82		6143	6039		5935		5831		5728		5624		5520		5416		5313		5209		5106		17
83		5106	5002		4898		4795		4691		4588		4485		4381		4278		4174		4071		16
84		4071	3968		3865		3761		3658		3555		3452		3349		3246		3142		3039		15
85	8.1	3039	2936		2833		2730		2627		2524		2422		2319		2216		2113		2010		14
86		2010	1907		1805		1702		1599		1497		1394		1291		1189		1086		0984		13
87	8.1	0984	0881		0779		0676		0574		0471		0369		0267		0164		0062		*9960		12
88	8.0	9960	9858		9755		9653		9551		9449		9347		9245		9143		9040		8938		11
89		8938	8836		8735		8633		8531		8429		8327		8225		8123		8022		7920		10
90	8.0	7920	7818		7716		7615		7513		7411		7310		7208		7107		7005		6904		09
91		6904	6802		6701		6599		6498		6397		6295		6194		6093		5991		5890		08
92		5890	5789		5688		5586		5485		5384		5283		5182		5081		4980		4879		07
93		4879	4778		4677		4576		4475		4374		4274		4173		4072		3971		3871		06
94		3871	3770		3669		3569		3468		3367		3267		3166		3066		2965		2865		05
95	8.0	2865	2764		2664		2563		2463		2363		2262		2162		2062		1962		1861		04
96		1861	1761		1661		1561		1461		1361		1261		1160		1060		0960		0860		03
97	8.0	0860	0761		0661		0561		0461		0361		0261		0161		0062		*9962		*9862		02
98	7.9	9862	9762		9663		9563		9464		9364		9264		9165		9065		8966		8866		01
99		8866	8767		8667		8568		8469		8369		8270		8171		8071		7972		7873		00
		100 ^{cc}	90 ^{cc}		80 ^{cc}		70 ^{cc}		60 ^{cc}		50 ^{cc}		40 ^{cc}		30 ^{cc}		20 ^{cc}		10 ^{cc}		00 ^{cc}		c
		99	100	101	102	103	104	105	106	107	108	109	110	111	112	113							
1	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	1							
2	19.8	20.0	20.2	20.4	20.6	20.8	21.0	21.2	21.4	21.6	21.8	22.0	22.2	22.4	22.6	2							
3	29.7	30.0	30.3	30.6	30.9	31.2	31.5	31.8	32.1	32.4	32.7	33.0	33.3	33.6	33.9	3							
4	39.6	40.0	40.4	40.8	41.2	41.6	42.0	42.4	42.8	43.2	43.6	44.0	44.4	44.8	45.2	4							
5	49.5	50.0	50.5	51.0	51.5	52.0	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.0	56.5	5							
6	59.4	60.0	60.6	61.2	61.8	62.4	63.0	63.6	64.2	64.8	65.4	66.0	66.6	67.2	67.8	6							
7	69.3	70.0	70.7	71.4	72.1	72.8	73.5	74.2	74.9	75.6	76.3	77.0	77.7	78.4	79.1	7							
8	79.2	80.0	80.8	81.6	82.4	83.2	84.0	84.8	85.6	86.4	87.2	88.0	88.8	89.6	90.4	8							
9	89.1	90.0	90.9	91.8	92.7	93.6	94.5	95.4	96.3	97.2	98.1	99.0	99.9	100.8	101.7	9							

sec 92^g

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cotg 7^g

c	00 ^{cc}			10 ^{cc}		20 ^{cc}		30 ^{cc}		40 ^{cc}		50 ^{cc}		60 ^{cc}		70 ^{cc}		80 ^{cc}		90 ^{cc}		100 ^{cc}		
50	8.4	4896		4782		4668		4555		4441		4328		4214		4101		3987		3874		3760		49
51		3760		3647		3533		3420		3307		3194		3080		2967		2854		2741		2628		48
52		2628		2515		2402		2289		2176		2063		1950		1837		1724		1611		1498		47
53		1498		1385		1273		1160		1047		0935		0822		0709		0597		0484		0372		46
54	8.4	0372		0259		0147		0034		*9922		*9810		*9697		*9585		*9473		*9360		*9248		45
55	8.3	9248		9136		9024		8912		8800		8687		8575		8463		8351		8239		8128		44
56		8128		8016		7904		7792		7680		7568		7457		7345		7233		7121		7010		43
57		7010		6898		6787		6675		6564		6452		6341		6229		6118		6006		5895		42
58		5895		5784		5673		5561		5450		5339		5228		5117		5005		4894		4783		41
59		4783		4672		4561		4450		4339		4229		4118		4007		3896		3785		3674		40
60	8.3	3674		3564		3453		3342		3232		3121		3011		2900		2789		2679		2568		39
61		2568		2458		2348		2237		2127		2017		1906		1796		1686		1576		1465		38
62		1465		1355		1245		1135		1025		0915		0805		0695		0585		0475		0365		37
63	8.3	0365		0255		0145		0036		*9926		*9816		*9706		*9597		*9487		*9377		*9268		36
64	8.2	9268		9158		9049		8939		8830		8720		8611		8501		8392		8283		8173		35
65	8.2	8173		8064		7955		7846		7736		7627		7518		7409		7300		7191		7082		34
66		7082		6973		6864		6755		6646		6537		6428		6319		6210		6102		5993		33
67		5993		5884		5775		5667		5558		5449		5341		5232		5124		5015		4907		32
68		4907		4798		4690		4582		4473		4365		4257		4148		4040		3932		3824		31
69		3824		3715		3607		3499		3391		3283		3175		3067		2959		2851		2743		30
70	8.2	2743		2635		2528		2420		2312		2204		2096		1989		1881		1773		1666		29
71		1666		1558		1450		1343		1235		1128		1020		0913		0806		0698		0591		28
72	8.2	0591		0484		0376		0269		0162		0054		*9947		*9840		*9733		*9626		*9519		27
73	8.1	9519		9412		9305		9198		9091		8984		8877		8770		8663		8556		8450		26
74		8450		8343		8236		8129		8023		7916		7809		7703		7596		7489		7383		25
75	8.1	7383		7276		7170		7064		6957		6851		6744		6638		6532		6425		6319		24
76		6319		6213		6107		6001		5894		5788		5682		5576		5470		5364		5258		23
77		5258		5152		5046		4940		4834		4729		4623		4517		4411		4305		4200		22
78		4200		4094		3988		3883		3777		3672		3566		3460		3355		3249		3144		21
79		3144		3039		2933		2828		2722		2617		2512		2407		2301		2196		2091		20
80	8.1	2091		1986		1881		1776		1671		1566		1461		1356		1251		1146		1041		19
81	8.1	1041		0936		0831		0726		0621		0517		0412		0307		0202		0098		*9993		18
82	8.0	9993		9888		9784		9679		9575		9470		9366		9261		9157		9053		8948		17
83		8948		8844		8739		8635		8531		8427		8322		8218		8114		8010		7906		16
84		7906		7802		7698		7594		7490		7386		7282		7178		7074		6970		6866		15
85	8.0	6866		6762		6659		6555		6451		6347		6244		6140		6036		5933		5829		14
86		5829		5726		5622		5519		5415		5312		5208		5105		5001		4898		4795		13
87		4795		4691		4588		4485		4382		4279		4175		4072		3969		3866		3763		12
88		3763		3660		3557		3454		3351		3248		3145		3042		2939		2837		2734		11
89		2734		2631		2528		2425		2323		2220		2117		2015		1912		1810		1707		10
90	8.0	1707		1605		1502		1400		1297		1195		1092		0990		0888		0785		0683		09
91	8.0	0683		0581		0479		0376		0274		0172		0070		*9968		*9866		*9764		*9662		08
92	7.9	9662		9560		9458		9356		9254		9152		9050		8948		8846		8745		8643		07
93		8643		8541		8439		8338		8236		8134		8033		7931		7829		7728		7626		06
94		7626		7525		7423		7322		7221		7119		7018		6917		6815		6714		6613		05
95	7.9	6613		6511		6410		6309		6208		6107		6006		5904		5803		5702		5601		04
96		5601		5500		5399		5299		5198		5097		4996		4895		4794		4693		4593		03
97		4593		4492		4391		4291		4190		4089		3989		3888		3787		3687		3586		02
98		3586		3486		3385		3285		3185		3084		2984		2884		2783		2683		2583		01
99		2583		2482		2382		2282		2182		2082		1982		1882		1782		1682		1582		00
	100 ^{cc}			90 ^{cc}		80 ^{cc}		70 ^{cc}		60 ^{cc}		50 ^{cc}		40 ^{cc}		30 ^{cc}		20 ^{cc}		10 ^{cc}		00 ^{cc}		c
		100	101	102	103	104	105	106	107	108	109	110	111	112	113	114								
1	10.0		10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4								
2	20.0		20.2	20.4	20.6	20.8	21.0	21.2	21.4	21.6	21.8	22.0	22.2	22.4	22.6	22.8								
3	30.0		30.3	30.6	30.9	31.2	31.5	31.8	32.1	32.4	32.7	33.0	33.3	33.6	33.9	34.2								
4	40.0		40.4	40.8	41.2	41.6	42.0	42.4	42.8	43.2	43.6	44.0	44.4	44.8	45.2	45.6								
5	50.0		50.5	51.0	51.5	52.0	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.0	56.5	57.0								
6	60.0		60.6	61.2	61.8	62.4	63.0	63.6	64.2	64.8	65.4	66.0	66.6	67.2	67.8	68.4								
7	70.0		70.7	71.4	72.1	72.8	73.5	74.2	74.9	75.6	76.3	77.0	77.7	78.4	79.1	79.8								
8	80.0		80.8	81.6	82.4	83.2	84.0	84.8	85.6	86.4	87.2	88.0	88.8	89.6	90.4	91.2								
9	90.0		90.9	91.8	92.7	93.6	94.5	95.4	96.3	97.2	98.1	99.0	99.9	100.8	101.7	102.6								

tang 92^g

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cosc 8^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}				
00	7.9 7873	7774	7675	7575	7476	7377	7278	7179	7080	6981	6882	99			
01	6882	6783	6684	6585	6486	6388	6289	6190	6091	5992	5894	98			
02	5894	5795	5696	5598	5499	5401	5302	5203	5105	5006	4908	97			
03	4908	4809	4711	4613	4514	4416	4318	4219	4121	4023	3924	96			
04	3924	3826	3728	3630	3532	3434	3336	3237	3139	3041	2943	95			
05	7.9 2943	2845	2748	2650	2552	2454	2356	2258	2160	2063	1965	94			
06	1965	1867	1769	1672	1574	1477	1379	1281	1184	1086	0989	93			
07	0989	0891	0794	0696	0599	0502	0404	0307	0210	0112	0015	92			
08	7.9 0015	*9918	*9821	*9723	*9626	*9529	*9432	*9335	*9238	*9141	*9044	91			
09	7.8 9044	8947	8850	8753	8656	8559	8462	8365	8269	8172	8075	90			
10	7.8 8075	7978	7881	7785	7688	7591	7495	7398	7302	7205	7108	89			
11	7108	7012	6915	6819	6723	6626	6530	6433	6337	6241	6144	88			
12	6144	6048	5952	5856	5759	5663	5567	5471	5375	5279	5183	87			
13	5183	5087	4991	4895	4799	4703	4607	4511	4415	4319	4223	86			
14	4223	4127	4032	3936	3840	3745	3649	3553	3458	3362	3266	85			
15	7.8 3266	3171	3075	2980	2884	2789	2693	2598	2502	2407	2312	84			
16	2312	2216	2121	2026	1930	1835	1740	1645	1550	1455	1359	83			
17	1359	1264	1169	1074	0979	0884	0789	0694	0599	0504	0409	82			
18	7.8 0409	0315	0220	0125	0030	*9935	*9841	*9746	*9651	*9556	*9462	81			
19	7.7 9462	9367	9273	9178	9083	8989	8894	8800	8705	8611	8516	80			
20	7.7 8516	8422	8328	8233	8139	8045	7950	7856	7762	7668	7573	79			
21	7573	7479	7385	7291	7197	7103	7009	6915	6821	6727	6633	78			
22	6633	6539	6445	6351	6257	6163	6069	5976	5882	5788	5694	77			
23	5694	5601	5507	5413	5320	5226	5132	5039	4945	4852	4758	76			
24	4758	4665	4571	4478	4384	4291	4198	4104	4011	3918	3824	75			
25	7.7 3824	3731	3638	3545	3452	3358	3265	3172	3079	2986	2893	74			
26	2893	2800	2707	2614	2521	2428	2335	2242	2149	2056	1964	73			
27	1964	1871	1778	1685	1592	1500	1407	1314	1222	1129	1036	72			
28	1036	0944	0851	0759	0666	0574	0481	0389	0296	0204	0112	71			
29	7.7 0112	0019	*9927	*9835	*9742	*9650	*9558	*9466	*9373	*9281	*9189	70			
30	7.6 9189	9097	9005	8913	8821	8729	8637	8545	8453	8361	8269	69			
31	8269	8177	8085	7993	7901	7809	7718	7626	7534	7442	7351	68			
32	7351	7259	7167	7076	6984	6892	6801	6709	6618	6526	6435	67			
33	6435	6343	6252	6160	6069	5977	5886	5795	5703	5612	5521	66			
34	5521	5430	5338	5247	5156	5065	4974	4883	4791	4700	4609	65			
35	7.6 4609	4518	4427	4336	4245	4154	4063	3973	3882	3791	3700	64			
36	3700	3609	3518	3428	3337	3246	3155	3065	2974	2883	2793	63			
37	2793	2702	2612	2521	2431	2340	2250	2159	2069	1978	1888	62			
38	1888	1797	1707	1617	1526	1436	1346	1256	1165	1075	0985	61			
39	0985	0895	0805	0715	0624	0534	0444	0354	0264	0174	0084	60			
40	7.6 0084	*9994	*9904	*9814	*9725	*9635	*9545	*9455	*9365	*9275	*9186	59			
41	7.5 9186	9096	9006	8917	8827	8737	8648	8558	8468	8379	8289	58			
42	8289	8200	8110	8021	7931	7842	7753	7663	7574	7484	7395	57			
43	7395	7306	7216	7127	7038	6949	6860	6770	6681	6592	6503	56			
44	6503	6414	6325	6236	6147	6058	5969	5880	5791	5702	5613	55			
45	7.5 5613	5524	5435	5346	5258	5169	5080	4991	4902	4814	4725	54			
46	4725	4636	4548	4459	4370	4282	4193	4105	4016	3928	3839	53			
47	3839	3751	3662	3574	3485	3397	3309	3220	3132	3044	2956	52			
48	2956	2867	2779	2691	2603	2514	2426	2338	2250	2162	2074	51			
49	2074	1986	1898	1810	1722	1634	1546	1458	1370	1282	1194	50			
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c			
		88	89	90	91	92	93	94	95	96	97	98	99	100	
1		8.8	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0	1
2		17.6	17.8	18.0	18.2	18.4	18.6	18.8	19.0	19.2	19.4	19.6	19.8	20.0	2
3		26.4	26.7	27.0	27.3	27.6	27.9	28.2	28.5	28.8	29.1	29.4	29.7	30.0	3
4		35.2	35.6	36.0	36.4	36.8	37.2	37.6	38.0	38.4	38.8	39.2	39.6	40.0	4
5		44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	5
6		52.8	53.4	54.0	54.6	55.2	55.8	56.4	57.0	57.6	58.2	58.8	59.4	60.0	6
7		61.6	62.3	63.0	63.7	64.4	65.1	65.8	66.5	67.2	67.9	68.6	69.3	70.0	7
8		70.4	71.2	72.0	72.8	73.6	74.4	75.2	76.0	76.8	77.6	78.4	79.2	80.0	8
9		79.2	80.1	81.0	81.9	82.8	83.7	84.6	85.5	86.4	87.3	88.2	89.1	90.0	9

sec 91^g

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cotg 8^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}				
00	7.9 1582	1482	1382	1282	1182	1082	0982	0882	0782	0683	0583	99			
01	7.9 0583	0483	0383	0284	0184	0084	*9985	*9885	*9786	*9686	*9587	98			
02	7.8 9587	9487	9388	9288	9189	9089	8990	8891	8791	8692	8593	97			
03	8593	8494	8394	8295	8196	8097	7998	7899	7799	7700	7601	96			
04	7601	7502	7403	7305	7206	7107	7008	6909	6810	6711	6613	95			
05	7.8 6613	6514	6415	6316	6218	6119	6020	5922	5823	5725	5626	94			
06	5626	5528	5429	5331	5232	5134	5035	4937	4839	4740	4642	93			
07	4642	4544	4446	4347	4249	4151	4053	3955	3857	3759	3661	92			
08	3661	3563	3465	3367	3269	3171	3073	2975	2877	2779	2681	91			
09	2681	2584	2486	2388	2290	2193	2095	1997	1900	1802	1705	90			
10	7.8 1705	1607	1510	1412	1315	1217	1120	1022	0925	0828	0730	89			
11	7.8 0730	0633	0536	0438	0341	0244	0147	0050	*9952	*9855	*9758	88			
12	7.7 9758	9661	9564	9467	9370	9273	9176	9079	8982	8886	8789	87			
13	8789	8692	8595	8498	8401	8305	8208	8111	8015	7918	7821	86			
14	7821	7725	7628	7532	7435	7339	7242	7146	7049	6953	6857	85			
15	7.7 6857	6760	6664	6568	6471	6375	6279	6183	6086	5990	5894	84			
16	5894	5798	5702	5606	5510	5414	5318	5222	5126	5030	4934	83			
17	4934	4838	4742	4646	4550	4455	4359	4263	4167	4072	3976	82			
18	3976	3880	3785	3689	3594	3498	3402	3307	3211	3116	3021	81			
19	3021	2925	2830	2734	2639	2544	2448	2353	2258	2163	2067	80			
20	7.7 2067	1972	1877	1782	1687	1592	1497	1401	1306	1211	1116	79			
21	1116	1021	0927	0832	0737	0642	0547	0452	0357	0263	0168	78			
22	7.7 0168	0073	*9978	*9884	*9789	*9694	*9600	*9505	*9411	*9316	*9222	77			
23	7.6 9222	9127	9033	8938	8844	8749	8655	8560	8466	8372	8278	76			
24	8278	8183	8089	7995	7901	7806	7712	7618	7524	7430	7336	75			
25	7.6 7336	7242	7148	7054	6960	6866	6772	6678	6584	6490	6396	74			
26	6396	6303	6209	6115	6021	5927	5834	5740	5646	5553	5459	73			
27	5459	5366	5272	5178	5085	4991	4898	4804	4711	4618	4524	72			
28	4524	4431	4337	4244	4151	4058	3964	3871	3778	3685	3591	71			
29	3591	3498	3405	3312	3219	3126	3033	2940	2847	2754	2661	70			
30	7.6 2661	2568	2475	2382	2289	2197	2104	2011	1918	1825	1733	69			
31	1733	1640	1547	1455	1362	1269	1177	1084	0992	0899	0807	68			
32	7.6 0807	0714	0622	0529	0437	0344	0252	0160	0067	*9975	*9883	67			
33	7.5 9883	9791	9698	9606	9514	9422	9330	9237	9145	9053	8961	66			
34	8961	8869	8777	8685	8593	8501	8409	8317	8226	8134	8042	65			
35	7.5 8042	7950	7858	7766	7675	7583	7491	7400	7308	7216	7125	64			
36	7125	7033	6941	6850	6758	6667	6575	6484	6392	6301	6210	63			
37	6210	6118	6027	5935	5844	5753	5662	5570	5479	5388	5297	62			
38	5297	5205	5114	5023	4932	4841	4750	4659	4568	4477	4386	61			
39	4386	4295	4204	4113	4022	3931	3841	3750	3659	3568	3477	60			
40	7.5 3477	3387	3296	3205	3115	3024	2933	2843	2752	2661	2571	59			
41	2571	2480	2390	2299	2209	2119	2028	1938	1847	1757	1667	58			
42	1667	1576	1486	1396	1306	1215	1125	1035	0945	0855	0764	57			
43	7.5 0764	0674	0584	0494	0404	0314	0224	0134	0044	*9954	*9864	56			
44	7.4 9864	9775	9685	9595	9505	9415	9325	9236	9146	9056	8967	55			
45	7.4 8967	8877	8787	8698	8608	8518	8429	8339	8250	8160	8071	54			
46	8071	7981	7892	7802	7713	7624	7534	7445	7356	7266	7177	53			
47	7177	7088	6999	6909	6820	6731	6642	6553	6464	6375	6285	52			
48	6285	6196	6107	6018	5929	5840	5752	5663	5574	5485	5396	51			
49	5396	5307	5218	5130	5041	4952	4863	4775	4686	4597	4509	50			
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c			
		88	89	90	91	92	93	94	95	96	97	98	99	100	
1	8.8	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0	1	
2	17.6	17.8	18.0	18.2	18.4	18.6	18.8	19.0	19.2	19.4	19.6	19.8	20.0	2	
3	26.4	26.7	27.0	27.3	27.6	27.9	28.2	28.5	28.8	29.1	29.4	29.7	30.0	3	
4	35.2	35.6	36.0	36.4	36.8	37.2	37.6	38.0	38.4	38.8	39.2	39.6	40.0	4	
5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	5	
6	52.8	53.4	54.0	54.6	55.2	55.8	56.4	57.0	57.6	58.2	58.8	59.4	60.0	6	
7	61.6	62.3	63.0	63.7	64.4	65.1	65.8	66.5	67.2	67.9	68.6	69.3	70.0	7	
8	70.4	71.2	72.0	72.8	73.6	74.4	75.2	76.0	76.8	77.6	78.4	79.2	80.0	8	
9	79.2	80.1	81.0	81.9	82.8	83.7	84.6	85.5	86.4	87.3	88.2	89.1	90.0	9	

tang 91^g

cos ec 8^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}		
50	7.5 1194	1107	1019	0931	0843	0755	0668	0580	0492	0405	0317	49	
51	7.5 0317	0229	0142	0054	*9966	*9879	*9791	*9704	*9616	*9529	*9442	48	
52	7.4 9442	9354	9267	9179	9092	9005	8917	8830	8743	8655	8568	47	
53	8568	8481	8394	8307	8219	8132	8045	7958	7871	7784	7697	46	
54	7697	7610	7523	7436	7349	7262	7175	7088	7001	6914	6828	45	
55	7.4 6828	6741	6654	6567	6481	6394	6307	6220	6134	6047	5960	44	
56	5960	5874	5787	5701	5614	5528	5441	5355	5268	5182	5095	43	
57	5095	5009	4922	4836	4750	4663	4577	4491	4405	4318	4232	42	
58	4232	4146	4060	3974	3887	3801	3715	3629	3543	3457	3371	41	
59	3371	3285	3199	3113	3027	2941	2855	2769	2683	2598	2512	40	
60	7.4 2512	2426	2340	2254	2169	2083	1997	1912	1826	1740	1655	39	
61	1655	1569	1484	1398	1312	1227	1141	1056	0970	0885	0800	38	
62	7.4 0800	0714	0629	0543	0458	0373	0287	0202	0117	0032	*9946	37	
63	7.3 9946	9861	9776	9691	9606	9521	9435	9350	9265	9180	9095	36	
64	9095	9010	8925	8840	8755	8670	8586	8501	8416	8331	8246	35	
65	7.3 8246	8161	8076	7992	7907	7822	7737	7653	7568	7483	7399	34	
66	7399	7314	7230	7145	7061	6976	6891	6807	6722	6638	6554	33	
67	6554	6469	6385	6300	6216	6132	6047	5963	5879	5795	5710	32	
68	5710	5626	5542	5458	5373	5289	5205	5121	5037	4953	4869	31	
69	4869	4785	4701	4617	4533	4449	4365	4281	4197	4113	4029	30	
70	7.3 4029	3946	3862	3778	3694	3611	3527	3443	3359	3276	3192	29	
71	3192	3108	3025	2941	2858	2774	2690	2607	2523	2440	2356	28	
72	2356	2273	2190	2106	2023	1939	1856	1773	1689	1606	1523	27	
73	1523	1440	1356	1273	1190	1107	1024	0940	0857	0774	0691	26	
74	7.3 0691	0608	0525	0442	0359	0276	0193	0110	0027	*9944	*9861	25	
75	7.2 9861	9778	9696	9613	9530	9447	9364	9282	9199	9116	9033	24	
76	9033	8951	8868	8785	8703	8620	8537	8455	8372	8290	8207	23	
77	8207	8125	8042	7960	7877	7795	7713	7630	7548	7466	7383	22	
78	7383	7301	7219	7136	7054	6972	6890	6807	6725	6643	6561	21	
79	6561	6479	6397	6315	6233	6150	6068	5986	5904	5822	5741	20	
80	7.2 5741	5659	5577	5495	5413	5331	5249	5167	5086	5004	4922	19	
81	4922	4840	4759	4677	4595	4513	4432	4350	4269	4187	4105	18	
82	4105	4024	3942	3861	3779	3698	3616	3535	3453	3372	3291	17	
83	3291	3209	3128	3047	2965	2884	2803	2721	2640	2559	2478	16	
84	2478	2396	2315	2234	2153	2072	1991	1910	1829	1748	1667	15	
85	7.2 1667	1586	1505	1424	1343	1262	1181	1100	1019	0938	0857	14	
86	0857	0776	0696	0615	0534	0453	0373	0292	0211	0130	0050	13	
87	7.2 0050	*9969	*9889	*9808	*9727	*9647	*9566	*9486	*9405	*9325	*9244	12	
88	7.1 9244	9164	9083	9003	8922	8842	8762	8681	8601	8521	8440	11	
89	8440	8360	8280	8200	8119	8039	7959	7879	7799	7719	7638	10	
90	7.1 7638	7558	7478	7398	7318	7238	7158	7078	6998	6918	6838	09	
91	6838	6758	6678	6599	6519	6439	6359	6279	6199	6120	6040	08	
92	6040	5960	5880	5801	5721	5641	5562	5482	5403	5323	5243	07	
93	5243	5164	5084	5005	4925	4846	4766	4687	4607	4528	4449	06	
94	4449	4369	4290	4210	4131	4052	3973	3893	3814	3735	3656	05	
95	7.1 3656	3576	3497	3418	3339	3260	3181	3101	3022	2943	2864	04	
96	2864	2785	2706	2627	2548	2469	2390	2311	2233	2154	2075	03	
97	2075	1996	1917	1838	1760	1681	1602	1523	1445	1366	1287	02	
98	1287	1208	1130	1051	0973	0894	0815	0737	0658	0580	0501	01	
99	7.1 0501	0423	0344	0266	0187	0109	0030	*9952	*9874	*9795	*9717	00	
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c	
		78	79	80	81	82	83	84	85	86	87	88	
1	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	1	
2	15.6	15.8	16.0	16.2	16.4	16.6	16.8	17.0	17.2	17.4	17.6	2	
3	23.4	23.7	24.0	24.3	24.6	24.9	25.2	25.5	25.8	26.1	26.4	3	
4	31.2	31.6	32.0	32.4	32.8	33.2	33.6	34.0	34.4	34.8	35.2	4	
5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	5	
6	46.8	47.4	48.0	48.6	49.2	49.8	50.4	51.0	51.6	52.2	52.8	6	
7	54.6	55.3	56.0	56.7	57.4	58.1	58.8	59.5	60.2	60.9	61.6	7	
8	62.4	63.2	64.0	64.8	65.6	66.4	67.2	68.0	68.8	69.6	70.4	8	
9	70.2	71.1	72.0	72.9	73.8	74.7	75.6	76.5	77.4	78.3	79.2	9	

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cotg 8 ^g													
c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}		
50	7.4 4509	4420	4331	4243	4154	4066	3977	3889	3800	3712	3623	49	
51	3623	3535	3446	3358	3270	3181	3093	3005	2916	2828	2740	48	
52	2740	2652	2563	2475	2387	2299	2211	2123	2035	1947	1859	47	
53	1859	1771	1683	1595	1507	1419	1331	1243	1155	1067	0980	46	
54	0980	0892	0804	0716	0628	0541	0453	0365	0278	0190	0102	45	
55	7.4 0102	0015	*9927	*9840	*9752	*9665	*9577	*9490	*9402	*9315	*9227	44	
56	7.3 9227	9140	9052	8965	8878	8790	8703	8616	8529	8441	8354	43	
57	8354	8267	8180	8093	8006	7918	7831	7744	7657	7570	7483	42	
58	7483	7396	7309	7222	7135	7048	6962	6875	6788	6701	6614	41	
59	6614	6527	6441	6354	6267	6180	6094	6007	5920	5834	5747	40	
60	7.3 5747	5661	5574	5487	5401	5314	5228	5141	5055	4969	4882	39	
61	4882	4796	4709	4623	4537	4450	4364	4278	4192	4105	4019	38	
62	4019	3933	3847	3761	3674	3588	3502	3416	3330	3244	3158	37	
63	3158	3072	2986	2900	2814	2728	2642	2556	2471	2385	2299	36	
64	2299	2213	2127	2042	1956	1870	1784	1699	1613	1528	1442	35	
65	7.3 1442	1356	1271	1185	1100	1014	0929	0843	0758	0672	0587	34	
66	7.3 0587	0501	0416	0331	0245	0160	0075	*9989	*9904	*9819	*9734	33	
67	7.2 9734	9648	9563	9478	9393	9308	9223	9138	9053	8967	8882	32	
68	8882	8797	8712	8627	8543	8458	8373	8288	8203	8118	8033	31	
69	8033	7948	7864	7779	7694	7609	7525	7440	7355	7271	7186	30	
70	7.2 7186	7101	7017	6932	6847	6763	6678	6594	6509	6425	6340	29	
71	6340	6256	6172	6087	6003	5919	5834	5750	5666	5581	5497	28	
72	5497	5413	5329	5244	5160	5076	4992	4908	4824	4740	4656	27	
73	4656	4571	4487	4403	4319	4235	4152	4068	3984	3900	3816	26	
74	3816	3732	3648	3564	3481	3397	3313	3229	3146	3062	2978	25	
75	7.2 2978	2895	2811	2727	2644	2560	2476	2393	2309	2226	2142	24	
76	2142	2059	1975	1892	1809	1725	1642	1558	1475	1392	1308	23	
77	1308	1225	1142	1059	0975	0892	0809	0726	0643	0560	0476	22	
78	7.2 0476	0393	0310	0227	0144	0061	*9978	*9895	*9812	*9729	*9646	21	
79	7.1 9646	9563	9480	9398	9315	9232	9149	9066	8984	8901	8818	20	
80	7.1 8818	8735	8653	8570	8487	8405	8322	8239	8157	8074	7992	19	
81	7992	7909	7827	7744	7662	7579	7497	7414	7332	7249	7167	18	
82	7167	7085	7002	6920	6838	6755	6673	6591	6509	6427	6344	17	
83	6344	6262	6180	6098	6016	5934	5852	5770	5688	5606	5524	16	
84	5524	5442	5360	5278	5196	5114	5032	4950	4868	4786	4705	15	
85	7.1 4705	4623	4541	4459	4377	4296	4214	4132	4051	3969	3887	14	
86	3887	3806	3724	3643	3561	3479	3398	3316	3235	3154	3072	13	
87	3072	2991	2909	2828	2746	2665	2584	2502	2421	2340	2259	12	
88	2259	2177	2096	2015	1934	1852	1771	1690	1609	1528	1447	11	
89	1447	1366	1285	1204	1123	1042	0961	0880	0799	0718	0637	10	
90	7.1 0637	0556	0475	0394	0314	0233	0152	0071	*9990	*9910	*9829	09	
91	7.0 9829	9748	9668	9587	9506	9426	9345	9264	9184	9103	9023	08	
92	9023	8942	8862	8781	8701	8620	8540	8459	8379	8299	8218	07	
93	8218	8138	8058	7977	7897	7817	7736	7656	7576	7496	7416	06	
94	7416	7335	7255	7175	7095	7015	6935	6855	6775	6695	6615	05	
95	7.0 6615	6535	6455	6375	6295	6215	6135	6055	5975	5895	5815	04	
96	5815	5736	5656	5576	5496	5417	5337	5257	5177	5098	5018	03	
97	5018	4938	4859	4779	4700	4620	4541	4461	4382	4302	4223	02	
98	4223	4143	4064	3984	3905	3825	3746	3667	3587	3508	3429	01	
99	3429	3349	3270	3191	3112	3032	2953	2874	2795	2716	2637	00	
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c	
		79	80	81	82	83	84	85	86	87	88	89	
1	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	1	
2	15.8	16.0	16.2	16.4	16.6	16.8	17.0	17.2	17.4	17.6	17.8	2	
3	23.7	24.0	24.3	24.6	24.9	25.2	25.5	25.8	26.1	26.4	26.7	3	
4	31.6	32.0	32.4	32.8	33.2	33.6	34.0	34.4	34.8	35.2	35.6	4	
5	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	5	
6	47.4	48.0	48.6	49.2	49.8	50.4	51.0	51.6	52.2	52.8	53.4	6	
7	55.3	56.0	56.7	57.4	58.1	58.8	59.5	60.2	60.9	61.6	62.3	7	
8	63.2	64.0	64.8	65.6	66.4	67.2	68.0	68.8	69.6	70.4	71.2	8	
9	71.1	72.0	72.9	73.8	74.7	75.6	76.5	77.4	78.3	79.2	80.1	9	

tang 91^g

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cosec 9^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}		
00	7.0 9717	9639	9560	9482	9404	9326	9247	9169	9091	9013	8935	99	
01	8935	8856	8778	8700	8622	8544	8466	8388	8310	8232	8154	98	
02	8154	8076	7998	7920	7842	7764	7686	7608	7531	7453	7375	97	
03	7375	7297	7219	7142	7064	6986	6908	6831	6753	6675	6598	96	
04	6598	6520	6442	6365	6287	6210	6132	6055	5977	5900	5822	95	
05	7.0 5822	5745	5667	5590	5512	5435	5358	5280	5203	5126	5048	94	
06	5048	4971	4894	4817	4739	4662	4585	4508	4431	4353	4276	93	
07	4276	4199	4122	4045	3968	3891	3814	3737	3660	3583	3506	92	
08	3506	3429	3352	3275	3198	3121	3044	2968	2891	2814	2737	91	
09	2737	2660	2584	2507	2430	2354	2277	2200	2123	2047	1970	90	
10	7.0 1970	1894	1817	1740	1664	1587	1511	1434	1358	1281	1205	89	
11	1205	1129	1052	0976	0899	0823	0747	0670	0594	0518	0441	88	
12	7.0 0441	0365	0289	0213	0136	0060	*9984	*9908	*9832	*9756	*9679	87	
13	6.9 9679	9603	9527	9451	9375	9299	9223	9147	9071	8995	8919	86	
14	8919	8843	8767	8691	8616	8540	8464	8388	8312	8236	8161	85	
15	6.9 8161	8085	8009	7933	7858	7782	7706	7631	7555	7479	7404	84	
16	7404	7328	7252	7177	7101	7026	6950	6875	6799	6724	6648	83	
17	6648	6573	6498	6422	6347	6271	6196	6121	6045	5970	5895	82	
18	5895	5819	5744	5669	5594	5519	5443	5368	5293	5218	5143	81	
19	5143	5068	4993	4918	4842	4767	4692	4617	4542	4467	4392	80	
20	6.9 4392	4318	4243	4168	4093	4018	3943	3868	3793	3719	3644	79	
21	3644	3569	3494	3419	3345	3270	3195	3121	3046	2971	2897	78	
22	2897	2822	2747	2673	2598	2524	2449	2375	2300	2226	2151	77	
23	2151	2077	2002	1928	1854	1779	1705	1630	1556	1482	1407	76	
24	1407	1333	1259	1185	1110	1036	0962	0888	0814	0739	0665	75	
25	6.9 0665	0591	0517	0443	0369	0295	0221	0147	0073	*9999	*9925	74	
26	6.8 9925	9851	9777	9703	9629	9555	9481	9407	9333	9259	9186	73	
27	9186	9112	9038	8964	8890	8817	8743	8669	8596	8522	8448	72	
28	8448	8375	8301	8227	8154	8080	8007	7933	7859	7786	7712	71	
29	7712	7639	7565	7492	7419	7345	7272	7198	7125	7052	6978	70	
30	6.8 6978	6905	6832	6758	6685	6612	6538	6465	6392	6319	6246	69	
31	6246	6172	6099	6026	5953	5880	5807	5734	5661	5588	5515	68	
32	5515	5441	5368	5296	5223	5150	5077	5004	4931	4858	4785	67	
33	4785	4712	4639	4566	4494	4421	4348	4275	4203	4130	4057	66	
34	4057	3984	3912	3839	3766	3694	3621	3549	3476	3403	3331	65	
35	6.8 3331	3258	3186	3113	3041	2968	2896	2823	2751	2678	2606	64	
36	2606	2534	2461	2389	2316	2244	2172	2100	2027	1955	1883	63	
37	1883	1810	1738	1666	1594	1522	1450	1377	1305	1233	1161	62	
38	1161	1089	1017	0945	0873	0801	0729	0657	0585	0513	0441	61	
39	6.8 0441	0369	0297	0225	0153	0081	0010	*9938	*9866	*9794	*9722	60	
40	6.7 9722	9650	9579	9507	9435	9364	9292	9220	9148	9077	9005	59	
41	9005	8934	8862	8790	8719	8647	8576	8504	8433	8361	8290	58	
42	8290	8218	8147	8075	8004	7932	7861	7790	7718	7647	7576	57	
43	7576	7504	7433	7362	7290	7219	7148	7077	7005	6934	6863	56	
44	6863	6792	6721	6650	6579	6507	6436	6365	6294	6223	6152	55	
45	6.7 6152	6081	6010	5939	5868	5797	5726	5655	5584	5513	5443	54	
46	5443	5372	5301	5230	5159	5088	5018	4947	4876	4805	4735	53	
47	4735	4664	4593	4523	4452	4381	4311	4240	4169	4099	4028	52	
48	4028	3958	3887	3816	3746	3675	3605	3534	3464	3394	3323	51	
49	3323	3253	3182	3112	3042	2971	2901	2831	2760	2690	2620	50	
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c	
			70	71	72	73	74	75	76	77	78	79	
1	7.0	7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	1		
2	14.0	14.2	14.4	14.6	14.8	15.0	15.2	15.4	15.6	15.8	2		
3	21.0	21.3	21.6	21.9	22.2	22.5	22.8	23.1	23.4	23.7	3		
4	28.0	28.4	28.8	29.2	29.6	30.0	30.4	30.8	31.2	31.6	4		
5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	5		
6	42.0	42.6	43.2	43.8	44.4	45.0	45.6	46.2	46.8	47.4	6		
7	49.0	49.7	50.4	51.1	51.8	52.5	53.2	53.9	54.6	55.3	7		
8	56.0	56.8	57.6	58.4	59.2	60.0	60.8	61.6	62.4	63.2	8		
9	63.0	63.9	64.8	65.7	66.6	67.5	68.4	69.3	70.2	71.1	9		

sec 90^g

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cotg 9^g

c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}	
00	7.0 2637	2558	2478	2399	2320	2241	2162	2083	2004	1925	1846	99
01	1846	1767	1688	1610	1531	1452	1373	1294	1215	1136	1058	98
02	1058	0979	0900	0821	0743	0664	0585	0507	0428	0349	0271	97
03	7.0 0271	0192	0114	0035	*9957	*9878	*9800	*9721	*9643	*9564	*9486	96
04	6.9 9486	9407	9329	9251	9172	9094	9015	8937	8859	8781	8702	95
05	6.9 8702	8624	8546	8468	8389	8311	8233	8155	8077	7999	7921	94
06	7921	7843	7764	7686	7608	7530	7452	7374	7296	7219	7141	93
07	7141	7063	6985	6907	6829	6751	6673	6596	6518	6440	6362	92
08	6362	6285	6207	6129	6052	5974	5896	5819	5741	5663	5586	91
09	5586	5508	5431	5353	5276	5198	5121	5043	4966	4888	4811	90
10	6.9 4811	4734	4656	4579	4501	4424	4347	4270	4192	4115	4038	89
11	4038	3961	3883	3806	3729	3652	3575	3498	3420	3343	3266	88
12	3266	3189	3112	3035	2958	2881	2804	2727	2650	2573	2496	87
13	2496	2420	2343	2266	2189	2112	2035	1959	1882	1805	1728	86
14	1728	1652	1575	1498	1421	1345	1268	1192	1115	1038	0962	85
15	6.9 0962	0885	0809	0732	0656	0579	0503	0426	0350	0273	0197	84
16	6.9 0197	0121	0044	*9968	*9891	*9815	*9739	*9663	*9586	*9510	*9434	83
17	6.8 9434	9358	9281	9205	9129	9053	8977	8901	8824	8748	8672	82
18	8672	8596	8520	8444	8368	8292	8216	8140	8064	7988	7912	81
19	7912	7837	7761	7685	7609	7533	7457	7381	7306	7230	7154	80
20	6.8 7154	7078	7003	6927	6851	6776	6700	6624	6549	6473	6398	79
21	6398	6322	6246	6171	6095	6020	5944	5869	5793	5718	5643	78
22	5643	5567	5492	5416	5341	5266	5190	5115	5040	4965	4889	77
23	4889	4814	4739	4664	4588	4513	4438	4363	4288	4213	4138	76
24	4138	4062	3987	3912	3837	3762	3687	3612	3537	3462	3387	75
25	6.8 3387	3313	3238	3163	3088	3013	2938	2863	2789	2714	2639	74
26	2639	2564	2489	2415	2340	2265	2191	2116	2041	1967	1892	73
27	1892	1817	1743	1668	1594	1519	1445	1370	1296	1221	1147	72
28	1147	1072	0998	0924	0849	0775	0700	0626	0552	0477	0403	71
29	6.8 0403	0329	0255	0180	0106	0032	*9958	*9883	*9809	*9735	*9661	70
30	6.7 9661	9587	9513	9439	9365	9291	9216	9142	9068	8994	8920	69
31	8920	8846	8773	8699	8625	8551	8477	8403	8329	8255	8181	68
32	8181	8108	8034	7960	7886	7813	7739	7665	7591	7518	7444	67
33	7444	7370	7297	7223	7150	7076	7002	6929	6855	6782	6708	66
34	6708	6635	6561	6488	6414	6341	6268	6194	6121	6047	5974	65
35	6.7 5974	5901	5827	5754	5681	5608	5534	5461	5388	5315	5241	64
36	5241	5168	5095	5022	4949	4876	4802	4729	4656	4583	4510	63
37	4510	4437	4364	4291	4218	4145	4072	3999	3926	3854	3781	62
38	3781	3708	3635	3562	3489	3416	3344	3271	3198	3125	3053	61
39	3053	2980	2907	2834	2762	2689	2616	2544	2471	2399	2326	60
40	6.7 2326	2254	2181	2108	2036	1963	1891	1818	1746	1674	1601	59
41	1601	1529	1456	1384	1312	1239	1167	1095	1022	0950	0878	58
42	0878	0805	0733	0661	0589	0516	0444	0372	0300	0228	0156	57
43	6.7 0156	0084	0012	*9939	*9867	*9795	*9723	*9651	*9579	*9507	*9435	56
44	6.6 9435	9363	9291	9219	9148	9076	9004	8932	8860	8788	8716	55
45	6.6 8716	8645	8573	8501	8429	8358	8286	8214	8142	8071	7999	54
46	7999	7927	7856	7784	7713	7641	7569	7498	7426	7355	7283	53
47	7283	7212	7140	7069	6997	6926	6854	6783	6712	6640	6569	52
48	6569	6497	6426	6355	6283	6212	6141	6070	5998	5927	5856	51
49	5856	5785	5713	5642	5571	5500	5429	5358	5287	5216	5144	50
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c
			71	72	73	74	75	76	77	78	79	80
1		7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0	1
2		14.2	14.4	14.6	14.8	15.0	15.2	15.4	15.6	15.8	16.0	2
3		21.3	21.6	21.9	22.2	22.5	22.8	23.1	23.4	23.7	24.0	3
4		28.4	28.8	29.2	29.6	30.0	30.4	30.8	31.2	31.6	32.0	4
5		35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	5
6		42.6	43.2	43.8	44.4	45.0	45.6	46.2	46.8	47.4	48.0	6
7		49.7	50.4	51.1	51.8	52.5	53.2	53.9	54.6	55.3	56.0	7
8		56.8	57.6	58.4	59.2	60.0	60.8	61.6	62.4	63.2	64.0	8
9		63.9	64.8	65.7	66.6	67.5	68.4	69.3	70.2	71.1	72.0	9

tang 90^g

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cosec 9 ^g													
c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}		
50	6.7 2620	2549	2479	2409	2339	2268	2198	2128	2058	1988	1918	49	
51	1918	1848	1777	1707	1637	1567	1497	1427	1357	1287	1217	48	
52	1217	1147	1077	1007	0937	0867	0797	0728	0658	0588	0518	47	
53	6.7 0518	0448	0378	0309	0239	0169	0099	0030	*9960	*9890	*9820	46	
54	6.6 9820	9751	9681	9611	9542	9472	9403	9333	9263	9194	9124	45	
55	6.6 9124	9055	8985	8916	8846	8777	8707	8638	8568	8499	8430	44	
56	8430	8360	8291	8222	8152	8083	8014	7944	7875	7806	7736	43	
57	7736	7667	7598	7529	7460	7390	7321	7252	7183	7114	7045	42	
58	7045	6976	6907	6837	6768	6699	6630	6561	6492	6423	6354	41	
59	6354	6285	6217	6148	6079	6010	5941	5872	5803	5734	5666	40	
60	6.6 5666	5597	5528	5459	5390	5322	5253	5184	5116	5047	4978	39	
61	4978	4909	4841	4772	4704	4635	4566	4498	4429	4361	4292	38	
62	4292	4224	4155	4087	4018	3950	3881	3813	3744	3676	3608	37	
63	3608	3539	3471	3403	3334	3266	3198	3129	3061	2993	2924	36	
64	2924	2856	2788	2720	2652	2583	2515	2447	2379	2311	2243	35	
65	6.6 2243	2175	2107	2039	1970	1902	1834	1766	1698	1630	1562	34	
66	1562	1495	1427	1359	1291	1223	1155	1087	1019	0951	0884	33	
67	0884	0816	0748	0680	0612	0545	0477	0409	0342	0274	0206	32	
68	6.6 0206	0138	0071	0003	*9936	*9868	*9800	*9733	*9665	*9598	*9530	31	
69	6.5 9530	9463	9395	9328	9260	9193	9125	9058	8990	8923	8855	30	
70	6.5 8855	8788	8721	8653	8586	8519	8451	8384	8317	8249	8182	29	
71	8182	8115	8048	7980	7913	7846	7779	7712	7645	7577	7510	28	
72	7510	7443	7376	7309	7242	7175	7108	7041	6974	6907	6840	27	
73	6840	6773	6706	6639	6572	6505	6438	6371	6304	6237	6171	26	
74	6171	6104	6037	5970	5903	5837	5770	5703	5636	5570	5503	25	
75	6.5 5503	5436	5370	5303	5236	5170	5103	5036	4970	4903	4837	24	
76	4837	4770	4703	4637	4570	4504	4437	4371	4304	4238	4172	23	
77	4172	4105	4039	3972	3906	3840	3773	3707	3641	3574	3508	22	
78	3508	3442	3375	3309	3243	3177	3110	3044	2978	2912	2846	21	
79	2846	2780	2713	2647	2581	2515	2449	2383	2317	2251	2185	20	
80	6.5 2185	2119	2053	1987	1921	1855	1789	1723	1657	1591	1525	19	
81	1525	1459	1393	1328	1262	1196	1130	1064	0999	0933	0867	18	
82	0867	0801	0736	0670	0604	0538	0473	0407	0341	0276	0210	17	
83	6.5 0210	0145	0079	0013	*9948	*9882	*9817	*9751	*9686	*9620	*9555	16	
84	6.4 9555	9489	9424	9358	9293	9227	9162	9097	9031	8966	8900	15	
85	6.4 8900	8835	8770	8704	8639	8574	8509	8443	8378	8313	8248	14	
86	8248	8182	8117	8052	7987	7922	7857	7791	7726	7661	7596	13	
87	7596	7531	7466	7401	7336	7271	7206	7141	7076	7011	6946	12	
88	6946	6881	6816	6751	6686	6621	6556	6492	6427	6362	6297	11	
89	6297	6232	6167	6103	6038	5973	5908	5844	5779	5714	5649	10	
90	6.4 5649	5585	5520	5455	5391	5326	5262	5197	5132	5068	5003	09	
91	5003	4939	4874	4810	4745	4681	4616	4552	4487	4423	4358	08	
92	4358	4294	4229	4165	4101	4036	3972	3908	3843	3779	3715	07	
93	3715	3650	3586	3522	3458	3393	3329	3265	3201	3136	3072	06	
94	3072	3008	2944	2880	2816	2752	2687	2623	2559	2495	2431	05	
95	6.4 2431	2367	2303	2239	2175	2111	2047	1983	1919	1855	1791	04	
96	1791	1728	1664	1600	1536	1472	1408	1344	1281	1217	1153	03	
97	1153	1089	1025	0962	0898	0834	0771	0707	0643	0579	0516	02	
98	6.4 0516	0452	0389	0325	0261	0198	0134	0071	0007	*9943	*9880	01	
99	6.3 9880	9816	9753	9689	9626	9562	9499	9436	9372	9309	9245	00	
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c	
			63	64	65	66	67	68	69	70	71		
1			6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.1	1	
2			12.6	12.8	13.0	13.2	13.4	13.6	13.8	14.0	14.2	2	
3			18.9	19.2	19.5	19.8	20.1	20.4	20.7	21.0	21.3	3	
4			25.2	25.6	26.0	26.4	26.8	27.2	27.6	28.0	28.4	4	
5			31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	5	
6			37.8	38.4	39.0	39.6	40.2	40.8	41.4	42.0	42.6	6	
7			44.1	44.8	45.5	46.2	46.9	47.6	48.3	49.0	49.7	7	
8			50.4	51.2	52.0	52.8	53.6	54.4	55.2	56.0	56.8	8	
9			56.7	57.6	58.5	59.4	60.3	61.2	62.1	63.0	63.9	9	

sec 90^g

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

cotg 9 ^g												
c	00 ^{cc}	10 ^{cc}	20 ^{cc}	30 ^{cc}	40 ^{cc}	50 ^{cc}	60 ^{cc}	70 ^{cc}	80 ^{cc}	90 ^{cc}	100 ^{cc}	
50	6.6 5144	5073	5002	4931	4860	4789	4718	4647	4576	4505	4435	49
51	4435	4364	4293	4222	4151	4080	4009	3939	3868	3797	3726	48
52	3726	3655	3585	3514	3443	3372	3302	3231	3160	3090	3019	47
53	3019	2949	2878	2807	2737	2666	2596	2525	2455	2384	2314	46
54	2314	2243	2173	2102	2032	1962	1891	1821	1750	1680	1610	45
55	6.6 1610	1539	1469	1399	1328	1258	1188	1118	1048	0977	0907	44
56	0907	0837	0767	0697	0627	0556	0486	0416	0346	0276	0206	43
57	6.6 0206	0136	0066	*9996	*9926	*9856	*9786	*9716	*9646	*9576	*9506	42
58	6.5 9506	9436	9367	9297	9227	9157	9087	9017	8948	8878	8808	41
59	8808	8738	8669	8599	8529	8460	8390	8320	8251	8181	8111	40
60	6.5 8111	8042	7972	7903	7833	7764	7694	7625	7555	7486	7416	39
61	7416	7347	7277	7208	7138	7069	7000	6930	6861	6792	6722	38
62	6722	6653	6584	6514	6445	6376	6307	6237	6168	6099	6030	37
63	6030	5961	5891	5822	5753	5684	5615	5546	5477	5408	5339	36
64	5339	5270	5201	5132	5063	4994	4925	4856	4787	4718	4649	35
65	6.5 4649	4580	4511	4443	4374	4305	4236	4167	4098	4030	3961	34
66	3961	3892	3823	3755	3686	3617	3549	3480	3411	3343	3274	33
67	3274	3206	3137	3068	3000	2931	2863	2794	2726	2657	2589	32
68	2589	2520	2452	2383	2315	2247	2178	2110	2042	1973	1905	31
69	1905	1837	1768	1700	1632	1563	1495	1427	1359	1290	1222	30
70	6.5 1222	1154	1086	1018	0950	0881	0813	0745	0677	0609	0541	29
71	6.5 0541	0473	0405	0337	0269	0201	0133	0065	*9997	*9929	*9861	28
72	6.4 9861	9793	9726	9658	9590	9522	9454	9386	9318	9251	9183	27
73	9183	9115	9047	8980	8912	8844	8777	8709	8641	8574	8506	26
74	8506	8438	8371	8303	8235	8168	8100	8033	7965	7898	7830	25
75	6.4 7830	7763	7695	7628	7560	7493	7426	7358	7291	7223	7156	24
76	7156	7089	7021	6954	6887	6819	6752	6685	6618	6550	6483	23
77	6483	6416	6349	6282	6214	6147	6080	6013	5946	5879	5812	22
78	5812	5745	5677	5610	5543	5476	5409	5342	5275	5208	5141	21
79	5141	5074	5008	4941	4874	4807	4740	4673	4606	4539	4473	20
80	6.4 4473	4406	4339	4272	4205	4139	4072	4005	3939	3872	3805	19
81	3805	3738	3672	3605	3539	3472	3405	3339	3272	3206	3139	18
82	3139	3073	3006	2939	2873	2807	2740	2674	2607	2541	2474	17
83	2474	2408	2342	2275	2209	2142	2076	2010	1943	1877	1811	16
84	1811	1745	1678	1612	1546	1480	1413	1347	1281	1215	1149	15
85	6.4 1149	1083	1017	0950	0884	0818	0752	0686	0620	0554	0488	14
86	6.4 0488	0422	0356	0290	0224	0158	0092	0026	*9960	*9894	*9829	13
87	6.3 9829	9763	9697	9631	9565	9499	9434	9368	9302	9236	9171	12
88	9171	9105	9039	8973	8908	8842	8776	8711	8645	8579	8514	11
89	8514	8448	8383	8317	8251	8186	8120	8055	7989	7924	7858	10
90	6.3 7858	7793	7727	7662	7596	7531	7466	7400	7335	7269	7204	09
91	7204	7139	7073	7008	6943	6878	6812	6747	6682	6617	6551	08
92	6551	6486	6421	6356	6291	6225	6160	6095	6030	5965	5900	07
93	5900	5835	5770	5705	5639	5574	5509	5444	5379	5314	5249	06
94	5249	5185	5120	5055	4990	4925	4860	4795	4730	4665	4601	05
95	6.3 4601	4536	4471	4406	4341	4277	4212	4147	4082	4018	3953	04
96	3953	3888	3824	3759	3694	3630	3565	3500	3436	3371	3307	03
97	3307	3242	3177	3113	3048	2984	2919	2855	2790	2726	2661	02
98	2661	2597	2533	2468	2404	2339	2275	2211	2146	2082	2018	01
99	2018	1953	1889	1825	1761	1696	1632	1568	1504	1439	1375	00
	100 ^{cc}	90 ^{cc}	80 ^{cc}	70 ^{cc}	60 ^{cc}	50 ^{cc}	40 ^{cc}	30 ^{cc}	20 ^{cc}	10 ^{cc}	00 ^{cc}	c
			64	65	66	67	68	69	70	71		
1	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.1	1			
2	12.8	13.0	13.2	13.4	13.6	13.8	14.0	14.2	2			
3	19.2	19.5	19.8	20.1	20.4	20.7	21.0	21.3	3			
4	25.6	26.0	26.4	26.8	27.2	27.6	28.0	28.4	4			
5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	5			
6	38.4	39.0	39.6	40.2	40.8	41.4	42.0	42.6	6			
7	44.8	45.5	46.2	46.9	47.6	48.3	49.0	49.7	7			
8	51.2	52.0	52.8	53.6	54.4	55.2	56.0	56.8	8			
9	57.6	58.5	59.4	60.3	61.2	62.1	63.0	63.9	9			

tang 90^g

Peters's table of trigonometric functions (1930) (reconstruction, D. Roegel, 2016)

0^g

c	sin		tang		sec		cosec		cotg		cos		
00	0.000000	157	0.000000	157	1.000000	0	∞		∞		1.000000	0	100
01	0157	157	0157	157	0000	0	6366.198		6366.198		0000	0	99
02	0314	157	0314	157	0000	0	3183.099		3183.099		0000	0	98
03	0471	157	0471	157	0000	0	2122.066		2122.066		0000	0	97
04	0628	157	0628	157	0000	0	1591.550		1591.549		0000	0	96
05	0785	157	0785	157	0000	0	1273.240		1273.239		0000	0	95
06	0942	157	0942	157	0000	0	1061.033		1061.033		1.000000	0	94
07	1100	158	1100	158	0001	1	909.457		909.456		0.999999	1	93
08	1257	157	1257	157	0001	0	795.775		795.774		9999	0	92
09	1414	157	1414	157	0001	0	707.356		707.355		9999	0	91
10	0.001571	157	0.001571	157	1.000001	0	636.620		636.619		0.999999	0	90
11	1728	157	1728	157	0001	1	578.746		578.745		9999	1	89
12	1885	157	1885	157	0002	0	530.517		530.516		9998	0	88
13	2042	157	2042	157	0002	0	489.708		489.707		9998	0	87
14	2199	157	2199	157	0002	0	454.729		454.728		9998	0	86
15	2356	157	2356	157	0003	1	424.414		424.412		9997	1	85
16	2513	157	2513	157	0003	0	397.888		397.887		9997	0	84
17	2670	157	2670	157	0004	1	374.483		374.481		9996	1	83
18	2827	157	2827	157	0004	0	353.678		353.677		9996	0	82
19	2985	158	2985	158	0004	0	335.064		335.062		9996	0	81
20	0.003142	157	0.003142	157	1.000005	1	318.310		318.309		0.999995	1	80
21	3299	157	3299	157	0005	0	303.153		303.151		9995	0	79
22	3456	157	3456	157	0006	1	289.373		289.371		9994	1	78
23	3613	157	3613	157	0007	1	276.792		276.790		9993	1	77
24	3770	157	3770	157	0007	0	265.259		265.257		9993	0	76
25	3927	157	3927	157	0008	1	254.649		254.647		9992	1	75
26	4084	157	4084	157	0008	0	244.854		244.852		9992	0	74
27	4241	157	4241	157	0009	1	235.786		235.784		9991	1	73
28	4398	157	4398	157	0010	1	227.365		227.363		9990	1	72
29	4555	157	4555	157	0010	0	219.525		219.523		9990	0	71
30	0.004712	157	0.004712	157	1.000011	1	212.207		212.205		0.999989	1	70
31	4869	157	4870	158	0012	1	205.362		205.360		9988	1	69
32	5027	158	5027	157	0013	1	198.945		198.942		9987	1	68
33	5184	157	5184	157	0013	0	192.916		192.913		9987	0	67
34	5341	157	5341	157	0014	1	187.242		187.239		9986	1	66
35	5498	157	5498	157	0015	1	181.892		181.890		9985	1	65
36	5655	157	5655	157	0016	1	176.840		176.837		9984	1	64
37	5812	157	5812	157	0017	1	172.060		172.057		9983	1	63
38	5969	157	5969	157	0018	1	167.533		167.530		9982	1	62
39	6126	157	6126	157	0019	1	163.237		163.234		9981	1	61
40	0.006283	157	0.006283	157	1.000020	1	159.156		159.153		0.999980	1	60
41	6440	157	6440	157	0021	1	155.274		155.271		9979	1	59
42	6597	157	6597	157	0022	1	151.577		151.574		9978	1	58
43	6754	157	6755	158	0023	1	148.052		148.049		9977	1	57
44	6911	157	6912	157	0024	1	144.687		144.684		9976	1	56
45	7069	158	7069	157	0025	1	141.472		141.469		9975	1	55
46	7226	157	7226	157	0026	1	138.397		138.393		9974	1	54
47	7383	157	7383	157	0027	1	135.452		135.449		9973	1	53
48	7540	157	7540	157	0028	1	132.630		132.627		9972	1	52
49	7697	157	7697	157	0030	2	129.924		129.920		9970	2	51
50	0.007854	157	0.007854	157	1.000031	1	127.325		127.321		0.999969	1	50
					cosec		sec		tang		sin		c
					157	158							
					1	15.7	15.8	1					
					2	31.4	31.6	2					
					3	47.1	47.4	3					
					4	62.8	63.2	4					
					5	78.5	79.0	5					
					6	94.2	94.8	6					
					7	109.9	110.6	7					
					8	125.6	126.4	8					
					9	141.3	142.2	9					

99^g

0^g

c	sin		tang		sec		cosec		cotg		cos		
50	0.007854	157	0.007854	157	1.000031	1	127.3253		127.3213		0.999969	1	50
51	8011	157	8011	157	0032	1	124.8287		124.8247		9968	1	49
52	8168	157	8168	157	0033	2	122.4282		122.4242		9967	2	48
53	8325	157	8325	157	0035	1	120.1183		120.1142		9965	1	47
54	8482	157	8483	158	0036	1	117.8940		117.8897		9964	1	46
55	8639	157	8640	157	0037	1	115.7505		115.7462		9963	1	45
56	8796	157	8797	157	0039	2	113.6836		113.6792		9961	2	44
57	8953	157	8954	157	0040	1	111.6892		111.6847		9960	1	43
58	9110	157	9111	157	0042	2	109.7635		109.7590		9958	2	42
59	9268	158	9268	157	0043	1	107.9032		107.8986		9957	1	41
60	0.009425	157	0.009425	157	1.000044	1	106.1049		106.1002		0.999956	1	40
61	9582	157	9582	157	0046	2	104.3655		104.3607		9954	2	39
62	9739	157	9739	157	0047	1	102.6822		102.6774		9953	1	38
63	0.009896	157	0.009896	157	0049	2	101.0524		101.0475		9951	2	37
64	0.010053	157	0.010053	157	0051	2	99.4735		99.4685		9949	2	36
65	0210	157	0211	158	0052	1	97.9432		97.9381		9948	1	35
66	0367	157	0368	157	0054	2	96.4593		96.4541		9946	2	34
67	0524	157	0525	157	0055	1	95.0196		95.0144		9945	1	33
68	0681	157	0682	157	0057	2	93.6223		93.6170		9943	2	32
69	0838	157	0839	157	0059	1	92.2655		92.2601		9941	1	31
70	0.010995	157	0.010996	157	1.000060	2	90.9475		90.9420		0.999940	2	30
71	1152	157	1153	157	0062	1	89.6666		89.6610		9938	1	29
72	1309	157	1310	157	0064	2	88.4213		88.4156		9936	2	28
73	1467	158	1467	157	0066	2	87.2101		87.2044		9934	2	27
74	1624	157	1624	157	0068	2	86.0316		86.0258		9932	2	26
75	1781	157	1782	158	0069	1	84.8846		84.8787		9931	1	25
76	1938	157	1939	157	0071	2	83.7677		83.7618		9929	2	24
77	2095	157	2096	157	0073	2	82.6799		82.6739		9927	2	23
78	2252	157	2253	157	0075	2	81.6200		81.6138		9925	2	22
79	2409	157	2410	157	0077	2	80.5868		80.5806		9923	2	21
80	0.012566	157	0.012567	157	1.000079	1	79.5796		79.5733		0.999921	1	20
81	2723	157	2724	157	0081	2	78.5972		78.5908		9919	2	19
82	2880	157	2881	157	0083	2	77.6387		77.6323		9917	2	18
83	3037	157	3038	157	0085	2	76.7034		76.6968		9915	2	17
84	3194	157	3195	157	0087	2	75.7903		75.7837		9913	2	16
85	3351	157	3353	158	0089	2	74.8987		74.8920		9911	2	15
86	3508	157	3510	157	0091	2	74.0278		74.0211		9909	2	14
87	3666	158	3667	157	0093	2	73.1770		73.1701		9907	2	13
88	3823	157	3824	157	0096	3	72.3455		72.3385		9904	3	12
89	3980	157	3981	157	0098	2	71.5326		71.5257		9902	2	11
90	0.014137	157	0.014138	157	1.000100	1	70.7379		70.7308		0.999900	1	10
91	4294	157	4295	157	0102	2	69.9606		69.9535		9898	2	09
92	4451	157	4452	157	0104	2	69.2002		69.1930		9896	2	08
93	4608	157	4609	157	0107	3	68.4562		68.4489		9893	3	07
94	4765	157	4767	158	0109	2	67.7280		67.7206		9891	2	06
95	4922	157	4924	157	0111	2	67.0151		67.0076		9889	2	05
96	5079	157	5081	157	0114	3	66.3171		66.3095		9886	3	04
97	5236	157	5238	157	0116	2	65.6334		65.6258		9884	2	03
98	5393	157	5395	157	0118	2	64.9638		64.9561		9882	2	02
99	5550	157	5552	157	0121	3	64.3076		64.2998		9879	3	01
100	0.015707	157	0.015709	157	1.000123	2	63.6646		63.6567		0.999877	2	00
cos		cotg		cosec		sec		tang		sin		c	
						157	158						
						1	15.7	15.8					
						2	31.4	31.6					
						3	47.1	47.4					
						4	62.8	63.2					
						5	78.5	79.0					
						6	94.2	94.8					
						7	109.9	110.6					
						8	125.6	126.4					
						9	141.3	142.2					

99^g

1^g

c	sin		tang		sec		cosec		cotg		cos		
00	0.015707	157	0.015709	157	1.000123	3	63.6646		63.6567		0.999877	3	100
01	5864	157	5866	157	0126	2	63.0343		63.0264		9874	2	99
02	6021	157	6023	157	0128	2	62.4164		62.4084		9872	2	98
03	6178	157	6181	158	0131	3	61.8104		61.8024		9869	3	97
		158		157		2						2	
04	6336	157	6338	157	0133	3	61.2162		61.2080		9867	3	96
05	6493	157	6495	157	0136	3	60.6332		60.6250		9864	3	95
06	6650	157	6652	157	0139	3	60.0612		60.0529		9861	3	94
		157		157		2						2	
07	6807	157	6809	157	0141	3	59.5000		59.4916		9859	3	93
08	6964	157	6966	157	0144	3	58.9491		58.9406		9856	3	92
09	7121	157	7123	157	0147	3	58.4083		58.3998		9853	3	91
		157		157		2						2	
10	0.017278	157	0.017280	158	1.000149	3	57.8774		57.8688		0.999851	3	90
11	7435	157	7438	157	0152	3	57.3560		57.3473		9848	3	89
12	7592	157	7595	157	0155	3	56.8440		56.8352		9845	3	88
13	7749	157	7752	157	0158	3	56.3410		56.3321		9842	3	87
		157		157		2						2	
14	7906	157	7909	157	0160	3	55.8468		55.8379		9840	3	86
15	8063	157	8066	157	0163	3	55.3613		55.3522		9837	3	85
16	8220	157	8223	157	0166	3	54.8841		54.8749		9834	3	84
		157		157		3						3	
17	8377	157	8380	157	0169	3	54.4150		54.4058		9831	3	83
18	8534	157	8538	158	0172	3	53.9539		53.9446		9828	3	82
19	8691	157	8695	157	0175	3	53.5006		53.4912		9825	3	81
		157		157		3						3	
20	0.018848	157	0.018852	157	1.000178	3	53.0548		53.0454		0.999822	3	80
21	9005	158	9009	157	0181	3	52.6164		52.6069		9819	3	79
22	9163	157	9166	157	0184	3	52.1851		52.1756		9816	3	78
23	9320	157	9323	157	0187	3	51.7609		51.7513		9813	3	77
		157		157		3						3	
24	9477	157	9480	157	0190	3	51.3436		51.3338		9810	3	76
25	9634	157	9637	157	0193	3	50.9329		50.9230		9807	3	75
26	9791	157	9795	158	0196	3	50.5287		50.5188		9804	3	74
		157		157		3						3	
27	0.019948	157	0.019952	157	0199	3	50.1309		50.1209		9801	3	73
28	0.020105	157	0.020109	157	0202	3	49.7393		49.7292		9798	3	72
29	0262	157	0266	157	0205	3	49.3537		49.3436		9795	3	71
		157		157		3						3	
30	0.020419	157	0.020423	157	1.000209	4	48.9742		48.9639		0.999792	3	70
31	0576	157	0580	157	0212	3	48.6004		48.5901		9788	4	69
32	0733	157	0737	157	0215	3	48.2322		48.2219		9785	3	68
33	0890	157	0895	158	0218	3	47.8696		47.8592		9782	3	67
		157		157		4						4	
34	1047	157	1052	157	0222	3	47.5124		47.5019		9778	3	66
35	1204	157	1209	157	0225	3	47.1606		47.1500		9775	3	65
36	1361	157	1366	157	0228	3	46.8138		46.8032		9772	3	64
		157		157		4						4	
37	1518	157	1523	157	0232	3	46.4722		46.4614		9768	3	63
38	1675	157	1680	157	0235	3	46.1355		46.1246		9765	3	62
39	1832	157	1838	158	0238	3	45.8036		45.7927		9762	3	61
		157		157		4						4	
40	0.021989	157	0.021995	157	1.000242	3	45.4765		45.4655		0.999758	3	60
41	2146	157	2152	157	0245	3	45.1540		45.1430		9755	3	59
42	2303	157	2309	157	0249	4	44.8361		44.8249		9751	4	58
43	2460	157	2466	157	0252	3	44.5226		44.5114		9748	3	57
		158		157		4						4	
44	2618	157	2623	157	0256	4	44.2135		44.2022		9744	4	56
45	2775	157	2780	157	0259	3	43.9086		43.8972		9741	3	55
46	2932	157	2938	158	0263	4	43.6079		43.5964		9737	4	54
		157		157		4						4	
47	3089	157	3095	157	0267	4	43.3113		43.2998		9733	4	53
48	3246	157	3252	157	0270	3	43.0187		43.0071		9730	3	52
49	3403	157	3409	157	0274	4	42.7301		42.7184		9726	4	51
		157		157		4						4	
50	0.023560	157	0.023566	157	1.000278	4	42.4452		42.4335		0.999722	4	50
	cos		cotg		cosec		sec		tang		sin		c
						157	158						
						1	15.7	15.8	1				
						2	31.4	31.6	2				
						3	47.1	47.4	3				
						4	62.8	63.2	4				
						5	78.5	79.0	5				
						6	94.2	94.8	6				
						7	109.9	110.6	7				
						8	125.6	126.4	8				
						9	141.3	142.2	9				

98^g

1^g

c	sin		tang		sec		cosec		cotg		cos		
50	0.023560	157	0.023566	157	1.000278	3	42.4452		42.4335		0.999722	3	50
51	3717	157	3723	158	0281	4	42.1642		42.1523		9719	4	49
52	3874	157	3881	157	0285	4	41.8869		41.8749		9715	4	48
53	4031	157	4038	157	0289	4	41.6131		41.6011		9711	4	47
		157		157		4						4	
54	4188	157	4195	157	0293	3	41.3430		41.3309		9707	3	46
55	4345	157	4352	157	0296	3	41.0763		41.0641		9704	3	45
56	4502	157	4509	157	0300	4	40.8130		40.8008		9700	4	44
		157		158		4						4	
57	4659	157	4667	157	0304	4	40.5531		40.5408		9696	4	43
58	4816	157	4824	157	0308	4	40.2965		40.2841		9692	4	42
59	4973	157	4981	157	0312	4	40.0431		40.0307		9688	4	41
		157		157		4						4	
60	0.025130	157	0.025138	157	1.000316	4	39.7929		39.7804		0.999684	4	40
61	5287	157	5295	157	0320	4	39.5458		39.5332		9680	4	39
62	5444	157	5452	157	0324	4	39.3018		39.2890		9676	4	38
63	5601	157	5610	158	0328	4	39.0607		39.0479		9672	4	37
		157		157		4						4	
64	5758	157	5767	157	0332	4	38.8226		38.8097		9668	4	36
65	5915	157	5924	157	0336	4	38.5873		38.5744		9664	4	35
66	6072	157	6081	157	0340	4	38.3549		38.3419		9660	4	34
		157		157		4						4	
67	6229	157	6238	157	0344	4	38.1253		38.1122		9656	4	33
68	6386	157	6396	158	0348	4	37.8984		37.8852		9652	4	32
69	6543	157	6553	157	0352	4	37.6742		37.6610		9648	4	31
		157		157		5						5	
70	0.026700	157	0.026710	157	1.000357	5	37.4527		37.4393		0.999643	5	30
71	6857	157	6867	157	0361	4	37.2337		37.2203		9639	4	29
72	7014	157	7024	157	0365	4	37.0173		37.0038		9635	4	28
73	7171	157	7181	157	0369	4	36.8034		36.7898		9631	4	27
		157		158		5						4	
74	7328	157	7339	157	0374	4	36.5919		36.5782		9627	4	26
75	7485	157	7496	157	0378	4	36.3829		36.3691		9622	5	25
76	7642	157	7653	157	0382	4	36.1762		36.1624		9618	4	24
		158		157		5						4	
77	7800	157	7810	157	0387	4	35.9719		35.9580		9614	4	23
78	7957	157	7967	157	0391	4	35.7698		35.7558		9609	5	22
79	8114	157	8125	158	0395	4	35.5700		35.5560		9605	4	21
		157		157		5						5	
80	0.028271	157	0.028282	157	1.000400	5	35.3725		35.3583		0.999600	5	20
81	8428	157	8439	157	0404	4	35.1771		35.1629		9596	4	19
82	8585	157	8596	157	0409	5	34.9839		34.9696		9591	5	18
83	8742	157	8753	157	0413	4	34.7928		34.7784		9587	4	17
		157		158		5						5	
84	8899	157	8911	157	0418	5	34.6037		34.5893		9582	5	16
85	9056	157	9068	157	0422	4	34.4167		34.4022		9578	4	15
86	9213	157	9225	157	0427	5	34.2317		34.2171		9573	5	14
		157		157		5						4	
87	9370	157	9382	157	0432	4	34.0487		34.0340		9569	5	13
88	9527	157	9540	158	0436	4	33.8677		33.8529		9564	5	12
89	9684	157	9697	157	0441	5	33.6885		33.6737		9559	5	11
		157		157		5						4	
90	0.029841	157	0.029854	157	1.000446	5	33.5113		33.4964		0.999555	5	10
91	0.029998	157	0.030011	157	0450	4	33.3359		33.3209		9550	5	09
92	0.030155	157	0168	157	0455	5	33.1623		33.1472		9545	5	08
93	0312	157	0326	158	0460	5	32.9905		32.9754		9540	5	07
		157		157		4						4	
94	0469	157	0483	157	0464	4	32.8205		32.8053		9536	4	06
95	0626	157	0640	157	0469	5	32.6523		32.6370		9531	5	05
96	0783	157	0797	157	0474	5	32.4857		32.4703		9526	5	04
		157		158		5						5	
97	0940	157	0955	157	0479	5	32.3209		32.3054		9521	5	03
98	1097	157	1112	157	0484	5	32.1577		32.1421		9516	5	02
99	1254	157	1269	157	0489	5	31.9962		31.9805		9511	5	01
		157		157		5						4	
100	0.031411		0.031426		1.000494		31.8362		31.8205		0.999507		00
	cos		cotg		cosec		sec		tang		sin		c
						157	158						
						1	15.7	15.8	1				
						2	31.4	31.6	2				
						3	47.1	47.4	3				
						4	62.8	63.2	4				
						5	78.5	79.0	5				
						6	94.2	94.8	6				
						7	109.9	110.6	7				
						8	125.6	126.4	8				
						9	141.3	142.2	9				

2^g

c	sin		tang		sec		cosec		cotg		cos				
00	0.031411	157	0.031426	158	1.000494	5	31.8362		31.8205		0.999507	5	100		
01	1568	157	1584	157	0499	5	31.6779		31.6621		9502	5	99		
02	1725	157	1741	157	0504	5	31.5211		31.5053		9497	5	98		
03	1882	157	1898	157	0509	5	31.3659		31.3500		9492	5	97		
04	2039	157	2055	157	0514	5	31.2122		31.1962		9487	5	96		
05	2196	157	2212	157	0519	5	31.0600		31.0439		9482	5	95		
06	2353	157	2370	158	0524	5	30.9093		30.8931		9477	5	94		
07	2510	157	2527	157	0529	5	30.7600		30.7437		9471	6	93		
08	2667	157	2684	157	0534	5	30.6122		30.5958		9466	5	92		
09	2824	157	2841	157	0539	5	30.4657		30.4493		9461	5	91		
10	0.032981	157	0.032999	158	1.000544	5	30.3207		30.3042		0.999456	5	90		
11	3138	157	3156	157	0550	6	30.1771		30.1605		9451	5	89		
12	3295	157	3313	157	0555	5	30.0348		30.0181		9446	5	88		
13	3452	157	3470	157	0560	5	29.8938		29.8771		9440	6	87		
14	3609	157	3628	158	0565	5	29.7542		29.7374		9435	5	86		
15	3766	157	3785	157	0571	6	29.6159		29.5990		9430	5	85		
16	3923	157	3942	157	0576	5	29.4788		29.4618		9424	6	84		
17	4080	157	4099	157	0581	5	29.3430		29.3260		9419	5	83		
18	4237	157	4257	158	0587	6	29.2084		29.1913		9414	5	82		
19	4394	157	4414	157	0592	5	29.0751		29.0579		9408	6	81		
20	0.034551	157	0.034571	157	1.000597	5	28.9430		28.9257		0.999403	5	80		
21	4708	157	4729	158	0603	6	28.8121		28.7948		9398	5	79		
22	4865	157	4886	157	0608	5	28.6824		28.6649		9392	6	78		
23	5022	157	5043	157	0614	6	28.5538		28.5363		9387	5	77		
24	5179	157	5200	157	0619	5	28.4264		28.4088		9381	6	76		
25	5336	157	5358	158	0625	6	28.3001		28.2824		9376	5	75		
26	5493	157	5515	157	0630	5	28.1749		28.1572		9370	6	74		
27	5650	157	5672	157	0636	6	28.0509		28.0330		9364	6	73		
28	5807	157	5829	157	0642	6	27.9279		27.9100		9359	5	72		
29	5963	156	5987	158	0647	5	27.8060		27.7880		9353	6	71		
30	0.036120	157	0.036144	157	1.000653	6	27.6851		27.6671		0.999347	6	70		
31	6277	157	6301	157	0659	6	27.5653		27.5472		9342	5	69		
32	6434	157	6459	158	0664	5	27.4466		27.4284		9336	6	68		
33	6591	157	6616	157	0670	6	27.3288		27.3105		9330	6	67		
34	6748	157	6773	157	0676	6	27.2121		27.1937		9325	5	66		
35	6905	157	6930	157	0682	6	27.0964		27.0779		9319	6	65		
36	7062	157	7088	158	0688	6	26.9816		26.9631		9313	6	64		
37	7219	157	7245	157	0693	5	26.8678		26.8492		9307	6	63		
38	7376	157	7402	157	0699	6	26.7550		26.7363		9301	6	62		
39	7533	157	7560	158	0705	6	26.6431		26.6243		9295	6	61		
40	0.037690	157	0.037717	157	1.000711	6	26.5321		26.5133		0.999289	6	60		
41	7847	157	7874	157	0717	6	26.4221		26.4031		9284	5	59		
42	8004	157	8032	158	0723	6	26.3129		26.2939		9278	6	58		
43	8161	157	8189	157	0729	6	26.2047		26.1856		9272	6	57		
44	8318	157	8346	157	0735	6	26.0974		26.0782		9266	6	56		
45	8475	157	8504	158	0741	6	25.9909		25.9717		9260	6	55		
46	8632	157	8661	157	0747	6	25.8853		25.8660		9254	6	54		
47	8789	157	8818	157	0753	6	25.7805		25.7611		9247	7	53		
48	8946	157	8975	157	0759	6	25.6766		25.6572		9241	6	52		
49	9103	157	9133	158	0765	6	25.5736		25.5540		9235	6	51		
50	0.039260	157	0.039290	157	1.000772	7	25.4713		25.4517		0.999229	6	50		
		cos		cotg		cosec		sec		tang		sin		c	
						156	157	158							
						1	15.6	15.7	15.8	1					
						2	31.2	31.4	31.6	2					
						3	46.8	47.1	47.4	3					
						4	62.4	62.8	63.2	4					
						5	78.0	78.5	79.0	5					
						6	93.6	94.2	94.8	6					
						7	109.2	109.9	110.6	7					
						8	124.8	125.6	126.4	8					
						9	140.4	141.3	142.2	9					

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c	sin		tang		sec		cosec		cotg		cos		
50	0.039260	157	0.039290	157	1.000772	6	25.4713		25.4517		0.999229	6	50
51	9417	157	9447	158	0778	6	3699		3502		9223	6	49
52	9574	157	9605	157	0784	6	2693		2495		9217	6	48
53	9731	157	9762	157	0790	6	1695		1496		9210	7	47
		157		157		6						6	
54	0.039888		0.039919	157	0796		25.0704		25.0505		9204		46
55	0.040045	157	0.040077	158	0803	7	24.9722		24.9521		9198	6	45
56	0202	157	0234	157	0809	6	8747		8546		9192	6	44
		157		157		6						7	
57	0359		0391	157	0815		7779		7577		9185		43
58	0515	156	0549	158	0822	7	6819		6617		9179	6	42
59	0672	157	0706	157	0828	6	5867		5664		9173	6	41
60	0.040829	157	0.040863	157	1.000835	7	24.4922		24.4718		0.999166	7	40
		157		158		6						6	
61	0986		1021		0841		3984		3779		9160		39
62	1143	157	1178	157	0847	6	3053		2847		9153	7	38
63	1300	157	1335	157	0854	7	2130		1923		9147	6	37
		157		158		6						7	
64	1457		1493		0860		1213		1006		9140		36
65	1614	157	1650	157	0867	7	24.0303		24.0095		9134	6	35
66	1771	157	1808	158	0874	7	23.9400		23.9191		9127	7	34
		157		157		6						6	
67	1928		1965		0880		8504		8295		9121		33
68	2085	157	2122	157	0887	7	7615		7404		9114	7	32
69	2242	157	2280	158	0893	6	6732		6521		9107	7	31
70	0.042399	157	0.042437	157	1.000900	7	23.5856		23.5644		0.999101	6	30
		157		157		7						7	
71	2556		2594		0907		4986		4773		9094		29
72	2713	157	2752	158	0913	6	4123		3909		9087	7	28
73	2870	157	2909	157	0920	7	3266		3051		9081	6	27
		157		157		7						7	
74	3027		3066		0927		2415		2199		9074		26
75	3183	156	3224	158	0934	7	1570		1354		9067	7	25
76	3340	157	3381	157	0941	7	23.0732		23.0515		9060	7	24
		157		158		6						6	
77	3497		3539		0947		22.9899		22.9682		9054		23
78	3654	157	3696	157	0954	7	9073		8854		9047	7	22
79	3811	157	3853	157	0961	7	8252		8033		9040	7	21
80	0.043968	157	0.044011	158	1.000968	7	22.7438		22.7218		0.999033	7	20
		157		157		7						7	
81	4125		4168		0975		6629		6408		9026		19
82	4282	157	4325	157	0982	7	5826		5604		9019	7	18
83	4439	157	4483	158	0989	7	5028		4806		9012	7	17
		157		157		7						7	
84	4596		4640		0996		4236		4013		9005		16
85	4753	157	4798	158	1003	7	3450		3226		8998	7	15
86	4910	157	4955	157	1010	7	2669		2445		8991	7	14
		157		157		7						7	
87	5067		5112		1017		1894		1668		8984		13
88	5224	157	5270	158	1024	7	1124		0898		8977	7	12
89	5380	156	5427	157	1031	7	22.0359		22.0132		8970	7	11
90	0.045537	157	0.045585	158	1.001038	7	22.0359		22.0132		8970	7	11
		157		158		8						7	
91	5694		5742		1046		21.9600		21.9372		0.998963	8	10
92	5851	157	5899	157	1053	7	8846		8617		8955		09
93	6008	157	6057	158	1060	7	8097		7868		8948	7	08
		157		158		7						7	
94	6165		6214		1067		7353		7123		8941		07
95	6322	157	6372	158	1075	7	6614		6383		8934	7	06
96	6479	157	6529	157	1082	8	5881		5649		8927	7	05
		157		158		7						8	
97	6636		6687		1089		5152		4919		8919		04
98	6793	157	6844	157	1097	7	4428		4195		8912	7	03
99	6950	157	7001	157	1097	8	3709		3475		8905	7	02
		156		158		7						8	
100	0.047106		0.047159		1104		2995		2760		8897		01
					1.001111	7	21.2285		21.2049		0.998890	7	00
	cos		cotg		cosec		sec		tang		sin		c
					156	157	158						
					1	15.6	15.7	15.8	1				
					2	31.2	31.4	31.6	2				
					3	46.8	47.1	47.4	3				
					4	62.4	62.8	63.2	4				
					5	78.0	78.5	79.0	5				
					6	93.6	94.2	94.8	6				
					7	109.2	109.9	110.6	7				
					8	124.8	125.6	126.4	8				
					9	140.4	141.3	142.2	9				

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c	sin		tang		sec		cosec		cotg		cos								
00	0.047106	157	0.047159	157	1.001111	8	21.2285	705	21.2049	705	0.998890	8	100						
01	7263	157	7316	157	1119	7	1580	700	1344	701	8882	7	99						
02	7420	157	7474	158	1126	7	0880	700	21.0643	701	8875	7	98						
03	7577	157	7631	157	1134	8	21.0185	695	20.9947	696	8868	7	97						
		157		158		7		691		692		8							
04	7734	157	7789	157	1141	8	20.9494	686	9255	687	8860	7	96						
05	7891	157	7946	157	1149	8	8808	686	8568	687	8853	7	95						
06	8048	157	8103	157	1156	7	8126	682	7885	683	8845	8	94						
		157		158		8		678		678		8							
07	8205	157	8261	157	1164	7	7448	673	7207	674	8837	7	93						
08	8362	157	8418	157	1171	7	6775	673	6533	674	8830	7	92						
09	8519	157	8576	158	1179	8	6107	668	5864	669	8822	8	91						
		156		157		8		665		665		7							
10	0.048675	157	0.048733	158	1.001187	7	20.5442	660	20.5199	661	0.998815	8	90						
11	8832	157	8891	157	1194	8	4782	655	4538	657	8807	8	89						
12	8989	157	9048	157	1202	8	4127	652	3881	652	8799	8	88						
13	9146	157	9206	158	1210	8	3475	652	3229	652	8792	7	87						
		157		157		8		648		648		8							
14	9303	157	9363	157	1218	8	2827	648	2581	648	8784	8	86						
15	9460	157	9521	158	1225	7	2184	643	1937	644	8776	8	85						
16	9617	157	9678	157	1233	8	1545	639	1296	641	8768	8	84						
		157		157		8		636		636		7							
17	9774	157	9835	157	1241	8	0909	631	0660	632	8761	7	83						
18	0.049931	157	0.049993	158	1249	8	20.0278	627	20.0028	632	8753	8	82						
19	0.050087	156	0.050150	157	1257	8	19.9651	627	19.9400	628	8745	8	81						
		157		158		8		624		624		8							
20	0.050244	157	0.050308	158	1.001265	8	19.9027	619	19.8776	620	0.998737	8	80						
21	0401	157	0465	157	1273	8	8408	616	8156	617	8729	8	79						
22	0558	157	0623	158	1281	8	7792	616	7539	617	8721	8	78						
23	0715	157	0780	157	1288	7	7180	612	6927	612	8713	8	77						
		157		158		8		608		609		8							
24	0872	157	0938	157	1296	8	6572	604	6318	605	8705	8	76						
25	1029	157	1095	157	1305	9	5968	604	5713	605	8697	8	75						
26	1186	157	1253	158	1313	8	5368	600	5111	602	8689	8	74						
		156		157		8		597		597		8							
27	1342	157	1410	157	1321	8	4771	594	4514	594	8681	8	73						
28	1499	157	1568	158	1329	8	4177	594	3920	594	8673	8	72						
29	1656	157	1725	157	1337	8	3588	589	3329	591	8665	8	71						
		157		158		8		586		587		8							
30	0.051813	157	0.051883	158	1.001345	8	19.3002	583	19.2742	583	0.998657	8	70						
31	1970	157	2040	157	1353	8	2419	579	2159	580	8649	9	69						
32	2127	157	2198	158	1361	8	1840	579	1579	580	8640	9	68						
33	2284	157	2355	157	1370	9	1264	576	1003	576	8632	8	67						
		157		158		8		572		573		8							
34	2441	156	2513	157	1378	8	0692	569	19.0430	570	8624	8	66						
35	2597	157	2670	157	1386	8	19.0123	569	18.9860	570	8616	8	65						
36	2754	157	2828	158	1394	8	18.9558	565	9294	566	8608	8	64						
		157		157		9		562		563		9							
37	2911	157	2985	157	1403	8	8996	558	8731	559	8599	8	63						
38	3068	157	3143	158	1411	8	8438	558	8172	559	8591	8	62						
39	3225	157	3300	157	1419	8	7882	556	7616	556	8583	8	61						
		157		158		9		552		553		9							
40	0.053382	157	0.053458	157	1.001428	8	18.7330	549	18.7063	550	0.998574	8	60						
41	3539	156	3615	157	1436	8	6781	549	6513	550	8566	8	59						
42	3695	156	3773	158	1445	9	6236	545	5967	546	8557	9	58						
43	3852	157	3931	158	1453	8	5693	543	5424	543	8549	8	57						
		157		157		9		539		540		9							
44	4009	157	4088	157	1462	9	5154	539	4884	540	8540	9	56						
45	4166	157	4246	158	1470	8	4618	536	4347	537	8532	8	55						
46	4323	157	4403	157	1479	9	4085	533	3813	534	8523	9	54						
		157		158		8		530		531		8							
47	4480	156	4561	157	1487	9	3555	527	3282	528	8515	9	53						
48	4636	157	4718	157	1496	9	3028	527	2754	528	8506	9	52						
49	4793	157	4876	158	1505	9	2504	524	2230	524	8498	8	51						
		157		157		8		521		522		9							
50	0.054950	157	0.055033	157	1.001513	8	18.1983	521	18.1708	522	0.998489	9	50						
	cos		cotg		cosec		sec		tang		sin		c						
	156	157	158	398	400	410	420	430	440	450	460	470	480	490	500	510	520	530	
1	15.6	15.7	15.8	39.8	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0	1
2	31.2	31.4	31.6	79.6	80.0	82.0	84.0	86.0	88.0	90.0	92.0	94.0	96.0	98.0	100.0	102.0	104.0	106.0	2
3	46.8	47.1	47.4	119.4	120.0	123.0	126.0	129.0	132.0	135.0	138.0	141.0	144.0	147.0	150.0	153.0	156.0	159.0	3
4	62.4	62.8	63.2	159.2	160.0	164.0	168.0	172.0	176.0	180.0	184.0	188.0	192.0	196.0	200.0	204.0	208.0	212.0	4
5	78.0	78.5	79.0	199.0	200.0	205.0	210.0	215.0	220.0	225.0	230.0	235.0	240.0	245.0	250.0	255.0	260.0	265.0	5
6	93.6	94.2	94.8	238.8	240.0	246.0	252.0	258.0	264.0	270.0	276.0	282.0	288.0	294.0	300.0	306.0	312.0	318.0	6
7	109.2	109.9	110.6	278.6	280.0	287.0	294.0	301.0	308.0	315.0	322.0	329.0	336.0	343.0	350.0	357.0	364.0	371.0	7
8	124.8	125.6	126.4	318.4	320.0	328.0	336.0	344.0	352.0	360.0	368.0	376.0	384.0	392.0	400.0	408.0	416.0	424.0	8
9	140.4	141.3	142.2	358.2	360.0	369.0	378.0	387.0	396.0	405.0	414.0	423.0	432.0	441.0	450.0	459.0	468.0	477.0	9

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c	sin		tang		sec		cosec		cotg		cos								
50	0.054950	157	0.055033	158	1.001513	9	18.1983	518	18.1708	519	0.998489	9	50						
51	5107	157	5191	157	1522	9	1465	515	1189	515	8480	8	49						
52	5264	157	5348	157	1531	9	0950	512	0674	513	8472	8	48						
53	5421	157	5506	158	1539	8	18.0438	512	18.0161	513	8463	9	47						
54	5578	157	5664	158	1548	9	17.9929	509	17.9651	510	8454	9	46						
55	5734	156	5821	157	1557	9	9422	507	9144	507	8446	8	45						
56	5891	157	5979	158	1566	9	8919	503	8639	505	8437	9	44						
57	6048	157	6136	157	1574	8	8418	501	8138	501	8428	9	43						
58	6205	157	6294	158	1583	9	7921	497	7639	499	8419	9	42						
59	6362	157	6451	157	1592	9	7425	496	7143	496	8410	9	41						
60	0.056519	157	0.056609	158	1.001601	9	17.6933	492	17.6650	493	0.998402	8	40						
61	6675	156	6767	158	1610	9	6444	489	6160	490	8393	9	39						
62	6832	157	6924	157	1619	9	5957	487	5672	488	8384	9	38						
63	6989	157	7082	158	1628	9	5472	485	5187	485	8375	9	37						
64	7146	157	7239	157	1637	9	4991	481	4705	482	8366	9	36						
65	7303	157	7397	158	1646	9	4512	479	4225	480	8357	9	35						
66	7459	156	7555	158	1655	9	4036	476	3748	477	8348	9	34						
67	7616	157	7712	157	1664	9	3562	474	3274	474	8339	9	33						
68	7773	157	7870	158	1673	9	3091	471	2802	472	8330	9	32						
69	7930	157	8027	157	1682	9	2622	469	2332	470	8321	9	31						
70	0.058087	157	0.058185	158	1.001691	9	17.2156	466	17.1866	466	0.998312	9	30						
71	8244	157	8343	158	1700	9	1693	463	1401	465	8302	10	29						
72	8400	156	8500	157	1710	10	1232	461	0940	461	8293	9	28						
73	8557	157	8658	158	1719	9	0773	459	0480	460	8284	9	27						
74	8714	157	8815	157	1728	9	17.0317	456	17.0023	457	8275	9	26						
75	8871	157	8973	158	1737	9	16.9863	454	16.9569	454	8266	9	25						
76	9028	157	9131	158	1747	10	9412	451	9117	452	8256	10	24						
77	9184	156	9288	157	1756	9	8963	449	8667	450	8247	9	23						
78	9341	157	9446	158	1765	9	8517	446	8220	447	8238	9	22						
79	9498	157	9604	158	1775	10	8073	444	7775	445	8228	10	21						
80	0.059655	157	0.059761	157	1.001784	9	16.7631	442	16.7333	442	0.998219	9	20						
81	9812	157	0.059919	158	1794	10	7192	439	6892	441	8210	9	19						
82	0.059968	156	0.060077	158	1803	9	6754	438	6454	438	8200	10	18						
83	0.060125	157	0234	157	1812	9	6320	434	6019	435	8191	9	17						
84	0282	157	0392	158	1822	10	5887	433	5585	434	8181	10	16						
85	0439	157	0549	157	1831	9	5457	430	5154	431	8172	9	15						
86	0596	157	0707	158	1841	10	5029	428	4725	429	8162	10	14						
87	0752	156	0865	158	1851	10	4603	426	4299	426	8153	9	13						
88	0909	157	1022	157	1860	9	4179	424	3874	425	8143	10	12						
89	1066	157	1180	158	1870	10	3757	422	3452	422	8134	9	11						
90	0.061223	157	0.061338	158	1.001879	9	16.3338	419	16.3032	420	0.998124	10	10						
91	1380	157	1495	157	1889	10	2921	417	2614	418	8114	10	09						
92	1536	156	1653	158	1899	10	2506	415	2198	416	8105	9	08						
93	1693	157	1811	158	1908	9	2093	413	1784	414	8095	10	07						
94	1850	157	1969	158	1918	10	1682	411	1372	412	8085	10	06						
95	2007	157	2126	157	1928	10	1273	409	0963	409	8076	9	05						
96	2163	156	2284	158	1938	10	0866	407	0555	408	8066	10	04						
97	2320	157	2442	158	1948	10	0462	404	16.0150	405	8056	10	03						
98	2477	157	2599	157	1957	9	16.0059	403	15.9746	404	8046	10	02						
99	2634	157	2757	158	1967	10	15.9658	401	9345	401	8037	9	01						
100	0.062791	157	0.062915	158	1.001977	10	15.9260	398	15.8945	400	0.998027	10	00						
	cos		cotg		cosec		sec		tang		sin		c						
	540	550	560	570	580	590	600	610	620	630	640	650	660	670	680	690	700	705	
1	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	70.5	1
2	108.0	110.0	112.0	114.0	116.0	118.0	120.0	122.0	124.0	126.0	128.0	130.0	132.0	134.0	136.0	138.0	140.0	141.0	2
3	162.0	165.0	168.0	171.0	174.0	177.0	180.0	183.0	186.0	189.0	192.0	195.0	198.0	201.0	204.0	207.0	210.0	211.5	3
4	216.0	220.0	224.0	228.0	232.0	236.0	240.0	244.0	248.0	252.0	256.0	260.0	264.0	268.0	272.0	276.0	280.0	282.0	4
5	270.0	275.0	280.0	285.0	290.0	295.0	300.0	305.0	310.0	315.0	320.0	325.0	330.0	335.0	340.0	345.0	350.0	352.5	5
6	324.0	330.0	336.0	342.0	348.0	354.0	360.0	366.0	372.0	378.0	384.0	390.0	396.0	402.0	408.0	414.0	420.0	423.0	6
7	378.0	385.0	392.0	399.0	406.0	413.0	420.0	427.0	434.0	441.0	448.0	455.0	462.0	469.0	476.0	483.0	490.0	493.5	7
8	432.0	440.0	448.0	456.0	464.0	472.0	480.0	488.0	496.0	504.0	512.0	520.0	528.0	536.0	544.0	552.0	560.0	564.0	8
9	486.0	495.0	504.0	513.0	522.0	531.0	540.0	549.0	558.0	567.0	576.0	585.0	594.0	603.0	612.0	621.0	630.0	634.5	9

c	sin		tang		sec		cosec		cotg		cos								
00	0.062791	156	0.062915	157	1.001977	10	15.9260	397	15.8945	397	0.998027	10	100						
01	2947	157	3072	158	1987	10	8863	395	8548	395	8017	10	99						
02	3104	157	3230	158	1997	10	8468	395	8153	395	8007	10	98						
03	3261	157	3388	158	2007	10	8076	392	7759	394	7997	10	97						
04	3418	157	3545	157	2017	10	7685	391	7368	391	7987	10	96						
05	3574	156	3703	158	2027	10	7296	389	6978	390	7977	10	95						
06	3731	157	3861	158	2037	10	6909	387	6590	388	7967	10	94						
07	3888	157	4019	158	2047	10	6524	385	6204	386	7957	10	93						
08	4045	157	4176	157	2057	10	6141	383	5821	383	7947	10	92						
09	4201	156	4334	158	2067	10	5760	381	5439	382	7937	10	91						
10	0.064358	157	0.064492	158	1.002077	11	15.5381	379	15.5058	381	0.997927	10	90						
11	4515	157	4650	157	2088	10	5003	376	4680	376	7917	10	89						
12	4672	157	4807	158	2098	10	4627	376	4304	376	7907	10	88						
13	4828	156	4965	158	2108	10	4253	374	3929	375	7896	11	87						
14	4985	157	5123	158	2118	10	3881	372	3556	373	7886	10	86						
15	5142	157	5281	158	2129	11	3511	370	3185	371	7876	10	85						
16	5299	157	5438	157	2139	10	3143	368	2816	369	7866	10	84						
17	5455	156	5596	158	2149	10	2776	367	2448	368	7855	11	83						
18	5612	157	5754	158	2159	10	2411	365	2082	366	7845	10	82						
19	5769	157	5912	158	2170	11	2048	363	1718	364	7835	10	81						
20	0.065926	157	0.066069	158	1.002180	11	15.1686	362	15.1356	362	0.997825	11	80						
21	6082	157	6227	158	2191	10	1326	360	0996	360	7814	10	79						
22	6239	157	6385	158	2201	11	0968	358	0637	359	7804	10	78						
23	6396	157	6543	157	2212	10	0612	356	15.0280	357	7793	11	77						
24	6553	157	6700	157	2222	10	15.0257	355	14.9924	356	7783	10	76						
25	6709	156	6858	158	2233	11	14.9904	353	9570	354	7772	11	75						
26	6866	157	7016	158	2243	10	9553	351	9218	352	7762	10	74						
27	7023	157	7174	158	2254	11	9203	350	8868	350	7751	11	73						
28	7179	156	7332	158	2264	10	8855	348	8519	349	7741	10	72						
29	7336	157	7489	157	2275	11	8509	346	8172	347	7730	11	71						
30	0.067493	157	0.067647	158	1.002285	10	14.8164	345	14.7826	346	0.997720	10	70						
31	7650	157	7805	158	2296	11	7820	344	7482	344	7709	11	69						
32	7806	156	7963	158	2307	11	7479	341	7139	343	7699	11	68						
33	7963	157	8121	158	2318	10	7139	340	6799	340	7688	11	67						
34	8120	157	8278	157	2328	10	6800	339	6459	340	7677	11	66						
35	8276	156	8436	158	2339	11	6463	337	6122	337	7666	11	65						
36	8433	157	8594	158	2350	11	6128	335	5785	337	7656	10	64						
37	8590	157	8752	158	2361	11	5794	334	5451	334	7645	11	63						
38	8747	157	8910	158	2371	10	5462	332	5118	333	7634	11	62						
39	8903	156	9067	157	2382	11	5131	331	4786	332	7623	11	61						
40	0.069060	157	0.069225	158	1.002393	11	14.4802	329	14.4456	330	0.997613	10	60						
41	9217	157	9383	158	2404	11	4474	328	4127	329	7602	11	59						
42	9373	156	9541	158	2415	11	4147	327	3800	327	7591	11	58						
43	9530	157	9699	158	2426	11	3823	324	3474	326	7580	11	57						
44	9687	157	0.069857	158	2437	11	3499	324	3150	324	7569	11	56						
45	0.069844	157	0.070015	158	2448	11	3177	322	2828	322	7558	11	55						
46	0.070000	156	0172	157	2459	11	2857	320	2506	322	7547	11	54						
47	0157	157	0330	158	2470	11	2538	319	2186	320	7536	11	53						
48	0314	157	0488	158	2481	11	2220	318	1868	318	7525	11	52						
49	0470	156	0646	158	2492	11	1904	316	1551	317	7514	11	51						
50	0.070627	157	0.070804	158	1.002503	11	14.1589	315	14.1235	316	0.997503	11	50						
cos		cotg		cosec		sec		tang		sin		c							
	11	12	13	156	157	158	159	255	260	265	270	275	280	285	290	295	300	305	
1	1.1	1.2	1.3	15.6	15.7	15.8	15.9	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	1
2	2.2	2.4	2.6	31.2	31.4	31.6	31.8	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	2
3	3.3	3.6	3.9	46.8	47.1	47.4	47.7	76.5	78.0	79.5	81.0	82.5	84.0	85.5	87.0	88.5	90.0	91.5	3
4	4.4	4.8	5.2	62.4	62.8	63.2	63.6	102.0	104.0	106.0	108.0	110.0	112.0	114.0	116.0	118.0	120.0	122.0	4
5	5.5	6.0	6.5	78.0	78.5	79.0	79.5	127.5	130.0	132.5	135.0	137.5	140.0	142.5	145.0	147.5	150.0	152.5	5
6	6.6	7.2	7.8	93.6	94.2	94.8	95.4	153.0	156.0	159.0	162.0	165.0	168.0	171.0	174.0	177.0	180.0	183.0	6
7	7.7	8.4	9.1	109.2	109.9	110.6	111.3	178.5	182.0	185.5	189.0	192.5	196.0	199.5	203.0	206.5	210.0	213.5	7
8	8.8	9.6	10.4	124.8	125.6	126.4	127.2	204.0	208.0	212.0	216.0	220.0	224.0	228.0	232.0	236.0	240.0	244.0	8
9	9.9	10.8	11.7	140.4	141.3	142.2	143.1	229.5	234.0	238.5	243.0	247.5	252.0	256.5	261.0	265.5	270.0	274.5	9

c	sin		tang		sec		cosec		cotg		cos								
50	0.070627	157	0.070804	158	1.002503	12	14.1589	313	14.1235	314	0.997503	11	50						
51	0784	156	0962	158	2515	11	1276	313	0921	313	7492	11	49						
52	0940	156	1120	158	2526	11	0963	313	0608	313	7481	11	48						
53	1097	157	1277	157	2537	11	0653	310	14.0297	311	7469	12	47						
54	1254	157	1435	158	2548	11	0344	309	13.9987	310	7458	11	46						
55	1410	156	1593	158	2560	12	14.0036	308	9678	309	7447	11	45						
56	1567	157	1751	158	2571	11	13.9729	307	9371	307	7436	11	44						
57	1724	157	1909	158	2582	11	9424	305	9065	306	7425	11	43						
58	1880	156	2067	158	2593	11	9120	304	8760	305	7413	12	42						
59	2037	157	2225	158	2605	12	8817	303	8457	303	7402	11	41						
60	0.072194	157	0.072383	158	1.002616	11	13.8516	301	13.8155	302	0.997391	11	40						
61	2350	156	2541	158	2628	12	8216	300	7854	301	7379	12	39						
62	2507	157	2698	157	2639	11	7918	298	7554	300	7368	11	38						
63	2664	157	2856	158	2651	12	7620	298	7256	298	7356	12	37						
64	2820	156	3014	158	2662	11	7324	296	6960	296	7345	11	36						
65	2977	157	3172	158	2674	12	7029	295	6664	296	7334	11	35						
66	3134	157	3330	158	2685	11	6736	293	6370	294	7322	12	34						
67	3290	156	3488	158	2697	12	6443	293	6077	293	7311	11	33						
68	3447	157	3646	158	2708	11	6152	291	5785	292	7299	12	32						
69	3604	157	3804	158	2720	12	5863	289	5494	291	7288	11	31						
70	0.073760	156	0.073962	158	1.002731	11	13.5574	289	13.5205	289	0.997276	12	30						
71	3917	157	4120	158	2743	12	5287	287	4917	288	7264	12	29						
72	4074	157	4278	158	2755	12	5001	286	4630	287	7253	11	28						
73	4230	156	4436	158	2767	12	4716	285	4344	286	7241	12	27						
74	4387	157	4594	158	2778	11	4432	284	4060	284	7229	12	26						
75	4544	157	4752	158	2790	12	4150	282	3776	284	7218	11	25						
76	4700	156	4910	158	2802	12	3868	282	3494	282	7206	12	24						
77	4857	157	5068	158	2814	12	3588	280	3213	281	7194	12	23						
78	5014	157	5225	157	2825	11	3309	279	2934	279	7183	11	22						
79	5170	156	5383	158	2837	12	3031	278	2655	279	7171	12	21						
80	0.075327	157	0.075541	158	1.002849	12	13.2755	276	13.2378	277	0.997159	12	20						
81	5483	156	5699	158	2861	12	2479	276	2101	277	7147	12	19						
82	5640	157	5857	158	2873	12	2205	274	1826	275	7135	12	18						
83	5797	157	6015	158	2885	12	1932	273	1552	274	7123	12	17						
84	5953	156	6173	158	2897	12	1660	272	1279	273	7111	12	16						
85	6110	157	6331	158	2909	12	1389	271	1008	271	7099	12	15						
86	6267	157	6489	158	2921	12	1119	270	0737	271	7087	12	14						
87	6423	156	6647	158	2933	12	0850	269	0468	269	7075	12	13						
88	6580	157	6805	158	2945	12	0583	267	13.0199	269	7063	12	12						
89	6736	156	6963	158	2957	12	0316	267	12.9932	267	7051	12	11						
90	0.076893	157	0.077121	158	1.002969	12	13.0051	265	12.9666	266	0.997039	12	10						
91	7050	157	7279	158	2982	13	12.9786	265	9401	265	7027	12	09						
92	7206	156	7437	158	2994	12	9523	263	9137	264	7015	12	08						
93	7363	157	7595	158	3006	12	9261	262	8874	263	7003	12	07						
94	7519	156	7753	158	3018	12	9000	261	8612	262	6991	12	06						
95	7676	157	7911	158	3031	13	8740	260	8351	261	6979	12	05						
96	7833	157	8070	159	3043	12	8481	259	8091	260	6966	13	04						
97	7989	156	8228	158	3055	12	8223	258	7832	259	6954	12	03						
98	8146	157	8386	158	3067	12	7966	257	7574	258	6942	12	02						
99	8302	156	8544	158	3080	13	7710	256	7318	256	6930	12	01						
100	0.078459	157	0.078702	158	1.003092	12	12.7455	255	12.7062	256	0.996917	13	00						
cos		cotg		cosec		sec		tang		sin		c							
	310	315	320	325	330	335	340	345	350	355	360	365	370	375	380	385	390	395	
1	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	1
2	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	2
3	93.0	94.5	96.0	97.5	99.0	100.5	102.0	103.5	105.0	106.5	108.0	109.5	111.0	112.5	114.0	115.5	117.0	118.5	3
4	124.0	126.0	128.0	130.0	132.0	134.0	136.0	138.0	140.0	142.0	144.0	146.0	148.0	150.0	152.0	154.0	156.0	158.0	4
5	155.0	157.5	160.0	162.5	165.0	167.5	170.0	172.5	175.0	177.5	180.0	182.5	185.0	187.5	190.0	192.5	195.0	197.5	5
6	186.0	189.0	192.0	195.0	198.0	201.0	204.0	207.0	210.0	213.0	216.0	219.0	222.0	225.0	228.0	231.0	234.0	237.0	6
7	217.0	220.5	224.0	227.5	231.0	234.5	238.0	241.5	245.0	248.5	252.0	255.5	259.0	262.5	266.0	269.5	273.0	276.5	7
8	248.0	252.0	256.0	260.0	264.0	268.0	272.0	276.0	280.0	284.0	288.0	292.0	296.0	300.0	304.0	308.0	312.0	316.0	8
9	279.0	283.5	288.0	292.5	297.0	301.5	306.0	310.5	315.0	319.5	324.0	328.5	333.0	337.5	342.0	346.5	351.0	355.5	9

c	sin		tang		sec		cosec		cotg		cos								
00	0.078459	157	0.078702	158	1.003092	13	12.7455	254	12.7062	255	0.996917	12	100						
01	8616	156	8860	158	3105	12	7201	253	6807	253	6905	12	99						
02	8772	156	9018	158	3117	12	6948	253	6554	253	6893	12	98						
03	8929	157	9176	158	3130	13	6696	252	6301	253	6880	13	97						
		156		158		12		251	6049	252	6868	12	96						
04	9085		9334		3142	13	6445		5799	250	6855	13	95						
05	9242	157	9492	158	3155	12	6196	249	5549	250	6843	12	94						
06	9399	157	9650	158	3167	12	5947	249											
		156		158		13		248	5300	249	6830	13	93						
07	9555		9808		3180	12	5699		5053	247	6818	12	92						
08	9712	156	0.079966	158	3192	13	5452	247	4806	247	6805	12	91						
09	0.079868	156	0.080124	158	3205	12	5206	246											
		157		159		12		245	12.4761	246	0.996793	12	90						
10	0.080025	157	0.080282	159	1.003217	13	12.4961	244	12.4560	245		13	89						
11	0182		0441		3230	13	4717		4315		6780	12	88						
12	0338	156	0599	158	3243	13	4474	243	4072	243	6768	12	87						
13	0495	157	0757	158	3256	13	4232	242	3829	243	6755	13	86						
		156		158		12		241		242		13	85						
14	0651		0915		3268	13	3991		3587		6742	12	84						
15	0808	157	1073	158	3281	13	3750	241	3346	241	6730	12	83						
16	0964	156	1231	158	3294	13	3511	239	3106	240	6717	13	82						
		157		158		13		238		240		13	81						
17	1121		1389		3307	12	3273		2866		6704	12	80						
18	1277	156	1547	158	3319	12	3035	238	2628	238	6692	12	79						
19	1434	157	1705	158	3332	13	2799	236	2391	237	6679	13	78						
		156		159		13		235	12.2154	237	0.996666	13	77						
20	0.081591	156	0.081864	158	1.003345	13	12.2563	235		235		13	76						
21	1747		2022		3358	13	2328		1919		6653	12	75						
22	1904	157	2180	158	3371	13	2095	233	1684	235	6640	13	74						
23	2060	156	2338	158	3384	13	1862	233	1451	233	6627	13	73						
		157		158		13		232		233		13	72						
24	2217		2496		3397	13	1630		1218		6614	12	71						
25	2373	156	2654	158	3410	13	1398	232	0986	232	6602	12	70						
26	2530	157	2812	158	3423	13	1168	230	0755	231	6589	13	69						
		156		159		13		229		230		13	68						
27	2686		2971		3436	13	0939		0525		6576	12	67						
28	2843	157	3129	158	3449	13	0710	229	0295	230	6563	13	66						
29	3000	157	3287	158	3462	13	0483	227	12.0067	228	6550	13	65						
		156		158		14		226		228		13	64						
30	0.083156	157	0.083445	158	1.003476	13	12.0256	227	11.9839	228	0.996537	14	63						
31	3313		3603		3489	13	12.0030		9613		6523	13	62						
32	3469	156	3761	158	3502	13	11.9805	225	9387	226	6510	13	61						
33	3626	157	3920	158	3515	13	9581	224	9162	225	6497	13	60						
		156		158		13		224		225		13	59						
34	3782		4078		3528	14	9357		8937		6484	12	58						
35	3939	157	4236	158	3542	14	9135	222	8714	223	6471	13	57						
36	4095	156	4394	158	3555	13	8913	222	8492	222	6458	13	56						
		157		158		13		221		222		14	55						
37	4252		4552		3568	14	8692		8270		6444	13	54						
38	4408	156	4711	159	3582	14	8472	220	8049	221	6431	13	53						
39	4565	157	4869	158	3595	13	8253	219	7829	220	6418	13	52						
		156		158		13		219		219		13	51						
40	0.084721	157	0.085027	158	1.003608	14	11.8034	219	11.7610	219	0.996405	14	50						
41	4878		5185		3622	14	7816		7391		6391	13	49						
42	5034	156	5343	158	3635	13	7600	216	7174	217	6378	13	48						
43	5191	157	5502	159	3649	14	7383	217	6957	217	6365	13	47						
		156		158		13		215		216		14	46						
44	5347		5660		3662	14	7168		6741		6351	13	45						
45	5504	157	5818	158	3676	14	6954	214	6525	216	6338	13	44						
46	5660	156	5976	158	3689	13	6740	214	6311	214	6324	14	43						
		157		159		14		213		214		13	42						
47	5817		6135		3703	13	6527		6097		6311	14	41						
48	5973	156	6293	158	3716	13	6315	212	5884	213	6297	14	40						
49	6130	157	6451	158	3730	14	6104	211	5672	212	6284	13	39						
		156		158		14		211		211		14	38						
50	0.086286	157	0.086609	158	1.003744	14	11.5893	211	11.5461	211	0.996270	14	37						
	cos		cotg		cosec		sec		tang		sin		c						
	12	13	14	15	156	157	158	159	176	178	180	183	186	189	192	195	198	201	
1	1.2	1.3	1.4	1.5	15.6	15.7	15.8	15.9	17.6	17.8	18.0	18.3	18.6	18.9	19.2	19.5	19.8	20.1	1
2	2.4	2.6	2.8	3.0	31.2	31.4	31.6	31.8	35.2	35.6	36.0	36.6	37.2	37.8	38.4	39.0	39.6	40.2	2
3	3.6	3.9	4.2	4.5	46.8	47.1	47.4	47.7	52.8	53.4	54.0	54.9	55.8	56.7	57.6	58.5	59.4	60.3	3
4	4.8	5.2	5.6	6.0	62.4	62.8	63.2	63.6	70.4	71.2	72.0	73.2	74.4	75.6	76.8	78.0	79.2	80.4	4
5	6.0	6.5	7.0	7.5	78.0	78.5	79.0	79.5	88.0	89.0	90.0	91.5	93.0	94.5	96.0	97.5	99.0	100.5	5
6	7.2	7.8	8.4	9.0	93.6	94.2	94.8	95.4	105.6	106.8	108.0	109.8	111.6	113.4	115.2	117.0	118.8	120.6	6
7	8.4	9.1	9.8	10.5	109.2	109.9	110.6	111.3	123.2	124.6	126.0	128.1	130.2	132.3	134.4	136.5	138.6	140.7	7
8	9.6	10.4	11.2	12.0	124.8	125.6	126.4	127.2	140.8	142.4	144.0	146.4	148.8	151.2	153.6	156.0	158.4	160.8	8
9	10.8	11.7	12.6	13.5	140.4	141.3	142.2	143.1	158.4	160.2	162.0	164.7	167.4	170.1	172.8	175.5	178.2	180.9	9

c	sin		tang		sec		cosec		cotg		cos								
50	0.086286	157	0.086609	159	1.003744	13	11.5893	210	11.5461	211	0.996270	13	50						
51	6443	156	6768	158	3757	14	5683	209	5250	210	6257	14	49						
52	6599	157	6926	158	3771	14	5474	208	5040	209	6243	14	48						
53	6756	156	7084	158	3785	14	5266	208	4831	209	6230	13	47						
54	6912	156	7242	158		13	5058	208	4623	208	6216	14	46						
55	7069	157	7401	159	3798	14	4852	206	4416	207	6202	14	45						
56	7225	156	7559	158	3812	14	4646	206	4209	207	6189	13	44						
57	7382	157	7717	158	3826	14		206	206	206		14							
58	7538	156	7876	159	3840	14	4440	204	4003	206	6175	14	43						
59	7695	157	8034	158	3854	14	4236	204	3797	206	6161	14	42						
60	7851	156	8303	158	3868	14	4032	204	3593	204	6147	13	41						
61	8008	157	8530	158	1.003881	13	11.3829	203	11.3389	204	0.996134	14	40						
62	8164	156	8509	159	3895	14	3626	201	3186	203	6120	14	39						
63	8321	157	8667	158	3909	14	3425	201	2983	203	6106	14	38						
64	8477	156	8825	158	3923	14	3224	201	2781	202	6092	14	37						
65	8634	157	8984	159	3937	14	3024	200	2580	201	6078	14	36						
66	8790	156	9142	158	3951	14	2824	200	2380	200	6064	14	35						
67	8946	157	9300	158	3965	14	2625	199	2180	200	6050	14	34						
68	9103	156	9459	158	3979	14	2427	198	1982	198	6036	14	33						
69	9259	157	9617	159	3993	14	2230	197	1783	199	6022	14	32						
70	9416	156	9875	158	4008	15	2033	197	1586	197	6008	14	31						
71	9572	157	10134	158	1.004022	14	11.1837	196	11.1389	197	0.995994	14	30						
72	9729	156	10393	158	4036	14	1642	195	1193	196	5980	14	29						
73	9885	157	10650	158	4050	14	1447	194	0998	195	5966	14	28						
74	10042	156	10909	158	4064	15	1253	193	0803	194	5952	14	27						
75	10198	157	11168	159	4079	14	1060	193	0609	194	5938	14	26						
76	10354	156	11426	158	4093	14	0867	192	0415	194	5924	14	25						
77	10511	157	11684	158	4107	14	0675	191	0223	192	5910	14	24						
78	10667	156	11942	158	4121	15	0484	191	11.0030	193	5895	15	23						
79	10824	157	12201	159	4136	15	0293	191	10.9839	191	5881	14	22						
80	10980	156	12459	158	4150	14	11.0103	190	9648	191	5867	14	21						
81	11137	157	12717	158	1.004165	15	10.9914	189	10.9458	190	0.995853	14	20						
82	11293	156	12976	158	4179	14	9725	188	9269	189	5838	15	19						
83	11449	157	13234	158	4193	15	9537	187	9080	188	5824	14	18						
84	11606	156	13493	158	4208	14	9350	187	8892	188	5810	15	17						
85	11762	157	13751	158	4222	15	9163	186	8704	187	5795	14	16						
86	11919	156	14009	158	4237	14	8977	185	8517	186	5781	14	15						
87	12075	157	14268	158	4251	15	8792	185	8331	185	5767	15	14						
88	12232	156	14526	158	4266	15	8607	185	8146	185	5752	15	13						
89	12388	157	14785	158	4281	15	8423	184	7961	185	5738	14	12						
90	12544	156	15043	158	4295	14	8239	184	7776	185	5723	15	11						
91	12701	157	15302	158	1.004310	15	10.8056	183	10.7593	183	0.995709	14	10						
92	12857	156	15560	158	4325	15	7874	182	7409	184	5694	15	09						
93	13014	157	15819	158	4339	14	7692	182	7227	182	5679	15	08						
94	13170	156	16077	158	4354	15	7511	181	7045	182	5665	14	07						
95	13326	157	16336	158	4369	15	7331	180	6864	181	5650	15	06						
96	13483	156	16594	158	4384	15	7151	180	6683	181	5636	14	05						
97	13639	157	16853	158	4398	15	6972	179	6503	180	5621	15	04						
98	13796	156	17111	158	4413	15	6793	179	6324	179	5606	15	03						
99	13952	157	17369	158	4428	15	6615	178	6145	179	5591	15	02						
100	14108	156	17628	158	4443	15	6437	178	5967	178	5577	14	01						
	14264	157	17886	158	1.004458	15	10.6261	176	10.5789	178	0.995562	15	00						
cos		cotg		cosec		sec		tang		sin		c							
	204	207	210	213	216	219	222	225	228	231	234	237	240	243	246	249	252	255	
1	20.4	20.7	21.0	21.3	21.6	21.9	22.2	22.5	22.8	23.1	23.4	23.7	24.0	24.3	24.6	24.9	25.2	25.5	1
2	40.8	41.4	42.0	42.6	43.2	43.8	44.4	45.0	45.6	46.2	46.8	47.4	48.0	48.6	49.2	49.8	50.4	51.0	2
3	61.2	62.1	63.0	63.9	64.8	65.7	66.6	67.5	68.4	69.3	70.2	71.1	72.0	72.9	73.8	74.7	75.6	76.5	3
4	81.6	82.8	84.0	85.2	86.4	87.6	88.8	90.0	91.2	92.4	93.6	94.8	96.0	97.2	98.4	99.6	100.8	102.0	4
5	102.0	103.5	105.0	106.5	108.0	109.5	111.0	112.5	114.0	115.5	117.0	118.5	120.0	121.5	123.0	124.5	126.0	127.5	5
6	122.4	124.2	126.0	127.8	129.6	131.4	133.2	135.0	136.8	138.6	140.4	142.2	144.0	145.8	147.6	149.4	151.2	153.0	6
7	142.8	144.9	147.0	149.1	151.2	153.3	155.4	157.5	159.6	161.7	163.8	165.9	168.0	170.1	172.2	174.3	176.4	178.5	7
8	163.2	165.6	168.0	170.4	172.8	175.2	177.6	180.0	182.4	184.8	187.2	189.6	192.0	194.4	196.8	199.2	201.6	204.0	8
9	183.6	186.3	189.0	191.7	194.4	197.1	199.8	202.5	205.2	207.9	210.6	213.3	216.0	218.7	221.4	224.1	226.8	229.5	9

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c	sin		tang		sec		cosec		cotg		cos		
00	0.094108		0.094528		1.004458		10.62605		10.57889		0.995562		100
01	4265	157	4686	158	4473	15	60843	1762	56119	1770	5547	15	99
02	4421	156	4845	159	4488	15	59086	1757	54354	1765	5532	15	98
03	4577	156	5003	158	4503	15	57334	1752	52595	1759	5518	14	97
04	4734	157	5162	159	4518	15	55589	1745	50842	1753	5503	15	96
05	4890	156	5320	158	4533	15	53850	1739	49094	1748	5488	15	95
06	5047	157	5479	159	4548	15	52116	1734	47353	1741	5473	15	94
07	5203	156	5637	158	4563	15	50388	1728	45617	1736	5458	15	93
08	5359	156	5796	159	4578	15	48665	1723	43887	1730	5443	15	92
09	5516	157	5954	158	4593	15	46949	1716	42162	1725	5428	15	91
10	0.095672	156	0.096113	159	1.004608	15	10.45238	1711	10.40443	1719	0.995413	15	90
11	5828	156	6271	158	4623	15	43532	1706	38730	1713	5398	15	89
12	5985	157	6430	159	4639	16	41832	1700	37022	1708	5383	15	88
13	6141	156	6589	158	4654	15	40138	1694	35320	1702	5368	15	87
14	6297	156	6747	158	4669	15	38449	1689	33623	1697	5353	15	86
15	6454	157	6906	159	4684	15	36766	1683	31932	1691	5337	16	85
16	6610	156	7064	158	4700	16	35088	1678	30246	1686	5322	15	84
17	6766	156	7223	159	4715	15	33416	1672	28566	1680	5307	15	83
18	6923	157	7381	158	4730	15	31749	1667	26891	1675	5292	15	82
19	7079	156	7540	159	4746	16	30087	1662	25222	1669	5277	15	81
20	0.097235	156	0.097698	158	1.004761	15	10.28431	1656	10.23558	1664	0.995261	16	80
21	7392	157	7857	159	4777	16	26780	1651	21899	1659	5246	15	79
22	7548	156	8016	158	4792	15	25135	1645	20246	1653	5231	15	78
23	7704	156	8174	158	4808	16	23494	1641	18597	1649	5215	16	77
24	7861	157	8333	159	4823	15	21859	1635	16955	1642	5200	15	76
25	8017	156	8491	158	4839	16	20230	1629	15317	1638	5185	15	75
26	8173	156	8650	159	4854	15	18605	1625	13685	1632	5169	16	74
27	8330	157	8809	158	4870	16	16986	1619	12057	1628	5154	15	73
28	8486	156	8967	158	4885	15	15372	1614	10435	1622	5138	16	72
29	8642	156	9126	159	4901	16	13763	1609	08819	1616	5123	15	71
30	0.098799	157	0.099284	158	1.004917	16	10.12159	1604	10.07207	1612	0.995107	16	70
31	8955	156	9443	159	4932	15	10560	1599	05600	1607	5092	15	69
32	9111	156	9602	158	4948	16	08966	1594	03998	1602	5076	16	68
33	9268	157	9760	158	4964	16	07378	1588	02402	1596	5061	15	67
34	9424	156	0.099919	159	4980	16	05794	1584	10.00810	1592	5045	16	66
35	9580	156	0.100078	158	4995	15	04215	1579	9.99224	1586	5030	15	65
36	9737	157	0236	158	5011	16	02641	1574	97642	1582	5014	16	64
37	0.099893	156	0395	159	5027	16	10.01073	1568	96066	1576	4998	16	63
38	0.100049	156	0554	158	5043	16	9.99509	1564	94494	1572	4982	16	62
39	0205	156	0712	158	5059	16	97950	1559	92927	1567	4967	15	61
40	0.100362	157	0.100871	159	1.005075	16	9.96396	1554	9.91365	1562	0.994951	16	60
41	0518	156	1030	159	5091	16	94847	1549	89808	1557	4935	16	59
42	0674	156	1188	158	5107	16	93302	1545	88256	1552	4919	16	58
43	0831	157	1347	159	5122	15	91763	1539	86708	1548	4904	15	57
44	0987	156	1506	159	5139	17	90228	1535	85166	1542	4888	16	56
45	1143	156	1664	158	5155	16	88698	1530	83628	1538	4872	16	55
46	1299	156	1823	159	5171	16	87173	1525	82095	1533	4856	16	54
47	1456	157	1982	159	5187	16	85652	1521	80566	1529	4840	16	53
48	1612	156	2141	158	5203	16	84136	1516	79043	1523	4824	16	52
49	1768	156	2299	158	5219	16	82625	1511	77524	1519	4808	16	51
50	0.101924	156	0.102458	159	1.005235	16	9.81119	1506	9.76009	1515	0.994792	16	50
	cos		cotg		cosec		sec		tang		sin		c
			14	15	16	17	156	157	158	159			
1	1.4	1.5	1.6	1.7	15.6	15.7	15.8	15.9	1				
2	2.8	3.0	3.2	3.4	31.2	31.4	31.6	31.8	2				
3	4.2	4.5	4.8	5.1	46.8	47.1	47.4	47.7	3				
4	5.6	6.0	6.4	6.8	62.4	62.8	63.2	63.6	4				
5	7.0	7.5	8.0	8.5	78.0	78.5	79.0	79.5	5				
6	8.4	9.0	9.6	10.2	93.6	94.2	94.8	95.4	6				
7	9.8	10.5	11.2	11.9	109.2	109.9	110.6	111.3	7				
8	11.2	12.0	12.8	13.6	124.8	125.6	126.4	127.2	8				
9	12.6	13.5	14.4	15.3	140.4	141.3	142.2	143.1	9				

93^g

6^g

c	sin		tang		sec		cosec		cotg		cos		
50	0.101924	157	0.102458	159	1.005235	16	9.81119	1502	9.76009	1509	0.994792	16	50
51	2081	156	2617	159	5251	17	79617	1497	74500	1506	4776	16	49
52	2237	156	2776	158	5268	16	78120	1493	72994	1500	4760	16	48
53	2393	156	2934	159	5284	16	76627	1488	71494	1496	4744	16	47
54	2549	157	3093	159	5300	16	75139	1484	69998	1491	4728	16	46
55	2706	156	3252	159	5316	16	73655	1478	68507	1487	4712	16	45
56	2862	156	3411	158	5333	17	72177	1475	67020	1483	4696	16	44
57	3018	156	3569	158	5349	16	70702	1470	65537	1477	4679	17	43
58	3174	156	3728	159	5365	16	69232	1465	64060	1474	4663	16	42
59	3331	157	3887	159	5382	17	67767	1462	62586	1469	4647	16	41
60	0.103487	156	0.104046	158	1.005398	17	9.66305	1456	9.61117	1464	0.994631	16	40
61	3643	156	4204	159	5415	16	64849	1452	59653	1460	4615	17	39
62	3799	157	4363	159	5431	17	63397	1448	58193	1456	4598	16	38
63	3956	156	4522	159	5448	16	61949	1444	56737	1452	4582	16	37
64	4112	156	4681	159	5464	17	60505	1439	55285	1447	4566	17	36
65	4268	156	4840	158	5481	16	59066	1435	53838	1442	4549	16	35
66	4424	157	4998	159	5497	17	57631	1430	52396	1439	4533	17	34
67	4581	156	5157	159	5514	16	56201	1426	50957	1434	4516	16	33
68	4737	156	5316	159	5530	17	54775	1422	49523	1429	4500	16	32
69	4893	156	5475	159	5547	17	53353	1418	48094	1426	4484	16	31
70	0.105049	156	0.105634	158	1.005564	16	9.51935	1413	9.46668	1421	0.994467	16	30
71	5205	157	5792	159	5580	17	50522	1410	45247	1417	4451	17	29
72	5362	156	5951	159	5597	17	49112	1405	43830	1413	4434	17	28
73	5518	156	6110	159	5614	17	47707	1400	42417	1409	4417	16	27
74	5674	156	6269	159	5631	16	46307	1397	41008	1405	4401	17	26
75	5830	156	6428	159	5647	17	44910	1393	39603	1400	4384	16	25
76	5986	157	6587	159	5664	17	43517	1388	38203	1396	4368	16	24
77	6143	156	6746	158	5681	17	42129	1384	36807	1392	4351	17	23
78	6299	156	6904	159	5698	17	40745	1381	35415	1389	4334	16	22
79	6455	156	7063	159	5715	17	39364	1376	34026	1384	4318	17	21
80	0.106611	156	0.107222	159	1.005732	17	9.37988	1372	9.32642	1380	0.994301	17	20
81	6767	157	7381	159	5749	17	36616	1368	31262	1376	4284	17	19
82	6924	156	7540	159	5766	17	35248	1364	29886	1372	4267	17	18
83	7080	156	7699	159	5783	17	33884	1360	28514	1368	4250	16	17
84	7236	156	7858	159	5800	17	32524	1356	27146	1363	4234	17	16
85	7392	156	8017	159	5817	17	31168	1352	25783	1361	4217	17	15
86	7548	156	8176	159	5834	17	29816	1349	24422	1356	4200	17	14
87	7704	157	8335	158	5851	17	28467	1344	23066	1352	4183	17	13
88	7861	156	8493	159	5868	17	27123	1340	21714	1348	4166	17	12
89	8017	156	8652	159	5885	18	25783	1337	20366	1344	4149	17	11
90	0.108173	156	0.108811	159	1.005903	17	9.24446	1332	9.19022	1341	0.994132	17	10
91	8329	156	8970	159	5920	17	23114	1329	17681	1336	4115	17	09
92	8485	156	9129	159	5937	17	21785	1325	16345	1333	4098	17	08
93	8641	156	9288	159	5954	18	20460	1321	15012	1329	4081	17	07
94	8797	157	9447	159	5972	17	19139	1317	13683	1325	4064	17	06
95	8954	156	9606	159	5989	17	17822	1314	12358	1322	4047	17	05
96	9110	156	9765	159	6006	18	16508	1309	11036	1317	4030	17	04
97	9266	156	0.109924	159	6024	17	15199	1306	09719	1314	4013	18	03
98	9422	156	0.110083	159	6041	17	13893	1303	08405	1310	3995	17	02
99	9578	156	0242	159	6058	18	12590	1298	07095	1306	3978	17	01
100	0.109734	156	0.110401	159	1.006076	18	9.11292	1298	9.05789	1306	0.993961	17	00
cos		cotg		cosec		sec		tang		sin		c	
				16	17	18	156	157	158	159			
1		1.6		1.7	1.8	15.6	15.7	15.8	15.9	1			
2		3.2		3.4	3.6	31.2	31.4	31.6	31.8	2			
3		4.8		5.1	5.4	46.8	47.1	47.4	47.7	3			
4		6.4		6.8	7.2	62.4	62.8	63.2	63.6	4			
5		8.0		8.5	9.0	78.0	78.5	79.0	79.5	5			
6		9.6		10.2	10.8	93.6	94.2	94.8	95.4	6			
7		11.2		11.9	12.6	109.2	109.9	110.6	111.3	7			
8		12.8		13.6	14.4	124.8	125.6	126.4	127.2	8			
9		14.4		15.3	16.2	140.4	141.3	142.2	143.1	9			

c	sin		tang		sec		cosec		cotg		cos		
00	0.109734	156	0.110401	159	1.006076	17	9.11292	1295	9.05789	1303	0.993961	17	100
01	0.109890	157	0560	159	6093	18	09997	1291	04486	1299	3944	18	99
02	0.110047	157	0719	159	6111	18	08706	1291	03187	1299	3926	18	98
03	0203	156	0878	159	6128	17	07419	1287	01892	1295	3909	17	97
04	0359	156	1037	159	6146	18	06135	1284	9.00600	1292	3892	17	96
05	0515	156	1196	159	6163	17	04855	1280	8.99312	1288	3874	18	95
06	0671	156	1355	159	6181	18	03579	1276	98028	1284	3857	17	94
07	0827	156	1514	159	6198	17	02306	1273	96747	1281	3840	17	93
08	0983	156	1673	159	6216	18	9.01037	1269	95470	1277	3822	18	92
09	1139	156	1832	159	6234	18	8.99771	1266	94197	1273	3805	17	91
10	0.111295	157	0.111991	159	1.006251	17	8.98509	1262	8.92927	1270	0.993787	18	90
11	1452	157	2150	159	6269	18	97251	1258	91661	1266	3770	17	89
12	1608	156	2309	159	6287	18	95996	1255	90398	1263	3752	18	88
13	1764	156	2468	159	6305	18	94744	1252	89138	1260	3735	17	87
14	1920	156	2627	159	6322	17	93496	1248	87883	1255	3717	18	86
15	2076	156	2787	160	6340	18	92252	1244	86630	1253	3700	17	85
16	2232	156	2946	159	6358	18	91011	1241	85382	1248	3682	18	84
17	2388	156	3105	159	6376	18	89774	1237	84136	1246	3664	18	83
18	2544	156	3264	159	6394	18	88540	1234	82894	1242	3647	17	82
19	2700	156	3423	159	6412	18	87309	1231	81656	1238	3629	18	81
20	0.112856	156	0.113582	159	1.006430	18	8.86082	1227	8.80421	1235	0.993611	18	80
21	3012	157	3741	159	6448	18	84858	1224	79189	1232	3594	17	79
22	3169	156	3900	159	6466	18	83638	1220	77961	1228	3576	18	78
23	3325	156	4059	159	6484	18	82421	1217	76736	1225	3558	18	77
24	3481	156	4218	159	6502	18	81207	1214	75515	1221	3540	18	76
25	3637	156	4378	160	6520	18	79997	1210	74297	1218	3522	18	75
26	3793	156	4537	159	6538	18	78790	1207	73082	1215	3505	17	74
27	3949	156	4696	159	6556	18	77587	1203	71871	1211	3487	18	73
28	4105	156	4855	159	6574	18	76387	1200	70663	1208	3469	18	72
29	4261	156	5014	159	6592	18	75190	1197	69458	1205	3451	18	71
30	0.114417	156	0.115173	159	1.006611	19	8.73996	1194	8.68256	1202	0.993433	18	70
31	4573	156	5333	160	6629	18	72806	1190	67058	1198	3415	18	69
32	4729	156	5492	159	6647	18	71618	1188	65863	1195	3397	18	68
33	4885	156	5651	159	6665	18	70435	1183	64671	1192	3379	18	67
34	5041	156	5810	159	6684	19	69254	1181	63483	1188	3361	18	66
35	5197	156	5969	159	6702	18	68077	1177	62297	1186	3343	18	65
36	5353	156	6128	159	6720	18	66902	1175	61115	1182	3325	18	64
37	5509	156	6288	160	6739	19	65731	1171	59937	1178	3306	19	63
38	5665	156	6447	159	6757	18	64564	1167	58761	1176	3288	18	62
39	5821	156	6606	159	6776	19	63399	1165	57588	1173	3270	18	61
40	0.115977	156	0.116765	159	1.006794	18	8.62237	1162	8.56419	1169	0.993252	18	60
41	6133	156	6925	160	6812	18	61079	1158	55253	1166	3234	18	59
42	6289	156	7084	159	6831	19	59924	1155	54090	1163	3215	19	58
43	6445	156	7243	159	6850	19	58772	1152	52930	1160	3197	18	57
44	6601	156	7402	159	6868	18	57623	1149	51773	1157	3179	18	56
45	6757	156	7561	159	6887	19	56477	1146	50619	1154	3160	19	55
46	6913	156	7721	160	6905	18	55334	1143	49468	1151	3142	18	54
47	7069	156	7880	159	6924	19	54194	1140	48320	1148	3124	18	53
48	7225	156	8039	159	6943	19	53057	1137	47176	1144	3105	19	52
49	7381	156	8199	160	6961	18	51924	1133	46034	1142	3087	18	51
50	0.117537	156	0.118358	159	1.006980	19	8.50793	1131	8.44896	1138	0.993068	19	50
cos		cotg		cosec		sec		tang		sin		c	
				17	18	19	156	157	159	160			
1				1.7	1.8	1.9	15.6	15.7	15.9	16.0	1		
2				3.4	3.6	3.8	31.2	31.4	31.8	32.0	2		
3				5.1	5.4	5.7	46.8	47.1	47.7	48.0	3		
4				6.8	7.2	7.6	62.4	62.8	63.6	64.0	4		
5				8.5	9.0	9.5	78.0	78.5	79.5	80.0	5		
6				10.2	10.8	11.4	93.6	94.2	95.4	96.0	6		
7				11.9	12.6	13.3	109.2	109.9	111.3	112.0	7		
8				13.6	14.4	15.2	124.8	125.6	127.2	128.0	8		
9				15.3	16.2	17.1	140.4	141.3	143.1	144.0	9		

c	sin		tang		sec		cosec		cotg		cos		
50	0.117537	156	0.118358	159	1.006980	19	8.50793	1128	8.44896	1136	0.993068	18	50
51	7693	156	8517	159	6999	18	49665	1124	43760	1132	3050	19	49
52	7849	156	8676	160	7017	19	48541	1122	42628	1130	3031	18	48
53	8005	156	8836	159	7036	19	47419	1118	41498	1126	3013	19	47
54	8161	156	8995	159	7055	19	46301	1116	40372	1124	2994	18	46
55	8317	156	9154	160	7074	19	45185	1113	39248	1120	2976	19	45
56	8473	156	9314	159	7093	19	44072	1110	38128	1118	2957	18	44
57	8629	156	9473	159	7112	19	42962	1106	37010	1115	2939	19	43
58	8785	156	9632	160	7131	18	41856	1104	35895	1112	2920	19	42
59	8941	156	9792	159	7149	19	40752	1101	34783	1109	2901	18	41
60	0.119097	156	0.119951	159	1.007168	19	8.39651	1099	8.33674	1106	0.992883	19	40
61	9253	156	0.120110	160	7187	19	38552	1095	32568	1103	2864	19	39
62	9409	156	0270	159	7206	19	37457	1092	31465	1100	2845	19	38
63	9565	156	0429	159	7225	19	36365	1090	30365	1097	2826	18	37
64	9721	156	0588	160	7245	19	35275	1086	29268	1095	2808	19	36
65	0.119877	156	0748	159	7264	19	34189	1084	28173	1091	2789	19	35
66	0.120033	156	0907	159	7283	19	33105	1081	27082	1089	2770	19	34
67	0189	156	1066	160	7302	19	32024	1078	25993	1086	2751	19	33
68	0345	156	1226	159	7321	19	30946	1075	24907	1083	2732	19	32
69	0501	156	1385	160	7340	19	29871	1073	23824	1081	2713	19	31
70	0.120657	156	0.121545	159	1.007359	20	8.28798	1069	8.22743	1077	0.992694	19	30
71	0813	155	1704	159	7379	19	27729	1067	21666	1075	2675	19	29
72	0968	156	1863	160	7398	19	26662	1065	20591	1072	2656	19	28
73	1124	156	2023	159	7417	20	25597	1061	19519	1069	2637	19	27
74	1280	156	2182	160	7437	19	24536	1059	18450	1067	2618	19	26
75	1436	156	2342	159	7456	19	23477	1056	17383	1064	2599	19	25
76	1592	156	2501	160	7475	20	22421	1053	16319	1061	2580	19	24
77	1748	156	2661	159	7495	19	21368	1050	15258	1058	2561	19	23
78	1904	156	2820	160	7514	20	20318	1048	14200	1056	2542	19	22
79	2060	156	2979	159	7534	20	19270	1045	13144	1053	2523	19	21
80	0.122216	156	0.123139	159	1.007553	20	8.18225	1043	8.12091	1050	0.992504	19	20
81	2372	156	3298	160	7573	19	17182	1039	11041	1048	2484	19	19
82	2528	155	3458	159	7592	20	16143	1037	09993	1045	2465	19	18
83	2683	156	3617	160	7612	19	15106	1035	08948	1042	2446	19	17
84	2839	156	3777	159	7631	20	14071	1032	07906	1040	2427	20	16
85	2995	156	3936	160	7651	19	13039	1029	06866	1037	2407	19	15
86	3151	156	4096	159	7670	20	12010	1026	05829	1034	2388	19	14
87	3307	156	4255	160	7690	20	10984	1024	04795	1032	2369	20	13
88	3463	156	4415	159	7710	20	09960	1022	03763	1029	2349	19	12
89	3619	156	4574	160	7730	19	08938	1018	02734	1027	2330	20	11
90	0.123775	156	0.124734	159	1.007749	20	8.07920	1016	8.01707	1024	0.992310	19	10
91	3931	155	4893	160	7769	20	06904	1014	8.00683	1021	2291	20	09
92	4086	156	5053	159	7789	20	05890	1011	7.99662	1019	2271	19	08
93	4242	156	5212	160	7809	19	04879	1008	98643	1017	2252	20	07
94	4398	156	5372	160	7828	20	03871	1006	97626	1013	2232	19	06
95	4554	156	5532	159	7848	20	02865	1004	96613	1012	2213	20	05
96	4710	156	5691	160	7868	20	01861	1001	95601	1008	2193	19	04
97	4866	156	5851	159	7888	20	8.00860	998	94593	1007	2174	20	03
98	5022	155	6010	160	7908	20	7.99862	996	93586	1003	2154	20	02
99	5177	156	6170	159	7928	20	98866	993	92583	1001	2134	19	01
100	0.125333	156	0.126329	159	1.007948	20	7.97873		7.91582		0.992115	19	00
	cos		cotg		cosec		sec		tang		sin		c
			18	19	20	155	156	159	160				
1	1.8	1.9	2.0	15.5	15.6	15.9	16.0	1					
2	3.6	3.8	4.0	31.0	31.2	31.8	32.0	2					
3	5.4	5.7	6.0	46.5	46.8	47.7	48.0	3					
4	7.2	7.6	8.0	62.0	62.4	63.6	64.0	4					
5	9.0	9.5	10.0	77.5	78.0	79.5	80.0	5					
6	10.8	11.4	12.0	93.0	93.6	95.4	96.0	6					
7	12.6	13.3	14.0	108.5	109.2	111.3	112.0	7					
8	14.4	15.2	16.0	124.0	124.8	127.2	128.0	8					
9	16.2	17.1	18.0	139.5	140.4	143.1	144.0	9					

c	sin		tang		sec		cosec		cotg		cos								
00	0.125333	156	0.126329	160	1.007948	20	7.97873	991	7.91582	999	0.992115	20	100						
01	5489	156	6489	160	7968	20	6882	988	7.90583	996	2095	20	99						
02	5645	156	6649	160	7988	20	5894	986	7.89587	994	2075	19	98						
03	5801	156	6808	159	8008	20	4908	984	8593	992	2056	20	97						
04	5957	156	6968	160	8028	20	3924	981	7601	988	2036	20	96						
05	6112	155	7127	159	8048	20	2943	981	6613	988	2016	20	95						
06	6268	156	7287	160	8068	20	1965	978	5626	987	1996	20	94						
07	6424	156	7447	160	8089	21	0989	976	4642	984	1976	20	93						
08	6580	156	7606	159	8109	20	7.90015	974	3661	981	1956	19	92						
09	6736	156	7766	160	8129	20	7.89044	971	2681	980	1937	20	91						
10	0.126891	155	0.127926	160	1.008149	20	7.88075	969	7.81705	976	0.991917	20	90						
11	7047	156	8085	159	8170	21	7108	967	7.80730	975	1897	20	89						
12	7203	156	8245	160	8190	20	6144	964	7.79758	972	1877	20	88						
13	7359	156	8405	160	8210	20	5183	961	8789	969	1857	20	87						
14	7515	156	8564	159	8231	21	4223	960	7821	968	1837	20	86						
15	7670	155	8724	160	8251	20	3266	957	6857	964	1817	20	85						
16	7826	156	8884	160	8271	20	2312	954	5894	963	1797	20	84						
17	7982	156	9043	159	8292	21	1359	953	4934	960	1776	21	83						
18	8138	156	9203	160	8312	20	7.80409	950	3976	958	1756	20	82						
19	8294	156	9363	160	8333	21	7.79462	947	3021	955	1736	20	81						
20	0.128449	155	0.129522	159	1.008353	21	7.78516	946	7.72067	954	0.991716	20	80						
21	8605	156	9682	160	8374	20	7573	943	1116	951	1696	20	79						
22	8761	156	0.129842	160	8394	20	6633	940	7.70168	948	1676	20	78						
23	8917	156	0.130002	160	8415	21	5694	939	7.69222	946	1655	21	77						
24	9073	156	0161	159	8435	20	4758	936	8278	944	1635	20	76						
25	9228	155	0321	160	8456	21	3824	934	7336	942	1615	20	75						
26	9384	156	0481	160	8477	21	2893	931	6396	940	1595	20	74						
27	9540	156	0641	160	8497	20	1964	929	5459	937	1574	21	73						
28	9696	156	0800	159	8518	21	1036	928	4524	935	1554	20	72						
29	0.129851	155	0960	160	8539	21	7.70112	924	3591	933	1533	21	71						
30	0.130007	156	0.131120	160	1.008560	21	7.69189	923	7.62661	930	0.991513	20	70						
31	0163	156	1280	160	8580	20	8269	920	1733	928	1493	20	69						
32	0319	156	1439	159	8601	21	7351	918	7.60807	926	1472	21	68						
33	0474	155	1599	160	8622	21	6435	916	7.59883	924	1452	20	67						
34	0630	156	1759	160	8643	21	5521	914	8961	922	1431	21	66						
35	0786	156	1919	160	8664	21	4609	912	8042	919	1411	20	65						
36	0941	155	2079	160	8685	21	3700	909	7125	917	1390	21	64						
37	1097	156	2238	159	8706	21	2793	907	6210	915	1370	20	63						
38	1253	156	2398	160	8727	21	1888	905	5297	913	1349	21	62						
39	1409	156	2558	160	8748	21	0985	903	4386	911	1328	21	61						
40	0.131564	155	0.132718	160	1.008769	21	7.60084	901	7.53477	909	0.991308	20	60						
41	1720	156	2878	160	8790	21	7.59186	898	2571	906	1287	21	59						
42	1876	156	3038	160	8811	21	8289	897	1667	904	1266	21	58						
43	2031	155	3198	160	8832	21	7395	894	7.50764	903	1246	20	57						
44	2187	156	3357	159	8853	21	6503	892	7.49864	900	1225	21	56						
45	2343	156	3517	160	8874	21	5613	890	8967	897	1204	21	55						
46	2499	156	3677	160	8895	21	4725	888	8071	896	1183	21	54						
47	2654	155	3837	160	8916	21	3839	886	7177	894	1162	21	53						
48	2810	156	3997	160	8938	22	2956	883	6285	892	1142	20	52						
49	2966	156	4157	160	8959	21	2074	882	5396	889	1121	21	51						
50	0.133121	155	0.134317	160	1.008980	21	7.51194	880	7.44509	887	0.991100	21	50						
cos		cotg		cosec		sec		tang		sin		c							
	19	20	21	22	23	155	156	159	160	161	784	787	790	795	800	810	820	830	
1	1.9	2.0	2.1	2.2	2.3	15.5	15.6	15.9	16.0	16.1	78.4	78.7	79.0	79.5	80.0	81.0	82.0	83.0	1
2	3.8	4.0	4.2	4.4	4.6	31.0	31.2	31.8	32.0	32.2	156.8	157.4	158.0	159.0	160.0	162.0	164.0	166.0	2
3	5.7	6.0	6.3	6.6	6.9	46.5	46.8	47.7	48.0	48.3	235.2	236.1	237.0	238.5	240.0	243.0	246.0	249.0	3
4	7.6	8.0	8.4	8.8	9.2	62.0	62.4	63.6	64.0	64.4	313.6	314.8	316.0	318.0	320.0	324.0	328.0	332.0	4
5	9.5	10.0	10.5	11.0	11.5	77.5	78.0	79.5	80.0	80.5	392.0	393.5	395.0	397.5	400.0	405.0	410.0	415.0	5
6	11.4	12.0	12.6	13.2	13.8	93.0	93.6	95.4	96.0	96.6	470.4	472.2	474.0	477.0	480.0	486.0	492.0	498.0	6
7	13.3	14.0	14.7	15.4	16.1	108.5	109.2	111.3	112.0	112.7	548.8	550.9	553.0	556.5	560.0	567.0	574.0	581.0	7
8	15.2	16.0	16.8	17.6	18.4	124.0	124.8	127.2	128.0	128.8	627.2	629.6	632.0	636.0	640.0	648.0	656.0	664.0	8
9	17.1	18.0	18.9	19.8	20.7	139.5	140.4	143.1	144.0	144.9	705.6	708.3	711.0	715.5	720.0	729.0	738.0	747.0	9

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c	sin		tang		sec		cosec		cotg		cos								
50	0.133121	156	0.134317	160	1.008980	21	7.51194	877	7.44509	886	0.991100	21	50						
51	3277	156	4477	160	9001	22	7.50317	875	3623	883	1079	21	49						
52	3433	155	4637	160	9023	21	7.49442	874	2740	881	1058	21	48						
53	3588	156	4797	160	9044	22	8568	871	1859	879	1037	21	47						
54	3744	156	4957	159	9066	21	7697	869	0980	878	1016	21	46						
55	3900	155	5116	160	9087	21	6828	868	7.40102	875	0995	21	45						
56	4055	156	5276	160	9108	22	5960	865	7.39227	873	0974	21	44						
57	4211	156	5436	160	9130	22	5095	863	8354	871	0953	21	43						
58	4367	155	5596	160	9151	21	4232	861	7483	869	0932	21	42						
59	4522	156	5756	160	9173	21	3371	859	6614	867	0911	22	41						
60	0.134678	156	0.135916	160	1.009194	22	7.42512	857	7.35747	865	0.990889	21	40						
61	4834	155	6076	160	9216	21	1655	855	4882	863	0868	21	39						
62	4989	156	6236	160	9237	22	7.40800	854	4019	861	0847	21	38						
63	5145	156	6396	160	9259	22	7.39946	851	3158	859	0826	21	37						
64	5301	155	6556	160	9281	21	9095	849	2299	857	0805	22	36						
65	5456	156	6716	160	9302	22	8246	847	1442	855	0783	21	35						
66	5612	155	6876	160	9324	22	7399	845	7.30587	853	0762	21	34						
67	5767	156	7036	160	9346	22	6554	844	7.29734	852	0741	22	33						
68	5923	156	7196	160	9368	22	5710	841	8882	849	0719	22	32						
69	6079	155	7356	160	9389	21	4869	840	8033	847	0698	21	31						
70	0.136234	156	0.137516	160	1.009411	22	7.34029	837	7.27186	846	0.990677	22	30						
71	6390	156	7676	161	9433	22	3192	836	6340	843	0655	21	29						
72	6546	155	7837	160	9455	22	2356	833	5497	841	0634	22	28						
73	6701	156	7997	160	9477	22	1523	832	4656	840	0612	21	27						
74	6857	155	8157	160	9499	21	7.30691	830	3816	838	0591	22	26						
75	7012	156	8317	160	9520	22	7.29861	828	2978	836	0569	21	25						
76	7168	156	8477	160	9542	22	9033	826	2142	834	0548	22	24						
77	7324	155	8637	160	9564	22	8207	824	1308	832	0526	21	23						
78	7479	156	8797	160	9586	22	7383	822	7.20476	830	0505	22	22						
79	7635	155	8957	160	9608	22	6561	820	7.19646	828	0483	22	21						
80	0.137790	156	0.139117	160	1.009630	23	7.25741	819	7.18818	826	0.990461	21	20						
81	7946	155	9277	161	9653	22	4922	817	7992	825	0440	22	19						
82	8101	156	9438	160	9675	22	4105	814	7167	823	0418	22	18						
83	8257	156	9598	160	9697	22	3291	813	6344	820	0396	21	17						
84	8413	155	9758	160	9719	22	2478	811	5524	819	0375	22	16						
85	8568	156	0.139918	160	9741	22	1667	810	4705	818	0353	22	15						
86	8724	155	0.140078	160	9763	23	0857	807	3887	815	0331	22	14						
87	8879	156	0238	160	9786	22	7.20050	806	3072	813	0309	22	13						
88	9035	155	0398	161	9808	22	7.19244	804	2259	812	0287	21	12						
89	9190	156	0559	160	9830	22	8440	802	1447	810	0266	22	11						
90	0.139346	155	0.140719	160	1.009852	23	7.17638	800	7.10637	808	0.990244	22	10						
91	9501	156	0879	160	9875	22	6838	798	7.09829	806	0222	22	09						
92	9657	156	1039	160	9897	22	6040	797	9023	805	0200	22	08						
93	9813	155	1199	161	9919	23	5243	794	8218	802	0178	22	07						
94	0.139968	156	1360	160	9942	22	4449	793	7416	801	0156	22	06						
95	0.140124	155	1520	160	9964	23	3656	792	6615	800	0134	22	05						
96	0279	156	1680	160	1.009987	22	2864	789	5815	797	0112	22	04						
97	0435	155	1840	161	1.010009	23	2075	788	5018	795	0090	22	03						
98	0590	156	2001	160	0032	22	1287	786	4223	794	0068	22	02						
99	0746	155	2161	160	0054	23	7.10501	784	3429	792	0046	22	01						
100	0.140901	155	0.142321	160	1.010077	23	7.09717		7.02637		0.990024	22	00						
cos		cotg		cosec		sec		tang		sin		c							
	840	850	860	870	880	890	900	910	920	930	940	950	960	970	980	990	995	999	
1	84.0	85.0	86.0	87.0	88.0	89.0	90.0	91.0	92.0	93.0	94.0	95.0	96.0	97.0	98.0	99.0	99.5	99.9	1
2	168.0	170.0	172.0	174.0	176.0	178.0	180.0	182.0	184.0	186.0	188.0	190.0	192.0	194.0	196.0	198.0	199.0	199.8	2
3	252.0	255.0	258.0	261.0	264.0	267.0	270.0	273.0	276.0	279.0	282.0	285.0	288.0	291.0	294.0	297.0	298.5	299.7	3
4	336.0	340.0	344.0	348.0	352.0	356.0	360.0	364.0	368.0	372.0	376.0	380.0	384.0	388.0	392.0	396.0	398.0	399.6	4
5	420.0	425.0	430.0	435.0	440.0	445.0	450.0	455.0	460.0	465.0	470.0	475.0	480.0	485.0	490.0	495.0	497.5	499.5	5
6	504.0	510.0	516.0	522.0	528.0	534.0	540.0	546.0	552.0	558.0	564.0	570.0	576.0	582.0	588.0	594.0	597.0	599.4	6
7	588.0	595.0	602.0	609.0	616.0	623.0	630.0	637.0	644.0	651.0	658.0	665.0	672.0	679.0	686.0	693.0	696.5	699.3	7
8	672.0	680.0	688.0	696.0	704.0	712.0	720.0	728.0	736.0	744.0	752.0	760.0	768.0	776.0	784.0	792.0	796.0	799.2	8
9	756.0	765.0	774.0	783.0	792.0	801.0	810.0	819.0	828.0	837.0	846.0	855.0	864.0	873.0	882.0	891.0	895.5	899.1	9

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c	sin			tang			sec			cosec			cotg			cos			
00	0.140901	156		0.142321	160		1.010077	22	7.09717	782	7.02637	791	0.990024	22		100			
01	1057			2481	161		0099	23	8935	781	1846	788	0.990002	23		99			
02	1212	155		2642	161		0122	23	8154	781	1058	788	0.989979	23		98			
03	1368	156		2802	160		0145	23	7375	779	7.00271	787	9957	22		97			
04	1523	155		2962	160		0167	22	6598	777	6.99486	785	9935	22		96			
05	1679	156		3122	160		0190	23	5822	776	8702	784	9913	22		95			
06	1834	155		3283	161		0213	23	5048	774	7921	781	9890	23		94			
07	1990	156		3443	160		0236	23	4276	772	7141	780	9868	22		93			
08	2145	155		3603	160		0258	22	3506	770	6362	779	9846	22		92			
09	2301	156		3764	161		0281	23	2737	769	5586	776	9823	23		91			
10	0.142456	155		0.143924	160		1.010304	23	7.01970	767	6.94811	775	0.989801	22		90			
11	2612			4084	161		0327	23	1205	764	4038	772	9779	23		89			
12	2767	155		4245	160		0350	23	7.00441	762	3266	770	9756	22		88			
13	2923	156		4405	160		0373	23	6.99679	762	2496	770	9734	22		87			
14	3078	155		4565	160		0396	23	8919	760	1728	768	9711	23		86			
15	3234	156		4726	161		0419	23	8161	758	0962	766	9689	22		85			
16	3389	155		4886	160		0441	22	7404	757	6.90197	765	9666	23		84			
17	3544	155		5047	161		0464	23	6648	756	6.89434	763	9644	22		83			
18	3700	156		5207	160		0488	24	5895	753	8672	762	9621	23		82			
19	3855	155		5367	160		0511	23	5143	752	7912	760	9599	22		81			
20	0.144011	156		0.145528	161		1.010534	23	6.94392	751	6.87154	758	0.989576	23		80			
21	4166			5688	160		0557	23	3644	748	6398	756	9553	23		79			
22	4322	156		5849	161		0580	23	2897	747	5643	755	9531	22		78			
23	4477	155		6009	160		0603	23	2151	746	4889	754	9508	23		77			
24	4633	156		6169	160		0626	23	1407	744	4138	751	9485	23		76			
25	4788	155		6330	161		0650	24	6.90665	742	3387	751	9463	22		75			
26	4943	155		6490	160		0673	23	6.89925	740	2639	748	9440	23		74			
27	5099	156		6651	161		0696	23	9186	739	1892	747	9417	23		73			
28	5254	155		6811	160		0719	23	8448	738	1147	745	9394	23		72			
29	5410	156		6972	161		0743	24	7712	736	6.80403	744	9372	22		71			
30	0.145565	155		0.147132	160		1.010766	23	6.86978	734	6.79661	742	0.989349	23		70			
31	5720			7293	161		0789	23	6246	732	8920	741	9326	23		69			
32	5876	156		7453	160		0813	24	5515	731	8181	739	9303	23		68			
33	6031	155		7614	161		0836	23	4785	730	7444	737	9280	23		67			
34	6187	156		7774	160		0860	24	4057	728	7444	736	9280	23		66			
35	6342	155		7935	161		0883	23	4057	726	6708	734	9257	23		65			
36	6497	155		8095	160		0907	24	3331	725	5974	733	9234	23		64			
37	6653	156		8256	161		0930	23	2606	723	5241	731	9211	23		63			
38	6808	155		8416	160		0954	24	1883	722	4510	731	9188	23		62			
39	6964	156		8577	161		0977	23	1161	720	3781	729	9165	23		61			
40	0.147119	155		0.148737	160		1.011001	24	6.80441	720	3053	728	9142	23		60			
41	7274			8898	161		1025	24	6.79722	719	6.72326	727	0.989119	23		59			
42	7430	156		9058	160		1048	23	9005	717	1601	725	9096	23		58			
43	7585	155		9219	161		1072	24	8290	715	0878	723	9073	23		57			
44	7740	155		9380	161		1096	24	7576	714	6.70156	722	9049	24		56			
45	7896	156		9540	160		1119	23	6863	713	6.69435	721	9026	23		55			
46	8051	155		9701	161		1143	24	6152	711	8716	719	9003	23		54			
47	8206	155		0.149861	160		1167	24	5443	708	7999	716	8980	24		53			
48	8362	156		0.150022	161		1191	24	4735	707	7283	714	8956	23		52			
49	8517	155		0183	161		1215	24	4028	705	6569	713	8933	23		51			
50	0.148672	155		0.150343	160		1.011238	23	3323	703	5856	712	8910	24		50			
cos		cotg			cosec			sec			tang			sin			c		
	22	23	24	25	26	155	156	160	161	635	640	645	650	655	660	665	670	675	
1	2.2	2.3	2.4	2.5	2.6	15.5	15.6	16.0	16.1	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	1
2	4.4	4.6	4.8	5.0	5.2	31.0	31.2	32.0	32.2	127.0	128.0	129.0	130.0	131.0	132.0	133.0	134.0	135.0	2
3	6.6	6.9	7.2	7.5	7.8	46.5	46.8	48.0	48.3	190.5	192.0	193.5	195.0	196.5	198.0	199.5	201.0	202.5	3
4	8.8	9.2	9.6	10.0	10.4	62.0	62.4	64.0	64.4	254.0	256.0	258.0	260.0	262.0	264.0	266.0	268.0	270.0	4
5	11.0	11.5	12.0	12.5	13.0	77.5	78.0	80.0	80.5	317.5	320.0	322.5	325.0	327.5	330.0	332.5	335.0	337.5	5
6	13.2	13.8	14.4	15.0	15.6	93.0	93.6	96.0	96.6	381.0	384.0	387.0	390.0	393.0	396.0	399.0	402.0	405.0	6
7	15.4	16.1	16.8	17.5	18.2	108.5	109.2	112.0	112.7	444.5	448.0	451.5	455.0	458.5	462.0	465.5	469.0	472.5	7
8	17.6	18.4	19.2	20.0	20.8	124.0	124.8	128.0	128.8	508.0	512.0	516.0	520.0	524.0	528.0	532.0	536.0	540.0	8
9	19.8	20.7	21.6	22.5	23.4	139.5	140.4	144.0	144.9	571.5	576.0	580.5	585.0	589.5	594.0	598.5	603.0	607.5	9

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c	sin			tang			sec			cosec			cotg			cos			
50	0.148672	156	0.150343	161	1.011238	24	6.72620	702	6.65144	709	0.988886	23	50						
51	8828	155	0504	161	1262	24	1918	701	4435	709	8863	23	49						
52	8983	155	0665	161	1286	24	1217	699	3726	707	8840	24	48						
53	9138	155	0825	160	1310	24	6.70518	699	3019	707	8816	24	47						
54	9294	156	0986	161	1334	24	6.69820	698	2314	705	8793	23	46						
55	9449	155	1147	161	1358	24	9124	696	1610	704	8769	24	45						
56	9604	155	1307	160	1382	24	8430	694	0907	703	8746	23	44						
57	9760	156	1468	161	1406	24	7736	694	6.60206	701	8722	24	43						
58	0.149915	155	1629	161	1430	24	7045	691	6.59506	700	8699	23	42						
59	0.150070	155	1789	160	1454	24	6354	691	8808	698	8675	24	41						
60	0.150226	156		161		25		688		697		23							
61	0381	155	0.151950	161	1.011479	24	6.65666	688	6.58111	695	0.988652	24	40						
62	0536	155	2111	160	1503	24	4978	686	7416	694	8628	23	39						
63	0691	155	2271	161	1527	24	4292	686	6722	694	8605	23	38						
		156	2432	161	1551	24	3608	684	6030	692	8581	24	37						
64	0847	156	2593	161	1575	24	2924	684	5339	691	8557	24	36						
65	1002	155	2754	161	1600	25	2243	681	4649	690	8533	24	35						
66	1157	155	2914	160	1624	24	1562	681	3961	688	8510	23	34						
67	1313	156	3075	161	1648	24	0884	678	3274	687	8486	24	33						
68	1468	155	3236	161	1672	24	6.60206	678	2589	685	8462	24	32						
69	1623	155	3397	161	1697	25	6.59530	676	1905	684	8438	24	31						
70	0.151778	155	0.153557	160	1.011721	24	6.58855	675	6.51222	683	8438	23							
71	1934	156		161		25		673		681	0.988415	24	30						
72	2089	155	3718	161	1746	24	8182	672	6.50541	680	8391	24	29						
73	2244	155	3879	161	1770	25	7510	670	6.49861	678	8367	24	28						
		155	4040	161	1795	24	6840	669	9183	677	8343	24	27						
74	2399	156	4201	161	1819	24	6171	669	8506	677	8319	24	26						
75	2555	156	4361	160	1844	25	5503	668	7830	676	8295	24	25						
76	2710	155	4522	161	1868	24	4837	666	7156	674	8271	24	24						
		155	4683	161	1893	25		665		673		24							
77	2865	155	4683	161	1893	25	4172	665	6483	673	8247	24	23						
78	3020	155	4844	161	1917	24	3508	664	5812	671	8223	24	22						
79	3176	156	5005	161	1942	25	2846	662	5141	671	8199	24	21						
80	0.153331	155	0.155166	161	1.011967	25	6.52185	661	6.44473	668	8199	24							
81	3486	155		160		24		660		668	0.988175	24	20						
82	3641	155	5326	161	1991	24	1525	660	3805	668	8151	24	19						
83	3796	155	5487	161	2016	25	0867	658	3139	666	8127	24	18						
		156	5648	161	2041	25	6.50210	657	2474	665	8103	24	17						
84	3952	156	5809	161	2065	24	6.49555	655	1811	663	8078	25	16						
85	4107	155	5970	161	2090	25	8900	655	1149	662	8054	24	15						
86	4262	155	6131	161	2115	25	8248	652	6.40488	661	8030	24	14						
		155	6292	161	2140	25		652		659		24							
87	4417	155	6292	161	2140	25	7596	650	6.39829	659	8006	24	13						
88	4572	155	6453	161	2165	25	6946	650	9171	658	7981	25	12						
89	4728	156	6614	161	2190	25	6297	649	8514	657	7957	24	11						
90	0.154883	155	0.156775	161	1.012215	25	6.45649	648	6.37858	656	7957	24							
91	5038	155		161		24		646		654	0.987933	24	10						
92	5193	155	6936	161	2239	25	5003	646	7204	656	7909	24	09						
93	5348	155	7097	160	2264	25	4358	645	6551	653	7884	25	08						
		156	7257	161	2289	25	3715	643	5900	651	7860	24	07						
94	5504	156	7418	161	2314	25		643		651		25							
95	5659	155	7418	161	2314	26	3072	643	5249	648	7835	24	06						
96	5814	155	7579	161	2340	26	2431	641	4601	648	7811	24	05						
		155	7740	161	2365	25	1791	640	3953	648	7786	25	04						
97	5969	155		161		25		638		646		24							
98	6124	155	7901	161	2390	25	1153	637	3307	646	7762	25	03						
99	6279	155	8062	161	2415	25	6.40516	636	2661	646	7737	25	02						
		155	8223	161	2440	25	6.39880	636	2018	643	7713	24	01						
100	0.156434	155	0.158384	161	1.012465	25	6.39245	635	6.31375	643	7713	25							
	cos			cotg			cosec			sec			tang			sin			c
	680	685	690	695	700	705	710	715	720	730	740	750	760	770	780	785	788	791	
1	68.0	68.5	69.0	69.5	70.0	70.5	71.0	71.5	72.0	73.0	74.0	75.0	76.0	77.0	78.0	78.5	78.8	79.1	1
2	136.0	137.0	138.0	139.0	140.0	141.0	142.0	143.0	144.0	146.0	148.0	150.0	152.0	154.0	156.0	157.0	157.6	158.2	2
3	204.0	205.5	207.0	208.5	210.0	211.5	213.0	214.5	216.0	219.0	222.0	225.0	228.0	231.0	234.0	235.5	236.4	237.3	3
4	272.0	274.0	276.0	278.0	280.0	282.0	284.0	286.0	288.0	292.0	296.0	300.0	304.0	308.0	312.0	314.0	315.2	316.4	4
5	340.0	342.5	345.0	347.5	350.0	352.5	355.0	357.5	360.0	365.0	370.0	375.0	380.0	385.0	390.0	392.5	394.0	395.5	5
6	408.0	411.0	414.0	417.0	420.0	423.0	426.0	429.0	432.0	438.0	444.0	450.0	456.0	462.0	468.0	471.0	472.8	474.6	6
7	476.0	479.5	483.0	486.5	490.0	493.5	497.0	500.5	504.0	511.0	518.0	525.0	532.0	539.0	546.0	549.5	551.6	553.7	7
8	544.0	548.0	552.0	556.0	560.0	564.0	568.0	572.0	576.0	584.0	592.0	600.0	608.0	616.0	624.0	628.0	630.4	632.8	8
9	612.0	616.5	621.0	625.5	630.0	634.5	639.0	643.5	648.0	657.0	666.0	675.0	684.0	693.0	702.0	706.5	709.2	711.9	9

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c	sin		tang		sec		cosec		cotg		cos								
00	0.156434	156	0.158384	161	1.012465	25	6.39245	633	6.31375	641	0.987688	24	100						
01	6590	155	8545	161	2490	26	8612	632	0734	640	7664	25	99						
02	6745	155	8706	161	2516	26	7980	632	6.30094	640	7639	25	98						
03	6900	155	8868	162	2541	25	7349	631	6.29455	639	7615	24	97						
04	7055	155	9029	161	2566	25	6720	629	8818	637	7590	25	96						
05	7210	155	9190	161	2591	25	6091	629	8182	636	7565	25	95						
06	7365	155	9351	161	2617	26	5464	627	7547	635	7540	25	94						
07	7520	155	9512	161	2642	25	4838	626	6913	634	7516	24	93						
08	7676	156	9673	161	2667	25	4214	624	6281	632	7491	25	92						
09	7831	155	9834	161	2693	26	3591	623	5649	632	7466	25	91						
10	0.157986	155	0.159995	161	1.012718	25	6.32969	622	6.25019	630	0.987441	25	90						
11	8141	155	0.160156	161	2744	26	2348	621	4391	628	7417	24	89						
12	8296	155	0317	161	2769	25	1728	620	3763	628	7392	25	88						
13	8451	155	0478	161	2795	26	1110	618	3137	626	7367	25	87						
14	8606	155	0640	162	2820	25	6.30493	617	2512	625	7342	25	86						
15	8761	155	0801	161	2846	26	6.29877	616	1888	624	7317	25	85						
16	8916	155	0962	161	2872	26	9262	615	1265	623	7292	25	84						
17	9071	155	1123	161	2897	25	8649	613	0644	621	7267	25	83						
18	9226	155	1284	161	2923	26	8036	613	6.20024	620	7242	25	82						
19	9382	156	1445	161	2948	25	7425	611	6.19405	619	7217	25	81						
20	0.159537	155	0.161606	161	1.012974	26	6.26815	610	6.18787	618	0.987192	25	80						
21	9692	155	1768	162	3000	26	6207	608	8171	616	7167	25	79						
22	0.159847	155	1929	161	3026	26	5599	608	7555	616	7142	25	78						
23	0.160002	155	2090	161	3051	25	4993	606	6941	614	7117	25	77						
24	0157	155	2251	161	3077	26	4388	605	6328	613	7092	25	76						
25	0312	155	2412	161	3103	26	3784	604	5716	612	7066	26	75						
26	0467	155	2574	162	3129	26	3181	603	5106	610	7041	25	74						
27	0622	155	2735	161	3155	26	2580	601	4496	610	7016	25	73						
28	0777	155	2896	161	3181	26	1979	601	3888	608	6991	25	72						
29	0932	155	3057	162	3207	26	1380	599	3281	607	6965	26	71						
30	0.161087	155	0.163219	161	1.013233	26	6.20782	598	6.12675	606	0.986940	25	70						
31	1242	155	3380	161	3259	26	6.20185	597	2070	605	6915	25	69						
32	1397	155	3541	162	3285	26	6.19590	595	1467	603	6890	25	68						
33	1552	155	3703	161	3311	26	8995	595	0864	603	6864	26	67						
34	1707	155	3864	161	3337	26	8402	593	6.10263	601	6839	25	66						
35	1862	155	4025	161	3363	26	7810	592	6.09663	600	6813	26	65						
36	2017	155	4186	161	3389	26	7218	592	9064	599	6788	25	64						
37	2172	155	4348	162	3415	26	6629	589	8466	598	6762	26	63						
38	2327	155	4509	161	3441	26	6040	589	7869	597	6737	25	62						
39	2482	155	4670	161	3467	26	5452	588	7274	595	6711	26	61						
40	0.162637	155	0.164832	162	1.013494	27	6.14866	586	6.06679	595	0.986686	25	60						
41	2792	155	4993	161	3520	26	4280	586	6086	593	6660	26	59						
42	2947	155	5154	161	3546	26	3696	584	5494	592	6635	25	58						
43	3102	155	5316	162	3573	27	3113	583	4903	591	6609	26	57						
44	3257	155	5477	161	3599	26	2531	582	4313	590	6584	25	56						
45	3412	155	5639	162	3625	26	1950	581	3724	589	6558	26	55						
46	3567	155	5800	161	3652	27	1370	580	3136	588	6532	26	54						
47	3722	155	5961	161	3678	26	0792	578	2550	586	6507	25	53						
48	3877	155	6123	162	3704	26	6.10214	578	1964	586	6481	26	52						
49	4032	155	6284	161	3731	27	6.09638	576	1380	584	6455	26	51						
50	0.164187	155	0.166446	162	1.013757	26	6.09062	576	6.00797	583	0.986429	26	50						
cos		cotg		cosec		sec		tang		sin		c							
	24	25	26	27	28	154	155	156	161	162	524	527	530	535	540	545	550	555	
1	2.4	2.5	2.6	2.7	2.8	15.4	15.5	15.6	16.1	16.2	52.4	52.7	53.0	53.5	54.0	54.5	55.0	55.5	1
2	4.8	5.0	5.2	5.4	5.6	30.8	31.0	31.2	32.2	32.4	104.8	105.4	106.0	107.0	108.0	109.0	110.0	111.0	2
3	7.2	7.5	7.8	8.1	8.4	46.2	46.5	46.8	48.3	48.6	157.2	158.1	159.0	160.5	162.0	163.5	165.0	166.5	3
4	9.6	10.0	10.4	10.8	11.2	61.6	62.0	62.4	64.4	64.8	209.6	210.8	212.0	214.0	216.0	218.0	220.0	222.0	4
5	12.0	12.5	13.0	13.5	14.0	77.0	77.5	78.0	80.5	81.0	262.0	263.5	265.0	267.5	270.0	272.5	275.0	277.5	5
6	14.4	15.0	15.6	16.2	16.8	92.4	93.0	93.6	96.6	97.2	314.4	316.2	318.0	321.0	324.0	327.0	330.0	333.0	6
7	16.8	17.5	18.2	18.9	19.6	107.8	108.5	109.2	112.7	113.4	366.8	368.9	371.0	374.5	378.0	381.5	385.0	388.5	7
8	19.2	20.0	20.8	21.6	22.4	123.2	124.0	124.8	128.8	129.6	419.2	421.6	424.0	428.0	432.0	436.0	440.0	444.0	8
9	21.6	22.5	23.4	24.3	25.2	138.6	139.5	140.4	144.9	145.8	471.6	474.3	477.0	481.5	486.0	490.5	495.0	499.5	9

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c	sin		tang		sec		cosec		cotg		cos								
50	0.164187	155	0.166446	161	1.013757	27	6.09062	574	6.00797	582	0.986429	26	50						
51	4342	155	6607	162	3784	27	8488	573	6.00215	581	6403	25	49						
52	4497	155	6769	162	3811	27	7915	573	5.99634	581	6378	25	48						
53	4652	155	6930	161	3837	26	7343	572	9054	580	6352	26	47						
54	4807	155	7091	161	3864	27	6772	571	8475	579	6326	26	46						
55	4962	155	7253	162	3890	26	6202	570	7897	578	6300	26	45						
56	5116	154	7414	161	3917	27	5633	569	7320	577	6274	26	44						
57	5271	155	7576	162	3944	27	5065	568	6745	575	6248	26	43						
58	5426	155	7737	161	3970	26	4499	566	6170	575	6222	26	42						
59	5581	155	7899	162	3997	27	3933	566	5597	573	6196	26	41						
60	0.165736	155	0.168060	161	1.014024	27	6.03369	564	5.95024	573	0.986170	26	40						
61	5891	155	8222	162	4051	27	2805	564	4453	571	6144	26	39						
62	6046	155	8383	161	4077	26	2243	562	3883	570	6118	26	38						
63	6201	155	8545	162	4104	27	1682	561	3313	570	6092	26	37						
64	6356	155	8707	162	4131	27	1122	560	2745	568	6066	26	36						
65	6511	155	8868	161	4158	27	0562	560	2178	567	6040	26	35						
66	6665	154	9030	162	4185	27	6.00004	558	1612	566	6013	27	34						
67	6820	155	9191	161	4212	27	5.99447	557	1047	565	5987	26	33						
68	6975	155	9353	162	4239	27	8891	556	5.90483	564	5961	26	32						
69	7130	155	9514	161	4266	27	8336	555	5.89920	563	5935	26	31						
70	0.167285	155	0.169676	162	1.014293	27	5.97782	554	5.89359	561	0.985909	26	30						
71	7440	155	9838	162	4320	27	7229	553	8798	561	5882	27	29						
72	7595	155	0.169999	161	4347	27	6678	551	8238	560	5856	26	28						
73	7750	155	0.170161	162	4374	27	6127	551	7679	559	5830	26	27						
74	7904	154	0322	161	4401	27	5577	550	7122	557	5803	27	26						
75	8059	155	0484	162	4428	27	5028	549	6565	557	5777	26	25						
76	8214	155	0646	162	4456	28	4480	548	6009	556	5750	27	24						
77	8369	155	0807	161	4483	27	3934	546	5455	554	5724	26	23						
78	8524	155	0969	162	4510	27	3388	546	4901	554	5698	26	22						
79	8679	155	1131	162	4537	27	2843	545	4349	552	5671	27	21						
80	0.168833	154	0.171292	161	4564	27	5.92300	543	5.83797	552	0.985645	26	20						
81	8988	155	1454	162	4592	28	1757	543	3246	551	5618	27	19						
82	9143	155	1616	162	4619	27	1215	542	2697	549	5592	26	18						
83	9298	155	1778	162	4646	27	0675	540	2148	549	5565	27	17						
84	9453	155	1939	161	4674	28	5.90135	540	1601	547	5538	27	16						
85	9608	155	2101	162	4701	27	5.89597	538	1054	547	5512	26	15						
86	9762	154	2263	162	4729	28	9059	538	5.80509	545	5485	27	14						
87	0.169917	155	2424	161	4756	27	8522	537	5.79964	545	5458	27	13						
88	0.170072	155	2586	162	4784	28	7987	535	9421	543	5432	26	12						
89	0227	155	2748	162	4811	27	7452	535	8878	543	5405	27	11						
90	0.170381	154	0.172910	162	4839	28	5.86918	534	5.78336	542	0.985378	27	10						
91	0536	155	3072	162	4866	27	6386	532	7796	540	5351	27	09						
92	0691	155	3233	161	4894	28	5854	532	7256	540	5325	26	08						
93	0846	155	3395	162	4922	28	5323	531	6718	538	5298	27	07						
94	1001	155	3557	162	4949	27	4793	530	6180	538	5271	27	06						
95	1155	154	3719	162	4977	28	4265	528	5643	537	5244	27	05						
96	1310	155	3881	162	5005	28	3737	528	5107	536	5217	27	04						
97	1465	155	4042	161	5032	27	3210	527	4573	534	5190	27	03						
98	1620	155	4204	162	5060	28	2684	526	4039	534	5163	27	02						
99	1774	154	4366	162	5088	28	2159	525	3506	533	5136	27	01						
100	0.171929	155	0.174528	162	5116	28	5.81635	524	5.72974	532	0.985109	27	00						
cos		cotg		cosec		sec		tang		sin		c							
	560	565	570	575	580	585	590	595	600	605	610	615	620	625	630	635	638	641	
1	56.0	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5	63.0	63.5	63.8	64.1	1
2	112.0	113.0	114.0	115.0	116.0	117.0	118.0	119.0	120.0	121.0	122.0	123.0	124.0	125.0	126.0	127.0	127.6	128.2	2
3	168.0	169.5	171.0	172.5	174.0	175.5	177.0	178.5	180.0	181.5	183.0	184.5	186.0	187.5	189.0	190.5	191.4	192.3	3
4	224.0	226.0	228.0	230.0	232.0	234.0	236.0	238.0	240.0	242.0	244.0	246.0	248.0	250.0	252.0	254.0	255.2	256.4	4
5	280.0	282.5	285.0	287.5	290.0	292.5	295.0	297.5	300.0	302.5	305.0	307.5	310.0	312.5	315.0	317.5	319.0	320.5	5
6	336.0	339.0	342.0	345.0	348.0	351.0	354.0	357.0	360.0	363.0	366.0	369.0	372.0	375.0	378.0	381.0	382.8	384.6	6
7	392.0	395.5	399.0	402.5	406.0	409.5	413.0	416.5	420.0	423.5	427.0	430.5	434.0	437.5	441.0	444.5	446.6	448.7	7
8	448.0	452.0	456.0	460.0	464.0	468.0	472.0	476.0	480.0	484.0	488.0	492.0	496.0	500.0	504.0	508.0	510.4	512.8	8
9	504.0	508.5	513.0	517.5	522.0	526.5	531.0	535.5	540.0	544.5	549.0	553.5	558.0	562.5	567.0	571.5	574.2	576.9	9

c	sin		tang		sec		cosec		cotg		cos								
00	0.171929	155	0.174528	162	1.015116	28	5.81635	523	5.72974	531	0.985109	27	100						
01	2084	155	4690	162	5144	27	1112	522	2443	530	5082	27	99						
02	2239	154	4852	162	5171	28	0590	521	1913	529	5055	27	98						
03	2393	155	5014	161	5199	28	5.80069	520	1384	528	5028	27	97						
04	2548	155	5175	162	5227	28	5.79549	519	0856	527	5001	27	96						
05	2703	154	5337	162	5255	28	9030	519	5.70329	526	4974	27	95						
06	2857	155	5499	162	5283	28	8511	519	5.69803	525	4947	27	94						
07	3012	155	5661	162	5311	28	7994	517	9278	525	4920	27	93						
08	3167	155	5823	162	5339	28	7478	516	8753	525	4892	28	92						
09	3322	155	5985	162	5367	28	6962	516	8230	523	4865	27	91						
10	0.173476	154	0.176147	162	1.015395	28	5.76448	514	5.67708	522	0.984838	27	90						
11	3631	155	6309	162	5423	29	5934	513	7186	521	4811	28	89						
12	3786	154	6471	162	5452	28	5421	511	6665	519	4783	27	88						
13	3940	155	6633	162	5480	28	4910	511	6146	519	4756	27	87						
14	4095	155	6795	162	5508	28	4399	510	5627	518	4729	28	86						
15	4250	154	6957	162	5536	28	3889	509	5109	517	4701	27	85						
16	4404	155	7119	162	5564	28	3380	509	4592	517	4674	27	84						
17	4559	155	7281	162	5593	29	2872	508	4076	516	4647	27	83						
18	4714	155	7443	162	5621	28	2365	507	3561	515	4619	28	82						
19	4868	154	7605	162	5649	28	1859	506	3047	514	4592	27	81						
20	0.175023	155	0.177767	162	1.015678	29	5.71353	506	5.62534	513	0.984564	28	80						
21	5178	155	7929	162	5706	28	0849	504	2022	512	4537	27	79						
22	5332	154	8091	162	5734	29	5.70345	504	1510	512	4509	28	78						
23	5487	155	8253	162	5763	28	5.69843	502	1000	510	4482	27	77						
24	5642	155	8415	162	5791	28	9341	502	5.60490	510	4454	28	76						
25	5796	154	8577	162	5820	29	8840	501	5.59981	509	4427	27	75						
26	5951	155	8739	162	5848	28	8340	500	9474	507	4399	28	74						
27	6106	155	8902	163	5877	29	7841	499	8967	507	4371	28	73						
28	6260	154	9064	162	5905	28	7343	498	8461	506	4344	27	72						
29	6415	155	9226	162	5934	29	6846	497	7955	506	4316	28	71						
30	0.176569	154	0.179388	162	1.015963	29	5.66350	496	5.57451	504	0.984288	28	70						
31	6724	155	9550	162	5991	28	5854	496	6948	503	4260	28	69						
32	6879	155	9712	162	6020	29	5359	495	6445	503	4233	27	68						
33	7033	154	0.179874	162	6049	29	4866	493	5944	501	4205	28	67						
34	7188	155	0.180037	163	6077	28	4373	493	5443	501	4177	28	66						
35	7342	154	0199	162	6106	29	3881	492	4943	500	4149	28	65						
36	7497	155	0361	162	6135	29	3390	491	4444	499	4121	28	64						
37	7652	155	0523	162	6164	29	2900	490	3946	498	4093	28	63						
38	7806	154	0685	162	6192	28	2410	490	3449	497	4066	27	62						
39	7961	155	0847	162	6221	29	1922	488	2952	497	4038	28	61						
40	0.178115	154	0.181010	163	1.016250	29	5.61434	488	5.52457	495	0.984010	28	60						
41	8270	155	1172	162	6279	29	0947	487	1962	495	3982	28	59						
42	8424	154	1334	162	6308	29	5.60461	486	1468	494	3954	28	58						
43	8579	155	1496	162	6337	29	5.59976	485	0975	493	3926	28	57						
44	8734	155	1659	163	6366	29	9492	484	5.50483	492	3898	28	56						
45	8888	154	1821	162	6395	29	9009	483	5.49992	491	3869	29	55						
46	9043	155	1983	162	6424	29	8526	483	9501	491	3841	28	54						
47	9197	154	2146	163	6453	29	8045	481	9012	489	3813	28	53						
48	9352	155	2308	162	6482	29	7564	481	8523	489	3785	28	52						
49	9506	154	2470	162	6511	29	7084	480	8035	488	3757	28	51						
50	0.179661	155	0.182632	162	1.016541	30	5.56605	479	5.47548	487	0.983729	28	50						
cos		cotg		cosec		sec		tang		sin		c							
	27	28	29	30	31	154	155	161	162	163	440	443	446	449	452	455	458	461	
1	2.7	2.8	2.9	3.0	3.1	15.4	15.5	16.1	16.2	16.3	44.0	44.3	44.6	44.9	45.2	45.5	45.8	46.1	1
2	5.4	5.6	5.8	6.0	6.2	30.8	31.0	32.2	32.4	32.6	88.0	88.6	89.2	89.8	90.4	91.0	91.6	92.2	2
3	8.1	8.4	8.7	9.0	9.3	46.2	46.5	48.3	48.6	48.9	132.0	132.9	133.8	134.7	135.6	136.5	137.4	138.3	3
4	10.8	11.2	11.6	12.0	12.4	61.6	62.0	64.4	64.8	65.2	176.0	177.2	178.4	179.6	180.8	182.0	183.2	184.4	4
5	13.5	14.0	14.5	15.0	15.5	77.0	77.5	80.5	81.0	81.5	220.0	221.5	223.0	224.5	226.0	227.5	229.0	230.5	5
6	16.2	16.8	17.4	18.0	18.6	92.4	93.0	96.6	97.2	97.8	264.0	265.8	267.6	269.4	271.2	273.0	274.8	276.6	6
7	18.9	19.6	20.3	21.0	21.7	107.8	108.5	112.7	113.4	114.1	308.0	310.1	312.2	314.3	316.4	318.5	320.6	322.7	7
8	21.6	22.4	23.2	24.0	24.8	123.2	124.0	128.8	129.6	130.4	352.0	354.4	356.8	359.2	361.6	364.0	366.4	368.8	8
9	24.3	25.2	26.1	27.0	27.9	138.6	139.5	144.9	145.8	146.7	396.0	398.7	401.4	404.1	406.8	409.5	412.2	414.9	9

c	sin		tang		sec		cosec		cotg		cos								
50	0.179661	154	0.182632	163	1.016541	29	5.56605	479	5.47548	486	0.983729	29	50						
51	9815	155	2795	162	6570	29	6126	477	7062	486	3700	28	49						
52	0.179970	155	2957	162	6599	29	5649	477	6576	486	3672	28	48						
53	0.180124	154	3119	162	6628	29	5172	477	6092	484	3644	28	47						
54	0279	155	3282	163	6657	29	4696	476	5608	484	3616	28	46						
55	0433	154	3444	162	6687	30	4221	475	5125	483	3587	29	45						
56	0588	155	3607	163	6716	29	3747	474	4643	482	3559	28	44						
57	0742	154	3769	162	6745	29	3274	473	4162	481	3530	29	43						
58	0897	155	3931	162	6775	30	2801	473	3681	481	3502	28	42						
59	1051	154	4094	163	6804	29	2330	471	3202	479	3474	28	41						
60	0.181206	155	0.184256	162	1.016833	29	5.51859	471	5.42723	479	0.983445	29	40						
61	1360	154	4419	163	6863	30	1389	470	2245	478	3417	28	39						
62	1515	155	4581	162	6892	29	0920	469	1768	477	3388	29	38						
63	1669	154	4743	162	6922	30	5.50451	469	1291	477	3360	28	37						
64	1824	155	4906	163	6951	29	5.49983	468	0816	475	3331	29	36						
65	1978	154	5068	162	6981	30	9517	466	5.40341	475	3303	28	35						
66	2133	155	5231	163	7011	30	9051	466	5.39867	474	3274	29	34						
67	2287	154	5393	162	7040	29	8585	466	9394	473	3245	29	33						
68	2441	154	5556	163	7070	30	8121	464	8922	472	3217	28	32						
69	2596	155	5718	162	7099	29	7657	464	8450	472	3188	29	31						
70	0.182750	154	0.185881	163	1.017129	30	5.47195	462	5.37980	470	0.983159	29	30						
71	2905	155	6043	162	7159	30	6733	462	7510	470	3131	29	29						
72	3059	154	6206	163	7189	30	6271	462	7040	470	3102	29	28						
73	3214	155	6368	162	7218	29	5811	460	6572	468	3073	29	27						
74	3368	154	6531	163	7248	30	5351	460	6105	467	3044	29	26						
75	3522	154	6693	162	7278	30	4892	459	5638	467	3016	28	25						
76	3677	155	6856	163	7308	30	4434	458	5172	466	2987	29	24						
77	3831	154	7018	162	7338	30	3977	457	4707	465	2958	29	23						
78	3986	155	7181	163	7368	30	3521	456	4242	465	2929	29	22						
79	4140	154	7344	163	7397	29	3065	456	3778	464	2900	29	21						
80	0.184294	154	0.187506	162	1.017427	30	5.42610	455	5.33316	462	0.982871	29	20						
81	4449	155	7669	163	7457	30	2156	454	2854	462	2842	29	19						
82	4603	154	7831	162	7487	30	1702	454	2392	462	2813	29	18						
83	4758	155	7994	163	7517	30	1250	452	1932	460	2784	29	17						
84	4912	154	8157	163	7548	31	0798	452	1472	460	2755	29	16						
85	5066	154	8319	162	7578	30	5.40347	451	1013	459	2726	29	15						
86	5221	155	8482	163	7608	30	5.39896	451	0555	458	2697	29	14						
87	5375	154	8645	163	7638	30	9447	449	5.30097	458	2668	29	13						
88	5529	154	8807	162	7668	30	8998	449	5.29640	457	2639	29	12						
89	5684	155	8970	163	7698	30	8550	448	9184	456	2610	29	11						
90	0.185838	154	0.189133	162	1.017728	30	5.38103	447	5.28729	455	0.982580	30	10						
91	5992	154	9295	163	7759	31	7656	447	8275	454	2551	29	09						
92	6147	155	9458	163	7789	30	7210	446	7821	454	2522	29	08						
93	6301	154	9621	163	7819	30	6765	445	7368	453	2493	29	07						
94	6455	154	9784	163	7850	31	6321	444	6916	452	2463	30	06						
95	6610	155	0.189946	162	7880	30	5878	443	6464	452	2434	29	05						
96	6764	154	0.190109	163	7910	30	5435	443	6014	450	2405	29	04						
97	6918	154	0272	163	7941	31	4993	442	5564	450	2375	30	03						
98	7073	155	0435	163	7971	30	4552	441	5115	449	2346	29	02						
99	7227	154	0597	162	8002	31	4111	441	4666	449	2317	29	01						
100	0.187381	154	0.190760	163	1.018032	30	5.33671	440	5.24218	448	0.982287	30	00						
cos		cotg		cosec		sec		tang		sin		c							
	464	467	470	473	476	479	482	485	490	495	500	505	510	515	520	525	528	531	
1	46.4	46.7	47.0	47.3	47.6	47.9	48.2	48.5	49.0	49.5	50.0	50.5	51.0	51.5	52.0	52.5	52.8	53.1	1
2	92.8	93.4	94.0	94.6	95.2	95.8	96.4	97.0	98.0	99.0	100.0	101.0	102.0	103.0	104.0	105.0	105.6	106.2	2
3	139.2	140.1	141.0	141.9	142.8	143.7	144.6	145.5	147.0	148.5	150.0	151.5	153.0	154.5	156.0	157.5	158.4	159.3	3
4	185.6	186.8	188.0	189.2	190.4	191.6	192.8	194.0	196.0	198.0	200.0	202.0	204.0	206.0	208.0	210.0	211.2	212.4	4
5	232.0	233.5	235.0	236.5	238.0	239.5	241.0	242.5	245.0	247.5	250.0	252.5	255.0	257.5	260.0	262.5	264.0	265.5	5
6	278.4	280.2	282.0	283.8	285.6	287.4	289.2	291.0	294.0	297.0	300.0	303.0	306.0	309.0	312.0	315.0	316.8	318.6	6
7	324.8	326.9	329.0	331.1	333.2	335.3	337.4	339.5	343.0	346.5	350.0	353.5	357.0	360.5	364.0	367.5	369.6	371.7	7
8	371.2	373.6	376.0	378.4	380.8	383.2	385.6	388.0	392.0	396.0	400.0	404.0	408.0	412.0	416.0	420.0	422.4	424.8	8
9	417.6	420.3	423.0	425.7	428.4	431.1	433.8	436.5	441.0	445.5	450.0	454.5	459.0	463.5	468.0	472.5	475.2	477.9	9

12^g

c	sin		tang		sec		cosec		cotg		cos								
00	0.187381	155	0.190760	163	1.018032	31	5.33671	439	5.24218	447	0.982287	29	100						
01	7536	154	0923	163	8063	30	3232	438	3771	446	2258	30	99						
02	7690	154	1086	163	8093	31	2794	438	3325	446	2228	29	98						
03	7844	154	1249	163	8124	31	2356	438	2880	445	2199	29	97						
04	7998	154	1411	162	8154	30	1919	437	2435	445	2169	30	96						
05	8153	155	1574	163	8185	31	1483	436	1991	444	2140	29	95						
06	8307	154	1737	163	8216	31	1048	435	1547	444	2110	30	94						
07	8461	154	1900	163	8246	30	0613	435	1105	442	2081	29	93						
08	8616	155	2063	163	8277	31	5.30179	434	0663	442	2051	30	92						
09	8770	154	2226	163	8308	31	5.29746	433	5.20222	441	2021	30	91						
10	0.188924	154	0.192389	163	1.018339	30	5.29313	432	5.19781	440	0.981992	29	90						
11	9078	155	2552	162	8369	31	8881	431	9341	439	1962	30	89						
12	9233	154	2714	163	8400	31	8450	431	8902	439	1932	30	88						
13	9387	154	2877	163	8431	31	8020	430	8464	438	1903	29	87						
14	9541	154	3040	163	8462	31	7590	430	8027	437	1873	30	86						
15	9695	154	3203	163	8493	31	7161	429	7590	437	1843	30	85						
16	0.189849	154	3366	163	8524	31	6733	428	7153	437	1813	30	84						
17	0.190004	155	3529	163	8555	31	6306	427	6718	435	1783	30	83						
18	0158	154	3692	163	8586	31	5879	427	6283	435	1754	29	82						
19	0312	154	3855	163	8617	31	5453	426	5849	434	1724	30	81						
20	0.190466	154	0.194018	163	1.018648	31	5.25027	426	5.15416	433	0.981694	30	80						
21	0621	154	4181	163	8679	31	4602	425	4983	433	1664	30	79						
22	0775	154	4344	163	8710	31	4178	424	4551	432	1634	30	78						
23	0929	154	4507	163	8741	31	3755	423	4120	431	1604	30	77						
24	1083	154	4670	163	8772	31	3332	423	3689	431	1574	30	76						
25	1237	154	4833	163	8803	31	2911	421	3260	429	1544	30	75						
26	1391	154	4996	163	8834	31	2489	422	2830	430	1514	30	74						
27	1546	155	5159	163	8866	32	2069	420	2402	428	1484	30	73						
28	1700	154	5322	163	8897	31	1649	420	1974	428	1454	30	72						
29	1854	154	5485	163	8928	31	1230	419	1547	427	1423	31	71						
30	0.192008	154	0.195649	164	1.018959	31	5.20811	419	5.11121	426	0.981393	30	70						
31	2162	154	5812	163	8991	32	5.20393	418	0695	426	1363	30	69						
32	2316	154	5975	163	9022	31	5.19976	417	5.10270	425	1333	30	68						
33	2471	155	6138	163	9054	32	9560	416	5.09846	424	1303	30	67						
34	2625	154	6301	163	9085	31	9144	416	9422	424	1272	31	66						
35	2779	154	6464	163	9116	31	8729	415	8999	423	1242	30	65						
36	2933	154	6627	163	9148	32	8315	414	8577	422	1212	30	64						
37	3087	154	6790	163	9179	31	7901	414	8155	422	1182	30	63						
38	3241	154	6954	164	9211	32	7488	413	7734	421	1151	31	62						
39	3395	154	7117	163	9242	31	7075	413	7314	420	1121	30	61						
40	0.193549	154	0.197280	163	1.019274	32	5.16664	411	5.06894	420	0.981091	30	60						
41	3704	155	7443	163	9306	32	6253	411	6475	419	1060	31	59						
42	3858	154	7606	163	9337	31	5842	411	6057	418	1030	30	58						
43	4012	154	7770	164	9369	32	5433	409	5639	418	0999	31	57						
44	4166	154	7933	163	9401	32	5024	409	5222	417	0969	30	56						
45	4320	154	8096	163	9432	31	4615	409	4806	416	0938	31	55						
46	4474	154	8259	163	9464	32	4207	408	4390	416	0908	30	54						
47	4628	154	8423	164	9496	32	3800	407	3975	415	0877	31	53						
48	4782	154	8586	163	9527	31	3394	406	3561	414	0847	30	52						
49	4936	154	8749	163	9559	32	2988	406	3147	414	0816	31	51						
50	0.195090	154	0.198912	163	1.019591	32	5.12583	405	5.02734	413	0.980785	31	50						
cos		cotg		cosec		sec		tang		sin		c							
	29	30	31	32	33	34	153	154	155	162	163	164	374	377	380	383	386	389	
1	2.9	3.0	3.1	3.2	3.3	3.4	15.3	15.4	15.5	16.2	16.3	16.4	37.4	37.7	38.0	38.3	38.6	38.9	1
2	5.8	6.0	6.2	6.4	6.6	6.8	30.6	30.8	31.0	32.4	32.6	32.8	74.8	75.4	76.0	76.6	77.2	77.8	2
3	8.7	9.0	9.3	9.6	9.9	10.2	45.9	46.2	46.5	48.6	48.9	49.2	112.2	113.1	114.0	114.9	115.8	116.7	3
4	11.6	12.0	12.4	12.8	13.2	13.6	61.2	61.6	62.0	64.8	65.2	65.6	149.6	150.8	152.0	153.2	154.4	155.6	4
5	14.5	15.0	15.5	16.0	16.5	17.0	76.5	77.0	77.5	81.0	81.5	82.0	187.0	188.5	190.0	191.5	193.0	194.5	5
6	17.4	18.0	18.6	19.2	19.8	20.4	91.8	92.4	93.0	97.2	97.8	98.4	224.4	226.2	228.0	229.8	231.6	233.4	6
7	20.3	21.0	21.7	22.4	23.1	23.8	107.1	107.8	108.5	113.4	114.1	114.8	261.8	263.9	266.0	268.1	270.2	272.3	7
8	23.2	24.0	24.8	25.6	26.4	27.2	122.4	123.2	124.0	129.6	130.4	131.2	299.2	301.6	304.0	306.4	308.8	311.2	8
9	26.1	27.0	27.9	28.8	29.7	30.6	137.7	138.6	139.5	145.8	146.7	147.6	336.6	339.3	342.0	344.7	347.4	350.1	9

12^g

c	sin		tang		sec		cosec		cotg		cos								
50	0.195090	154	0.198912	164	1.019591	32	5.12583	404	5.02734	412	0.980785	30	50						
51	5244	154	9076	163	9623	32	2179	404	2322	412	0755	31	49						
52	5398	154	9239	163	9655	32	1775	404	1910	412	0724	31	48						
53	5552	154	9402	163	9687	32	1372	403	1499	411	0693	31	47						
54	5707	155	9566	164	9719	32	0969	403	1088	411	0663	30	46						
55	5861	154	9729	163	9751	32	0567	402	0678	410	0632	31	45						
56	6015	154	0.199892	163	9783	32	5.10166	401	5.00269	409	0601	31	44						
57	6169	154	0.200056	164	9815	32	5.09765	401	4.99861	408	0570	31	43						
58	6323	154	0219	163	9847	32	9366	399	9453	408	0539	31	42						
59	6477	154	0382	163	9879	32	8966	400	9046	407	0508	31	41						
60	0.196631	154	0.200546	164	1.019911	32	5.08568	398	4.98639	407	0.980478	30	40						
61	6785	154	0709	164	9943	32	8170	398	8233	406	0447	31	39						
62	6939	154	0873	163	1.019975	32	7772	398	7828	405	0416	31	38						
63	7093	154	1036	163	1.020008	33	7375	397	7423	405	0385	31	37						
64	7247	154	1199	163	0040	32	6979	396	7019	404	0354	31	36						
65	7401	154	1363	164	0072	32	6584	395	6616	403	0323	31	35						
66	7555	154	1526	163	0104	32	6189	395	6213	403	0292	31	34						
67	7709	154	1690	164	0137	33	5795	394	5811	402	0261	31	33						
68	7863	154	1853	163	0169	32	5401	394	5409	402	0230	31	32						
69	8017	154	2017	164	0201	32	5008	393	5008	401	0199	31	31						
70	0.198171	154	0.202180	163	1.020234	33	5.04616	392	4.94608	400	0.980168	31	30						
71	8325	154	2344	164	0266	32	4224	392	4208	400	0136	32	29						
72	8479	154	2507	163	0299	33	3833	391	3809	399	0105	31	28						
73	8632	153	2671	164	0331	32	3442	391	3411	398	0074	31	27						
74	8786	154	2834	163	0364	33	3053	389	3013	398	0043	31	26						
75	8940	154	2998	164	0396	32	2663	390	2616	397	0.980012	31	25						
76	9094	154	3162	164	0429	33	2275	388	2219	397	0.979980	32	24						
77	9248	154	3325	163	0461	32	1887	388	1823	396	9949	31	23						
78	9402	154	3489	164	0494	33	1499	388	1428	395	9918	31	22						
79	9556	154	3652	163	0526	32	1112	387	1033	395	9886	32	21						
80	0.199710	154	0.203816	164	1.020559	33	5.00726	386	4.90639	394	0.979855	31	20						
81	0.199864	154	3979	163	0592	33	5.00340	386	4.90245	394	9824	31	19						
82	0.200018	154	4143	164	0625	33	4.99956	384	4.89853	392	9792	32	18						
83	0172	154	4307	164	0657	32	9571	385	9460	393	9761	31	17						
84	0326	154	4470	163	0690	33	9187	384	9068	392	9729	32	16						
85	0479	153	4634	164	0723	33	8804	383	8677	391	9698	31	15						
86	0633	154	4798	164	0756	33	8422	382	8287	390	9666	32	14						
87	0787	154	4961	163	0788	32	8040	382	7897	390	9635	31	13						
88	0941	154	5125	164	0821	33	7658	382	7508	389	9603	32	12						
89	1095	154	5289	164	0854	33	7277	381	7119	389	9572	31	11						
90	0.201249	154	0.205452	163	1.020887	33	4.96897	380	4.86731	388	0.979540	32	10						
91	1403	154	5616	164	0920	33	6518	379	6343	388	9509	31	09						
92	1557	154	5780	164	0953	33	6139	379	5956	387	9477	32	08						
93	1710	153	5944	164	0986	33	5760	379	5570	386	9445	32	07						
94	1864	154	6107	163	1019	33	5382	378	5184	386	9413	32	06						
95	2018	154	6271	164	1052	33	5005	377	4799	385	9382	31	05						
96	2172	154	6435	164	1085	33	4628	377	4414	385	9350	32	04						
97	2326	154	6599	164	1119	34	4252	376	4030	384	9318	32	03						
98	2480	154	6762	163	1152	33	3877	375	3647	383	9286	32	02						
99	2633	153	6926	164	1185	33	3502	375	3264	383	9255	31	01						
100	0.202787	154	0.207090	164	1.021218	33	4.93128	374	4.82882	382	0.979223	32	00						
cos		cotg		cosec		sec		tang		sin		c							
	392	395	398	401	404	407	410	413	416	419	422	425	430	435	438	441	444	447	
1	39.2	39.5	39.8	40.1	40.4	40.7	41.0	41.3	41.6	41.9	42.2	42.5	43.0	43.5	43.8	44.1	44.4	44.7	1
2	78.4	79.0	79.6	80.2	80.8	81.4	82.0	82.6	83.2	83.8	84.4	85.0	86.0	87.0	87.6	88.2	88.8	89.4	2
3	117.6	118.5	119.4	120.3	121.2	122.1	123.0	123.9	124.8	125.7	126.6	127.5	129.0	130.5	131.4	132.3	133.2	134.1	3
4	156.8	158.0	159.2	160.4	161.6	162.8	164.0	165.2	166.4	167.6	168.8	170.0	172.0	174.0	175.2	176.4	177.6	178.8	4
5	196.0	197.5	199.0	200.5	202.0	203.5	205.0	206.5	208.0	209.5	211.0	212.5	215.0	217.5	219.0	220.5	222.0	223.5	5
6	235.2	237.0	238.8	240.6	242.4	244.2	246.0	247.8	249.6	251.4	253.2	255.0	258.0	261.0	262.8	264.6	266.4	268.2	6
7	274.4	276.5	278.6	280.7	282.8	284.9	287.0	289.1	291.2	293.3	295.4	297.5	301.0	304.5	306.6	308.7	310.8	312.9	7
8	313.6	316.0	318.4	320.8	323.2	325.6	328.0	330.4	332.8	335.2	337.6	340.0	344.0	348.0	350.4	352.8	355.2	357.6	8
9	352.8	355.5	358.2	360.9	363.6	366.3	369.0	371.7	374.4	377.1	379.8	382.5	387.0	391.5	394.2	396.9	399.6	402.3	9

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c	sin		tang		sec		cosec		cotg		cos								
00	0.202787	154	0.207090	164	1.021218	33	4.93128	374	4.82882	382	0.979223	32	100						
01	2941	154	7254	164	1251	34	2754	373	2500	381	9191	32	99						
02	3095	154	7418	164	1285	34	2381	373	2119	381	9159	32	98						
03	3249	154	7582	164	1318	33	2008	373	1738	381	9127	32	97						
04	3403	154	7745	163	1351	33	1636	372	1358	380	9095	32	96						
05	3556	153	7909	164	1384	33	1265	371	0979	379	9063	32	95						
06	3710	154	8073	164	1418	34	0894	371	0600	379	9031	32	94						
07	3864	154	8237	164	1451	33	0523	371	4.80222	378	8999	32	93						
08	4018	154	8401	164	1485	34	4.90154	369	4.79844	378	8967	32	92						
09	4171	153	8565	164	1518	33	4.89784	370	9467	377	8935	32	91						
10	0.204325	154	0.208729	164	1.021552	34	4.89416	368	4.79091	376	0.978903	32	90						
11	4479	154	8893	164	1585	34	9048	368	8715	376	8871	32	89						
12	4633	154	9057	164	1619	34	8680	368	8339	376	8839	32	88						
13	4786	153	9221	164	1652	33	8313	367	7965	374	8807	32	87						
14	4940	154	9385	164	1686	34	7947	366	7590	375	8774	33	86						
15	5094	154	9548	163	1719	33	7581	366	7217	373	8742	32	85						
16	5248	154	9712	164	1753	34	7216	365	6843	374	8710	32	84						
17	5401	153	0.209876	164	1787	34	6852	364	6471	372	8678	32	83						
18	5555	154	0.210040	164	1820	33	6487	365	6099	372	8646	32	82						
19	5709	154	0204	164	1854	34	6124	363	5727	372	8613	33	81						
20	0.205863	154	0.210369	165	1.021888	34	4.85761	363	4.75356	371	0.978581	32	80						
21	6016	153	0533	164	1922	34	5398	363	4986	370	8549	33	79						
22	6170	154	0697	164	1956	34	5037	361	4616	370	8516	33	78						
23	6324	154	0861	164	1989	33	4675	362	4247	369	8484	32	77						
24	6477	153	1025	164	2023	34	4314	361	3878	369	8451	33	76						
25	6631	154	1189	164	2057	34	3954	360	3510	368	8419	32	75						
26	6785	154	1353	164	2091	34	3595	359	3142	368	8386	33	74						
27	6938	153	1517	164	2125	34	3235	360	2775	367	8354	32	73						
28	7092	154	1681	164	2159	34	2877	358	2409	366	8321	33	72						
29	7246	154	1845	164	2193	34	2519	358	2043	366	8289	32	71						
30	0.207400	154	0.212009	164	1.022227	34	4.82161	358	4.71677	366	0.978256	33	70						
31	7553	153	2174	165	2261	34	1804	357	1312	365	8224	32	69						
32	7707	154	2338	164	2295	34	1448	356	0948	364	8191	33	68						
33	7860	153	2502	164	2329	34	1092	356	0584	364	8158	33	67						
34	8014	154	2666	164	2363	34	0737	355	4.70221	363	8126	32	66						
35	8168	154	2830	164	2398	35	0382	355	4.69858	363	8093	33	65						
36	8321	153	2994	164	2432	34	4.80028	354	9496	362	8060	33	64						
37	8475	154	3159	165	2466	34	4.79674	354	9134	362	8028	32	63						
38	8629	154	3323	164	2500	34	9321	353	8773	361	7995	33	62						
39	8782	153	3487	164	2534	34	8968	353	8412	361	7962	33	61						
40	0.208936	154	0.213651	164	1.022569	35	4.78616	352	4.68052	360	0.977929	33	60						
41	9090	154	3816	165	2603	34	8264	352	7693	359	7897	32	59						
42	9243	153	3980	164	2637	34	7913	351	7334	359	7864	33	58						
43	9397	154	4144	164	2672	35	7562	351	6975	359	7831	33	57						
44	9550	153	4308	164	2706	34	7212	350	6617	358	7798	33	56						
45	9704	154	4473	165	2741	35	6863	349	6260	357	7765	33	55						
46	0.209857	153	4637	164	2775	34	6514	349	5903	357	7732	33	54						
47	0.210011	154	4801	164	2810	35	6165	349	5546	357	7699	33	53						
48	0165	154	4966	165	2844	34	5817	348	5191	355	7666	33	52						
49	0318	153	5130	164	2879	35	5470	347	4835	356	7633	33	51						
50	0.210472	154	0.215294	164	1.022913	34	4.75123	347	4.64480	355	0.977600	33	50						
cos		cotg		cosec		sec		tang		sin		c							
	32	33	34	35	36	153	154	163	164	165	323	325	327	329	331	333	335	337	
1	3.2	3.3	3.4	3.5	3.6	15.3	15.4	16.3	16.4	16.5	32.3	32.5	32.7	32.9	33.1	33.3	33.5	33.7	1
2	6.4	6.6	6.8	7.0	7.2	30.6	30.8	32.6	32.8	33.0	64.6	65.0	65.4	65.8	66.2	66.6	67.0	67.4	2
3	9.6	9.9	10.2	10.5	10.8	45.9	46.2	48.9	49.2	49.5	96.9	97.5	98.1	98.7	99.3	99.9	100.5	101.1	3
4	12.8	13.2	13.6	14.0	14.4	61.2	61.6	65.2	65.6	66.0	129.2	130.0	130.8	131.6	132.4	133.2	134.0	134.8	4
5	16.0	16.5	17.0	17.5	18.0	76.5	77.0	81.5	82.0	82.5	161.5	162.5	163.5	164.5	165.5	166.5	167.5	168.5	5
6	19.2	19.8	20.4	21.0	21.6	91.8	92.4	97.8	98.4	99.0	193.8	195.0	196.2	197.4	198.6	199.8	201.0	202.2	6
7	22.4	23.1	23.8	24.5	25.2	107.1	107.8	114.1	114.8	115.5	226.1	227.5	228.9	230.3	231.7	233.1	234.5	235.9	7
8	25.6	26.4	27.2	28.0	28.8	122.4	123.2	130.4	131.2	132.0	258.4	260.0	261.6	263.2	264.8	266.4	268.0	269.6	8
9	28.8	29.7	30.6	31.5	32.4	137.7	138.6	146.7	147.6	148.5	290.7	292.5	294.3	296.1	297.9	299.7	301.5	303.3	9

13^g

c	sin			tang			sec			cosec			cotg			cos			
50	0.210472	153	0.215294	165	1.022913	35	4.75123	346	4.64480	354	0.977600	33	50						
51	0625	154	5459	164	2948	35	4777	346	4126	354	7567	33	49						
52	0779	153	5623	164	2983	34	4431	346	3772	353	7534	33	48						
53	0932	154	5787	165	3017	35	4085	344	3419	353	7501	33	47						
54	1086	154	5952	164	3052	35	3741	344	3066	353	7468	33	46						
55	1240	154	6116	164	3087	35	3396	345	2714	352	7434	34	45						
56	1393	153	6281	165	3121	34	3052	344	2362	352	7401	33	44						
57	1547	154	6445	164	3156	35	2709	343	2011	351	7368	33	43						
58	1700	153	6610	165	3191	35	2366	343	1660	351	7335	33	42						
59	1854	154	6774	164	3226	35	2024	342	1310	350	7301	34	41						
60	0.212007	153	0.216939	165	1.023261	35	4.71682	342	4.60960	350	0.977268	33	40						
61	2161	154	7103	164	3296	35	1341	341	0611	349	7235	33	39						
62	2314	153	7267	165	3330	34	1000	341	4.60262	349	7201	34	38						
63	2468	154	7432	165	3365	35	0660	340	4.59914	348	7168	33	37						
64	2621	153	7597	165	3400	35	4.70320	340	9566	348	7135	33	36						
65	2775	154	7761	164	3435	35	4.69981	339	9219	347	7101	34	35						
66	2928	153	7926	165	3470	35	9642	339	8872	347	7068	33	34						
67	3082	154	8090	164	3505	35	9304	338	8526	346	7034	34	33						
68	3235	153	8255	165	3540	35	8966	338	8180	346	7001	33	32						
69	3388	153	8419	164	3576	36	8629	337	7835	345	6967	34	31						
70	0.213542	154	0.218584	165	1.023611	35	4.68292	337	4.57490	345	0.976934	33	30						
71	3695	153	8748	164	3646	35	7956	336	7146	344	6900	34	29						
72	3849	154	8913	165	3681	35	7620	336	6802	344	6867	33	28						
73	4002	153	9078	165	3716	35	7285	335	6459	343	6833	34	27						
74	4156	154	9242	164	3752	36	6950	335	6116	343	6800	33	26						
75	4309	153	9407	165	3787	35	6616	334	5774	342	6766	34	25						
76	4463	154	9572	165	3822	35	6282	334	5432	342	6732	34	24						
77	4616	153	9736	164	3857	35	5948	334	5091	341	6699	33	23						
78	4769	153	0.219901	165	3893	36	5616	332	4750	341	6665	34	22						
79	4923	154	0.220066	165	3928	35	5283	333	4410	340	6631	34	21						
80	0.215076	153	0.220230	164	1.023964	36	4.64951	332	4.54070	340	0.976597	34	20						
81	5230	154	0395	165	3999	35	4620	331	3731	339	6563	34	19						
82	5383	153	0560	165	4034	35	4289	331	3392	339	6530	33	18						
83	5536	153	0724	164	4070	36	3959	330	3054	338	6496	34	17						
84	5690	154	0889	165	4105	35	3629	330	2716	338	6462	34	16						
85	5843	153	1054	165	4141	36	3299	330	2378	338	6428	34	15						
86	5997	154	1219	165	4177	36	2970	329	2042	336	6394	34	14						
87	6150	153	1383	164	4212	35	2642	328	1705	337	6360	34	13						
88	6303	153	1548	165	4248	36	2314	328	1369	336	6326	34	12						
89	6457	154	1713	165	4283	35	1986	328	1034	335	6292	34	11						
90	0.216610	153	0.221878	165	1.024319	36	4.61659	327	4.50699	335	0.976258	34	10						
91	6763	153	2043	165	4355	36	1333	326	0364	335	6224	34	09						
92	6917	154	2207	164	4391	36	1006	327	4.50030	334	6190	34	08						
93	7070	153	2372	165	4426	35	0681	325	4.49696	334	6156	34	07						
94	7223	153	2537	165	4462	36	0356	325	9363	333	6122	34	06						
95	7377	154	2702	165	4498	36	4.60031	325	9031	332	6088	34	05						
96	7530	153	2867	165	4534	36	4.59707	324	8698	333	6054	34	04						
97	7683	153	3032	165	4570	36	9383	324	8367	331	6019	35	03						
98	7837	154	3197	165	4606	36	9060	323	8035	332	5985	34	02						
99	7990	153	3362	165	4642	36	8737	323	7705	330	5951	34	01						
100	0.218143	153	0.223526	164	1.024678	36	4.58414	323	4.47374	331	0.975917	34	00						
		cos			cotg			cosec			tang			sin			c		
	339	341	343	345	347	349	351	353	355	358	361	364	367	370	373	376	379	382	
1	33.9	34.1	34.3	34.5	34.7	34.9	35.1	35.3	35.5	35.8	36.1	36.4	36.7	37.0	37.3	37.6	37.9	38.2	1
2	67.8	68.2	68.6	69.0	69.4	69.8	70.2	70.6	71.0	71.6	72.2	72.8	73.4	74.0	74.6	75.2	75.8	76.4	2
3	101.7	102.3	102.9	103.5	104.1	104.7	105.3	105.9	106.5	107.4	108.3	109.2	110.1	111.0	111.9	112.8	113.7	114.6	3
4	135.6	136.4	137.2	138.0	138.8	139.6	140.4	141.2	142.0	143.2	144.4	145.6	146.8	148.0	149.2	150.4	151.6	152.8	4
5	169.5	170.5	171.5	172.5	173.5	174.5	175.5	176.5	177.5	179.0	180.5	182.0	183.5	185.0	186.5	188.0	189.5	191.0	5
6	203.4	204.6	205.8	207.0	208.2	209.4	210.6	211.8	213.0	214.8	216.6	218.4	220.2	222.0	223.8	225.6	227.4	229.2	6
7	237.3	238.7	240.1	241.5	242.9	244.3	245.7	247.1	248.5	250.6	252.7	254.8	256.9	259.0	261.1	263.2	265.3	267.4	7
8	271.2	272.8	274.4	276.0	277.6	279.2	280.8	282.4	284.0	286.4	288.8	291.2	293.6	296.0	298.4	300.8	303.2	305.6	8
9	305.1	306.9	308.7	310.5	312.3	314.1	315.9	317.7	319.5	322.2	324.9	327.6	330.3	333.0	335.7	338.4	341.1	343.8	9

c	sin		tang		sec		cosec		cotg		cos								
00	0.218143	154	0.223526	165	1.024678	36	4.58414	322	4.47374	330	0.975917	35	100						
01	8297	153	3691	165	4714	36	8092	321	7044	329	5882	34	99						
02	8450	153	3856	165	4750	36	7771	321	6715	329	5848	34	98						
03	8603	153	4021	165	4786	36	7450	321	6386	329	5814	34	97						
04	8756	153	4186	165	4822	36	7130	320	6058	328	5780	34	96						
05	8910	154	4351	165	4858	36	6809	321	5730	328	5745	35	95						
06	9063	153	4516	165	4894	36	6490	319	5402	328	5711	34	94						
07	9216	153	4681	165	4930	36	6171	319	5075	327	5676	35	93						
08	9369	153	4846	165	4966	36	5852	319	4748	327	5642	34	92						
09	9523	154	5011	165	5002	36	5534	318	4422	326	5607	35	91						
10	0.219676	153	0.225176	165	1.025039	37	4.55216	318	4.44096	326	0.975573	34	90						
11	9829	153	5341	165	5075	36	4899	317	3771	325	5538	35	89						
12	0.219982	153	5506	166	5111	36	4582	317	3446	325	5504	34	88						
13	0.220136	154	5672	166	5148	37	4265	317	3122	324	5469	35	87						
14	0289	153	5837	165	5184	36	3949	316	2798	324	5435	34	86						
15	0442	153	6002	165	5220	36	3634	315	2475	323	5400	35	85						
16	0595	153	6167	165	5257	37	3319	315	2152	323	5365	35	84						
17	0749	154	6332	165	5293	36	3004	315	1829	323	5331	34	83						
18	0902	153	6497	165	5330	37	2690	314	1507	322	5296	35	82						
19	1055	153	6662	165	5366	36	2376	314	1185	322	5261	35	81						
20	0.221208	153	0.226827	166	1.025403	37	4.52063	313	4.40864	321	0.975227	34	80						
21	1361	153	6993	166	5439	36	1750	313	0543	321	5192	35	79						
22	1514	153	7158	165	5476	37	1438	312	4.40223	320	5157	35	78						
23	1668	154	7323	165	5512	36	1126	312	4.39903	320	5122	35	77						
24	1821	153	7488	165	5549	37	0814	312	9583	320	5087	35	76						
25	1974	153	7653	165	5586	37	0503	311	9264	319	5053	34	75						
26	2127	153	7819	166	5622	36	4.50193	310	8946	318	5018	35	74						
27	2280	153	7984	165	5659	37	4.49882	311	8628	318	4983	35	73						
28	2433	153	8149	165	5696	37	9573	309	8310	318	4948	35	72						
29	2587	154	8314	165	5733	37	9263	310	7993	317	4913	35	71						
30	0.222740	153	0.228480	166	1.025769	36	4.48955	308	4.37676	317	0.974878	35	70						
31	2893	153	8645	165	5806	37	8646	309	7359	317	4843	35	69						
32	3046	153	8810	165	5843	37	8338	308	7044	315	4808	35	68						
33	3199	153	8975	166	5880	37	8031	307	6728	316	4773	35	67						
34	3352	153	9141	166	5917	37	7723	308	6413	315	4738	35	66						
35	3505	153	9306	165	5954	37	7417	306	6098	315	4703	35	65						
36	3658	153	9471	165	5991	37	7110	307	5784	314	4668	35	64						
37	3812	154	9637	166	6028	37	6805	305	5470	314	4632	36	63						
38	3965	153	9802	165	6065	37	6499	306	5157	313	4597	35	62						
39	4118	153	0.229968	166	6102	37	6194	305	4844	313	4562	35	61						
40	0.224271	153	0.230133	165	1.026139	37	4.45890	304	4.34531	313	0.974527	35	60						
41	4424	153	0298	165	6176	37	5585	305	4219	312	4492	35	59						
42	4577	153	0464	166	6213	37	5282	303	3908	311	4456	36	58						
43	4730	153	0629	165	6250	37	4978	304	3596	312	4421	35	57						
44	4883	153	0795	166	6288	38	4676	302	3286	310	4386	35	56						
45	5036	153	0960	165	6325	37	4373	303	2975	311	4350	36	55						
46	5189	153	1126	166	6362	37	4071	302	2665	310	4315	35	54						
47	5342	153	1291	165	6399	37	3770	301	2356	309	4280	35	53						
48	5495	153	1457	166	6437	38	3468	302	2047	309	4244	36	52						
49	5648	153	1622	165	6474	37	3168	300	1738	309	4209	35	51						
50	0.225801	153	0.231788	166	1.026511	37	4.42867	301	4.31430	308	0.974173	36	50						
cos		cotg		cosec		sec		tang		sin		c							
	34	35	36	37	38	39	152	153	154	165	166	167	280	282	284	286	288	290	
1	3.4	3.5	3.6	3.7	3.8	3.9	15.2	15.3	15.4	16.5	16.6	16.7	28.0	28.2	28.4	28.6	28.8	29.0	1
2	6.8	7.0	7.2	7.4	7.6	7.8	30.4	30.6	30.8	33.0	33.2	33.4	56.0	56.4	56.8	57.2	57.6	58.0	2
3	10.2	10.5	10.8	11.1	11.4	11.7	45.6	45.9	46.2	49.5	49.8	50.1	84.0	84.6	85.2	85.8	86.4	87.0	3
4	13.6	14.0	14.4	14.8	15.2	15.6	60.8	61.2	61.6	66.0	66.4	66.8	112.0	112.8	113.6	114.4	115.2	116.0	4
5	17.0	17.5	18.0	18.5	19.0	19.5	76.0	76.5	77.0	82.5	83.0	83.5	140.0	141.0	142.0	143.0	144.0	145.0	5
6	20.4	21.0	21.6	22.2	22.8	23.4	91.2	91.8	92.4	99.0	99.6	100.2	168.0	169.2	170.4	171.6	172.8	174.0	6
7	23.8	24.5	25.2	25.9	26.6	27.3	106.4	107.1	107.8	115.5	116.2	116.9	196.0	197.4	198.8	200.2	201.6	203.0	7
8	27.2	28.0	28.8	29.6	30.4	31.2	121.6	122.4	123.2	132.0	132.8	133.6	224.0	225.6	227.2	228.8	230.4	232.0	8
9	30.6	31.5	32.4	33.3	34.2	35.1	136.8	137.7	138.6	148.5	149.4	150.3	252.0	253.8	255.6	257.4	259.2	261.0	9

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c	sin		tang		sec		cosec		cotg		cos								
50	0.225801	153	0.231788	165	1.026511	38	4.42867	300	4.31430	308	0.974173	35	50						
51	5954	153	1953	166	6549	37	2567	299	1122	308	4138	36	49						
52	6107	153	2119	166	6586	37	2268	299	0814	308	4102	36	48						
53	6260	153	2284	165	6624	38	1969	299	0507	307	4067	35	47						
		153		166		37		299		306		36							
54	6413	153	2450	165	6661	37	1670	299	4.30201	306	4031	36	46						
55	6566	153	2615	165	6699	38	1372	298	4.29894	307	3996	35	45						
56	6719	153	2781	166	6736	37	1074	298	9589	305	3960	36	44						
		153		165		38		297		306		35							
57	6872	153	2946	166	6774	37	0777	297	9283	306	3925	35	43						
58	7025	153	3112	166	6811	38	0480	297	8978	305	3889	36	42						
59	7178	153	3278	166	6849	37	4.40183	297	8674	304	3853	36	41						
60	0.227331	153	0.233443	165	1.026886	37	4.39887	296	4.28369	305	0.973817	36	40						
61	7484	153	3609	166	6924	38	9591	296	8066	303	3782	35	39						
62	7637	153	3775	166	6962	38	9296	295	7762	304	3746	36	38						
63	7790	153	3940	165	7000	38	9001	295	7459	303	3710	36	37						
		153		166		37		295		302		36							
64	7943	153	4106	166	7037	38	8706	295	7157	302	3674	36	36						
65	8096	153	4272	166	7075	38	8412	294	6855	302	3639	35	35						
66	8249	153	4437	165	7113	38	8118	294	6553	302	3603	36	34						
		153		166		38		293		301		36							
67	8402	153	4603	166	7151	38	7825	293	6252	301	3567	36	33						
68	8555	153	4769	166	7189	38	7532	293	5951	301	3531	36	32						
69	8708	153	4935	166	7226	37	7239	293	5650	301	3495	36	31						
70	0.228861	153	0.235100	165	1.027264	38	4.36947	292	4.25350	299	0.973459	36	30						
71	9014	152	5266	166	7302	38	6655	291	5051	300	3423	36	29						
72	9166	153	5432	166	7340	38	6364	291	4751	300	3387	36	28						
73	9319	153	5598	165	7378	38	6073	290	4452	299	3351	36	27						
		153		165		38		290		298		36							
74	9472	153	5763	166	7416	38	5783	291	4154	298	3315	36	26						
75	9625	153	5929	166	7454	38	5492	291	3856	298	3279	36	25						
76	9778	153	6095	166	7493	39	5203	289	3558	298	3243	36	24						
		153		166		38		290		297		36							
77	0.229931	153	6261	166	7531	38	4913	289	3261	297	3207	36	23						
78	0.230084	153	6427	166	7569	38	4624	289	2964	297	3171	36	22						
79	0237	153	6593	166	7607	38	4336	288	2667	297	3135	36	21						
80	0.230389	152	0.236759	166	1.027645	38	4.34048	288	4.22371	296	0.973099	36	20						
81	0542	153	6924	165	7683	38	3760	288	2075	296	3062	37	19						
82	0695	153	7090	166	7722	39	3473	287	1780	295	3026	36	18						
83	0848	153	7256	166	7760	38	3186	287	1485	295	2990	36	17						
		153		166		38		287		294		36							
84	1001	153	7422	166	7798	39	2899	286	1191	295	2954	37	16						
85	1154	152	7588	166	7837	38	2613	286	0896	293	2917	36	15						
86	1306	152	7754	166	7875	38	2327	286	0603	293	2881	36	14						
		153		166		38		286		294		36							
87	1459	153	7920	166	7913	39	2041	285	0309	293	2845	37	13						
88	1612	153	8086	166	7952	39	1756	285	4.20016	293	2808	37	12						
89	1765	153	8252	166	7990	38	1472	284	4.19724	292	2772	36	11						
90	0.231918	153	0.238418	166	1.028029	39	4.31187	285	4.19431	293	0.972735	37	10						
91	2070	152	8584	166	8067	38	0904	283	9139	292	2699	36	09						
92	2223	153	8750	166	8106	39	0620	284	8848	291	2663	36	08						
93	2376	153	8916	166	8144	38	0337	283	8557	291	2626	37	07						
		153		166		39		283		291		36							
94	2529	153	9082	166	8183	39	4.30054	282	8266	291	2590	36	06						
95	2682	153	9248	166	8222	39	4.29772	282	7976	290	2553	37	05						
96	2834	152	9414	166	8260	38	9490	282	7686	290	2516	37	04						
		153		166		39		282		290		36							
97	2987	153	9580	167	8299	39	9208	281	7396	289	2480	37	03						
98	3140	153	9747	166	8338	39	8927	281	7107	289	2443	37	02						
99	3293	153	0.239913	166	8376	38	8646	281	6818	289	2407	36	01						
100	0.233445	152	0.240079	166	1.028415	39	4.28366	280	4.16530	288	0.972370	37	00						
	cos		cotg		cosec		sec		tang		sin		c						
	292	294	296	298	300	302	304	306	308	310	312	314	316	318	321	324	327	330	
1	29.2	29.4	29.6	29.8	30.0	30.2	30.4	30.6	30.8	31.0	31.2	31.4	31.6	31.8	32.1	32.4	32.7	33.0	1
2	58.4	58.8	59.2	59.6	60.0	60.4	60.8	61.2	61.6	62.0	62.4	62.8	63.2	63.6	64.2	64.8	65.4	66.0	2
3	87.6	88.2	88.8	89.4	90.0	90.6	91.2	91.8	92.4	93.0	93.6	94.2	94.8	95.4	96.3	97.2	98.1	99.0	3
4	116.8	117.6	118.4	119.2	120.0	120.8	121.6	122.4	123.2	124.0	124.8	125.6	126.4	127.2	128.4	129.6	130.8	132.0	4
5	146.0	147.0	148.0	149.0	150.0	151.0	152.0	153.0	154.0	155.0	156.0	157.0	158.0	159.0	160.5	162.0	163.5	165.0	5
6	175.2	176.4	177.6	178.8	180.0	181.2	182.4	183.6	184.8	186.0	187.2	188.4	189.6	190.8	192.6	194.4	196.2	198.0	6
7	204.4	205.8	207.2	208.6	210.0	211.4	212.8	214.2	215.6	217.0	218.4	219.8	221.2	222.6	224.7	226.8	228.9	231.0	7
8	233.6	235.2	236.8	238.4	240.0	241.6	243.2	244.8	246.4	248.0	249.6	251.2	252.8	254.4	256.8	259.2	261.6	264.0	8
9	262.8	264.6	266.4	268.2	270.0	271.8	273.6	275.4	277.2	279.0	280.8	282.6	284.4	286.2	288.9	291.6	294.3	297.0	9

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c	sin		tang		sec		cosec		cotg		cos								
00	0.233445	153	0.240079	166	1.028415	39	4.28366	280	4.16530	288	0.972370	37	100						
01	3598	153	0245	166	8454	39	8086	280	6242	288	2333	36	99						
02	3751	153	0411	166	8493	39	7806	280	5954	288	2297	36	98						
03	3904	153	0577	166	8532	39	7527	279	5667	287	2260	37	97						
04	4056	152	0743	166	8571	39	7248	279	5380	287	2223	37	96						
05	4209	153	0910	167	8609	38	6969	279	5093	287	2186	37	95						
06	4362	153	1076	166	8648	39	6691	278	4807	286	2149	37	94						
07	4514	152	1242	166	8687	39	6413	278	4522	285	2113	36	93						
08	4667	153	1408	166	8726	39	6136	277	4236	286	2076	37	92						
09	4820	153	1574	166	8765	39	5858	278	3951	285	2039	37	91						
10	0.234972	152	0.241741	167	1.028804	39	4.25582	276	4.13666	285	0.972002	37	90						
11	5125	153	1907	166	8844	40	5305	277	3382	284	1965	37	89						
12	5278	153	2073	166	8883	39	5029	276	3098	284	1928	37	88						
13	5430	152	2240	167	8922	39	4754	275	2814	284	1891	37	87						
14	5583	153	2406	166	8961	39	4479	275	2531	283	1854	37	86						
15	5736	153	2572	166	9000	39	4204	275	2248	283	1817	37	85						
16	5888	152	2739	167	9039	39	3929	275	1966	282	1780	37	84						
17	6041	153	2905	166	9079	40	3655	274	1684	282	1743	37	83						
18	6194	153	3071	166	9118	39	3381	274	1402	282	1706	37	82						
19	6346	152	3238	167	9157	39	3108	273	1121	281	1669	37	81						
20	0.236499	153	0.243404	166	1.029197	40	4.22835	273	4.10840	281	0.971632	37	80						
21	6652	153	3570	166	9236	39	2562	273	0559	281	1595	37	79						
22	6804	152	3737	167	9275	39	2290	272	4.10279	280	1557	38	78						
23	6957	153	3903	166	9315	40	2018	272	4.09999	280	1520	37	77						
24	7109	152	4070	167	9354	39	1746	272	9719	280	1483	37	76						
25	7262	153	4236	166	9394	40	1475	271	9440	279	1446	37	75						
26	7415	153	4402	166	9433	39	1204	271	9161	279	1408	38	74						
27	7567	152	4569	167	9473	40	0933	271	8883	278	1371	37	73						
28	7720	153	4735	166	9512	39	0663	270	8604	279	1334	37	72						
29	7872	152	4902	167	9552	40	0394	269	8327	277	1296	38	71						
30	0.238025	153	0.245068	166	1.029591	39	4.20124	270	4.08049	278	0.971259	37	70						
31	8178	153	5235	167	9631	40	4.19855	269	7772	277	1222	37	69						
32	8330	152	5401	166	9671	40	9586	269	7495	277	1184	38	68						
33	8483	153	5568	167	9710	39	9318	268	7219	276	1147	37	67						
34	8635	152	5735	167	9750	40	9050	268	6943	276	1109	38	66						
35	8788	153	5901	166	9790	40	8782	268	6667	276	1072	37	65						
36	8940	152	6068	167	9830	40	8515	267	6392	275	1034	38	64						
37	9093	153	6234	166	9870	40	8248	267	6117	275	0997	37	63						
38	9245	152	6401	167	9909	39	7981	267	5843	274	0959	38	62						
39	9398	153	6568	167	9949	40	7715	266	5568	275	0922	37	61						
40	0.239550	152	0.246734	166	1.029989	40	4.17449	266	4.05294	274	0.970884	38	60						
41	9703	153	6901	167	1.030029	40	7183	266	5021	273	0846	38	59						
42	0.239855	152	7068	167	0069	40	6918	265	4748	273	0809	37	58						
43	0.240008	153	7234	166	0109	40	6653	265	4475	273	0771	38	57						
44	0160	152	7401	167	0149	40	6389	264	4202	273	0733	38	56						
45	0313	153	7568	167	0189	40	6124	265	3930	272	0696	37	55						
46	0465	152	7734	166	0229	40	5861	263	3658	272	0658	38	54						
47	0618	153	7901	167	0269	40	5597	264	3387	271	0620	38	53						
48	0770	152	8068	167	0309	40	5334	263	3116	271	0582	38	52						
49	0923	153	8235	167	0350	41	5071	263	2845	271	0544	38	51						
50	0.241075	152	0.248401	166	1.030390	40	4.14809	262	4.02574	271	0.970506	38	50						
cos		cotg		cosec		sec		tang		sin		c							
	36	37	38	39	40	41	42	152	153	166	167	168	246	247	248	249	250	252	
1	3.6	3.7	3.8	3.9	4.0	4.1	4.2	15.2	15.3	16.6	16.7	16.8	24.6	24.7	24.8	24.9	25.0	25.2	1
2	7.2	7.4	7.6	7.8	8.0	8.2	8.4	30.4	30.6	33.2	33.4	33.6	49.2	49.4	49.6	49.8	50.0	50.4	2
3	10.8	11.1	11.4	11.7	12.0	12.3	12.6	45.6	45.9	49.8	50.1	50.4	73.8	74.1	74.4	74.7	75.0	75.6	3
4	14.4	14.8	15.2	15.6	16.0	16.4	16.8	60.8	61.2	66.4	66.8	67.2	98.4	98.8	99.2	99.6	100.0	100.8	4
5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	76.0	76.5	83.0	83.5	84.0	123.0	123.5	124.0	124.5	125.0	126.0	5
6	21.6	22.2	22.8	23.4	24.0	24.6	25.2	91.2	91.8	99.6	100.2	100.8	147.6	148.2	148.8	149.4	150.0	151.2	6
7	25.2	25.9	26.6	27.3	28.0	28.7	29.4	106.4	107.1	116.2	116.9	117.6	172.2	172.9	173.6	174.3	175.0	176.4	7
8	28.8	29.6	30.4	31.2	32.0	32.8	33.6	121.6	122.4	132.8	133.6	134.4	196.8	197.6	198.4	199.2	200.0	201.6	8
9	32.4	33.3	34.2	35.1	36.0	36.9	37.8	136.8	137.7	149.4	150.3	151.2	221.4	222.3	223.2	224.1	225.0	226.8	9

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c	sin		tang		sec		cosec		cotg		cos								
50	0.241075	153	0.248401	167	1.030390	40	4.14809	263	4.02574	270	0.970506	37	50						
51	1228	152	8568	167	0430	40	4546	261	2304	269	0469	38	49						
52	1380	152	8735	167	0470	41	4285	262	2035	270	0431	38	48						
53	1532	153	8902	166	0511	40	4023	261	1765	269	0393	38	47						
54	1685	152	9068	167	0551	40	3762	261	1496	269	0355	38	46						
55	1837	153	9235	167	0591	40	3501	261	1227	269	0317	38	45						
56	1990	153	9402	167	0632	41	3241	260	0959	268	0279	38	44						
		152		167	0672	40		260		268		38							
57	2142	152	9569	167	0712	40	2981	260	0691		0241	38	43						
58	2294	152	9736	167	0753	41	2721	260	0423	268	0203	38	42						
59	2447	153	0.249903	167	0753	41	2462	259	4.00156	267	0165	38	41						
60	0.242599	152	0.250070	167	1.030793	40	4.12202	260	3.99889	267	0.970127	39	40						
		153		167		41		258		267		38							
61	2752	152	0237	166	0834	40	1944	259	9622	267	0088	38	39						
62	2904	152	0403	167	0874	41	1685	258	9355	266	0050	38	38						
63	3056	153	0570	167	0915	40	1427	258	9089	265	0.970012	38	37						
64	3209	152	0737	167	0955	41	1169	257	8824	266	0.969974	38	36						
65	3361	152	0904	167	0996	41	0912	257	8558	265	9936	38	35						
66	3513	153	1071	167	1037	40	0655	257	8293	265	9898	38	34						
		152		167	1077	41		257	8028	265	9859	39							
67	3666	152	1238	167	1118	41	4.10142	256	7764	264	9821	38	33						
68	3818	152	1405	167	1159	41	4.09886	256	7500	264	9783	38	32						
69	3970	153	1572	167		41	4.09630	256	3.97236	264	0.969744	39	31						
70	0.244123	152	0.251739	167	1.031200	40		256		263		38	30						
		153		167		41		256											
71	4275	152	1906	167	1240	41	9374	255	6973	263	9706	38	29						
72	4427	153	2073	168	1281	41	9119	254	6710	263	9668	38	28						
73	4580	152	2241	167	1322	41	8865	255	6447	262	9629	39	27						
		153		167		41		255		262		38							
74	4732	152	2408	167	1363	41	8610	254	6185	262	9591	39	26						
75	4884	153	2575	167	1404	41	8356	254	5923	262	9552	38	25						
76	5037	152	2742	167	1445	41	8102	253	5661	262	9514	38	24						
		153		167		41		253		262		39							
77	5189	152	2909	167	1486	41	7849	253	5399	261	9475	38	23						
78	5341	153	3076	167	1527	41	7596	253	5138	261	9437	38	22						
79	5494	152	3243	167	1568	41	7343	253	4877	261	9398	39	21						
		153		167		41		253		260		38							
80	0.245646	152	0.253410	168	1.031609	41	4.07090	252	3.94617	260	0.969360	39	20						
		153		167		41		252		260		39							
81	5798	152	3578	167	1650	41	6838	252	4357	260	9321	39	19						
82	5950	153	3745	167	1691	41	6586	252	4097	260	9282	39	18						
83	6103	152	3912	167	1732	41	6335	252	3837	260	9244	38	17						
		153		167		41		252		259		39							
84	6255	152	4079	167	1773	42	6083	250	3578	259	9205	39	16						
85	6407	152	4246	168	1815	41	5833	251	3319	258	9166	39	15						
86	6559	152	4414	167	1856	41	5582	250	3061	258	9128	38	14						
		153		167		41		250		258		39							
87	6711	153	4581	167	1897	41	5332	250	2803	258	9089	39	13						
88	6864	152	4748	167	1938	42	5082	250	2545	258	9050	39	12						
89	7016	152	4915	167	1980	42	4832	250	2287	258	9011	39	11						
		153		168		41		249		257		38							
90	0.247168	152	0.255083	167	1.032021	41	4.04583	249	3.92030	257	0.968973	39	10						
		153		167		41		249		257		39							
91	7320	153	5250	167	2062	42	4334	249	1773	257	8934	39	09						
92	7473	152	5417	168	2104	41	4085	248	1516	257	8895	39	08						
93	7625	152	5585	167	2145	42	3837	248	1260	256	8856	39	07						
		153		167		42		248		256		39							
94	7777	152	5752	167	2187	42	3589	248	1004	256	8817	39	06						
95	7929	152	5919	168	2228	41	3341	248	0748	256	8778	39	05						
96	8081	152	6087	167	2270	41	3094	247	0493	255	8739	39	04						
		153		168		42		247		255		39							
97	8233	153	6254	168	2311	42	2847	247	3.90238	255	8700	39	03						
98	8386	152	6422	167	2353	41	2600	247	3.89983	255	8661	39	02						
99	8538	152	6589	167	2394	42	2353	246	9728	255	8622	39	01						
100	0.248690	152	0.256756	167	1.032436		4.02107		3.89474	254	0.968583	39	00						
	cos		cotg		cosec		sec		tang		sin		c						
	254	256	258	260	262	264	266	268	270	272	274	276	278	280	282	284	286	288	
1	25.4	25.6	25.8	26.0	26.2	26.4	26.6	26.8	27.0	27.2	27.4	27.6	27.8	28.0	28.2	28.4	28.6	28.8	1
2	50.8	51.2	51.6	52.0	52.4	52.8	53.2	53.6	54.0	54.4	54.8	55.2	55.6	56.0	56.4	56.8	57.2	57.6	2
3	76.2	76.8	77.4	78.0	78.6	79.2	79.8	80.4	81.0	81.6	82.2	82.8	83.4	84.0	84.6	85.2	85.8	86.4	3
4	101.6	102.4	103.2	104.0	104.8	105.6	106.4	107.2	108.0	108.8	109.6	110.4	111.2	112.0	112.8	113.6	114.4	115.2	4
5	127.0	128.0	129.0	130.0	131.0	132.0	133.0	134.0	135.0	136.0	137.0	138.0	139.0	140.0	141.0	142.0	143.0	144.0	5
6	152.4	153.6	154.8	156.0	157.2	158.4	159.6	160.8	162.0	163.2	164.4	165.6	166.8	168.0	169.2	170.4	171.6	172.8	6
7	177.8	179.2	180.6	182.0	183.4	184.8	186.2	187.6	189.0	190.4	191.8	193.2	194.6	196.0	197.4	198.8	200.2	201.6	7
8	203.2	204.8	206.4	208.0	209.6	211.2	212.8	214.4	216.0	217.6	219.2	220.8	222.4	224.0	225.6	227.2	228.8	230.4	8
9	228.6	230.4	232.2	234.0	235.8	237.6	239.4	241.2	243.0	244.8	246.6	248.4	250.2	252.0	253.8	255.6	257.4	259.2	9

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c	sin		tang		sec		cosec		cotg		cos								
00	0.248690	152	0.256756	168	1.032436	42	4.02107	246	3.89474	254	0.968583	39	100						
01	8842	152	6924	167	2478	41	1861	245	9220	253	8544	39	99						
02	8994	152	7091	167	2519	41	1616	245	8967	253	8505	39	98						
03	9146	152	7259	168	2561	42	1371	245	8714	253	8466	39	97						
04	9298	152	7426	167	2603	42	1126	245	8461	253	8427	39	96						
05	9451	153	7594	168	2644	41	0881	245	8208	253	8388	39	95						
06	9603	152	7761	167	2686	42	0637	244	7956	252	8348	40	94						
07	9755	152	7929	168	2728	42	0393	244	7704	252	8309	39	93						
08	0.249907	152	8096	167	2770	42	4.00149	244	7452	252	8270	39	92						
09	0.250059	152	8264	168	2812	42	3.99906	243	7201	251	8231	39	91						
10	0.250211	152	0.258431	167	1.032854	42	3.99663	243	3.86950	251	0.968191	40	90						
11	0363	152	8599	168	2896	42	9420	243	6699	251	8152	39	89						
12	0515	152	8767	168	2938	42	9177	243	6449	250	8113	39	88						
13	0667	152	8934	167	2980	42	8935	242	6199	250	8073	40	87						
14	0819	152	9102	168	3022	42	8693	242	5949	250	8034	39	86						
15	0971	152	9269	167	3064	42	8452	241	5699	250	7995	39	85						
16	1123	152	9437	168	3106	42	8211	241	5450	249	7955	40	84						
17	1275	152	9605	168	3148	42	7970	241	5201	249	7916	39	83						
18	1427	152	9772	167	3190	42	7729	241	4952	249	7876	40	82						
19	1580	153	0.259940	168	3232	42	7489	240	4704	248	7837	39	81						
20	0.251732	152	0.260108	167	1.033274	43	3.97249	240	3.84456	248	0.967797	40	80						
21	1884	152	0275	168	3317	42	7009	240	4208	248	7758	39	79						
22	2036	152	0443	168	3359	42	6769	240	3961	247	7718	40	78						
23	2188	152	0611	168	3401	42	6530	239	3714	247	7678	40	77						
24	2340	152	0779	168	3444	43	6291	239	3467	247	7639	39	76						
25	2492	152	0946	167	3486	42	6053	238	3220	247	7599	40	75						
26	2644	152	1114	168	3528	42	5815	238	2974	246	7559	40	74						
27	2796	152	1282	168	3571	43	5577	238	2728	246	7520	39	73						
28	2948	152	1450	168	3613	42	5339	238	2483	245	7480	40	72						
29	3099	151	1618	168	3656	43	5102	237	2237	246	7440	40	71						
30	0.253251	152	0.261786	167	1.033698	42	3.94864	238	3.81992	245	0.967400	40	70						
31	3403	152	1953	168	3741	43	4628	236	1747	245	7361	39	69						
32	3555	152	2121	168	3783	42	4391	237	1503	244	7321	40	68						
33	3707	152	2289	168	3826	42	4155	236	1259	244	7281	40	67						
34	3859	152	2457	168	3868	42	3919	236	1015	244	7241	40	66						
35	4011	152	2625	168	3911	43	3683	236	0771	244	7201	40	65						
36	4163	152	2793	168	3954	43	3448	235	0528	243	7161	40	64						
37	4315	152	2961	168	3996	42	3213	235	0285	243	7121	40	63						
38	4467	152	3129	168	4039	43	2978	235	3.80042	243	7081	40	62						
39	4619	152	3297	168	4082	43	2744	234	3.79800	242	7041	40	61						
40	0.254771	152	0.263465	167	1.034125	43	3.92510	234	3.79558	242	0.967001	40	60						
41	4923	152	3633	168	4167	42	2276	234	9316	242	6961	40	59						
42	5075	152	3801	168	4210	43	2042	234	9074	242	6921	40	58						
43	5226	151	3969	168	4253	43	1809	233	8833	241	6881	40	57						
44	5378	152	4137	168	4296	43	1576	233	8592	241	6841	40	56						
45	5530	152	4305	168	4339	43	1343	233	8351	241	6801	40	55						
46	5682	152	4473	168	4382	43	1111	232	8111	240	6761	40	54						
47	5834	152	4641	168	4425	43	0879	232	7871	240	6721	40	53						
48	5986	152	4809	168	4468	43	0647	232	7631	240	6681	40	52						
49	6138	152	4977	168	4511	43	0415	232	7391	240	6640	41	51						
50	0.256289	151	0.265145	167	1.034554	43	3.90184	231	3.77152	239	0.966600	40	50						
cos		cotg		cosec		sec		tang		sin		c							
	39	40	41	42	43	44	45	151	152	153	167	168	169	218	219	220	221	222	
1	3.9	4.0	4.1	4.2	4.3	4.4	4.5	15.1	15.2	15.3	16.7	16.8	16.9	21.8	21.9	22.0	22.1	22.2	1
2	7.8	8.0	8.2	8.4	8.6	8.8	9.0	30.2	30.4	30.6	33.4	33.6	33.8	43.6	43.8	44.0	44.2	44.4	2
3	11.7	12.0	12.3	12.6	12.9	13.2	13.5	45.3	45.6	45.9	50.1	50.4	50.7	65.4	65.7	66.0	66.3	66.6	3
4	15.6	16.0	16.4	16.8	17.2	17.6	18.0	60.4	60.8	61.2	66.8	67.2	67.6	87.2	87.6	88.0	88.4	88.8	4
5	19.5	20.0	20.5	21.0	21.5	22.0	22.5	75.5	76.0	76.5	83.5	84.0	84.5	109.0	109.5	110.0	110.5	111.0	5
6	23.4	24.0	24.6	25.2	25.8	26.4	27.0	90.6	91.2	91.8	100.2	100.8	101.4	130.8	131.4	132.0	132.6	133.2	6
7	27.3	28.0	28.7	29.4	30.1	30.8	31.5	105.7	106.4	107.1	116.9	117.6	118.3	152.6	153.3	154.0	154.7	155.4	7
8	31.2	32.0	32.8	33.6	34.4	35.2	36.0	120.8	121.6	122.4	133.6	134.4	135.2	174.4	175.2	176.0	176.8	177.6	8
9	35.1	36.0	36.9	37.8	38.7	39.6	40.5	135.9	136.8	137.7	150.3	151.2	152.1	196.2	197.1	198.0	198.9	199.8	9

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c	sin		tang		sec		cosec		cotg		cos								
50	0.256289	152	0.265145	168	1.034554	43	3.90184	231	3.77152	239	0.966600	40	50						
51	6441	152	5313	168	4597	43	3.89953	231	6913	239	6560	40	49						
52	6593	152	5481	169	4640	43	9722	231	6674	239	6520	40	48						
53	6745	152	5650	169	4683	43	9492	230	6436	238	6479	41	47						
54	6897	152	5818	168	4727	44	9262	230	6198	238	6439	40	46						
55	7048	151	5986	168	4770	43	9032	230	5960	238	6399	40	45						
56	7200	152	6154	168	4813	43	8802	230	5722	238	6358	41	44						
57	7352	152	6322	168	4856	43	8573	229	5485	237	6318	40	43						
58	7504	152	6491	169	4900	44	8344	229	5248	237	6277	41	42						
59	7656	152	6659	168	4943	43	8115	229	5011	237	6237	40	41						
60	0.257807	151	0.266827	168	1.034986	43	3.87886	229	3.74774	237	0.966196	41	40						
61	7959	152	6995	169	5030	44	7658	228	4538	236	6156	40	39						
62	8111	152	7164	169	5073	43	7430	228	4302	236	6115	41	38						
63	8263	152	7332	168	5117	44	7203	227	4067	235	6075	40	37						
64	8414	151	7500	168	5160	43	6975	228	3831	236	6034	41	36						
65	8566	152	7669	169	5204	44	6748	227	3596	235	5994	40	35						
66	8718	152	7837	168	5247	43	6521	227	3361	235	5953	41	34						
67	8870	152	8005	168	5291	44	6295	226	3127	234	5912	41	33						
68	9021	151	8174	169	5334	43	6069	226	2893	234	5872	40	32						
69	9173	152	8342	168	5378	44	5843	226	2659	234	5831	41	31						
70	0.259325	152	0.268510	168	1.035422	44	3.85617	226	3.72425	233	0.965790	41	30						
71	9476	151	8679	169	5465	43	5391	226	2192	234	5749	40	29						
72	9628	152	8847	168	5509	44	5166	225	1958	234	5709	41	28						
73	9780	152	9016	169	5553	44	4941	225	1725	233	5668	41	27						
74	0.259932	152	9184	168	5597	44	4717	224	1493	232	5627	41	26						
75	0.260083	151	9353	169	5640	43	4492	225	1260	233	5586	41	25						
76	0235	152	9521	168	5684	44	4268	224	1028	232	5545	41	24						
77	0387	152	9690	169	5728	44	4044	224	0797	231	5504	41	23						
78	0538	151	0.269858	168	5772	44	3821	223	0565	232	5464	40	22						
79	0690	152	0.270027	169	5816	44	3598	223	0334	231	5423	41	21						
80	0.260842	152	0.270195	168	1.035860	44	3.83375	223	3.70103	231	0.965382	41	20						
81	0993	151	0364	169	5904	44	3152	223	3.69872	231	5341	41	19						
82	1145	152	0532	168	5948	44	2929	223	9642	230	5300	41	18						
83	1296	151	0701	169	5992	44	2707	222	9411	231	5259	41	17						
84	1448	152	0870	169	6036	44	2485	222	9181	230	5218	41	16						
85	1600	152	1038	168	6080	44	2264	221	8952	229	5176	42	15						
86	1751	151	1207	169	6124	44	2042	222	8722	230	5135	41	14						
87	1903	152	1375	168	6168	44	1821	221	8493	229	5094	41	13						
88	2054	151	1544	169	6212	44	1600	221	8264	229	5053	41	12						
89	2206	152	1713	169	6257	45	1379	221	8036	228	5012	41	11						
90	0.262358	152	0.271881	168	1.036301	44	3.81159	220	3.67807	229	0.964971	41	10						
91	2509	151	2050	169	6345	44	0939	220	7579	228	4929	42	09						
92	2661	152	2219	169	6389	44	0719	220	7352	227	4888	41	08						
93	2812	151	2388	169	6434	45	0500	219	7124	228	4847	41	07						
94	2964	152	2556	168	6478	44	0280	220	6897	227	4806	41	06						
95	3115	151	2725	169	6523	45	3.80061	219	6670	227	4764	42	05						
96	3267	152	2894	169	6567	44	3.79843	218	6443	227	4723	41	04						
97	3418	151	3063	169	6611	44	9624	219	6216	227	4682	41	03						
98	3570	152	3231	168	6656	45	9406	218	5990	226	4640	42	02						
99	3722	152	3400	169	6700	44	9188	218	5764	226	4599	41	01						
100	0.263873	151	0.273569	169	1.036745	45	3.78970	218	3.65538	226	0.964557	42	00						
cos		cotg		cosec		sec		tang		sin		c							
	223	224	225	226	228	230	232	234	236	238	240	242	244	246	248	250	252	254	
1	22.3	22.4	22.5	22.6	22.8	23.0	23.2	23.4	23.6	23.8	24.0	24.2	24.4	24.6	24.8	25.0	25.2	25.4	1
2	44.6	44.8	45.0	45.2	45.6	46.0	46.4	46.8	47.2	47.6	48.0	48.4	48.8	49.2	49.6	50.0	50.4	50.8	2
3	66.9	67.2	67.5	67.8	68.4	69.0	69.6	70.2	70.8	71.4	72.0	72.6	73.2	73.8	74.4	75.0	75.6	76.2	3
4	89.2	89.6	90.0	90.4	91.2	92.0	92.8	93.6	94.4	95.2	96.0	96.8	97.6	98.4	99.2	100.0	100.8	101.6	4
5	111.5	112.0	112.5	113.0	114.0	115.0	116.0	117.0	118.0	119.0	120.0	121.0	122.0	123.0	124.0	125.0	126.0	127.0	5
6	133.8	134.4	135.0	135.6	136.8	138.0	139.2	140.4	141.6	142.8	144.0	145.2	146.4	147.6	148.8	150.0	151.2	152.4	6
7	156.1	156.8	157.5	158.2	159.6	161.0	162.4	163.8	165.2	166.6	168.0	169.4	170.8	172.2	173.6	175.0	176.4	177.8	7
8	178.4	179.2	180.0	180.8	182.4	184.0	185.6	187.2	188.8	190.4	192.0	193.6	195.2	196.8	198.4	200.0	201.6	203.2	8
9	200.7	201.6	202.5	203.4	205.2	207.0	208.8	210.6	212.4	214.2	216.0	217.8	219.6	221.4	223.2	225.0	226.8	228.6	9

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c	sin		tang		sec		cosec		cotg		cos								
00	0.263873	152	0.273569	169	1.036745	44	3.78970	217	3.65538	225	0.964557	41	100						
01	4025	151	3738	169	6789	45	8753	218	5313	225	4516	42	99						
02	4176	152	3907	169	6834	45	8535	217	5088	225	4474	41	98						
03	4328	151	4076	169	6879	44	8318	216	4863	225	4433	42	97						
04	4479	152	4245	168	6923	45	8102	217	4638	224	4391	41	96						
05	4631	151	4413	169	6968	45	7885	216	4414	224	4350	42	95						
06	4782	151	4582	169	7013	44	7669	216	4190	224	4308	41	94						
07	4933	152	4751	169	7057	45	7453	215	3966	224	4267	42	93						
08	5085	151	4920	169	7102	45	7238	216	3742	223	4225	42	92						
09	5236	152	5089	169	7147	45	7022	215	3519	224	4183	41	91						
10	0.265388	151	0.275258	169	1.037192	45	3.76807	215	3.63295	223	0.964142	42	90						
11	5539	152	5427	169	7237	45	6592	215	3072	222	4100	42	89						
12	5691	151	5596	169	7282	45	6377	214	2850	223	4058	41	88						
13	5842	152	5765	169	7327	45	6163	214	2627	222	4017	42	87						
14	5994	151	5934	169	7372	44	5949	214	2405	222	3975	42	86						
15	6145	151	6103	169	7416	46	5735	214	2183	221	3933	42	85						
16	6296	152	6272	169	7462	45	5521	213	1962	222	3891	42	84						
17	6448	151	6441	169	7507	45	5308	213	1740	221	3849	42	83						
18	6599	152	6610	169	7552	45	5095	213	1519	221	3807	42	82						
19	6751	151	6780	170	7597	45	4882	213	1298	220	3766	41	81						
20	0.266902	151	0.276949	169	1.037642	45	3.74669	212	3.61078	221	0.963724	42	80						
21	7053	152	7118	169	7687	45	4457	212	0857	220	3682	42	79						
22	7205	151	7287	169	7732	45	4245	212	0637	220	3640	42	78						
23	7356	151	7456	169	7777	46	4033	212	0417	219	3598	42	77						
24	7507	152	7625	169	7823	45	3821	211	3.60198	220	3556	42	76						
25	7659	151	7794	170	7868	45	3610	211	3.59978	219	3514	42	75						
26	7810	151	7964	169	7913	46	3399	211	9759	219	3472	42	74						
27	7961	152	8133	169	7959	45	3188	211	9540	219	3430	42	73						
28	8113	151	8302	169	8004	45	2977	211	9322	218	3388	42	72						
29	8264	151	8471	169	8049	45	2767	210	9103	219	3345	43	71						
30	0.268415	151	0.278641	170	1.038095	46	3.72557	210	3.58885	218	0.963303	42	70						
31	8567	152	8810	169	8140	45	2347	210	8667	218	3261	42	69						
32	8718	151	8979	169	8186	46	2137	210	8450	217	3219	42	68						
33	8869	151	9149	170	8231	45	1928	209	8232	218	3177	42	67						
34	9021	152	9318	169	8277	46	1719	209	8015	217	3134	43	66						
35	9172	151	9487	169	8322	45	1510	209	7798	217	3092	42	65						
36	9323	151	9657	170	8368	46	1301	209	7581	217	3050	42	64						
37	9475	152	9826	169	8413	45	1093	208	7365	216	3008	42	63						
38	9626	151	0.279995	169	8459	46	0884	209	7149	216	2965	43	62						
39	9777	151	0.280165	170	8505	46	0676	208	6933	216	2923	42	61						
40	0.269928	151	0.280334	169	1.038551	46	3.70469	207	3.56717	216	0.962880	43	60						
41	0.270080	152	0504	170	8596	45	0261	208	6502	215	2838	42	59						
42	0231	151	0673	169	8642	46	3.70054	207	6286	216	2796	42	58						
43	0382	151	0843	170	8688	46	3.69847	207	6071	215	2753	43	57						
44	0533	151	1012	169	8734	46	9640	207	5857	214	2711	42	56						
45	0684	151	1181	169	8780	46	9434	206	5642	215	2668	43	55						
46	0836	152	1351	170	8825	45	9228	206	5428	214	2626	42	54						
47	0987	151	1521	170	8871	46	9022	206	5214	214	2583	43	53						
48	1138	151	1690	169	8917	46	8816	206	5000	214	2540	43	52						
49	1289	151	1860	170	8963	46	8610	206	4787	213	2498	42	51						
50	0.271440	151	0.282029	169	1.039009	46	3.68405	205	3.54573	214	0.962455	43	50						
cos		cotg		cosec		sec		tang		sin		c							
	41	42	43	44	45	46	47	48	150	151	152	168	169	170	171	194	195	196	
1	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	15.0	15.1	15.2	16.8	16.9	17.0	17.1	19.4	19.5	19.6	1
2	8.2	8.4	8.6	8.8	9.0	9.2	9.4	9.6	30.0	30.2	30.4	33.6	33.8	34.0	34.2	38.8	39.0	39.2	2
3	12.3	12.6	12.9	13.2	13.5	13.8	14.1	14.4	45.0	45.3	45.6	50.4	50.7	51.0	51.3	58.2	58.5	58.8	3
4	16.4	16.8	17.2	17.6	18.0	18.4	18.8	19.2	60.0	60.4	60.8	67.2	67.6	68.0	68.4	77.6	78.0	78.4	4
5	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	75.0	75.5	76.0	84.0	84.5	85.0	85.5	97.0	97.5	98.0	5
6	24.6	25.2	25.8	26.4	27.0	27.6	28.2	28.8	90.0	90.6	91.2	100.8	101.4	102.0	102.6	116.4	117.0	117.6	6
7	28.7	29.4	30.1	30.8	31.5	32.2	32.9	33.6	105.0	105.7	106.4	117.6	118.3	119.0	119.7	135.8	136.5	137.2	7
8	32.8	33.6	34.4	35.2	36.0	36.8	37.6	38.4	120.0	120.8	121.6	134.4	135.2	136.0	136.8	155.2	156.0	156.8	8
9	36.9	37.8	38.7	39.6	40.5	41.4	42.3	43.2	135.0	135.9	136.8	151.2	152.1	153.0	153.9	174.6	175.5	176.4	9

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c	sin		tang		sec		cosec		cotg		cos								
50	0.271440	152	0.282029	170	1.039009	46	3.68405	205	3.54573	213	0.962455	42	50						
51	1592	151	2199	169	9055	46	8200	205	4360	213	2413	43	49						
52	1743	151	2368	170	9101	47	7995	205	4147	212	2370	43	48						
53	1894	151	2538	170	9148	47	7790	205	3935	212	2327	43	47						
		151		170		46		204		213		43	46						
54	2045	151	2708	169	9194	46	7586	204	3722	212	2284	42	45						
55	2196	151	2877	170	9240	46	7382	204	3510	212	2242	43	44						
56	2347	151	3047	170	9286	46	7178	204	3298	212	2199	43	44						
		152		170		46		204		211		43							
57	2499	151	3217	169	9332	47	6974	203	3087	212	2156	43	43						
58	2650	151	3386	169	9379	47	6771	203	2875	212	2113	43	42						
59	2801	151	3556	170	9425	46	6568	203	2664	211	2071	42	41						
60	0.272952	151	0.283726	169	1.039471	46	3.66365	203	3.52453	211	0.962028	43	40						
61	3103	151	3895	170	9517	47	6162	202	2242	210	1985	43	39						
62	3254	151	4065	170	9564	46	5960	203	2032	210	1942	43	38						
63	3405	151	4235	170	9610	46	5757	202	1822	210	1899	43	37						
		151		170		47		202		210		43							
64	3556	151	4405	169	9657	46	5555	201	1612	210	1856	43	36						
65	3707	152	4574	170	9703	47	5354	202	1402	210	1813	43	35						
66	3859	151	4744	170	9750	47	5152	202	1192	210	1770	43	34						
		151		170		46		201		209		43							
67	4010	151	4914	170	9796	47	4951	201	0983	209	1727	43	33						
68	4161	151	5084	170	9843	47	4750	201	0774	209	1684	43	32						
69	4312	151	5254	170	9889	46	4549	201	0565	209	1641	43	31						
		151		170		47		201		209		43							
70	0.274463	151	0.285424	170	1.039936	47	3.64348	200	3.50356	208	0.961598	43	30						
71	4614	151	5594	170	1.039983	47	4148	200	3.50148	208	1555	43	29						
72	4765	151	5763	169	1.040029	46	3948	200	3.49940	208	1511	44	28						
73	4916	151	5933	170	0076	47	3748	200	9732	208	1468	43	27						
		151		170		47		200		208		43							
74	5067	151	6103	170	0123	46	3548	200	9524	207	1425	43	26						
75	5218	151	6273	170	0169	47	3348	200	9317	207	1382	43	25						
76	5369	151	6443	170	0216	47	3149	199	9109	208	1339	43	24						
		151		170		47		199		207		44							
77	5520	151	6613	170	0263	47	2950	199	8902	207	1295	43	23						
78	5671	151	6783	170	0310	47	2751	199	8696	206	1252	43	22						
79	5822	151	6953	170	0357	47	2553	198	8489	207	1209	43	21						
		151		170		47		198		207		43							
80	0.275973	151	0.287123	170	1.040404	47	3.62354	199	3.48283	206	0.961165	44	20						
81	6124	151	7293	170	0451	47	2156	198	8076	207	1122	43	19						
82	6275	151	7463	170	0498	47	1958	198	7871	205	1079	43	18						
83	6426	151	7633	170	0545	47	1761	197	7665	206	1035	44	17						
		151		170		47		198		206		43							
84	6577	151	7803	171	0592	47	1563	197	7459	205	0992	44	16						
85	6728	151	7974	170	0639	47	1366	197	7254	205	0948	43	15						
86	6879	151	8144	170	0686	47	1169	197	7049	205	0905	43	14						
		151		170		47		197		205		44							
87	7030	151	8314	170	0733	47	0972	196	6844	204	0861	43	13						
88	7181	150	8484	170	0780	47	0776	196	6640	204	0818	43	12						
89	7331	150	8654	170	0827	47	0579	197	6435	205	0774	44	11						
		151		170		47		196		204		43							
90	0.277482	151	0.288824	170	1.040874	48	3.60383	196	3.46231	204	0.960731	44	10						
91	7633	151	8994	171	0922	47	3.60187	196	6027	204	0687	44	09						
92	7784	151	9165	171	0969	47	3.59992	195	5824	203	0644	43	08						
93	7935	151	9335	170	1016	47	9796	196	5620	204	0600	44	07						
		151		170		47		195		203		44							
94	8086	151	9505	170	1063	47	9601	195	5417	203	0556	44	06						
95	8237	151	9675	170	1111	48	9406	195	5214	203	0513	43	05						
96	8388	151	0.289846	171	1158	48	9211	195	5011	203	0469	44	04						
		151		170		48		194		202		44							
97	8539	150	0.290016	170	1206	47	9017	195	4809	203	0425	44	03						
98	8689	151	0186	171	1253	47	8822	195	4606	203	0381	44	02						
99	8840	151	0357	171	1301	48	8628	194	4404	202	0337	44	01						
		151		170		47		194		202		43							
100	0.278991	151	0.290527	170	1.041348	47	3.58434	194	3.44202	202	0.960294	43	00						
cos		cotg		cosec		sec		tang		sin		c							
	197	198	199	200	201	202	203	205	207	209	211	213	215	217	219	221	223	225	
1	19.7	19.8	19.9	20.0	20.1	20.2	20.3	20.5	20.7	20.9	21.1	21.3	21.5	21.7	21.9	22.1	22.3	22.5	1
2	39.4	39.6	39.8	40.0	40.2	40.4	40.6	41.0	41.4	41.8	42.2	42.6	43.0	43.4	43.8	44.2	44.6	45.0	2
3	59.1	59.4	59.7	60.0	60.3	60.6	60.9	61.5	62.1	62.7	63.3	63.9	64.5	65.1	65.7	66.3	66.9	67.5	3
4	78.8	79.2	79.6	80.0	80.4	80.8	81.2	82.0	82.8	83.6	84.4	85.2	86.0	86.8	87.6	88.4	89.2	90.0	4
5	98.5	99.0	99.5	100.0	100.5	101.0	101.5	102.5	103.5	104.5	105.5	106.5	107.5	108.5	109.5	110.5	111.5	112.5	5
6	118.2	118.8	119.4	120.0	120.6	121.2	121.8	123.0	124.2	125.4	126.6	127.8	129.0	130.2	131.4	132.6	133.8	135.0	6
7	137.9	138.6	139.3	140.0	140.7	141.4	142.1	143.5	144.9	146.3	147.7	149.1	150.5	151.9	153.3	154.7	156.1	157.5	7
8	157.6	158.4	159.2	160.0	160.8	161.6	162.4	164.0	165.6	167.2	168.8	170.4	172.0	173.6	175.2	176.8	178.4	180.0	8
9	177.3	178.2	179.1	180.0	180.9	181.8	182.7	184.5	186.3	188.1	189.9	191.7	193.5	195.3	197.1	198.9	200.7	202.5	9

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c	sin		tang		sec		cosec		cotg		cos								
00	0.278991	151	0.290527	170	1.041348	48	3.58434	193	3.44202	201	0.960294	44	100						
01	9142	151	0697	171	1396	47	8241	194	4001	202	0250	44	99						
02	9293	151	0868	171	1443	47	8047	194	3799	202	0206	44	98						
03	9444	151	1038	170	1491	48	7854	193	3598	201	0162	44	97						
04	9594	150	1208	170	1538	47	7661	193	3397	201	0118	44	96						
05	9745	151	1379	171	1586	48	7468	193	3196	201	0074	44	95						
06	0.279896	151	1549	170	1634	48	7276	192	2995	201	0.960030	44	94						
07	0.280047	151	1720	171	1681	47	7083	193	2795	200	0.959986	44	93						
08	0198	151	1890	170	1729	48	6891	192	2595	200	9942	44	92						
09	0348	150	2061	171	1777	48	6699	192	2395	200	9898	44	91						
10	0.280499	151	0.292231	170	1.041825	48	3.56507	192	3.42195	200	0.959854	44	90						
11	0650	151	2402	171	1873	48	6316	191	1995	200	9810	44	89						
12	0801	151	2572	170	1921	48	6124	192	1796	199	9766	44	88						
13	0951	150	2743	171	1968	47	5933	191	1597	199	9722	44	87						
14	1102	151	2913	170	2016	48	5742	191	1398	199	9678	44	86						
15	1253	151	3084	171	2064	48	5552	190	1199	199	9634	44	85						
16	1404	151	3254	170	2112	48	5361	191	1001	198	9589	45	84						
17	1554	150	3425	171	2160	48	5171	190	0803	198	9545	44	83						
18	1705	151	3595	170	2208	48	4981	190	0605	198	9501	44	82						
19	1856	151	3766	171	2256	48	4791	190	0407	198	9457	44	81						
20	0.282007	151	0.293937	171	1.042305	48	3.54602	189	3.40209	197	0.959412	45	80						
21	2157	150	4107	170	2353	49	4412	190	3.40012	198	9368	44	79						
22	2308	151	4278	171	2401	48	4223	189	3.39815	197	9324	44	78						
23	2459	151	4449	171	2449	48	4034	189	9618	197	9279	45	77						
24	2609	150	4619	170	2497	48	3845	189	9421	197	9235	44	76						
25	2760	151	4790	171	2546	49	3657	188	9224	197	9191	44	75						
26	2911	151	4961	171	2594	48	3468	189	9028	196	9146	45	74						
27	3061	150	5132	171	2642	48	3280	188	8832	196	9102	44	73						
28	3212	151	5302	170	2691	49	3092	188	8636	196	9057	45	72						
29	3363	151	5473	171	2739	48	2905	187	8440	196	9013	44	71						
30	0.283513	150	0.295644	171	1.042787	48	3.52717	188	3.38245	195	0.958968	45	70						
31	3664	151	5815	171	2836	49	2530	187	8049	196	8924	44	69						
32	3815	151	5986	171	2884	48	2343	187	7854	195	8879	45	68						
33	3965	150	6157	171	2933	49	2156	187	7659	195	8835	44	67						
34	4116	151	6327	170	2981	48	1969	187	7465	194	8790	45	66						
35	4266	150	6498	171	3030	49	1783	186	7270	195	8745	45	65						
36	4417	151	6669	171	3078	48	1596	187	7076	194	8701	44	64						
37	4568	151	6840	171	3127	49	1410	186	6882	194	8656	45	63						
38	4718	150	7011	171	3176	49	1225	185	6688	194	8611	45	62						
39	4869	151	7182	171	3224	48	1039	186	6494	194	8567	44	61						
40	0.285019	150	0.297353	171	1.043273	49	3.50853	186	3.36301	193	0.958522	45	60						
41	5170	151	7524	171	3322	49	0668	185	6107	194	8477	45	59						
42	5320	150	7695	171	3371	49	0483	185	5914	193	8432	45	58						
43	5471	151	7866	171	3419	48	0298	185	5722	192	8387	45	57						
44	5621	150	8037	171	3468	49	3.50114	184	5529	193	8343	44	56						
45	5772	151	8208	171	3517	49	3.49929	185	5336	193	8298	45	55						
46	5923	151	8379	171	3566	49	9745	184	5144	192	8253	45	54						
47	6073	150	8550	171	3615	49	9561	184	4952	192	8208	45	53						
48	6224	151	8721	171	3664	49	9377	184	4760	192	8163	45	52						
49	6374	150	8892	171	3713	49	9194	183	4569	191	8118	45	51						
50	0.286525	151	0.299063	171	1.043762	49	3.49010	184	3.34377	192	0.958073	45	50						
cos		cotg		cosec		sec		tang		sin		c							
	44	45	46	47	48	49	50	51	150	151	170	171	172	174	175	176	177	178	
1	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	15.0	15.1	17.0	17.1	17.2	17.4	17.5	17.6	17.7	17.8	1
2	8.8	9.0	9.2	9.4	9.6	9.8	10.0	10.2	30.0	30.2	34.0	34.2	34.4	34.8	35.0	35.2	35.4	35.6	2
3	13.2	13.5	13.8	14.1	14.4	14.7	15.0	15.3	45.0	45.3	51.0	51.3	51.6	52.2	52.5	52.8	53.1	53.4	3
4	17.6	18.0	18.4	18.8	19.2	19.6	20.0	20.4	60.0	60.4	68.0	68.4	68.8	69.6	70.0	70.4	70.8	71.2	4
5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	75.0	75.5	85.0	85.5	86.0	87.0	87.5	88.0	88.5	89.0	5
6	26.4	27.0	27.6	28.2	28.8	29.4	30.0	30.6	90.0	90.6	102.0	102.6	103.2	104.4	105.0	105.6	106.2	106.8	6
7	30.8	31.5	32.2	32.9	33.6	34.3	35.0	35.7	105.0	105.7	119.0	119.7	120.4	121.8	122.5	123.2	123.9	124.6	7
8	35.2	36.0	36.8	37.6	38.4	39.2	40.0	40.8	120.0	120.8	136.0	136.8	137.6	139.2	140.0	140.8	141.6	142.4	8
9	39.6	40.5	41.4	42.3	43.2	44.1	45.0	45.9	135.0	135.9	153.0	153.9	154.8	156.6	157.5	158.4	159.3	160.2	9

81^g

18^g

c	sin		tang		sec		cosec		cotg		cos								
50	0.286525	150	0.299063	172	1.043762	49	3.49010	183	3.34377	191	0.958073	45	50						
51	6675	151	9235	171	3811	49	8827	183	4186	191	8028	45	49						
52	6826	150	9406	171	3860	49	8644	183	3995	191	7983	45	48						
53	6976	150	9577	171	3909	49	8461	183	3804	191	7938	45	47						
		150		171		49		182		190		45							
54	7126	151	9748	171	3958	49	8279	183	3614	191	7893	45	46						
55	7277	150	0.299919	171	4007	49	8096	183	3423	191	7848	45	45						
56	7427	150	0.300090	171	4057	50	7914	182	3233	190	7802	46	44						
		151		172		49		182		190		45							
57	7578	150	0262	171	4106	49	7732	182	3043	190	7757	45	43						
58	7728	150	0433	171	4155	49	7550	182	2853	190	7712	45	42						
59	7879	151	0604	171	4204	49	7369	181	2663	190	7667	45	41						
60	0.288029	150	0.300776	172	1.044254	50	3.47187	182	3.32474	189	0.957622	45	40						
61	8180	151	0947	171	4303	49	7006	181	2285	189	7576	45	39						
62	8330	150	1118	171	4352	49	6825	181	2096	189	7531	45	38						
63	8480	150	1289	171	4402	50	6644	181	1907	189	7486	45	37						
		151		172		49		181		189		46							
64	8631	150	1461	171	4451	50	6463	180	1718	188	7440	45	36						
65	8781	150	1632	171	4501	50	6283	180	1530	188	7395	45	35						
66	8932	151	1804	172	4550	49	6103	180	1341	189	7350	45	34						
		150		171		50		180		188		46							
67	9082	150	1975	171	4600	49	5923	180	1153	188	7304	45	33						
68	9232	150	2146	171	4649	49	5743	180	0965	188	7259	45	32						
69	9383	151	2318	172	4699	50	5563	180	0778	187	7213	46	31						
		150		171		50		179		188		45							
70	0.289533	150	0.302489	172	1.044749	49	3.45384	179	3.30590	187	0.957168	45	30						
71	9683	150	2661	172	4798	49	5205	179	0403	187	7123	45	29						
72	9834	151	2832	171	4848	50	5025	180	0216	187	7077	46	28						
73	0.289984	150	3004	172	4898	50	4847	178	3.30029	187	7031	46	27						
		150		171		49		179		187		45							
74	0.290134	151	3175	172	4947	50	4668	179	3.29842	186	6986	46	26						
75	0285	150	3347	171	4997	50	4489	179	9656	186	6940	45	25						
76	0435	150	3518	172	5047	50	4311	178	9470	186	6895	45	24						
		150		172		50		178		187		46							
77	0585	151	3690	171	5097	50	4133	178	9283	186	6849	46	23						
78	0736	151	3861	171	5147	50	3955	178	9097	186	6803	46	22						
79	0886	150	4033	172	5197	50	3777	178	8912	185	6758	45	21						
		150		172		50		177		186		46							
80	0.291036	150	0.304205	171	1.045247	50	3.43600	177	3.28726	186	0.956712	45	20						
81	1186	150	4376	171	5297	50	3423	177	8541	185	6666	46	19						
82	1337	151	4548	172	5347	50	3245	178	8356	185	6621	45	18						
83	1487	150	4719	171	5397	50	3069	176	8171	185	6575	46	17						
		150		172		50		177		185		46							
84	1637	150	4891	172	5447	50	2892	177	7986	185	6529	46	16						
85	1787	151	5063	172	5497	50	2715	177	7801	185	6483	46	15						
86	1938	151	5235	172	5547	50	2539	176	7617	184	6437	46	14						
		150		171		50		176		184		46							
87	2088	150	5406	172	5597	50	2363	176	7433	184	6391	45	13						
88	2238	150	5578	172	5647	50	2187	176	7249	184	6346	45	12						
89	2388	150	5750	172	5697	50	2011	176	7065	184	6300	46	11						
		151		172		51		176		184		46							
90	0.292539	150	0.305922	171	1.045748	50	3.41835	175	3.26881	183	0.956254	46	10						
91	2689	150	6093	172	5798	50	1660	175	6698	184	6208	46	09						
92	2839	150	6265	172	5848	50	1485	175	6514	184	6162	46	08						
93	2989	150	6437	172	5898	50	1310	175	6331	183	6116	46	07						
		150		172		51		175		182		46							
94	3139	151	6609	172	5949	50	1135	175	6149	183	6070	46	06						
95	3290	150	6781	172	5999	50	0960	175	5966	183	6024	46	05						
96	3440	150	6953	171	6050	50	0785	174	5783	182	5978	46	04						
		150		172		51		174		182		47							
97	3590	150	7124	172	6100	51	0611	174	5601	182	5931	46	03						
98	3740	150	7296	172	6151	50	0437	174	5419	182	5885	46	02						
99	3890	150	7468	172	6201	50	0263	174	5237	182	5839	46	01						
		150		172		51		174		182		46							
100	0.294040		0.307640		1.046252		3.40089		3.25055		0.955793		00						
	cos		cotg		cosec		sec		tang		sin		c						
	179	180	181	182	183	184	185	186	187	188	189	190	192	194	196	198	200	202	
1	17.9	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	19.0	19.2	19.4	19.6	19.8	20.0	20.2	1
2	35.8	36.0	36.2	36.4	36.6	36.8	37.0	37.2	37.4	37.6	37.8	38.0	38.4	38.8	39.2	39.6	40.0	40.4	2
3	53.7	54.0	54.3	54.6	54.9	55.2	55.5	55.8	56.1	56.4	56.7	57.0	57.6	58.2	58.8	59.4	60.0	60.6	3
4	71.6	72.0	72.4	72.8	73.2	73.6	74.0	74.4	74.8	75.2	75.6	76.0	76.8	77.6	78.4	79.2	80.0	80.8	4
5	89.5	90.0	90.5	91.0	91.5	92.0	92.5	93.0	93.5	94.0	94.5	95.0	96.0	97.0	98.0	99.0	100.0	101.0	5
6	107.4	108.0	108.6	109.2	109.8	110.4	111.0	111.6	112.2	112.8	113.4	114.0	115.2	116.4	117.6	118.8	120.0	121.2	6
7	125.3	126.0	126.7	127.4	128.1	128.8	129.5	130.2	130.9	131.6	132.3	133.0	134.4	135.8	137.2	138.6	140.0	141.4	7
8	143.2	144.0	144.8	145.6	146.4	147.2	148.0	148.8	149.6	150.4	151.2	152.0	153.6	155.2	156.8	158.4	160.0	161.6	8
9	161.1	162.0	162.9	163.8	164.7	165.6	166.5	167.4	168.3	169.2	170.1	171.0	172.8	174.6	176.4	178.2	180.0	181.8	9

c	sin		tang		sec		cosec		cotg		cos								
00	0.294040	150	0.307640	172	1.046252	50	3.40089	173	3.25055	182	0.955793	46	100						
01	4190	151	7812	172	6302	51	3.39916	174	4873	181	5747	46	99						
02	4341	150	7984	172	6353	51	9742	174	4692	181	5701	46	98						
03	4491	150	8156	172	6403	50	9569	173	4511	181	5654	47	97						
04	4641	150	8328	172	6454	51	9396	173	4330	181	5608	46	96						
05	4791	150	8500	172	6505	51	9223	173	4149	181	5562	46	95						
06	4941	150	8672	172	6556	51	9051	172	3968	181	5515	47	94						
07	5091	150	8844	172	6606	50	8878	173	3788	180	5469	46	93						
08	5241	150	9016	172	6657	51	8706	172	3608	180	5423	46	92						
09	5391	150	9188	172	6708	51	8534	172	3427	181	5376	47	91						
10	0.295541	150	0.309360	172	1.046759	51	3.38362	172	3.23248	179	0.955330	46	90						
11	5691	150	9533	172	6810	51	8190	171	3068	180	5284	47	89						
12	5841	150	9705	172	6861	51	8019	171	2888	180	5237	47	88						
13	5991	150	0.309877	172	6911	50	7848	171	2709	179	5191	46	87						
14	6142	151	0.310049	172	6962	51	7676	172	2530	179	5144	47	86						
15	6292	150	0221	172	7013	51	7505	171	2351	179	5098	46	85						
16	6442	150	0393	172	7065	52	7335	170	2172	179	5051	47	84						
17	6592	150	0566	173	7116	51	7164	171	1993	179	5004	47	83						
18	6742	150	0738	172	7167	51	6994	170	1815	178	4958	46	82						
19	6892	150	0910	172	7218	51	6823	171	1636	179	4911	47	81						
20	0.297042	150	0.311082	172	1.047269	51	3.36653	170	3.21458	178	0.954865	46	80						
21	7192	150	1255	172	7320	51	6483	169	1280	177	4818	47	79						
22	7342	150	1427	172	7371	52	6314	170	1103	178	4771	47	78						
23	7492	149	1599	173	7423	51	6144	169	0925	177	4724	46	77						
24	7641	150	1772	172	7474	51	5975	170	0748	178	4678	47	76						
25	7791	150	1944	172	7525	52	5805	169	0570	177	4631	47	75						
26	7941	150	2116	172	7577	52	5636	169	0393	177	4584	47	74						
27	8091	150	2289	173	7628	51	5468	168	0216	177	4537	47	73						
28	8241	150	2461	172	7679	51	5299	169	3.20040	176	4491	46	72						
29	8391	150	2634	173	7731	52	5131	168	3.19863	177	4444	47	71						
30	0.298541	150	0.312806	172	1.047782	51	3.34962	169	3.19687	176	0.954397	47	70						
31	8691	150	2979	173	7834	52	4794	168	9511	176	4350	47	69						
32	8841	150	3151	172	7885	51	4626	168	9335	176	4303	47	68						
33	8991	150	3324	173	7937	52	4458	168	9159	176	4256	47	67						
34	9141	150	3496	172	7988	51	4291	167	8983	176	4209	47	66						
35	9291	150	3669	173	8040	52	4123	168	8808	175	4162	47	65						
36	9440	149	3841	172	8092	52	3956	167	8633	175	4115	47	64						
37	9590	150	4014	173	8143	51	3789	167	8458	175	4068	47	63						
38	9740	150	4186	172	8195	52	3622	167	8283	175	4021	47	62						
39	0.299890	150	4359	173	8247	52	3456	166	8108	175	3974	47	61						
40	0.300040	150	0.314531	172	1.048299	52	3.33289	167	3.17933	175	0.953927	47	60						
41	0190	150	4704	173	8350	51	3123	166	7759	174	3880	47	59						
42	0340	150	4877	173	8402	52	2956	167	7585	174	3832	48	58						
43	0489	149	5049	172	8454	52	2790	166	7411	174	3785	47	57						
44	0639	150	5222	173	8506	52	2625	165	7237	174	3738	47	56						
45	0789	150	5395	173	8558	52	2459	166	7063	174	3691	47	55						
46	0939	150	5567	172	8610	52	2293	166	6889	174	3643	48	54						
47	1089	150	5740	173	8662	52	2128	165	6716	173	3596	47	53						
48	1238	149	5913	173	8714	52	1963	165	6543	173	3549	47	52						
49	1388	150	6086	173	8766	52	1798	165	6370	173	3502	47	51						
50	0.301538	150	0.316258	172	1.048818	52	3.31633	165	3.16197	173	0.953454	48	50						
cos		cotg		cosec		sec		tang		sin		c							
	46	47	48	49	50	51	52	53	54	149	150	151	156	157	158	159	160	161	
1	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	14.9	15.0	15.1	15.6	15.7	15.8	15.9	16.0	16.1	1
2	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8	29.8	30.0	30.2	31.2	31.4	31.6	31.8	32.0	32.2	2
3	13.8	14.1	14.4	14.7	15.0	15.3	15.6	15.9	16.2	44.7	45.0	45.3	46.8	47.1	47.4	47.7	48.0	48.3	3
4	18.4	18.8	19.2	19.6	20.0	20.4	20.8	21.2	21.6	59.6	60.0	60.4	62.4	62.8	63.2	63.6	64.0	64.4	4
5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	74.5	75.0	75.5	78.0	78.5	79.0	79.5	80.0	80.5	5
6	27.6	28.2	28.8	29.4	30.0	30.6	31.2	31.8	32.4	89.4	90.0	90.6	93.6	94.2	94.8	95.4	96.0	96.6	6
7	32.2	32.9	33.6	34.3	35.0	35.7	36.4	37.1	37.8	104.3	105.0	105.7	109.2	109.9	110.6	111.3	112.0	112.7	7
8	36.8	37.6	38.4	39.2	40.0	40.8	41.6	42.4	43.2	119.2	120.0	120.8	124.8	125.6	126.4	127.2	128.0	128.8	8
9	41.4	42.3	43.2	44.1	45.0	45.9	46.8	47.7	48.6	134.1	135.0	135.9	140.4	141.3	142.2	143.1	144.0	144.9	9

c	sin		tang		sec		cosec		cotg		cos								
50	0.301538	150	0.316258	173	1.048818	52	3.31633	164	3.16197	173	0.953454	47	50						
51	1688	149	6431	173	8870	52	1469	165	6024	172	3407	48	49						
52	1837	150	6604	173	8922	53	1304	164	5852	172	3359	47	48						
53	1987	150	6777	173	8975	52	1140	164	5680	173	3312	47	47						
54	2137	150	6950	173	9027	52	0976	164	5507	172	3265	47	46						
55	2287	149	7123	173	9079	52	0812	164	5335	172	3217	48	45						
56	2436	150	7296	173	9131	52	0648	164	5164	171	3170	47	44						
57	2586	150	7468	172	9184	53	0484	164	4992	172	3122	48	43						
58	2736	150	7641	173	9236	52	0321	163	4820	172	3074	48	42						
59	2886	150	7814	173	9288	52	3.30158	163	4649	171	3027	47	41						
60	0.303035	149	0.317987	173	1.049341	53	3.29995	163	3.14478	171	0.952979	47	40						
61	3185	150	8160	173	9393	53	9832	163	4307	171	2932	48	39						
62	3335	149	8333	173	9446	52	9669	163	4136	170	2884	48	38						
63	3484	150	8506	173	9498	53	9506	162	3966	171	2836	47	37						
64	3634	150	8679	173	9551	52	9344	162	3795	170	2789	48	36						
65	3784	149	8852	173	9603	53	9182	162	3625	170	2741	48	35						
66	3933	150	9025	173	9656	52	9020	162	3455	170	2693	48	34						
67	4083	150	9198	173	9708	52	8858	162	3285	170	2646	47	33						
68	4233	150	9371	173	9761	53	8696	162	3115	170	2598	48	32						
69	4382	149	9545	174	9814	53	8534	162	2945	170	2550	48	31						
70	0.304532	150	0.319718	173	1.049866	52	3.28373	161	3.12776	169	0.952502	48	30						
71	4681	149	0.319891	173	9919	53	8212	161	2607	170	2454	48	29						
72	4831	150	0.320064	173	1.049972	53	8051	161	2437	168	2406	47	28						
73	4981	149	0237	173	1.050025	53	7890	161	2269	169	2359	48	27						
74	5130	150	0410	174	0078	52	7729	161	2100	169	2311	48	26						
75	5280	149	0584	173	0130	53	7568	160	1931	168	2263	48	25						
76	5429	150	0757	173	0183	53	7408	160	1763	169	2215	48	24						
77	5579	150	0930	173	0236	53	7248	160	1594	168	2167	48	23						
78	5729	149	1103	174	0289	53	7088	160	1426	168	2119	48	22						
79	5878	150	1277	173	0342	53	6928	160	1258	168	2071	48	21						
80	0.306028	149	0.321450	173	1.050395	53	3.26768	160	3.11090	168	0.952023	48	20						
81	6177	150	1623	174	0448	53	6608	160	0923	167	1975	49	19						
82	6327	149	1797	173	0501	53	6449	159	0755	168	1926	49	18						
83	6476	150	1970	173	0554	53	6290	160	0588	167	1878	48	17						
84	6626	149	2143	174	0608	54	6130	158	0421	167	1830	48	16						
85	6775	150	2317	173	0661	53	5972	159	0254	167	1782	48	15						
86	6925	149	2490	174	0714	53	5813	159	3.10087	167	1734	48	14						
87	7074	150	2664	173	0767	54	5654	158	3.09920	166	1686	49	13						
88	7224	149	2837	173	0821	53	5496	159	9754	167	1637	48	12						
89	7373	150	3010	174	0874	53	5337	158	9587	166	1589	48	11						
90	0.307523	149	0.323184	173	1.050927	54	3.25179	158	3.09421	166	0.951541	49	10						
91	7672	150	3357	174	0981	53	5021	158	9255	166	1492	48	09						
92	7822	149	3531	173	1034	53	4863	157	9089	165	1444	48	08						
93	7971	150	3704	174	1087	54	4706	158	8924	166	1396	49	07						
94	8121	149	3878	174	1141	53	4548	157	8758	165	1347	48	06						
95	8270	150	4052	173	1194	54	4391	157	8593	165	1299	49	05						
96	8419	149	4225	174	1248	53	4234	157	8428	165	1250	48	04						
97	8569	150	4399	173	1301	54	4077	157	8263	165	1202	48	03						
98	8718	149	4572	174	1355	54	3920	157	8098	165	1154	49	02						
99	8868	150	4746	174	1409	54	3763	157	7933	165	1105	49	01						
100	0.309017	149	0.324920	174	1.051462	53	3.23607	156	3.07768	165	0.951057	48	00						
cos		cotg		cosec		sec		tang		sin		c							
	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	178	180	182	
1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.8	18.0	18.2	1
2	32.4	32.6	32.8	33.0	33.2	33.4	33.6	33.8	34.0	34.2	34.4	34.6	34.8	35.0	35.2	35.6	36.0	36.4	2
3	48.6	48.9	49.2	49.5	49.8	50.1	50.4	50.7	51.0	51.3	51.6	51.9	52.2	52.5	52.8	53.4	54.0	54.6	3
4	64.8	65.2	65.6	66.0	66.4	66.8	67.2	67.6	68.0	68.4	68.8	69.2	69.6	70.0	70.4	71.2	72.0	72.8	4
5	81.0	81.5	82.0	82.5	83.0	83.5	84.0	84.5	85.0	85.5	86.0	86.5	87.0	87.5	88.0	89.0	90.0	91.0	5
6	97.2	97.8	98.4	99.0	99.6	100.2	100.8	101.4	102.0	102.6	103.2	103.8	104.4	105.0	105.6	106.8	108.0	109.2	6
7	113.4	114.1	114.8	115.5	116.2	116.9	117.6	118.3	119.0	119.7	120.4	121.1	121.8	122.5	123.2	124.6	126.0	127.4	7
8	129.6	130.4	131.2	132.0	132.8	133.6	134.4	135.2	136.0	136.8	137.6	138.4	139.2	140.0	140.8	142.4	144.0	145.6	8
9	145.8	146.7	147.6	148.5	149.4	150.3	151.2	152.1	153.0	153.9	154.8	155.7	156.6	157.5	158.4	160.2	162.0	163.8	9

20^g

c	sin		tang		sec		cosec		cotg		cos		100						
00	0.309017	149	0.324920	173	1.051462	54	3.23607	157	3.07768	164	0.951057	49							
01	9166	150	5093	174	1516	54	3450	156	7604	164	1008	49	99						
02	9316	149	5267	174	1570	53	3294	156	7440	164	0959	48	98						
03	9465	149	5441	174	1623	53	3138	156	7276	164	0911	48	97						
04	9614	149	5614	173	1677	54	2982	156	7112	164	0862	49	96						
05	9764	150	5788	174	1731	54	2827	155	6948	164	0814	48	95						
06	0.309913	149	5962	174	1785	54	2671	156	6784	164	0765	49	94						
07	0.310063	150	6136	174	1839	54	2516	155	6621	163	0716	49	93						
08	0212	149	6310	174	1893	54	2360	156	6457	164	0667	49	92						
09	0361	149	6483	173	1946	53	2205	155	6294	163	0619	48	91						
10	0.310511	150	0.326657	174	1.052000	54	3.22050	155	3.06131	163	0.950570	49	90						
11	0660	149	6831	174	2054	54	1895	154	5968	162	0521	49	89						
12	0809	149	7005	174	2108	54	1741	154	5806	162	0472	49	88						
13	0958	149	7179	174	2163	55	1586	155	5643	163	0424	48	87						
14	1108	150	7353	174	2217	54	1432	154	5481	162	0375	49	86						
15	1257	149	7527	174	2271	54	1278	154	5319	162	0326	49	85						
16	1406	149	7701	174	2325	54	1124	154	5157	162	0277	49	84						
17	1556	150	7875	174	2379	54	0970	154	4995	162	0228	49	83						
18	1705	149	8049	174	2433	54	0816	154	4833	162	0179	49	82						
19	1854	149	8223	174	2488	55	0663	153	4671	162	0130	49	81						
20	0.312003	149	0.328397	174	1.052542	54	3.20509	154	3.04510	161	0.950081	49	80						
21	2153	150	8571	174	2596	54	0356	153	4349	161	0.950032	49	79						
22	2302	149	8745	174	2650	54	0203	153	4188	161	0.949983	49	78						
23	2451	149	8919	174	2705	55	3.20050	153	4027	161	9934	49	77						
24	2600	149	9093	174	2759	54	3.19897	153	3866	161	9885	49	76						
25	2749	149	9267	174	2814	55	9745	152	3705	161	9836	49	75						
26	2899	150	9441	174	2868	54	9592	153	3545	160	9787	49	74						
27	3048	149	9615	174	2923	55	9440	152	3384	161	9737	50	73						
28	3197	149	9789	174	2977	54	9288	152	3224	160	9688	49	72						
29	3346	149	0.329963	174	3032	55	9136	152	3064	160	9639	49	71						
30	0.313495	149	0.330138	175	1.053086	54	3.18984	152	3.02904	160	0.949590	49	70						
31	3644	149	0312	174	3141	55	8832	152	2744	160	9540	50	69						
32	3794	150	0486	174	3196	55	8681	151	2585	159	9491	49	68						
33	3943	149	0660	174	3250	54	8529	152	2425	160	9442	49	67						
34	4092	149	0835	175	3305	55	8378	151	2266	159	9393	49	66						
35	4241	149	1009	174	3360	55	8227	151	2107	159	9343	50	65						
36	4390	149	1183	174	3415	55	8076	151	1948	159	9294	49	64						
37	4539	149	1357	174	3469	54	7925	151	1789	159	9244	50	63						
38	4688	149	1532	175	3524	55	7775	150	1630	159	9195	49	62						
39	4837	149	1706	174	3579	55	7624	151	1472	158	9146	49	61						
40	0.314987	150	0.331881	175	1.053634	55	3.17474	150	3.01313	159	0.949096	50	60						
41	5136	149	2055	174	3689	55	7324	150	1155	158	9047	49	59						
42	5285	149	2229	174	3744	55	7174	150	0997	158	8997	50	58						
43	5434	149	2404	175	3799	55	7024	150	0839	158	8948	49	57						
44	5583	149	2578	174	3854	55	6874	150	0681	158	8898	50	56						
45	5732	149	2753	175	3909	55	6724	150	0524	157	8848	50	55						
46	5881	149	2927	174	3964	55	6575	149	0366	158	8799	49	54						
47	6030	149	3102	175	4019	55	6426	149	0209	157	8749	50	53						
48	6179	149	3276	174	4074	55	6277	149	3.00051	158	8700	49	52						
49	6328	149	3451	175	4130	56	6128	149	2.99894	157	8650	50	51						
50	0.316477	149	0.333625	174	1.054185	55	3.15979	149	2.99738	156	0.948600	50	50						
cos		cotg		cosec		sec		tang		sin		c							
	48	49	50	51	53	54	55	56	57	141	142	143	144	145	146	147	148	149	
1	4.8	4.9	5.0	5.1	5.3	5.4	5.5	5.6	5.7	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	1
2	9.6	9.8	10.0	10.2	10.6	10.8	11.0	11.2	11.4	28.2	28.4	28.6	28.8	29.0	29.2	29.4	29.6	29.8	2
3	14.4	14.7	15.0	15.3	15.9	16.2	16.5	16.8	17.1	42.3	42.6	42.9	43.2	43.5	43.8	44.1	44.4	44.7	3
4	19.2	19.6	20.0	20.4	21.2	21.6	22.0	22.4	22.8	56.4	56.8	57.2	57.6	58.0	58.4	58.8	59.2	59.6	4
5	24.0	24.5	25.0	25.5	26.5	27.0	27.5	28.0	28.5	70.5	71.0	71.5	72.0	72.5	73.0	73.5	74.0	74.5	5
6	28.8	29.4	30.0	30.6	31.8	32.4	33.0	33.6	34.2	84.6	85.2	85.8	86.4	87.0	87.6	88.2	88.8	89.4	6
7	33.6	34.3	35.0	35.7	37.1	37.8	38.5	39.2	39.9	98.7	99.4	100.1	100.8	101.5	102.2	102.9	103.6	104.3	7
8	38.4	39.2	40.0	40.8	42.4	43.2	44.0	44.8	45.6	112.8	113.6	114.4	115.2	116.0	116.8	117.6	118.4	119.2	8
9	43.2	44.1	45.0	45.9	47.7	48.6	49.5	50.4	51.3	126.9	127.8	128.7	129.6	130.5	131.4	132.3	133.2	134.1	9

c	sin		tang		sec		cosec		cotg		cos								
50	0.316477	149	0.333625	175	1.054185	55	3.15979	149	2.99738	157	0.948600	50	50						
51	6626	149	3800	174	4240	55	5830	148	9581	157	8550	49	49						
52	6775	149	3974	175	4295	56	5682	149	9424	156	8501	49	48						
53	6924	149	4149	175	4351	55	5533	148	9268	156	8451	50	47						
		149		175		55		148		157		50							
54	7073	149	4324	174	4406	56	5385	148	9111	156	8401	50	46						
55	7222	149	4498	175	4462	56	5237	148	8955	156	8351	50	45						
56	7371	149	4673	175	4517	55	5089	148	8799	156	8302	49	44						
		149		175		55		148		156		50							
57	7520	149	4848	174	4572	56	4941	148	8643	155	8252	50	43						
58	7669	149	5022	174	4628	56	4793	148	8488	155	8202	50	42						
59	7818	149	5197	175	4683	55	4646	147	8332	156	8152	50	41						
		149		175		56		148		155		50							
60	0.317967	149	0.335372	175	1.054739	56	3.14498	147	2.98177	156	0.948102	50	40						
61	8116	148	5547	174	4795	55	4351	147	8021	155	8052	50	39						
62	8264	149	5721	175	4850	56	4204	147	7866	155	8002	50	38						
63	8413	149	5896	175	4906	56	4057	147	7711	155	7952	50	37						
		149		175		55		147		155		50							
64	8562	149	6071	175	4961	56	3910	146	7556	154	7902	50	36						
65	8711	149	6246	175	5017	56	3764	146	7402	154	7852	50	35						
66	8860	149	6421	175	5073	56	3617	147	7247	155	7802	50	34						
		149		174		56		146		154		50							
67	9009	149	6595	175	5129	55	3471	146	7093	155	7752	50	33						
68	9158	149	6770	175	5184	56	3325	146	6938	155	7702	50	32						
69	9307	149	6945	175	5240	56	3179	146	6784	154	7651	51	31						
		149		175		56		146		154		50							
70	0.319456	148	0.337120	175	1.055296	56	3.13033	146	2.96630	154	0.947601	50	30						
71	9604	149	7295	175	5352	56	2887	146	6476	154	7551	50	29						
72	9753	149	7470	175	5408	56	2741	146	6323	153	7501	50	28						
73	0.319902	149	7645	175	5464	56	2596	145	6169	154	7451	50	27						
		149		175		56		146		153		51							
74	0.320051	149	7820	175	5520	56	2450	145	6016	154	7400	50	26						
75	0200	148	7995	175	5576	56	2305	145	5862	153	7350	50	25						
76	0348	149	8170	175	5632	56	2160	145	5709	153	7300	50	24						
		149		175		56		145		153		51							
77	0497	149	8345	175	5688	56	2015	145	5556	153	7249	50	23						
78	0646	149	8520	175	5744	56	1870	145	5403	153	7199	50	22						
79	0795	149	8695	175	5800	56	1726	144	5251	152	7149	50	21						
		149		175		57		145		153		51							
80	0.320944	148	0.338870	176	1.055857	56	3.11581	144	2.95098	152	0.947098	50	20						
81	1092	149	9046	175	5913	56	1437	144	4946	152	7048	51	19						
82	1241	149	9221	175	5969	56	1293	144	4793	153	6997	51	18						
83	1390	149	9396	175	6025	56	1149	144	4641	152	6947	50	17						
		149		175		57		144		152		51							
84	1539	148	9571	175	6082	56	1005	144	4489	152	6896	50	16						
85	1687	149	9746	175	6138	56	0861	144	4337	151	6846	50	15						
86	1836	149	0.339921	176	6194	56	0717	144	4186	151	6795	51	14						
		149		176		57		143		152		50							
87	1985	149	0.340097	175	6251	56	0574	144	4034	151	6745	51	13						
88	2134	148	0272	175	6307	56	0430	144	3883	151	6694	51	12						
89	2282	148	0447	175	6364	57	0287	143	3731	152	6644	50	11						
		149		176		56		143		151		51							
90	0.322431	149	0.340623	175	1.056420	57	3.10144	143	2.93580	151	0.946593	51	10						
91	2580	148	0798	175	6477	56	3.10001	143	3429	151	6542	51	09						
92	2728	149	0973	175	6533	56	3.09858	143	3278	151	6492	50	08						
93	2877	149	1149	176	6590	57	9716	142	3127	151	6441	51	07						
		149		175		57		143		150		51							
94	3026	148	1324	175	6647	56	9573	142	2977	151	6390	51	06						
95	3174	149	1499	176	6703	56	9431	142	2826	151	6339	51	05						
96	3323	149	1675	176	6760	57	9288	143	2676	150	6289	50	04						
		149		175		57		142		150		51							
97	3472	148	1850	176	6817	56	9146	142	2526	150	6238	51	03						
98	3620	149	2026	175	6873	56	9004	142	2376	150	6187	51	02						
99	3769	149	2201	175	6930	57	8862	142	2226	150	6136	51	01						
		148		176		57		141		150		51							
100	0.323917		0.342377		1.056987		3.08721		2.92076		0.946085		00						
	cos		cotg		cosec		sec		tang		sin		c						
	150	151	152	153	154	155	156	157	158	159	160	161	162	164	173	174	175	176	
1	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.4	17.3	17.4	17.5	17.6	1
2	30.0	30.2	30.4	30.6	30.8	31.0	31.2	31.4	31.6	31.8	32.0	32.2	32.4	32.8	34.6	34.8	35.0	35.2	2
3	45.0	45.3	45.6	45.9	46.2	46.5	46.8	47.1	47.4	47.7	48.0	48.3	48.6	49.2	51.9	52.2	52.5	52.8	3
4	60.0	60.4	60.8	61.2	61.6	62.0	62.4	62.8	63.2	63.6	64.0	64.4	64.8	65.6	69.2	69.6	70.0	70.4	4
5	75.0	75.5	76.0	76.5	77.0	77.5	78.0	78.5	79.0	79.5	80.0	80.5	81.0	82.0	86.5	87.0	87.5	88.0	5
6	90.0	90.6	91.2	91.8	92.4	93.0	93.6	94.2	94.8	95.4	96.0	96.6	97.2	98.4	103.8	104.4	105.0	105.6	6
7	105.0	105.7	106.4	107.1	107.8	108.5	109.2	109.9	110.6	111.3	112.0	112.7	113.4	114.8	121.1	121.8	122.5	123.2	7
8	120.0	120.8	121.6	122.4	123.2	124.0	124.8	125.6	126.4	127.2	128.0	128.8	129.6	131.2	138.4	139.2	140.0	140.8	8
9	135.0	135.9	136.8	137.7	138.6	139.5	140.4	141.3	142.2	143.1	144.0	144.9	145.8	147.6	155.7	156.6	157.5	158.4	9

21^g

c	sin		tang		sec		cosec		cotg		cos								
00	0.323917	149	0.342377	175	1.056987	57	3.08721	142	2.92076	150	0.946085	51	100						
01	4066	149	2552	176	7044	57	8579	141	1926	149	6034	50	99						
02	4215	149	2728	176	7101	57	8438	141	1777	149	5984	50	98						
03	4363	148	2903	175	7158	57	8296	142	1628	149	5933	51	97						
04	4512	149	3079	176	7215	57	8155	141	1478	150	5882	51	96						
05	4660	148	3254	175	7272	57	8014	141	1329	149	5831	51	95						
06	4809	149	3430	176	7329	57	7873	141	1180	149	5780	51	94						
07	4957	148	3605	175	7386	57	7733	140	1031	149	5729	51	93						
08	5106	149	3781	176	7443	57	7592	141	0883	148	5678	51	92						
09	5255	149	3957	176	7500	57	7451	141	0734	149	5626	52	91						
10	0.325403	148	0.344132	175	1.057557	57	3.07311	140	2.90586	148	0.945575	51	90						
11	5552	148	4308	176	7614	58	7171	140	0438	149	5524	51	89						
12	5700	148	4484	176	7672	57	7031	140	0289	148	5473	51	88						
13	5849	149	4660	176	7729	57	6891	140	2.90141	148	5422	51	87						
14	5997	148	4835	175	7786	57	6751	140	2.89994	147	5371	51	86						
15	6146	149	5011	176	7843	57	6611	140	9846	148	5320	51	85						
16	6294	148	5187	176	7901	58	6472	139	9698	148	5268	52	84						
17	6443	149	5363	176	7958	57	6333	139	9551	147	5217	51	83						
18	6591	148	5538	175	8016	58	6193	140	9403	148	5166	51	82						
19	6740	149	5714	176	8073	57	6054	139	9256	147	5114	52	81						
20	0.326888	148	0.345890	176	1.058130	58	3.05915	139	2.89109	147	0.945063	51	80						
21	7036	149	6066	176	8188	57	5776	138	8962	147	5012	52	79						
22	7185	148	6242	176	8245	58	5638	139	8815	146	4960	51	78						
23	7333	149	6418	176	8303	58	5499	138	8669	146	4909	52	77						
24	7482	148	6594	176	8361	57	5361	139	8522	146	4857	51	76						
25	7630	149	6770	176	8418	58	5222	138	8376	147	4806	51	75						
26	7779	148	6946	176	8476	58	5084	138	8229	147	4755	51	74						
27	7927	149	7122	176	8534	58	4946	138	8083	146	4703	52	73						
28	8075	148	7298	176	8591	57	4808	138	7937	146	4652	51	72						
29	8224	149	7474	176	8649	58	4670	138	7791	146	4600	52	71						
30	0.328372	148	0.347650	176	1.058707	58	3.04533	137	2.87646	145	0.944548	52	70						
31	8520	149	7826	176	8765	58	4395	138	7500	146	4497	51	69						
32	8669	148	8002	176	8823	58	4258	137	7355	145	4445	52	68						
33	8817	149	8178	176	8881	58	4120	138	7209	146	4394	51	67						
34	8966	148	8354	176	8938	57	3983	137	7064	145	4342	52	66						
35	9114	149	8530	176	8996	58	3846	137	6919	145	4290	51	65						
36	9262	148	8707	177	9054	58	3709	137	6774	145	4239	52	64						
37	9411	149	8883	176	9112	58	3573	136	6629	145	4187	52	63						
38	9559	148	9059	176	9171	59	3436	137	6485	144	4135	52	62						
39	9707	149	9235	176	9229	58	3299	137	6340	145	4083	52	61						
40	0.329855	148	0.349411	177	1.059287	58	3.03163	136	2.86196	144	0.944031	52	60						
41	0.330004	149	9588	176	9345	58	3027	136	6051	145	3980	51	59						
42	0152	148	9764	176	9403	58	2891	136	5907	144	3928	52	58						
43	0300	149	0.349940	177	9461	58	2755	136	5763	144	3876	52	57						
44	0449	148	0.350117	177	9520	59	2619	136	5619	144	3824	52	56						
45	0597	148	0293	176	9578	58	2483	136	5475	144	3772	52	55						
46	0745	148	0469	176	9636	58	2348	135	5332	143	3720	52	54						
47	0893	148	0646	177	9695	59	2212	136	5188	144	3668	52	53						
48	1041	148	0822	176	9753	58	2077	135	5045	143	3616	52	52						
49	1190	149	0999	177	9811	58	1942	135	4901	144	3564	52	51						
50	0.331338	148	0.351175	176	1.059870	59	3.01807	135	2.84758	143	0.943512	52	50						
cos		cotg		cosec		sec		tang		sin		c							
	50	51	52	53	54	57	58	59	60	129	130	131	132	133	134	135	136	137	
1	5.0	5.1	5.2	5.3	5.4	5.7	5.8	5.9	6.0	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	1
2	10.0	10.2	10.4	10.6	10.8	11.4	11.6	11.8	12.0	25.8	26.0	26.2	26.4	26.6	26.8	27.0	27.2	27.4	2
3	15.0	15.3	15.6	15.9	16.2	17.1	17.4	17.7	18.0	38.7	39.0	39.3	39.6	39.9	40.2	40.5	40.8	41.1	3
4	20.0	20.4	20.8	21.2	21.6	22.8	23.2	23.6	24.0	51.6	52.0	52.4	52.8	53.2	53.6	54.0	54.4	54.8	4
5	25.0	25.5	26.0	26.5	27.0	28.5	29.0	29.5	30.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.0	68.5	5
6	30.0	30.6	31.2	31.8	32.4	34.2	34.8	35.4	36.0	77.4	78.0	78.6	79.2	79.8	80.4	81.0	81.6	82.2	6
7	35.0	35.7	36.4	37.1	37.8	39.9	40.6	41.3	42.0	90.3	91.0	91.7	92.4	93.1	93.8	94.5	95.2	95.9	7
8	40.0	40.8	41.6	42.4	43.2	45.6	46.4	47.2	48.0	103.2	104.0	104.8	105.6	106.4	107.2	108.0	108.8	109.6	8
9	45.0	45.9	46.8	47.7	48.6	51.3	52.2	53.1	54.0	116.1	117.0	117.9	118.8	119.7	120.6	121.5	122.4	123.3	9

21^g

c	sin			tang			sec			cosec			cotg			cos			
50	0.331338	148	0.351175	176	1.059870	58	3.01807	135	2.84758	143	0.943512	52	50						
51	1486	148	1351	177	9928	59	1672	135	4615	143	3460	52	49						
52	1634	148	1528	177	1.059987	58	1537	135	4472	142	3408	52	48						
53	1782	148	1704	176	1.060045	58	1402	135	4330	142	3356	52	47						
54	1931	149	1881	177	0104	59	1268	134	4187	143	3304	52	46						
55	2079	148	2058	177	0162	58	1133	135	4045	142	3252	52	45						
56	2227	148	2234	176	0221	59	0999	134	3902	143	3199	53	44						
57	2375	148	2411	177	0280	59	0865	134	3760	142	3147	52	43						
58	2523	148	2587	176	0339	59	0731	134	3618	142	3095	52	42						
59	2671	148	2764	177	0397	58	0597	134	3476	142	3043	52	41						
60	0.332820	148	0.352940	177	1.060456	59	3.00463	134	2.83334	142	0.942991	53	40						
61	2968	148	3117	177	0515	59	0329	133	3192	141	2938	52	39						
62	3116	148	3294	177	0574	59	0196	133	3051	142	2886	52	38						
63	3264	148	3471	177	0633	59	3.00063	133	2909	142	2834	52	37						
64	3412	148	3647	176	0691	58	2.99929	134	2768	141	2781	53	36						
65	3560	148	3824	177	0750	59	9796	133	2626	142	2729	52	35						
66	3708	148	4001	177	0809	59	9663	133	2485	141	2676	53	34						
67	3856	148	4177	176	0868	59	9530	133	2344	141	2624	52	33						
68	4004	148	4354	177	0927	59	9397	133	2203	141	2572	52	32						
69	4152	148	4531	177	0986	59	9265	132	2063	140	2519	53	31						
70	0.334300	148	0.354708	177	1.061046	60	2.99132	133	2.81922	141	0.942467	53	30						
71	4448	148	4885	177	1105	59	9000	132	1782	140	2414	52	29						
72	4596	148	5062	177	1164	59	8867	133	1641	141	2362	52	28						
73	4744	148	5239	177	1223	59	8735	132	1501	140	2309	53	27						
74	4892	148	5415	176	1282	59	8603	132	1361	140	2256	53	26						
75	5040	148	5592	177	1342	60	8471	132	1221	140	2204	52	25						
76	5188	148	5769	177	1401	59	8340	131	1081	140	2151	53	24						
77	5336	148	5946	177	1460	59	8208	132	0941	140	2098	53	23						
78	5484	148	6123	177	1520	60	8076	132	0802	139	2046	52	22						
79	5632	148	6300	177	1579	59	7945	131	0662	140	1993	53	21						
80	0.335780	148	0.356477	177	1.061638	59	2.97814	131	2.80523	139	0.941940	53	20						
81	5928	148	6654	177	1698	60	7683	131	0383	140	1888	52	19						
82	6076	148	6831	177	1757	59	7551	132	0244	139	1835	53	18						
83	6224	148	7009	178	1817	60	7421	130	2.80105	139	1782	53	17						
84	6372	148	7186	177	1876	59	7290	131	2.79966	139	1729	53	16						
85	6520	148	7363	177	1936	60	7159	131	9828	138	1676	53	15						
86	6668	148	7540	177	1996	60	7029	130	9689	139	1623	53	14						
87	6816	148	7717	177	2055	59	6898	131	9550	139	1571	52	13						
88	6964	148	7894	177	2115	60	6768	130	9412	138	1518	53	12						
89	7112	148	8072	178	2175	60	6638	130	9274	138	1465	53	11						
90	0.337260	148	0.358249	177	1.062235	60	2.96508	130	2.79136	138	0.941412	53	10						
91	7407	147	8426	177	2294	59	6378	130	8998	138	1359	53	09						
92	7555	148	8603	177	2354	60	6248	130	8860	138	1306	53	08						
93	7703	148	8781	178	2414	60	6118	130	8722	138	1253	53	07						
94	7851	148	8958	177	2474	60	5988	130	8584	138	1200	53	06						
95	7999	148	9135	177	2534	60	5859	129	8447	137	1147	53	05						
96	8147	148	9313	178	2594	60	5730	129	8309	138	1093	54	04						
97	8295	148	9490	177	2654	60	5600	130	8172	137	1040	53	03						
98	8442	147	9667	177	2714	60	5471	129	8035	137	0987	53	02						
99	8590	148	0.359845	178	2774	60	5342	129	7898	137	0934	53	01						
100	0.338738	148	0.360022	177	1.062834	60	2.95213	129	2.77761	137	0.940881	53	00						
cos		cotg		cosec		sec		tang		sin		c							
	138	139	140	141	142	143	144	145	146	147	148	149	150	175	176	177	178		
1	13.8	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	17.5	17.6	17.7	17.8	1	
2	27.6	27.8	28.0	28.2	28.4	28.6	28.8	29.0	29.2	29.4	29.6	29.8	30.0	35.2	35.2	35.4	35.6	2	
3	41.4	41.7	42.0	42.3	42.6	42.9	43.2	43.5	43.8	44.1	44.4	44.7	45.0	52.5	52.8	53.1	53.4	3	
4	55.2	55.6	56.0	56.4	56.8	57.2	57.6	58.0	58.4	58.8	59.2	59.6	60.0	70.0	70.4	70.8	71.2	4	
5	69.0	69.5	70.0	70.5	71.0	71.5	72.0	72.5	73.0	73.5	74.0	74.5	75.0	87.5	88.0	88.5	89.0	5	
6	82.8	83.4	84.0	84.6	85.2	85.8	86.4	87.0	87.6	88.2	88.8	89.4	90.0	105.0	105.6	106.2	106.8	6	
7	96.6	97.3	98.0	98.7	99.4	100.1	100.8	101.5	102.2	102.9	103.6	104.3	105.0	122.5	123.2	123.9	124.6	7	
8	110.4	111.2	112.0	112.8	113.6	114.4	115.2	116.0	116.8	117.6	118.4	119.2	120.0	140.0	140.8	141.6	142.4	8	
9	124.2	125.1	126.0	126.9	127.8	128.7	129.6	130.5	131.4	132.3	133.2	134.1	135.0	157.5	158.4	159.3	160.2	9	

22^g

c	sin		tang		sec		cosec		cotg		cos								
00	0.338738	148	0.360022	178	1.062834	60	2.95213	128	2.77761	137	0.940881	53	100						
01	8886	147	0200	177	2894	60	5085	129	7624	137	0828	54	99						
02	9033	147	0377	177	2954	60	4956	129	7487	137	0774	54	98						
03	9181	148	0555	178	3014	60	4828	128	7351	136	0721	53	97						
04	9329	148	0732	177	3075	61	4699	129	7214	137	0668	53	96						
05	9477	148	0910	178	3135	60	4571	128	7078	136	0614	54	95						
06	9625	148	1087	177	3195	60	4443	128	6941	137	0561	53	94						
07	9772	147	1265	178	3255	60	4315	128	6805	136	0508	53	93						
08	0.339920	148	1442	177	3316	61	4187	128	6669	136	0454	54	92						
09	0.340068	148	1620	178	3376	60	4059	128	6533	136	0401	53	91						
10	0.340215	147	0.361798	178	1.063437	61	2.93931	128	2.76398	135	0.940348	53	90						
11	0363	148	1975	177	3497	60	3804	127	6262	136	0294	54	89						
12	0511	148	2153	178	3558	61	3676	128	6126	136	0241	53	88						
13	0659	148	2331	178	3618	60	3549	127	5991	135	0187	54	87						
14	0806	147	2508	177	3679	61	3422	127	5856	135	0134	53	86						
15	0954	148	2686	178	3739	60	3295	127	5721	135	0080	54	85						
16	1102	148	2864	178	3800	61	3168	127	5586	135	0.940026	54	84						
17	1249	147	3042	178	3860	60	3041	127	5451	135	0.939973	53	83						
18	1397	148	3219	177	3921	61	2914	127	5316	135	9919	54	82						
19	1544	147	3397	178	3982	61	2788	126	5181	135	9866	53	81						
20	0.341692	148	0.363575	178	1.064043	61	2.92661	127	2.75046	135	0.939812	54	80						
21	1840	147	3753	178	4103	60	2535	126	4912	134	9758	54	79						
22	1987	147	3931	178	4164	61	2408	127	4778	134	9705	53	78						
23	2135	148	4109	178	4225	61	2282	126	4643	135	9651	54	77						
24	2283	148	4287	178	4286	61	2156	126	4509	134	9597	54	76						
25	2430	147	4464	177	4347	61	2030	126	4375	134	9543	54	75						
26	2578	148	4642	178	4408	61	1905	125	4241	134	9489	54	74						
27	2725	147	4820	178	4469	61	1779	126	4107	134	9436	53	73						
28	2873	148	4998	178	4530	61	1653	126	3974	133	9382	54	72						
29	3020	147	5176	178	4591	61	1528	125	3840	134	9328	54	71						
30	0.343168	148	0.365354	178	1.064652	61	2.91403	125	2.73707	133	0.939274	54	70						
31	3315	147	5532	178	4713	61	1277	126	3573	134	9220	54	69						
32	3463	148	5711	179	4774	61	1152	125	3440	133	9166	54	68						
33	3611	148	5889	178	4835	61	1027	125	3307	133	9112	54	67						
34	3758	147	6067	178	4897	62	0902	125	3174	133	9058	54	66						
35	3906	148	6245	178	4958	61	0778	124	3041	133	9004	54	65						
36	4053	147	6423	178	5019	61	0653	125	2909	132	8950	54	64						
37	4201	148	6601	178	5081	62	0528	125	2776	133	8896	54	63						
38	4348	147	6779	178	5142	61	0404	124	2643	133	8842	54	62						
39	4495	147	6958	179	5203	61	0280	124	2511	132	8788	54	61						
40	0.344643	148	0.367136	178	1.065265	62	2.90155	125	2.72379	132	0.938734	54	60						
41	4790	147	7314	178	5326	61	2.90031	124	2246	133	8680	54	59						
42	4938	148	7492	178	5388	62	2.89907	124	2114	132	8626	54	58						
43	5085	147	7671	179	5449	61	9783	124	1982	132	8571	55	57						
44	5233	148	7849	178	5511	62	9660	123	1851	131	8517	54	56						
45	5380	147	8027	178	5572	61	9536	124	1719	132	8463	54	55						
46	5528	148	8206	179	5634	62	9413	123	1587	132	8409	54	54						
47	5675	147	8384	178	5696	62	9289	124	1456	131	8354	55	53						
48	5822	147	8563	179	5757	61	9166	123	1324	132	8300	54	52						
49	5970	148	8741	178	5819	62	9043	123	1193	131	8246	54	51						
50	0.346117	147	0.368919	178	1.065881	62	2.88920	123	2.71062	131	0.938191	55	50						
cos		cotg		cosec		sec		tang		sin		c							
	53	54	55	56	60	61	62	63	64	117	118	119	120	121	122	123	124	125	
1	5.3	5.4	5.5	5.6	6.0	6.1	6.2	6.3	6.4	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.5	1
2	10.6	10.8	11.0	11.2	12.0	12.2	12.4	12.6	12.8	23.4	23.6	23.8	24.0	24.2	24.4	24.6	24.8	25.0	2
3	15.9	16.2	16.5	16.8	18.0	18.3	18.6	18.9	19.2	35.1	35.4	35.7	36.0	36.3	36.6	36.9	37.2	37.5	3
4	21.2	21.6	22.0	22.4	24.0	24.4	24.8	25.2	25.6	46.8	47.2	47.6	48.0	48.4	48.8	49.2	49.6	50.0	4
5	26.5	27.0	27.5	28.0	30.0	30.5	31.0	31.5	32.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5	5
6	31.8	32.4	33.0	33.6	36.0	36.6	37.2	37.8	38.4	70.2	70.8	71.4	72.0	72.6	73.2	73.8	74.4	75.0	6
7	37.1	37.8	38.5	39.2	42.0	42.7	43.4	44.1	44.8	81.9	82.6	83.3	84.0	84.7	85.4	86.1	86.8	87.5	7
8	42.4	43.2	44.0	44.8	48.0	48.8	49.6	50.4	51.2	93.6	94.4	95.2	96.0	96.8	97.6	98.4	99.2	100.0	8
9	47.7	48.6	49.5	50.4	54.0	54.9	55.8	56.7	57.6	105.3	106.2	107.1	108.0	108.9	109.8	110.7	111.6	112.5	9

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c	sin		tang		sec		cosec		cotg		cos								
50	0.346117	147	0.368919	179	1.065881	61	2.88920	123	2.71062	131	0.938191	54	50						
51	6264	148	9098	178	5942	62	8797	123	0931	131	8137	54	49						
52	6412	147	9276	179	6004	62	8674	123	0800	131	8083	54	48						
53	6559	147	9455	178	6066	62	8551	123	0669	131	8028	55	47						
54	6706	148	9633	179	6128	62	8428	122	0538	130	7974	54	46						
55	6854	147	9812	179	6190	62	8306	122	0408	130	7919	55	45						
56	7001	147	0.369991	179	6252	62	8184	122	0277	131	7865	54	44						
57	7148	147	0.370169	178	6314	62	8061	123	0147	130	7810	55	43						
58	7296	148	0348	179	6376	62	7939	122	2.70016	131	7756	54	42						
59	7443	147	0526	178	6438	62	7817	122	2.69886	130	7701	55	41						
60	0.347590	147	0.370705	179	1.066500	62	2.87695	122	2.69756	130	0.937646	55	40						
61	7738	147	0884	178	6562	62	7573	122	9626	130	7592	55	39						
62	7885	147	1062	179	6624	62	7451	121	9496	129	7537	54	38						
63	8032	147	1241	179	6686	63	7330	122	9367	130	7483	55	37						
64	8179	148	1420	179	6749	62	7208	121	9237	129	7428	55	36						
65	8327	147	1599	178	6811	62	7087	121	9108	130	7373	55	35						
66	8474	147	1777	179	6873	63	6966	122	8978	129	7318	54	34						
67	8621	147	1956	179	6936	62	6844	121	8849	129	7264	55	33						
68	8768	147	2135	179	6998	62	6723	121	8720	129	7209	55	32						
69	8916	148	2314	179	7060	62	6602	121	8591	129	7154	55	31						
70	0.349063	147	0.372493	179	1.067123	63	2.86481	121	2.68462	129	0.937099	55	30						
71	9210	147	2672	179	7185	63	6361	120	8333	129	7045	54	29						
72	9357	147	2851	179	7248	62	6240	121	8204	129	6990	55	28						
73	9504	147	3030	178	7310	63	6119	120	8075	128	6935	55	27						
74	9651	148	3208	179	7373	62	5999	120	7947	129	6880	55	26						
75	9799	147	3387	179	7435	63	5879	120	7818	128	6825	55	25						
76	0.349946	147	3566	179	7498	63	5759	121	7690	128	6770	55	24						
77	0.350093	147	3745	179	7561	62	5638	120	7562	128	6715	55	23						
78	0240	147	3924	180	7623	63	5518	119	7434	128	6660	55	22						
79	0387	147	4104	179	7686	63	5399	120	7306	128	6605	55	21						
80	0.350534	147	0.374283	179	1.067749	63	2.85279	120	2.67178	128	0.936550	55	20						
81	0681	147	4462	179	7812	62	5159	119	7050	128	6495	55	19						
82	0829	148	4641	179	7874	63	5040	120	6922	127	6440	55	18						
83	0976	147	4820	179	7937	63	4920	119	6795	128	6385	56	17						
84	1123	147	4999	179	8000	63	4801	120	6667	127	6329	55	16						
85	1270	147	5178	179	8063	63	4681	119	6540	127	6274	55	15						
86	1417	147	5357	180	8126	63	4562	119	6413	127	6219	55	14						
87	1564	147	5537	179	8189	63	4443	119	6286	127	6164	55	13						
88	1711	147	5716	179	8252	63	4324	118	6159	127	6109	55	12						
89	1858	147	5895	179	8315	63	4206	118	6032	127	6053	56	11						
90	0.352005	147	0.376074	180	1.068378	63	2.84087	119	2.65905	127	0.935998	55	10						
91	2152	147	6254	179	8441	64	3968	118	5778	127	5943	56	09						
92	2299	147	6433	179	8505	63	3850	119	5651	126	5887	55	08						
93	2446	147	6612	180	8568	63	3731	118	5525	126	5832	55	07						
94	2593	147	6792	179	8631	63	3613	118	5399	126	5777	55	06						
95	2740	147	6971	180	8694	64	3495	118	5272	126	5721	56	05						
96	2887	147	7151	179	8758	63	3377	118	5146	126	5666	55	04						
97	3034	147	7330	180	8821	63	3259	118	5020	126	5610	55	03						
98	3181	147	7510	179	8884	64	3141	118	4894	126	5555	55	02						
99	3328	147	7689	180	8948	63	3023	117	4768	126	5500	56	01						
100	0.353475	147	0.377869	180	1.069011	63	2.82906	117	2.64642	126	0.935444	56	00						
cos		cotg		cosec		sec		tang		sin		c							
	126	127	128	129	130	131	132	133	134	135	136	137	147	148	177	178	179	180	
1	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	14.7	14.8	17.7	17.8	17.9	18.0	1
2	25.2	25.4	25.6	25.8	26.0	26.2	26.4	26.6	26.8	27.0	27.2	27.4	29.4	29.6	35.4	35.6	35.8	36.0	2
3	37.8	38.1	38.4	38.7	39.0	39.3	39.6	39.9	40.2	40.5	40.8	41.1	44.1	44.4	53.1	53.4	53.7	54.0	3
4	50.4	50.8	51.2	51.6	52.0	52.4	52.8	53.2	53.6	54.0	54.4	54.8	58.8	59.2	70.8	71.2	71.6	72.0	4
5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.0	68.5	73.5	74.0	88.5	89.0	89.5	90.0	5
6	75.6	76.2	76.8	77.4	78.0	78.6	79.2	79.8	80.4	81.0	81.6	82.2	88.2	88.8	106.2	106.8	107.4	108.0	6
7	88.2	88.9	89.6	90.3	91.0	91.7	92.4	93.1	93.8	94.5	95.2	95.9	102.9	103.6	123.9	124.6	125.3	126.0	7
8	100.8	101.6	102.4	103.2	104.0	104.8	105.6	106.4	107.2	108.0	108.8	109.6	117.6	118.4	141.6	142.4	143.2	144.0	8
9	113.4	114.3	115.2	116.1	117.0	117.9	118.8	119.7	120.6	121.5	122.4	123.3	132.3	133.2	159.3	160.2	161.1	162.0	9

23^g

c	sin		tang		sec		cosec		cotg		cos		100					
00	0.353475	147	0.377869	179	1.069011	64	2.82906	118	2.64642	125	0.935444	56						
01	3622	147	8048	180	9075	63	2788	117	4517	126	5388	55	99					
02	3769	147	8228	179	9138	64	2671	118	4391	125	5333	56	98					
03	3916	147	8407	180	9202	63	2553	117	4266	126	5277	55	97					
04	4063	146	8587	179	9265	64	2436	117	4140	125	5222	56	96					
05	4209	147	8766	180	9329	63	2319	117	4015	125	5166	56	95					
06	4356	147	8946	180	9392	63	2202	117	3890	125	5110	56	94					
07	4503	147	9126	180	9456	64	2085	117	3765	125	5055	55	93					
08	4650	147	9305	179	9520	64	1968	117	3640	125	4999	56	92					
09	4797	147	9485	180	9583	63	1851	117	3515	125	4943	56	91					
10	0.354944	147	0.379665	179	1.069647	64	2.81735	116	2.63390	125	0.934888	55	90					
11	5091	146	0.379844	180	9711	64	1618	116	3266	125	4832	56	89					
12	5237	147	0.380024	180	9775	64	1502	116	3141	124	4776	56	88					
13	5384	147	0204	180	9839	64	1386	117	3017	125	4720	56	87					
14	5531	147	0384	180	9903	64	1269	116	2892	124	4664	55	86					
15	5678	147	0564	179	1.069967	64	1153	116	2768	124	4609	55	85					
16	5825	147	0743	180	1.070031	64	1037	116	2644	124	4553	56	84					
17	5972	147	0923	180	0095	64	0921	116	2520	124	4497	56	83					
18	6118	146	1103	180	0159	64	0806	115	2396	124	4441	56	82					
19	6265	147	1283	180	0223	64	0690	116	2272	124	4385	56	81					
20	0.356412	147	0.381463	180	1.070287	64	2.80574	116	2.62149	123	0.934329	56	80					
21	6559	147	1643	180	0351	64	0459	115	2025	124	4273	56	79					
22	6705	146	1823	180	0415	64	0343	116	1902	123	4217	56	78					
23	6852	147	2003	180	0479	64	0228	115	1778	124	4161	56	77					
24	6999	147	2183	180	0544	65	2.80113	115	1655	123	4105	56	76					
25	7146	146	2363	180	0608	64	2.79998	115	1532	123	4049	56	75					
26	7292	147	2543	180	0672	64	9883	115	1409	123	3993	56	74					
27	7439	147	2723	180	0737	65	9768	115	1286	123	3936	57	73					
28	7586	147	2903	180	0801	64	9653	115	1163	123	3880	56	72					
29	7732	146	3083	180	0865	64	9539	114	1040	123	3824	56	71					
30	0.357879	147	0.383263	180	1.070930	65	2.79424	115	2.60917	123	0.933768	56	70					
31	8026	147	3444	181	0994	64	9310	114	0795	122	3712	56	69					
32	8172	146	3624	180	1059	65	9195	115	0672	123	3655	57	68					
33	8319	147	3804	180	1123	64	9081	114	0550	122	3599	56	67					
34	8466	147	3984	180	1188	65	8967	114	0427	123	3543	56	66					
35	8612	146	4164	180	1253	65	8853	114	0305	122	3487	56	65					
36	8759	147	4345	181	1317	64	8739	114	0183	122	3430	57	64					
37	8906	147	4525	180	1382	65	8625	114	2.60061	122	3374	56	63					
38	9052	146	4705	180	1447	65	8511	114	2.59939	122	3317	57	62					
39	9199	147	4886	181	1512	65	8397	114	9817	122	3261	56	61					
40	0.359345	146	0.385066	180	1.071576	64	2.78284	113	2.59696	121	0.933205	56	60					
41	9492	147	5246	180	1641	65	8170	114	9574	122	3148	57	59					
42	9639	147	5427	181	1706	65	8057	113	9453	121	3092	56	58					
43	9785	146	5607	180	1771	65	7944	113	9331	122	3035	57	57					
44	0.359932	147	5788	181	1836	65	7831	113	9210	121	2979	56	56					
45	0.360078	146	5968	180	1901	65	7717	114	9089	121	2922	57	55					
46	0225	147	6149	181	1966	65	7604	113	8968	121	2866	56	54					
47	0371	146	6329	180	2031	65	7492	112	8847	121	2809	57	53					
48	0518	147	6510	181	2096	65	7379	113	8726	121	2752	57	52					
49	0664	146	6690	180	2161	65	7266	113	8605	121	2696	56	51					
50	0.360811	147	0.386871	181	1.072226	65	2.77154	112	2.58484	121	0.932639	57	50					
cos		cotg		cosec		sec		tang		sin		c						
	55	56	57	58	63	64	65	66	67	108	109	110	111	112	113	114	115	
1	5.5	5.6	5.7	5.8	6.3	6.4	6.5	6.6	6.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5	1
2	11.0	11.2	11.4	11.6	12.6	12.8	13.0	13.2	13.4	21.6	21.8	22.0	22.2	22.4	22.6	22.8	23.0	2
3	16.5	16.8	17.1	17.4	18.9	19.2	19.5	19.8	20.1	32.4	32.7	33.0	33.3	33.6	33.9	34.2	34.5	3
4	22.0	22.4	22.8	23.2	25.2	25.6	26.0	26.4	26.8	43.2	43.6	44.0	44.4	44.8	45.2	45.6	46.0	4
5	27.5	28.0	28.5	29.0	31.5	32.0	32.5	33.0	33.5	54.0	54.5	55.0	55.5	56.0	56.5	57.0	57.5	5
6	33.0	33.6	34.2	34.8	37.8	38.4	39.0	39.6	40.2	64.8	65.4	66.0	66.6	67.2	67.8	68.4	69.0	6
7	38.5	39.2	39.9	40.6	44.1	44.8	45.5	46.2	46.9	75.6	76.3	77.0	77.7	78.4	79.1	79.8	80.5	7
8	44.0	44.8	45.6	46.4	50.4	51.2	52.0	52.8	53.6	86.4	87.2	88.0	88.8	89.6	90.4	91.2	92.0	8
9	49.5	50.4	51.3	52.2	56.7	57.6	58.5	59.4	60.3	97.2	98.1	99.0	99.9	100.8	101.7	102.6	103.5	9

23^g

c	sin		tang		sec		cosec		cotg		cos							
50	0.360811	146	0.386871	180	1.072226	65	2.77154	113	2.58484	120	0.932639	57	50					
51	0957	147	7051	181	2291	66	7041	112	8364	121	2582	56	49					
52	1104	146	7232	181	2357	65	6929	113	8243	120	2526	57	48					
53	1250	147	7413	181	2422	65	6816	113	8123	120	2469	57	47					
54	1397	147	7593	180	2487	65	6704	112	8002	121	2412	57	46					
55	1543	146	7774	181	2552	65	6592	112	7882	120	2355	57	45					
56	1690	147	7955	181	2618	66	6480	112	7762	120	2299	56	44					
57	1836	146	8135	180	2683	65	6368	112	7642	120	2242	57	43					
58	1983	147	8316	181	2749	66	6256	112	7522	120	2185	57	42					
59	2129	146	8497	181	2814	65	6145	111	7402	120	2128	57	41					
60	0.362275	147	0.388678	181	1.072880	66	2.76033	112	2.57282	120	0.932071	57	40					
61	2422	146	8859	181	2945	65	5922	111	7163	119	2014	57	39					
62	2568	146	9039	180	3011	66	5810	112	7043	120	1957	57	38					
63	2715	147	9220	181	3076	65	5699	111	6924	119	1900	57	37					
64	2861	146	9401	181	3142	66	5588	111	6805	119	1843	57	36					
65	3007	146	9582	181	3207	65	5477	111	6685	120	1786	57	35					
66	3154	147	9763	181	3273	66	5366	111	6566	119	1729	57	34					
67	3300	146	0.389944	181	3339	66	5255	111	6447	119	1672	57	33					
68	3446	146	0.390125	181	3405	66	5144	111	6328	119	1615	57	32					
69	3593	147	0306	181	3470	65	5033	111	6209	119	1558	57	31					
70	0.363739	146	0.390487	181	1.073536	66	2.74922	111	2.56090	119	0.931501	57	30					
71	3885	147	0668	181	3602	66	4812	110	5972	118	1444	57	29					
72	4032	146	0849	181	3668	66	4701	110	5853	119	1387	57	28					
73	4178	146	1030	181	3734	66	4591	110	5735	118	1329	58	27					
74	4324	146	1211	181	3800	66	4481	110	5616	119	1272	57	26					
75	4470	146	1392	181	3866	66	4371	110	5498	118	1215	57	25					
76	4617	147	1574	182	3932	66	4261	110	5380	118	1158	57	24					
77	4763	146	1755	181	3998	66	4151	110	5262	118	1100	58	23					
78	4909	146	1936	181	4064	66	4041	110	5144	118	1043	57	22					
79	5056	147	2117	181	4130	66	3931	110	5026	118	0986	57	21					
80	0.365202	146	0.392298	181	1.074196	67	2.73821	110	2.54908	118	0.930928	58	20					
81	5348	147	2480	182	4263	67	3712	109	4790	118	0871	57	19					
82	5494	146	2661	181	4329	66	3602	110	4673	117	0814	57	18					
83	5640	146	2842	181	4395	66	3493	109	4555	118	0756	58	17					
84	5787	147	3024	182	4462	67	3383	110	4438	117	0699	57	16					
85	5933	146	3205	181	4528	66	3274	109	4320	118	0641	58	15					
86	6079	146	3386	181	4594	66	3165	109	4203	117	0584	57	14					
87	6225	146	3568	182	4661	67	3056	109	4086	117	0526	58	13					
88	6371	146	3749	181	4727	66	2947	109	3969	117	0469	57	12					
89	6517	146	3931	182	4794	67	2838	109	3852	117	0411	58	11					
90	0.366664	147	0.394112	181	1.074860	66	2.72730	108	2.53735	117	0.930354	57	10					
91	6810	146	4294	182	4927	67	2621	109	3618	117	0296	58	09					
92	6956	146	4475	181	4993	66	2512	109	3501	117	0238	58	08					
93	7102	146	4657	182	5060	67	2404	108	3385	116	0181	57	07					
94	7248	146	4838	181	5127	67	2295	109	3268	117	0123	58	06					
95	7394	146	5020	182	5193	66	2187	108	3152	116	0065	57	05					
96	7540	146	5201	181	5260	67	2079	108	3036	116	0.930008	58	04					
97	7686	146	5383	182	5327	67	1971	108	2919	117	0.929950	58	03					
98	7832	146	5565	182	5394	67	1863	108	2803	116	9892	58	02					
99	7978	146	5746	181	5460	66	1755	108	2687	116	9834	58	01					
100	0.368125	147	0.395928	182	1.075527	67	2.71647	108	2.52571	116	0.929776	58	00					
cos		cotg		cosec		sec		tang		sin		c						
	116	117	118	119	120	121	122	123	124	125	126	146	147	179	180	181	182	
1	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.6	14.6	14.7	17.9	18.0	18.1	18.2	1
2	23.2	23.4	23.6	23.8	24.0	24.2	24.4	24.6	24.8	25.0	25.2	29.2	29.4	35.8	36.0	36.2	36.4	2
3	34.8	35.1	35.4	35.7	36.0	36.3	36.6	36.9	37.2	37.5	37.8	43.8	44.1	53.7	54.0	54.3	54.6	3
4	46.4	46.8	47.2	47.6	48.0	48.4	48.8	49.2	49.6	50.0	50.4	58.4	58.8	71.6	72.0	72.4	72.8	4
5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5	63.0	73.0	73.5	89.5	90.0	90.5	91.0	5
6	69.6	70.2	70.8	71.4	72.0	72.6	73.2	73.8	74.4	75.0	75.6	87.6	88.2	107.4	108.0	108.6	109.2	6
7	81.2	81.9	82.6	83.3	84.0	84.7	85.4	86.1	86.8	87.5	88.2	102.2	102.9	125.3	126.0	126.7	127.4	7
8	92.8	93.6	94.4	95.2	96.0	96.8	97.6	98.4	99.2	100.0	100.8	116.8	117.6	143.2	144.0	144.8	145.6	8
9	104.4	105.3	106.2	107.1	108.0	108.9	109.8	110.7	111.6	112.5	113.4	131.4	132.3	161.1	162.0	162.9	163.8	9

24^g

c	sin		tang		sec		cosec		cotg		cos							
00	0.368125	146	0.395928	182	1.075527	67	2.71647	108	2.52571	116	0.929776	57	100					
01	8271	146	6110	181	5594	67	1539	107	2455	115	9719	58	99					
02	8417	146	6291	181	5661	67	1432	107	2340	115	9661	58	98					
03	8563	146	6473	182	5728	67	1324	108	2224	116	9603	58	97					
04	8709	146	6655	182	5795	67	1217	107	2108	116	9545	58	96					
05	8855	146	6837	182	5862	67	1109	108	1993	115	9487	58	95					
06	9001	146	7019	182	5929	67	1002	107	1877	116	9429	58	94					
07	9147	146	7200	181	5996	67	0895	107	1762	115	9371	58	93					
08	9293	146	7382	182	6064	68	0788	107	1647	115	9313	58	92					
09	9439	146	7564	182	6131	67	0681	107	1532	115	9255	58	91					
10	0.369585	146	0.397746	182	1.076198	67	2.70574	107	2.51417	115	0.929197	58	90					
11	9731	145	7928	182	6265	67	0467	106	1302	115	9139	58	89					
12	0.369876	146	8110	182	6332	67	0361	106	1187	115	9081	58	88					
13	0.370022	146	8292	182	6400	68	0254	107	1072	115	9023	58	87					
14	0168	146	8474	182	6467	67	0147	107	0957	115	8965	58	86					
15	0314	146	8656	182	6535	68	2.70041	106	0843	114	8907	58	85					
16	0460	146	8838	182	6602	67	2.69935	106	0728	115	8848	59	84					
17	0606	146	9020	182	6669	67	9828	107	0614	114	8790	58	83					
18	0752	146	9202	182	6737	68	9722	106	0500	114	8732	58	82					
19	0898	146	9384	182	6805	68	9616	106	0385	115	8674	58	81					
20	0.371044	146	0.399567	182	1.076872	68	2.69510	106	2.50271	114	0.928615	59	80					
21	1190	145	9749	182	6940	67	9404	106	0157	114	8557	58	79					
22	1335	146	0.399931	182	7007	67	9298	106	2.50043	114	8499	58	78					
23	1481	146	0.400113	182	7075	68	9193	106	2.49929	114	8440	59	77					
24	1627	146	0295	183	7143	67	9087	106	9815	113	8382	58	76					
25	1773	146	0478	182	7210	68	8981	106	9702	114	8324	58	75					
26	1919	146	0660	182	7278	68	8876	105	9588	114	8265	59	74					
27	2065	146	0842	182	7346	68	8771	105	9475	113	8207	58	73					
28	2210	145	1025	183	7414	68	8665	106	9361	114	8148	59	72					
29	2356	146	1207	182	7482	68	8560	105	9248	113	8090	58	71					
30	0.372502	146	0.401389	182	1.077550	68	2.68455	105	2.49135	113	0.928031	59	70					
31	2648	145	1572	183	7618	68	8350	105	9022	113	7973	58	69					
32	2793	146	1754	182	7686	68	8245	105	8908	114	7914	59	68					
33	2939	146	1937	182	7754	68	8140	105	8795	113	7856	58	67					
34	3085	146	2119	183	7822	68	8035	105	8683	112	7797	59	66					
35	3231	146	2302	183	7890	68	7931	104	8570	113	7739	58	65					
36	3376	145	2484	182	7958	68	7826	105	8457	113	7680	59	64					
37	3522	146	2667	183	8026	68	7722	104	8344	113	7621	59	63					
38	3668	146	2849	182	8094	68	7617	105	8232	112	7563	58	62					
39	3814	146	3032	183	8163	69	7513	104	8119	113	7504	59	61					
40	0.373959	145	0.403214	182	1.078231	68	2.67409	104	2.48007	112	0.927445	59	60					
41	4105	146	3397	183	8299	68	7305	104	7895	112	7386	59	59					
42	4251	146	3580	183	8368	69	7201	104	7783	112	7328	58	58					
43	4396	145	3762	182	8436	68	7097	104	7670	113	7269	59	57					
44	4542	146	3945	183	8504	68	6993	104	7558	112	7210	59	56					
45	4688	146	4128	183	8573	69	6889	104	7447	111	7151	59	55					
46	4833	145	4310	182	8641	68	6785	104	7335	112	7092	59	54					
47	4979	146	4493	183	8710	69	6682	103	7223	112	7033	59	53					
48	5124	145	4676	183	8778	68	6578	104	7111	112	6974	59	52					
49	5270	146	4859	183	8847	69	6475	103	7000	111	6916	58	51					
50	0.375416	146	0.405042	183	1.078916	69	2.66371	104	2.46888	112	0.926857	59	50					
cos		cotg		cosec		sec		tang		sin		c						
	57	58	59	60	67	68	69	70	71	99	100	101	102	103	104	105	106	
1	5.7	5.8	5.9	6.0	6.7	6.8	6.9	7.0	7.1	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.6	1
2	11.4	11.6	11.8	12.0	13.4	13.6	13.8	14.0	14.2	19.8	20.0	20.2	20.4	20.6	20.8	21.0	21.2	2
3	17.1	17.4	17.7	18.0	20.1	20.4	20.7	21.0	21.3	29.7	30.0	30.3	30.6	30.9	31.2	31.5	31.8	3
4	22.8	23.2	23.6	24.0	26.8	27.2	27.6	28.0	28.4	39.6	40.0	40.4	40.8	41.2	41.6	42.0	42.4	4
5	28.5	29.0	29.5	30.0	33.5	34.0	34.5	35.0	35.5	49.5	50.0	50.5	51.0	51.5	52.0	52.5	53.0	5
6	34.2	34.8	35.4	36.0	40.2	40.8	41.4	42.0	42.6	59.4	60.0	60.6	61.2	61.8	62.4	63.0	63.6	6
7	39.9	40.6	41.3	42.0	46.9	47.6	48.3	49.0	49.7	69.3	70.0	70.7	71.4	72.1	72.8	73.5	74.2	7
8	45.6	46.4	47.2	48.0	53.6	54.4	55.2	56.0	56.8	79.2	80.0	80.8	81.6	82.4	83.2	84.0	84.8	8
9	51.3	52.2	53.1	54.0	60.3	61.2	62.1	63.0	63.9	89.1	90.0	90.9	91.8	92.7	93.6	94.5	95.4	9

24^g

c	sin		tang		sec		cosec		cotg		cos						
50	0.375416	145	0.405042	183	1.078916	68	2.66371	103	2.46888	111	0.926857	59	50				
51	5561	146	5225	182	8984	69	6268	103	6777	112	6798	59	49				
52	5707	145	5407	183	9053	69	6165	103	6665	111	6739	59	48				
53	5852	146	5590	183	9122	68	6062	103	6554	111	6680	59	47				
54	5998	145	5773	183	9190	69	5959	103	6443	111	6621	59	46				
55	6143	146	5956	183	9259	69	5856	103	6332	111	6561	60	45				
56	6289	145	6139	183	9328	69	5753	103	6221	111	6502	59	44				
57	6434	146	6322	183	9397	69	5650	103	6110	111	6443	59	43				
58	6580	145	6505	183	9466	69	5548	102	5999	111	6384	59	42				
59	6726	146	6688	183	9535	69	5445	103	5889	110	6325	59	41				
60	0.376871	145	0.406871	183	1.079604	69	2.65343	102	2.45778	111	0.926266	59	40				
61	7017	146	7054	184	9673	69	5240	102	5667	110	6207	60	39				
62	7162	145	7238	183	9742	69	5138	102	5557	110	6147	60	38				
63	7307	146	7421	183	9811	69	5036	102	5447	110	6088	59	37				
64	7453	145	7604	183	9880	69	4934	102	5336	111	6029	59	36				
65	7598	146	7787	183	1.079949	69	4832	102	5226	110	5969	60	35				
66	7744	145	7970	183	1.080018	69	4730	102	5116	110	5910	59	34				
67	7889	146	8154	184	0088	70	4628	102	5006	110	5851	59	33				
68	8035	145	8337	183	0157	69	4526	102	4896	110	5791	60	32				
69	8180	146	8520	183	0226	69	4424	102	4786	110	5732	59	31				
70	0.378326	145	0.408703	183	1.080296	70	2.64323	101	2.44676	110	0.925673	59	30				
71	8471	146	8887	184	0365	69	4221	102	4567	109	5613	60	29				
72	8616	145	9070	183	0434	69	4120	101	4457	110	5554	59	28				
73	8762	146	9253	183	0504	70	4018	102	4347	110	5494	60	27				
74	8907	145	9437	184	0573	69	3917	101	4238	109	5435	59	26				
75	9052	146	9620	183	0643	70	3816	101	4129	109	5375	60	25				
76	9198	145	9804	184	0712	69	3715	101	4019	110	5316	59	24				
77	9343	146	0.409987	183	0782	70	3614	101	3910	109	5256	60	23				
78	9488	145	0.410171	184	0852	70	3513	101	3801	109	5196	60	22				
79	9634	146	0354	183	0921	69	3412	101	3692	109	5137	59	21				
80	0.379779	145	0.410538	184	1.080991	70	2.63311	101	2.43583	109	0.925077	60	20				
81	0.379924	146	0721	183	1061	70	3210	101	3474	109	5018	59	19				
82	0.380070	145	0905	184	1130	69	3110	100	3365	109	4958	60	18				
83	0215	146	1088	183	1200	70	3009	101	3257	108	4898	60	17				
84	0360	145	1272	184	1270	70	2909	100	3148	109	4838	60	16				
85	0506	146	1456	184	1340	70	2808	101	3039	109	4779	59	15				
86	0651	145	1639	183	1410	70	2708	100	2931	108	4719	60	14				
87	0796	146	1823	184	1480	70	2608	100	2823	108	4659	60	13				
88	0941	145	2007	184	1550	70	2508	100	2714	109	4599	60	12				
89	1087	146	2191	184	1620	70	2408	100	2606	108	4539	60	11				
90	0.381232	145	0.412374	183	1.081690	70	2.62308	100	2.42498	108	0.924480	59	10				
91	1377	146	2558	184	1760	70	2208	100	2390	108	4420	60	09				
92	1522	145	2742	184	1830	70	2108	100	2282	108	4360	60	08				
93	1667	146	2926	184	1900	70	2008	100	2174	108	4300	60	07				
94	1813	145	3110	184	1970	70	1909	99	2066	108	4240	60	06				
95	1958	146	3294	184	2041	71	1809	100	1959	107	4180	60	05				
96	2103	145	3478	184	2111	70	1710	99	1851	108	4120	60	04				
97	2248	146	3662	184	2181	70	1610	100	1744	107	4060	60	03				
98	2393	145	3846	184	2251	70	1511	99	1636	108	4000	60	02				
99	2538	146	4030	184	2322	71	1412	99	1529	107	3940	60	01				
100	0.382683	145	0.414214	184	1.082392	70	2.61313	99	2.41421	108	0.923880	60	00				
cos		cotg		cosec		sec		tang		sin		c					
	107	108	109	110	111	112	113	114	115	116	145	146	181	182	183	184	
1	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	14.5	14.6	18.1	18.2	18.3	18.4	1
2	21.4	21.6	21.8	22.0	22.2	22.4	22.6	22.8	23.0	23.2	29.0	29.2	36.2	36.4	36.6	36.8	2
3	32.1	32.4	32.7	33.0	33.3	33.6	33.9	34.2	34.5	34.8	43.5	43.8	54.3	54.6	54.9	55.2	3
4	42.8	43.2	43.6	44.0	44.4	44.8	45.2	45.6	46.0	46.4	58.0	58.4	72.4	72.8	73.2	73.6	4
5	53.5	54.0	54.5	55.0	55.5	56.0	56.5	57.0	57.5	58.0	72.5	73.0	90.5	91.0	91.5	92.0	5
6	64.2	64.8	65.4	66.0	66.6	67.2	67.8	68.4	69.0	69.6	87.0	87.6	108.6	109.2	109.8	110.4	6
7	74.9	75.6	76.3	77.0	77.7	78.4	79.1	79.8	80.5	81.2	101.5	102.2	126.7	127.4	128.1	128.8	7
8	85.6	86.4	87.2	88.0	88.8	89.6	90.4	91.2	92.0	92.8	116.0	116.8	144.8	145.6	146.4	147.2	8
9	96.3	97.2	98.1	99.0	99.9	100.8	101.7	102.6	103.5	104.4	130.5	131.4	162.9	163.8	164.7	165.6	9

25^g

c	sin		tang		sec		cosec		cotg		cos							
00	0.382683	146	0.414214	184	1.082392	71	2.61313	99	2.41421	107	0.923880	61	100					
01	2829	145	4398	184	2463	70	1214	99	1314	107	3819	60	99					
02	2974	145	4582	184	2533	71	1115	99	1207	107	3759	60	98					
03	3119	145	4766	184	2604	71	1016	99	1100	107	3699	60	97					
04	3264	145	4950	184	2674	70	0917	99	0993	107	3639	60	96					
05	3409	145	5134	184	2745	71	0818	99	0886	107	3579	60	95					
06	3554	145	5318	184	2815	70	0719	99	0779	107	3518	61	94					
07	3699	145	5502	184	2886	71	0621	98	0673	106	3458	60	93					
08	3844	145	5687	185	2957	71	0522	99	0566	107	3398	60	92					
09	3989	145	5871	184	3027	70	0424	98	0459	107	3338	60	91					
10	0.384134	145	0.416055	184	1.083098	71	2.60326	98	2.40353	106	0.923277	61	90					
11	4279	145	6239	185	3169	71	0227	98	0246	106	3217	60	89					
12	4424	145	6424	184	3240	71	0129	98	0140	106	3157	61	88					
13	4569	145	6608	184	3311	71	2.60031	98	2.40034	106	3096	60	87					
14	4714	145	6792	184	3382	71	2.59933	98	2.39928	106	3036	60	86					
15	4859	145	6977	185	3453	71	9835	98	9822	106	2975	61	85					
16	5004	145	7161	184	3524	71	9737	98	9716	106	2915	60	84					
17	5149	145	7346	185	3595	71	9640	97	9610	106	2854	61	83					
18	5294	145	7530	184	3666	71	9542	98	9504	106	2794	60	82					
19	5439	145	7714	184	3737	71	9444	98	9398	106	2733	61	81					
20	0.385584	145	0.417899	185	1.083808	71	2.59347	97	2.39292	105	0.922673	61	80					
21	5729	145	8083	185	3879	71	9249	97	9187	106	2612	60	79					
22	5874	145	8268	185	3950	71	9152	97	9081	105	2552	61	78					
23	6019	145	8453	184	4021	72	9055	97	8976	106	2491	61	77					
24	6164	145	8637	184	4093	72	8958	97	8870	106	2430	60	76					
25	6309	145	8822	185	4164	71	8860	98	8765	105	2370	60	75					
26	6453	144	9006	184	4235	71	8763	97	8660	105	2309	61	74					
27	6598	145	9191	185	4307	72	8666	97	8555	105	2248	61	73					
28	6743	145	9376	185	4378	71	8570	96	8450	105	2187	61	72					
29	6888	145	9561	185	4450	72	8473	97	8345	105	2127	60	71					
30	0.387033	145	0.419745	184	1.084521	71	2.58376	97	2.38240	105	0.922066	61	70					
31	7178	145	0.419930	185	4593	72	8279	97	8135	105	2005	61	69					
32	7323	145	0.420115	185	4664	71	8183	96	8030	105	1944	61	68					
33	7467	144	0300	185	4736	72	8086	97	7925	105	1883	61	67					
34	7612	145	0485	185	4807	71	7990	96	7821	104	1823	60	66					
35	7757	145	0669	184	4879	72	7894	96	7716	105	1762	61	65					
36	7902	145	0854	185	4951	72	7797	97	7612	104	1701	61	64					
37	8046	144	1039	185	5023	72	7701	96	7508	104	1640	61	63					
38	8191	145	1224	185	5094	71	7605	96	7403	105	1579	61	62					
39	8336	145	1409	185	5166	72	7509	96	7299	104	1518	61	61					
40	0.388481	145	0.421594	185	1.085238	72	2.57413	96	2.37195	104	0.921457	61	60					
41	8625	144	1779	185	5310	72	7317	96	7091	104	1396	61	59					
42	8770	145	1964	185	5382	72	7221	96	6987	104	1335	61	58					
43	8915	145	2149	185	5454	72	7126	95	6883	104	1274	61	57					
44	9060	145	2334	185	5526	72	7030	96	6779	104	1213	61	56					
45	9204	144	2519	185	5598	72	6934	96	6676	103	1151	62	55					
46	9349	145	2705	186	5670	72	6839	95	6572	104	1090	61	54					
47	9494	145	2890	185	5742	72	6744	95	6468	104	1029	61	53					
48	9638	144	3075	185	5814	72	6648	96	6365	103	0968	61	52					
49	9783	145	3260	185	5886	72	6553	95	6261	104	0907	61	51					
50	0.389928	145	0.423445	185	1.085959	73	2.56458	95	2.36158	103	0.920845	62	50					
cos		cotg		cosec		sec		tang		sin		c						
	60	61	62	63	70	71	72	73	74	91	92	93	94	95	96	97	98	
1	6.0	6.1	6.2	6.3	7.0	7.1	7.2	7.3	7.4	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	1
2	12.0	12.2	12.4	12.6	14.0	14.2	14.4	14.6	14.8	18.2	18.4	18.6	18.8	19.0	19.2	19.4	19.6	2
3	18.0	18.3	18.6	18.9	21.0	21.3	21.6	21.9	22.2	27.3	27.6	27.9	28.2	28.5	28.8	29.1	29.4	3
4	24.0	24.4	24.8	25.2	28.0	28.4	28.8	29.2	29.6	36.4	36.8	37.2	37.6	38.0	38.4	38.8	39.2	4
5	30.0	30.5	31.0	31.5	35.0	35.5	36.0	36.5	37.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	5
6	36.0	36.6	37.2	37.8	42.0	42.6	43.2	43.8	44.4	54.6	55.2	55.8	56.4	57.0	57.6	58.2	58.8	6
7	42.0	42.7	43.4	44.1	49.0	49.7	50.4	51.1	51.8	63.7	64.4	65.1	65.8	66.5	67.2	67.9	68.6	7
8	48.0	48.8	49.6	50.4	56.0	56.8	57.6	58.4	59.2	72.8	73.6	74.4	75.2	76.0	76.8	77.6	78.4	8
9	54.0	54.9	55.8	56.7	63.0	63.9	64.8	65.7	66.6	81.9	82.8	83.7	84.6	85.5	86.4	87.3	88.2	9

25^g

c	sin		tang		sec		cosec		cotg		cos						
50	0.389928	144	0.423445	186	1.085959	72	2.56458	95	2.36158	103	0.920845	61	50				
51	0.390072	145	3631	185	6031	72	6363	95	6055	103	0784	61	49				
52	0217	145	3816	185	6103	72	6268	95	5952	104	0723	61	48				
53	0362	144	4001	185	6175	72	6173	95	5848	103	0662	62	47				
54	0506	145	4186	186	6248	73	6078	95	5745	103	0600	61	46				
55	0651	144	4372	185	6320	72	5983	95	5642	103	0539	61	45				
56	0795	144	4557	185	6393	73	5888	95	5540	102	0478	61	44				
57	0940	145	4743	186	6465	72	5794	94	5437	103	0416	62	43				
58	1085	145	4928	185	6538	73	5699	95	5334	103	0355	61	42				
59	1229	144	5114	186	6610	72	5605	94	5231	103	0293	62	41				
60	0.391374	145	0.425299	185	1.086683	73	2.55510	95	2.35129	102	0.920232	61	40				
61	1518	144	5484	186	6755	72	5416	94	5026	103	0170	62	39				
62	1663	145	5670	186	6828	73	5322	94	4924	102	0109	61	38				
63	1807	144	5856	186	6901	73	5228	94	4821	103	0.920047	62	37				
64	1952	145	6041	185	6973	72	5133	95	4719	102	0.919986	61	36				
65	2096	144	6227	186	7046	73	5039	94	4617	102	9924	62	35				
66	2241	145	6412	185	7119	73	4945	94	4515	102	9863	61	34				
67	2385	144	6598	186	7192	73	4852	93	4413	102	9801	62	33				
68	2530	145	6784	186	7265	73	4758	94	4311	102	9739	62	32				
69	2674	144	6969	185	7338	73	4664	94	4209	102	9678	61	31				
70	0.392819	145	0.427155	186	1.087410	72	2.54570	94	2.34107	102	0.919616	62	30				
71	2963	144	7341	186	7483	73	4477	93	4005	102	9554	62	29				
72	3108	145	7527	186	7556	73	4383	94	3904	101	9492	62	28				
73	3252	144	7712	185	7630	74	4290	93	3802	102	9431	61	27				
74	3396	144	7898	186	7703	73	4197	93	3700	102	9369	62	26				
75	3541	145	8084	186	7776	73	4103	94	3599	101	9307	62	25				
76	3685	144	8270	186	7849	73	4010	93	3498	101	9245	62	24				
77	3830	145	8456	186	7922	73	3917	93	3396	102	9183	62	23				
78	3974	144	8642	186	7995	73	3824	93	3295	101	9122	61	22				
79	4118	144	8828	186	8069	74	3731	93	3194	101	9060	62	21				
80	0.394263	145	0.429014	186	1.088142	73	2.53638	93	2.33093	101	0.918998	62	20				
81	4407	144	9200	186	8215	73	3545	93	2992	101	8936	62	19				
82	4551	144	9386	186	8289	74	3452	93	2891	101	8874	62	18				
83	4696	145	9572	186	8362	73	3360	92	2790	101	8812	62	17				
84	4840	144	9758	186	8436	74	3267	93	2689	101	8750	62	16				
85	4984	144	0.429944	186	8509	73	3175	92	2588	101	8688	62	15				
86	5129	145	0.430130	186	8583	74	3082	93	2488	100	8626	62	14				
87	5273	144	0316	186	8656	73	2990	92	2387	101	8564	62	13				
88	5417	144	0503	187	8730	74	2897	93	2287	100	8502	62	12				
89	5562	145	0689	186	8803	73	2805	92	2186	101	8439	63	11				
90	0.395706	144	0.430875	186	1.088877	74	2.52713	92	2.32086	100	0.918377	62	10				
91	5850	144	1061	186	8951	74	2621	92	1986	100	8315	62	09				
92	5994	144	1247	186	9025	74	2529	92	1885	101	8253	62	08				
93	6139	145	1434	187	9098	73	2437	92	1785	100	8191	62	07				
94	6283	144	1620	186	9172	74	2345	92	1685	100	8129	62	06				
95	6427	144	1806	186	9246	74	2253	92	1585	100	8066	63	05				
96	6571	144	1993	187	9320	74	2162	91	1485	100	8004	62	04				
97	6715	144	2179	186	9394	74	2070	92	1385	100	7942	62	03				
98	6860	145	2366	187	9468	74	1978	92	1286	99	7879	63	02				
99	7004	144	2552	186	9542	74	1887	91	1186	100	7817	62	01				
100	0.397148	144	0.432739	187	1.089616	74	2.51795	92	2.31086	100	0.917755	62	00				
	cos		cotg		cosec		sec		tang		sin		c				
	99	100	101	102	103	104	105	106	107	144	145	146	184	185	186	187	
1	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	14.4	14.5	14.6	18.4	18.5	18.6	18.7	1
2	19.8	20.0	20.2	20.4	20.6	20.8	21.0	21.2	21.4	28.8	29.0	29.2	36.8	37.0	37.2	37.4	2
3	29.7	30.0	30.3	30.6	30.9	31.2	31.5	31.8	32.1	43.2	43.5	43.8	55.2	55.5	55.8	56.1	3
4	39.6	40.0	40.4	40.8	41.2	41.6	42.0	42.4	42.8	57.6	58.0	58.4	73.6	74.0	74.4	74.8	4
5	49.5	50.0	50.5	51.0	51.5	52.0	52.5	53.0	53.5	72.0	72.5	73.0	92.0	92.5	93.0	93.5	5
6	59.4	60.0	60.6	61.2	61.8	62.4	63.0	63.6	64.2	86.4	87.0	87.6	110.4	111.0	111.6	112.2	6
7	69.3	70.0	70.7	71.4	72.1	72.8	73.5	74.2	74.9	100.8	101.5	102.2	128.8	129.5	130.2	130.9	7
8	79.2	80.0	80.8	81.6	82.4	83.2	84.0	84.8	85.6	115.2	116.0	116.8	147.2	148.0	148.8	149.6	8
9	89.1	90.0	90.9	91.8	92.7	93.6	94.5	95.4	96.3	129.6	130.5	131.4	165.6	166.5	167.4	168.3	9

26^g

c	sin		tang		sec		cosec		cotg		cos							
00	0.397148	144	0.432739	186	1.089616	74	2.51795	91	2.31086	99	0.917755	63	100					
01	7292	144	2925	187	9690	74	1704	91	0987	100	7692	62	99					
02	7436	144	3112	186	9764	74	1613	92	0887	99	7630	63	98					
03	7580	144	3298	187	9838	74	1521	91	0788	99	7567	62	97					
04	7724	145	3485	186	9912	75	1430	91	0689	100	7505	63	96					
05	7869	144	3671	187	1.089987	74	1339	91	0589	99	7442	62	95					
06	8013	144	3858	187	1.090061	74	1248	91	0490	99	7380	63	94					
07	8157	144	4045	187	0135	74	1157	91	0391	99	7317	62	93					
08	8301	144	4231	186	0210	75	1066	91	0292	99	7255	63	92					
09	8445	144	4418	187	0284	74	0976	90	0193	99	7192	62	91					
10	0.398589	144	0.434605	187	1.090358	75	2.50885	91	2.30094	99	0.917130	63	90					
11	8733	144	4792	186	0433	74	0794	90	2.29995	99	7067	63	89					
12	8877	144	4978	187	0507	75	0704	91	9896	98	7004	62	88					
13	9021	144	5165	187	0582	74	0613	90	9798	99	6942	63	87					
14	9165	144	5352	187	0656	75	0523	90	9699	98	6879	63	86					
15	9309	144	5539	187	0731	75	0433	91	9601	99	6816	62	85					
16	9453	144	5726	187	0806	75	0342	91	9502	99	6754	63	84					
17	9597	144	5913	187	0880	74	0252	90	9404	98	6691	63	83					
18	9741	144	6100	187	0955	75	0162	90	9305	99	6628	63	82					
19	0.399885	144	6287	187	1030	75	2.50072	90	9207	98	6565	63	81					
20	0.400029	144	0.436474	187	1.091105	75	2.49982	90	2.29109	98	0.916502	63	80					
21	0173	144	6661	187	1179	74	9892	90	9011	98	6440	63	79					
22	0317	144	6848	187	1254	75	9802	90	8913	98	6377	63	78					
23	0461	144	7035	187	1329	75	9712	90	8815	98	6314	63	77					
24	0605	144	7222	187	1404	75	9622	89	8717	98	6251	63	76					
25	0749	144	7409	187	1479	75	9533	90	8619	98	6188	63	75					
26	0893	144	7596	187	1554	75	9443	90	8521	98	6125	63	74					
27	1037	144	7783	187	1629	75	9354	89	8424	97	6062	63	73					
28	1181	144	7970	187	1704	75	9264	90	8326	98	5999	63	72					
29	1324	143	8158	188	1779	75	9175	89	8228	98	5936	63	71					
30	0.401468	144	0.438345	187	1.091855	76	2.49086	89	2.28131	97	0.915873	63	70					
31	1612	144	8532	188	1930	75	8996	89	8033	98	5810	63	69					
32	1756	144	8720	187	2005	75	8907	89	7936	97	5747	63	68					
33	1900	144	8907	187	2080	76	8818	89	7839	97	5684	63	67					
34	2044	143	9094	188	2156	75	8729	89	7742	97	5620	63	66					
35	2187	144	9282	187	2231	75	8640	89	7644	98	5557	63	65					
36	2331	144	9469	187	2306	76	8551	88	7547	97	5494	63	64					
37	2475	144	9656	188	2382	75	8463	89	7450	97	5431	63	63					
38	2619	144	0.439844	187	2457	76	8374	89	7353	97	5368	63	62					
39	2763	143	0.440031	188	2533	75	8285	88	7257	96	5304	63	61					
40	0.402906	144	0.440219	187	1.092608	76	2.48197	89	2.27160	97	0.915241	63	60					
41	3050	144	0406	188	2684	75	8108	88	7063	97	5178	63	59					
42	3194	144	0594	188	2759	76	8020	89	6966	97	5115	63	58					
43	3338	143	0782	187	2835	76	7931	88	6870	96	5051	63	57					
44	3481	144	0969	188	2911	75	7843	88	6773	97	4988	63	56					
45	3625	144	1157	187	2986	76	7755	89	6677	96	4924	63	55					
46	3769	144	1344	188	3062	76	7666	88	6580	96	4861	63	54					
47	3913	143	1532	188	3138	76	7578	88	6484	96	4798	63	53					
48	4056	144	1720	188	3214	76	7490	88	6388	96	4734	63	52					
49	4200	144	1908	187	3290	76	7402	88	6292	96	4671	63	51					
50	0.404344	144	0.442095	187	1.093366	76	2.47314	88	2.26196	96	0.914607	63	50					
cos		cotg		cosec		sec		tang		sin		c						
	62	63	64	65	74	75	76	77	78	84	85	86	87	88	89	90	91	
1	6.2	6.3	6.4	6.5	7.4	7.5	7.6	7.7	7.8	8.4	8.5	8.6	8.7	8.8	8.9	9.0	9.1	1
2	12.4	12.6	12.8	13.0	14.8	15.0	15.2	15.4	15.6	16.8	17.0	17.2	17.4	17.6	17.8	18.0	18.2	2
3	18.6	18.9	19.2	19.5	22.2	22.5	22.8	23.1	23.4	25.2	25.5	25.8	26.1	26.4	26.7	27.0	27.3	3
4	24.8	25.2	25.6	26.0	29.6	30.0	30.4	30.8	31.2	33.6	34.0	34.4	34.8	35.2	35.6	36.0	36.4	4
5	31.0	31.5	32.0	32.5	37.0	37.5	38.0	38.5	39.0	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	5
6	37.2	37.8	38.4	39.0	44.4	45.0	45.6	46.2	46.8	50.4	51.0	51.6	52.2	52.8	53.4	54.0	54.6	6
7	43.4	44.1	44.8	45.5	51.8	52.5	53.2	53.9	54.6	58.8	59.5	60.2	60.9	61.6	62.3	63.0	63.7	7
8	49.6	50.4	51.2	52.0	59.2	60.0	60.8	61.6	62.4	67.2	68.0	68.8	69.6	70.4	71.2	72.0	72.8	8
9	55.8	56.7	57.6	58.5	66.6	67.5	68.4	69.3	70.2	75.6	76.5	77.4	78.3	79.2	80.1	81.0	81.9	9

26^g

c	sin			tang			sec			cosec			cotg			cos			
50	0.404344		143	0.442095		188	1.093366		76	2.47314		87	2.26196		97	0.914607		63	50
51	4487		144	2283		188	3442		76	7227		88	6099		95	4544		64	49
52	4631		144	2471		188	3518		76	7139		88	6004		96	4480		64	48
53	4775		144	2659		188	3594		76	7051		88	5908		96	4417		63	47
54	4918		143	2847		188	3670		76	6963		88	5812		96	4353		64	46
55	5062		144	3035		188	3746		76	6876		87	5716		96	4289		64	45
56	5205		143	3223		188	3822		76	6788		88	5620		96	4226		63	44
57	5349		144	3410		187	3898		76	6701		87	5525		95	4162		64	43
58	5493		144	3598		188	3974		76	6614		87	5429		96	4098		64	42
59	5636		143	3786		188	4050		76	6526		88	5334		95	4035		63	41
60	0.405780		144	0.443974		188	1.094127		77	2.46439		87	2.25238		96	0.913971		64	40
61	5923		143	4163		188	4203		76	6352		87	5143		95	3907		64	39
62	6067		144	4351		188	4279		76	6265		87	5048		95	3843		64	38
63	6210		143	4539		188	4356		77	6178		87	4952		96	3780		63	37
64	6354		144	4727		188	4432		76	6091		87	4857		95	3716		64	36
65	6497		143	4915		188	4509		77	6004		87	4762		95	3652		64	35
66	6641		144	5103		188	4585		76	5917		87	4667		95	3588		64	34
67	6784		143	5291		188	4662		77	5830		87	4572		95	3524		64	33
68	6928		144	5480		189	4738		76	5744		86	4477		95	3460		64	32
69	7071		143	5668		188	4815		77	5657		87	4382		95	3396		64	31
70	0.407215		144	0.445856		188	1.094892		77	2.45571		86	2.24288		94	0.913332		64	30
71	7358		143	6045		189	4968		76	5484		87	4193		95	3268		64	29
72	7502		144	6233		188	5045		77	5398		86	4098		95	3204		64	28
73	7645		143	6421		188	5122		77	5311		87	4004		94	3140		64	27
74	7789		144	6610		189	5199		77	5225		86	3909		95	3076		64	26
75	7932		143	6798		188	5276		77	5139		86	3815		94	3012		64	25
76	8076		144	6987		189	5352		76	5053		86	3720		95	2948		64	24
77	8219		143	7175		188	5429		77	4967		86	3626		94	2884		64	23
78	8362		143	7364		189	5506		77	4881		86	3532		94	2820		64	22
79	8506		144	7552		188	5583		77	4795		86	3438		94	2756		64	21
80	0.408649		143	0.447741		189	1.095660		77	2.44709		86	2.23344		94	0.912692		64	20
81	8792		143	7929		188	5737		77	4623		86	3250		94	2627		65	19
82	8936		144	8118		189	5815		78	4537		86	3156		94	2563		64	18
83	9079		143	8306		188	5892		77	4451		86	3062		94	2499		64	17
84	9222		143	8495		189	5969		77	4366		86	2968		94	2435		65	16
85	9366		144	8684		189	6046		77	4280		86	2874		94	2370		65	15
86	9509		143	8872		188	6123		77	4195		85	2780		94	2306		64	14
87	9652		143	9061		189	6201		78	4109		86	2687		93	2242		64	13
88	9796		144	9250		189	6278		77	4024		85	2593		94	2177		65	12
89	0.409939		143	9439		189	6355		77	3939		85	2500		93	2113		64	11
90	0.410082		143	0.449628		189	1.096433		78	2.43854		85	2.22406		94	0.912049		64	10
91	0225		143	0.449816		188	6510		77	3768		86	2313		93	1984		65	09
92	0369		144	0.450005		189	6588		78	3683		85	2220		93	1920		64	08
93	0512		143	0194		189	6665		77	3598		85	2126		94	1855		65	07
94	0655		143	0383		189	6743		78	3513		85	2033		93	1791		64	06
95	0798		143	0572		189	6821		78	3428		85	1940		93	1726		65	05
96	0942		144	0761		189	6898		77	3344		84	1847		93	1662		64	04
97	1085		143	0950		189	6976		78	3259		85	1754		93	1597		65	03
98	1228		143	1139		189	7054		78	3174		85	1661		93	1533		64	02
99	1371		143	1328		189	7131		77	3089		85	1568		93	1468		65	01
100	0.411514		143	0.451517		189	1.097209		78	2.43005		84	2.21475		93	0.911403		65	00
cos			cotg			cosec			sec			tang			sin			c	
	92	93	94	95	96	97	98	99	100	143	144	145	186	187	188	189			
1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0	14.3	14.4	14.5	18.6	18.7	18.8	18.9	1		
2	18.4	18.6	18.8	19.0	19.2	19.4	19.6	19.8	20.0	28.6	28.8	29.0	37.2	37.4	37.6	37.8	2		
3	27.6	27.9	28.2	28.5	28.8	29.1	29.4	29.7	30.0	42.9	43.2	43.5	55.8	56.1	56.4	56.7	3		
4	36.8	37.2	37.6	38.0	38.4	38.8	39.2	39.6	40.0	57.2	57.6	58.0	74.4	74.8	75.2	75.6	4		
5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	71.5	72.0	72.5	93.0	93.5	94.0	94.5	5		
6	55.2	55.8	56.4	57.0	57.6	58.2	58.8	59.4	60.0	85.8	86.4	87.0	111.6	112.2	112.8	113.4	6		
7	64.4	65.1	65.8	66.5	67.2	67.9	68.6	69.3	70.0	100.1	100.8	101.5	130.2	130.9	131.6	132.3	7		
8	73.6	74.4	75.2	76.0	76.8	77.6	78.4	79.2	80.0	114.4	115.2	116.0	148.8	149.6	150.4	151.2	8		
9	82.8	83.7	84.6	85.5	86.4	87.3	88.2	89.1	90.0	128.7	129.6	130.5	167.4	168.3	169.2	170.1	9		

27^g

c	sin		tang		sec		cosec		cotg		cos				
00	0.411514	144	0.451517	189	1.097209	78	2.43005	85	2.21475	92	0.911403	64	100		
01	1658	143	1706	190	7287	78	2920	84	1383	93	1339	65	99		
02	1801	143	1896	189	7365	78	2836	84	1290	93	1274	65	98		
03	1944	143	2085	189	7443	78	2752	84	1197	93	1209	65	97		
04	2087	143	2274	189	7521	78	2667	85	1105	92	1145	64	96		
05	2230	143	2463	189	7599	78	2583	84	1012	93	1080	65	95		
06	2373	143	2652	189	7677	78	2499	84	0920	92	1015	65	94		
07	2516	143	2842	190	7755	78	2415	84	0828	92	0950	65	93		
08	2659	143	3031	189	7833	78	2331	84	0735	93	0885	65	92		
09	2802	143	3220	189	7911	78	2247	84	0643	92	0821	64	91		
10	0.412945	144	0.453410	189	1.097989	78	2.42163	84	2.20551	92	0.910756	65	90		
11	3089	143	3599	189	8067	79	2079	84	0459	92	0691	65	89		
12	3232	143	3788	190	8146	78	1995	84	0367	92	0626	65	88		
13	3375	143	3978	190	8224	78	1911	84	0275	92	0561	65	87		
14	3518	143	4167	189	8302	78	1828	83	0183	92	0496	65	86		
15	3661	143	4357	190	8381	79	1744	84	0091	92	0431	65	85		
16	3804	143	4546	189	8459	78	1660	84	2.20000	91	0366	65	84		
17	3947	143	4736	190	8538	79	1577	83	2.19908	92	0301	65	83		
18	4090	143	4926	190	8616	78	1494	83	9816	92	0236	65	82		
19	4233	143	5115	189	8695	79	1410	84	9725	91	0171	65	81		
20	0.414376	143	0.455305	189	1.098773	78	2.41327	83	2.19633	92	0.910106	65	80		
21	4519	142	5494	190	8852	79	1244	83	9542	91	0.910041	65	79		
22	4661	143	5684	190	8930	78	1161	84	9450	92	0.909976	65	78		
23	4804	143	5874	190	9009	79	1077	84	9359	91	9911	66	77		
24	4947	143	6064	190	9088	79	0994	83	9268	91	9845	66	76		
25	5090	143	6253	189	9167	79	0911	83	9176	92	9780	65	75		
26	5233	143	6443	190	9245	78	0829	82	9085	91	9715	65	74		
27	5376	143	6633	190	9324	79	0746	83	8994	91	9650	65	73		
28	5519	143	6823	190	9403	79	0663	83	8903	91	9585	65	72		
29	5662	143	7013	190	9482	79	0580	83	8812	91	9519	66	71		
30	0.415805	143	0.457203	190	1.099561	79	2.40498	82	2.18721	91	0.909454	65	70		
31	5948	143	7392	189	9640	79	0415	83	8631	90	9389	65	69		
32	6090	142	7582	190	9719	79	0332	83	8540	91	9323	66	68		
33	6233	143	7772	190	9798	79	0250	82	8449	91	9258	65	67		
34	6376	143	7962	190	9877	79	0168	82	8359	90	9193	65	66		
35	6519	143	8152	190	1.099956	79	0085	83	8268	91	9127	66	65		
36	6662	143	8343	191	1.100035	79	2.40003	82	8177	91	9062	65	64		
37	6804	142	8533	190	0115	80	2.39921	82	8087	90	8996	66	63		
38	6947	143	8723	190	0194	79	9839	82	7997	90	8931	65	62		
39	7090	143	8913	190	0273	79	9756	83	7906	91	8865	66	61		
40	0.417233	143	0.459103	190	1.100352	79	2.39674	82	2.17816	90	0.908800	65	60		
41	7375	142	9293	190	0432	80	9592	82	7726	90	8734	66	59		
42	7518	143	9483	190	0511	79	9511	81	7636	90	8669	65	58		
43	7661	143	9674	191	0591	80	9429	82	7546	90	8603	66	57		
44	7804	143	0.459864	190	0670	79	9347	82	7456	90	8537	66	56		
45	7946	142	0.460054	190	0750	80	9265	82	7366	90	8472	65	55		
46	8089	143	0245	191	0829	79	9183	82	7276	90	8406	66	54		
47	8232	143	0435	190	0909	80	9102	81	7186	90	8340	66	53		
48	8374	142	0625	190	0989	80	9020	82	7096	90	8275	65	52		
49	8517	143	0816	191	1068	79	8939	81	7006	90	8209	66	51		
50	0.418660	143	0.461006	190	1.101148	80	2.38857	82	2.16917	89	0.908143	66	50		
cos		cotg		cosec		sec		tang		sin		c			
	64	65	66	67	78	79	80	81	82	83	84	85	86	87	
1	6.4	6.5	6.6	6.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	1
2	12.8	13.0	13.2	13.4	15.6	15.8	16.0	16.2	16.4	16.6	16.8	17.0	17.2	17.4	2
3	19.2	19.5	19.8	20.1	23.4	23.7	24.0	24.3	24.6	24.9	25.2	25.5	25.8	26.1	3
4	25.6	26.0	26.4	26.8	31.2	31.6	32.0	32.4	32.8	33.2	33.6	34.0	34.4	34.8	4
5	32.0	32.5	33.0	33.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	5
6	38.4	39.0	39.6	40.2	46.8	47.4	48.0	48.6	49.2	49.8	50.4	51.0	51.6	52.2	6
7	44.8	45.5	46.2	46.9	54.6	55.3	56.0	56.7	57.4	58.1	58.8	59.5	60.2	60.9	7
8	51.2	52.0	52.8	53.6	62.4	63.2	64.0	64.8	65.6	66.4	67.2	68.0	68.8	69.6	8
9	57.6	58.5	59.4	60.3	70.2	71.1	72.0	72.9	73.8	74.7	75.6	76.5	77.4	78.3	9

27^g

c	sin		tang		sec		cosec		cotg		cos				
50	0.418660	142	0.461006	191	1.101148	80	2.38857	81	2.16917	90	0.908143	66	50		
51	8802	143	1197	190	1228	80	8776	81	6827	89	8077	65	49		
52	8945	143	1387	191	1308	80	8695	81	6738	89	8012	65	48		
53	9088	143	1578	191	1387	79	8614	81	6648	90	7946	66	47		
		142		190		80		82		89		66			
54	9230		1768		1467	80	8532		6559		7880		46		
55	9373	143	1959	191	1547	80	8451	81	6469	90	7814	66	45		
56	9515	142	2150	191	1627	80	8370	81	6380	89	7748	66	44		
		143		190		80		81		89		66			
57	9658		2340		1707	80	8289		6291		7682		43		
58	9801	143	2531	191	1787	80	8208	81	6202	89	7616	66	42		
59	0.419943	142	2722	191	1867	80	8127	81	6113	89	7550	66	41		
60	0.420086	143		190		80		80		89		66			
		142	0.462912	191	1.101947	80	2.38047	81	2.16024	89	0.907484	66	40		
61	0228		3103		2027	81	7966	81	5935	89	7418	66	39		
62	0371	143	3294	191	2108	81	7885	81	5846	89	7352	66	38		
63	0513	142	3485	191	2188	80	7805	80	5757	89	7286	66	37		
		143		191		80		81		89		66			
64	0656		3676		2268	80	7724		5668		7220		36		
65	0798	142	3866	190	2348	80	7644	80	5579	89	7154	66	35		
66	0941	143	4057	191	2429	81	7563	81	5491	88	7088	66	34		
		142		191		80		80		89		66			
67	1083		4248		2509	81	7483		5402		7022		33		
68	1226	143	4439	191	2590	81	7402	81	5313	89	6956	66	32		
69	1368	142	4630	191	2670	80	7322	80	5225	88	6890	66	31		
		143		191		81		80		88		67			
70	0.421511	142	0.464821	191	1.102751	80	2.37242	80	2.15137	89	0.906823	66	30		
71	1653		5012		2831	81	7162	80	5048	88	6757	66	29		
72	1796	143	5203	191	2912	80	7082	80	4960	88	6691	66	28		
73	1938	142	5394	191	2992	80	7002	80	4872	88	6625	66	27		
		142		191		81		80		89		67			
74	2080		5585		3073	81	6922		4783		6558		26		
75	2223	143	5777	192	3154	81	6842	80	4695	88	6492	66	25		
76	2365	142	5968	191	3234	80	6762	80	4607	88	6426	66	24		
		143		191		81		80		88		67			
77	2508		6159		3315	81	6682		4519		6359		23		
78	2650	142	6350	191	3396	81	6602	80	4431	88	6293	66	22		
79	2792	142	6541	191	3477	81	6523	79	4343	88	6227	66	21		
		143		192		81		80		88		67			
80	0.422935	142	0.466733	191	1.103558	81	2.36443	79	2.14255	87	0.906160	66	20		
81	3077		6924		3639	81	6364	79	4168	87	6094	66	19		
82	3219	142	7115	191	3720	81	6284	80	4080	88	6027	67	18		
83	3362	143	7307	192	3801	81	6205	79	3992	88	5961	66	17		
		142		191		81		80		87		67			
84	3504		7498		3882	81	6125		3905		5894		16		
85	3646	142	7690	192	3963	81	6046	79	3817	88	5828	66	15		
86	3788	142	7881	191	4044	81	5967	79	3730	87	5761	67	14		
		143		191		81		79		88		66			
87	3931		8072		4125	81	5888		3642		5695		13		
88	4073	142	8264	192	4206	81	5808	80	3555	87	5628	67	12		
89	4215	142	8456	192	4287	81	5729	79	3467	88	5561	67	11		
		142		191		82		79		87		66			
90	0.424357	143	0.468647	192	1.104369	81	2.35650	79	2.13380	87	0.905495	67	10		
91	4500		8839		4450	81	5571	79	3293	87	5428	67	09		
92	4642	142	9030	191	4531	81	5493	78	3206	87	5361	67	08		
93	4784	142	9222	192	4613	82	5414	79	3119	87	5295	66	07		
		142		192		81		79		87		67			
94	4926		9414		4694	82	5335		3032		5228		06		
95	5069	143	9605	191	4776	82	5256	79	2945	87	5161	67	05		
96	5211	142	9797	192	4857	81	5178	78	2858	87	5094	67	04		
		142		192		82		79		87		66			
97	5353		0.469989		4939	81	5099		2771		5028		03		
98	5495	142	0.470181	192	5020	81	5020	79	2684	87	4961	67	02		
99	5637	142	0372	191	5102	82	4942	78	2597	87	4894	67	01		
		142		192		82		79		86		67			
100	0.425779		0.470564		1.105184		2.34863		2.12511		0.904827		00		
	cos		cotg		cosec		sec		tang		sin		c		
		88	89	90	91	92	93	142	143	144	189	190	191	192	
1	8.8	8.9	9.0	9.1	9.2	9.3	14.2	14.3	14.4	18.9	19.0	19.1	19.2	1	
2	17.6	17.8	18.0	18.2	18.4	18.6	28.4	28.6	28.8	37.8	38.0	38.2	38.4	2	
3	26.4	26.7	27.0	27.3	27.6	27.9	42.6	42.9	43.2	56.7	57.0	57.3	57.6	3	
4	35.2	35.6	36.0	36.4	36.8	37.2	56.8	57.2	57.6	75.6	76.0	76.4	76.8	4	
5	44.0	44.5	45.0	45.5	46.0	46.5	71.0	71.5	72.0	94.5	95.0	95.5	96.0	5	
6	52.8	53.4	54.0	54.6	55.2	55.8	85.2	85.8	86.4	113.4	114.0	114.6	115.2	6	
7	61.6	62.3	63.0	63.7	64.4	65.1	99.4	100.1	100.8	132.3	133.0	133.7	134.4	7	
8	70.4	71.2	72.0	72.8	73.6	74.4	113.6	114.4	115.2	151.2	152.0	152.8	153.6	8	
9	79.2	80.1	81.0	81.9	82.8	83.7	127.8	128.7	129.6	170.1	171.0	171.9	172.8	9	

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c	sin		tang		sec		cosec		cotg		cos		
00	0.425779	142	0.470564	192	1.105184	81	2.34863	78	2.12511	87	0.904827	67	100
01	5921	143	0756	192	5265	82	4785	78	2424	86	4760	67	99
02	6064	142	0948	192	5347	82	4707	78	2338	87	4693	67	98
03	6206	142	1140	192	5429	82	4629	79	2251	86	4626	67	97
04	6348	142	1332	192	5511	82	4550	78	2165	87	4559	67	96
05	6490	142	1524	192	5593	81	4472	78	2078	86	4492	67	95
06	6632	142	1716	192	5674	82	4394	78	1992	86	4425	67	94
07	6774	142	1908	192	5756	82	4316	78	1906	87	4358	67	93
08	6916	142	2100	192	5838	82	4238	78	1819	87	4291	67	92
09	7058	142	2292	192	5920	82	4160	78	1733	86	4224	67	91
10	0.427200	142	0.472484	192	1.106002	82	2.34082	78	2.11647	86	0.904157	67	90
11	7342	142	2676	193	6085	82	4005	78	1561	86	4090	67	89
12	7484	142	2869	192	6167	82	3927	78	1475	86	4023	67	88
13	7626	142	3061	192	6249	82	3849	77	1389	86	3956	67	87
14	7768	142	3253	192	6331	82	3772	78	1303	85	3889	68	86
15	7910	142	3445	193	6413	83	3694	78	1218	86	3821	67	85
16	8052	142	3638	192	6496	82	3616	77	1132	86	3754	67	84
17	8194	142	3830	192	6578	82	3539	77	1046	86	3687	67	83
18	8336	142	4022	192	6660	82	3462	77	0960	86	3620	67	82
19	8478	142	4215	193	6743	83	3384	78	0875	85	3552	68	81
20	0.428620	142	0.474407	192	1.106825	82	2.33307	77	2.10789	86	0.903485	67	80
21	8762	142	4600	193	6908	83	3230	77	0704	85	3418	67	79
22	8904	142	4792	192	6990	82	3153	77	0618	86	3350	68	78
23	9045	141	4985	193	7073	83	3076	77	0533	85	3283	67	77
24	9187	142	5177	192	7156	83	2998	78	0448	85	3215	68	76
25	9329	142	5370	193	7238	82	2921	77	0363	85	3148	67	75
26	9471	142	5562	192	7321	83	2845	76	0277	86	3081	67	74
27	9613	142	5755	193	7404	83	2768	77	0192	85	3013	68	73
28	9755	142	5948	193	7486	82	2691	77	0107	85	2946	67	72
29	0.429897	142	6140	192	7569	83	2614	77	2.10022	85	2878	68	71
30	0.430038	141	0.476333	193	1.107652	83	2.32537	77	2.09937	85	0.902811	67	70
31	0180	142	6526	193	7735	83	2461	76	9852	85	2743	68	69
32	0322	142	6718	192	7818	83	2384	77	9767	85	2675	68	68
33	0464	142	6911	193	7901	83	2308	76	9683	84	2608	67	67
34	0606	142	7104	193	7984	83	2231	77	9598	85	2540	68	66
35	0747	141	7297	193	8067	83	2155	76	9513	85	2473	67	65
36	0889	142	7490	193	8150	83	2078	77	9429	84	2405	68	64
37	1031	142	7683	193	8233	83	2002	76	9344	85	2337	68	63
38	1173	142	7876	193	8316	83	1926	76	9259	85	2269	68	62
39	1314	141	8069	193	8400	84	1849	77	9175	84	2202	67	61
40	0.431456	142	0.478262	193	1.108483	83	2.31773	76	2.09091	84	0.902134	68	60
41	1598	142	8455	193	8566	83	1697	76	9006	85	2066	68	59
42	1739	141	8648	193	8649	83	1621	76	8922	84	1998	68	58
43	1881	142	8841	193	8733	84	1545	76	8838	84	1931	67	57
44	2023	142	9034	193	8816	83	1469	76	8753	85	1863	68	56
45	2164	141	9227	193	8900	84	1393	76	8669	84	1795	68	55
46	2306	142	9420	193	8983	83	1318	75	8585	84	1727	68	54
47	2448	142	9613	193	9067	84	1242	76	8501	84	1659	68	53
48	2589	141	0.479807	194	9150	83	1166	76	8417	84	1591	68	52
49	2731	142	0.480000	193	9234	84	1090	76	8333	84	1523	68	51
50	0.432873	142	0.480193	193	1.109318	84	2.31015	75	2.08250	83	0.901455	68	50
cos		cotg		cosec		sec		tang		sin		c	
		67	68	69	73	74	75	76	77	78	79	81	82
1	6.7	6.8	6.9	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.1	8.2	1
2	13.4	13.6	13.8	14.6	14.8	15.0	15.2	15.4	15.6	15.8	16.2	16.4	2
3	20.1	20.4	20.7	21.9	22.2	22.5	22.8	23.1	23.4	23.7	24.3	24.6	3
4	26.8	27.2	27.6	29.2	29.6	30.0	30.4	30.8	31.2	31.6	32.4	32.8	4
5	33.5	34.0	34.5	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.5	41.0	5
6	40.2	40.8	41.4	43.8	44.4	45.0	45.6	46.2	46.8	47.4	48.6	49.2	6
7	46.9	47.6	48.3	51.1	51.8	52.5	53.2	53.9	54.6	55.3	56.7	57.4	7
8	53.6	54.4	55.2	58.4	59.2	60.0	60.8	61.6	62.4	63.2	64.8	65.6	8
9	60.3	61.2	62.1	65.7	66.6	67.5	68.4	69.3	70.2	71.1	72.9	73.8	9

c	sin		tang		sec		cosec		cotg		cos		
50	0.432873	141	0.480193	193	1.109318	83	2.31015	76	2.08250	84	0.901455	68	50
51	3014	142	0386	194	9401	84	0939	75	8166	84	1387	68	49
52	3156	141	0580	194	9485	84	0864	75	8082	84	1319	68	48
53	3297	141	0773	193	9569	84	0788	76	7998	84	1251	68	47
		142		194		84		75		83		68	
54	3439		0967		9653	84	0713		7915		1183		46
55	3580	141	1160	193	9736	83	0638	75	7831	84	1115	68	45
56	3722	142	1353	193	9820	84	0562	76	7748	83	1047	68	44
		142		194		84		75		84		68	
57	3864		1547		9904	84	0487		7664		0979		43
58	4005	141	1740	193	1.109988	84	0412	75	7581	83	0910	69	42
59	4147	142	1934	194	1.110072	84	0337	75	7497	84	0842	68	41
60	0.434288	141	0.482128	194	1.110156	84	2.30262	75	2.07414	83	0.900774	68	40
		142		193		84		75		83		68	
61	4430		2321		0240	85	0187		7331		0706		39
62	4571	141	2515	194	0325	85	0112	75	7248	83	0638	68	38
63	4712	141	2709	194	0409	84	2.30037	75	7164	84	0569	69	37
		142		193		84		75		83		68	
64	4854		2902		0493	84	2.29962		7081		0501		36
65	4995	141	3096	194	0577	84	9887	75	6998	83	0433	68	35
66	5137	142	3290	194	0661	84	9813	74	6915	83	0364	69	34
		141		193		85		75		83		68	
67	5278		3483		0746	84	9738		6832		0296		33
68	5420	142	3677	194	0830	84	9663	75	6749	83	0228	68	32
69	5561	141	3871	194	0915	85	9589	74	6667	82	0159	69	31
70	0.435702	141	0.484065	194	1.110999	84	2.29514	75	2.06584	83	0.900091	68	30
		142		194		85		74		83		69	
71	5844		4259		1084	84	9440		6501		0.900022		29
72	5985	141	4453	194	1168	84	9366	74	6418	83	0.899954	68	28
73	6127	142	4647	194	1253	85	9291	75	6336	82	9885	69	27
		141		194		84		74		83		68	
74	6268		4841		1337	85	9217		6253		9817		26
75	6409	141	5035	194	1422	85	9143	74	6171	82	9748	69	25
76	6551	142	5229	194	1507	85	9069	74	6088	83	9680	68	24
		141		194		84		75		82		69	
77	6692		5423		1591	85	8994		6006		9611		23
78	6833	141	5617	194	1676	85	8920	74	5924	82	9543	68	22
79	6974	141	5811	194	1761	85	8846	74	5841	83	9474	69	21
80	0.437116	142	0.486005	194	1.111846	85	2.28772	74	2.05759	82	0.899405	68	20
		141		195		85		74		82		69	
81	7257		6200		1931	85	8698		5677		9337		19
82	7398	141	6394	194	2016	85	8625	73	5595	82	9268	69	18
83	7540	142	6588	194	2101	85	8551	74	5513	82	9199	69	17
		141		194		85		74		82		69	
84	7681		6782		2186	85	8477		5431		9130		16
85	7822	141	6977	195	2271	85	8403	74	5349	82	9062	68	15
86	7963	141	7171	194	2356	85	8330	73	5267	82	8993	69	14
		141		194		85		74		82		69	
87	8104		7365		2441	85	8256		5185		8924		13
88	8246	142	7560	195	2526	85	8183	73	5103	82	8855	69	12
89	8387	141	7754	194	2611	85	8109	74	5021	82	8786	69	11
90	0.438528	141	0.487949	195	1.112697	86	2.28036	73	2.04940	81	0.898718	68	10
		141		194		85		74		82		69	
91	8669		8143		2782	85	7962		4858		8649		09
92	8810	141	8338	195	2867	85	7889	73	4776	82	8580	69	08
93	8951	141	8532	194	2953	86	7816	73	4695	81	8511	69	07
		142		195		85		74		82		69	
94	9093		8727		3038	86	7742		4613		8442		06
95	9234	141	8921	194	3124	86	7669	73	4532	81	8373	69	05
96	9375	141	9116	195	3209	85	7596	73	4450	82	8304	69	04
		141		195		86		73		81		69	
97	9516		9311		3295	85	7523		4369		8235		03
98	9657	141	9505	194	3380	85	7450	73	4288	81	8166	69	02
99	9798	141	9700	195	3466	86	7377	73	4207	81	8097	69	01
100	0.439939	141	0.489895	195	1.113552	86	2.27304	73	2.04125	82	0.898028	69	00
	cos		cotg		cosec		sec		tang		sin		c
		83	84	85	86	87	141	142	143	192	193	194	195
1	8.3	8.4	8.5	8.6	8.7	14.1	14.2	14.3	19.2	19.3	19.4	19.5	1
2	16.6	16.8	17.0	17.2	17.4	28.2	28.4	28.6	38.4	38.6	38.8	39.0	2
3	24.9	25.2	25.5	25.8	26.1	42.3	42.6	42.9	57.6	57.9	58.2	58.5	3
4	33.2	33.6	34.0	34.4	34.8	56.4	56.8	57.2	76.8	77.2	77.6	78.0	4
5	41.5	42.0	42.5	43.0	43.5	70.5	71.0	71.5	96.0	96.5	97.0	97.5	5
6	49.8	50.4	51.0	51.6	52.2	84.6	85.2	85.8	115.2	115.8	116.4	117.0	6
7	58.1	58.8	59.5	60.2	60.9	98.7	99.4	100.1	134.4	135.1	135.8	136.5	7
8	66.4	67.2	68.0	68.8	69.6	112.8	113.6	114.4	153.6	154.4	155.2	156.0	8
9	74.7	75.6	76.5	77.4	78.3	126.9	127.8	128.7	172.8	173.7	174.6	175.5	9

c	sin		tang		sec		cosec		cotg		cos			
00	0.439939	141	0.489895	195	1.113552	85	2.27304	73	2.04125	81	0.898028	70	100	
01	0.440080	141	0.490090	195	3637	86	7231	73	4044	81	7958	69	99	
02	0221	141	0285	195	3723	86	7158	73	3963	81	7889	69	98	
03	0362	141	0479	194	3809	86	7086	72	3882	81	7820	69	97	
04	0503	141	0674	195	3895	86	7013	73	3801	81	7751	69	96	
05	0644	141	0869	195	3981	86	6940	73	3720	81	7682	69	95	
06	0785	141	1064	195	4066	85	6868	72	3639	81	7613	69	94	
07	0926	141	1259	195	4152	86	6795	73	3559	80	7543	70	93	
08	1067	141	1454	195	4238	86	6723	72	3478	81	7474	69	92	
09	1208	141	1649	195	4324	86	6650	73	3397	81	7405	69	91	
10	0.441349	141	0.491844	195	1.114410	87	2.26578	72	2.03316	80	0.897335	70	90	
11	1490	141	2039	195	4497	86	6506	73	3236	81	7266	69	89	
12	1631	141	2234	196	4583	86	6433	72	3155	80	7197	70	88	
13	1772	141	2430	196	4669	86	6361	72	3075	81	7127	70	87	
14	1913	141	2625	195	4755	86	6289	72	2994	80	7058	69	86	
15	2054	141	2820	195	4841	86	6217	72	2914	80	6989	69	85	
16	2195	141	3015	195	4928	87	6145	72	2833	81	6919	70	84	
17	2336	141	3211	196	5014	86	6073	72	2753	80	6850	69	83	
18	2477	141	3406	195	5101	87	6001	72	2673	80	6780	70	82	
19	2617	140	3601	195	5187	86	5929	72	2593	80	6711	69	81	
20	0.442758	141	0.493797	196	1.115274	87	2.25857	72	2.02513	80	0.896641	70	80	
21	2899	141	3992	195	5360	87	5785	72	2432	80	6571	69	79	
22	3040	141	4187	195	5447	86	5713	72	2352	80	6502	70	78	
23	3181	141	4383	196	5533	86	5642	71	2272	80	6432	70	77	
24	3322	141	4578	195	5620	87	5570	72	2192	80	6363	69	76	
25	3462	140	4774	196	5707	87	5498	72	2113	79	6293	70	75	
26	3603	141	4969	195	5793	86	5427	71	2033	80	6223	70	74	
27	3744	141	5165	196	5880	87	5355	72	1953	80	6154	69	73	
28	3885	141	5361	196	5967	87	5284	71	1873	80	6084	70	72	
29	4025	140	5556	195	6054	87	5212	72	1793	80	6014	70	71	
30	0.444166	141	0.495752	196	1.116141	87	2.25141	71	2.01714	79	0.895944	70	70	
31	4307	141	5948	196	6228	87	5070	71	1634	80	5875	69	69	
32	4448	141	6143	195	6315	87	4998	72	1555	79	5805	70	68	
33	4588	140	6339	196	6402	87	4927	71	1475	80	5735	70	67	
34	4729	141	6535	196	6489	87	4856	71	1396	79	5665	70	66	
35	4870	141	6731	196	6576	87	4785	71	1316	80	5595	70	65	
36	5010	140	6927	196	6663	87	4714	71	1237	79	5525	70	64	
37	5151	141	7122	195	6750	87	4643	71	1158	79	5456	69	63	
38	5292	141	7318	196	6837	87	4572	71	1078	80	5386	70	62	
39	5432	140	7514	196	6925	88	4501	71	0999	79	5316	70	61	
40	0.445573	141	0.497710	196	1.117012	87	2.24430	71	2.00920	79	0.895246	70	60	
41	5714	141	7906	196	7099	87	4359	71	0841	79	5176	70	59	
42	5854	140	8102	196	7187	88	4289	70	0762	79	5106	70	58	
43	5995	141	8298	196	7274	87	4218	71	0683	79	5036	70	57	
44	6135	140	8494	196	7361	87	4147	71	0604	79	4966	70	56	
45	6276	141	8691	197	7449	88	4077	70	0525	79	4895	71	55	
46	6416	140	8887	196	7537	88	4006	70	0446	79	4825	70	54	
47	6557	141	9083	196	7624	87	3936	70	0368	78	4755	70	53	
48	6698	141	9279	196	7712	88	3865	71	0289	79	4685	70	52	
49	6838	140	9475	196	7799	87	3795	70	0210	79	4615	70	51	
50	0.446979	141	0.499672	197	1.117887	88	2.23724	71	2.00131	79	0.894545	70	50	
cos		cotg		cosec		sec		tang		sin		c		
	68	69	70	71	72	73	76	77	78	79	80	81	85	
1	6.8	6.9	7.0	7.1	7.2	7.3	7.6	7.7	7.8	7.9	8.0	8.1	8.5	1
2	13.6	13.8	14.0	14.2	14.4	14.6	15.2	15.4	15.6	15.8	16.0	16.2	17.0	2
3	20.4	20.7	21.0	21.3	21.6	21.9	22.8	23.1	23.4	23.7	24.0	24.3	25.5	3
4	27.2	27.6	28.0	28.4	28.8	29.2	30.4	30.8	31.2	31.6	32.0	32.4	34.0	4
5	34.0	34.5	35.0	35.5	36.0	36.5	38.0	38.5	39.0	39.5	40.0	40.5	42.5	5
6	40.8	41.4	42.0	42.6	43.2	43.8	45.6	46.2	46.8	47.4	48.0	48.6	51.0	6
7	47.6	48.3	49.0	49.7	50.4	51.1	53.2	53.9	54.6	55.3	56.0	56.7	59.5	7
8	54.4	55.2	56.0	56.8	57.6	58.4	60.8	61.6	62.4	63.2	64.0	64.8	68.0	8
9	61.2	62.1	63.0	63.9	64.8	65.7	68.4	69.3	70.2	71.1	72.0	72.9	76.5	9

c	sin		tang		sec		cosec		cotg		cos				
50	0.446979	140	0.499672	196	1.117887	88	2.23724	70	2.00131	78	0.894545	71	50		
51	7119	141	0.499868	196	7975	88	3654	70	2.00053	79	4474	70	49		
52	7260	140	0.500064	197	8063	88	3584	70	1.99974	78	4404	70	48		
53	7400	141	0261	196	8151	88	3514	71	9896	79	4334	70	47		
54	7541	140	0457	197	8238	88	3443	70	9817	78	4264	70	46		
55	7681	141	0654	197	8326	88	3373	70	9739	78	4193	71	45		
56	7822	141	0850	196	8414	88	3303	70	9661	78	4123	70	44		
		140		197		88		70		79		70			
57	7962	140	1047	196	8502	88	3233	70	9582	79	4053	70	43		
58	8102	140	1243	196	8590	88	3163	70	9504	78	3982	71	42		
59	8243	141	1440	197	8679	89	3093	70	9426	78	3912	70	41		
60	0.448383	140	0.501636	196	1.118767	88	2.23024	69	1.99348	78	0.893841	71	40		
61	8524	141	1833	197	8855	88	2954	70	9270	79	3771	70	39		
62	8664	140	2029	196	8943	88	2884	70	9191	79	3701	70	38		
63	8804	140	2226	197	9031	88	2814	70	9113	78	3630	71	37		
		141		197		89		69		77		70			
64	8945	140	2423	197	9120	88	2745	70	9036	78	3560	71	36		
65	9085	140	2620	196	9208	88	2675	70	8958	78	3489	71	35		
66	9225	140	2816	196	9296	88	2605	70	8880	78	3418	71	34		
		141		197		89		69		78		70			
67	9366	140	3013	197	9385	88	2536	70	8802	78	3348	71	33		
68	9506	140	3210	197	9473	88	2466	70	8724	78	3277	71	32		
69	9646	140	3407	197	9562	89	2397	69	8646	78	3207	70	31		
		141		197		88		70		77		71			
70	0.449787	140	0.503604	197	1.119650	89	2.22328	69	1.98569	78	0.893136	71	30		
71	0.449927	140	3801	197	9739	89	2258	69	8491	77	3065	71	29		
72	0.450067	140	3998	197	9828	88	2189	69	8414	77	2995	70	28		
73	0208	141	4195	197	1.119916	88	2120	69	8336	78	2924	71	27		
		140		197		89		69		77		71			
74	0348	140	4392	197	1.120005	89	2051	70	8259	78	2853	71	26		
75	0488	140	4589	197	0094	88	1981	70	8181	78	2782	71	25		
76	0628	140	4786	197	0182	88	1912	69	8104	77	2712	70	24		
		140		197		89		69		78		71			
77	0768	140	4983	197	0271	89	1843	69	8026	78	2641	71	23		
78	0909	141	5180	197	0360	89	1774	69	7949	77	2570	71	22		
79	1049	140	5377	197	0449	89	1705	69	7872	77	2499	71	21		
		140		198		89		68		77		71			
80	0.451189	140	0.505575	197	1.120538	89	2.21637	69	1.97795	77	0.892428	71	20		
81	1329	140	5772	197	0627	89	1568	69	7718	77	2357	71	19		
82	1469	140	5969	197	0716	89	1499	69	7641	77	2287	70	18		
83	1610	141	6166	197	0805	89	1430	69	7563	78	2216	71	17		
		140		198		89		68		77		71			
84	1750	140	6364	197	0894	90	1362	69	7486	76	2145	71	16		
85	1890	140	6561	197	0984	89	1293	69	7410	77	2074	71	15		
86	2030	140	6759	198	1073	89	1224	69	7333	77	2003	71	14		
		140		197		89		68		77		71			
87	2170	140	6956	197	1162	89	1156	69	7256	77	1932	71	13		
88	2310	140	7153	197	1251	89	1087	69	7179	77	1861	71	12		
89	2450	140	7351	198	1341	90	1019	68	7102	77	1790	71	11		
		140		197		89		69		76		71			
90	0.452590	140	0.507548	198	1.121430	90	2.20950	68	1.97026	77	0.891719	72	10		
91	2730	140	7746	198	1520	89	0882	68	6949	77	1647	71	09		
92	2870	140	7944	198	1609	89	0814	68	6872	77	1576	71	08		
93	3011	141	8141	197	1698	89	0745	69	6796	76	1505	71	07		
		140		198		90		68		77		71			
94	3151	140	8339	198	1788	90	0677	68	6719	77	1434	71	06		
95	3291	140	8537	198	1878	90	0609	68	6643	76	1363	71	05		
96	3431	140	8734	197	1967	89	0541	68	6566	77	1292	71	04		
		140		198		90		68		76		72			
97	3571	140	8932	198	2057	90	0473	68	6490	76	1220	71	03		
98	3711	140	9130	198	2147	90	0405	68	6414	76	1149	71	02		
99	3851	140	9328	198	2236	89	0337	68	6337	77	1078	71	01		
		139		197		90		68		76		71			
100	0.453990		0.509525		1.122326		2.20269		1.96261		0.891007		00		
	cos		cotg		cosec		sec		tang		sin		c		
		86	87	88	89	90	139	140	141	194	195	196	197	198	
1		8.6	8.7	8.8	8.9	9.0	13.9	14.0	14.1	19.4	19.5	19.6	19.7	19.8	1
2		17.2	17.4	17.6	17.8	18.0	27.8	28.0	28.2	38.8	39.0	39.2	39.4	39.6	2
3		25.8	26.1	26.4	26.7	27.0	41.7	42.0	42.3	58.2	58.5	58.8	59.1	59.4	3
4		34.4	34.8	35.2	35.6	36.0	55.6	56.0	56.4	77.6	78.0	78.4	78.8	79.2	4
5		43.0	43.5	44.0	44.5	45.0	69.5	70.0	70.5	97.0	97.5	98.0	98.5	99.0	5
6		51.6	52.2	52.8	53.4	54.0	83.4	84.0	84.6	116.4	117.0	117.6	118.2	118.8	6
7		60.2	60.9	61.6	62.3	63.0	97.3	98.0	98.7	135.8	136.5	137.2	137.9	138.6	7
8		68.8	69.6	70.4	71.2	72.0	111.2	112.0	112.8	155.2	156.0	156.8	157.6	158.4	8
9		77.4	78.3	79.2	80.1	81.0	125.1	126.0	126.9	174.6	175.5	176.4	177.3	178.2	9

30°

c	sin		tang		sec		cosec		cotg		cos			
00	0.453990	140	0.509525	198	1.122326	90	2.20269	68	1.96261	76	0.891007	72	100	
01	4130	140	9723	198	2416	90	0201	68	6185	76	0935	71	99	
02	4270	140	0.509921	198	2506	90	0133	68	6109	76	0864	71	98	
03	4410	140	0.510119	198	2596	90	2.20065	67	6033	76	0792	72	97	
04	4550	140	0317	198	2686	90	2.19998	68	5957	76	0721	71	96	
05	4690	140	0515	198	2776	90	9930	68	5881	76	0650	71	95	
06	4830	140	0713	198	2866	90	9862	68	5805	76	0578	72	94	
07	4970	140	0911	198	2956	90	9795	67	5729	76	0507	71	93	
08	5110	140	1109	198	3046	90	9727	68	5653	76	0435	72	92	
09	5250	140	1307	198	3136	90	9660	67	5577	76	0364	71	91	
10	0.455390	139	0.511506	199	1.123227	91	2.19592	68	1.95501	76	0.890292	72	90	
11	5529	140	1704	198	3317	90	9525	68	5426	76	0221	72	89	
12	5669	140	1902	198	3407	91	9457	67	5350	76	0149	71	88	
13	5809	140	2100	198	3498	90	9390	67	5274	75	0078	72	87	
14	5949	140	2299	199	3588	90	9323	67	5199	76	0.890006	72	86	
15	6089	140	2497	198	3678	90	9256	67	5123	76	0.889934	72	85	
16	6228	139	2695	198	3769	91	9188	68	5048	75	9863	71	84	
17	6368	140	2894	199	3859	90	9121	67	4972	76	9791	72	83	
18	6508	140	3092	198	3950	91	9054	67	4897	75	9719	72	82	
19	6648	140	3291	199	4041	91	8987	67	4821	76	9648	71	81	
20	0.456787	139	0.513489	198	1.124131	90	2.18920	67	1.94746	75	0.889576	72	80	
21	6927	140	3688	199	4222	91	8853	67	4671	75	9504	72	79	
22	7067	140	3886	198	4313	91	8786	67	4596	75	9432	72	78	
23	7207	140	4085	199	4403	90	8720	66	4520	76	9361	71	77	
24	7346	139	4283	198	4494	91	8653	67	4445	75	9289	72	76	
25	7486	140	4482	199	4585	91	8586	67	4370	75	9217	72	75	
26	7626	140	4681	199	4676	91	8519	66	4295	75	9145	72	74	
27	7765	139	4879	198	4767	91	8453	66	4220	75	9073	72	73	
28	7905	140	5078	199	4858	91	8386	67	4145	75	9001	72	72	
29	8045	140	5277	199	4949	91	8319	67	4070	75	8929	72	71	
30	0.458184	139	0.515476	199	1.125040	91	2.18253	66	1.93996	74	0.888857	72	70	
31	8324	140	5674	198	5131	91	8186	67	3921	75	8785	72	69	
32	8463	139	5873	199	5222	91	8120	66	3846	75	8713	72	68	
33	8603	140	6072	199	5314	92	8054	66	3771	75	8641	72	67	
34	8743	140	6271	199	5405	91	7987	67	3697	74	8569	72	66	
35	8882	139	6470	199	5496	91	7921	66	3622	75	8497	72	65	
36	9022	140	6669	199	5587	91	7855	66	3547	75	8425	72	64	
37	9161	139	6868	199	5679	92	7788	67	3473	74	8353	72	63	
38	9301	140	7067	199	5770	91	7722	66	3398	75	8281	72	62	
39	9440	139	7266	199	5862	92	7656	66	3324	74	8209	72	61	
40	0.459580	140	0.517465	199	1.125953	91	2.17590	66	1.93250	74	0.888136	73	60	
41	9719	139	7665	200	6045	92	7524	66	3175	75	8064	72	59	
42	9859	140	7864	199	6136	91	7458	66	3101	74	7992	72	58	
43	0.459998	139	8063	199	6228	92	7392	66	3027	74	7920	72	57	
44	0.460138	140	8262	199	6320	92	7326	66	2953	74	7848	72	56	
45	0277	139	8461	199	6411	91	7260	66	2878	75	7775	73	55	
46	0417	140	8661	200	6503	92	7195	65	2804	74	7703	72	54	
47	0556	139	8860	199	6595	92	7129	66	2730	74	7631	72	53	
48	0696	140	9060	200	6687	92	7063	66	2656	74	7558	73	52	
49	0835	139	9259	199	6779	92	6997	66	2582	74	7486	72	51	
50	0.460974	139	0.519458	199	1.126870	91	2.16932	65	1.92508	74	0.887413	73	50	
cos		cotg		cosec		sec		tang		sin		c		
		63	64	65	66	67	68	71	72	73	74	75	76	
1	6.3	6.4	6.5	6.6	6.7	6.8	7.1	7.2	7.3	7.4	7.5	7.6	1	
2	12.6	12.8	13.0	13.2	13.4	13.6	14.2	14.4	14.6	14.8	15.0	15.2	2	
3	18.9	19.2	19.5	19.8	20.1	20.4	21.3	21.6	21.9	22.2	22.5	22.8	3	
4	25.2	25.6	26.0	26.4	26.8	27.2	28.4	28.8	29.2	29.6	30.0	30.4	4	
5	31.5	32.0	32.5	33.0	33.5	34.0	35.5	36.0	36.5	37.0	37.5	38.0	5	
6	37.8	38.4	39.0	39.6	40.2	40.8	42.6	43.2	43.8	44.4	45.0	45.6	6	
7	44.1	44.8	45.5	46.2	46.9	47.6	49.7	50.4	51.1	51.8	52.5	53.2	7	
8	50.4	51.2	52.0	52.8	53.6	54.4	56.8	57.6	58.4	59.2	60.0	60.8	8	
9	56.7	57.6	58.5	59.4	60.3	61.2	63.9	64.8	65.7	66.6	67.5	68.4	9	

30°

c	sin		tang		sec		cosec		cotg		cos			
50	0.460974	140	0.519458	200	1.126870	92	2.16932	66	1.92508	74	0.887413	72	50	
51	1114	139	9658	199	6962	92	6866	65	2434	74	7341	72	49	
52	1253	140	0.519857	200	7054	92	6801	66	2360	73	7269	72	48	
53	1393	139	0.520057	200	7146	92	6735	66	2287	73	7196	73	47	
54	1532	139	0257	200	7239	93	6670	65	2213	74	7124	72	46	
55	1671	139	0456	199	7331	92	6604	66	2139	74	7051	73	45	
56	1811	140	0656	200	7423	92	6539	65	2065	74	6979	72	44	
57	1950	139	0855	199	7515	92	6474	65	1992	73	6906	73	43	
58	2089	139	1055	200	7607	92	6408	66	1918	74	6833	73	42	
59	2228	139	1255	200	7700	93	6343	65	1845	73	6761	72	41	
60	0.462368	140	0.521455	200	1.127792	92	2.16278	65	1.91771	74	0.886688	73	40	
61	2507	139	1655	199	7884	93	6213	65	1698	73	6616	72	39	
62	2646	140	1854	200	7977	92	6148	65	1624	74	6543	73	38	
63	2786	139	2054	200	8069	93	6083	65	1551	73	6470	73	37	
64	2925	139	2254	200	8162	93	6018	65	1478	73	6398	72	36	
65	3064	139	2454	200	8255	93	5953	65	1404	74	6325	73	35	
66	3203	139	2654	200	8347	92	5888	65	1331	73	6252	73	34	
67	3342	139	2854	200	8440	93	5823	65	1258	73	6179	73	33	
68	3482	140	3054	200	8532	92	5758	65	1185	73	6107	72	32	
69	3621	139	3254	200	8625	93	5694	64	1112	73	6034	73	31	
70	0.463760	139	0.523454	200	1.128718	93	2.15629	65	1.91039	73	0.885961	73	30	
71	3899	139	3654	200	8811	93	5564	65	0966	73	5888	73	29	
72	4038	139	3855	201	8904	93	5499	65	0893	73	5815	73	28	
73	4177	139	4055	200	8997	93	5435	64	0820	73	5742	73	27	
74	4317	140	4255	200	9090	93	5370	65	0747	73	5669	73	26	
75	4456	139	4455	200	9183	93	5306	64	0674	73	5596	73	25	
76	4595	139	4656	201	9276	93	5241	65	0601	73	5523	73	24	
77	4734	139	4856	200	9369	93	5177	64	0528	73	5450	73	23	
78	4873	139	5056	200	9462	93	5113	64	0456	72	5377	73	22	
79	5012	139	5257	201	9555	93	5048	65	0383	73	5304	73	21	
80	0.465151	139	0.525457	200	1.129648	93	2.14984	64	1.90310	73	0.885231	73	20	
81	5290	139	5658	201	9742	94	4920	64	0238	72	5158	73	19	
82	5429	139	5858	200	9835	93	4855	65	0165	73	5085	73	18	
83	5568	139	6059	201	1.129928	93	4791	64	0093	72	5012	73	17	
84	5707	139	6259	200	1.130022	94	4727	64	1.90020	73	4939	73	16	
85	5846	139	6460	201	0115	93	4663	64	1.89948	72	4866	73	15	
86	5985	139	6660	200	0208	93	4599	64	9876	72	4793	73	14	
87	6124	139	6861	201	0302	94	4535	64	9803	73	4719	74	13	
88	6263	139	7062	201	0396	94	4471	64	9731	72	4646	73	12	
89	6402	139	7262	200	0489	93	4407	64	9659	72	4573	73	11	
90	0.466541	139	0.527463	201	1.130583	94	2.14343	64	1.89587	72	0.884500	73	10	
91	6680	139	7664	201	0677	94	4280	63	9515	72	4426	74	09	
92	6819	139	7865	201	0770	93	4216	64	9442	73	4353	73	08	
93	6958	139	8066	201	0864	94	4152	64	9370	72	4280	73	07	
94	7097	139	8267	201	0958	94	4088	64	9298	72	4206	74	06	
95	7236	139	8468	201	1052	94	4025	63	9226	72	4133	73	05	
96	7374	138	8669	201	1146	94	3961	64	9154	72	4059	74	04	
97	7513	139	8870	201	1240	94	3898	63	9154	71				
98	7652	139	9071	201	1334	94	3834	64	9083	72	3986	73	03	
99	7791	139	9272	201	1428	94	3771	63	9011	72	3913	73	02	
100	0.467930	139	0.529473	201	1.131522	94	2.13707	64	8939	72	3839	74	01	
	cos		cotg		cosec		sec		tang		sin		c	
		90	91	92	93	94	138	139	140	198	199	200	201	
1		9.0	9.1	9.2	9.3	9.4	13.8	13.9	14.0	19.8	19.9	20.0	20.1	1
2		18.0	18.2	18.4	18.6	18.8	27.6	27.8	28.0	39.6	39.8	40.0	40.2	2
3		27.0	27.3	27.6	27.9	28.2	41.4	41.7	42.0	59.4	59.7	60.0	60.3	3
4		36.0	36.4	36.8	37.2	37.6	55.2	55.6	56.0	79.2	79.6	80.0	80.4	4
5		45.0	45.5	46.0	46.5	47.0	69.0	69.5	70.0	99.0	99.5	100.0	100.5	5
6		54.0	54.6	55.2	55.8	56.4	82.8	83.4	84.0	118.8	119.4	120.0	120.6	6
7		63.0	63.7	64.4	65.1	65.8	96.6	97.3	98.0	138.6	139.3	140.0	140.7	7
8		72.0	72.8	73.6	74.4	75.2	110.4	111.2	112.0	158.4	159.2	160.0	160.8	8
9		81.0	81.9	82.8	83.7	84.6	124.2	125.1	126.0	178.2	179.1	180.0	180.9	9

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31^g

c	sin		tang		sec		cosec		cotg		cos					
00	0.467930	139	0.529473	201	1.131522	94	2.13707	63	1.88867	72	0.883766	74	100			
01	8069	138	9674	201	1616	94	3644	63	8795	71	3692	73	99			
02	8207	138	0.529875	201	1710	94	3581	63	8724	71	3619	73	98			
03	8346	139	0.530076	201	1804	94	3517	64	8652	72	3545	74	97			
04	8485	139	0277	201	1898	94	3454	63	8581	71	3471	74	96			
05	8624	139	0479	202	1993	95	3391	63	8509	72	3398	73	95			
06	8763	139	0680	201	2087	94	3328	63	8437	72	3324	74	94			
07	8901	138	0881	201	2182	95	3265	63	8366	71	3251	73	93			
08	9040	139	1083	202	2276	94	3201	64	8295	71	3177	74	92			
09	9179	139	1284	201	2370	94	3138	63	8223	72	3103	74	91			
10	0.469317	138	0.531486	202	1.132465	95	2.13075	63	1.88152	71	0.883030	73	90			
11	9456	139	1687	201	2560	94	3012	62	8081	72	2956	74	89			
12	9595	139	1889	202	2654	94	2950	62	8009	72	2882	74	88			
13	9734	139	2090	201	2749	95	2887	63	7938	71	2808	74	87			
	138	202		202		95		63		71		74				
14	0.469872	139	2292	202	2844	95	2824	63	7867	71	2734	74	86			
15	0.470011	139	2493	201	2938	94	2761	63	7796	71	2661	73	85			
16	0149	138	2695	202	3033	95	2698	63	7725	71	2587	74	84			
	139	202		202		95		62		71		74				
17	0288	139	2897	201	3128	95	2636	63	7654	71	2513	74	83			
18	0427	139	3098	201	3223	95	2573	63	7583	71	2439	74	82			
19	0565	138	3300	202	3318	95	2510	63	7512	71	2365	74	81			
20	0.470704	139	0.533502	202	1.133413	95	2.12448	62	1.87441	71	0.882291	74	80			
21	0843	139	3704	202	3508	95	2385	63	7370	71	2217	74	79			
22	0981	138	3905	201	3603	95	2323	62	7299	71	2143	74	78			
23	1120	139	4107	202	3698	95	2260	63	7228	71	2069	74	77			
	138	202		202		95		62		70		74				
24	1258	139	4309	202	3793	95	2198	62	7158	71	1995	74	76			
25	1397	139	4511	202	3888	95	2136	62	7087	71	1921	74	75			
26	1535	138	4713	202	3983	95	2073	63	7016	71	1847	74	74			
	139	202		202		96		62		70		74				
27	1674	139	4915	202	4079	95	2011	62	6946	71	1773	74	73			
28	1812	138	5117	202	4174	95	1949	62	6875	71	1699	74	72			
29	1951	139	5319	202	4269	95	1887	62	6804	71	1625	74	71			
30	0.472089	138	0.535521	202	1.134365	96	2.11824	62	1.86734	70	0.881551	74	70			
31	2228	139	5723	202	4460	95	1762	63	6663	71	1477	74	69			
32	2366	138	5926	203	4556	96	1700	62	6593	70	1402	75	68			
33	2505	139	6128	202	4651	95	1638	62	6523	70	1328	74	67			
	138	202		202		96		62		71		74				
34	2643	138	6330	202	4747	95	1576	62	6452	70	1254	74	66			
35	2781	139	6532	203	4842	96	1514	62	6382	70	1180	74	65			
36	2920	139	6735	203	4938	96	1452	62	6312	70	1105	75	64			
	138	202		202		96		62		70		74				
37	3058	139	6937	202	5034	95	1390	61	6242	71	1031	74	63			
38	3197	139	7139	202	5129	95	1329	61	6171	71	0957	74	62			
39	3335	138	7342	203	5225	96	1267	62	6101	70	0882	75	61			
40	0.473473	138	0.537544	202	1.135321	96	2.11205	62	1.86031	70	0.880808	74	60			
41	3612	139	7747	203	5417	96	1143	62	5961	70	0734	74	59			
42	3750	138	7949	202	5513	96	1082	61	5891	70	0659	75	58			
43	3888	138	8152	203	5609	96	1020	62	5821	70	0585	74	57			
	139	202		202		96		61		70		75				
44	4027	139	8354	202	5705	96	0959	62	5751	70	0510	75	56			
45	4165	138	8557	203	5801	96	0897	62	5681	70	0436	74	55			
46	4303	138	8760	203	5897	96	0836	61	5611	70	0361	75	54			
	139	202		202		96		62		69		74				
47	4442	138	8962	203	5993	96	0774	61	5542	70	0287	75	53			
48	4580	138	9165	203	6089	96	0713	62	5472	70	0212	75	52			
49	4718	138	9368	203	6186	97	0651	62	5402	70	0138	74	51			
50	0.474856	138	0.539571	203	1.136282	96	2.10590	61	1.85333	69	0.880063	75	50			
	cos		cotg		cosec		sec		tang		sin		c			
	59	60	61	62	63	64	67	68	69	70	71	72	73	74	75	
1	5.9	6.0	6.1	6.2	6.3	6.4	6.7	6.8	6.9	7.0	7.1	7.2	7.3	7.4	7.5	1
2	11.8	12.0	12.2	12.4	12.6	12.8	13.4	13.6	13.8	14.0	14.2	14.4	14.6	14.8	15.0	2
3	17.7	18.0	18.3	18.6	18.9	19.2	20.1	20.4	20.7	21.0	21.3	21.6	21.9	22.2	22.5	3
4	23.6	24.0	24.4	24.8	25.2	25.6	26.8	27.2	27.6	28.0	28.4	28.8	29.2	29.6	30.0	4
5	29.5	30.0	30.5	31.0	31.5	32.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	5
6	35.4	36.0	36.6	37.2	37.8	38.4	40.2	40.8	41.4	42.0	42.6	43.2	43.8	44.4	45.0	6
7	41.3	42.0	42.7	43.4	44.1	44.8	46.9	47.6	48.3	49.0	49.7	50.4	51.1	51.8	52.5	7
8	47.2	48.0	48.8	49.6	50.4	51.2	53.6	54.4	55.2	56.0	56.8	57.6	58.4	59.2	60.0	8
9	53.1	54.0	54.9	55.8	56.7	57.6	60.3	61.2	62.1	63.0	63.9	64.8	65.7	66.6	67.5	9

31^g

c	sin		tang		sec		cosec		cotg		cos					
50	0.474856	139	0.539571	203	1.136282	96	2.10590	61	1.85333	70	0.880063	74	50			
51	4995	138	9774	202	6378	97	0529	62	5263	70	0.879989	75	49			
52	5133	138	0.539976	202	6475	97	0467	62	5193	70	9914	75	48			
53	5271	138	0.540179	203	6571	96	0406	61	5124	69	9839	75	47			
54	5409	138	0382	203	6667	96	0345	61	5054	70	9765	74	46			
55	5547	138	0585	203	6764	97	0284	61	4985	69	9690	75	45			
56	5686	139	0788	203	6861	97	0223	61	4915	70	9615	75	44			
57	5824	138	0991	203	6957	96	0162	61	4846	69	9541	74	43			
58	5962	138	1194	203	7054	97	0101	61	4777	69	9466	75	42			
59	6100	138	1397	203	7150	96	2.10040	61	4707	70	9391	75	41			
60	0.476238	138	0.541601	204	1.137247	97	2.09979	61	1.84638	69	0.879316	75	40			
61	6376	138	1804	203	7344	97	9918	61	4569	70	9241	74	39			
62	6514	138	2007	203	7441	97	9857	61	4499	70	9167	74	38			
63	6653	139	2210	203	7538	97	9796	61	4430	69	9092	75	37			
64	6791	138	2413	203	7635	97	9736	60	4361	69	9017	75	36			
65	6929	138	2617	204	7731	96	9675	61	4292	69	8942	75	35			
66	7067	138	2820	203	7828	97	9614	61	4223	69	8867	75	34			
67	7205	138	3023	203	7926	98	9554	60	4154	69	8792	75	33			
68	7343	138	3227	204	8023	97	9493	61	4085	69	8717	75	32			
69	7481	138	3430	203	8120	97	9432	61	4016	69	8642	75	31			
70	0.477619	138	0.543634	204	1.138217	97	2.09372	60	1.83947	69	0.878567	75	30			
71	7757	138	3837	203	8314	97	9311	61	3879	68	8492	75	29			
72	7895	138	4041	204	8411	97	9251	60	3810	69	8417	75	28			
73	8033	138	4245	204	8509	98	9191	60	3741	69	8342	75	27			
74	8171	138	4448	203	8606	97	9130	61	3672	69	8267	75	26			
75	8309	138	4652	204	8703	97	9070	60	3604	68	8192	75	25			
76	8447	138	4855	203	8801	98	9010	60	3535	69	8117	75	24			
77	8585	138	5059	204	8898	97	8949	61	3466	69	8041	76	23			
78	8723	138	5263	204	8996	98	8889	60	3398	68	7966	75	22			
79	8860	137	5467	204	9094	98	8829	60	3329	69	7891	75	21			
80	0.478998	138	0.545671	204	1.139191	97	2.08769	60	1.83261	68	0.877816	75	20			
81	9136	138	5874	203	9289	98	8709	60	3192	69	7741	75	19			
82	9274	138	6078	204	9387	98	8649	60	3124	68	7665	76	18			
83	9412	138	6282	204	9484	97	8589	60	3056	68	7590	75	17			
84	9550	138	6486	204	9582	98	8529	60	2987	69	7515	75	16			
85	9688	138	6690	204	9680	98	8469	60	2919	68	7439	76	15			
86	9825	137	6894	204	9778	98	8409	60	2851	68	7364	75	14			
87	0.479963	138	7098	204	9876	98	8349	60	2782	69	7289	75	13			
88	0.480101	138	7303	205	1.139974	98	8289	60	2714	68	7213	76	12			
89	0.480239	138	7507	204	1.140072	98	8230	59	2646	68	7138	75	11			
90	0.480377	138	0.547711	204	1.140170	98	2.08170	60	1.82578	68	0.877062	76	10			
91	0514	137	7915	204	0268	98	8110	60	2510	68	6987	75	09			
92	0652	138	8119	204	0366	98	8051	59	2442	68	6911	76	08			
93	0790	138	8324	205	0464	98	7991	60	2374	68	6836	75	07			
94	0928	138	8528	204	0563	99	7932	59	2306	68	6760	76	06			
95	1065	137	8732	204	0661	98	7872	60	2238	68	6685	75	05			
96	1203	138	8937	205	0759	98	7813	59	2170	68	6609	76	04			
97	1341	138	9141	204	0858	99	7753	60	2103	67	6534	75	03			
98	1478	137	9346	205	0956	98	7694	59	2035	68	6458	76	02			
99	1616	138	9550	204	1054	98	7634	60	1967	68	6382	76	01			
100	0.481754	138	0.549755	205	1.141153	99	2.07575	59	1.81899	68	0.876307	75	00			
	cos		cotg		cosec		sec		tang		sin		c			
	76	94	95	96	97	98	99	137	138	139	201	202	203	204	205	
1	7.6	9.4	9.5	9.6	9.7	9.8	9.9	13.7	13.8	13.9	20.1	20.2	20.3	20.4	20.5	1
2	15.2	18.8	19.0	19.2	19.4	19.6	19.8	27.4	27.6	27.8	40.2	40.4	40.6	40.8	41.0	2
3	22.8	28.2	28.5	28.8	29.1	29.4	29.7	41.1	41.4	41.7	60.3	60.6	60.9	61.2	61.5	3
4	30.4	37.6	38.0	38.4	38.8	39.2	39.6	54.8	55.2	55.6	80.4	80.8	81.2	81.6	82.0	4
5	38.0	47.0	47.5	48.0	48.5	49.0	49.5	68.5	69.0	69.5	100.5	101.0	101.5	102.0	102.5	5
6	45.6	56.4	57.0	57.6	58.2	58.8	59.4	82.2	82.8	83.4	120.6	121.2	121.8	122.4	123.0	6
7	53.2	65.8	66.5	67.2	67.9	68.6	69.3	95.9	96.6	97.3	140.7	141.4	142.1	142.8	143.5	7
8	60.8	75.2	76.0	76.8	77.6	78.4	79.2	109.6	110.4	111.2	160.8	161.6	162.4	163.2	164.0	8
9	68.4	84.6	85.5	86.4	87.3	88.2	89.1	123.3	124.2	125.1	180.9	181.8	182.7	183.6	184.5	9

32^g

c	sin		tang		sec		cosec		cotg		cos					
00	0.481754	137	0.549755	204	1.141153	99	2.07575	59	1.81899	67	0.876307	76	100			
01	1891	138	0.549959	205	1252	98	7516	60	1832	68	6231	76	99			
02	2029	138	0.550164	204	1350	99	7456	59	1764	68	6155	75	98			
03	2167	137	0368	205	1449	99	7397	59	1696	67	6080	76	97			
04	2304	138	0573	205	1548	99	7338	59	1629	67	6004	76	96			
05	2442	138	0778	205	1646	98	7279	59	1561	68	5928	76	95			
06	2579	137	0983	205	1745	99	7220	59	1494	67	5852	76	94			
		138		204		99		59		68		76				
07	2717		1187		1844		7161		1426		5776		93			
08	2854	137	1392	205	1943	99	7102	59	1359	67	5701	75	92			
09	2992	138	1597	205	2042	99	7043	59	1292	67	5625	76	91			
10	0.483130	137	0.551802	205	1.142141	99	2.06984	59	1.81224	68	0.875549	76	90			
11	3267	138	2007	205	2240	99	6925	59	1157	67	5473	76	89			
12	3405	137	2212	205	2339	99	6866	59	1090	67	5397	76	88			
13	3542	138	2417	205	2438	99	6807	59	1023	67	5321	76	87			
14	3680		2622	205	2537	99	6748	59	0956	67	5245	76	86			
15	3817	137	2827	205	2636	99	6690	58	0888	68	5169	76	85			
16	3955	138	3032	205	2736	100	6631	59	0821	67	5093	76	84			
		137		205		99		59		67		76				
17	4092		3237		2835		6572		0754		5017		83			
18	4229	137	3442	205	2934	99	6514	58	0687	67	4941	76	82			
19	4367	138	3648	206	3034	100	6455	59	0620	67	4865	76	81			
20	0.484504	137	0.553853	205	1.143133	99	2.06397	58	1.80553	67	0.874789	76	80			
21	4642	138	4058	205	3232	99	6338	59	0486	67	4713	76	79			
22	4779	137	4263	205	3332	100	6280	58	0420	66	4637	76	78			
23	4916	137	4469	206	3432	100	6221	59	0353	67	4560	77	77			
		138		205		99		58		67		76				
24	5054		4674		3531		6163		0286		4484		76			
25	5191	137	4880	206	3631	100	6104	59	0219	67	4408	76	75			
26	5329	138	5085	205	3730	99	6046	58	0153	66	4332	76	74			
		137		206		100		58		67		76				
27	5466		5291		3830		5988		0086		4256		73			
28	5603	137	5496	205	3930	100	5929	59	1.80019	67	4179	77	72			
29	5741	138	5702	206	4030	100	5871	58	1.79953	66	4103	76	71			
30	0.485878	137	0.555907	205	1.144130	100	2.05813	58	1.79886	67	0.874027	76	70			
31	6015	138	6113	206	4230	100	5755	58	9820	66	3950	77	69			
32	6152	137	6319	206	4330	100	5697	58	9753	67	3874	76	68			
33	6290	138	6524	205	4430	100	5639	58	9687	66	3798	76	67			
		137		206		100		58		67		77				
34	6427		6730		4530		5581		9620		3721		66			
35	6564	137	6936	206	4630	100	5523	58	9554	66	3645	76	65			
36	6701	137	7142	206	4730	100	5465	58	9488	66	3568	77	64			
		138		205		100		58		67		76				
37	6839		7347		4830		5407		9421		3492		63			
38	6976	137	7553	206	4930	100	5349	58	9355	66	3415	77	62			
39	7113	137	7759	206	5031	101	5291	58	9289	66	3339	76	61			
40	0.487250	137	0.557965	206	1.145131	100	2.05233	58	1.79223	66	0.873262	77	60			
41	7387	138	8171	206	5231	100	5176	57	9156	67	3186	76	59			
42	7524	137	8377	206	5332	101	5118	58	9090	66	3109	77	58			
43	7662	138	8583	206	5432	100	5060	58	9024	66	3033	76	57			
		137		206		101		57		66		77				
44	7799		8789		5533		5003		8958		2956		56			
45	7936	137	8996	207	5634	101	4945	58	8892	66	2880	76	55			
46	8073	137	9202	206	5734	100	4887	58	8826	66	2803	77	54			
		137		206		101		57		66		77				
47	8210		9408		5835		4830		8760		2726		53			
48	8347	137	9614	206	5935	100	4772	58	8695	65	2649	77	52			
49	8484	137	0.559821	207	6036	101	4715	57	8629	66	2573	76	51			
50	0.488621	137	0.560027	206	1.146137	101	2.04657	58	1.78563	66	0.872496	77	50			
cos		cotg		cosec		sec		tang		sin		c				
	55	56	57	58	59	60	64	65	66	67	68	75	76	77	78	
1	5.5	5.6	5.7	5.8	5.9	6.0	6.4	6.5	6.6	6.7	6.8	7.5	7.6	7.7	7.8	1
2	11.0	11.2	11.4	11.6	11.8	12.0	12.8	13.0	13.2	13.4	13.6	15.0	15.2	15.4	15.6	2
3	16.5	16.8	17.1	17.4	17.7	18.0	19.2	19.5	19.8	20.1	20.4	22.5	22.8	23.1	23.4	3
4	22.0	22.4	22.8	23.2	23.6	24.0	25.6	26.0	26.4	26.8	27.2	30.0	30.4	30.8	31.2	4
5	27.5	28.0	28.5	29.0	29.5	30.0	32.0	32.5	33.0	33.5	34.0	37.5	38.0	38.5	39.0	5
6	33.0	33.6	34.2	34.8	35.4	36.0	38.4	39.0	39.6	40.2	40.8	45.0	45.6	46.2	46.8	6
7	38.5	39.2	39.9	40.6	41.3	42.0	44.8	45.5	46.2	46.9	47.6	52.5	53.2	53.9	54.6	7
8	44.0	44.8	45.6	46.4	47.2	48.0	51.2	52.0	52.8	53.6	54.4	60.0	60.8	61.6	62.4	8
9	49.5	50.4	51.3	52.2	53.1	54.0	57.6	58.5	59.4	60.3	61.2	67.5	68.4	69.3	70.2	9

32^g

c	sin		tang		sec		cosec		cotg		cos					
50	0.488621	137	0.560027	206	1.146137	101	2.04657	57	1.78563	66	0.872496	77	50			
51	8758	137	0233	207	6238	101	4600	57	8497	66	2419	77	49			
52	8895	137	0440	206	6339	101	4543	58	8431	65	2342	77	48			
53	9032	137	0646	207	6440	101	4485	57	8366	66	2266	77	47			
54	9169	137	0853	206	6541	101	4428	57	8300	66	2189	77	46			
55	9306	137	1059	207	6642	101	4371	57	8234	66	2112	77	45			
56	9443	137	1266	207	6743	101	4314	57	8169	65	2035	77	44			
57	9580	137	1472	206	6844	101	4257	57	8103	66	1958	77	43			
58	9717	137	1679	207	6945	101	4199	58	8038	65	1881	77	42			
59	9854	137	1885	206	7046	101	4142	57	7972	66	1804	77	41			
60	0.489991	137	0.562092	207	1.147148	102	2.04085	57	1.77907	66	0.871727	77	40			
61	0.490128	137	2299	207	7249	101	4028	57	7841	65	1650	77	39			
62	0265	137	2506	206	7350	102	3971	57	7776	65	1573	77	38			
63	0402	137	2712	207	7452	101	3914	57	7711	66	1496	77	37			
64	0539	137	2919	207	7553	102	3857	56	7645	65	1419	77	36			
65	0676	137	3126	207	7655	101	3801	57	7580	65	1342	77	35			
66	0813	136	3333	207	7756	102	3744	57	7515	65	1265	77	34			
67	0949	137	3540	207	7858	101	3687	57	7450	65	1188	77	33			
68	1086	137	3747	207	7959	102	3630	57	7385	66	1111	77	32			
69	1223	137	3954	207	8061	102	3574	56	7319	66	1034	77	31			
70	0.491360	137	0.564161	207	1.148163	102	2.03517	57	1.77254	65	0.870957	77	30			
71	1497	136	4368	207	8265	101	3460	57	7189	65	0879	77	29			
72	1633	137	4575	207	8366	102	3404	57	7124	65	0802	77	28			
73	1770	137	4782	208	8468	102	3347	57	7059	65	0725	77	27			
74	1907	137	4990	207	8570	102	3290	56	6994	65	0648	77	26			
75	2044	136	5197	207	8672	102	3234	57	6929	64	0570	77	25			
76	2180	137	5404	208	8774	102	3177	56	6865	65	0493	77	24			
77	2317	137	5612	207	8876	102	3121	56	6800	65	0416	77	23			
78	2454	137	5819	207	8978	102	3065	56	6735	65	0339	77	22			
79	2591	136	6026	208	9080	103	3008	57	6670	65	0261	77	21			
80	0.492727	137	0.566234	207	1.149183	102	2.02952	56	1.76606	65	0.870184	77	20			
81	2864	137	6441	208	9285	102	2896	57	6541	65	0106	77	19			
82	3001	136	6649	207	9387	102	2839	56	6476	64	0.870029	77	18			
83	3137	137	6856	208	9489	103	2783	56	6412	65	0.869951	77	17			
84	3274	137	7064	207	9592	102	2727	56	6347	65	9874	77	16			
85	3411	136	7271	208	9694	103	2671	56	6282	64	9796	77	15			
86	3547	137	7479	208	9797	102	2615	56	6218	64	9719	77	14			
87	3684	136	7687	207	1.149899	103	2559	56	6154	65	9641	77	13			
88	3820	137	7894	208	1.150002	102	2503	56	6089	64	9564	77	12			
89	3957	137	8102	208	0104	103	2447	56	6025	64	9486	77	11			
90	0.494094	136	0.568310	208	1.150207	103	2.02391	56	1.75960	65	0.869409	77	10			
91	4230	137	8518	208	0310	102	2335	56	5896	64	9331	77	09			
92	4367	136	8726	208	0412	103	2279	56	5832	65	9253	77	08			
93	4503	137	8934	207	0515	103	2223	56	5767	64	9176	77	07			
94	4640	136	9141	208	0618	103	2167	56	5703	64	9098	77	06			
95	4776	137	9349	208	0721	103	2112	55	5639	64	9020	77	05			
96	4913	136	9557	209	0824	103	2056	56	5575	64	8943	77	04			
97	5049	137	9766	208	0927	103	2000	56	5511	64	8865	77	03			
98	5186	136	0.569974	208	1030	103	1944	55	5447	64	8787	77	02			
99	5322	137	0.570182	208	1133	103	1889	55	5383	64	8709	77	01			
100	0.495459	137	0.570390	208	1.151236	103	2.01833	56	1.75319	64	0.868632	77	00			
cos		cotg		cosec		sec		tang		sin		c				
	98	99	100	101	102	103	136	137	138	204	205	206	207	208	209	
1	9.8	9.9	10.0	10.1	10.2	10.3	13.6	13.7	13.8	20.4	20.5	20.6	20.7	20.8	20.9	1
2	19.6	19.8	20.0	20.2	20.4	20.6	27.2	27.4	27.6	40.8	41.0	41.2	41.4	41.6	41.8	2
3	29.4	29.7	30.0	30.3	30.6	30.9	40.8	41.1	41.4	61.2	61.5	61.8	62.1	62.4	62.7	3
4	39.2	39.6	40.0	40.4	40.8	41.2	54.4	54.8	55.2	81.6	82.0	82.4	82.8	83.2	83.6	4
5	49.0	49.5	50.0	50.5	51.0	51.5	68.0	68.5	69.0	102.0	102.5	103.0	103.5	104.0	104.5	5
6	58.8	59.4	60.0	60.6	61.2	61.8	81.6	82.2	82.8	122.4	123.0	123.6	124.2	124.8	125.4	6
7	68.6	69.3	70.0	70.7	71.4	72.1	95.2	95.9	96.6	142.8	143.5	144.2	144.9	145.6	146.3	7
8	78.4	79.2	80.0	80.8	81.6	82.4	108.8	109.6	110.4	163.2	164.0	164.8	165.6	166.4	167.2	8
9	88.2	89.1	90.0	90.9	91.8	92.7	122.4	123.3	124.2	183.6	184.5	185.4	186.3	187.2	188.1	9

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c	sin		tang		sec		cosec		cotg		cos								
00	0.495459	136	0.570390	208	1.151236	103	2.018332	556	1.753187	640	0.868632	78	100						
01	5595	137	0598	208	1339	104	7776	555	2547	639	8554	78	99						
02	5732	137	0806	208	1443	104	7221	555	1908	639	8476	78	98						
03	5868	136	1015	209	1546	103	6666	555	1269	639	8398	78	97						
04	6004	136	1223	208	1649	103	6111	555	1.750630	639	8320	78	96						
05	6141	137	1431	208	1752	103	5557	554	1.749992	638	8242	78	95						
06	6277	136	1640	209	1856	104	5003	554	9354	638	8164	78	94						
07	6413	136	1848	208	1959	103	4450	553	8716	638	8086	78	93						
08	6550	137	2057	209	2063	104	3897	553	8079	637	8008	78	92						
09	6686	136	2265	208	2166	103	3344	553	7442	637	7930	78	91						
10	0.496822	137	0.572474	208	1.152270	104	2.012791	553	1.746805	637	0.867852	78	90						
11	6959	136	2682	209	2374	103	2239	552	6169	636	7774	78	89						
12	7095	136	2891	208	2477	104	1687	551	5533	635	7696	78	88						
13	7231	137	3099	209	2581	104	1136	551	4898	635	7618	78	87						
14	7368	136	3308	209	2685	104	0585	551	4263	635	7540	78	86						
15	7504	136	3517	209	2789	104	2.010034	550	3628	635	7462	78	85						
16	7640	136	3726	209	2893	104	2.009484	550	2993	635	7384	78	84						
17	7776	136	3934	208	2996	103	8934	550	2359	634	7305	79	83						
18	7913	137	4143	209	3100	104	8384	550	1725	634	7227	78	82						
19	8049	136	4352	209	3204	104	7835	549	1092	633	7149	78	81						
20	0.498185	136	0.574561	209	1.153308	104	2.007286	549	1.740459	633	0.867071	78	80						
21	8321	136	4770	209	3413	105	6737	549	1.739826	633	6992	79	79						
22	8457	136	4979	209	3517	104	6189	548	9194	632	6914	78	78						
23	8594	137	5188	209	3621	104	5641	548	8562	632	6836	78	77						
24	8730	136	5397	209	3725	104	5094	547	7930	632	6758	78	76						
25	8866	136	5606	209	3830	105	4547	547	7299	631	6679	79	75						
26	9002	136	5815	209	3934	104	4000	547	6668	631	6601	78	74						
27	9138	136	6025	210	4038	104	3453	547	6037	631	6522	79	73						
28	9274	136	6234	209	4143	105	2907	546	5407	630	6444	78	72						
29	9410	136	6443	209	4247	104	2361	546	4777	630	6366	78	71						
30	0.499546	136	0.576652	209	1.154352	105	2.001816	545	1.734147	630	0.866287	79	70						
31	9683	137	6862	210	4456	104	1271	545	3518	629	6209	78	69						
32	9819	136	7071	209	4561	105	0726	545	2889	629	6130	79	68						
33	0.499955	136	7280	209	4666	105	2.000181	545	2260	629	6052	78	67						
34	0.500091	136	7490	210	4770	104	1.999637	544	1632	628	5973	79	66						
35	0227	136	7699	210	4875	105	9094	543	1004	628	5894	79	65						
36	0363	136	7909	209	4980	105	8550	544	1.730377	627	5816	78	64						
37	0499	136	8118	209	5085	105	8007	543	1.729749	628	5737	79	63						
38	0635	136	8328	210	5190	105	7464	543	9122	627	5659	78	62						
39	0771	136	8538	210	5295	105	6922	542	8496	626	5580	79	61						
40	0.500907	136	0.578747	209	1.155400	105	1.996380	542	1.727870	626	0.865501	79	60						
41	1043	136	8957	210	5505	105	5838	542	7244	626	5423	78	59						
42	1179	136	9167	210	5610	105	5297	541	6618	626	5344	79	58						
43	1314	135	9377	210	5715	105	4756	541	5993	625	5265	79	57						
44	1450	136	9586	209	5820	105	4215	541	5368	625	5186	79	56						
45	1586	136	0.579796	210	5926	106	3675	540	4744	624	5108	78	55						
46	1722	136	0.580006	210	6031	105	3135	540	4119	625	5029	79	54						
47	1858	136	0216	210	6136	105	2596	539	3496	623	4950	79	53						
48	1994	136	0426	210	6242	106	2056	540	2872	624	4871	79	52						
49	2130	136	0636	210	6347	105	1517	539	2249	623	4792	79	51						
50	0.502266	136	0.580846	210	1.156452	105	1.990979	538	1.721626	623	0.864713	79	50						
cos		cotg		cosec		sec		tang		sin		c							
	78	79	80	103	104	105	106	107	108	135	136	137	208	209	210	211	212	522	
1	7.8	7.9	8.0	10.3	10.4	10.5	10.6	10.7	10.8	13.5	13.6	13.7	20.8	20.9	21.0	21.1	21.2	52.2	1
2	15.6	15.8	16.0	20.6	20.8	21.0	21.2	21.4	21.6	27.0	27.2	27.4	41.6	41.8	42.0	42.2	42.4	104.4	2
3	23.4	23.7	24.0	30.9	31.2	31.5	31.8	32.1	32.4	40.5	40.8	41.1	62.4	62.7	63.0	63.3	63.6	156.6	3
4	31.2	31.6	32.0	41.2	41.6	42.0	42.4	42.8	43.2	54.0	54.4	54.8	83.2	83.6	84.0	84.4	84.8	208.8	4
5	39.0	39.5	40.0	51.5	52.0	52.5	53.0	53.5	54.0	67.5	68.0	68.5	104.0	104.5	105.0	105.5	106.0	261.0	5
6	46.8	47.4	48.0	61.8	62.4	63.0	63.6	64.2	64.8	81.0	81.6	82.2	124.8	125.4	126.0	126.6	127.2	313.2	6
7	54.6	55.3	56.0	72.1	72.8	73.5	74.2	74.9	75.6	94.5	95.2	95.9	145.6	146.3	147.0	147.7	148.4	365.4	7
8	62.4	63.2	64.0	82.4	83.2	84.0	84.8	85.6	86.4	108.0	108.8	109.6	166.4	167.2	168.0	168.8	169.6	417.6	8
9	70.2	71.1	72.0	92.7	93.6	94.5	95.4	96.3	97.2	121.5	122.4	123.3	187.2	188.1	189.0	189.9	190.8	469.8	9

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c	sin		tang		sec		cosec		cotg		cos								
50	0.502266	135	0.580846	210	1.156452	106	1.990979	539	1.721626	622	0.864713	78	50						
51	2401	136	1056	210	6558	106	1.990440	537	1004	623	4635	79	49						
52	2537	136	1266	211	6664	105	1.989903	538	1.720381	621	4556	79	48						
53	2673	136	1477	210	6769	106	9365	537	1.719760	622	4477	79	47						
54	2809	136	1687	210	6875	106	8828	537	9138	621	4398	79	46						
55	2945	136	1897	210	6981	106	8291	537	8517	621	4319	79	45						
56	3080	135	2107	210	7086	105	7754	537	7896	621	4240	79	44						
57	3216	136	2318	211	7192	106	7218	536	7276	620	4161	79	43						
58	3352	136	2528	210	7298	106	6682	536	6656	620	4082	79	42						
59	3487	135	2738	210	7404	106	6147	535	6036	620	4003	79	41						
60	0.503623	136	0.582949	210	1.157510	106	1.985611	536	1.715416	620	0.863923	79	40						
61	3759	136	3159	211	7616	106	5077	535	4797	619	3844	79	39						
62	3895	135	3370	210	7722	106	4542	534	4178	618	3765	79	38						
63	4030	136	3580	211	7828	106	4008	534	3560	618	3686	79	37						
64	4166	136	3791	211	7934	107	3474	534	2942	618	3607	79	36						
65	4302	135	4002	210	8041	106	2940	533	2324	618	3528	79	35						
66	4437	136	4212	210	8147	106	2407	533	1706	618	3448	80	34						
67	4573	136	4423	211	8253	106	1874	533	1089	617	3369	79	33						
68	4708	135	4634	211	8359	106	1342	532	1.710472	617	3290	79	32						
69	4844	136	4845	211	8466	107	0810	532	1.709856	616	3211	79	31						
70	0.504980	136	0.585055	210	1.158572	106	1.980278	532	1.709240	616	0.863131	80	30						
71	5115	135	5266	211	8679	107	1.979746	532	8624	616	3052	79	29						
72	5251	136	5477	211	8785	106	9215	531	8008	616	2973	79	28						
73	5386	135	5688	211	8892	107	8684	531	7393	615	2893	80	27						
74	5522	136	5899	211	8999	107	8154	530	6778	615	2814	79	26						
75	5657	135	6110	211	9105	106	7624	530	6164	614	2734	80	25						
76	5793	136	6321	211	9212	107	7094	530	5550	614	2655	79	24						
77	5928	135	6532	211	9319	107	6564	530	4936	614	2575	80	23						
78	6064	136	6743	211	9426	107	6035	529	4322	614	2496	79	22						
79	6199	135	6955	212	9533	107	5506	529	3709	613	2417	79	21						
80	0.506335	136	0.587166	211	1.159639	106	1.974978	528	1.703096	613	0.862337	80	20						
81	6470	135	7377	211	9746	107	4450	528	2484	613	2257	80	19						
82	6606	136	7588	211	9853	107	3922	528	1872	612	2178	79	18						
83	6741	135	7800	211	1.159961	108	3394	528	1260	612	2098	80	17						
84	6877	136	8011	211	1.160068	107	2867	527	0648	612	2019	79	16						
85	7012	135	8222	211	0175	107	2340	527	1.700037	611	1939	80	15						
86	7147	135	8434	212	0282	107	1814	526	1.699426	611	1859	80	14						
87	7283	136	8645	211	0389	107	1287	527	8816	610	1780	79	13						
88	7418	135	8857	212	0497	108	0762	525	8205	611	1700	80	12						
89	7553	135	9069	212	0604	107	1.970236	526	7595	610	1620	80	11						
90	0.507689	136	0.589280	211	1.160711	107	1.970236	525	7595	609	1620	79	10						
91	7824	135	9492	212	1.160711	108	1.969711	525	1.696986	609	0.861541	80	09						
92	7959	135	9703	211	0819	107	9186	525	6377	609	1461	80	08						
93	8095	136	9703	212	0926	108	8661	525	5768	609	1381	80	07						
94	8230	135	0.589915	212	1034	108	8137	524	5159	609	1301	80	06						
95	8365	135	0.590127	212	1142	108	7613	524	4551	608	1221	79	05						
96	8500	135	0339	212	1249	108	7090	523	3943	608	1142	80	04						
97	8636	136	0551	211	1357	108	6566	524	3335	607	1062	80	03						
98	8771	135	0762	212	1465	108	6044	522	3335	607	0982	80	02						
99	8906	135	0974	212	1573	108	5521	523	2728	607	0902	80	01						
100	8906	135	1186	212	1680	107	4999	522	2121	607	0822	80	00						
100	0.509041	135	0.591398	212	1.161788	108	1.964477	522	1.690908	606	0.860742	80	00						
	cos		cotg		cosec		sec		tang		sin		c						
	525	528	531	534	537	540	545	550	555	606	609	612	615	620	625	630	635	640	
1	52.5	52.8	53.1	53.4	53.7	54.0	54.5	55.0	55.5	60.6	60.9	61.2	61.5	62.0	62.5	63.0	63.5	64.0	1
2	105.0	105.6	106.2	106.8	107.4	108.0	109.0	110.0	111.0	121.2	121.8	122.4	123.0	124.0	125.0	126.0	127.0	128.0	2
3	157.5	158.4	159.3	160.2	161.1	162.0	163.5	165.0	166.5	181.8	182.7	183.6	184.5	186.0	187.5	189.0	190.5	192.0	3
4	210.0	211.2	212.4	213.6	214.8	216.0	218.0	220.0	222.0	242.4	243.6	244.8	246.0	248.0	250.0	252.0	254.0	256.0	4
5	262.5	264.0	265.5	267.0	268.5	270.0	272.5	275.0	277.5	303.0	304.5	306.0	307.5	310.0	312.5	315.0	317.5	320.0	5
6	315.0	316.8	318.6	320.4	322.2	324.0	327.0	330.0	333.0	363.6	365.4	367.2	369.0	372.0	375.0	378.0	381.0	384.0	6
7	367.5	369.6	371.7	373.8	375.9	378.0	381.5	385.0	388.5	424.2	426.3	428.4	430.5	434.0	437.5	441.0	444.5	448.0	7
8	420.0	422.4	424.8	427.2	429.6	432.0	436.0	440.0	444.0	484.8	487.2	489.6	492.0	496.0	500.0	504.0	508.0	512.0	8
9	472.5	475.2	477.9	480.6	483.3	486.0	490.5	495.0	499.5	545.4	548.1	550.8	553.5	558.0	562.5	567.0	571.5	576.0	9

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c	sin		tang		sec		cosec		cotg		cos								
00	0.509041	136	0.591398	212	1.161788	108	1.964477	522	1.690908	606	0.860742	80	100						
01	9177	135	1610	212	1896	108	3955	521	1.690302	606	0662	80	99						
02	9312	135	1822	212	2004	108	3434	521	1.689696	605	0582	80	98						
03	9447	135	2035	213	2112	108	2913	521	9091	605	0502	80	97						
04	9582	135	2247	212	2220	108	2392	521	8485	606	0422	80	96						
05	9717	135	2459	212	2329	109	1872	520	7881	604	0342	80	95						
06	9852	135	2671	212	2437	108	1352	520	7276	605	0262	80	94						
07	0.509988	136	2883	212	2545	108	0832	520	6672	604	0182	80	93						
08	0.510123	135	3096	213	2653	108	1.960313	519	6068	604	0102	80	92						
09	0258	135	3308	212	2762	109	1.959794	519	5465	603	0.860022	80	91						
10	0.510393	135	0.593521	213	1.162870	108	1.959275	519	1.684862	603	0.859941	81	90						
11	0528	135	3733	212	2978	108	8757	518	4259	603	9861	80	89						
12	0663	135	3945	212	3087	109	8239	518	3656	603	9781	80	88						
13	0798	135	4158	213	3195	108	7721	518	3054	602	9701	80	87						
14	0933	135	4370	212	3304	109	7204	517	2452	602	9621	80	86						
15	1068	135	4583	213	3413	109	6686	518	1851	601	9540	81	85						
16	1203	135	4796	213	3521	108	6170	516	1250	601	9460	80	84						
17	1338	135	5008	212	3630	109	5653	517	0649	601	9380	80	83						
18	1473	135	5221	213	3739	109	5137	516	1.680048	601	9299	81	82						
19	1608	135	5434	213	3848	109	4621	516	1.679448	600	9219	80	81						
20	0.511743	135	0.595647	212	1.163957	109	1.954106	515	1.678848	600	0.859139	81	80						
21	1878	135	5859	213	4066	108	3591	515	8248	600	9058	80	79						
22	2013	135	6072	213	4174	110	3076	515	7649	599	8978	81	78						
23	2148	135	6285	213	4284	109	2561	515	7050	599	8897	80	77						
24	2283	135	6498	213	4393	109	2047	514	6451	599	8817	80	76						
25	2418	135	6711	213	4502	109	1533	514	5853	598	8736	81	75						
26	2552	134	6924	213	4611	109	1020	513	5255	598	8656	80	74						
27	2687	135	7137	213	4720	109	1.950506	514	4657	598	8575	81	73						
28	2822	135	7350	213	4829	109	1.949994	512	4059	598	8495	80	72						
29	2957	135	7564	214	4939	110	9481	513	3462	597	8414	81	71						
30	0.513092	135	0.597777	213	1.165048	109	1.948969	512	1.672865	597	0.858334	81	70						
31	3227	135	7990	213	5157	109	8457	512	2269	596	8253	80	69						
32	3362	135	8203	213	5267	110	7945	512	1673	596	8172	81	68						
33	3496	134	8417	214	5376	109	7434	511	1077	596	8092	80	67						
34	3631	135	8630	213	5486	110	6923	511	1.670481	596	8011	81	66						
35	3766	135	8843	213	5596	110	6412	511	1.669886	595	7930	81	65						
36	3901	135	9057	214	5705	109	5901	511	9291	595	7850	80	64						
37	4035	134	9270	213	5815	110	5391	510	8696	595	7769	81	63						
38	4170	135	9484	214	5925	110	4882	509	8102	594	7688	81	62						
39	4305	135	9697	213	6035	110	4372	510	7508	594	7607	81	61						
40	0.514440	135	0.599911	214	1.166145	110	1.943863	509	1.666914	594	0.857527	80	60						
41	4574	134	0.600124	213	6254	109	3354	509	6321	593	7446	81	59						
42	4709	135	0338	214	6364	110	2846	508	5728	593	7365	81	58						
43	4844	135	0552	214	6474	110	2338	508	5135	593	7284	81	57						
44	4978	134	0766	214	6584	110	1830	508	4543	592	7203	81	56						
45	5113	135	0979	213	6695	111	1322	508	3951	592	7122	81	55						
46	5248	135	1193	214	6805	110	0815	507	3359	592	7041	81	54						
47	5382	134	1407	214	6915	110	1.940308	507	2767	592	6960	81	53						
48	5517	135	1621	214	7025	110	1.939801	507	2176	591	6880	80	52						
49	5651	134	1835	214	7136	111	9295	506	1585	591	6799	81	51						
50	0.515786	135	0.602049	214	1.167246	110	1.938789	506	1.660994	591	0.856718	81	50						
cos		cotg		cosec		sec		tang		sin		c							
	80	81	82	108	109	110	111	112	113	134	135	136	212	213	214	215	216	491	
1	8.0	8.1	8.2	10.8	10.9	11.0	11.1	11.2	11.3	13.4	13.5	13.6	21.2	21.3	21.4	21.5	21.6	49.1	1
2	16.0	16.2	16.4	21.6	21.8	22.0	22.2	22.4	22.6	26.8	27.0	27.2	42.4	42.6	42.8	43.0	43.2	98.2	2
3	24.0	24.3	24.6	32.4	32.7	33.0	33.3	33.6	33.9	40.2	40.5	40.8	63.6	63.9	64.2	64.5	64.8	147.3	3
4	32.0	32.4	32.8	43.2	43.6	44.0	44.4	44.8	45.2	53.6	54.0	54.4	84.8	85.2	85.6	86.0	86.4	196.4	4
5	40.0	40.5	41.0	54.0	54.5	55.0	55.5	56.0	56.5	67.0	67.5	68.0	106.0	106.5	107.0	107.5	108.0	245.5	5
6	48.0	48.6	49.2	64.8	65.4	66.0	66.6	67.2	67.8	80.4	81.0	81.6	127.2	127.8	128.4	129.0	129.6	294.6	6
7	56.0	56.7	57.4	75.6	76.3	77.0	77.7	78.4	79.1	93.8	94.5	95.2	148.4	149.1	149.8	150.5	151.2	343.7	7
8	64.0	64.8	65.6	86.4	87.2	88.0	88.8	89.6	90.4	107.2	108.0	108.8	169.6	170.4	171.2	172.0	172.8	392.8	8
9	72.0	72.9	73.8	97.2	98.1	99.0	99.9	100.8	101.7	120.6	121.5	122.4	190.8	191.7	192.6	193.5	194.4	441.9	9

c	sin		tang		sec		cosec		cotg		cos								
50	0.515786	134	0.602049	214	1.167246	110	1.938789	506	1.660994	590	0.856718	82	50						
51	5920	135	2263	214	7356	111	8283	505	1.660404	590	6636	81	49						
52	6055	135	2477	214	7467	110	7778	505	1.659814	589	6555	81	48						
53	6190	134	2691	214	7577	111	7273	505	9225	590	6474	81	47						
54	6324	135	2905	214	7688	110	6768	505	8635	590	6393	81	46						
55	6459	135	3120	215	7798	110	6264	504	8046	589	6312	81	45						
56	6593	134	3334	214	7909	111	5759	505	7457	589	6231	81	44						
57	6728	135	3548	214	8020	111	5256	503	6869	588	6150	81	43						
58	6862	134	3762	214	8131	111	4752	504	6281	588	6069	81	42						
59	6997	135	3977	215	8241	110	4249	503	5693	588	5987	82	41						
60	0.517131	134	0.604191	214	1.168352	111	1.933746	503	1.655105	587	0.855906	81	40						
61	7265	135	4406	214	8463	111	3243	502	4518	587	5825	81	39						
62	7400	134	4620	215	8574	111	2741	502	3931	586	5744	82	38						
63	7534	135	4835	214	8685	111	2239	502	3345	587	5662	81	37						
64	7669	134	5049	214	8796	111	1738	501	2758	587	5581	81	36						
65	7803	135	5264	215	8907	111	1236	502	2172	586	5500	81	35						
66	7937	134	5478	214	9018	111	0735	501	1587	585	5419	81	34						
67	8072	135	5693	215	9130	112		501		586		82							
68	8206	134	5908	215	9241	111	1.930234	500	1001	585	5337	81	33						
69	8340	135	6123	215	9352	111	1.929734	500	1.650416	585	5256	81	32						
							9234	500	1.649831	585	5174	82	31						
70	0.518475	134	0.606337	215	1.169464	112	1.928734	500	1.649247	584	0.855093	82	30						
71	8609	135	6552	215	9575	111	8235	499	8663	584	5011	81	29						
72	8743	134	6767	215	9686	112	7735	500	8079	584	4930	82	28						
73	8878	135	6982	215	9798	112	7236	499	7495	583	4848	81	27						
74	9012	134	7197	215	1.169910	111	6738	498	6912	583	4767	82	26						
75	9146	135	7412	215	1.170021	112	6240	498	6329	583	4685	81	25						
76	9280	134	7627	215	0133	112	5742	498	5746	583	4604	81	24						
								498		582		82							
77	9415	135	7842	215	0244	111	5244	498	5164	582	4522	81	23						
78	9549	134	8057	215	0356	112	4747	497	4582	582	4441	81	22						
79	9683	135	8273	216	0468	112	4249	498	4000	582	4359	82	21						
80	0.519817	134	0.608488	215	1.170580	112	1.923753	496	1.643418	582	0.854277	82	20						
81	0.519952	135	8703	215	0692	112	3256	497	2837	581	4196	81	19						
82	0.520086	134	8918	216	0804	112	2760	496	2256	581	4114	82	18						
83	0220	135	9134	216	0916	112	2264	496	1676	580	4032	81	17						
84	0354	134	9349	215	1028	112	1769	495	1096	580	3951	82	16						
85	0488	135	9564	215	1140	112	1273	496	1.640516	580	3869	82	15						
86	0622	134	9780	216	1252	112	0778	495	1.639936	580	3787	82	14						
								494		579		82							
87	0756	135	0.609995	216	1364	113	1.920284	495	9357	580	3705	81	13						
88	0890	134	0.610211	216	1477	112	1.919789	495	8777	580	3624	81	12						
89	1025	135	0427	216	1589	112	9295	494	8199	578	3542	82	11						
								493		579		82							
90	0.521159	134	0.610642	216	1.171701	113	1.918802	494	1.637620	578	0.853460	82	10						
91	1293	135	0858	216	1814	112	8308	494	7042	578	3378	82	09						
92	1427	134	1074	216	1926	112	7815	493	6464	578	3296	82	08						
93	1561	135	1289	215	2039	113	7322	493	5887	577	3214	82	07						
								492		578		82							
94	1695	134	1505	216	2151	112	6830	492	5309	578	3132	82	06						
95	1829	135	1721	216	2264	113	6338	492	4732	577	3050	82	05						
96	1963	134	1937	216	2377	113	5846	492	4156	576	2968	82	04						
								492		577		82							
97	2097	135	2153	216	2489	113	5354	491	3579	576	2886	82	03						
98	2231	134	2369	216	2602	113	4863	491	3003	576	2804	82	02						
99	2365	135	2585	216	2715	113	4372	491	2427	576	2722	82	01						
100	0.522499	134	0.612801	216	1.172828	113	1.913881	491	1.631852	575	0.852640	82	00						
	cos		cotg		cosec		sec		tang		sin		c						
	494	497	500	505	510	515	520	575	578	581	584	587	590	593	596	599	602	605	
1	49.4	49.7	50.0	50.5	51.0	51.5	52.0	57.5	57.8	58.1	58.4	58.7	59.0	59.3	59.6	59.9	60.2	60.5	1
2	98.8	99.4	100.0	101.0	102.0	103.0	104.0	115.0	115.6	116.2	116.8	117.4	118.0	118.6	119.2	119.8	120.4	121.0	2
3	148.2	149.1	150.0	151.5	153.0	154.5	156.0	172.5	173.4	174.3	175.2	176.1	177.0	177.9	178.8	179.7	180.6	181.5	3
4	197.6	198.8	200.0	202.0	204.0	206.0	208.0	230.0	231.2	232.4	233.6	234.8	236.0	237.2	238.4	239.6	240.8	242.0	4
5	247.0	248.5	250.0	252.5	255.0	257.5	260.0	287.5	289.0	290.5	292.0	293.5	295.0	296.5	298.0	299.5	301.0	302.5	5
6	296.4	298.2	300.0	303.0	306.0	309.0	312.0	345.0	346.8	348.6	350.4	352.2	354.0	355.8	357.6	359.4	361.2	363.0	6
7	345.8	347.9	350.0	353.5	357.0	360.5	364.0	402.5	404.6	406.7	408.8	410.9	413.0	415.1	417.2	419.3	421.4	423.5	7
8	395.2	397.6	400.0	404.0	408.0	412.0	416.0	460.0	462.4	464.8	467.2	469.6	472.0	474.4	476.8	479.2	481.6	484.0	8
9	444.6	447.3	450.0	454.5	459.0	463.5	468.0	517.5	520.2	522.9	525.6	528.3	531.0	533.7	536.4	539.1	541.8	544.5	9

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c	sin		tang		sec		cosec		cotg		cos								
00	0.522499	133	0.612801	216	1.172828	113	1.913881	491	1.631852	576	0.852640	82	100						
01	2632	134	3017	216	2941	113	3390	490	1276	574	2558	82	99						
02	2766	134	3233	216	3054	113	2900	490	0702	575	2476	82	98						
03	2900	134	3449	216	3167	113	2410	490	1.630127	575	2394	82	97						
04	3034	134	3665	216	3280	113	1921	489	1.629553	574	2312	82	96						
05	3168	134	3882	217	3393	113	1432	489	8979	574	2230	82	95						
06	3302	134	4098	216	3506	113	0943	489	8405	574	2147	83	94						
07	3436	134	4314	216	3619	113		489		574		82							
08	3570	134	4531	217	3732	113	1.910454	488	7831	573	2065	82	93						
09	3703	133	4747	216	3846	114	1.909966	488	7258	573	1983	82	92						
							9478	488	6685	573	1901	82	91						
10	0.523837	134	0.614964	217	1.173959	113	1.908990	488	1.626113	572	0.851818	83	90						
11	3971	134	5180	216	4073	114	8502	488	5540	573	1736	82	89						
12	4105	134	5397	217	4186	113	8015	487	4968	572	1654	82	88						
13	4239	134	5613	216	4300	114	7528	487	4397	571	1571	83	87						
		133		217		113		486		572		82							
14	4372	133	5830	217	4413	113	7042	486	3825	572	1489	82	86						
15	4506	134	6046	216	4527	114	6556	486	3254	571	1407	82	85						
16	4640	134	6263	217	4641	114	6070	486	2683	571	1324	83	84						
		134		217		113		486		570		82							
17	4774	133	6480	217	4754	114	5584	486	2113	570	1242	82	83						
18	4907	133	6697	217	4868	114	5098	486	1543	570	1159	83	82						
19	5041	134	6914	217	4982	114	4613	485	0973	570	1077	82	81						
		134		216				484				83							
20	0.525175	133	0.617130	217	1.175096	114	1.904129	485	1.620403	570	0.850994	82	80						
21	5308	134	7347	217	5210	114	3644	485	1.619833	570	0912	82	79						
22	5442	134	7564	217	5324	114	3160	484	9264	569	0829	83	78						
23	5576	134	7781	217	5438	114	2676	484	8696	568	0747	82	77						
		133		217		114		484		569		83							
24	5709	134	7998	218	5552	114	2192	483	8127	568	0664	82	76						
25	5843	134	8216	218	5666	114	1709	483	7559	568	0582	82	75						
26	5976	133	8433	217	5780	114	1226	483	6991	568	0499	83	74						
		134		217		114		483		568		82							
27	6110	134	8650	217	5894	114	0743	483	6423	567	0417	82	73						
28	6244	134	8867	217	6009	115	1.900261	482	5856	567	0334	83	72						
29	6377	133	9084	217	6123	114	1.899778	483	5289	567	0251	83	71						
		134		218		114		481				83							
30	0.526511	133	0.619302	217	1.176237	115	1.899297	482	1.614722	567	0.850168	82	70						
31	6644	133	9519	217	6352	115	8815	482	4156	566	0086	82	69						
32	6778	134	9736	217	6466	114	8334	481	3589	567	0.850003	83	68						
33	6911	133	0.619954	218	6581	115	7853	481	3023	566	0.849920	83	67						
		134		217		115		481		565		82							
34	7045	133	0.620171	218	6696	114	7372	480	2458	566	9838	83	66						
35	7178	134	0389	217	6810	115	6892	481	1892	566	9755	83	65						
36	7312	134	0606	217	6925	115	6411	481	1327	565	9672	83	64						
		133		218		115		479		564		83							
37	7445	133	0824	218	7040	114	5932	480	0763	565	9589	83	63						
38	7579	134	1042	218	7154	114	5452	480	1.610198	565	9506	83	62						
39	7712	133	1259	217	7269	115	4973	479	1.609634	564	9423	83	61						
		134		218		115		479		564		83							
40	0.527846	133	0.621477	218	1.177384	115	1.894494	479	1.609070	564	0.849340	83	60						
41	7979	133	1695	218	7499	115	4015	479	8506	564	9257	83	59						
42	8112	133	1913	218	7614	115	3537	478	7943	563	9175	82	58						
43	8246	134	2130	217	7729	115	3058	479	7380	563	9092	83	57						
		133		218		115		477		563		83							
44	8379	133	2348	218	7844	116	2581	477	6817	562	9009	83	56						
45	8512	133	2566	218	7960	116	2103	478	6255	562	8926	83	55						
46	8646	134	2784	218	8075	115	1626	477	5693	562	8843	83	54						
		133		218		115		477		562		84							
47	8779	133	3002	218	8190	115	1149	477	5131	562	8759	83	53						
48	8912	133	3220	218	8305	115	0672	477	4569	562	8676	83	52						
49	9046	134	3438	218	8421	116	1.890196	476	4008	561	8593	83	51						
		133		219		115		476		562		83							
50	0.529179	133	0.623657	219	1.178536	115	1.889720	476	1.603446	562	0.848510	83	50						
	cos		cotg		cosec		sec		tang		sin		c						
	82	83	84	85	113	114	115	116	117	118	132	133	134	216	217	218	219	220	
1	8.2	8.3	8.4	8.5	11.3	11.4	11.5	11.6	11.7	11.8	13.2	13.3	13.4	21.6	21.7	21.8	21.9	22.0	1
2	16.4	16.6	16.8	17.0	22.6	22.8	23.0	23.2	23.4	23.6	26.4	26.6	26.8	43.2	43.4	43.6	43.8	44.0	2
3	24.6	24.9	25.2	25.5	33.9	34.2	34.5	34.8	35.1	35.4	39.6	39.9	40.2	64.8	65.1	65.4	65.7	66.0	3
4	32.8	33.2	33.6	34.0	45.2	45.6	46.0	46.4	46.8	47.2	52.8	53.2	53.6	86.4	86.8	87.2	87.6	88.0	4
5	41.0	41.5	42.0	42.5	56.5	57.0	57.5	58.0	58.5	59.0	66.0	66.5	67.0	108.0	108.5	109.0	109.5	110.0	5
6	49.2	49.8	50.4	51.0	67.8	68.4	69.0	69.6	70.2	70.8	79.2	79.8	80.4	129.6	130.2	130.8	131.4	132.0	6
7	57.4	58.1	58.8	59.5	79.1	79.8	80.5	81.2	81.9	82.6	92.4	93.1	93.8	151.2	151.9	152.6	153.3	154.0	7
8	65.6	66.4	67.2	68.0	90.4	91.2	92.0	92.8	93.6	94.4	105.6	106.4	107.2	172.8	173.6	174.4	175.2	176.0	8
9	73.8	74.7	75.6	76.5	101.7	102.6	103.5	104.4	105.3	106.2	118.8	119.7	120.6	194.4	195.3	196.2	197.1	198.0	9

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c	sin		tang		sec		cosec		cotg		cos								
50	0.529179	133	0.623657	218	1.178536	116	1.889720	476	1.603446	560	0.848510	83	50						
51	9312	134	3875	218	8652	115	9244	476	2886	561	8427	83	49						
52	9446	133	4093	218	8767	116	8768	475	2325	560	8344	83	48						
53	9579	133	4311	219	8883	115	8293	475	1765	560	8261	83	47						
54	9712	133	4530	218	8998	116	7818	475	1205	560	8178	83	46						
55	9845	133	4748	218	9114	116	7343	475	0645	560	8094	83	45						
56	0.529978	133	4966	218	9230	116	6869	474	1.600086	559	8011	83	44						
57	0.530112	134	5185	219	9346	116	6395	474	1.599527	559	7928	83	43						
58	0245	133	5403	218	9461	115	5921	474	8968	559	7845	83	42						
59	0378	133	5622	219	9577	116	5448	473	8409	559	7761	83	41						
60	0.530511	133	0.625841	218	1.179693	116	1.884974	473	1.597851	558	0.847678	83	40						
61	0644	133	6059	219	9809	116	4501	472	7293	557	7595	83	39						
62	0777	133	6278	219	1.179925	116	4029	472	6736	557	7511	83	38						
63	0911	134	6497	219	1.180041	116	3556	473	6178	558	7428	83	37						
64	1044	133	6715	218	0158	117	3084	472	5621	557	7344	83	36						
65	1177	133	6934	219	0274	116	2612	472	5064	557	7261	83	35						
66	1310	133	7153	219	0390	116	2141	471	4507	557	7178	83	34						
67	1443	133	7372	219	0506	116	1670	471	3951	556	7094	83	33						
68	1576	133	7591	219	0623	117	1199	471	3395	556	7011	83	32						
69	1709	133	7810	219	0739	116	0728	471	2839	556	6927	83	31						
70	0.531842	133	0.628029	219	1.180856	116	1.880257	471	1.592284	555	0.846844	83	30						
71	1975	133	8248	219	0972	117	1.879787	470	1729	555	6760	83	29						
72	2108	133	8467	219	1089	116	9317	470	1174	555	6676	83	28						
73	2241	133	8686	219	1205	117	8848	469	0619	555	6593	83	27						
74	2374	133	8905	219	1322	117	8379	469	1.590065	554	6509	83	26						
75	2507	133	9124	220	1439	117	7910	469	1.589511	554	6426	83	25						
76	2640	133	9344	219	1556	117	7441	469	8957	554	6342	83	24						
77	2773	133	9563	219	1672	116	6972	469	8403	554	6258	83	23						
78	2906	133	0.629782	219	1789	117	6504	468	7850	553	6175	83	22						
79	3039	133	0.630002	220	1906	117	6036	468	7297	553	6091	83	21						
80	0.533172	133	0.630221	219	1.182023	117	1.875569	467	1.586744	553	0.846007	83	20						
81	3305	133	0441	220	2140	117	5101	468	6192	552	5923	83	19						
82	3437	132	0660	219	2257	117	4634	467	5640	552	5840	83	18						
83	3570	133	0880	220	2374	117	4168	466	5088	552	5756	83	17						
84	3703	133	1099	219	2492	118	3701	467	4536	552	5672	83	16						
85	3836	133	1319	220	2609	117	3235	466	3985	551	5588	83	15						
86	3969	133	1539	220	2726	117	2769	466	3434	551	5504	83	14						
87	4102	133	1759	220	2844	118	2303	466	2883	551	5420	83	13						
88	4234	132	1978	219	2961	117	1838	465	2333	550	5336	83	12						
89	4367	133	2198	220	3078	117	1373	465	1782	551	5253	83	11						
90	0.534500	133	0.632418	220	1.183196	118	1.870908	465	1.581232	550	0.845169	83	10						
91	4633	133	2638	220	3313	117	1.870443	465	0683	549	5085	83	09						
92	4765	132	2858	220	3431	118	1.869979	464	1.580133	550	5001	83	08						
93	4898	133	3078	220	3549	118	9515	464	1.579584	549	4917	83	07						
94	5031	133	3298	220	3667	118	9051	464	9035	549	4833	83	06						
95	5163	132	3518	220	3784	117	8588	463	8487	548	4749	83	05						
96	5296	133	3738	220	3902	118	8125	463	7938	549	4664	83	04						
97	5429	133	3958	221	4020	118	7662	463	7390	548	4580	83	03						
98	5562	132	4179	220	4138	118	7199	462	6843	547	4496	83	02						
99	5694	133	4399	220	4256	118	6737	462	6295	548	4412	83	01						
100	0.535827	133	0.634619	220	1.184374	118	1.866275	462	1.575748	547	0.844328	83	00						
cos		cotg		cosec		sec		tang		sin		c							
	221	462	464	467	470	475	480	485	490	547	550	553	556	559	562	565	570	575	
1	22.1	46.2	46.4	46.7	47.0	47.5	48.0	48.5	49.0	54.7	55.0	55.3	55.6	55.9	56.2	56.5	57.0	57.5	1
2	44.2	92.4	92.8	93.4	94.0	95.0	96.0	97.0	98.0	109.4	110.0	110.6	111.2	111.8	112.4	113.0	114.0	115.0	2
3	66.3	138.6	139.2	140.1	141.0	142.5	144.0	145.5	147.0	164.1	165.0	165.9	166.8	167.7	168.6	169.5	171.0	172.5	3
4	88.4	184.8	185.6	186.8	188.0	190.0	192.0	194.0	196.0	218.8	220.0	221.2	222.4	223.6	224.8	226.0	228.0	230.0	4
5	110.5	231.0	232.0	233.5	235.0	237.5	240.0	242.5	245.0	273.5	275.0	276.5	278.0	279.5	281.0	282.5	285.0	287.5	5
6	132.6	277.2	278.4	280.2	282.0	285.0	288.0	291.0	294.0	328.2	330.0	331.8	333.6	335.4	337.2	339.0	342.0	345.0	6
7	154.7	323.4	324.8	326.9	329.0	332.5	336.0	339.5	343.0	382.9	385.0	387.1	389.2	391.3	393.4	395.5	399.0	402.5	7
8	176.8	369.6	371.2	373.6	376.0	380.0	384.0	388.0	392.0	437.6	440.0	442.4	444.8	447.2	449.6	452.0	456.0	460.0	8
9	198.9	415.8	417.6	420.3	423.0	427.5	432.0	436.5	441.0	492.3	495.0	497.7	500.4	503.1	505.8	508.5	513.0	517.5	9

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c	sin		tang		sec		cosec		cotg		cos								
00	0.535827	132	0.634619	221	1.184374	118	1.866275	462	1.575748	547	0.844328	84	100						
01	5959	133	4840	220	4492	118	5813	462	5201	547	4244	84	99						
02	6092	133	5060	221	4610	118	5351	461	4654	546	4160	85	98						
03	6225	132	5281	220	4728	119	4890	461	4108	546	4075	84	97						
04	6357	133	5501	221	4847	118	4429	461	3562	546	3991	84	96						
05	6490	132	5722	220	4965	118	3968	461	3016	546	3907	84	95						
06	6622	132	5942	220	5083	118	3508	460	2470	546	3823	84	94						
07	6755	133	6163	221	5202	119	3048	460	1925	545	3738	85	93						
08	6887	132	6383	220	5320	118	2588	460	1380	545	3654	84	92						
09	7020	133	6604	221	5439	119	2128	460	0835	545	3570	84	91						
10	0.537152	132	0.636825	221	1.185557	118	1.861669	459	1.570290	545	0.843485	84	90						
11	7285	132	7046	221	5676	119	1210	459	1.569746	544	3401	85	89						
12	7417	133	7267	220	5795	118	0751	458	9202	544	3316	84	88						
13	7550	132	7487	221	5913	119	1.860293	459	8658	544	3232	84	87						
14	7682	133	7708	221	6032	119	1.859834	458	8115	543	3148	85	86						
15	7815	132	7929	221	6151	119	9376	457	7572	543	3063	84	85						
16	7947	133	8150	221	6270	119	8919	457	7029	543	2979	84	84						
17	8080	133	8371	221	6389	119	8461	458	6486	543	2894	85	83						
18	8212	132	8593	222	6508	119	8004	457	5944	542	2810	84	82						
19	8344	132	8814	221	6627	119	7547	457	5401	543	2725	85	81						
20	0.538477	133	0.639035	221	1.186746	119	1.857091	456	1.564860	541	0.842640	85	80						
21	8609	132	9256	221	6865	119	6634	457	4318	542	2556	84	79						
22	8741	132	9477	221	6984	119	6178	456	3777	541	2471	85	78						
23	8874	133	9699	222	7103	119	5722	456	3236	541	2387	84	77						
24	9006	132	0.639920	221	7223	120	5267	455	2695	541	2302	85	76						
25	9138	132	0.640142	222	7342	119	4812	455	2154	541	2217	84	75						
26	9271	133	0363	221	7462	120	4357	455	1614	540	2133	84	74						
27	9403	132	0585	222	7581	119	3902	455	1074	540	2048	85	73						
28	9535	132	0806	221	7701	120	3447	455	1.560534	540	1963	85	72						
29	9667	132	1028	222	7820	119	2993	454	1.559995	539	1878	85	71						
30	0.539800	133	0.641249	221	1.187940	120	1.852539	454	1.559456	539	0.841794	84	70						
31	0.539932	132	1471	222	8059	119	2086	453	8917	539	1709	85	69						
32	0.540064	132	1693	222	8179	120	1632	454	8378	539	1624	85	68						
33	0196	132	1915	222	8299	120	1179	453	7839	539	1539	85	67						
34	0328	133	2136	221	8419	120	0726	453	7301	538	1454	85	66						
35	0461	133	2358	222	8539	120	1.850274	452	6763	538	1369	85	65						
36	0593	132	2580	222	8659	120	1.849821	453	6226	537	1284	85	64						
37	0725	132	2802	222	8779	120	9369	452	5688	538	1199	85	63						
38	0857	132	3024	222	8899	120	8917	452	5151	537	1115	84	62						
39	0989	132	3246	222	9019	120	8466	451	4614	537	1030	85	61						
40	0.541121	132	0.643468	222	1.189139	120	1.848015	451	1.554078	536	0.840945	85	60						
41	1253	132	3691	223	9259	120	7564	451	3542	536	0860	85	59						
42	1385	132	3913	222	9379	120	7113	451	3006	536	0775	85	58						
43	1517	132	4135	222	9500	121	6662	451	2470	536	0689	86	57						
44	1650	133	4357	222	9620	120	6212	450	1934	536	0604	85	56						
45	1782	132	4580	223	9741	121	5762	450	1399	535	0519	85	55						
46	1914	132	4802	222	9861	120	5313	449	0864	535	0434	85	54						
47	2046	132	5024	223	1.189982	121	4863	450	1.550329	535	0349	85	53						
48	2178	132	5247	222	1.190102	121	4414	449	1.549795	534	0264	85	52						
49	2310	132	5469	222	0223	121	3965	449	9260	535	0179	85	51						
50	0.542442	132	0.645692	223	1.190344	121	1.843517	448	1.548726	534	0.840094	85	50						
cos		cotg		cosec		sec		tang		sin		c							
	84	85	86	87	118	119	120	121	122	123	124	131	132	133	220	221	222	223	
1	8.4	8.5	8.6	8.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4	13.1	13.2	13.3	22.0	22.1	22.2	22.3	1
2	16.8	17.0	17.2	17.4	23.6	23.8	24.0	24.2	24.4	24.6	24.8	26.2	26.4	26.6	44.0	44.2	44.4	44.6	2
3	25.2	25.5	25.8	26.1	35.4	35.7	36.0	36.3	36.6	36.9	37.2	39.3	39.6	39.9	66.0	66.3	66.6	66.9	3
4	33.6	34.0	34.4	34.8	47.2	47.6	48.0	48.4	48.8	49.2	49.6	52.4	52.8	53.2	88.0	88.4	88.8	89.2	4
5	42.0	42.5	43.0	43.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	65.5	66.0	66.5	110.0	110.5	111.0	111.5	5
6	50.4	51.0	51.6	52.2	70.8	71.4	72.0	72.6	73.2	73.8	74.4	78.6	79.2	79.8	132.0	132.6	133.2	133.8	6
7	58.8	59.5	60.2	60.9	82.6	83.3	84.0	84.7	85.4	86.1	86.8	91.7	92.4	93.1	154.0	154.7	155.4	156.1	7
8	67.2	68.0	68.8	69.6	94.4	95.2	96.0	96.8	97.6	98.4	99.2	104.8	105.6	106.4	176.0	176.8	177.6	178.4	8
9	75.6	76.5	77.4	78.3	106.2	107.1	108.0	108.9	109.8	110.7	111.6	117.9	118.8	119.7	198.0	198.9	199.8	200.7	9

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c	sin		tang		sec		cosec		cotg		cos								
50	0.542442	131	0.645692	222	1.190344	120	1.843517	449	1.548726	533	0.840094	86	50						
51	2573	132	5914	223	0464	121	3068	448	8193	534	0.840008	85	49						
52	2705	132	6137	223	0585	121	2620	448	7659	533	0.839923	85	48						
53	2837	132	6360	223	0706	121	2172	448	7126	533	9838	85	47						
54	2969	132	6582	222	0827	121	1725	447	6593	533	9753	85	46						
55	3101	132	6805	223	0948	121	1278	447	6060	533	9667	86	45						
56	3233	132	7028	223	1069	121	0831	447	5528	532	9582	85	44						
57	3365	132	7251	223	1190	121	1.840384	447	4996	532	9497	85	43						
58	3497	132	7474	223	1311	121	1.839937	447	4464	532	9411	86	42						
59	3629	132	7697	223	1432	121	9491	446	3932	532	9326	85	41						
60	0.543760	131	0.647920	223	1.191554	122	1.839045	446	1.543401	531	0.839240	86	40						
61	3892	132	8143	223	1675	121	8599	445	2870	531	9155	85	39						
62	4024	132	8366	223	1796	121	8154	445	2339	531	9070	85	38						
63	4156	132	8589	223	1918	122	7709	445	1808	531	8984	86	37						
64	4288	132	8812	223	2039	121	7264	445	1278	530	8899	85	36						
65	4419	131	9035	223	2161	122	6819	445	0748	530	8813	86	35						
66	4551	132	9259	224	2282	121	6375	444	1.540218	530	8728	85	34						
67	4683	132	9482	223	2404	122	5930	445	1.539688	530	8642	86	33						
68	4815	132	9705	223	2526	122	5487	443	9159	529	8556	86	32						
69	4946	131	0.649929	224	2647	121	5043	444	8630	529	8471	85	31						
70	0.545078	132	0.650152	223	1.192769	122	1.834600	443	1.538101	528	0.838385	86	30						
71	5210	131	0376	223	2891	122	4156	442	7573	529	8300	85	29						
72	5341	132	0599	224	3013	122	3714	443	7044	528	8214	86	28						
73	5473	132	0823	224	3135	122	3271	442	6516	527	8128	85	27						
74	5605	131	1047	223	3257	122	2829	442	5989	528	8043	86	26						
75	5736	132	1270	224	3379	122	2387	442	5461	527	7957	86	25						
76	5868	132	1494	224	3501	122	1945	442	4934	527	7871	86	24						
77	6000	132	1718	224	3623	122	1503	442	4407	527	7785	86	23						
78	6131	131	1942	224	3745	122	1062	441	3880	527	7700	85	22						
79	6263	132	2165	223	3868	123	0621	441	3353	527	7614	86	21						
80	0.546394	131	0.652389	224	1.193990	122	1.830180	441	1.532827	526	0.837528	86	20						
81	6526	132	2613	224	4112	122	1.829739	441	2301	526	7442	85	19						
82	6657	131	2837	224	4235	123	9299	440	1775	526	7356	86	18						
83	6789	132	3061	224	4357	122	8859	440	1250	525	7270	85	17						
84	6920	131	3285	224	4480	123	8419	440	0724	526	7185	85	16						
85	7052	132	3510	225	4602	122	7980	439	1.530199	525	7099	86	15						
86	7183	131	3734	224	4725	123	7541	439	1.529675	524	7013	86	14						
87	7315	132	3958	224	4848	123	7102	439	9150	525	6927	86	13						
88	7446	131	4182	224	4970	122	6663	439	8626	524	6841	86	12						
89	7578	132	4407	225	5093	123	6224	439	8102	524	6755	86	11						
90	0.547709	131	0.654631	224	1.195216	123	1.825786	438	1.527578	524	0.836669	86	10						
91	7841	132	4855	224	5339	123	5348	438	7055	523	6583	85	09						
92	7972	131	5080	225	5462	123	4911	437	6531	524	6497	86	08						
93	8103	131	5304	224	5585	123	4473	438	6008	523	6411	86	07						
94	8235	132	5529	225	5708	123	4036	437	5486	522	6324	87	06						
95	8366	131	5754	225	5831	123	3599	437	4963	523	6238	86	05						
96	8498	132	5978	224	5955	124	3162	437	4441	522	6152	86	04						
97	8629	131	6203	225	6078	123	2726	436	3919	522	6066	86	03						
98	8760	131	6428	225	6201	123	2290	436	3397	522	5980	86	02						
99	8892	132	6652	224	6325	124	1854	436	2876	521	5894	86	01						
100	0.549023	131	0.656877	225	1.196448	123	1.821418	436	1.522355	521	0.835807	87	00						
cos		cotg		cosec		sec		tang		sin		c							
	224	225	437	440	443	446	449	452	455	460	522	525	528	531	534	537	540	545	
1	22.4	22.5	43.7	44.0	44.3	44.6	44.9	45.2	45.5	46.0	52.2	52.5	52.8	53.1	53.4	53.7	54.0	54.5	1
2	44.8	45.0	87.4	88.0	88.6	89.2	89.8	90.4	91.0	92.0	104.4	105.0	105.6	106.2	106.8	107.4	108.0	109.0	2
3	67.2	67.5	131.1	132.0	132.9	133.8	134.7	135.6	136.5	138.0	156.6	157.5	158.4	159.3	160.2	161.1	162.0	163.5	3
4	89.6	90.0	174.8	176.0	177.2	178.4	179.6	180.8	182.0	184.0	208.8	210.0	211.2	212.4	213.6	214.8	216.0	218.0	4
5	112.0	112.5	218.5	220.0	221.5	223.0	224.5	226.0	227.5	230.0	261.0	262.5	264.0	265.5	267.0	268.5	270.0	272.5	5
6	134.4	135.0	262.2	264.0	265.8	267.6	269.4	271.2	273.0	276.0	313.2	315.0	316.8	318.6	320.4	322.2	324.0	327.0	6
7	156.8	157.5	305.9	308.0	310.1	312.2	314.3	316.4	318.5	322.0	365.4	367.5	369.6	371.7	373.8	375.9	378.0	381.5	7
8	179.2	180.0	349.6	352.0	354.4	356.8	359.2	361.6	364.0	368.0	417.6	420.0	422.4	424.8	427.2	429.6	432.0	436.0	8
9	201.6	202.5	393.3	396.0	398.7	401.4	404.1	406.8	409.5	414.0	469.8	472.5	475.2	477.9	480.6	483.3	486.0	490.5	9

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c	sin		tang		sec		cosec		cotg		cos								
00	0.549023	131	0.656877	225	1.196448	123	1.821418	436	1.522355	521	0.835807	86	100						
01	9154	131	7102	225	6571	124	0982	435	1834	521	5721	86	99						
02	9285	131	7327	225	6695	124	0547	435	1313	521	5635	86	98						
03	9417	132	7552	225	6819	124	1.820112	435	0792	521	5549	86	97						
04	9548	131	7777	225	6942	123	1.819678	434	1.520272	520	5462	87	96						
05	9679	131	8002	225	7066	124	9243	435	1.519752	520	5376	86	95						
06	9810	131	8227	225	7190	124	8809	434	9232	520	5290	86	94						
07		132		225		123		434		519		87							
07	0.549942		8452		7313		8375		8713		5203		93						
08	0.550073	131	8678	226	7437	124	7942	433	8193	520	5117	86	92						
09	0204	131	8903	225	7561	124	7508	434	7674	519	5030	87	91						
10	0.550335	131	0.659128	225	1.197685	124	1.817075	433	1.517156	518	0.834944	86	90						
11	0466	131	9353	226	7809	124	6642	433	6637	519	4857	87	89						
12	0597	131	9579	226	7933	124	6209	433	6119	518	4771	86	88						
13	0728	131	0.659804	225	8057	124	5777	432	5601	518	4684	87	87						
		132		226		125		432		518		86							
14	0860		0.660030		8182		5345		5083		4598		86						
15	0991	131	0255	225	8306	124	4913	432	4566	517	4511	87	85						
16	1122	131	0481	226	8430	124	4481	432	4048	518	4425	86	84						
		131		226		125		431		517		87							
17	1253		0707		8555		4050		3531		4338		83						
18	1384	131	0932	225	8679	124	3619	431	3014	517	4252	86	82						
19	1515	131	1158	226	8803	124	3188	431	2498	516	4165	87	81						
20	0.551646	131	0.661384	226	1.198928	125	1.812757	430	1.511982	516	0.834078	86	80						
21	1777		1610		9053		2327		1466		3992		79						
22	1908	131	1835	225	9177	124	1897	430	0950	516	3905	87	78						
23	2039	131	2061	226	9302	125	1467	430	1.510434	516	3818	87	77						
		131		226		125		430		515		86							
24	2170		2287		9427		1037		1.509919		3732		76						
25	2301	131	2513	226	9551	124	0608	429	9404	515	3645	87	75						
26	2432	131	2739	226	9676	125	1.810178	430	8889	515	3558	87	74						
		131		226		125		428		515		87							
27	2563		2965		9801		1.809750		8374		3471		73						
28	2694	131	3192	227	1.199926	125	9321	429	7860	514	3385	86	72						
29	2824	130	3418	226	1.200051	125	8892	429	7346	514	3298	87	71						
30	0.552955	131	0.663644	226	1.200176	125	1.808464	428	1.506832	514	0.833211	87	70						
31	3086	131	3870	226	0301	125	8036	428	6318	514	3124	87	69						
32	3217	131	4097	227	0427	126	7609	427	5805	513	3037	87	68						
33	3348	131	4323	226	0552	125	7181	428	5292	513	2950	87	67						
		131		226		125		427		513		87							
34	3479		4549		0677		6754		4779		2863		66						
35	3610	131	4776	227	0803	126	6327	427	4266	513	2776	87	65						
36	3740	130	5002	226	0928	125	5900	427	3754	512	2689	87	64						
		131		227		126		426		512		87							
37	3871		5229		1054		5474		3242		2602		63						
38	4002	131	5456	227	1179	125	5048	426	2730	512	2515	87	62						
39	4133	131	5682	226	1305	126	4622	426	2218	512	2428	87	61						
40	0.554263	130	0.665909	227	1.201430	125	1.804196	426	1.501707	511	0.832341	87	60						
41	4394	131	6136	227	1556	126	3771	425	1196	511	2254	87	59						
42	4525	131	6362	226	1682	126	3345	426	0685	511	2167	87	58						
43	4656	131	6589	227	1808	126	2920	425	1.500174	511	2080	87	57						
		130		227		125		424		510		87							
44	4786		6816		1933		2496		1.499664		1993		56						
45	4917	131	7043	227	2059	126	2071	425	9153	511	1906	87	55						
46	5048	131	7270	227	2185	126	1647	424	8643	510	1819	87	54						
		130		227		126		424		509		88							
47	5178		7497		2311		1223		8134		1731		53						
48	5309	131	7724	227	2437	126	0799	424	7624	510	1644	87	52						
49	5440	131	7951	227	2564	127	1.800376	423	7115	509	1557	87	51						
50	0.555570	130	0.668179	228	1.202690	126	1.799952	424	1.496606	509	0.831470	87	50						
	cos		cotg		cosec		sec		tang		sin		c						
	86	87	88	89	123	124	125	126	127	128	129	130	131	132	225	226	227	228	
1	8.6	8.7	8.8	8.9	12.3	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.2	22.5	22.6	22.7	22.8	1
2	17.2	17.4	17.6	17.8	24.6	24.8	25.0	25.2	25.4	25.6	25.8	26.0	26.2	26.4	45.0	45.2	45.4	45.6	2
3	25.8	26.1	26.4	26.7	36.9	37.2	37.5	37.8	38.1	38.4	38.7	39.0	39.3	39.6	67.5	67.8	68.1	68.4	3
4	34.4	34.8	35.2	35.6	49.2	49.6	50.0	50.4	50.8	51.2	51.6	52.0	52.4	52.8	90.0	90.4	90.8	91.2	4
5	43.0	43.5	44.0	44.5	61.5	62.0	62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	112.5	113.0	113.5	114.0	5
6	51.6	52.2	52.8	53.4	73.8	74.4	75.0	75.6	76.2	76.8	77.4	78.0	78.6	79.2	135.0	135.6	136.2	136.8	6
7	60.2	60.9	61.6	62.3	86.1	86.8	87.5	88.2	88.9	89.6	90.3	91.0	91.7	92.4	157.5	158.2	158.9	159.6	7
8	68.8	69.6	70.4	71.2	98.4	99.2	100.0	100.8	101.6	102.4	103.2	104.0	104.8	105.6	180.0	180.8	181.6	182.4	8
9	77.4	78.3	79.2	80.1	110.7	111.6	112.5	113.4	114.3	115.2	116.1	117.0	117.9	118.8	202.5	203.4	204.3	205.2	9

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c	sin		tang		sec		cosec		cotg		cos								
50	0.555570	131	0.668179	227	1.202690	126	1.799952	423	1.496606	509	0.831470	88	50						
51	5701	130	8406	227	2816	126	9529	422	6097	509	1382	87	49						
52	5831	130	8633	227	2942	126	9107	422	5588	509	1295	87	48						
53	5962	131	8860	227	3069	127	8684	423	5080	508	1208	87	47						
		131		228		126		422		508		88							
54	6093	130	9088	227	3195	127	8262	422	4572	508	1120	87	46						
55	6223	130	9315	227	3322	127	7840	422	4064	508	1033	87	45						
56	6354	131	9543	228	3448	126	7418	422	3557	507	0946	87	44						
		130		227		127		422		508		88							
57	6484	131	9770	228	3575	126	6996	421	3049	507	0858	87	43						
58	6615	131	0.669998	228	3701	126	6575	421	2542	507	0771	88	42						
59	6745	130	0.670225	227	3828	127	6154	421	2035	507	0683	87	41						
60	0.556876	131	0.670453	228	1.203955	127	1.795733	421	1.491529	506	0.830596	87	40						
61	7006	130	0681	228	4082	127	5313	420	1022	507	0508	88	39						
62	7137	131	0909	228	4209	127	4892	421	0516	506	0421	87	38						
63	7267	130	1136	227	4336	127	4472	420	1.490010	506	0333	88	37						
		130		228		127		420		506		87							
64	7397	131	1364	228	4463	127	4052	419	1.489504	505	0246	88	36						
65	7528	131	1592	228	4590	127	3633	419	8999	505	0158	88	35						
66	7658	130	1820	228	4717	127	3213	420	8494	505	0.830071	87	34						
		131		228		127		419		505		88							
67	7789	130	2048	228	4844	127	2794	419	7989	505	0.829983	88	33						
68	7919	130	2276	228	4971	127	2375	419	7484	505	9895	88	32						
69	8049	131	2504	228	5098	127	1956	419	6979	505	9808	87	31						
		130		228		128		418		504		88							
70	0.558180	130	0.672732	229	1.205226	127	1.791538	418	1.486475	504	0.829720	88	30						
71	8310	130	2961	228	5353	127	1120	418	5971	504	9632	87	29						
72	8440	131	3189	228	5480	128	0702	418	5467	504	9545	88	28						
73	8571	130	3417	228	5608	128	1.790284	418	4964	503	9457	88	27						
		130		228		128		417		504		88							
74	8701	130	3645	229	5736	127	1.789867	418	4460	503	9369	88	26						
75	8831	130	3874	228	5863	127	9449	418	3957	503	9281	88	25						
76	8961	130	4102	228	5991	128	9032	417	3454	503	9194	87	24						
		131		229		128		416		502		88							
77	9092	130	4331	228	6119	127	8616	417	2952	502	9106	88	23						
78	9222	130	4559	228	6246	127	8199	417	2449	503	9018	88	22						
79	9352	130	4788	229	6374	128	7783	416	1947	502	8930	88	21						
		130		229		128		416		502		88							
80	0.559482	130	0.675017	228	1.206502	128	1.787367	416	1.481445	502	0.828842	88	20						
81	9612	130	5245	228	6630	128	6951	416	0944	501	8754	87	19						
82	9743	131	5474	229	6758	128	6535	416	1.480442	502	8667	87	18						
83	0.559873	130	5703	229	6886	128	6120	415	1.479941	501	8579	88	17						
		130		229		128		415		501		88							
84	0.560003	130	5932	228	7014	128	5705	415	9440	501	8491	88	16						
85	0133	130	6160	228	7142	128	5290	415	8939	501	8403	88	15						
86	0263	130	6389	229	7271	129	4875	415	8439	500	8315	88	14						
		130		229		128		414		501		88							
87	0393	130	6618	229	7399	128	4461	414	7938	501	8227	88	13						
88	0523	130	6847	229	7527	128	4047	414	7438	500	8139	88	12						
89	0653	130	7076	229	7656	129	3633	414	6938	500	8051	88	11						
		131		229		128		414		499		89							
90	0.560784	130	0.677305	230	1.207784	129	1.783219	413	1.476439	500	0.827962	88	10						
91	0914	130	7535	230	7913	129	2806	413	5939	500	7874	88	09						
92	1044	130	7764	229	8041	128	2393	413	5440	499	7786	88	08						
93	1174	130	7993	229	8170	129	1980	413	4941	499	7698	88	07						
		130		229		129		413		498		88							
94	1304	130	8222	229	8299	129	1567	413	4443	499	7610	88	06						
95	1434	130	8452	230	8427	128	1154	413	3944	499	7522	88	05						
96	1564	130	8681	229	8556	129	0742	412	3446	498	7434	88	04						
		130		230		129		412		498		89							
97	1694	130	8911	229	8685	129	1.780330	412	2948	498	7345	88	03						
98	1824	130	9140	229	8814	129	1.779918	412	2450	498	7257	88	02						
99	1953	129	9370	230	8943	129	9507	411	1953	497	7169	88	01						
		130		229		129		412		498		88							
100	0.562083		0.679599		1.209072		1.779095		1.471455		0.827081		00						
	cos		cotg		cosec		sec		tang		sin		c						
	229	230	412	415	418	421	424	427	430	435	497	500	503	506	509	512	515	520	
1	22.9	23.0	41.2	41.5	41.8	42.1	42.4	42.7	43.0	43.5	49.7	50.0	50.3	50.6	50.9	51.2	51.5	52.0	1
2	45.8	46.0	82.4	83.0	83.6	84.2	84.8	85.4	86.0	87.0	99.4	100.0	100.6	101.2	101.8	102.4	103.0	104.0	2
3	68.7	69.0	123.6	124.5	125.4	126.3	127.2	128.1	129.0	130.5	149.1	150.0	150.9	151.8	152.7	153.6	154.5	156.0	3
4	91.6	92.0	164.8	166.0	167.2	168.4	169.6	170.8	172.0	174.0	198.8	200.0	201.2	202.4	203.6	204.8	206.0	208.0	4
5	114.5	115.0	206.0	207.5	209.0	210.5	212.0	213.5	215.0	217.5	248.5	250.0	251.5	253.0	254.5	256.0	257.5	260.0	5
6	137.4	138.0	247.2	249.0	250.8	252.6	254.4	256.2	258.0	261.0	298.2	300.0	301.8	303.6	305.4	307.2	309.0	312.0	6
7	160.3	161.0	288.4	290.5	292.6	294.7	296.8	298.9	301.0	304.5	347.9	350.0	352.1	354.2	356.3	358.4	360.5	364.0	7
8	183.2	184.0	329.6	332.0	334.4	336.8	339.2	341.6	344.0	348.0	397.6	400.0	402.4	404.8	407.2	409.6	412.0	416.0	8
9	206.1	207.0	370.8	373.5	376.2	378.9	381.6	384.3	387.0	391.5	447.3	450.0	452.7	455.4	458.1	460.8	463.5	468.0	9

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c	sin		tang		sec		cosec		cotg		cos								
00	0.562083	130	0.679599	230	1.209072	129	1.779095	411	1.471455	497	0.827081	89	100						
01	2213	130	0.679829	230	9201	129	8684	410	0958	497	6992	88	99						
02	2343	130	0.680059	230	9330	129	8274	410	1.470461	497	6904	88	98						
03	2473	130	0288	229	9460	130	7863	411	1.469965	496	6816	88	97						
04	2603	130	0518	230	9589	129	7453	410	9468	497	6727	89	96						
05	2733	130	0748	230	9718	129	7042	411	8972	496	6639	88	95						
06	2863	130	0978	230	9847	129	6632	410	8476	496	6550	89	94						
07	2992	129	1208	230	1.209977	130	6223	409	7981	495	6462	88	93						
08	3122	130	1438	230	1.210106	129	5813	410	7485	496	6374	88	92						
09	3252	130	1668	230	0236	130	5404	409	6990	495	6285	89	91						
10	0.563382	130	0.681898	230	1.210366	130	1.774995	409	1.466495	495	0.826197	89	90						
11	3512	129	2128	230	0495	130	4586	408	6000	494	6108	88	89						
12	3641	130	2358	231	0625	130	4178	409	5506	494	6020	88	88						
13	3771	130	2589	231	0755	130	3769	409	5011	495	5931	89	87						
14	3901	130	2819	230	0885	130	3361	408	4517	494	5842	89	86						
15	4031	130	3049	230	1015	130	2954	407	4023	494	5754	88	85						
16	4160	129	3280	231	1145	130	2546	408	3530	493	5665	89	84						
17	4290	130	3510	230	1275	130	2139	407	3036	494	5577	88	83						
18	4420	130	3741	231	1405	130	1731	408	2543	493	5488	89	82						
19	4549	129	3971	230	1535	130	1324	407	2050	493	5399	89	81						
20	0.564679	130	0.684202	231	1.211665	130	1.770918	407	1.461557	493	0.825311	88	80						
21	4809	130	4432	230	1795	130	0511	406	1065	492	5222	89	79						
22	4938	129	4663	231	1926	131	1.770105	406	0573	492	5133	89	78						
23	5068	130	4894	231	2056	130	1.769699	406	1.460080	493	5044	89	77						
24	5197	129	5125	231	2186	130	9293	406	1.459589	491	4956	88	76						
25	5327	130	5355	230	2317	131	8888	405	9097	492	4867	89	75						
26	5457	130	5586	231	2447	130	8483	405	8606	491	4778	89	74						
27	5586	129	5817	231	2578	131	8077	406	8114	492	4689	89	73						
28	5716	130	6048	231	2709	131	7673	404	7624	490	4600	89	72						
29	5845	129	6279	231	2839	130	7268	405	7133	491	4512	88	71						
30	0.565975	130	0.686510	231	1.212970	131	1.766864	404	1.456642	491	0.824423	89	70						
31	6104	129	6741	231	3101	131	6459	405	6152	490	4334	89	69						
32	6234	130	6973	232	3232	131	6056	403	5662	490	4245	89	68						
33	6363	129	7204	231	3363	131	5652	404	5172	490	4156	89	67						
34	6493	130	7435	231	3494	131	5248	404	4683	489	4067	89	66						
35	6622	129	7666	231	3625	131	4845	403	4193	490	3978	89	65						
36	6751	129	7898	232	3756	131	4442	403	3704	489	3889	89	64						
37	6881	130	8129	231	3887	131	4039	403	3215	489	3800	89	63						
38	7010	129	8361	232	4018	131	3637	402	2727	488	3711	89	62						
39	7140	130	8592	231	4150	132	3234	403	2238	489	3622	89	61						
40	0.567269	129	0.688824	232	1.214281	131	1.762832	402	1.451750	488	0.823533	89	60						
41	7398	129	9056	232	4412	131	2430	402	1262	488	3443	90	59						
42	7528	130	9287	231	4544	132	2029	401	0774	488	3354	89	58						
43	7657	129	9519	232	4675	131	1627	402	1.450286	488	3265	89	57						
44	7786	129	9751	232	4807	132	1226	401	1.449799	487	3176	89	56						
45	7916	130	0.689983	231	4939	131	0825	401	9312	487	3087	89	55						
46	8045	129	0.690214	232	5070	132	0424	401	8825	487	2998	89	54						
47	8174	129	0446	232	5202	132	1.760024	400	8338	487	2908	90	53						
48	8303	129	0678	232	5334	132	1.759624	400	7852	486	2819	89	52						
49	8433	130	0910	232	5466	132	9223	401	7366	486	2730	89	51						
50	0.568562	129	0.691143	233	1.215598	132	1.758824	399	1.446880	486	0.822641	89	50						
cos		cotg		cosec		sec		tang		sin		c							
	88	89	90	91	128	129	130	131	132	133	134	135	229	230	231	232	233	234	
1	8.8	8.9	9.0	9.1	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.5	22.9	23.0	23.1	23.2	23.3	23.4	1
2	17.6	17.8	18.0	18.2	25.6	25.8	26.0	26.2	26.4	26.6	26.8	27.0	45.8	46.0	46.2	46.4	46.6	46.8	2
3	26.4	26.7	27.0	27.3	38.4	38.7	39.0	39.3	39.6	39.9	40.2	40.5	68.7	69.0	69.3	69.6	69.9	70.2	3
4	35.2	35.6	36.0	36.4	51.2	51.6	52.0	52.4	52.8	53.2	53.6	54.0	91.6	92.0	92.4	92.8	93.2	93.6	4
5	44.0	44.5	45.0	45.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	114.5	115.0	115.5	116.0	116.5	117.0	5
6	52.8	53.4	54.0	54.6	76.8	77.4	78.0	78.6	79.2	79.8	80.4	81.0	137.4	138.0	138.6	139.2	139.8	140.4	6
7	61.6	62.3	63.0	63.7	89.6	90.3	91.0	91.7	92.4	93.1	93.8	94.5	160.3	161.0	161.7	162.4	163.1	163.8	7
8	70.4	71.2	72.0	72.8	102.4	103.2	104.0	104.8	105.6	106.4	107.2	108.0	183.2	184.0	184.8	185.6	186.4	187.2	8
9	79.2	80.1	81.0	81.9	115.2	116.1	117.0	117.9	118.8	119.7	120.6	121.5	206.1	207.0	207.9	208.8	209.7	210.6	9

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c	sin		tang		sec		cosec		cotg		cos								
50	0.568562	129	0.691143	232	1.215598	132	1.758824	400	1.446880	486	0.822641	90	50						
51	8691	129	1375	232	5730	132	8424	399	6394	486	2551	89	49						
52	8820	129	1607	232	5862	132	8025	399	5908	486	2462	89	48						
53	8949	129	1839	232	5994	132	7625	400	5423	485	2372	90	47						
54	9079	130	2071	232	6126	132	7226	399	4938	485	2283	89	46						
55	9208	129	2304	233	6258	132	6828	398	4453	485	2194	89	45						
56	9337	129	2536	232	6391	133	6429	399	3968	485	2104	90	44						
57	9466	129	2769	233	6523	132	6031	398	3484	484	2015	89	43						
58	9595	129	3001	232	6655	132	5633	398	2999	485	1925	90	42						
59	9724	129	3234	233	6788	133	5235	398	2515	484	1836	89	41						
60	0.569853	129	0.693466	232	1.216920	132	1.754837	398	1.442031	484	0.821746	90	40						
61	0.569982	129	3699	233	7053	133	4440	397	1548	483	1657	89	39						
62	0.570111	129	3932	233	7186	133	4043	397	1064	484	1567	90	38						
63	0241	130	4164	232	7318	132	3646	397	0581	483	1478	89	37						
64	0370	129	4397	233	7451	133	3249	397	483	483	1388	90	36						
65	0499	129	4630	233	7584	133	2853	396	1.440098	482	1299	89	35						
66	0628	129	4863	233	7717	133	2456	397	1.439616	483	1209	90	34						
67	0757	129	5096	233	7850	133	2060	396	9133	482	1119	90	33						
68	0886	129	5329	233	7983	133	1665	395	8651	482	1030	89	32						
69	1014	128	5562	233	8116	133	1269	396	8169	482	0940	90	31						
70	0.571143	129	0.695795	233	1.218249	133	1.750874	396	7687	482	0940	90	30						
71	1272	129	6028	233	8382	133	0478	395	1.437205	481	0.820850	89	29						
72	1401	129	6261	233	8515	133	1.750084	394	6724	482	0761	90	28						
73	1530	129	6495	234	8649	134	1.749689	395	6242	481	0671	90	27						
74	1659	129	6728	233	8782	133	9294	395	5761	480	0581	90	26						
75	1788	129	6961	233	8915	133	8900	394	5281	481	0491	90	25						
76	1917	129	7195	234	9049	134	8506	394	4800	481	0401	90	24						
77	2046	129	7428	233	9182	133	8112	394	4320	480	0312	90	23						
78	2175	129	7662	234	9316	134	7719	393	3840	480	0222	90	22						
79	2303	128	7895	233	9450	134	7325	394	3360	480	0132	90	21						
80	0.572432	129	0.698129	234	1.219583	133	1.746932	393	2880	480	0.820042	90	20						
81	2561	129	8362	233	9717	134	6539	393	1.432401	479	0.819952	90	19						
82	2690	129	8596	234	9851	134	6146	393	1921	480	9862	90	18						
83	2818	128	8830	234	1.219985	134	5754	393	1442	479	9772	90	17						
84	2947	129	9064	234	1.220119	134	5362	392	0963	478	9682	90	16						
85	3076	129	9298	234	0253	134	4969	393	0485	479	9592	90	15						
86	3205	129	9531	233	0387	134	4578	391	1.430006	478	9502	90	14						
87	3333	128	9765	234	0521	134	4186	392	1.429528	478	9412	90	13						
88	3462	129	0.699999	234	0655	134	3795	391	9050	478	9322	90	12						
89	3591	129	0.700234	235	0790	135	3403	392	8573	477	9232	90	11						
90	0.573719	128	0.700468	234	1.220924	134	1.743012	391	8095	478	9142	90	10						
91	3848	129	0702	234	1.220924	134	1.743012	390	1.427618	477	0.819052	90	09						
92	3977	129	0936	234	1058	135	2622	390	7141	477	8962	90	08						
93	4105	128	1170	234	1193	134	2231	391	6664	477	8872	90	07						
94	4234	129	1405	235	1327	135	1841	390	6187	477	8781	90	06						
95	4363	129	1639	234	1462	134	1451	390	5710	477	8691	90	05						
96	4491	128	1874	235	1596	135	1061	390	5234	476	8601	90	04						
97	4620	129	2108	234	1731	135	0671	389	4758	476	8511	90	03						
98	4748	128	2343	235	1866	134	1.740282	390	4282	475	8421	90	02						
99	4877	129	2577	234	2000	135	1.739892	389	3807	476	8330	90	01						
100	0.575005	128	0.702812	235	2135	135	9503	388	3331	475	8240	90	00						
	cos		cotg		cosec		sec		tang		sin		c						
	235	389	392	395	398	401	404	407	410	475	476	479	482	485	488	491	494	497	
1	23.5	38.9	39.2	39.5	39.8	40.1	40.4	40.7	41.0	47.5	47.6	47.9	48.2	48.5	48.8	49.1	49.4	49.7	1
2	47.0	77.8	78.4	79.0	79.6	80.2	80.8	81.4	82.0	95.0	95.2	95.8	96.4	97.0	97.6	98.2	98.8	99.4	2
3	70.5	116.7	117.6	118.5	119.4	120.3	121.2	122.1	123.0	142.5	142.8	143.7	144.6	145.5	146.4	147.3	148.2	149.1	3
4	94.0	155.6	156.8	158.0	159.2	160.4	161.6	162.8	164.0	190.0	190.4	191.6	192.8	194.0	195.2	196.4	197.6	198.8	4
5	117.5	194.5	196.0	197.5	199.0	200.5	202.0	203.5	205.0	237.5	238.0	239.5	241.0	242.5	244.0	245.5	247.0	248.5	5
6	141.0	233.4	235.2	237.0	238.8	240.6	242.4	244.2	246.0	285.0	285.6	287.4	289.2	291.0	292.8	294.6	296.4	298.2	6
7	164.5	272.3	274.4	276.5	278.6	280.7	282.8	284.9	287.0	332.5	333.2	335.3	337.4	339.5	341.6	343.7	345.8	347.9	7
8	188.0	311.2	313.6	316.0	318.4	320.8	323.2	325.6	328.0	380.0	380.8	383.2	385.6	388.0	390.4	392.8	395.2	397.6	8
9	211.5	350.1	352.8	355.5	358.2	360.9	363.6	366.3	369.0	427.5	428.4	431.1	433.8	436.5	439.2	441.9	444.6	447.3	9

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c	sin		tang		sec		cosec		cotg		cos		100						
00	0.575005	129	0.702812	234	1.222270	135	1.739115	389	1.422856	475	0.818150	91							
01	5134	128	3046	235	2405	135	8726	388	2381	475	8059	90	99						
02	5262	129	3281	235	2540	135	8338	389	1906	474	7969	90	98						
03	5391	128	3516	235	2675	135	7949	387	1432	474	7879	90	97						
04	5519	129	3751	235	2810	135	7562	387	0957	475	7788	91	96						
05	5648	128	3986	235	2946	136	7174	388	0483	474	7698	90	95						
06	5776	128	4221	235	3081	135	6786	388	1.420009	474	7607	91	94						
07	5905	129	4456	235	3216	135	6399	387	1.419536	473	7517	90	93						
08	6033	128	4691	235	3352	136	6012	387	9062	474	7426	91	92						
09	6161	128	4926	235	3487	135	5625	387	8589	473	7336	90	91						
10	0.576290	129	0.705161	235	1.223623	136	1.735238	387	1.418116	473	0.817245	91	90						
11	6418	128	5396	236	3758	136	4852	386	7643	473	7155	91	89						
12	6546	129	5632	235	3894	135	4466	386	7170	472	7064	90	88						
13	6675	128	5867	235	4029	136	4080	386	6698	472	6974	91	87						
14	6803	128	6102	236	4165	136	3694	386	6226	472	6883	90	86						
15	6931	129	6338	235	4301	136	3308	386	5754	472	6793	90	85						
16	7060	128	6573	235	4437	136	2923	385	5282	472	6702	91	84						
17	7188	128	6809	236	4573	136	2538	385	4810	472	6611	91	83						
18	7316	128	7044	235	4709	136	2153	385	4339	471	6521	90	82						
19	7444	128	7280	236	4845	136	1768	385	3868	471	6430	91	81						
20	0.577573	129	0.707516	236	1.224981	136	1.731384	384	1.413397	471	0.816339	91	80						
21	7701	128	7751	235	5117	136	0999	385	2926	471	6249	90	79						
22	7829	128	7987	236	5253	136	0615	384	2455	471	6158	91	78						
23	7957	128	8223	236	5390	137	1.730232	383	1985	470	6067	91	77						
24	8086	129	8459	236	5526	136	1.729848	384	1515	470	5976	91	76						
25	8214	128	8695	236	5662	136	9464	384	1045	470	5885	90	75						
26	8342	128	8931	236	5799	137	9081	383	0575	470	5795	90	74						
27	8470	128	9167	236	5935	136	8698	383	1.410106	469	5704	91	73						
28	8598	128	9403	236	6072	137	8315	383	1.409636	470	5613	91	72						
29	8726	128	9639	236	6209	137	7933	382	9167	469	5522	91	71						
30	0.578854	128	0.709875	236	1.226345	136	1.727550	383	1.408698	469	0.815431	91	70						
31	8982	128	0.710112	237	6482	137	7168	382	8230	468	5340	91	69						
32	9110	128	0348	236	6619	137	6786	382	7761	469	5249	91	68						
33	9238	128	0584	236	6756	137	6405	381	7293	468	5158	91	67						
34	9367	129	0821	237	6893	137	6023	382	6825	468	5067	91	66						
35	9495	128	1057	236	7030	137	5642	381	6357	468	4976	91	65						
36	9623	128	1294	236	7167	137	5261	381	5889	468	4885	91	64						
37	9751	128	1530	237	7304	137	4880	381	5422	467	4794	91	63						
38	0.579879	128	1767	237	7441	137	4499	381	4954	468	4703	91	62						
39	0.580007	127	2004	237	7579	138	4119	380	4487	467	4612	91	61						
40	0.580134	128	0.712240	236	1.227716	137	1.723738	381	1.404021	466	0.814521	91	60						
41	0262	128	2477	237	7853	137	3358	380	3554	467	4430	91	59						
42	0390	128	2714	237	7991	138	2978	380	3088	466	4338	92	58						
43	0518	128	2951	237	8128	137	2599	379	2621	467	4247	91	57						
44	0646	128	3188	237	8266	138	2219	380	2155	466	4156	91	56						
45	0774	128	3425	237	8403	137	1840	379	1690	465	4065	91	55						
46	0902	128	3662	237	8541	138	1461	379	1224	466	3974	91	54						
47	1030	128	3899	237	8679	138	1082	379	0759	465	3882	92	53						
48	1158	128	4136	237	8817	138	0704	378	1.400293	466	3791	91	52						
49	1285	127	4373	237	8955	138	1.720325	379	1.399828	465	3700	91	51						
50	0.581413	128	0.714611	238	1.229092	137	1.719947	378	1.399364	464	0.813608	92	50						
cos		cotg		cosec		sec		tang		sin		c							
	90	91	92	93	127	128	129	135	136	137	138	139	140	141	234	235	236	237	
1	9.0	9.1	9.2	9.3	12.7	12.8	12.9	13.5	13.6	13.7	13.8	13.9	14.0	14.1	23.4	23.5	23.6	23.7	1
2	18.0	18.2	18.4	18.6	25.4	25.6	25.8	27.0	27.2	27.4	27.6	27.8	28.0	28.2	46.8	47.0	47.2	47.4	2
3	27.0	27.3	27.6	27.9	38.1	38.4	38.7	40.5	40.8	41.1	41.4	41.7	42.0	42.3	70.2	70.5	70.8	71.1	3
4	36.0	36.4	36.8	37.2	50.8	51.2	51.6	54.0	54.4	54.8	55.2	55.6	56.0	56.4	93.6	94.0	94.4	94.8	4
5	45.0	45.5	46.0	46.5	63.5	64.0	64.5	67.5	68.0	68.5	69.0	69.5	70.0	70.5	117.0	117.5	118.0	118.5	5
6	54.0	54.6	55.2	55.8	76.2	76.8	77.4	81.0	81.6	82.2	82.8	83.4	84.0	84.6	140.4	141.0	141.6	142.2	6
7	63.0	63.7	64.4	65.1	88.9	89.6	90.3	94.5	95.2	95.9	96.6	97.3	98.0	98.7	163.8	164.5	165.2	165.9	7
8	72.0	72.8	73.6	74.4	101.6	102.4	103.2	108.0	108.8	109.6	110.4	111.2	112.0	112.8	187.2	188.0	188.8	189.6	8
9	81.0	81.9	82.8	83.7	114.3	115.2	116.1	121.5	122.4	123.3	124.2	125.1	126.0	126.9	210.6	211.5	212.4	213.3	9

c	sin		tang		sec		cosec		cotg		cos								
50	0.581413	128	0.714611	237	1.229092	138	1.719947	378	1.399364	465	0.813608	91	50						
51	1541	128	4848	237	9230	139	9569	377	8899	464	3517	91	49						
52	1669	128	5085	237	9369	139	9192	377	8435	464	3426	91	48						
53	1797	128	5323	238	9507	138	8814	378	7970	465	3334	92	47						
54	1924	127	5560	237	9645	138	8437	377	7507	463	3243	91	46						
55	2052	128	5798	238	9783	138	8060	377	7043	464	3152	91	45						
56	2180	128	6035	237	1.229921	138	7683	377	6579	464	3060	92	44						
57	2307	127	6273	238	1.230060	139	7306	377	6116	463	2969	91	43						
58	2435	128	6511	238	0198	138	6929	377	5653	463	2877	92	42						
59	2563	128	6748	237	0337	139	6553	376	5190	463	2786	91	41						
60	0.582690	128	0.716986	238	1.230475	139	1.716177	376	1.394727	463	0.812694	91	40						
61	2818	128	7224	238	0614	138	5801	376	4264	462	2603	92	39						
62	2946	128	7462	238	0752	138	5425	376	3802	462	2511	92	38						
63	3073	127	7700	238	0891	139	5050	375	3340	462	2419	92	37						
64	3201	128	7938	238	1030	139	4675	375	2878	462	2328	91	36						
65	3329	128	8176	238	1169	139	4300	375	2416	462	2236	92	35						
66	3456	127	8414	238	1308	139	3925	375	1955	461	2145	91	34						
67	3584	128	8652	238	1447	139	3550	375	1494	461	2053	92	33						
68	3711	127	8891	239	1586	139	3176	374	1032	462	1961	92	32						
69	3839	128	9129	238	1725	139	2801	375	0571	461	1870	91	31						
70	0.583966	128	0.719367	239	1.231864	139	1.712427	373	1.390111	460	0.811778	92	30						
71	4094	127	9606	238	2003	140	2054	374	1.389650	461	1686	92	29						
72	4221	128	0.719844	238	2143	139	1680	374	9190	460	1594	92	28						
73	4349	127	0.720082	239	2282	139	1307	373	8730	460	1503	91	27						
74	4476	128	0321	239	2421	140	0933	374	8270	460	1411	92	26						
75	4604	128	0560	239	2561	140	0560	373	7810	460	1319	92	25						
76	4731	127	0798	238	2700	139	1.710188	372	7351	459	1227	92	24						
77	4859	128	1037	239	2840	140	1.709815	373	6891	460	1135	92	23						
78	4986	127	1276	239	2980	140	9443	372	6432	459	1043	92	22						
79	5113	127	1515	239	3119	139	9070	373	5973	459	0952	91	21						
80	0.585241	128	0.721754	239	1.233259	140	1.708699	371	1.385515	458	0.810860	92	20						
81	5368	127	1992	238	3399	140	8327	372	5056	459	0768	92	19						
82	5495	127	2231	239	3539	140	7955	372	4598	458	0676	92	18						
83	5623	128	2470	239	3679	140	7584	371	4140	458	0584	92	17						
84	5750	127	2710	240	3819	140	7213	371	3682	458	0492	92	16						
85	5877	127	2949	239	3959	140	6842	371	3224	458	0400	92	15						
86	6005	128	3188	239	4099	140	6471	371	2766	458	0308	92	14						
87	6132	127	3427	239	4239	140	6100	371	2309	457	0216	92	13						
88	6259	127	3667	240	4380	141	5730	370	1852	457	0124	92	12						
89	6386	127	3906	239	4520	140	5360	370	1395	457	0.810031	93	11						
90	0.586514	128	0.724145	239	1.234660	140	1.704990	370	1.380938	457	0.809939	92	10						
91	6641	127	4385	240	4801	141	4620	370	0482	456	9847	92	09						
92	6768	127	4624	239	4941	140	4251	369	1.380025	457	9755	92	08						
93	6895	127	4864	240	5082	141	3881	370	1.379569	456	9663	92	07						
94	7023	128	5104	240	5223	141	3512	369	9113	456	9571	92	06						
95	7150	127	5343	239	5363	140	3143	369	8658	455	9478	93	05						
96	7277	127	5583	240	5504	141	2775	368	8202	456	9386	92	04						
97	7404	127	5823	240	5645	141	2406	369	7747	455	9294	92	03						
98	7531	127	6063	240	5786	141	2038	368	7292	455	9202	92	02						
99	7658	127	6303	240	5927	141	1670	368	6837	455	9109	93	01						
100	0.587785	127	0.726543	240	1.236068	141	1.701302	368	1.376382	455	0.809017	92	00						
cos		cotg		cosec		sec		tang		sin		c							
	238	239	240	368	371	374	377	380	383	386	389	456	459	462	465	468	471	474	
1	23.8	23.9	24.0	36.8	37.1	37.4	37.7	38.0	38.3	38.6	38.9	45.6	45.9	46.2	46.5	46.8	47.1	47.4	1
2	47.6	47.8	48.0	73.6	74.2	74.8	75.4	76.0	76.6	77.2	77.8	91.2	91.8	92.4	93.0	93.6	94.2	94.8	2
3	71.4	71.7	72.0	110.4	111.3	112.2	113.1	114.0	114.9	115.8	116.7	136.8	137.7	138.6	139.5	140.4	141.3	142.2	3
4	95.2	95.6	96.0	147.2	148.4	149.6	150.8	152.0	153.2	154.4	155.6	182.4	183.6	184.8	186.0	187.2	188.4	189.6	4
5	119.0	119.5	120.0	184.0	185.5	187.0	188.5	190.0	191.5	193.0	194.5	228.0	229.5	231.0	232.5	234.0	235.5	237.0	5
6	142.8	143.4	144.0	220.8	222.6	224.4	226.2	228.0	229.8	231.6	233.4	273.6	275.4	277.2	279.0	280.8	282.6	284.4	6
7	166.6	167.3	168.0	257.6	259.7	261.8	263.9	266.0	268.1	270.2	272.3	319.2	321.3	323.4	325.5	327.6	329.7	331.8	7
8	190.4	191.2	192.0	294.4	296.8	299.2	301.6	304.0	306.4	308.8	311.2	364.8	367.2	369.6	372.0	374.4	376.8	379.2	8
9	214.2	215.1	216.0	331.2	333.9	336.6	339.3	342.0	344.7	347.4	350.1	410.4	413.1	415.8	418.5	421.2	423.9	426.6	9

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c	sin		tang		sec		cosec		cotg		cos								
00	0.587785	127	0.726543	240	1.236068	141	1.701302	368	1.376382	455	0.809017	92	100						
01	7912	127	6783	240	6209	141	0934	368	5927	454	8925	93	99						
02	8039	127	7023	240	6350	141	0566	367	5473	454	8832	93	98						
03	8166	127	7263	240	6491	141	1.700199	367	5019	454	8740	92	97						
04	8293	127	7503	240	6633	142	1.699832	367	4565	454	8648	92	96						
05	8420	127	7743	240	6774	141	9465	367	4111	454	8555	93	95						
06	8547	127	7983	240	6916	142	9098	367	3658	453	8463	92	94						
07	8674	127	8224	241	7057	141	8732	366	3204	454	8370	93	93						
08	8801	127	8464	240	7199	142	8365	367	2751	453	8278	92	92						
09	8928	127	8705	241	7340	141	7999	366	2298	453	8185	93	91						
10	0.589055	127	0.728945	240	1.237482	142	1.697633	366	1.371845	453	0.808093	92	90						
11	9182	127	9186	241	7624	142	7268	365	1393	452	8000	93	89						
12	9309	127	9426	240	7765	141	6902	366	0940	453	7908	92	88						
13	9436	127	9667	241	7907	142	6537	365	0488	452	7815	93	87						
14	9563	127	0.729908	241	8049	142	6172	365	1.370036	452	7722	93	86						
15	9690	127	0.730149	241	8191	142	5807	365	1.369584	452	7630	92	85						
16	9817	127	0390	241	8333	142	5442	365	9132	452	7537	93	84						
17	0.589944	127	0630	240	8475	142	5078	364	8681	451	7445	92	83						
18	0.590070	126	0871	241	8617	142	4713	365	8230	451	7352	93	82						
19	0197	127	1112	241	8760	143	4349	364	7779	451	7259	93	81						
20	0.590324	127	0.731353	242	1.238902	142	1.693985	364	1.367328	451	0.807166	92	80						
21	0451	126	1595	241	9044	143	3621	363	6877	450	7074	93	79						
22	0577	127	1836	241	9187	142	3258	363	6427	450	6981	93	78						
23	0704	127	2077	241	9329	142	2895	363	5977	450	6888	93	77						
24	0831	127	2318	241	9472	143	2531	364	5526	451	6795	93	76						
25	0958	127	2560	242	9614	142	2168	363	5077	449	6703	92	75						
26	1084	126	2801	241	9757	143	1806	362	4627	450	6610	93	74						
27	1211	127	3042	241	1.239900	143	1443	363	4177	450	6517	93	73						
28	1338	127	3284	242	1.240043	143	1081	362	3728	449	6424	93	72						
29	1464	126	3526	242	0185	142	0719	362	3279	449	6331	93	71						
30	0.591591	127	0.733767	241	1.240328	143	1.690357	362	1.362830	449	0.806238	93	70						
31	1718	127	4009	242	0471	143	1.689995	362	2381	449	6145	93	69						
32	1844	126	4251	242	0614	143	9633	362	1933	448	6052	93	68						
33	1971	127	4492	241	0757	143	9272	361	1484	449	5959	93	67						
34	2098	127	4734	242	0901	144	8911	361	1036	448	5866	93	66						
35	2224	126	4976	242	1044	143	8550	361	0588	448	5773	93	65						
36	2351	127	5218	242	1187	143	8189	361	1.360141	447	5680	93	64						
37	2477	126	5460	242	1331	144	7828	361	1.359693	448	5587	93	63						
38	2604	127	5702	242	1474	143	7468	360	9246	447	5494	93	62						
39	2730	126	5944	242	1618	144	7108	360	8798	448	5401	93	61						
40	0.592857	127	0.736187	243	1.241761	143	1.686748	360	1.358351	447	0.805308	93	60						
41	2983	126	6429	242	1905	144	6388	360	7905	446	5215	93	59						
42	3110	127	6671	242	2048	143	6028	360	7458	447	5122	93	58						
43	3236	126	6913	242	2192	144	5669	359	7012	446	5028	94	57						
44	3363	127	7156	243	2336	144	5310	359	6565	447	4935	93	56						
45	3489	126	7398	242	2480	144	4951	359	6119	446	4842	93	55						
46	3616	127	7641	243	2624	144	4592	359	5673	446	4749	93	54						
47	3742	126	7883	242	2768	144	4233	359	5228	445	4656	93	53						
48	3868	126	8126	243	2912	144	3875	358	4782	446	4562	94	52						
49	3995	127	8369	243	3056	144	3517	358	4337	445	4469	93	51						
50	0.594121	126	0.738611	242	1.243200	144	1.683159	358	1.353892	445	0.804376	93	50						
cos		cotg		cosec		sec		tang		sin		c							
	92	93	94	95	125	126	127	141	142	143	144	145	146	147	148	240	241	242	
1	9.2	9.3	9.4	9.5	12.5	12.6	12.7	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	24.0	24.1	24.2	1
2	18.4	18.6	18.8	19.0	25.0	25.2	25.4	28.2	28.4	28.6	28.8	29.0	29.2	29.4	29.6	48.0	48.2	48.4	2
3	27.6	27.9	28.2	28.5	37.5	37.8	38.1	42.3	42.6	42.9	43.2	43.5	43.8	44.1	44.4	72.0	72.3	72.6	3
4	36.8	37.2	37.6	38.0	50.0	50.4	50.8	56.4	56.8	57.2	57.6	58.0	58.4	58.8	59.2	96.0	96.4	96.8	4
5	46.0	46.5	47.0	47.5	62.5	63.0	63.5	70.5	71.0	71.5	72.0	72.5	73.0	73.5	74.0	120.0	120.5	121.0	5
6	55.2	55.8	56.4	57.0	75.0	75.6	76.2	84.6	85.2	85.8	86.4	87.0	87.6	88.2	88.8	144.0	144.6	145.2	6
7	64.4	65.1	65.8	66.5	87.5	88.2	88.9	98.7	99.4	100.1	100.8	101.5	102.2	102.9	103.6	168.0	168.7	169.4	7
8	73.6	74.4	75.2	76.0	100.0	100.8	101.6	112.8	113.6	114.4	115.2	116.0	116.8	117.6	118.4	192.0	192.8	193.6	8
9	82.8	83.7	84.6	85.5	112.5	113.4	114.3	126.9	127.8	128.7	129.6	130.5	131.4	132.3	133.2	216.0	216.9	217.8	9

59^g

40^g

c	sin		tang		sec		cosec		cotg		cos								
50	0.594121	126	0.738611	243	1.243200	145	1.683159	358	1.353892	445	0.804376	94	50						
51	4247	127	8854	243	3345	144	2801	358	3447	445	4282	93	49						
52	4374	126	9097	243	3489	144	2443	357	3002	444	4189	93	48						
53	4500	126	9340	243	3633	144	2086	357	2558	444	4096	93	47						
54	4626	126	9583	243	3778	145	1728	358	2113	445	4002	94	46						
55	4753	127	0.739826	243	3922	144	1371	357	1669	444	3909	93	45						
56	4879	126	0.740069	243	4067	145	1014	357	1225	444	3815	94	44						
57	5005	126	0312	243	4211	144	0658	356	0781	444	3722	93	43						
58	5131	127	0555	243	4356	145	1.680301	357	1.350338	443	3628	94	42						
59	5258	126	0799	244	4501	145	1.679945	356	1.349894	444	3535	93	41						
60	0.595384	126	0.741042	243	1.244646	145	1.679589	356	1.349451	443	0.803441	94	40						
61	5510	126	1285	244	4791	145	9233	356	9008	443	3348	94	39						
62	5636	126	1529	243	4936	145	8877	356	8565	443	3254	94	38						
63	5762	126	1772	243	5081	145	8522	355	8123	442	3161	93	37						
64	5889	127	2016	244	5226	145	8166	356	7680	443	3067	94	36						
65	6015	126	2259	243	5371	145	7811	355	7238	442	2974	93	35						
66	6141	126	2503	244	5516	145	7456	355	6796	442	2880	94	34						
67	6267	126	2747	244	5662	146	7101	355	6354	442	2786	94	33						
68	6393	126	2991	244	5807	145	6747	354	5912	442	2693	93	32						
69	6519	126	3234	243	5952	145	6392	355	5471	441	2599	94	31						
70	0.596645	126	0.743478	244	1.246098	145	1.676038	354	1.345029	442	0.802505	94	30						
71	6771	126	3722	244	6243	146	5684	354	4588	441	2411	93	29						
72	6897	126	3966	244	6389	146	5330	353	4147	441	2318	94	28						
73	7023	126	4210	244	6535	145	4977	354	3706	441	2224	94	27						
74	7149	126	4454	244	6680	145	4623	354	3266	440	2130	94	26						
75	7275	126	4698	244	6826	146	4270	353	2825	441	2036	94	25						
76	7401	126	4943	245	6972	146	3917	353	2385	440	1943	93	24						
77	7527	126	5187	244	7118	146	3564	353	1945	440	1849	94	23						
78	7653	126	5431	244	7264	146	3211	353	1505	440	1755	94	22						
79	7779	126	5676	245	7410	146	2859	352	1066	439	1661	94	21						
80	0.597905	126	0.745920	244	1.247556	146	1.672507	352	1.340626	440	0.801567	94	20						
81	8031	126	6165	245	7703	147	2154	353	1.340187	439	1473	94	19						
82	8157	126	6409	244	7849	146	1803	351	1.339748	439	1379	94	18						
83	8283	126	6654	245	7995	146	1451	352	9309	439	1285	94	17						
84	8409	126	6899	245	8142	147	1099	352	8870	439	1191	94	16						
85	8534	125	7143	244	8288	146	0748	351	8431	439	1097	94	15						
86	8660	126	7388	245	8435	147	0397	351	7993	438	1003	94	14						
87	8786	126	7633	245	8581	146	1.670046	351	7555	438	0909	94	13						
88	8912	126	7878	245	8728	147	1.669695	351	7117	438	0815	94	12						
89	9038	126	8123	245	8875	147	9344	351	6679	438	0721	94	11						
90	0.599163	125	0.748368	245	1.249021	146	1.668994	350	1.336241	438	0.800627	94	10						
91	9289	126	8613	245	9168	147	8644	350	5804	437	0533	94	09						
92	9415	126	8858	245	9315	147	8294	350	5367	437	0439	94	08						
93	9541	126	9103	245	9462	147	7944	350	4929	438	0344	95	07						
94	9666	125	9348	245	9609	147	7594	350	4493	436	0250	94	06						
95	9792	126	9594	246	9756	147	7245	349	4056	437	0156	94	05						
96	0.599918	126	0.749839	245	1.249904	148	6895	350	3619	437	0.800062	94	04						
97	0.600043	125	0.750085	246	1.250051	147	6546	349	3183	436	0.799968	94	03						
98	0169	126	0330	245	0198	147	6197	349	2747	436	9873	95	02						
99	0295	126	0576	246	0345	147	5849	348	2311	436	9779	94	01						
100	0.600420	125	0.750821	245	1.250493	148	1.665500	349	1.331875	436	0.799685	94	00						
cos		cotg		cosec		sec		tang		sin		c							
	243	244	245	246	349	352	355	358	361	364	367	436	439	442	445	448	451	454	
1	24.3	24.4	24.5	24.6	34.9	35.2	35.5	35.8	36.1	36.4	36.7	43.6	43.9	44.2	44.5	44.8	45.1	45.4	1
2	48.6	48.8	49.0	49.2	69.8	70.4	71.0	71.6	72.2	72.8	73.4	87.2	87.8	88.4	89.0	89.6	90.2	90.8	2
3	72.9	73.2	73.5	73.8	104.7	105.6	106.5	107.4	108.3	109.2	110.1	130.8	131.7	132.6	133.5	134.4	135.3	136.2	3
4	97.2	97.6	98.0	98.4	139.6	140.8	142.0	143.2	144.4	145.6	146.8	174.4	175.6	176.8	178.0	179.2	180.4	181.6	4
5	121.5	122.0	122.5	123.0	174.5	176.0	177.5	179.0	180.5	182.0	183.5	218.0	219.5	221.0	222.5	224.0	225.5	227.0	5
6	145.8	146.4	147.0	147.6	209.4	211.2	213.0	214.8	216.6	218.4	220.2	261.6	263.4	265.2	267.0	268.8	270.6	272.4	6
7	170.1	170.8	171.5	172.2	244.3	246.4	248.5	250.6	252.7	254.8	256.9	305.2	307.3	309.4	311.5	313.6	315.7	317.8	7
8	194.4	195.2	196.0	196.8	279.2	281.6	284.0	286.4	288.8	291.2	293.6	348.8	351.2	353.6	356.0	358.4	360.8	363.2	8
9	218.7	219.6	220.5	221.4	314.1	316.8	319.5	322.2	324.9	327.6	330.3	392.4	395.1	397.8	400.5	403.2	405.9	408.6	9

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c	sin		tang		sec		cosec		cotg		cos		100						
00	0.600420	126	0.750821	246	1.250493	147	1.665500	348	1.331875	436	0.799685	95							
01	0546	125	1067	246	0640	148	5152	348	1439	435	9590	94	99						
02	0671	126	1313	245	0788	148	4804	348	1004	435	9496	94	98						
03	0797	126	1558	245	0936	148	4456	348	0569	435	9402	94	97						
04	0923	126	1804	246	1083	147	4108	348	1.330134	435	9307	95	96						
05	1048	125	2050	246	1231	148	3760	348	1.329699	435	9213	94	95						
06	1174	126	2296	246	1379	148	3413	347	9264	435	9118	95	94						
07	1299	125	2542	246	1527	148	3066	347	8829	435	9024	94	93						
08	1425	126	2788	246	1675	148	2719	347	8395	434	8930	94	92						
09	1550	125	3034	246	1823	148	2372	347	7961	434	8835	95	91						
10	0.601676	126	0.753280	246	1.251971	148	1.662025	347	1.327527	434	0.798741	94	90						
11	1801	125	3527	247	2119	148	1679	346	7093	434	8646	95	89						
12	1927	126	3773	246	2267	148	1332	347	6659	434	8551	95	88						
13	2052	125	4019	246	2416	149	0986	346	6226	433	8457	94	87						
14	2177	125	4266	247	2564	148	0640	346	5793	433	8362	95	86						
15	2303	126	4512	246	2713	149	1.660295	345	5360	433	8268	94	85						
16	2428	125	4759	247	2861	148	1.659949	346	4927	433	8173	95	84						
17	2554	126	5005	246	3010	149	9604	345	4494	433	8078	95	83						
18	2679	125	5252	247	3158	148	9258	346	4061	433	7984	94	82						
19	2804	126	5499	247	3307	149	8913	345	3629	432	7889	95	81						
20	0.602930	125	0.755745	247	1.253456	149	1.658569	344	1.323197	432	0.797794	94	80						
21	3055	126	5992	247	3605	148	8224	344	2765	432	7700	95	79						
22	3180	125	6239	247	3753	149	7880	345	2333	432	7605	95	78						
23	3305	126	6486	247	3902	149	7535	345	1901	432	7510	95	77						
24	3431	125	6733	247	4051	149	7191	344	1470	431	7415	95	76						
25	3556	126	6980	247	4201	150	6847	344	1039	431	7321	94	75						
26	3681	125	7227	247	4350	149	6504	343	0607	432	7226	95	74						
27	3806	126	7474	247	4499	149	6160	344	1.320176	431	7131	95	73						
28	3932	125	7722	248	4648	149	5817	343	1.319746	430	7036	95	72						
29	4057	126	7969	247	4798	150	5473	344	9315	431	6941	95	71						
30	0.604182	125	0.758216	247	1.254947	149	1.655130	343	1.318885	430	0.796846	95	70						
31	4307	126	8464	248	5097	150	4788	342	8455	430	6751	95	69						
32	4432	125	8711	247	5246	149	4445	343	8024	431	6657	94	68						
33	4557	126	8959	248	5396	150	4103	342	7595	429	6562	95	67						
34	4683	125	9206	247	5545	149	3760	343	7165	430	6467	95	66						
35	4808	126	9454	248	5695	150	3418	342	6735	430	6372	95	65						
36	4933	125	9702	248	5845	150	3076	342	6306	429	6277	95	64						
37	5058	126	0.759950	248	5995	150	2735	341	5877	429	6182	95	63						
38	5183	125	0.760197	247	6145	150	2393	342	5448	429	6087	95	62						
39	5308	126	0445	248	6295	150	2052	341	5019	429	5991	96	61						
40	0.605433	125	0.760693	248	1.256445	150	1.651711	341	1.314590	429	0.795896	95	60						
41	5558	126	0941	248	6595	150	1370	341	4162	428	5801	95	59						
42	5683	125	1189	248	6745	150	1029	341	3734	428	5706	95	58						
43	5808	126	1437	248	6896	151	0688	341	3306	428	5611	95	57						
44	5933	125	1686	249	7046	150	0348	340	2878	428	5516	95	56						
45	6058	126	1934	248	7197	151	1.650008	340	2450	428	5421	95	55						
46	6183	125	2182	248	7347	150	1.649668	340	2022	428	5325	96	54						
47	6308	126	2430	248	7498	151	9328	340	1595	427	5230	95	53						
48	6433	125	2679	249	7648	150	8988	340	1168	427	5135	95	52						
49	6557	124	2927	248	7799	151	8648	340	0741	427	5040	95	51						
50	0.606682	125	0.763176	249	1.257950	151	1.648309	339	1.310314	427	0.794944	96	50						
cos		cotg		cosec		sec		tang		sin		c							
	94	95	96	97	124	125	126	147	148	149	150	151	152	153	154	245	246	247	
1	9.4	9.5	9.6	9.7	12.4	12.5	12.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4	24.5	24.6	24.7	1
2	18.8	19.0	19.2	19.4	24.8	25.0	25.2	29.4	29.6	29.8	30.0	30.2	30.4	30.6	30.8	49.0	49.2	49.4	2
3	28.2	28.5	28.8	29.1	37.2	37.5	37.8	44.1	44.4	44.7	45.0	45.3	45.6	45.9	46.2	73.5	73.8	74.1	3
4	37.6	38.0	38.4	38.8	49.6	50.0	50.4	58.8	59.2	59.6	60.0	60.4	60.8	61.2	61.6	98.0	98.4	98.8	4
5	47.0	47.5	48.0	48.5	62.0	62.5	63.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	122.5	123.0	123.5	5
6	56.4	57.0	57.6	58.2	74.4	75.0	75.6	88.2	88.8	89.4	90.0	90.6	91.2	91.8	92.4	147.0	147.6	148.2	6
7	65.8	66.5	67.2	67.9	86.8	87.5	88.2	102.9	103.6	104.3	105.0	105.7	106.4	107.1	107.8	171.5	172.2	172.9	7
8	75.2	76.0	76.8	77.6	99.2	100.0	100.8	117.6	118.4	119.2	120.0	120.8	121.6	122.4	123.2	196.0	196.8	197.6	8
9	84.6	85.5	86.4	87.3	111.6	112.5	113.4	132.3	133.2	134.1	135.0	135.9	136.8	137.7	138.6	220.5	221.4	222.3	9

c	sin		tang		sec		cosec		cotg		cos								
50	0.606682	125	0.763176	248	1.257950	151	1.648309	339	1.310314	427	0.794944	95	50						
51	6807	125	3424	249	8101	150	7970	339	1.309887	426	4849	95	49						
52	6932	125	3673	249	8251	150	7631	339	9461	426	4754	95	48						
53	7057	125	3922	249	8402	151	7292	339	9034	427	4658	96	47						
54	7182	125	4171	249	8553	151	6953	339	8608	426	4563	95	46						
55	7307	125	4419	248	8705	152	6615	338	8182	426	4468	95	45						
56	7431	124	4668	249	8856	151	6277	338	7756	426	4372	96	44						
57	7556	125	4917	249	9007	151	5939	338	7331	425	4277	95	43						
58	7681	125	5166	249	9158	151	5601	338	6905	426	4181	96	42						
59	7806	125	5415	249	9310	152	5263	338	6480	425	4086	95	41						
60	0.607930	124	0.765665	250	1.259461	151	1.644925	338	1.306055	425	0.793990	96	40						
61	8055	125	5914	249	9613	152	4588	337	5630	425	3895	95	39						
62	8180	125	6163	249	9764	151	4251	337	5205	425	3799	96	38						
63	8304	124	6412	249	1.259916	152	3914	337	4781	424	3704	95	37						
64	8429	125	6662	250	1.260068	152	3577	337	4356	425	3608	96	36						
65	8554	125	6911	249	0219	151	3240	337	3932	424	3513	95	35						
66	8678	124	7161	250	0371	152	2904	336	3508	424	3417	96	34						
67	8803	125	7410	249	0523	152	2568	336	3084	424	3321	96	33						
68	8928	125	7660	250	0675	152	2231	337	2660	424	3226	95	32						
69	9052	124	7909	249	0827	152	1895	336	2237	423	3130	96	31						
70	0.609177	125	0.768159	250	1.260979	152	1.641560	335	1.301813	424	0.793034	95	30						
71	9301	124	8409	250	1131	152	1224	336	1390	423	2939	96	29						
72	9426	125	8659	250	1284	153	0889	335	0967	423	2843	96	28						
73	9550	124	8909	250	1436	152	0553	336	0544	423	2747	96	27						
74	9675	125	9159	250	1588	152	1.640218	335	1.300122	422	2652	95	26						
75	9799	124	9409	250	1741	153	1.639884	334	1.299699	423	2556	96	25						
76	0.609924	125	9659	250	1893	152	9549	335	9277	422	2460	96	24						
77	0.610048	124	0.769909	250	2046	153	9214	335	8855	422	2364	96	23						
78	0173	125	0.770159	250	2199	153	8880	334	8433	422	2268	96	22						
79	0297	124	0410	251	2351	152	8546	334	8011	422	2172	96	21						
80	0.610422	125	0.770660	250	1.262504	153	1.638212	334	1.297589	422	0.792077	95	20						
81	0546	124	0910	250	2657	153	7878	334	7168	421	1981	96	19						
82	0670	124	1161	251	2810	153	7544	334	6746	422	1885	96	18						
83	0795	125	1411	250	2963	153	7211	333	6325	421	1789	96	17						
84	0919	124	1662	251	3116	153	6878	333	5904	421	1693	96	16						
85	1044	125	1913	251	3269	153	6544	334	5484	420	1597	96	15						
86	1168	124	2163	250	3422	153	6212	332	5063	421	1501	96	14						
87	1292	124	2414	251	3576	154	5879	333	4643	420	1405	96	13						
88	1417	125	2665	251	3729	153	5546	333	4222	421	1309	96	12						
89	1541	124	2916	251	3882	153	5214	332	3802	420	1213	96	11						
90	0.611665	124	0.773167	251	1.264036	154	1.634882	332	1.293382	420	0.791117	96	10						
91	1789	124	3418	251	4189	153	4549	333	2962	420	1021	96	09						
92	1914	125	3669	251	4343	154	4218	331	2543	419	0925	96	08						
93	2038	124	3920	251	4497	154	3886	332	2123	420	0828	97	07						
94	2162	124	4171	251	4650	153	3554	332	1704	419	0732	96	06						
95	2286	124	4422	251	4804	154	3223	331	1285	419	0636	96	05						
96	2410	124	4674	252	4958	154	2892	331	0866	419	0540	96	04						
97	2535	125	4925	251	5112	154	2561	331	0447	419	0444	96	03						
98	2659	124	5176	251	5266	154	2230	331	1.290029	418	0348	96	02						
99	2783	124	5428	252	5420	154	1899	331	1.289610	419	0251	97	01						
100	0.612907	124	0.775680	252	1.265574	154	1.631569	330	1.289192	418	0.790155	96	00						
cos		cotg		cosec		sec		tang		sin		c							
	248	249	250	252	330	333	336	339	342	345	348	418	421	424	427	430	433	436	
1	24.8	24.9	25.0	25.2	33.0	33.3	33.6	33.9	34.2	34.5	34.8	41.8	42.1	42.4	42.7	43.0	43.3	43.6	1
2	49.6	49.8	50.0	50.4	66.0	66.6	67.2	67.8	68.4	69.0	69.6	83.6	84.2	84.8	85.4	86.0	86.6	87.2	2
3	74.4	74.7	75.0	75.6	99.0	99.9	100.8	101.7	102.6	103.5	104.4	125.4	126.3	127.2	128.1	129.0	129.9	130.8	3
4	99.2	99.6	100.0	100.8	132.0	133.2	134.4	135.6	136.8	138.0	139.2	167.2	168.4	169.6	170.8	172.0	173.2	174.4	4
5	124.0	124.5	125.0	126.0	165.0	166.5	168.0	169.5	171.0	172.5	174.0	209.0	210.5	212.0	213.5	215.0	216.5	218.0	5
6	148.8	149.4	150.0	151.2	198.0	199.8	201.6	203.4	205.2	207.0	208.8	252.6	254.4	256.2	258.0	259.8	261.6	263.4	6
7	173.6	174.3	175.0	176.4	231.0	233.1	235.2	237.3	239.4	241.5	243.6	292.6	294.7	296.8	298.9	301.0	303.1	305.2	7
8	198.4	199.2	200.0	201.6	264.0	266.4	268.8	271.2	273.6	276.0	278.4	334.4	336.8	339.2	341.6	344.0	346.4	348.8	8
9	223.2	224.1	225.0	226.8	297.0	299.7	302.4	305.1	307.8	310.5	313.2	376.2	378.9	381.6	384.3	387.0	389.7	392.4	9

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c	sin		tang		sec		cosec		cotg		cos								
00	0.612907	124	0.775680	251	1.265574	155	1.631569	331	1.289192	418	0.790155	96	100						
01	3031	124	5931	252	5729	154	1238	330	8774	418	0.790059	97	99						
02	3155	124	6183	252	5883	154	0908	330	8356	417	0.789962	96	98						
03	3279	124	6435	252	6037	154	0578	330	7939	417	9866	96	97						
		124		251		155		329		418		96							
04	3403	124	6686	252	6192	154	1.630249	330	7521	417	9770	96	96						
05	3527	124	6938	252	6346	154	1.629919	330	7104	417	9673	97	95						
06	3651	124	7190	252	6501	155	9589	330	6686	418	9577	96	94						
		125		252		155		329		417		96							
07	3776	124	7442	252	6656	154	9260	329	6269	417	9481	97	93						
08	3900	124	7694	252	6810	154	8931	329	5852	417	9384	97	92						
09	4023	123	7946	252	6965	155	8602	329	5436	416	9288	96	91						
10	0.614147	124	0.778198	253	1.267120	155	1.628273	329	1.285019	417	0.789191	97	90						
		124		252		155		328		416		96							
11	4271	124	8451	252	7275	155	7945	329	4603	416	9095	97	89						
12	4395	124	8703	252	7430	155	7616	328	4187	416	8998	97	88						
13	4519	124	8955	252	7585	155	7288	328	3771	416	8902	96	87						
		124		253		155		328		416		97							
14	4643	124	9208	252	7740	155	6960	328	3355	416	8805	96	86						
15	4767	124	9460	252	7895	155	6632	328	2939	416	8709	96	85						
16	4891	124	9713	253	8051	156	6305	327	2523	416	8612	97	84						
		124		252		155		328		415		96							
17	5015	124	0.779965	253	8206	155	5977	327	2108	415	8516	97	83						
18	5139	124	0.780218	253	8361	155	5650	327	1693	415	8419	97	82						
19	5263	124	0471	253	8517	156	5322	328	1278	415	8322	97	81						
20	0.615386	123	0.780724	253	1.268672	155	1.624995	327	1.280863	415	0.788226	96	80						
		124		252		156		326		415		97							
21	5510	124	0976	253	8828	156	4669	327	0448	415	8129	97	79						
22	5634	124	1229	253	8984	155	4342	327	1.280034	414	8032	97	78						
23	5758	124	1482	253	9139	155	4015	327	1.279619	415	7936	96	77						
		124		253		156		326		414		97							
24	5882	123	1735	254	9295	156	3689	326	9205	414	7839	97	76						
25	6005	124	1989	253	9451	156	3363	326	8791	414	7742	97	75						
26	6129	124	2242	253	9607	156	3037	326	8377	414	7645	97	74						
		124		253		156		326		413		97							
27	6253	123	2495	253	9763	156	2711	326	7964	414	7548	96	73						
28	6376	124	2748	254	1.269919	156	2385	326	7550	414	7452	96	72						
29	6500	124	3002	254	1.270075	156	2060	325	7137	413	7355	97	71						
		124		253		157		326		414		97							
30	0.616624	123	0.783255	253	1.270232	156	1.621734	325	1.276723	413	0.787258	97	70						
		123		253		156		325		413		97							
31	6747	124	3508	254	0388	156	1409	325	6310	412	7161	97	69						
32	6871	124	3762	254	0544	156	1084	325	5898	412	7064	97	68						
33	6995	124	4016	254	0701	157	0760	324	5485	413	6967	97	67						
		123		253		156		325		413		97							
34	7118	124	4269	254	0857	157	0435	325	5072	412	6870	97	66						
35	7242	123	4523	254	1014	157	1.620110	325	4660	412	6773	97	65						
36	7365	124	4777	254	1171	157	1.619786	324	4248	412	6676	97	64						
		124		254		156		324		412		96							
37	7489	124	5031	254	1327	157	9462	324	3836	412	6580	96	63						
38	7613	123	5285	254	1484	157	9138	324	3424	412	6482	98	62						
39	7736	123	5539	254	1641	157	8814	324	3012	412	6385	97	61						
		124		254		157		323		412		97							
40	0.617860	123	0.785793	254	1.271798	157	1.618491	324	1.272600	411	0.786288	97	60						
		123		254		157		324		411		97							
41	7983	124	6047	254	1955	157	8167	323	2189	411	6191	97	59						
42	8107	124	6301	254	2112	157	7844	323	1778	411	6094	97	58						
43	8230	123	6555	254	2269	157	7521	323	1367	411	5997	97	57						
		124		254		157		323		411		97							
44	8354	123	6809	255	2426	158	7198	323	0956	411	5900	97	56						
45	8477	123	7064	254	2584	157	6875	323	0545	411	5803	97	55						
46	8600	124	7318	255	2741	158	6552	323	1.270135	410	5706	97	54						
		124		255		158		322		411		97							
47	8724	123	7573	254	2899	157	6230	322	1.269724	410	5609	98	53						
48	8847	124	7827	255	3056	158	5908	322	9314	410	5511	97	52						
49	8971	123	8082	254	3214	157	5586	322	8904	410	5414	97	51						
50	0.619094	123	0.788336	254	1.273371	157	1.615264	322	1.268494	410	0.785317	97	50						
	cos		cotg		cosec		sec		tang		sin		c						
	96	97	98	99	122	123	124	125	154	155	156	157	158	159	160	161	251	252	
1	9.6	9.7	9.8	9.9	12.2	12.3	12.4	12.5	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	25.1	25.2	1
2	19.2	19.4	19.6	19.8	24.4	24.6	24.8	25.0	30.8	31.0	31.2	31.4	31.6	31.8	32.0	32.2	50.2	50.4	2
3	28.8	29.1	29.4	29.7	36.6	36.9	37.2	37.5	46.2	46.5	46.8	47.1	47.4	47.7	48.0	48.3	75.3	75.6	3
4	38.4	38.8	39.2	39.6	48.8	49.2	49.6	50.0	61.6	62.0	62.4	62.8	63.2	63.6	64.0	64.4	100.4	100.8	4
5	48.0	48.5	49.0	49.5	61.0	61.5	62.0	62.5	77.0	77.5	78.0	78.5	79.0	79.5	80.0	80.5	125.5	126.0	5
6	57.6	58.2	58.8	59.4	73.2	73.8	74.4	75.0	92.4	93.0	93.6	94.2	94.8	95.4	96.0	96.6	150.6	151.2	6
7	67.2	67.9	68.6	69.3	85.4	86.1	86.8	87.5	107.8	108.5	109.2	109.9	110.6	111.3	112.0	112.7	175.7	176.4	7
8	76.8	77.6	78.4	79.2	97.6	98.4	99.2	100.0	123.2	124.0	124.8	125.6	126.4	127.2	128.0	128.8	200.8	201.6	8
9	86.4	87.3	88.2	89.1	109.8	110.7	111.6	112.5	138.6	139.5	140.4	141.3	142.2	143.1	144.0	144.9	225.9	226.8	9

c	sin		tang		sec		cosec		cotg		cos								
50	0.619094	123	0.788336	255	1.273371	158	1.615264	322	1.268494	410	0.785317	97	50						
51	9217	124	8591	255	3529	158	4942	322	8084	409	5220	98	49						
52	9341	123	8846	255	3687	158	4620	321	7675	410	5122	97	48						
53	9464	123	9101	255	3845	158	4299	321	7265	409	5025	97	47						
		123		255		158		321		409		97							
54	9587	124	9356	255	4003	158	3978	321	6856	409	4928	98	46						
55	9711	123	9611	255	4161	158	3657	321	6447	409	4830	98	45						
56	9834	123	0.789866	255	4319	158	3336	321	6038	409	4733	97	44						
		123		255		158		321		409		97							
57	0.619957	123	0.790121	255	4477	158	3015	321	5629	408	4636	98	43						
58	0.620080	123	0376	255	4635	158	2694	321	5221	408	4538	98	42						
59	0204	124	0631	255	4793	158	2374	320	4812	409	4441	97	41						
60	0.620327	123	0.790887	256	1.274952	158	1.612054	320	1.264404	408	0.784343	98	40						
61	0450	123	1142	255	5110	159	1734	320	3996	408	4246	97	39						
62	0573	123	1397	256	5269	158	1414	320	3588	408	4149	98	38						
63	0696	123	1653	255	5427	159	1094	320	3180	408	4051	97	37						
64	0819	124	1908	256	5586	158	0774	319	2772	407	3954	98	36						
65	0943	123	2164	256	5744	159	0455	319	2365	408	3856	98	35						
66	1066	123	2420	255	5903	159	1.610136	319	1957	407	3758	97	34						
		123		255		159		320		407		97							
67	1189	123	2675	256	6062	159	1.609816	318	1550	407	3661	98	33						
68	1312	123	2931	256	6221	159	9498	318	1143	407	3563	98	32						
69	1435	123	3187	256	6380	159	9179	319	0736	407	3466	97	31						
		123		256		159		319		406		98							
70	0.621558	123	0.793443	256	1.276539	159	1.608860	318	1.260330	407	0.783368	98	30						
71	1681	123	3699	256	6698	159	8542	318	1.259923	407	3270	97	29						
72	1804	123	3955	256	6857	160	8224	319	9517	406	3173	98	28						
73	1927	123	4211	256	7017	159	7905	317	9111	406	3075	98	27						
74	2050	123	4467	257	7176	159	7588	318	8705	406	2977	97	26						
75	2173	123	4724	256	7335	160	7270	318	8299	406	2880	98	25						
76	2296	123	4980	256	7495	160	6952	317	7893	405	2782	98	24						
		123		256		160		317		405		98							
77	2419	123	5236	257	7655	159	6635	318	7488	406	2684	98	23						
78	2542	123	5493	256	7814	160	6317	318	7082	406	2586	98	22						
79	2665	123	5749	256	7974	160	6000	317	6677	405	2489	97	21						
		123		257		160		317		405		98							
80	0.622788	123	0.796006	257	1.278134	159	1.605683	316	1.256272	405	0.782391	98	20						
81	2911	123	6263	256	8293	160	5367	317	5867	405	2293	98	19						
82	3034	122	6519	257	8453	160	5050	316	5462	405	2195	98	18						
83	3156	123	6776	257	8613	160	4734	317	5058	405	2097	98	17						
84	3279	123	7033	257	8773	161	4417	316	4653	404	1999	98	16						
85	3402	123	7290	257	8934	160	4101	316	4249	404	1901	98	15						
86	3525	123	7547	257	9094	160	3785	316	3845	404	1803	98	14						
87	3648	122	7804	257	9254	160	3469	315	3441	404	1706	98	13						
88	3770	123	8061	257	9414	161	3154	316	3037	404	1608	98	12						
89	3893	123	8318	257	9575	161	2838	316	2634	403	1510	98	11						
		123		257		160		315		404		98							
90	0.624016	123	0.798575	258	1.279735	161	1.602523	315	1.252230	403	0.781412	98	10						
91	4139	122	8833	257	1.279896	161	2208	315	1827	403	1314	99	09						
92	4261	123	9090	257	1.280057	160	1893	315	1424	403	1215	98	08						
93	4384	123	9347	258	0217	161	1578	315	1021	403	1117	98	07						
94	4507	123	9605	258	0378	161	1263	315	0618	403	1019	98	06						
95	4630	122	0.799862	257	0539	161	0949	314	1.250215	403	0921	98	05						
96	4752	123	0.800120	258	0700	161	0635	314	1.249813	403	0823	98	04						
		123		258		161		314		403		98							
97	4875	122	0378	257	0861	161	0321	314	9410	402	0725	98	03						
98	4997	123	0635	258	1022	161	1.600007	314	9008	402	0627	98	02						
99	5120	123	0893	258	1183	161	1.599693	314	8606	402	0529	99	01						
100	0.625243	123	0.801151	258	1.281344	161	1.599379	314	1.248204	402	0.780430	99	00						
	cos		cotg		cosec		sec		tang		sin		c						
	253	254	255	256	257	258	315	318	321	324	327	330	402	405	408	411	414	417	
1	25.3	25.4	25.5	25.6	25.7	25.8	31.5	31.8	32.1	32.4	32.7	33.0	40.2	40.5	40.8	41.1	41.4	41.7	1
2	50.6	50.8	51.0	51.2	51.4	51.6	63.0	63.6	64.2	64.8	65.4	66.0	80.4	81.0	81.6	82.2	82.8	83.4	2
3	75.9	76.2	76.5	76.8	77.1	77.4	94.5	95.4	96.3	97.2	98.1	99.0	120.6	121.5	122.4	123.3	124.2	125.1	3
4	101.2	101.6	102.0	102.4	102.8	103.2	126.0	127.2	128.4	129.6	130.8	132.0	160.8	162.0	163.2	164.4	165.6	166.8	4
5	126.5	127.0	127.5	128.0	128.5	129.0	157.5	159.0	160.5	162.0	163.5	165.0	201.0	202.5	204.0	205.5	207.0	208.5	5
6	151.8	152.4	153.0	153.6	154.2	154.8	189.0	190.8	192.6	194.4	196.2	198.0	241.2	243.0	244.8	246.6	248.4	250.2	6
7	177.1	177.8	178.5	179.2	179.9	180.6	220.5	222.6	224.7	226.8	228.9	231.0	281.4	283.5	285.6	287.7	289.8	291.9	7
8	202.4	203.2	204.0	204.8	205.6	206.4	252.0	254.4	256.8	259.2	261.6	264.0	321.6	324.0	326.4	328.8	331.2	333.6	8
9	227.7	228.6	229.5	230.4	231.3	232.2	283.5	286.2	288.9	291.6	294.3	297.0	361.8	364.5	367.2	369.9	372.6	375.3	9

c	sin		tang		sec		cosec		cotg		cos								
00	0.625243	122	0.801151	258	1.281344	162	1.599379	313	1.248204	402	0.780430	98	100						
01	5365	123	1409	258	1506	161	9066	314	7802	401	0332	98	99						
02	5488	122	1667	258	1667	161	8752	314	7401	401	0234	98	98						
03	5610	122	1925	258	1828	161	8439	313	6999	402	0136	98	97						
04	5733	123	2183	258	1990	162	8126	313	6598	401	0.780037	99	96						
05	5855	122	2441	258	2151	161	7813	313	6197	401	0.779939	98	95						
06	5978	123	2700	259	2313	162	7500	313	5796	401	9841	98	94						
07	6100	122	2958	258	2475	162	7188	312	5395	401	9742	99	93						
08	6223	123	3216	258	2637	162	6876	312	4995	400	9644	98	92						
09	6345	122	3475	259	2798	161	6563	313	4594	401	9546	98	91						
10	0.626468	123	0.803733	258	1.282960	162	1.596251	312	1.244194	400	0.779447	99	90						
11	6590	122	3992	259	3122	162	5939	312	3794	400	9349	98	89						
12	6713	123	4251	259	3284	162	5628	311	3394	400	9250	99	88						
13	6835	122	4509	258	3447	163	5316	312	2994	400	9152	98	87						
14	6957	122	4768	259	3609	162	5005	311	2594	400	9054	98	86						
15	7080	123	5027	259	3771	162	4693	312	2195	399	8955	99	85						
16	7202	122	5286	259	3933	162	4382	311	1795	400	8857	98	84						
17	7324	122	5545	259	4096	163	4071	311	1396	399	8758	99	83						
18	7447	123	5804	259	4258	162	3761	310	0997	399	8659	99	82						
19	7569	122	6063	259	4421	163	3450	311	0598	399	8561	98	81						
20	0.627691	123	0.806322	259	1.284584	163	1.593140	310	1.240199	399	0.778462	99	80						
21	7814	122	6581	260	4746	162	2829	311	1.239801	398	8364	98	79						
22	7936	122	6841	260	4909	163	2519	310	9402	399	8265	99	78						
23	8058	122	7100	259	5072	163	2209	310	9004	398	8166	99	77						
24	8180	122	7359	259	5235	163	1899	310	8606	398	8068	98	76						
25	8303	123	7619	260	5398	163	1590	309	8208	398	7969	99	75						
26	8425	122	7879	260	5561	163	1280	310	7810	398	7870	99	74						
27	8547	122	8138	259	5724	163	0971	309	7412	398	7772	98	73						
28	8669	122	8398	260	5888	164	0662	309	7015	397	7673	99	72						
29	8791	122	8658	260	6051	163	0353	309	6617	398	7574	99	71						
30	0.628913	122	0.808917	259	1.286214	163	1.590044	309	1.236220	397	0.777475	99	70						
31	9036	123	9177	260	6378	164	1.589735	309	5823	397	7377	98	69						
32	9158	122	9437	260	6541	163	9427	308	5426	397	7278	99	68						
33	9280	122	9697	260	6705	164	9118	309	5029	397	7179	99	67						
34	9402	122	0.809957	260	6869	164	8810	308	4633	396	7179	99	66						
35	9524	122	0.810218	261	7032	163	8502	308	4236	397	7080	99	65						
36	9646	122	0478	260	7196	164	8194	308	3840	396	6981	99	64						
37	9768	122	0738	260	7360	164	7887	307	3444	396	6882	99	63						
38	0.629890	122	0998	260	7524	164	7579	308	3048	396	6783	99	62						
39	0.630012	122	1259	261	7688	164	7272	307	3048	396	6684	99	61						
40	0.630134	122	0.811519	260	1.287852	164	1.586964	307	2652	396	6585	98	60						
41	0256	122	1780	261	8017	165	6657	308	1.232256	396	0.776487	99	59						
42	0378	122	2041	261	8181	164	6350	307	1861	395	6388	99	58						
43	0500	122	2301	260	8345	164	6044	306	1466	396	6289	100	57						
44	0622	122	2562	261	8510	165	5737	307	1070	395	6189	99	56						
45	0744	122	2823	261	8674	164	5430	307	0675	395	6090	99	55						
46	0865	121	3084	261	8839	165	5124	306	1.230280	394	5991	99	54						
47	0987	122	3345	261	9003	164	4818	306	1.229886	395	5892	99	53						
48	1109	122	3606	261	9168	165	4512	306	9491	394	5793	99	52						
49	1231	122	3867	261	9333	165	4206	306	9097	395	5694	99	51						
50	0.631353	122	0.814128	261	1.289498	165	1.583900	306	8702	394	5595	99	50						
	cos		cotg		cosec		sec		tang		sin		c						
	98	99	100	101	121	122	123	161	162	163	164	165	166	167	168	169	258	259	
1	9.8	9.9	10.0	10.1	12.1	12.2	12.3	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	25.8	25.9	1
2	19.6	19.8	20.0	20.2	24.2	24.4	24.6	32.2	32.4	32.6	32.8	33.0	33.2	33.4	33.6	33.8	51.6	51.8	2
3	29.4	29.7	30.0	30.3	36.3	36.6	36.9	48.3	48.6	48.9	49.2	49.5	49.8	50.1	50.4	50.7	77.4	77.7	3
4	39.2	39.6	40.0	40.4	48.4	48.8	49.2	64.4	64.8	65.2	65.6	66.0	66.4	66.8	67.2	67.6	103.2	103.6	4
5	49.0	49.5	50.0	50.5	60.5	61.0	61.5	80.5	81.0	81.5	82.0	82.5	83.0	83.5	84.0	84.5	129.0	129.5	5
6	58.8	59.4	60.0	60.6	72.6	73.2	73.8	96.6	97.2	97.8	98.4	99.0	99.6	100.2	100.8	101.4	154.8	155.4	6
7	68.6	69.3	70.0	70.7	84.7	85.4	86.1	112.7	113.4	114.1	114.8	115.5	116.2	116.9	117.6	118.3	180.6	181.3	7
8	78.4	79.2	80.0	80.8	96.8	97.6	98.4	128.8	129.6	130.4	131.2	132.0	132.8	133.6	134.4	135.2	206.4	207.2	8
9	88.2	89.1	90.0	90.9	108.9	109.8	110.7	144.9	145.8	146.7	147.6	148.5	149.4	150.3	151.2	152.1	232.2	233.1	9

c	sin		tang		sec		cosec		cotg		cos								
50	0.631353	122	0.814128	261	1.289498	165	1.583900	305	1.228308	394	0.775496	99	50						
51	1475	121	4389	262	9663	165	3595	305	7914	394	5397	100	49						
52	1596	122	4651	261	9828	165	3290	306	7520	394	5297	99	48						
53	1718	122	4912	261	1.289993	165	2984	305	7127	393	5198	99	47						
54	1840	122	5173	262	1.290158	165	2679	305	6733	394	5099	99	46						
55	1962	122	5435	262	0323	165	2374	305	6340	393	5000	99	45						
56	2083	121	5696	261	0488	165	2070	304	5946	394	4900	100	44						
		122		262		166		305		393		99							
57	2205	122	5958	262	0654	165	1765	305	5553	393	4801	99	43						
58	2327	122	6220	262	0819	165	1461	304	5160	393	4702	99	42						
59	2448	121	6481	261	0985	166	1156	305	4768	392	4602	100	41						
		122		262		165		304		393		99							
60	0.632570	122	0.816743	262	1.291150	166	1.580852	304	1.224375	393	0.774503	99	40						
61	2692	121	7005	262	1316	166	0548	303	3982	392	4404	100	39						
62	2813	121	7267	262	1482	166	1.580245	303	3590	392	4304	99	38						
63	2935	122	7529	262	1648	166	1.579941	304	3198	392	4205	99	37						
		122		262		166		304		392		100							
64	3057	121	7791	262	1814	166	9637	303	2806	392	4105	99	36						
65	3178	121	8053	262	1980	166	9334	303	2414	392	4006	99	35						
66	3300	122	8316	263	2146	166	9031	303	2022	392	3907	99	34						
		121		262		166		303		391		100							
67	3421	122	8578	262	2312	166	8728	303	1631	391	3807	99	33						
68	3543	122	8840	262	2478	166	8425	303	1239	392	3708	99	32						
69	3664	121	9103	263	2644	166	8122	303	0848	391	3608	100	31						
		122		262		167		302		391		99							
70	0.633786	121	0.819365	263	1.292811	166	1.577820	303	1.220457	391	0.773508	99	30						
71	3907	122	9628	262	2977	167	7517	302	1.220066	391	3409	100	29						
72	4029	121	0.819890	263	3144	166	7215	302	1.219675	391	3309	99	28						
73	4150	122	0.820153	263	3310	167	6913	302	9284	390	3210	99	27						
		122		263		167		302		390		100							
74	4272	121	0416	263	3477	167	6611	302	8894	390	3110	99	26						
75	4393	122	0679	263	3644	166	6309	302	8504	390	3010	99	25						
76	4515	122	0942	263	3810	166	6008	301	8113	391	2911	99	24						
		121		263		167		302		390		100							
77	4636	121	1205	263	3977	167	5706	301	7723	390	2811	99	23						
78	4757	121	1468	263	4144	167	5405	301	7333	390	2711	99	22						
79	4879	122	1731	263	4311	167	5104	301	6944	389	2612	99	21						
		121		263		167		301		390		100							
80	0.635000	122	0.821994	263	1.294478	168	1.574803	301	1.216554	390	0.772512	99	20						
81	5122	121	2257	264	4646	167	4502	301	6164	389	2412	99	19						
82	5243	121	2521	263	4813	167	4201	301	5775	389	2312	99	18						
83	5364	121	2784	263	4980	168	3901	300	5386	389	2213	99	17						
		121		263		168		301		389		100							
84	5485	122	3047	264	5148	167	3600	300	4997	389	2113	99	16						
85	5607	121	3311	264	5315	168	3300	300	4608	389	2013	99	15						
86	5728	121	3575	263	5483	167	3000	300	4219	389	1913	99	14						
		121		263		167		300		388		100							
87	5849	121	3838	264	5650	168	2700	300	3831	389	1813	99	13						
88	5970	122	4102	264	5818	168	2400	300	3442	389	1713	99	12						
89	6092	122	4366	264	5986	168	2100	300	3054	388	1613	99	11						
		121		264		168		299		388		100							
90	0.636213	121	0.824630	263	1.296154	167	1.571801	299	1.212666	388	0.771514	99	10						
91	6334	121	4893	264	6321	168	1502	299	2278	388	1414	99	09						
92	6455	121	5157	264	6489	168	1202	300	1890	388	1314	99	08						
93	6576	121	5422	265	6658	169	0903	299	1502	388	1214	99	07						
		122		264		168		298		387		100							
94	6698	121	5686	264	6826	168	0605	299	1115	388	1114	99	06						
95	6819	121	5950	264	6994	168	0306	299	0727	388	1014	99	05						
96	6940	121	6214	265	7162	169	1.570007	299	1.210340	387	0914	99	04						
		121		265		169		298		387		100							
97	7061	121	6479	264	7331	168	1.569709	298	1.209953	387	0814	99	03						
98	7182	121	6743	264	7499	169	9411	299	9566	387	0713	99	02						
99	7303	121	7007	265	7668	168	9112	299	9179	387	0613	99	01						
		121		265		168		297		387		100							
100	0.637424		0.827272		1.297836		1.568815		1.208792		0.770513		00						
	cos		cotg		cosec		sec		tang		sin		c						
	260	261	262	263	264	265	298	301	304	307	310	313	387	390	393	396	399	402	
1	26.0	26.1	26.2	26.3	26.4	26.5	29.8	30.1	30.4	30.7	31.0	31.3	38.7	39.0	39.3	39.6	39.9	40.2	1
2	52.0	52.2	52.4	52.6	52.8	53.0	59.6	60.2	60.8	61.4	62.0	62.6	77.4	78.0	78.6	79.2	79.8	80.4	2
3	78.0	78.3	78.6	78.9	79.2	79.5	89.4	90.3	91.2	92.1	93.0	93.9	116.1	117.0	117.9	118.8	119.7	120.6	3
4	104.0	104.4	104.8	105.2	105.6	106.0	119.2	120.4	121.6	122.8	124.0	125.2	154.8	156.0	157.2	158.4	159.6	160.8	4
5	130.0	130.5	131.0	131.5	132.0	132.5	149.0	150.5	152.0	153.5	155.0	156.5	193.5	195.0	196.5	198.0	199.5	201.0	5
6	156.0	156.6	157.2	157.8	158.4	159.0	178.8	180.6	182.4	184.2	186.0	187.8	232.2	234.0	235.8	237.6	239.4	241.2	6
7	182.0	182.7	183.4	184.1	184.8	185.5	208.6	210.7	212.8	214.9	217.0	219.1	270.9	273.0	275.1	277.2	279.3	281.4	7
8	208.0	208.8	209.6	210.4	211.2	212.0	238.4	240.8	243.2	245.6	248.0	250.4	309.6	312.0	314.4	316.8	319.2	321.6	8
9	234.0	234.9	235.8	236.7	237.6	238.5	268.2	270.9	273.6	276.3	279.0	281.7	348.3	351.0	353.7	356.4	359.1	361.8	9

c	sin		tang		sec		cosec		cotg		cos								
00	0.637424	121	0.827272	265	1.297836	169	1.568815	298	1.208792	386	0.770513	100	100						
01	7545	121	7537	264	8005	169	8517	298	8406	387	0413	100	99						
02	7666	121	7801	265	8174	169	8219	297	8019	386	0313	100	98						
03	7787	121	8066	265	8343	168	7922	297	7633	386	0213	100	97						
04	7908	121	8331	265	8511	169	7624	298	7247	386	0113	100	96						
05	8029	121	8596	265	8680	169	7327	297	6861	386	0.770012	101	95						
06	8150	121	8861	265	8849	169	7030	297	6475	386	0.769912	100	94						
07	8271	121	9126	265	9019	170	6733	297	6090	385	9812	100	93						
08	8392	121	9391	265	9188	169	6436	297	5704	386	9712	100	92						
09	8513	121	9656	265	9357	169	6140	296	5319	385	9611	101	91						
10	0.638634	120	0.829921	266	1.299527	170	1.565843	297	1.204934	385	0.769511	100	90						
11	8754	121	0.830187	265	9696	170	5547	296	4549	385	9411	101	89						
12	8875	121	0452	265	1.299866	170	5251	296	4164	385	9310	101	88						
13	8996	121	0717	265	1.300035	169	4955	296	3779	385	9210	100	87						
14	9117	121	0983	266	0205	170	4659	296	3394	385	9110	100	86						
15	9238	121	1248	265	0375	170	4363	296	3010	384	9009	101	85						
16	9358	120	1514	266	0544	169	4068	295	2625	385	8909	100	84						
17	9479	121	1780	266	0714	170	3772	296	2241	384	8808	101	83						
18	9600	121	2046	266	0884	170	3477	295	1857	384	8708	100	82						
19	9721	121	2311	265	1054	170	3182	295	1473	384	8607	101	81						
20	0.639841	121	0.832577	266	1.301224	170	1.562887	295	1.201090	383	0.768507	100	80						
21	0.639962	121	2843	266	1395	171	2592	295	0706	384	8406	101	79						
22	0.640083	121	3109	266	1565	170	2298	294	1.200322	384	8306	100	78						
23	0204	120	3376	267	1735	170	2003	295	1.199939	383	8205	101	77						
24	0324	120	3642	266	1906	171	1709	294	9556	383	8105	100	76						
25	0445	121	3908	266	2076	170	1415	294	9173	383	8004	101	75						
26	0565	120	4174	266	2247	171	1121	294	8790	383	7904	100	74						
27	0686	121	4441	267	2418	171	0827	294	8407	383	7803	101	73						
28	0807	121	4707	266	2588	170	0533	294	8025	382	7702	101	72						
29	0927	120	4974	267	2759	171	1.560239	294	7642	383	7602	100	71						
30	0.641048	121	0.835241	267	1.302930	171	1.559946	293	1.197260	382	0.767501	101	70						
31	1168	120	5507	266	3101	171	9653	293	6878	382	7400	101	69						
32	1289	121	5774	267	3272	171	9359	294	6496	382	7299	101	68						
33	1409	120	6041	267	3443	171	9066	293	6114	382	7199	100	67						
34	1530	121	6308	267	3614	171	8774	292	5732	382	7098	101	66						
35	1650	120	6575	267	3786	172	8481	293	5351	381	6997	101	65						
36	1771	121	6842	267	3957	171	8188	293	4969	382	6896	101	64						
37	1891	120	7109	267	4129	172	7896	292	4588	381	6796	100	63						
38	2012	121	7376	267	4300	171	7604	292	4207	381	6695	101	62						
39	2132	120	7643	267	4472	172	7312	292	3826	381	6594	101	61						
40	0.642253	121	0.837911	268	1.304643	171	1.557020	292	1.193445	381	0.766493	101	60						
41	2373	120	8178	267	4815	172	6728	292	3064	381	6392	101	59						
42	2493	120	8446	268	4987	172	6436	292	2683	381	6291	101	58						
43	2614	121	8713	267	5159	172	6145	291	2303	380	6190	101	57						
44	2734	120	8981	268	5331	172	5853	292	1923	380	6089	101	56						
45	2854	120	9248	267	5503	172	5562	291	1542	381	5988	101	55						
46	2975	121	9516	268	5675	172	5271	291	1162	380	5887	101	54						
47	3095	120	0.839784	268	5847	172	4980	291	0782	380	5786	101	53						
48	3215	120	0.840052	268	6020	173	4689	291	0403	379	5685	101	52						
49	3336	121	0320	268	6192	172	4399	290	1.190023	380	5584	101	51						
50	0.643456	120	0.840588	268	1.306364	172	1.554108	291	1.189644	379	0.765483	101	50						
cos		cotg		cosec		sec		tang		sin		c							
1	100	101	102	119	120	121	168	169	170	172	173	174	175	176	177	264	265	266	
2	10.0	10.1	10.2	11.9	12.0	12.1	16.8	16.9	17.0	17.2	17.3	17.4	17.5	17.6	17.7	26.4	26.5	26.6	1
3	20.0	20.2	20.4	23.8	24.0	24.2	33.6	33.8	34.0	34.4	34.6	34.8	35.0	35.2	35.4	52.8	53.0	53.2	2
4	30.0	30.3	30.6	35.7	36.0	36.3	50.4	50.7	51.0	51.6	51.9	52.2	52.5	52.8	53.1	79.2	79.5	79.8	3
5	40.0	40.4	40.8	47.6	48.0	48.4	67.2	67.6	68.0	68.8	69.2	69.6	70.0	70.4	70.8	105.6	106.0	106.4	4
6	50.0	50.5	51.0	59.5	60.0	60.5	84.0	84.5	85.0	86.0	86.5	87.0	87.5	88.0	88.5	132.0	132.5	133.0	5
7	60.0	60.6	61.2	71.4	72.0	72.6	100.8	101.4	102.0	103.2	103.8	104.4	105.0	105.6	106.2	158.4	159.0	159.6	6
8	70.0	70.7	71.4	83.3	84.0	84.7	117.6	118.3	119.0	120.4	121.1	121.8	122.5	123.2	123.9	184.8	185.5	186.2	7
9	80.0	80.8	81.6	95.2	96.0	96.8	134.4	135.2	136.0	137.6	138.4	139.2	140.0	140.8	141.6	211.2	212.0	212.8	8
10	90.0	90.9	91.8	107.1	108.0	108.9	151.2	152.1	153.0	154.8	155.7	156.6	157.5	158.4	159.3	237.6	238.5	239.4	9

c	sin		tang		sec		cosec		cotg		cos								
50	0.643456	120	0.840588	268	1.306364	173	1.554108	290	1.189644	380	0.765483	101	50						
51	3576	120	0856	268	6537	173	3818	290	9264	379	5382	101	49						
52	3696	120	1124	268	6710	173	3528	290	8885	379	5281	101	48						
53	3817	121	1392	268	6882	172	3238	290	8506	379	5180	101	47						
54	3937	120	1661	269	7055	173	2948	290	8127	379	5079	101	46						
55	4057	120	1929	268	7228	173	2658	290	7749	378	4978	101	45						
56	4177	120	2198	269	7401	173	2368	290	7370	379	4876	102	44						
57	4297	120	2466	268	7574	173	2079	289	6991	379	4775	101	43						
58	4417	120	2735	269	7747	173	1790	289	6613	378	4674	101	42						
59	4537	120	3003	268	7920	173	1500	290	6235	378	4573	101	41						
60	0.644657	120	0.843272	269	1.308093	173	1.551211	289	1.185857	378	0.764472	101	40						
61	4778	121	3541	269	8266	173	0922	289	5479	378	4370	102	39						
62	4898	120	3810	269	8440	174	0634	288	5101	378	4269	101	38						
63	5018	120	4079	269	8613	173	0345	289	4724	377	4168	101	37						
64	5138	120	4348	269	8787	174	1.550057	288	4346	378	4066	102	36						
65	5258	120	4617	269	8961	174	1.549768	289	3969	377	3965	101	35						
66	5378	120	4886	269	9134	173	9480	288	3592	377	3864	101	34						
67	5498	120	5155	269	9308	174	9192	288	3215	377	3762	102	33						
68	5618	120	5425	270	9482	174	8904	288	2838	377	3661	101	32						
69	5738	120	5694	269	9656	174	8617	287	2461	377	3559	102	31						
70	0.645858	119	0.845963	269	1.309830	174	1.548329	288	1.182084	377	0.763458	101	30						
71	5977	120	6233	270	1.310004	174	8042	287	1708	376	3357	101	29						
72	6097	120	6503	270	0178	174	7754	288	1331	377	3255	102	28						
73	6217	120	6772	269	0352	174	7467	287	0955	376	3154	101	27						
74	6337	120	7042	270	0527	175	7180	287	0579	376	3052	102	26						
75	6457	120	7312	270	0701	174	6893	287	1.180203	376	2950	102	25						
76	6577	120	7582	270	0876	175	6607	286	1.179827	376	2849	101	24						
77	6697	120	7852	270	1050	174	6320	287	9452	375	2747	102	23						
78	6816	119	8122	270	1225	175	6034	286	9076	376	2646	101	22						
79	6936	120	8392	270	1399	174	5748	286	8701	375	2544	102	21						
80	0.647056	120	0.848662	270	1.311574	175	1.545461	287	1.178325	376	0.762443	101	20						
81	7176	120	8932	270	1749	175	5175	286	7950	375	2341	102	19						
82	7295	119	9203	271	1924	175	4890	285	7575	375	2239	102	18						
83	7415	120	9473	270	2099	175	4604	286	7201	374	2138	101	17						
84	7535	120	0.849743	271	2274	175	4318	286	6826	375	2036	102	16						
85	7655	120	0.850014	271	2449	175	4033	285	6451	375	1934	102	15						
86	7774	119	0285	271	2625	176	3748	285	6077	374	1832	102	14						
87	7894	120	0555	270	2800	175	3463	285	5703	374	1731	101	13						
88	8014	120	0826	271	2976	176	3178	285	5328	375	1629	102	12						
89	8133	119	1097	271	3151	175	2893	285	4954	374	1527	102	11						
90	0.648253	120	0.851368	271	1.313327	176	1.542608	285	1.174581	373	0.761425	102	10						
91	8372	119	1639	271	3502	175	2324	284	4207	374	1323	102	09						
92	8492	120	1910	271	3678	176	2039	285	3833	374	1221	102	08						
93	8612	120	2181	271	3854	176	1755	284	3460	373	1120	101	07						
94	8731	119	2452	271	4030	176	1471	284	3087	373	1018	102	06						
95	8851	120	2723	271	4206	176	1187	284	2713	374	0916	102	05						
96	8970	119	2995	272	4382	176	0903	284	2340	373	0814	102	04						
97	9090	120	3266	271	4558	176	0619	284	1967	373	0712	102	03						
98	9209	119	3538	272	4734	176	0336	283	1595	372	0610	102	02						
99	9329	120	3809	271	4911	177	1.540052	284	1222	373	0508	102	01						
100	0.649448	119	0.854081	272	1.315087	176	1.539769	283	1.170850	372	0.760406	102	00						
cos		cotg		cosec		sec		tang		sin		c							
	267	268	269	270	271	272	283	286	289	292	295	298	372	375	378	381	384	387	
1	26.7	26.8	26.9	27.0	27.1	27.2	28.3	28.6	28.9	29.2	29.5	29.8	37.2	37.5	37.8	38.1	38.4	38.7	1
2	53.4	53.6	53.8	54.0	54.2	54.4	56.6	57.2	57.8	58.4	59.0	59.6	74.4	75.0	75.6	76.2	76.8	77.4	2
3	80.1	80.4	80.7	81.0	81.3	81.6	84.9	85.8	86.7	87.6	88.5	89.4	111.6	112.5	113.4	114.3	115.2	116.1	3
4	106.8	107.2	107.6	108.0	108.4	108.8	113.2	114.4	115.6	116.8	118.0	119.2	148.8	150.0	151.2	152.4	153.6	154.8	4
5	133.5	134.0	134.5	135.0	135.5	136.0	141.5	143.0	144.5	146.0	147.5	149.0	186.0	187.5	189.0	190.5	192.0	193.5	5
6	160.2	160.8	161.4	162.0	162.6	163.2	169.8	171.6	173.4	175.2	177.0	178.8	223.2	225.0	226.8	228.6	230.4	232.2	6
7	186.9	187.6	188.3	189.0	189.7	190.4	198.1	200.2	202.3	204.4	206.5	208.6	260.4	262.5	264.6	266.7	268.8	270.9	7
8	213.6	214.4	215.2	216.0	216.8	217.6	226.4	228.8	231.2	233.6	236.0	238.4	297.6	300.0	302.4	304.8	307.2	309.6	8
9	240.3	241.2	242.1	243.0	243.9	244.8	254.7	257.4	260.1	262.8	265.5	268.2	334.8	337.5	340.2	342.9	345.6	348.3	9

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c	sin		tang		sec		cosec		cotg		cos								
00	0.649448	119	0.854081	271	1.315087	176	1.539769	283	1.170850	373	0.760406	102	100						
01	9567	120	4352	272	5263	177	9486	283	0477	372	0304	102	99						
02	9687	119	4624	272	5440	177	9203	283	1.170105	372	0202	102	98						
03	9806	120	4896	272	5617	177	8920	283	1.169733	372	0.760100	102	97						
04	0.649926		5168		5793	176	8637		9361		0.759998	102	96						
05	0.650045	119	5440	272	5970	177	8355	282	8989	372	9896	102	95						
06	0164	119	5712	272	6147	177	8072	283	8618	371	9794	102	94						
07	0284	120	5984		6324	177	7790	282	8246	372	9691	103	93						
08	0403	119	6256	272	6501	177	7508	282	7875	371	9589	102	92						
09	0522	119	6529	273	6678	177	7226	282	7503	372	9487	102	91						
10	0.650642	120	0.856801	272	1.316855	177	1.536944	281	1.167132	371	0.759385	102	90						
11	0761	119	7073		7033	177	6663		6761		9283		89						
12	0880	119	7346	273	7210	177	6381	282	6390	371	9180	103	88						
13	0999	119	7618	272	7387	177	6100	281	6020	370	9078	102	87						
		120		273		178		282		371		102							
14	1119		7891		7565		5818		5649		8976		86						
15	1238	119	8164	273	7742	177	5537	281	5279	370	8874	102	85						
16	1357	119	8437	273	7920	178	5256	281	4908	371	8771	103	84						
		119		273		178		281		370		102							
17	1476		8710		8098		4975		4538		8669		83						
18	1595	119	8982	272	8276	178	4695	280	4168	370	8567	102	82						
19	1715	120	9255	273	8454	178	4414	281	3798	370	8464	103	81						
20	0.651834	119	0.859529	274	1.318632	178	1.534134	280	1.163428	370	0.758362	102	80						
21	1953	119	0.859802	273	8810	178	3853	281	3059	369	8260	102	79						
22	2072	119	0.860075	273	8988	178	3573	280	2689	370	8157	103	78						
23	2191	119	0348	273	9166	178	3293	280	2320	369	8055	102	77						
		119		274		178		280		369		103							
24	2310		0622		9344		3013		1951		7952		76						
25	2429	119	0895	273	9523	179	2734	279	1582	369	7850	102	75						
26	2548	119	1169	274	9701	178	2454	280	1213	369	7747	103	74						
		119		273		179		280		369		102							
27	2667		1442		1.319880		2174		0844		7645		73						
28	2786	119	1716	274	1.320058	178	1895	279	0475	369	7542	103	72						
29	2905	119	1990	274	0237	179	1616	279	1.160107	368	7440	102	71						
30	0.653024	119	0.862264	274	1.320416	179	1.531337	279	1.159738	369	0.757337	103	70						
31	3143	119	2537	273	0595	179	1058	279	9370	368	7234	103	69						
32	3262	119	2811	274	0774	179	0779	279	9002	368	7132	102	68						
33	3381	119	3085	274	0953	179	0501	278	8634	368	7029	103	67						
		119		275		179		279		368		102							
34	3500		3360		1132		1.530222		8266		6927		66						
35	3619	119	3634	274	1311	179	1.529944	278	7898	368	6824	103	65						
36	3738	119	3908	274	1491	180	9666	278	7531	367	6721	103	64						
		118		274		179		278		368		102							
37	3856		4182		1670		9388		7163		6619		63						
38	3975	119	4457	275	1849	179	9110	278	6796	367	6516	103	62						
39	4094	119	4731	274	2029	180	8832	278	6429	367	6413	103	61						
40	0.654213	119	0.865006	275	1.322208	179	1.528554	278	1.156061	368	0.756310	103	60						
41	4332	119	5281	275	2388	180	8277	277	5694	367	6208	102	59						
42	4451	119	5555	274	2568	180	7999	278	5328	366	6105	103	58						
43	4569	118	5830	275	2748	180	7722	277	4961	367	6002	103	57						
		119		275		180		277		367		103							
44	4688		6105		2928		7445		4594		5899		56						
45	4807	119	6380	275	3108	180	7168	277	4228	366	5796	103	55						
46	4925	118	6655	275	3288	180	6891	277	3862	366	5693	103	54						
		119		275		180		276		366		102							
47	5044		6930		3468		6615		3496		5591		53						
48	5163	119	7205	275	3648	180	6338	277	3130	366	5488	103	52						
49	5282	119	7480	275	3829	181	6062	276	2764	366	5385	103	51						
50	0.655400	118	0.867756	276	1.324009	180	1.525785	277	1.152398	366	0.755282	103	50						
	cos		cotg		cosec		sec		tang		sin		c						
	102	103	104	117	118	119	120	176	177	178	179	180	181	182	183	184	185	269	
1	10.2	10.3	10.4	11.7	11.8	11.9	12.0	17.6	17.7	17.8	17.9	18.0	18.1	18.2	18.3	18.4	18.5	26.9	1
2	20.4	20.6	20.8	23.4	23.6	23.8	24.0	35.2	35.4	35.6	35.8	36.0	36.2	36.4	36.6	36.8	37.0	53.8	2
3	30.6	30.9	31.2	35.1	35.4	35.7	36.0	52.8	53.1	53.4	53.7	54.0	54.3	54.6	54.9	55.2	55.5	80.7	3
4	40.8	41.2	41.6	46.8	47.2	47.6	48.0	70.4	70.8	71.2	71.6	72.0	72.4	72.8	73.2	73.6	74.0	107.6	4
5	51.0	51.5	52.0	58.5	59.0	59.5	60.0	88.0	88.5	89.0	89.5	90.0	90.5	91.0	91.5	92.0	92.5	134.5	5
6	61.2	61.8	62.4	70.2	70.8	71.4	72.0	105.6	106.2	106.8	107.4	108.0	108.6	109.2	109.8	110.4	111.0	161.4	6
7	71.4	72.1	72.8	81.9	82.6	83.3	84.0	123.2	123.9	124.6	125.3	126.0	126.7	127.4	128.1	128.8	129.5	188.3	7
8	81.6	82.4	83.2	93.6	94.4	95.2	96.0	140.8	141.6	142.4	143.2	144.0	144.8	145.6	146.4	147.2	148.0	215.2	8
9	91.8	92.7	93.6	105.3	106.2	107.1	108.0	158.4	159.3	160.2	161.1	162.0	162.9	163.8	164.7	165.6	166.5	242.1	9

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c	sin		tang		sec		cosec		cotg		cos								
50	0.655400	119	0.867756	275	1.324009	181	1.525785	276	1.152398	366	0.755282	103	50						
51	5519	118	8031	276	4190	180	5509	276	2032	365	5179	103	49						
52	5637	119	8307	275	4370	181	5233	276	1667	366	5076	103	48						
53	5756	119	8582	276	4551	181	4957	275	1301	365	4973	103	47						
54	5875	118	8858	276	4732	180	4682	275	0936	365	4870	103	46						
55	5993	119	9134	275	4912	181	4406	276	0571	365	4767	103	45						
56	6112	118	9409	276	5093	181	4131	275	1.150206	365	4664	103	44						
57	6230	118	9685	276	5274	181	3855	276	1.149841	365	4561	103	43						
58	6349	119	0.869961	276	5456	182	3580	275	9477	364	4458	103	42						
59	6467	118	0.870237	276	5637	181	3305	275	9112	365	4355	103	41						
60	0.656586	119	0.870513	276	1.325818	181	1.523030	275	1.148748	364	0.754251	104	40						
61	6704	118	0789	277	5999	182	2756	274	8383	365	4148	103	39						
62	6823	119	1066	277	6181	182	2481	275	8019	364	4045	103	38						
63	6941	118	1342	276	6362	181	2206	275	7655	364	3942	103	37						
64	7060	119	1618	276	6544	182	1932	274	7291	364	3839	103	36						
65	7178	118	1895	277	6725	181	1658	274	6928	363	3735	104	35						
66	7296	118	2171	276	6907	182	1384	274	6564	364	3632	103	34						
67	7415	119	2448	277	7089	182	1110	274	6200	364	3529	103	33						
68	7533	118	2724	276	7271	182	0836	274	5837	363	3426	103	32						
69	7651	118	3001	277	7453	182	0562	274	5474	363	3322	104	31						
70	0.657770	119	0.873278	277	1.327635	182	1.520289	273	1.145111	363	0.753219	103	30						
71	7888	118	3555	277	7817	182	1.520016	274	4748	363	3116	104	29						
72	8006	119	3832	277	7999	183	1.519742	273	4385	363	3012	103	28						
73	8125	118	4109	277	8182	182	9469	273	4022	363	2909	103	27						
74	8243	118	4386	277	8364	183	9196	273	3659	363	2806	103	26						
75	8361	118	4663	277	8547	183	8923	273	3297	362	2702	104	25						
76	8479	118	4941	278	8729	182	8651	272	2935	362	2599	103	24						
77	8598	119	5218	277	8912	183	8378	273	2572	363	2495	104	23						
78	8716	118	5495	277	9095	183	8106	272	2210	362	2392	103	22						
79	8834	118	5773	278	9277	182	7833	273	1848	362	2288	104	21						
80	0.658952	118	0.876051	278	1.329460	183	1.517561	272	1.141487	361	0.752185	103	20						
81	9070	118	6328	277	9643	183	7289	272	1125	362	2081	104	19						
82	9188	118	6606	278	1.329826	183	7017	272	0763	362	1978	103	18						
83	9306	119	6884	278	1.330009	184	6745	272	0402	361	1874	104	17						
84	9425	118	7162	278	0193	184	6474	271	1.140041	361	1771	103	16						
85	9543	118	7440	278	0376	183	6202	272	1.139679	362	1667	104	15						
86	9661	118	7718	278	0559	183	5931	271	9318	361	1564	103	14						
87	9779	118	7996	278	0743	184	5660	271	8957	361	1460	104	13						
88	0.659897	118	8274	278	0927	184	5389	271	8597	360	1356	104	12						
89	0.660015	118	8552	278	1110	183	5118	271	8236	361	1253	103	11						
90	0.660133	118	0.878831	279	1.331294	184	1.514847	271	1.137876	360	0.751149	104	10						
91	0251	118	9109	278	1478	184	4576	271	7515	361	1045	104	09						
92	0369	118	9388	279	1662	184	4306	270	7155	360	0942	103	08						
93	0487	118	9666	278	1846	184	4035	271	6795	360	0838	104	07						
94	0605	118	0.879945	279	2030	184	3765	270	6435	360	0734	104	06						
95	0723	117	0.880224	279	2214	184	3495	270	6075	360	0630	104	05						
96	0840	118	0503	278	2398	184	3225	270	5715	360	0526	104	04						
97	0958	118	0781	279	2582	184	2955	270	5355	360	0423	103	03						
98	1076	118	1060	279	2767	185	2685	270	4996	359	0319	104	02						
99	1194	118	1339	279	2951	184	2415	270	4637	359	0215	104	01						
100	0.661312	118	0.881619	280	1.333136	185	1.512146	269	1.134277	360	0.750111	104	00						
	cos		cotg		cosec		sec		tang		sin		c						
	270	271	272	273	274	275	277	279	281	283	359	361	363	365	367	369	371	373	
1	27.0	27.1	27.2	27.3	27.4	27.5	27.7	27.9	28.1	28.3	35.9	36.1	36.3	36.5	36.7	36.9	37.1	37.3	1
2	54.0	54.2	54.4	54.6	54.8	55.0	55.4	55.8	56.2	56.6	71.8	72.2	72.6	73.0	73.4	73.8	74.2	74.6	2
3	81.0	81.3	81.6	81.9	82.2	82.5	83.1	83.7	84.3	84.9	107.7	108.3	108.9	109.5	110.1	110.7	111.3	111.9	3
4	108.0	108.4	108.8	109.2	109.6	110.0	110.8	111.6	112.4	113.2	143.6	144.4	145.2	146.0	146.8	147.6	148.4	149.2	4
5	135.0	135.5	136.0	136.5	137.0	137.5	138.5	139.5	140.5	141.5	179.5	180.5	181.5	182.5	183.5	184.5	185.5	186.5	5
6	162.0	162.6	163.2	163.8	164.4	165.0	166.2	167.4	168.6	169.8	215.4	216.6	217.8	219.0	220.2	221.4	222.6	223.8	6
7	189.0	189.7	190.4	191.1	191.8	192.5	193.9	195.3	196.7	198.1	251.3	252.7	254.1	255.5	256.9	258.3	259.7	261.1	7
8	216.0	216.8	217.6	218.4	219.2	220.0	221.6	223.2	224.8	226.4	287.2	288.8	290.4	292.0	293.6	295.2	296.8	298.4	8
9	243.0	243.9	244.8	245.7	246.6	247.5	249.3	251.1	252.9	254.7	323.1	324.9	326.7	328.5	330.3	332.1	333.9	335.7	9

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c	sin		tang		sec		cosec		cotg		cos		100						
00	0.661312	118	0.881619	279	1.333136	185	1.512146	269	1.134277	359	0.750111	104							
01	1430	117	1898	279	3321	184	1877	270	3918	359	0.750007	104	99						
02	1547	118	2177	279	3505	185	1607	269	3559	359	0.749903	104	98						
03	1665	118	2456	279	3690	185	1338	269	3200	359	9799	104	97						
04	1783	118	2736	280	3875	185	1069	269	2842	358	9695	104	96						
05	1901	118	3015	279	4060	185	0800	269	2483	359	9591	104	95						
06	2019	118	3295	280	4245	185	0532	268	2125	358	9487	104	94						
07	2136	117	3575	280	4430	185	1.510263	269	1766	359	9383	104	93						
08	2254	118	3854	279	4616	186	1.509995	268	1408	358	9279	104	92						
09	2372	118	4134	280	4801	185	9726	269	1050	358	9175	104	91						
10	0.662489	117	0.884414	280	1.334986	185	1.509458	268	1.130692	358	0.749071	104	90						
11	2607	118	4694	280	5172	185	9190	268	1.130334	358	8967	104	89						
12	2725	117	4974	280	5357	186	8922	267	1.129976	357	8863	104	88						
13	2842	118	5254	281	5543	186	8655	268	9619	357	8759	104	87						
14	2960	118	5535	281	5729	186	8387	267	9261	358	8655	104	86						
15	3077	117	5815	280	5915	186	8119	268	8904	357	8551	104	85						
16	3195	118	6095	280	6101	186	7852	267	8547	357	8447	104	84						
17	3313	118	6376	281	6287	186	7585	267	8190	357	8342	105	83						
18	3430	117	6656	280	6473	186	7318	267	7833	357	8238	104	82						
19	3548	118	6937	281	6659	186	7051	267	7476	357	8134	104	81						
20	0.663665	117	0.887218	280	1.336845	186	1.506784	267	1.127119	357	0.748030	104	80						
21	3783	118	7498	281	7031	187	6517	266	6763	356	7926	105	79						
22	3900	118	7779	281	7218	186	6251	267	6406	357	7821	104	78						
23	4018	117	8060	281	7404	187	5984	266	6050	356	7717	104	77						
24	4135	117	8341	281	7591	187	5718	266	5694	356	7613	105	76						
25	4252	118	8622	281	7778	187	5452	266	5338	356	7508	104	75						
26	4370	117	8903	282	7965	186	5186	266	4982	356	7404	104	74						
27	4487	118	9185	281	8151	187	4920	266	4626	356	7300	104	73						
28	4605	117	9466	281	8338	187	4654	266	4270	356	7195	105	72						
29	4722	117	0.889747	282	8525	187	4388	266	3915	355	7091	104	71						
30	0.664839	117	0.890029	281	1.338712	187	1.504123	265	1.123559	356	0.746986	105	70						
31	4957	118	0310	282	8900	188	3857	266	3204	355	6882	104	69						
32	5074	117	0592	282	9087	187	3592	265	2849	355	6777	105	68						
33	5191	118	0874	281	9274	188	3327	265	2494	355	6673	104	67						
34	5309	117	1155	282	9462	187	3062	265	2139	355	6569	105	66						
35	5426	117	1437	282	9649	188	2797	265	1784	355	6464	105	65						
36	5543	117	1719	282	1.339837	188	2532	264	1429	355	6359	104	64						
37	5660	117	2001	282	1.340025	187	2268	265	1075	354	6255	105	63						
38	5777	118	2283	282	0212	188	2003	265	0720	355	6150	105	62						
39	5895	117	2565	283	0400	188	1739	264	0366	354	6046	104	61						
40	0.666012	117	0.892848	282	1.340588	188	1.501475	264	1.120012	354	0.745941	105	60						
41	6129	117	3130	283	0776	189	1211	264	1.119658	354	5837	104	59						
42	6246	117	3413	283	0965	189	0947	264	9304	354	5732	105	58						
43	6363	117	3695	282	1153	188	0683	264	8950	354	5627	105	57						
44	6480	117	3978	283	1341	188	0419	264	8596	354	5523	104	56						
45	6598	118	4260	282	1529	188	1.500156	263	8243	353	5418	105	55						
46	6715	117	4543	283	1718	189	1.499892	264	7889	354	5313	105	54						
47	6832	117	4826	283	1907	189	9629	263	7536	353	5208	105	53						
48	6949	117	5109	283	2095	188	9366	263	7183	353	5104	104	52						
49	7066	117	5392	283	2284	189	9103	263	6830	353	4999	105	51						
50	0.667183	117	0.895675	283	1.342473	189	1.498840	263	1.116477	353	0.744894	105	50						
cos		cotg		cosec		sec		tang		sin		c							
1	104	105	106	116	117	118	184	185	186	187	188	189	190	191	192	193	256	258	1
2	10.4	10.5	10.6	11.6	11.7	11.8	18.4	18.5	18.6	18.7	18.8	18.9	19.0	19.1	19.2	19.3	25.6	25.8	2
3	20.8	21.0	21.2	23.2	23.4	23.6	36.8	37.0	37.2	37.4	37.6	37.8	38.0	38.2	38.4	38.6	51.2	51.6	3
4	31.2	31.5	31.8	34.8	35.1	35.4	55.2	55.5	55.8	56.1	56.4	56.7	57.0	57.3	57.6	57.9	76.8	77.4	4
5	41.6	42.0	42.4	46.4	46.8	47.2	73.6	74.0	74.4	74.8	75.2	75.6	76.0	76.4	76.8	77.2	102.4	103.2	5
6	52.0	52.5	53.0	58.0	58.5	59.0	92.0	92.5	93.0	93.5	94.0	94.5	95.0	95.5	96.0	96.5	128.0	129.0	6
7	62.4	63.0	63.6	69.6	70.2	70.8	110.4	111.0	111.6	112.2	112.8	113.4	114.0	114.6	115.2	115.8	153.6	154.8	7
8	72.8	73.5	74.2	81.2	81.9	82.6	128.8	129.5	130.2	130.9	131.6	132.3	133.0	133.7	134.4	135.1	179.2	180.6	8
9	83.2	84.0	84.8	92.8	93.6	94.4	147.2	148.0	148.8	149.6	150.4	151.2	152.0	152.8	153.6	154.4	204.8	206.4	9
	93.6	94.5	95.4	104.4	105.3	106.2	165.6	166.5	167.4	168.3	169.2	170.1	171.0	171.9	172.8	173.7	230.4	232.2	

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c	sin		tang		sec		cosec		cotg		cos								
50	0.667183	117	0.895675	283	1.342473	189	1.498840	263	1.116477	353	0.744894	105	50						
51	7300	117	5958	283	2662	189	8577	263	6124	353	4789	105	49						
52	7417	117	6241	283	2851	189	8314	263	5771	353	4684	105	48						
53	7534	117	6524	283	3040	189	8052	262	5419	352	4580	104	47						
54	7651	117	6808	284	3229	189	7789	263	5066	353	4475	105	46						
55	7768	117	7091	283	3418	189	7527	262	4714	352	4370	105	45						
56	7885	117	7375	284	3608	190	7265	262	4362	352	4265	105	44						
57	8001	116	7658	283	3797	189	7003	262	4010	352	4160	105	43						
58	8118	117	7942	284	3987	190	6741	262	3658	352	4055	105	42						
59	8235	117	8226	284	4176	189	6479	262	3306	352	3950	105	41						
60	0.668352	117	0.898510	284	1.344366	190	1.496218	261	1.112954	352	0.743845	105	40						
61	8469	117	8794	284	4556	190	5956	261	2603	352	3740	105	39						
62	8586	117	9078	284	4746	190	5695	261	2251	352	3635	105	38						
63	8702	116	9362	284	4935	189	5433	262	1900	351	3530	105	37						
64	8819	117	9646	284	5126	191	5172	261	1548	352	3425	105	36						
65	8936	117	0.899930	284	5316	190	4911	261	1197	351	3320	105	35						
66	9053	117	0.900214	284	5506	190	4650	261	0846	351	3215	105	34						
67	9170	117	0499	285	5696	190	4390	260	0496	350	3110	105	33						
68	9286	116	0783	284	5887	191	4129	261	1.110145	351	3005	105	32						
69	9403	117	1068	285	6077	190	3869	260	1.109794	351	2900	105	31						
70	0.669520	116	0.901353	285	1.346268	191	1.493608	261	1.109444	350	0.742794	106	30						
71	9636	117	1637	284	6458	190	3348	260	9093	351	2689	105	29						
72	9753	117	1922	285	6649	191	3088	260	8743	350	2584	105	28						
73	9870	116	2207	285	6840	191	2828	260	8393	350	2479	105	27						
74	0.669986	117	2492	285	7031	191	2568	260	8043	350	2374	106	26						
75	0.670103	117	2777	285	7222	191	2308	260	7693	350	2268	106	25						
76	0219	116	3062	285	7413	191	2049	259	7343	350	2163	105	24						
77	0336	117	3347	285	7604	191	1789	260	6994	349	2058	105	23						
78	0453	117	3633	286	7795	191	1530	259	6644	350	1952	106	22						
79	0569	116	3918	285	7987	192	1271	259	6295	349	1847	105	21						
80	0.670686	117	0.904204	286	1.348178	191	1.491012	259	1.105946	349	0.741742	105	20						
81	0802	116	4489	285	8370	192	0753	259	5596	350	1636	106	19						
82	0919	117	4775	286	8561	191	0494	259	5247	349	1531	105	18						
83	1035	116	5060	285	8753	192	1.490235	259	4899	348	1426	105	17						
84	1151	116	5346	286	8945	192	1.489977	258	4550	349	1320	106	16						
85	1268	117	5632	286	9137	192	9718	259	4201	349	1215	105	15						
86	1384	116	5918	286	9329	192	9460	258	3853	348	1109	106	14						
87	1501	117	6204	286	9521	192	9202	258	3504	349	1004	105	13						
88	1617	116	6490	286	9713	192	8944	258	3156	348	0898	106	12						
89	1734	117	6776	286	1.349905	192	8686	258	2808	348	0793	105	11						
90	0.671850	116	0.907063	287	1.350097	192	1.488428	258	1.102460	348	0.740687	106	10						
91	1966	116	7349	286	0290	193	8170	258	2112	348	0582	105	09						
92	2083	117	7636	287	0482	192	7912	258	1764	348	0476	106	08						
93	2199	116	7922	286	0675	193	7655	257	1416	348	0371	105	07						
94	2315	116	8209	287	0867	192	7398	257	1069	347	0265	106	06						
95	2431	116	8495	286	1060	193	7141	257	0721	348	0159	106	05						
96	2548	117	8782	287	1253	193	6883	258	0374	347	0.740054	105	04						
97	2664	116	9069	287	1446	193	6627	256	1.100027	347	0.739948	106	03						
98	2780	116	9356	287	1639	193	6370	257	1.099679	348	9842	106	02						
99	2896	116	9643	287	1832	193	6113	257	9333	346	9737	105	01						
100	0.673013	117	0.909930	287	1.352025	193	1.485856	257	1.098986	347	0.739631	106	00						
	cos		cotg		cosec		sec		tang		sin		c						
	260	262	264	266	268	270	279	281	283	285	287	346	348	350	352	354	356	358	
1	26.0	26.2	26.4	26.6	26.8	27.0	27.9	28.1	28.3	28.5	28.7	34.6	34.8	35.0	35.2	35.4	35.6	35.8	1
2	52.0	52.4	52.8	53.2	53.6	54.0	55.8	56.2	56.6	57.0	57.4	69.2	69.6	70.0	70.4	70.8	71.2	71.6	2
3	78.0	78.6	79.2	79.8	80.4	81.0	83.7	84.3	84.9	85.5	86.1	103.8	104.4	105.0	105.6	106.2	106.8	107.4	3
4	104.0	104.8	105.6	106.4	107.2	108.0	111.6	112.4	113.2	114.0	114.8	138.4	139.2	140.0	140.8	141.6	142.4	143.2	4
5	130.0	131.0	132.0	133.0	134.0	135.0	139.5	140.5	141.5	142.5	143.5	173.0	174.0	175.0	176.0	177.0	178.0	179.0	5
6	156.0	157.2	158.4	159.6	160.8	162.0	167.4	168.6	169.8	171.0	172.2	207.6	208.8	210.0	211.2	212.4	213.6	214.8	6
7	182.0	183.4	184.8	186.2	187.6	189.0	195.3	196.7	198.1	199.5	200.9	242.2	243.6	245.0	246.4	247.8	249.2	250.6	7
8	208.0	209.6	211.2	212.8	214.4	216.0	223.2	224.8	226.4	228.0	229.6	276.8	278.4	280.0	281.6	283.2	284.8	286.4	8
9	234.0	235.8	237.6	239.4	241.2	243.0	251.1	252.9	254.7	256.5	258.3	311.4	313.2	315.0	316.8	318.6	320.4	322.2	9

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c	sin		tang		sec		cosec		cotg		cos								
00	0.673013	116	0.909930	287	1.352025	194	1.485856	256	1.098986	347	0.739631	106	100						
01	3129	116	0.910217	287	2219	193	5600	256	8639	347	9525	105	99						
02	3245	116	0504	288	2412	194	5344	256	8292	346	9420	106	98						
03	3361	116	0792	287	2606	193	5088	257	7946	347	9314	106	97						
04	3477	116	1079	288	2799	194	4831	255	7599	346	9208	106	96						
05	3593	116	1367	287	2993	193	4576	256	7253	346	9102	106	95						
06	3709	116	1654	288	3186	194	4320	256	6907	346	8996	105	94						
07	3825	116	1942	288	3380	194	4064	256	6561	346	8891	106	93						
08	3941	116	2230	288	3574	194	3808	256	6215	346	8785	106	92						
09	4057	116	2518	287	3768	194	3553	255	5869	346	8679	106	91						
10	0.674173	116	0.912805	288	1.353962	194	1.483298	255	1.095524	345	0.738573	106	90						
11	4289	116	3093	289	4156	195	3043	256	5178	345	8467	106	89						
12	4405	116	3382	288	4351	194	2787	254	4833	346	8361	106	88						
13	4521	116	3670	288	4545	195	2533	255	4487	345	8255	106	87						
14	4637	116	3958	288	4740	194	2278	255	4142	345	8149	106	86						
15	4753	116	4246	289	4934	195	2023	255	3797	345	8043	106	85						
16	4869	116	4535	288	5129	194	1768	254	3452	345	7937	106	84						
17	4985	116	4823	289	5323	195	1514	254	3107	344	7831	106	83						
18	5101	116	5112	288	5518	195	1260	254	2763	344	7725	106	82						
19	5217	116	5400	289	5713	195	1005	255	2418	345	7619	106	81						
20	0.675333	116	0.915689	289	1.355908	195	1.480751	254	1.092074	344	0.737513	106	80						
21	5449	115	5978	289	6103	195	0497	253	1729	344	7407	106	79						
22	5564	116	6267	289	6298	196	1.480244	254	1385	344	7301	106	78						
23	5680	116	6556	289	6494	195	1.479990	254	1041	344	7195	106	77						
24	5796	116	6845	289	6689	195	9736	253	0697	344	7089	107	76						
25	5912	116	7134	289	6884	196	9483	253	0353	344	6982	106	75						
26	6028	115	7423	290	7080	195	9230	254	1.090009	343	6876	106	74						
27	6143	116	7713	289	7275	196	8976	253	1.089666	344	6770	106	73						
28	6259	116	8002	290	7471	196	8723	253	9322	344	6664	106	72						
29	6375	115	8292	289	7667	196	8470	253	8979	343	6558	106	71						
30	0.676490	116	0.918581	290	1.357863	196	1.478217	253	1.088635	344	0.736451	107	70						
31	6606	116	8871	290	8059	196	7965	252	8292	343	6345	106	69						
32	6722	115	9161	290	8255	196	7712	252	7949	343	6239	106	68						
33	6837	116	9451	289	8451	196	7460	253	7606	343	6133	107	67						
34	6953	116	0.919740	290	8647	197	7207	252	7263	342	6026	106	66						
35	7069	115	0.920030	291	8844	196	6955	252	6921	343	5920	107	65						
36	7184	116	0321	290	9040	197	6703	252	6578	342	5813	106	64						
37	7300	115	0611	290	9237	196	6451	252	6236	343	5707	106	63						
38	7415	116	0901	290	9433	197	6199	252	5893	342	5601	107	62						
39	7531	115	1191	291	9630	197	5947	251	5551	342	5494	106	61						
40	0.677646	116	0.921482	290	1.359827	197	1.475696	252	1.085209	342	0.735388	107	60						
41	7762	115	1772	291	1.360024	196	5444	251	4867	342	5281	106	59						
42	7877	116	2063	290	0220	198	5193	251	4525	342	5175	107	58						
43	7993	115	2353	291	0418	197	4942	251	4183	342	5068	106	57						
44	8108	116	2644	291	0615	197	4691	251	3841	341	4962	107	56						
45	8224	115	2935	291	0812	197	4440	251	3500	342	4855	106	55						
46	8339	116	3226	291	1009	198	4189	251	3158	341	4749	107	54						
47	8455	115	3517	291	1207	197	3938	251	2817	341	4642	106	53						
48	8570	115	3808	291	1404	198	3687	250	2476	341	4536	107	52						
49	8685	116	4099	291	1602	197	3437	251	2135	341	4429	106	51						
50	0.678801	116	0.924390	291	1.361799	197	1.473186	251	1.081794	341	0.734323	106	50						
cos		cotg		cosec		sec		tang		sin		c							
	105	106	107	108	114	115	116	193	194	195	196	197	198	199	200	202	203	244	
1	10.5	10.6	10.7	10.8	11.4	11.5	11.6	19.3	19.4	19.5	19.6	19.7	19.8	19.9	20.0	20.2	20.3	24.4	1
2	21.0	21.2	21.4	21.6	22.8	23.0	23.2	38.6	38.8	39.0	39.2	39.4	39.6	39.8	40.0	40.4	40.6	48.8	2
3	31.5	31.8	32.1	32.4	34.2	34.5	34.8	57.9	58.2	58.5	58.8	59.1	59.4	59.7	60.0	60.6	60.9	73.2	3
4	42.0	42.4	42.8	43.2	45.6	46.0	46.4	77.2	77.6	78.0	78.4	78.8	79.2	79.6	80.0	80.8	81.2	97.6	4
5	52.5	53.0	53.5	54.0	57.0	57.5	58.0	96.5	97.0	97.5	98.0	98.5	99.0	99.5	100.0	101.0	101.5	122.0	5
6	63.0	63.6	64.2	64.8	68.4	69.0	69.6	115.8	116.4	117.0	117.6	118.2	118.8	119.4	120.0	121.2	121.8	146.4	6
7	73.5	74.2	74.9	75.6	79.8	80.5	81.2	135.1	135.8	136.5	137.2	137.9	138.6	139.3	140.0	141.4	142.1	170.8	7
8	84.0	84.8	85.6	86.4	91.2	92.0	92.8	154.4	155.2	156.0	156.8	157.6	158.4	159.2	160.0	161.6	162.4	195.2	8
9	94.5	95.4	96.3	97.2	102.6	103.5	104.4	173.7	174.6	175.5	176.4	177.3	178.2	179.1	180.0	181.8	182.7	219.6	9

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c	sin		tang		sec		cosec		cotg		cos								
50	0.678801	115	0.924390	292	1.361799	198	1.473186	250	1.081794	341	0.734323	107	50						
51	8916	115	4682	291	1997	198	2936	250	1453	341	4216	107	49						
52	9031	116	4973	292	2195	198	2686	250	1112	341	4109	107	48						
53	9147	115	5265	291	2393	198	2436	250	0772	340	4003	106	47						
54	9262	115	5556	292	2591	198	2186	250	0431	341	3896	107	46						
55	9377	115	5848	292	2789	198	1936	250	1.080091	340	3789	107	45						
56	9493	116	6140	292	2988	199	1687	249	1.079751	340	3682	107	44						
57	9608	115	6432	292	3186	198	1437	250	9410	341	3576	106	43						
58	9723	115	6724	292	3384	198	1188	249	9070	340	3469	107	42						
59	9838	115	7016	292	3583	199	0938	250	8730	340	3362	107	41						
60	0.679953	116	0.927308	292	1.363781	199	1.470689	249	1.078391	339	0.733255	106	40						
61	0.680069	115	7600	292	3980	199	0440	249	8051	340	3149	107	39						
62	0184	115	7892	293	4179	199	1.470191	249	7711	340	3042	107	38						
63	0299	115	8185	292	4378	199	1.469942	248	7372	339	2935	107	37						
64	0414	115	8477	293	4577	199	9694	249	7033	339	2828	107	36						
65	0529	115	8770	292	4776	199	9445	249	6693	340	2721	107	35						
66	0644	115	9062	293	4975	199	9196	248	6354	339	2614	107	34						
67	0759	115	9355	293	5174	199	8948	248	6015	339	2507	107	33						
68	0874	115	9648	293	5374	200	8700	248	5676	339	2400	107	32						
69	0989	115	0.929941	293	5573	199	8452	248	5338	338	2293	107	31						
70	0.681104	115	0.930234	293	1.365772	200	1.468204	248	1.074999	339	0.732186	107	30						
71	1219	115	0527	293	5972	200	7956	248	4660	338	2079	107	29						
72	1334	115	0820	293	6172	200	7708	247	4322	338	1972	107	28						
73	1449	115	1113	293	6372	200	7461	247	3984	338	1865	107	27						
74	1564	115	1406	293	6571	199	7213	248	3645	339	1758	107	26						
75	1679	115	1700	294	6771	200	6966	247	3307	338	1651	107	25						
76	1794	115	1993	293	6972	201	6718	248	2969	338	1544	107	24						
77	1909	115	2287	294	7172	200	6471	247	2631	338	1437	107	23						
78	2024	115	2580	293	7372	200	6224	247	2294	337	1330	107	22						
79	2139	115	2874	294	7572	200	5977	247	1956	338	1223	107	21						
80	0.682254	115	0.933168	294	1.367773	201	1.465731	246	1.071619	337	0.731116	107	20						
81	2368	114	3462	294	7973	200	5484	247	1281	338	1008	108	19						
82	2483	115	3756	294	8174	201	5237	247	0944	337	0901	107	18						
83	2598	115	4050	294	8375	201	4991	246	0607	337	0794	107	17						
84	2713	115	4344	294	8575	201	4745	246	1.070270	337	0687	107	16						
85	2828	114	4638	295	8776	201	4498	247	1.069933	337	0580	108	15						
86	2942	115	4933	294	8977	201	4252	246	9596	337	0472	107	14						
87	3057	115	5227	295	9178	202	4006	245	9259	337	0365	107	13						
88	3172	115	5522	295	9380	202	3761	245	8922	337	0258	107	12						
89	3287	115	5816	294	9581	201	3515	246	8586	336	0150	108	11						
90	0.683401	114	0.936111	295	1.369782	201	1.463269	246	1.068250	336	0.730043	107	10						
91	3516	115	6406	295	1.369984	202	3024	245	7913	337	0.729936	107	09						
92	3631	115	6701	295	1.370185	201	2778	246	7577	336	9828	108	08						
93	3745	114	6995	294	0387	202	2533	245	7241	336	9721	107	07						
94	3860	115	7290	295	0589	202	2288	245	6905	336	9613	108	06						
95	3974	114	7586	296	0791	202	2043	245	6569	336	9506	107	05						
96	4089	115	7881	295	0992	201	1798	245	6234	335	9399	107	04						
97	4204	115	8176	295	1195	203	1553	245	5898	336	9291	108	03						
98	4318	114	8471	295	1397	202	1309	244	5562	336	9184	107	02						
99	4433	115	8767	296	1599	202	1064	245	5227	335	9076	108	01						
100	0.684547	114	0.939063	296	1.371801	202	1.460820	244	1.064892	335	0.728969	107	00						
	cos		cotg		cosec		sec		tang		sin		c						
	246	248	250	252	254	256	287	289	291	293	295	335	337	339	341	343	345	347	
1	24.6	24.8	25.0	25.2	25.4	25.6	28.7	28.9	29.1	29.3	29.5	33.5	33.7	33.9	34.1	34.3	34.5	34.7	1
2	49.2	49.6	50.0	50.4	50.8	51.2	57.4	57.8	58.2	58.6	59.0	67.0	67.4	67.8	68.2	68.6	69.0	69.4	2
3	73.8	74.4	75.0	75.6	76.2	76.8	86.1	86.7	87.3	87.9	88.5	100.5	101.1	101.7	102.3	102.9	103.5	104.1	3
4	98.4	99.2	100.0	100.8	101.6	102.4	114.8	115.6	116.4	117.2	118.0	134.0	134.8	135.6	136.4	137.2	138.0	138.8	4
5	123.0	124.0	125.0	126.0	127.0	128.0	143.5	144.5	145.5	146.5	147.5	167.5	168.5	169.5	170.5	171.5	172.5	173.5	5
6	147.6	148.8	150.0	151.2	152.4	153.6	172.2	173.4	174.6	175.8	177.0	201.0	202.2	203.4	204.6	205.8	207.0	208.2	6
7	172.2	173.6	175.0	176.4	177.8	179.2	200.9	202.3	203.7	205.1	206.5	234.5	235.9	237.3	238.7	240.1	241.5	242.9	7
8	196.8	198.4	200.0	201.6	203.2	204.8	229.6	231.2	232.8	234.4	236.0	268.0	269.6	271.2	272.8	274.4	276.0	277.6	8
9	221.4	223.2	225.0	226.8	228.6	230.4	258.3	260.1	261.9	263.7	265.5	301.5	303.3	305.1	306.9	308.7	310.5	312.3	9

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c	sin		tang		sec		cosec		cotg		cos								
00	0.684547	115	0.939063	295	1.371801	203	1.460820	244	1.064892	335	0.728969	108	100						
01	4662	114	9358	296	2004	202	0576	245	4557	335	8861	107	99						
02	4776	115	9654	296	2206	203	0331	245	4222	335	8754	107	98						
03	4891	115	0.939950	296	2409	203	1.460087	244	3887	335	8646	108	97						
04	5005	114	0.940246	296	2611	202	1.459843	244	3552	335	8538	108	96						
05	5119	114	0542	296	2814	203	9600	243	3217	335	8431	107	95						
06	5234	115	0838	296	3017	203	9356	244	2883	334	8323	108	94						
07	5348	114	1134	296	3220	203	9112	244	2548	335	8215	108	93						
08	5463	115	1430	296	3423	203	8869	243	2214	334	8108	107	92						
09	5577	114	1726	296	3626	203	8625	244	1880	334	8000	108	91						
10	0.685691	114	0.942023	297	1.373829	203	1.458382	243	1.061545	335	0.727892	108	90						
11	5806	115	2319	297	4033	204	8139	243	1211	334	7785	107	89						
12	5920	114	2616	297	4236	203	7896	243	0877	334	7677	108	88						
13	6034	114	2913	297	4440	204	7653	243	0544	333	7569	108	87						
14	6149	115	3209	296	4643	203	7410	243	1.060210	334	7461	108	86						
15	6263	114	3506	297	4847	204	7168	242	1.059876	334	7354	107	85						
16	6377	114	3803	297	5051	204	6925	243	9543	333	7246	108	84						
17	6491	114	4100	297	5255	204	6683	242	9209	334	7138	108	83						
18	6605	114	4397	297	5459	204	6440	243	8876	333	7030	108	82						
19	6720	115	4695	298	5663	204	6198	242	8543	333	6922	108	81						
20	0.686834	114	0.944992	297	1.375867	204	1.455956	242	1.058210	333	0.726814	108	80						
21	6948	114	5289	298	6071	205	5714	242	7877	333	6707	108	79						
22	7062	114	5587	297	6276	204	5472	242	7544	333	6599	108	78						
23	7176	114	5884	298	6480	204	5231	241	7212	332	6491	108	77						
24	7290	114	6182	298	6685	205	4989	242	6879	333	6383	108	76						
25	7404	114	6480	298	6889	204	4748	241	6547	332	6275	108	75						
26	7519	115	6778	298	7094	205	4506	242	6214	333	6167	108	74						
27	7633	114	7076	298	7299	205	4265	241	5882	332	6059	108	73						
28	7747	114	7374	298	7504	205	4024	241	5550	332	5951	108	72						
29	7861	114	7672	298	7709	205	3783	241	5218	332	5843	108	71						
30	0.687975	114	0.947970	298	1.377914	205	1.453542	241	1.054886	332	0.725735	108	70						
31	8089	114	8268	298	8119	205	3301	241	4554	332	5627	108	69						
32	8203	114	8567	299	8325	206	3060	241	4222	332	5519	108	68						
33	8317	114	8865	298	8530	205	2820	240	3891	331	5410	109	67						
34	8431	114	9164	299	8735	205	2579	241	3559	332	5302	108	66						
35	8544	113	9462	298	8941	206	2339	240	3228	331	5194	108	65						
36	8658	114	0.949761	299	9147	206	2099	240	2896	332	5086	108	64						
37	8772	114	0.950060	299	9353	206	1859	240	2565	331	4978	108	63						
38	8886	114	0359	299	9559	206	1619	240	2234	331	4870	108	62						
39	9000	114	0658	299	9764	205	1379	240	1903	331	4761	109	61						
40	0.689114	114	0.950957	299	1.379971	206	1.451139	240	1.051572	331	0.724653	108	60						
41	9228	114	1256	299	1.380177	206	0899	240	1242	330	4545	108	59						
42	9341	113	1555	299	0383	206	0660	239	0911	331	4437	108	58						
43	9455	114	1855	300	0589	206	0421	239	0581	330	4328	109	57						
44	9569	114	2154	299	0796	207	1.450181	240	1.050250	331	4220	108	56						
45	9683	114	2454	300	1002	206	1.449942	239	1.049920	330	4112	108	55						
46	9796	114	2753	300	1209	207	9703	239	9590	330	4003	109	54						
47	0.689910	114	3053	300	1416	207	9464	239	9260	330	3895	108	53						
48	0.690024	114	3353	300	1623	207	9225	239	8930	330	3787	108	52						
49	0138	114	3653	300	1830	207	8986	239	8600	330	3678	109	51						
50	0.690251	113	0.953953	300	1.382037	207	1.448748	238	1.048270	330	0.723570	108	50						
cos		cotg		cosec		sec		tang		sin		c							
1	107	108	109	110	112	113	114	115	202	203	204	205	206	207	208	210	212	233	1
2	10.7	10.8	10.9	11.0	11.2	11.3	11.4	11.5	20.2	20.3	20.4	20.5	20.6	20.7	20.8	21.0	21.2	23.3	2
3	21.4	21.6	21.8	22.0	22.4	22.6	22.8	23.0	40.4	40.6	40.8	41.0	41.2	41.4	41.6	42.0	42.4	46.6	3
4	32.1	32.4	32.7	33.0	33.6	33.9	34.2	34.5	60.6	60.9	61.2	61.5	61.8	62.1	62.4	63.0	63.6	69.9	4
5	42.8	43.2	43.6	44.0	44.8	45.2	45.6	46.0	80.8	81.2	81.6	82.0	82.4	82.8	83.2	84.0	84.8	93.2	5
6	53.5	54.0	54.5	55.0	56.0	56.5	57.0	57.5	101.0	101.5	102.0	102.5	103.0	103.5	104.0	105.0	106.0	116.5	6
7	64.2	64.8	65.4	66.0	67.2	67.8	68.4	69.0	121.2	121.8	122.4	123.0	123.6	124.2	124.8	126.0	127.2	139.8	7
8	74.9	75.6	76.3	77.0	78.4	79.1	79.8	80.5	141.4	142.1	142.8	143.5	144.2	144.9	145.6	147.0	148.4	163.1	8
9	85.6	86.4	87.2	88.0	89.6	90.4	91.2	92.0	161.6	162.4	163.2	164.0	164.8	165.6	166.4	168.0	169.6	186.4	9
10	96.3	97.2	98.1	99.0	100.8	101.7	102.6	103.5	181.8	182.7	183.6	184.5	185.4	186.3	187.2	189.0	190.8	209.7	10

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c	sin		tang		sec		cosec		cotg		cos								
50	0.690251	114	0.953953	300	1.382037	207	1.448748	239	1.048270	329	0.723570	109	50						
51	0365	114	4253	300	2244	207	8509	238	7941	330	3461	108	49						
52	0479	113	4553	300	2451	207	8271	238	7611	330	3353	108	48						
53	0592	114	4853	300	2658	207	8033	238	7282	329	3244	109	47						
54	0706	114	5153	300	2866	208	7795	238	6952	330	3136	108	46						
55	0819	113	5454	301	3073	207	7557	238	6623	329	3027	109	45						
56	0933	114	5754	300	3281	208	7319	238	6294	329	2919	108	44						
57	1046	113	6055	301	3489	208	7081	238	5965	329	2810	109	43						
58	1160	114	6356	301	3697	208	6843	238	5636	329	2702	108	42						
59	1273	113	6656	300	3904	207	6605	238	5307	329	2593	109	41						
60	0.691387	114	0.956957	301	1.384112	208	1.446368	237	1.044979	328	0.722485	108	40						
61	1500	113	7258	301	4321	209	6131	237	4650	329	2376	109	39						
62	1614	114	7559	301	4529	208	5893	238	4322	328	2267	109	38						
63	1727	113	7861	302	4737	208	5656	237	3993	329	2159	108	37						
64	1841	114	8162	301	4945	208	5419	237	3665	328	2050	109	36						
65	1954	113	8463	301	5154	209	5182	237	3337	328	1941	109	35						
66	2068	114	8765	302	5363	209	4946	236	3009	328	1833	108	34						
67	2181	113	9066	301	5571	208	4709	237	2681	328	1724	109	33						
68	2294	113	9368	302	5780	209	4472	237	2353	328	1615	109	32						
69	2408	114	9669	301	5989	209	4236	236	2026	327	1506	109	31						
70	0.692521	113	0.959971	302	1.386198	209	1.444000	236	1.041698	328	0.721398	108	30						
71	2634	113	0.960273	302	6407	209	3763	237	1371	327	1289	109	29						
72	2748	114	0575	302	6616	209	3527	236	1043	328	1180	109	28						
73	2861	113	0877	302	6825	209	3291	236	0716	327	1071	109	27						
74	2974	113	1179	302	7035	210	3055	236	0389	327	0962	109	26						
75	3087	113	1481	302	7244	209	2820	235	1.040062	327	0854	108	25						
76	3201	114	1784	303	7454	210	2584	236	1.039735	327	0745	109	24						
77	3314	113	2086	302	7663	209	2348	236	9408	327	0636	109	23						
78	3427	113	2389	303	7873	210	2113	235	9081	327	0527	109	22						
79	3540	113	2691	302	8083	210	1878	235	8755	326	0418	109	21						
80	0.693653	113	0.962994	303	1.388293	210	1.441642	236	1.038428	327	0.720309	109	20						
81	3766	113	3297	303	8503	210	1407	235	8102	326	0200	109	19						
82	3880	114	3600	303	8713	210	1172	235	7775	327	0.720091	109	18						
83	3993	113	3903	303	8923	210	0937	235	7449	326	0.719982	109	17						
84	4106	113	4206	303	9134	211	0703	234	7123	326	9873	109	16						
85	4219	113	4509	303	9344	210	0468	235	6797	326	9764	109	15						
86	4332	113	4812	303	9555	211	1.440233	235	6471	326	9655	109	14						
87	4445	113	5116	304	9765	210	1.439999	234	6145	326	9546	109	13						
88	4558	113	5419	303	1.389976	211	9765	234	5820	325	9437	109	12						
89	4671	113	5723	304	1.390187	211	9531	234	5494	326	9328	109	11						
90	0.694784	113	0.966026	303	1.390398	211	1.439296	235	1.035169	325	0.719219	109	10						
91	4897	113	6330	304	0609	211	9062	234	4843	326	9109	110	09						
92	5010	113	6634	304	0820	211	8829	233	4518	325	9000	109	08						
93	5123	113	6938	304	1031	211	8595	234	4193	325	8891	109	07						
94	5236	113	7242	304	1243	212	8361	234	3868	325	8782	109	06						
95	5349	113	7546	304	1454	211	8128	233	3543	325	8673	109	05						
96	5461	112	7850	304	1666	212	7894	234	3218	325	8563	110	04						
97	5574	113	8154	304	1877	211	7661	233	2893	325	8454	109	03						
98	5687	113	8458	304	2089	212	7428	233	2569	324	8345	109	02						
99	5800	113	8763	305	2301	212	7195	233	2244	325	8236	109	01						
100	0.695913	113	0.969067	304	1.392513	212	1.436962	233	1.031920	324	0.718126	110	00						
cos		cotg		cosec		sec		tang		sin		c							
	235	237	239	241	243	245	295	297	299	301	303	305	324	326	328	330	332	334	
1	23.5	23.7	23.9	24.1	24.3	24.5	29.5	29.7	29.9	30.1	30.3	30.5	32.4	32.6	32.8	33.0	33.2	33.4	1
2	47.0	47.4	47.8	48.2	48.6	49.0	59.0	59.4	59.8	60.2	60.6	61.0	64.8	65.2	65.6	66.0	66.4	66.8	2
3	70.5	71.1	71.7	72.3	72.9	73.5	88.5	89.1	89.7	90.3	90.9	91.5	97.2	97.8	98.4	99.0	99.6	100.2	3
4	94.0	94.8	95.6	96.4	97.2	98.0	118.0	118.8	119.6	120.4	121.2	122.0	129.6	130.4	131.2	132.0	132.8	133.6	4
5	117.5	118.5	119.5	120.5	121.5	122.5	147.5	148.5	149.5	150.5	151.5	152.5	162.0	163.0	164.0	165.0	166.0	167.0	5
6	141.0	142.2	143.4	144.6	145.8	147.0	177.0	178.2	179.4	180.6	181.8	183.0	194.4	195.6	196.8	198.0	199.2	200.4	6
7	164.5	165.9	167.3	168.7	170.1	171.5	206.5	207.9	209.3	210.7	212.1	213.5	226.8	228.2	229.6	231.0	232.4	233.8	7
8	188.0	189.6	191.2	192.8	194.4	196.0	236.0	237.6	239.2	240.8	242.4	244.0	259.2	260.8	262.4	264.0	265.6	267.2	8
9	211.5	213.3	215.1	216.9	218.7	220.5	265.5	267.3	269.1	270.9	272.7	274.5	291.6	293.4	295.2	297.0	298.8	300.6	9

c	sin		tang		sec		cosec		cotg		cos								
00	0.695913	113	0.969067	305	1.392513	212	1.436962	233	1.031920	324	0.718126	109	100						
01	6026	112	9372	305	2725	212	6729	233	1596	325	8017	109	99						
02	6138	112	9677	305	2937	212	6496	233	1271	325	7908	109	98						
03	6251	113	0.969982	305	3149	212	6263	233	0947	324	7798	110	97						
04	6364	113	0.970287	305	3361	212	6031	232	0623	324	7689	109	96						
05	6477	113	0592	305	3574	213	5798	233	1.030300	323	7580	109	95						
06	6589	112	0897	305	3786	212	5566	232	1.029976	324	7470	110	94						
07	6702	113	1202	305	3999	213	5334	232	9652	324	7361	109	93						
08	6815	113	1507	305	4212	213	5102	232	9329	323	7251	110	92						
09	6927	112	1813	306	4424	212	4870	232	9005	324	7142	109	91						
10	0.697040	113	0.972118	305	1.394637	213	1.434638	232	1.028682	323	0.717032	110	90						
11	7153	112	2424	305	4850	213	4406	231	8358	323	6923	110	89						
12	7265	113	2729	306	5063	214	4175	232	8035	323	6813	109	88						
13	7378	112	3035	306	5277	213	3943	232	7712	323	6704	109	87						
14	7490	113	3341	306	5490	213	3712	231	7389	323	6594	110	86						
15	7603	113	3647	306	5703	213	3480	232	7067	322	6485	109	85						
16	7715	112	3953	306	5917	214	3249	231	6744	323	6375	110	84						
17	7828	113	4259	306	6131	214	3018	231	6421	323	6265	110	83						
18	7940	112	4565	306	6344	213	2787	231	6099	322	6156	109	82						
19	8053	113	4871	306	6558	214	2556	231	5776	323	6046	110	81						
20	0.698165	112	0.975178	307	1.396772	214	1.432325	231	1.025454	322	0.715936	110	80						
21	8278	113	5484	306	6986	214	2095	230	5132	322	5827	109	79						
22	8390	112	5791	307	7200	214	1864	231	4810	322	5717	110	78						
23	8503	113	6098	307	7414	214	1634	230	4488	322	5607	110	77						
24	8615	112	6404	306	7629	215	1403	231	4166	322	5498	109	76						
25	8727	112	6711	307	7843	214	1173	230	3844	322	5388	110	75						
26	8840	113	7018	307	8058	215	0943	230	3522	322	5278	110	74						
27	8952	112	7325	307	8272	214	0713	230	3201	321	5168	110	73						
28	9065	113	7633	308	8487	215	0483	230	2879	322	5059	109	72						
29	9177	112	7940	307	8702	215	0253	230	2558	321	4949	110	71						
30	0.699289	112	0.978247	307	1.398917	215	1.430024	229	1.022237	321	0.714839	110	70						
31	9401	113	8555	308	9132	215	1.429794	229	1915	321	4729	110	69						
32	9514	112	8862	307	9347	215	9565	229	1594	321	4619	110	68						
33	9626	112	9170	308	9562	215	9335	230	1273	321	4509	110	67						
34	9738	112	9478	308	9777	215	9106	229	0952	321	4399	110	66						
35	9850	112	0.979785	307	1.399993	216	8877	229	0632	320	4289	110	65						
36	0.699963	113	0.980093	308	1.400208	215	8648	229	1.020311	321	4180	109	64						
37	0.700075	112	0401	308	0424	216	8419	229	1.019991	320	4070	110	63						
38	0187	112	0709	308	0639	215	8190	229	9670	321	3960	110	62						
39	0299	112	1018	309	0855	216	7961	229	9350	320	3850	110	61						
40	0.700411	112	0.981326	308	1.401071	216	1.427733	228	1.019029	321	0.713740	110	60						
41	0523	112	1634	308	1287	216	7504	229	8709	320	3630	110	59						
42	0635	112	1943	309	1503	216	7276	228	8389	320	3520	110	58						
43	0747	112	2251	308	1720	217	7048	228	8069	320	3409	111	57						
44	0859	112	2560	309	1936	216	6820	228	7750	319	3299	110	56						
45	0972	113	2869	309	2152	216	6592	228	7430	320	3189	110	55						
46	1084	112	3178	309	2369	217	6364	228	7110	320	3079	110	54						
47	1196	112	3487	309	2585	216	6136	228	6791	319	2969	110	53						
48	1308	112	3796	309	2802	217	5908	228	6471	320	2859	110	52						
49	1419	111	4105	309	3019	217	5680	228	6152	319	2749	110	51						
50	0.701531	112	0.984414	309	1.403236	217	1.425453	227	1.015833	319	0.712639	110	50						
	cos		cotg		cosec		sec		tang		sin		c						
	109	110	111	112	113	212	213	214	215	216	217	218	219	220	221	222	223	224	
1	10.9	11.0	11.1	11.2	11.3	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	22.0	22.1	22.2	22.3	22.4	1
2	21.8	22.0	22.2	22.4	22.6	42.4	42.6	42.8	43.0	43.2	43.4	43.6	43.8	44.0	44.2	44.4	44.6	44.8	2
3	32.7	33.0	33.3	33.6	33.9	63.6	63.9	64.2	64.5	64.8	65.1	65.4	65.7	66.0	66.3	66.6	66.9	67.2	3
4	43.6	44.0	44.4	44.8	45.2	84.8	85.2	85.6	86.0	86.4	86.8	87.2	87.6	88.0	88.4	88.8	89.2	89.6	4
5	54.5	55.0	55.5	56.0	56.5	106.0	106.5	107.0	107.5	108.0	108.5	109.0	109.5	110.0	110.5	111.0	111.5	112.0	5
6	65.4	66.0	66.6	67.2	67.8	127.2	127.8	128.4	129.0	129.6	130.2	130.8	131.4	132.0	132.6	133.2	133.8	134.4	6
7	76.3	77.0	77.7	78.4	79.1	148.4	149.1	149.8	150.5	151.2	151.9	152.6	153.3	154.0	154.7	155.4	156.1	156.8	7
8	87.2	88.0	88.8	89.6	90.4	169.6	170.4	171.2	172.0	172.8	173.6	174.4	175.2	176.0	176.8	177.6	178.4	179.2	8
9	98.1	99.0	99.9	100.8	101.7	190.8	191.7	192.6	193.5	194.4	195.3	196.2	197.1	198.0	198.9	199.8	200.7	201.6	9

c	sin			tang			sec			cosec			cotg			cos			
50	0.701531		112	0.984414		309	1.403236		217	1.425453		228	1.015833		319	0.712639		111	50
51	1643		112	4723		310	3453		217	5225		227	5514		320	2528		110	49
52	1755		112	5033		309	3670		217	4998		227	5194		318	2418		110	48
53	1867		112	5342		310	3887		218	4771		227	4876		319	2308		110	47
54	1979		112	5652		310	4105		217	4544		227	4557		319	2198		111	46
55	2091		112	5962		310	4322		218	4317		227	4238		319	2087		110	45
56	2203		112	6272		310	4540		217	4090		227	3919		318	1977		110	44
57	2315		112	6582		310	4757		218	3863		226	3601		318	1867		111	43
58	2426		111	6892		310	4975		218	3637		226	3283		318	1756		111	42
59	2538		112	7202		310	5193		218	3410		227	2964		319	1646		110	41
60	0.702650		112	0.987512		310	1.405411		218	1.423184		226	1.012646		318	0.711536		111	40
61	2762		111	7822		311	5629		218	2957		226	2328		318	1425		110	39
62	2873		112	8133		310	5847		218	2731		226	2010		318	1315		111	38
63	2985		112	8443		311	6065		219	2505		226	1692		318	1204		110	37
64	3097		112	8754		310	6284		218	2279		226	1374		318	1094		110	36
65	3209		111	9064		311	6502		219	2053		226	1056		317	0984		111	35
66	3320		112	9375		311	6721		218	1827		225	0739		318	0873		110	34
67	3432		112	9686		311	6939		219	1602		226	0421		317	0763		111	33
68	3544		111	0.989997		311	7158		219	1376		226	1.010104		317	0652		110	32
69	3655		112	0.990308		311	7377		219	1151		225	1.009787		317	0542		111	31
70	0.703767		111	0.990619		312	1.407596		219	1.420925		226	1.009469		317	0.710431		110	30
71	3878		112	0931		311	7815		219	0700		225	9152		317	0321		111	29
72	3990		111	1242		311	8034		220	0475		225	8835		317	0210		111	28
73	4101		112	1553		312	8254		219	0250		225	8518		316	0.710099		110	27
74	4213		112	1865		312	8473		220	1.420025		225	8202		317	0.709989		111	26
75	4325		111	2177		311	8693		219	1.419800		225	7885		317	9878		111	25
76	4436		112	2488		312	8912		220	9575		224	7568		316	9767		110	24
77	4548		111	2800		312	9132		220	9351		225	7252		317	9657		111	23
78	4659		111	3112		312	9352		220	9126		224	6935		316	9546		111	22
79	4770		112	3424		312	9572		220	8902		225	6619		316	9435		110	21
80	0.704882		111	0.993736		313	1.409792		220	1.418677		224	1.006303		316	0.709325		111	20
81	4993		112	4049		312	1.410012		220	8453		224	5987		316	9214		111	19
82	5105		111	4361		313	0232		220	8229		224	5671		316	9103		111	18
83	5216		111	4674		312	0452		221	8005		224	5355		316	8992		110	17
84	5327		112	4986		313	0673		220	7781		223	5039		315	8882		111	16
85	5439		111	5299		312	0893		221	7558		224	4724		316	8771		111	15
86	5550		111	5611		313	1114		221	7334		224	4408		316	8660		111	14
87	5661		112	5924		313	1335		220	7110		223	4092		315	8549		111	13
88	5773		111	6237		313	1555		221	6887		224	3777		315	8438		110	12
89	5884		111	6550		313	1776		221	6663		223	3462		315	8328		111	11
90	0.705995		111	0.996863		314	1.411997		221	1.416440		223	1.003147		316	0.708217		111	10
91	6106		112	7177		313	2218		222	6217		223	2831		315	8106		111	09
92	6218		111	7490		313	2440		221	5994		223	2516		314	7995		111	08
93	6329		111	7803		314	2661		222	5771		223	2202		315	7884		111	07
94	6440		111	8117		313	2883		221	5548		222	1887		315	7773		111	06
95	6551		111	8430		314	3104		222	5326		223	1572		315	7662		111	05
96	6662		111	8744		314	3326		222	5103		223	1257		314	7551		111	04
97	6773		112	9058		314	3548		221	4880		222	0943		314	7440		111	03
98	6885		111	9372		314	3769		222	4658		222	0629		315	7329		111	02
99	6996		111	0.999686		314	3991		223	4436		222	0314		314	7218		111	01
100	0.707107		111	1.000000		314	1.414214		223	1.414214		222	1.000000		314	0.707107		111	00
	cos			cotg			cosec			sec			tang			sin			c
	225	226	227	228	229	231	233	305	307	309	311	313	315	317	319	321	323	325	
1	22.5	22.6	22.7	22.8	22.9	23.1	23.3	30.5	30.7	30.9	31.1	31.3	31.5	31.7	31.9	32.1	32.3	32.5	1
2	45.0	45.2	45.4	45.6	45.8	46.2	46.6	61.0	61.4	61.8	62.2	62.6	63.0	63.4	63.8	64.2	64.6	65.0	2
3	67.5	67.8	68.1	68.4	68.7	69.3	69.9	91.5	92.1	92.7	93.3	93.9	94.5	95.1	95.7	96.3	96.9	97.5	3
4	90.0	90.4	90.8	91.2	91.6	92.4	93.2	122.0	122.8	123.6	124.4	125.2	126.0	126.8	127.6	128.4	129.2	130.0	4
5	112.5	113.0	113.5	114.0	114.5	115.5	116.5	152.5	153.5	154.5	155.5	156.5	157.5	158.5	159.5	160.5	161.5	162.5	5
6	135.0	135.6	136.2	136.8	137.4	138.6	139.8	183.0	184.2	185.4	186.6	187.8	189.0	190.2	191.4	192.6	193.8	195.0	6
7	157.5	158.2	158.9	159.6	160.3	161.7	163.1	213.5	214.9	216.3	217.7	219.1	220.5	221.9	223.3	224.7	226.1	227.5	7
8	180.0	180.8	181.6	182.4	183.2	184.8	186.4	244.0	245.6	247.2	248.8	250.4	252.0	253.6	255.2	256.8	258.4	260.0	8
9	202.5	203.4	204.3	205.2	206.1	207.9	209.7	274.5	276.3	278.1	279.9	281.7	283.5	285.3	287.1	288.9	290.7	292.5	9