度	分	sin	cos	tan	cot	sec	csc	度	分
0	00	0.0000	1.0000	0.0000		1.0000		90	00
0	10	0.0029	1.0000	0.0029	343.7737	1.0000	343.7752	89	50
0	20	0.0058	1.0000	0.0058	171.8854	1.0000	171.8883	89	40
0	30	0.0087	1.0000	0.0087	114.5887	1.0000	114.5930	89	30
0	40	0.0116	0.9999	0.0116	85.9398	1.0001	85.9456	89	20
0	50	0.0145	0.9999	0.0145	68.7501	1.0001	68.7574	89	10
1	00	0.0175	0.9998	0.0175	57.2900	1.0002	57.2987	89	00
1	10	0.0204	0.9998	0.0204	49.1039	1.0002	49.1141	88	50
1	20	0.0233	0.9997	0.0233	42.9641	1.0003	42.9757	88	40
1	30	0.0262	0.9997	0.0262	38.1885	1.0003	38.2016	88	30
1	40	0.0291	0.9996	0.0291	34.3678	1.0004	34.3823	88	20
1	50	0.0320	0.9995	0.0320	31.2416	1.0005	31.2576	88	10
2	00	0.0349	0.9994	0.0349	28.6363	1.0006	28.6537	88	00
2	10	0.0378	0.9993	0.0378	26.4316	1.0007	26.4505	87	50
2	20	0.0407	0.9992	0.0407	24.5418	1.0008	24.5621	87	40
2	30	0.0436	0.9990	0.0437	22.9038	1.0010	22.9256	87	30
2	40	0.0465	0.9989	0.0466	21.4704	1.0011	21.4937	87	20
2	50	0.0494	0.9988	0.0495	20.2056	1.0012	20.2303	87	10
3	00	0.0523	0.9986	0.0524	19.0811	1.0014	19.1073	87	00
3	10	0.0552	0.9985	0.0553	18.0750	1.0015	18.1026	86	50
3	20	0.0581	0.9983	0.0582	17.1693	1.0017	17.1984	86	40
3	30	0.0610	0.9981	0.0612	16.3499	1.0019	16.3804	86	30
3	40	0.0640	0.9980	0.0641	15.6048	1.0021	15.6368	86	20
3	50	0.0669	0.9978	0.0670	14.9244	1.0022	14.9579	86	10
4	00	0.0698	0.9976	0.0699	14.3007	1.0024	14.3356	86	00
4	10	0.0727	0.9974	0.0729	13.7267	1.0027	13.7631	85	50
4	20	0.0756	0.9971	0.0758	13.1969	1.0029	13.2347	85	40
4	30	0.0785	0.9969	0.0787	12.7062	1.0031	12.7455	85	30
4	40	0.0814	0.9967	0.0816	12.2505	1.0033	12.2913	85	20
4	50	0.0843	0.9964	0.0846	11.8262	1.0036	11.8684	85	10
5	00	0.0872	0.9962	0.0875	11.4301	1.0038	11.4737	85	00
5	10	0.0901	0.9959	0.0904	11.0594	1.0041	11.1045	84	50
5	20	0.0929	0.9957	0.0934	10.7119	1.0043	10.7585	84	40
5	30	0.0958	0.9954	0.0963	10.3854	1.0046	10.4334	84	30
5	40	0.0987	0.9951	0.0992	10.0780	1.0049	10.1275	84	20
5	50	0.1016	0.9948	0.1022	9.7882	1.0052	9.8391	84	10
6	00	0.1045	0.9945	0.1051	9.5144	1.0055	9.5668	84	00
6	10	0.1074	0.9942	0.1080	9.2553	1.0058	9.3092	83	50
6	20	0.1103	0.9939	0.1110	9.0098	1.0061	9.0652	83	40
6	30	0.1132	0.9936	0.1139	8.7769	1.0065	8.8337	83	30
6	40	0.1161	0.9932	0.1169	8.5555	1.0068	8.6138	83	20
6	50	0.1190	0.9929	0.1198	8.3450	1.0072	8.4047	83	10
7	00	0.1219	0.9925	0.1228	8.1443	1.0075	8.2055	83	00
7	10	0.1248	0.9922	0.1257	7.9530	1.0079	8.0156	82	50
7	20	0.1276	0.9918	0.1287	7.7704	1.0082	7.8344	82	40
7	30	0.1305	0.9914	0.1317	7.5958	1.0086	7.6613	82	30
7	40	0.1334	0.9911	0.1346	7.4287	1.0090	7.4957	82	20
7	50	0.1363	0.9907	0.1376	7.2687	1.0094	7.3372	82	10
8	00	0.1392	0.9903	0.1405	7.1154	1.0098	7.1853	82	00

8 10 0.1421 0.9899 0.1435 6.9682 1.0102 7			
	7.0396	81	50
	5.8998	81	40
	6.7655	81	30
	5.6363	81	20
	5.5121	81	10
	5.3925	81	00
	5.2772	80	50
	5.1661	80	40
	5.0589	80	30
	5.9554	80	20
	5.8554	80	10
	5.7588	80	00
	5.6653	79	50
	5.5749	79	40
	5.4874	79	30
	5.4026	79	20
	5.3205	79	10
	5.2408	79	00
	5.1636	78	50
	5.0886	78	40
	5.0159	78	30
	4.9452	78	20
	4.8765	78	10
	4.8097	78	00
	4.7448	77	50
	4.6817	77	40
	4.6202	77	30
	4.5604	77	20
	4.5022	77	10
	4.4454	77	00
	4.3901	76	50
	4.3362	76	40
	4.2837	76	30
	4.2324	76	20
	4.1824	76	10
	4.1336	76	00
	4.0859	75	50
	4.0394	75	40
	3.9939	75	30
	3.9495	75	20
	3.9061	75	10
	3.8637	75	00
	3.8222	74	50
	3.7817	74	40
	3.7420	74	30
	3.7032	74	20
	3.6652	74	10
	3.6280	74	00
	3.5915	73	50
16 20 0.2812 0.9596 0.2931 3.4124 1.0421 3	3.5559	73	40

	20	0.0010	0.0700	0.000	2.25.5	1 0 10 0	2 7200		-
16	30	0.2840	0.9588	0.2962	3.3759	1.0429	3.5209	73	30
16	40	0.2868	0.9580	0.2994	3.3402	1.0439	3.4867	73	20
16	50	0.2896	0.9572	0.3026	3.3052	1.0448	3.4532	73	10
17	00	0.2924	0.9563	0.3057	3.2709	1.0457	3.4203	73	00
17	10	0.2952	0.9555	0.3089	3.2371	1.0466	3.3881	72	50
17	20	0.2979	0.9546	0.3121	3.2041	1.0476	3.3565	72	40
17	30	0.3007	0.9537	0.3153	3.1716	1.0485	3.3255	72	30
17	40	0.3035	0.9528	0.3185	3.1397	1.0495	3.2951	72	20
17	50	0.3062	0.9520	0.3217	3.1084	1.0505	3.2653	72	10
18	00	0.3090	0.9511	0.3249	3.0777	1.0515	3.2361	72	00
18	10	0.3118	0.9502	0.3281	3.0475	1.0525	3.2074	71	50
18	20	0.3145	0.9492	0.3314	3.0178	1.0535	3.1792	71	40
18	30	0.3173	0.9483	0.3346	2.9887	1.0545	3.1515	71	30
18	40	0.3201	0.9474	0.3378	2.9600	1.0555	3.1244	71	20
18	50	0.3228	0.9465	0.3411	2.9319	1.0566	3.0977	71	10
19	00	0.3256	0.9455	0.3443	2.9042	1.0576	3.0716	71	00
19	10	0.3283	0.9446	0.3476	2.8770	1.0587	3.0458	70	50
19	20	0.3311	0.9436	0.3508	2.8502	1.0598	3.0206	70	40
19	30	0.3338	0.9426	0.3541	2.8239	1.0608	2.9957	70	30
19	40	0.3365	0.9417	0.3574	2.7980	1.0619	2.9713	70	20
19	50	0.3393	0.9407	0.3607	2.7725	1.0631	2.9474	70	10
20	00	0.3420	0.9397	0.3640	2.7475	1.0642	2.9238	70	00
20	10	0.3448	0.9387	0.3673	2.7228	1.0653	2.9006	69	50
20	20	0.3475	0.9377	0.3706	2.6985	1.0665	2.8779	69	40
20	30	0.3502	0.9367	0.3739	2.6746	1.0676	2.8555	69	30
20	40	0.3529	0.9356	0.3772	2.6511	1.0688	2.8334	69	20
20	50	0.3557	0.9346	0.3805	2.6279	1.0700	2.8117	69	10
21	00	0.3584	0.9336	0.3839	2.6051	1.0711	2.7904	69	00
21	10	0.3611	0.9325	0.3872	2.5826	1.0723	2.7695	68	50
21	20	0.3638	0.9315	0.3906	2.5605	1.0736	2.7488	68	40
21	30	0.3665	0.9304	0.3939	2.5386	1.0748	2.7285	68	30
21	40	0.3692	0.9293	0.3973	2.5172	1.0760	2.7085	68	20
21	50	0.3719	0.9283	0.4006	2.4960	1.0773	2.6888	68	10
22	00	0.3746	0.9272	0.4040	2.4751	1.0785	2.6695	68	00
22	10	0.3773	0.9261	0.4074	2.4545	1.0798	2.6504	67	50
22	20	0.3800	0.9250	0.4108	2.4342	1.0811	2.6316	67	40
22	30	0.3827	0.9239	0.4142	2.4142	1.0824	2.6131	67	30
22	40	0.3854	0.9228	0.4176	2.3945	1.0837	2.5949	67	20
22	50	0.3881	0.9216	0.4210	2.3750	1.0850	2.5770	67	10
23	00	0.3907	0.9205	0.4245	2.3559	1.0864	2.5593	67	00
23	10	0.3934	0.9194	0.4279	2.3369	1.0877	2.5419	66	50
23	20	0.3961	0.9182	0.4314	2.3183	1.0891	2.5247	66	40
23	30	0.3987	0.9171	0.4348	2.2998	1.0904	2.5078	66	30
23	40	0.4014	0.9159	0.4383	2.2817	1.0918	2.4912	66	20
23	50	0.4041	0.9147	0.4417	2.2637	1.0932	2.4748	66	10
24	00	0.4067	0.9135	0.4452	2.2460	1.0946	2.4586	66	00
24	10	0.4094	0.9124	0.4487	2.2286	1.0961	2.4426	65	50
24	20	0.4120	0.9112	0.4522	2.2113	1.0975	2.4269	65	40
24	30	0.4147	0.9100	0.4557	2.1943	1.0989	2.4114	65	30
24	40	0.4173	0.9088	0.4592	2.1775	1.1004	2.3961	65	20

24	50	0.4200	0.9075	0.4628	2.1609	1.1019	2.3811	65	10
25	00	0.4226	0.9063	0.4663	2.1445	1.1034	2.3662	65	00
25	10	0.4253	0.9051	0.4699	2.1283	1.1049	2.3515	64	50
25	20	0.4279	0.9038	0.4734	2.1123	1.1064	2.3371	64	40
25	30	0.4305	0.9026	0.4770	2.0965	1.1079	2.3228	64	30
25	40	0.4331	0.9013	0.4806	2.0809	1.1095	2.3088	64	20
25	50	0.4358	0.9001	0.4841	2.0655	1.1110	2.2949	64	10
26	00	0.4384	0.8988	0.4877	2.0503	1.1126	2.2812	64	00
26	10	0.4410	0.8975	0.4913	2.0353	1.1142	2.2677	63	50
26	20	0.4436	0.8962	0.4950	2.0204	1.1158	2.2543	63	40
26	30	0.4462	0.8949	0.4986	2.0057	1.1174	2.2412	63	30
26	40	0.4488	0.8936	0.5022	1.9912	1.1190	2.2282	63	20
26	50	0.4514	0.8923	0.5059	1.9768	1.1207	2.2153	63	10
27	00	0.4540	0.8910	0.5095	1.9626	1.1223	2.2027	63	00
27	10	0.4566	0.8897	0.5132	1.9486	1.1240	2.1902	62	50
27	20	0.4592	0.8884	0.5169	1.9347	1.1257	2.1779	62	40
27	30	0.4617	0.8870	0.5206	1.9210	1.1274	2.1657	62	30
27	40	0.4643	0.8857	0.5243	1.9074	1.1291	2.1537	62	20
27	50	0.4669	0.8843	0.5280	1.8940	1.1308	2.1418	62	10
28	00	0.4695	0.8829	0.5317	1.8807	1.1326	2.1301	62	00
28	10	0.4720	0.8816	0.5354	1.8676	1.1343	2.1185	61	50
28	20	0.4746	0.8802	0.5392	1.8546	1.1361	2.1070	61	40
28	30	0.4772	0.8788	0.5430	1.8418	1.1379	2.0957	61	30
28	40	0.4797	0.8774	0.5467	1.8291	1.1397	2.0846	61	20
28	50	0.4823	0.8760	0.5505	1.8165	1.1415	2.0736	61	10
29	00	0.4848	0.8746	0.5543	1.8040	1.1434	2.0627	61	00
29	10	0.4874	0.8732	0.5581	1.7917	1.1452	2.0519	60	50
29	20	0.4899	0.8718	0.5619	1.7796	1.1471	2.0413	60	40
29	30	0.4924	0.8704	0.5658	1.7675	1.1490	2.0308	60	30
29	40	0.4950	0.8689	0.5696	1.7556	1.1509	2.0204	60	20
29	50	0.4975	0.8675	0.5735	1.7437	1.1528	2.0101	60	10
30	00	0.5000	0.8660	0.5774	1.7321	1.1547	2.0000	60	00
30	10	0.5025	0.8646	0.5812	1.7205	1.1566	1.9900	59	50
30	20	0.5050	0.8631	0.5851	1.7090	1.1586	1.9801	59	40
30	30	0.5075	0.8616	0.5890	1.6977	1.1606	1.9703	59	30
30	40	0.5100	0.8601	0.5930	1.6864	1.1626	1.9606	59	20
30	50	0.5125	0.8587	0.5969	1.6753	1.1646	1.9511	59	10
31	00	0.5150	0.8572	0.6009	1.6643	1.1666	1.9416	59	00
31	10	0.5175	0.8557	0.6048	1.6534	1.1687	1.9323	58	50
31	20	0.5200	0.8542	0.6088	1.6426	1.1707	1.9230	58	40
31	30	0.5225	0.8526	0.6128	1.6319	1.1728	1.9139	58	30
31	40	0.5250	0.8511	0.6168	1.6212	1.1749	1.9048	58	20
31	50	0.5275	0.8496	0.6208	1.6107	1.1770	1.8959	58	10
32	00	0.5299	0.8480	0.6249	1.6003	1.1792	1.8871	58	00
32	10	0.5324	0.8465	0.6289	1.5900	1.1813	1.8783	57	50
32	20	0.5348	0.8450	0.6330	1.5798	1.1835	1.8697	57	40
32	30	0.5373	0.8434	0.6371	1.5697	1.1857	1.8612	57	30
32	40	0.5398	0.8418	0.6412	1.5597	1.1879	1.8527	57	20
32	50	0.5422	0.8403	0.6453	1.5497	1.1901	1.8443	57	10
33	00	0.5446	0.8387	0.6494	1.5399	1.1924	1.8361	57	00

33	10	0.5471	0.9271	0.6526	1.5201	1.1946	1 9270	56	50
33	10 20	0.5471	0.8371 0.8355	0.6536 0.6577	1.5301 1.5204	1.1946	1.8279 1.8198	56 56	40
33	30	0.5495 0.5519	0.8333	0.6619	1.5204	1.1909	1.8118	56	30
33	40	0.5544		0.6661	1.5013	1.1992	1.8039	56	20
33	50	0.5568	0.8323 0.8307	0.6703	1.4919	1.2013	1.7960	56	10
34	00	0.5592	0.8307	0.6745	1.4919	1.2059	1.7883	56	00
34	10	0.5592	0.8290	0.6787	1.4620	1.2002	1.7806	55	50
34	20	0.5640	0.8274	0.6830	1.4641	1.2110	1.7730	55	40
34	30	0.5664	0.8238	0.6873	1.4550	1.2110	1.7655	55	30
34	40	0.5688	0.8241	0.6916	1.4350	1.2154	1.7581	55	20
34	50	0.5088	0.8223	0.6959	1.4370	1.2133	1.7507	55	10
35	00	0.5736	0.8208	0.0939	1.4281	1.2208	1.7434	55	00
35	10	0.5760	0.8175	0.7002	1.4281	1.2233	1.7362	54	50
35	20	0.5783	0.8173	0.7040	1.4193	1.2258	1.7302	54	40
35	30	0.5783	0.8138	0.7039	1.4100	1.2283	1.7291	54	30
35	40	0.5831	0.8141	0.7177	1.3934	1.2309	1.7221	54	20
35	50	0.5854	0.8124	0.7177	1.3934	1.2335	1.7131	54	10
36	00	0.5878	0.8107	0.7265	1.3764	1.2353	1.7013	54	00
36	10	0.5901	0.8090	0.7203	1.3704	1.2387	1.6945	53	50
36	20	0.5901	0.8073	0.7310	1.3597	1.2367	1.6878	53	40
36	30	0.5948	0.8030	0.7333	1.3514	1.2413	1.6812	53	30
36	40	0.5948	0.8039	0.7445	1.3432	1.2440	1.6746	53	20
36	50	0.5972	0.8021	0.7443	1.3452	1.2494	1.6681	53	10
37	00	0.6018	0.8004	0.7490	1.3270	1.2494	1.6616	53	00
37	10	0.6041	0.7969	0.7581	1.3270	1.2549	1.6553	52	50
37	20	0.6065	0.7951	0.7627	1.3111	1.2577	1.6489	52	40
37	30	0.6088	0.7931	0.7673	1.3111	1.2605	1.6427	52	30
37	40	0.6111	0.7934	0.7720	1.3032	1.2633	1.6365	52	20
37	50	0.6134	0.7898	0.7766	1.2934	1.2661	1.6303	52	10
38	00	0.6157	0.7880	0.7700	1.2799	1.2690	1.6243	52	00
38	10	0.6180	0.7862	0.7813	1.2723	1.2090	1.6183	51	50
38	20	0.6202	0.7802	0.7907	1.2723	1.2748	1.6123	51	40
38	30	0.6202	0.7826	0.7954	1.2572	1.2778	1.6064	51	30
38	40	0.6248	0.7820	0.7934	1.2372	1.2807	1.6005	51	20
38	50	0.6271	0.7308	0.8050	1.2423	1.2837	1.5948	51	10
39	00	0.6293	0.7771	0.8098	1.2349	1.2868	1.5890	51	00
39	10	0.6293	0.7753	0.8038	1.2276	1.2898	1.5833	50	50
39	20	0.6338	0.7735	0.8140	1.2203	1.2929	1.5777	50	40
39	30	0.6361	0.7735	0.8193	1.2203	1.2929	1.5721	50	30
39	40	0.6383	0.7710	0.8243	1.2151	1.2900	1.5666	50	20
39	50	0.6406	0.7679	0.8292	1.1988	1.3022	1.5611	50	10
40	00	0.6428	0.7660	0.8342	1.1988	1.3022	1.5557	50	00
40	10	0.6450	0.7642	0.8391	1.1918	1.3034	1.5504	49	50
40	20	0.6472	0.7623	0.8491	1.1778	1.3118	1.5450	49	40
40	30	0.6494	0.7623	0.8541	1.1778	1.3116	1.5398	49	30
40	40	0.6517	0.7585	0.8591	1.1708	1.3131	1.5345	49	20
40	50	0.6539	0.7566	0.8591	1.1571	1.3164	1.5294	49	10
41	00	0.6561	0.7547	0.8693	1.15/1	1.3217	1.5243	49	00
41	10	0.6583	0.7528	0.8093	1.1304	1.3284	1.5192	49	50
41	20	0.6583	0.7528	0.8744		1.3284	1.5192	48	40
41	∠U	0.0004	0.7309	0.8790	1.1369	1.3318	1.3141	40	4 U

41	30	0.6626	0.7490	0.8847	1.1303	1.3352	1.5092	48	30
41	40	0.6648	0.7470	0.8899	1.1237	1.3386	1.5042	48	20
41	50	0.6670	0.7451	0.8952	1.1171	1.3421	1.4993	48	10
42	00	0.6691	0.7431	0.9004	1.1106	1.3456	1.4945	48	00
42	10	0.6713	0.7412	0.9057	1.1041	1.3492	1.4897	47	50
42	20	0.6734	0.7392	0.9110	1.0977	1.3527	1.4849	47	40
42	30	0.6756	0.7373	0.9163	1.0913	1.3563	1.4802	47	30
42	40	0.6777	0.7353	0.9217	1.0850	1.3600	1.4755	47	20
42	50	0.6799	0.7333	0.9271	1.0786	1.3636	1.4709	47	10
43	00	0.6820	0.7314	0.9325	1.0724	1.3673	1.4663	47	00
43	10	0.6841	0.7294	0.9380	1.0661	1.3711	1.4617	46	50
43	20	0.6862	0.7274	0.9435	1.0599	1.3748	1.4572	46	40
43	30	0.6884	0.7254	0.9490	1.0538	1.3786	1.4527	46	30
43	40	0.6905	0.7234	0.9545	1.0477	1.3824	1.4483	46	20
43	50	0.6926	0.7214	0.9601	1.0416	1.3863	1.4439	46	10
44	00	0.6947	0.7193	0.9657	1.0355	1.3902	1.4396	46	00
44	10	0.6967	0.7173	0.9713	1.0295	1.3941	1.4352	45	50
44	20	0.6988	0.7153	0.9770	1.0235	1.3980	1.4310	45	40
44	30	0.7009	0.7133	0.9827	1.0176	1.4020	1.4267	45	30
44	40	0.7030	0.7112	0.9884	1.0117	1.4061	1.4225	45	20
44	50	0.7050	0.7092	0.9942	1.0058	1.4101	1.4183	45	10
45	00	0.7071	0.7071	1.0000	1.0000	1.4142	1.4142	45	00
度	分	cos	sin	cot	tan	csc	sec	度	分