

Trigonometric Tables

Cosine

First decimal place

Angle in degrees	0	1	2	3	4	5	6	7	8	9
0	1,0000	1,0000	1,0000	1,0000	1,0000	1,0000	,9999	,9999	,9999	,9999
1	,9998	,9998	,9998	,9997	,9997	,9997	,9996	,9996	,9995	,9995
2	,9994	,9993	,9993	,9992	,9991	,9990	,9990	,9989	,9988	,9987
3	,9986	,9985	,9984	,9983	,9982	,9981	,9980	,9979	,9978	,9977
4	,9976	,9974	,9973	,9972	,9971	,9969	,9968	,9966	,9965	,9963
5	,9962	,9960	,9959	,9957	,9956	,9954	,9952	,9951	,9949	,9947
6	,9945	,9943	,9942	,9940	,9938	,9936	,9934	,9932	,9930	,9928
7	,9925	,9923	,9921	,9919	,9917	,9914	,9912	,9910	,9907	,9905
8	,9903	,9900	,9898	,9895	,9893	,9890	,9888	,9885	,9882	,9880
9	,9877	,9874	,9871	,9869	,9866	,9863	,9860	,9857	,9854	,9851
10	,9848	,9845	,9842	,9839	,9836	,9833	,9829	,9826	,9823	,9820
11	,9816	,9813	,9810	,9806	,9803	,9799	,9796	,9792	,9789	,9785
12	,9781	,9778	,9774	,9770	,9767	,9763	,9759	,9755	,9751	,9748
13	,9744	,9740	,9736	,9732	,9728	,9724	,9720	,9715	,9711	,9707
14	,9703	,9699	,9694	,9690	,9686	,9681	,9677	,9673	,9668	,9664
15	,9659	,9655	,9650	,9646	,9641	,9636	,9632	,9627	,9622	,9617
16	,9613	,9608	,9603	,9598	,9593	,9588	,9583	,9578	,9573	,9568
17	,9563	,9558	,9553	,9548	,9542	,9537	,9532	,9527	,9521	,9516
18	,9511	,9505	,9500	,9494	,9489	,9483	,9478	,9472	,9466	,9461
19	,9455	,9449	,9444	,9438	,9432	,9426	,9421	,9415	,9409	,9403
20	,9397	,9391	,9385	,9379	,9373	,9367	,9361	,9354	,9348	,9342
21	,9336	,9330	,9323	,9317	,9311	,9304	,9298	,9291	,9285	,9278
22	,9272	,9265	,9259	,9252	,9245	,9239	,9232	,9225	,9219	,9212
23	,9205	,9198	,9191	,9184	,9178	,9171	,9164	,9157	,9150	,9143
24	,9135	,9128	,9121	,9114	,9107	,9100	,9092	,9085	,9078	,9070
25	,9063	,9056	,9048	,9041	,9033	,9026	,9018	,9011	,9003	,8996
26	,8988	,8980	,8973	,8965	,8957	,8949	,8942	,8934	,8926	,8918
27	,8910	,8902	,8894	,8886	,8878	,8870	,8862	,8854	,8846	,8838
28	,8829	,8821	,8813	,8805	,8796	,8788	,8780	,8771	,8763	,8755
29	,8746	,8738	,8729	,8721	,8712	,8704	,8695	,8686	,8678	,8669
30	,8660	,8652	,8643	,8634	,8625	,8616	,8607	,8599	,8590	,8581
31	,8572	,8563	,8554	,8545	,8536	,8526	,8517	,8508	,8499	,8490
32	,8480	,8471	,8462	,8453	,8443	,8434	,8425	,8415	,8406	,8396
33	,8387	,8377	,8368	,8358	,8348	,8339	,8329	,8320	,8310	,8300
34	,8290	,8281	,8271	,8261	,8251	,8241	,8231	,8221	,8211	,8202
35	,8192	,8181	,8171	,8161	,8151	,8141	,8131	,8121	,8111	,8100
36	,8090	,8080	,8070	,8059	,8049	,8039	,8028	,8018	,8007	,7997
37	,7986	,7976	,7965	,7955	,7944	,7934	,7923	,7912	,7902	,7891
38	,7880	,7869	,7859	,7848	,7837	,7826	,7815	,7804	,7793	,7782
39	,7771	,7760	,7749	,7738	,7727	,7716	,7705	,7694	,7683	,7672
40	,7660	,7649	,7638	,7627	,7615	,7604	,7593	,7581	,7570	,7559
41	,7547	,7536	,7524	,7513	,7501	,7490	,7478	,7466	,7455	,7443
42	,7431	,7420	,7408	,7396	,7385	,7373	,7361	,7349	,7337	,7325
43	,7314	,7302	,7290	,7278	,7266	,7254	,7242	,7230	,7218	,7206
44	,7193	,7181	,7169	,7157	,7145	,7133	,7120	,7108	,7096	,7083
45	,7071	,7059	,7046	,7034	,7022	,7009	,6997	,6984	,6972	,6959
46	,6947	,6934	,6921	,6909	,6896	,6884	,6871	,6858	,6845	,6833
47	,6820	,6807	,6794	,6782	,6769	,6756	,6743	,6730	,6717	,6704

Trigonometric Tables

48	,6691	,6678	,6665	,6652	,6639	,6626	,6613	,6600	,6587	,6574
49	,6561	,6547	,6534	,6521	,6508	,6494	,6481	,6468	,6455	,6441
50	,6428	,6414	,6401	,6388	,6374	,6361	,6347	,6334	,6320	,6307
51	,6293	,6280	,6266	,6252	,6239	,6225	,6211	,6198	,6184	,6170
52	,6157	,6143	,6129	,6115	,6101	,6088	,6074	,6060	,6046	,6032
53	,6018	,6004	,5990	,5976	,5962	,5948	,5934	,5920	,5906	,5892
54	,5878	,5864	,5850	,5835	,5821	,5807	,5793	,5779	,5764	,5750
55	,5736	,5721	,5707	,5693	,5678	,5664	,5650	,5635	,5621	,5606
56	,5592	,5577	,5563	,5548	,5534	,5519	,5505	,5490	,5476	,5461
57	,5446	,5432	,5417	,5402	,5388	,5373	,5358	,5344	,5329	,5314
58	,5299	,5284	,5270	,5255	,5240	,5225	,5210	,5195	,5180	,5165
59	,5150	,5135	,5120	,5105	,5090	,5075	,5060	,5045	,5030	,5015
60	,5000	,4985	,4970	,4955	,4939	,4924	,4909	,4894	,4879	,4863
61	,4848	,4833	,4818	,4802	,4787	,4772	,4756	,4741	,4726	,4710
62	,4695	,4679	,4664	,4648	,4633	,4617	,4602	,4586	,4571	,4555
63	,4540	,4524	,4509	,4493	,4478	,4462	,4446	,4431	,4415	,4399
64	,4384	,4368	,4352	,4337	,4321	,4305	,4289	,4274	,4258	,4242
65	,4226	,4210	,4195	,4179	,4163	,4147	,4131	,4115	,4099	,4083
66	,4067	,4051	,4035	,4019	,4003	,3987	,3971	,3955	,3939	,3923
67	,3907	,3891	,3875	,3859	,3843	,3827	,3811	,3795	,3778	,3762
68	,3746	,3730	,3714	,3697	,3681	,3665	,3649	,3633	,3616	,3600
69	,3584	,3567	,3551	,3535	,3518	,3502	,3486	,3469	,3453	,3437
70	,3420	,3404	,3387	,3371	,3355	,3338	,3322	,3305	,3289	,3272
71	,3256	,3239	,3223	,3206	,3190	,3173	,3156	,3140	,3123	,3107
72	,3090	,3074	,3057	,3040	,3024	,3007	,2990	,2974	,2957	,2940
73	,2924	,2907	,2890	,2874	,2857	,2840	,2823	,2807	,2790	,2773
74	,2756	,2740	,2723	,2706	,2689	,2672	,2656	,2639	,2622	,2605
75	,2588	,2571	,2554	,2538	,2521	,2504	,2487	,2470	,2453	,2436
76	,2419	,2402	,2385	,2368	,2351	,2334	,2317	,2300	,2284	,2267
77	,2250	,2233	,2215	,2198	,2181	,2164	,2147	,2130	,2113	,2096
78	,2079	,2062	,2045	,2028	,2011	,1994	,1977	,1959	,1942	,1925
79	,1908	,1891	,1874	,1857	,1840	,1822	,1805	,1788	,1771	,1754
80	,1736	,1719	,1702	,1685	,1668	,1650	,1633	,1616	,1599	,1582
81	,1564	,1547	,1530	,1513	,1495	,1478	,1461	,1444	,1426	,1409
82	,1392	,1374	,1357	,1340	,1323	,1305	,1288	,1271	,1253	,1236
83	,1219	,1201	,1184	,1167	,1149	,1132	,1115	,1097	,1080	,1063
84	,1045	,1028	,1011	,0993	,0976	,0958	,0941	,0924	,0906	,0889
85	,0872	,0854	,0837	,0819	,0802	,0785	,0767	,0750	,0732	,0715
86	,0698	,0680	,0663	,0645	,0628	,0610	,0593	,0576	,0558	,0541
87	,0523	,0506	,0488	,0471	,0454	,0436	,0419	,0401	,0384	,0366
88	,0349	,0332	,0314	,0297	,0279	,0262	,0244	,0227	,0209	,0192
89	,0175	,0157	,0140	,0122	,0105	,0087	,0070	,0052	,0035	,0017
90	,0000									