



Trigonometric Tables

Trigonometric Functions

°		Sine	Tan.	Cotan.	Cosine	°	°		Sine	Tan.	Cotan.	Cosine	°	°	
0	0	.000000	.000000	INFINITE	1.000000	0	90	11	0	.190809	.194380	5.1445540	.981627	0	79
	10	.002909	.002909	343.77371	.999996	50			10	.913664	.197401	5.0658352	.981068	50	
	20	.005818	.005818	171.88540	.999983	40			20	.196517	.200425	4.9894027	.980500	40	
	30	.008727	.008727	114.58865	.999962	30			30	.199368	.203452	4.9151570	.979925	30	
	40	.011635	.011636	85.939791	.999932	20			40	.202218	.206483	4.8430045	.979341	20	
	50	.014544	.014545	68.750087	.999894	10			50	.205065	.209518	4.7728568	.978748	10	
1	0	.017452	.017455	57.289962	.999848	0	89	12	0	.207912	.212557	4.7046301	.978148	0	78
	10	.020361	.020365	49.103881	.999793	50			10	.210756	.215599	4.6382457	.977539	50	
	20	.023269	.023275	42.964077	.999729	40			20	.213599	.218645	4.5736287	.976921	40	
	30	.026177	.026186	38.188459	.999657	30			30	.216440	.221695	4.5107085	.976296	30	
	40	.029085	.029097	34.367771	.999577	20			40	.219279	.224748	4.4494181	.975662	20	
	50	.031992	.032009	31.241577	.999488	10			50	.222116	.227806	4.3896940	.975020	10	
2	0	.034899	.034921	28.636253	.999391	0	88	13	0	.224951	.230868	4.3314759	.974370	0	77
	10	.037806	.037834	26.431600	.999285	50			10	.227784	.233934	4.2747066	.973712	50	
	20	.040713	.040747	24.541758	.999171	40			20	.230616	.237004	4.2193318	.973045	40	
	30	.043619	.043661	22.903766	.999048	30			30	.233445	.240079	4.1652998	.972370	30	
	40	.046525	.046576	21.474041	.998917	20			40	.236273	.243158	4.1125614	.971687	20	
	50	.049431	.049491	20.205553	.998778	10			50	.239098	.246241	4.0610700	.970995	10	
3	0	.052336	.052408	19.081137	.998630	0	87	14	0	.241922	.249328	4.0107809	.970296	0	76
	10	.055241	.055325	18.074977	.998473	50			10	.244743	.252420	3.9616518	.969588	50	
	20	.058145	.058243	17.169337	.998308	40			20	.247563	.255517	3.9136420	.968872	40	
	30	.061049	.061163	16.349855	.998135	30			30	.250380	.258618	3.8667131	.968148	30	
	40	.063952	.064083	15.604784	.997957	20			40	.253195	.261723	3.8208281	.967415	20	
	50	.066854	.067004	14.924417	.997763	10			50	.256008	.264834	3.7759519	.966675	10	
4	0	.069756	.069927	14.300666	.997564	0	86	15	0	.258819	.267949	3.7320508	.965926	0	75
	10	.072658	.072851	13.726738	.997357	50			10	.261628	.271069	3.6890927	.965169	50	
	20	.075559	.075776	13.196888	.997141	40			20	.264434	.274195	3.6470467	.964404	40	
	30	.078459	.078702	12.706205	.996917	30			30	.267238	.277325	3.6058835	.963630	30	
	40	.081359	.081629	12.250505	.996685	20			40	.270040	.280460	3.5655749	.962849	20	
	50	.084258	.084558	11.826167	.996444	10			50	.272840	.283600	3.5260938	.962059	10	
5	0	.087156	.087489	11.430052	.996195	0	85	16	0	.275637	.286745	3.4874144	.961262	0	74
	10	.090053	.090421	11.059431	.995937	50			10	.278432	.289896	3.4495120	.960456	50	
	20	.092950	.093354	10.711913	.995671	40			20	.281225	.293052	3.4123626	.959642	40	
	30	.095846	.096289	10.385397	.995396	30			30	.284015	.296214	3.3759434	.958820	30	
	40	.098741	.099226	10.078031	.995113	20			40	.286803	.299380	3.3402326	.957990	20	
	50	.101635	.102164	9.7881732	.994822	10			50	.289589	.302553	3.3052091	.957151	10	
6	0	.104528	.105104	9.5143645	.994522	0	84	17	0	.292372	.305731	3.2708526	.956305	0	73
	10	.107421	.108046	9.2553035	.994214	50			10	.295152	.308914	3.2371438	.955450	50	
	20	.110313	.110990	9.0098261	.993897	40			20	.297930	.312104	3.2040638	.954588	40	
	30	.113203	.113936	8.7768874	.993572	30			30	.300706	.315299	3.1715948	.953717	30	
	40	.116093	.116883	8.5555468	.993238	20			40	.303479	.318500	3.1397194	.952838	20	
	50	.118982	.119833	8.3449558	.992896	10			50	.306249	.321707	3.1084210	.951951	10	
7	0	.121869	.122785	8.1443464	.992546	0	83	18	0	.309017	.324920	3.0776835	.951057	0	72
	10	.124756	.125738	7.9530224	.992187	50			10	.311782	.328139	3.0474915	.950154	50	
	20	.127642	.128694	7.7703506	.991820	40			20	.314545	.331364	3.0178301	.949243	40	
	30	.130526	.131653	7.5957541	.991445	30			30	.317305	.334595	2.9886850	.948324	30	
	40	.133410	.134613	7.4287064	.991061	20			40	.320062	.337833	2.9600422	.947397	20	
	50	.136292	.137576	7.2687255	.990669	10			50	.322816	.341077	2.9318885	.946462	10	
8	0	.139173	.140541	7.1153697	.990268	0	82	19	0	.325568	.344328	2.9042109	.945519	0	71
	10	.142053	.143508	6.9682335	.989859	50			10	.328317	.347585	2.8769970	.944568	50	
	20	.144932	.146478	6.8269437	.989442	40			20	.331063	.350848	2.8502349	.943609	40	
	30	.147809	.149451	6.6911562	.989016	30			30	.333807	.354119	2.8239129	.942641	30	
	40	.150686	.152426	6.5605538	.988582	20			40	.336547	.357396	2.7980198	.941666	20	
	50	.153561	.155404	6.4348428	.988139	10			50	.339285	.360680	2.7725448	.940684	10	
9	0	.156434	.158384	6.3137515	.987688	0	81	20	0	.342020	.363970	2.7474774	.939693	0	70
	10	.159307	.161368	6.1970279	.987229	50			10	.344752	.367268	2.7228076	.938694	50	
	20	.162178	.164354	6.0844381	.986762	40			20	.347481	.370573	2.6985254	.937687	40	
	30	.165048	.167343	5.9757644	.986286	30			30	.350207	.373885	2.6746215	.936672	30	
	40	.167916	.170334	5.8708042	.985801	20			40	.352931	.377204	2.6510867	.935650	20	
	50	.170783	.173329	5.7693688	.985309	10			50	.355651	.380530	2.6279121	.934619	10	
10	0	.173648	.176327	5.6712818	.984808	0	80	21	0	.358368	.383864	2.6050891	.933580	0	69
	10	.176512	.179328	5.5763786	.984298	50			10	.361082	.387205	2.5826094	.932534	50	
	20	.179375	.182332	5.4845052	.983781	40			20	.363793	.390554	2.5604649	.931480	40	
	30	.182236	.185339	5.3955172	.983255	30			30	.366501	.393911	2.5386479	.930418	30	
	40	.185095	.188359	5.3092793	.982721	20			40	.369206	.397275	2.5171507	.929348	20	
	50	.187953	.191363	5.2256647	.982178	10	79		50	.371908	.400647	2.4959661	.928270	10	68
°		Cosine	Cotan.	Tan.	Sine	°	°		Cosine	Cotan.	Tan.	Sine	°	°	

NOTE: For functions from 45°-0 to 68° read from bottom of table upward.

Trigonometric Tables



Trigonometric Functions

°		Sine	Tan.	Cotan.	Cosine	°	°		Sine	Tan.	Cotan.	Cosine	°	°	
22	0	.374607	.404026	2.4750869	.927184	0	68	34	0	.559193	.674509	1.4825610	.829038	0	56
	10	.377302	.407414	2.4545061	.926090	50			10	.561602	.678749	1.4732983	.827407	50	
	20	.379994	.410810	2.4342172	.924980	40			20	.564007	.683007	1.4641147	.825770	40	
	30	.382683	.414214	2.4142136	.923880	30			30	.566406	.687281	1.4550090	.824126	30	
	40	.385369	.417626	2.3944889	.922762	20			40	.568801	.691573	1.4459801	.822475	20	
	50	.388052	.421046	2.3750372	.921638	10			50	.571191	.695881	1.4370268	.820817	10	
23	0	.390731	.424475	2.3558524	.920505	0	67	35	0	.573576	.700208	1.4281480	.819152	0	55
	10	.393407	.427912	2.3369287	.919364	50			10	.575957	.704552	1.4193427	.817480	50	
	20	.396080	.431358	2.3182606	.918216	40			20	.578332	.708913	1.4106098	.815801	40	
	30	.398749	.434812	2.2998425	.917060	30			30	.580703	.713293	1.4019483	.814116	30	
	40	.401415	.438276	2.2816693	.915896	20			40	.583069	.717691	1.3933571	.812423	20	
	50	.404078	.441748	2.2637357	.914725	10			50	.585429	.722108	1.3848355	.810723	10	
24	0	.406737	.445229	2.2460368	.913545	0	66	36	0	.587785	.726543	1.3763810	.809017	0	54
	10	.409392	.448719	2.2285676	.912358	50			10	.590136	.730996	1.3679959	.807304	50	
	20	.412045	.452218	2.2113234	.911164	40			20	.592482	.735469	1.3596764	.805584	40	
	30	.414693	.455726	2.1942997	.909961	30			30	.594823	.739961	1.3514224	.803857	30	
	40	.417338	.459244	2.1774920	.908751	20			40	.597159	.744472	1.3432331	.802123	20	
	50	.419980	.462771	2.1608958	.907535	10			50	.599489	.749003	1.3351075	.800383	10	
25	0	.422618	.466308	2.1445069	.906308	0	65	37	0	.601815	.753554	1.3270448	.798636	0	53
	10	.425253	.469854	2.1283213	.905075	50			10	.604136	.758125	1.3190441	.796882	50	
	20	.427884	.473410	2.1123348	.903834	40			20	.606451	.762716	1.3111046	.795121	40	
	30	.430511	.476976	2.0965436	.902585	30			30	.608761	.767327	1.3032254	.793353	30	
	40	.433125	.480551	2.0809438	.901329	20			40	.611067	.771959	1.2954057	.791579	20	
	50	.435755	.484137	2.0655318	.900065	10			50	.613367	.776612	1.2876447	.789798	10	
26	0	.438371	.487733	2.0503038	.898794	0	64	38	0	.615661	.781286	1.2799416	.788011	0	52
	10	.440984	.491339	2.0352565	.897515	50			10	.617951	.785981	1.2722957	.786217	50	
	20	.443593	.494955	2.0203862	.896229	40			20	.620235	.790698	1.2647062	.784416	40	
	30	.446197	.498582	2.0056897	.894934	30			30	.622515	.795436	1.2571723	.782608	30	
	40	.448799	.502219	1.9911637	.893633	20			40	.624789	.800196	1.2496933	.780794	20	
	50	.451397	.505867	1.9768050	.892323	10			50	.627057	.804980	1.2422685	.778973	10	
27	0	.453990	.509525	1.9626105	.891007	0	63	39	0	.629320	.809784	1.2348972	.777146	0	51
	10	.456580	.513195	1.9485772	.889682	50			10	.631578	.814612	1.2275786	.775312	50	
	20	.459166	.516876	1.9347020	.888350	40			20	.633831	.819463	1.2203121	.773472	40	
	30	.461749	.520567	1.9209821	.887011	30			30	.636078	.824336	1.2130970	.771625	30	
	40	.464327	.524270	1.9074147	.885664	20			40	.638320	.829234	1.2059327	.769771	20	
	50	.466901	.527984	1.8939971	.884309	10			50	.640557	.834155	1.1988184	.767911	10	
28	0	.469472	.531709	1.8807265	.882948	0	62	40	0	.642788	.839100	1.1917536	.766044	0	50
	10	.472038	.535547	1.8676003	.881578	50			10	.645013	.844069	1.1847376	.764171	50	
	20	.474600	.539195	1.8546159	.880201	40			20	.647233	.849062	1.1777698	.762292	40	
	30	.477149	.542956	1.8417709	.878817	30			30	.649448	.854081	1.1708496	.760406	30	
	40	.479713	.546728	1.8290628	.877425	20			40	.651657	.859124	1.1639763	.758514	20	
	50	.482263	.550515	1.8164892	.876026	10			50	.653861	.864193	1.1571495	.756615	10	
29	0	.484810	.554309	1.8040478	.874620	0	61	41	0	.656059	.869287	1.1503684	.754710	0	49
	10	.487352	.558118	1.7917362	.873206	50			10	.658252	.874407	1.1436326	.752798	50	
	20	.489890	.561939	1.7795524	.871784	40			20	.660439	.879553	1.1369414	.750880	40	
	30	.492424	.565773	1.7674940	.870356	30			30	.662620	.884725	1.1302944	.748956	30	
	40	.494953	.569619	1.7555590	.868920	20			40	.664796	.889924	1.1236909	.747025	20	
	50	.497479	.573478	1.7437453	.867476	10			50	.666966	.895151	1.1171305	.745088	10	
30	0	.500000	.577350	1.7320508	.866025	0	60	42	0	.669131	.900404	1.1106125	.743145	0	48
	10	.502517	.581235	1.7204736	.864567	50			10	.671289	.905685	1.1041365	.741195	50	
	20	.505030	.585134	1.7090116	.863102	40			20	.673443	.910994	1.0977020	.739239	40	
	30	.507538	.589045	1.6976631	.861629	30			30	.675590	.916331	1.0913085	.737277	30	
	40	.510043	.592970	1.6864261	.860149	20			40	.677732	.921697	1.0849554	.735309	20	
	50	.512543	.596908	1.6752988	.858662	10			50	.679868	.927021	1.0786423	.733335	10	
31	0	.515038	.600861	1.6642795	.857167	0	59	43	0	.681998	.932515	1.0723687	.731354	0	47
	10	.517529	.604827	1.6533663	.855665	50			10	.684123	.937968	1.0661341	.729367	50	
	20	.520016	.608807	1.6425576	.854156	40			20	.686242	.943451	1.0599381	.727374	40	
	30	.522499	.612801	1.6318517	.852640	30			30	.688355	.948965	1.0537801	.725374	30	
	40	.524977	.616809	1.6212469	.851117	20			40	.690462	.954508	1.0476598	.723369	20	
	50	.527450	.620832	1.6107417	.849586	10			50	.692563	.960083	1.0415767	.721357	10	
32	0	.529919	.624869	1.6003345	.848048	0	58	44	0	.694658	.965689	1.0355303	.719340	0	46
	10	.532384	.628921	1.5900238	.846503	50			10	.696748	.971326	1.0295203	.717316	50	
	20	.534844	.632988	1.5798079	.844951	40			20	.698832	.976996	1.0235461	.715286	40	
	30	.537300	.637079	1.5696856	.843391	30			30	.700909	.982697	1.0176074	.713251	30	
	40	.539751	.641167	1.5596552	.841825	20			40	.702981	.988432	1.0117088	.711209	20	
	50	.542197	.645280	1.4597155	.840251	10			50	.705047	.994199	1.0058348	.709161	10	
33	0	.544639	.649408	1.5398650	.838671	0	57	45	0	.707107	1.000000	1.0000000	.707107	0	45
	10	.547076	.653551	1.5301025	.837083	50				—	—	—	—	50	
	20	.549509	.657710	1.5204261	.835488	40				—	—	—	—	40	
	30	.551937	.661886	1.5108352	.833886	30				—	—	—	—	30	
	40	.554360	.666077	1.5013282	.832277	20				—	—	—	—	20	
	50	.556769	.670285	1.4919039	.830661	10	56	—	—	—	—	—	—	10	
°		Cosine	Cotan.	Tan.	Sine	°	°		Cosine	Cotan.	Tan.	Sine	°	°	

NOTE: For functions from 45°-0 to 68° read from bottom of table upward.