



Tabelle der Bogenmaßwerte zu Winkeln in Grad: 0,0° bis 359,9°

α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°
0,	0.00000000	0.00174533	0.00349066	0.00523599	0.00698132	0.00872665	0.01047198	0.01221730	0.01396263	0.01570796
1,	0.01745329	0.01919862	0.02094395	0.02268928	0.02443461	0.02617994	0.02792527	0.02967060	0.03141593	0.03316126
2,	0.03490659	0.03665191	0.03839724	0.04014257	0.04188790	0.04363323	0.04537856	0.04712389	0.04886922	0.05061455
3,	0.05235988	0.05410521	0.05585054	0.05759587	0.05934119	0.06108652	0.06283185	0.06457718	0.06632251	0.06806784
4,	0.06981317	0.07155850	0.07330383	0.07504916	0.07679449	0.07853982	0.08028515	0.08203047	0.08377580	0.08552113
5,	0.08726646	0.08901179	0.09075712	0.09250245	0.09424778	0.09599311	0.09773844	0.09948377	0.10122910	0.10297443
6,	0.10471976	0.10646508	0.10821041	0.10995574	0.11170107	0.11344640	0.11519173	0.11693706	0.11868239	0.12042772
7,	0.12217305	0.12391838	0.12566371	0.12740904	0.12915436	0.13089969	0.13264502	0.13439035	0.13613568	0.13788101
8,	0.13962634	0.14137167	0.14311700	0.14486233	0.14660766	0.14835299	0.15009832	0.15184364	0.15358897	0.15533430
9,	0.15707963	0.15882496	0.16057029	0.16231562	0.16406095	0.16580628	0.16755161	0.16929694	0.17104227	0.17278760
10,	0.17453293	0.17627825	0.17802358	0.17976891	0.18151424	0.18325957	0.18500490	0.18675023	0.18849556	0.19024089
11,	0.19198622	0.19373155	0.19547688	0.19722221	0.19896753	0.20071286	0.20245819	0.20420352	0.20594885	0.20769418
12,	0.20943951	0.21118484	0.21293017	0.21467550	0.21642083	0.21816616	0.21991149	0.22165682	0.22340214	0.22514747
13,	0.22689280	0.22863813	0.23038346	0.23212879	0.23387412	0.23561945	0.23736478	0.23911011	0.24085544	0.24260077
14,	0.24434610	0.24609142	0.24783675	0.24958208	0.25132741	0.25307274	0.25481807	0.25656340	0.25830873	0.26005406
15,	0.26179939	0.26354472	0.26529005	0.26703538	0.26878070	0.27052603	0.27227136	0.27401669	0.27576202	0.27750735
16,	0.27925268	0.28099801	0.28274334	0.28448867	0.28623400	0.28797933	0.28972466	0.29146999	0.29321531	0.29496064
17,	0.29670597	0.29845130	0.30019663	0.30194196	0.30368729	0.30543262	0.30717795	0.30892328	0.31066861	0.31241394
18,	0.31415927	0.31590459	0.31764992	0.31939525	0.32114058	0.32288591	0.32463124	0.32637657	0.32812190	0.32986723
19,	0.33161256	0.33335789	0.33510322	0.33684855	0.33859387	0.34033920	0.34208453	0.34382986	0.34557519	0.34732052
20,	0.34906585	0.35081118	0.35255651	0.35430184	0.35604717	0.35779250	0.35953783	0.36128316	0.36302848	0.36477381
21,	0.36651914	0.36826447	0.37000980	0.37175513	0.37350046	0.37524579	0.37699112	0.37873645	0.38048178	0.38222711
22,	0.38397244	0.38571776	0.38746309	0.38920842	0.39095375	0.39269908	0.39444441	0.39618974	0.39793507	0.39968040
23,	0.40142573	0.40317106	0.40491639	0.40666172	0.40840704	0.41015237	0.41189770	0.41364303	0.41538836	0.41713369
24,	0.41887902	0.42062435	0.42236968	0.42411501	0.42586034	0.42760567	0.42935100	0.43109633	0.43284165	0.43458698
25,	0.43633231	0.43807764	0.43982297	0.44156830	0.44331363	0.44505896	0.44680429	0.44854962	0.45029495	0.45204028
26,	0.45378561	0.45553093	0.45727626	0.45902159	0.46076692	0.46251225	0.46425758	0.46600291	0.46774824	0.46949357
27,	0.47123890	0.47298423	0.47472956	0.47647489	0.47822022	0.47996554	0.48171087	0.48345620	0.48520153	0.48694686
28,	0.48869219	0.49043752	0.49218285	0.49392818	0.49567351	0.49741884	0.49916417	0.50090950	0.50265482	0.50440015
29,	0.50614548	0.50789081	0.50963614	0.51138147	0.51312680	0.51487213	0.51661746	0.51836279	0.52010812	0.52185345
α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°

α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°
30,	0.52359878	0.52534410	0.52708943	0.52883476	0.53058009	0.53232542	0.53407075	0.53581608	0.53756141	0.53930674
31,	0.54105207	0.54279740	0.54454273	0.54628806	0.54803339	0.54977871	0.55152404	0.55326937	0.55501470	0.55676003
32,	0.55850536	0.56025069	0.56199602	0.56374135	0.56548668	0.56723201	0.56897734	0.57072267	0.57246799	0.57421332
33,	0.57595865	0.57770398	0.57944931	0.58119464	0.58293997	0.58468530	0.58643063	0.58817596	0.58992129	0.59166662
34,	0.59341195	0.59515727	0.59690260	0.59864793	0.60039326	0.60213859	0.60388392	0.60562925	0.60737458	0.60911991
35,	0.61086524	0.61261057	0.61435590	0.61610123	0.61784656	0.61959188	0.62133721	0.62308254	0.62482787	0.62657320
36,	0.62831853	0.63006386	0.63180919	0.63355452	0.63529985	0.63704518	0.63879051	0.64053584	0.64228116	0.64402649
37,	0.64577182	0.64751715	0.64926248	0.65100781	0.65275314	0.65449847	0.65624380	0.65798913	0.65973446	0.66147979
38,	0.66322512	0.66497045	0.66671577	0.66846110	0.67020643	0.67195176	0.67369709	0.67544242	0.67718775	0.67893308
39,	0.68067841	0.68242374	0.68416907	0.68591440	0.68765973	0.68940505	0.69115038	0.69289571	0.69464104	0.69638637
40,	0.69813170	0.69987703	0.70162236	0.70336769	0.70511302	0.70685835	0.70860368	0.71034901	0.71209433	0.71383966
41,	0.71558499	0.71733032	0.71907565	0.72082098	0.72256631	0.72431164	0.72605697	0.72780230	0.72954763	0.73129296
42,	0.73303829	0.73478362	0.73652894	0.73827427	0.74001960	0.74176493	0.74351026	0.74525559	0.74700092	0.74874625
43,	0.75049158	0.75223691	0.75398224	0.75572757	0.75747290	0.75921822	0.76096355	0.76270888	0.76445421	0.76619954
44,	0.76794487	0.76969020	0.77143553	0.77318086	0.77492619	0.77667152	0.77841685	0.78016218	0.78190750	0.78365283
45,	0.78539816	0.78714349	0.78888882	0.79063415	0.79237948	0.79412481	0.79587014	0.79761547	0.79936080	0.80110613
46,	0.80285146	0.80459679	0.80634211	0.80808744	0.80983277	0.81157810	0.81332343	0.81506876	0.81681409	0.81855942
47,	0.82030475	0.82205008	0.82379541	0.82554074	0.82728607	0.82903139	0.83077672	0.83252205	0.83426738	0.83601271
48,	0.83775804	0.83950337	0.84124870	0.84299403	0.84473936	0.84648469	0.84823002	0.84997535	0.85172067	0.85346600
49,	0.85521133	0.85695666	0.85870199	0.86044732	0.86219265	0.86393798	0.86568331	0.86742864	0.86917397	0.87091930
50,	0.87266463	0.87440996	0.87615528	0.87790061	0.87964594	0.88139127	0.88313660	0.88488193	0.88662726	0.88837259
51,	0.89011792	0.89186325	0.89360858	0.89535391	0.89709924	0.89884456	0.90058989	0.90233522	0.90408055	0.90582588
52,	0.90757121	0.90931654	0.91106187	0.91280720	0.91455253	0.91629786	0.91804319	0.91978852	0.92153385	0.92327917
53,	0.92502450	0.92676983	0.92851516	0.93026049	0.93200582	0.93375115	0.93549648	0.93724181	0.93898714	0.94073247
54,	0.94247780	0.94422313	0.94596845	0.94771378	0.94945911	0.95120444	0.95294977	0.95469510	0.95644043	0.95818576
55,	0.95993109	0.96167642	0.96342175	0.96516708	0.96691241	0.96865773	0.97040306	0.97214839	0.97389372	0.97563905
56,	0.97738438	0.97912971	0.98087504	0.98262037	0.98436570	0.98611103	0.98785636	0.98960169	0.99134702	0.99309234
57,	0.99483767	0.99658300	0.99832833	1.00007366	1.00181899	1.00356432	1.00530965	1.00705498	1.00880031	1.01054564
58,	1.01229097	1.01403630	1.01578162	1.01752695	1.01927228	1.02101761	1.02276294	1.02450827	1.02625360	1.02799893
59,	1.02974426	1.03148959	1.03323492	1.03498025	1.03672558	1.03847090	1.04021623	1.04196156	1.04370689	1.04545222
α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°

α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°
60,	1.04719755	1.04894288	1.05068821	1.05243354	1.05417887	1.05592420	1.05766953	1.05941486	1.06116019	1.06290551
61,	1.06465084	1.06639617	1.06814150	1.06988683	1.07163216	1.07337749	1.07512282	1.07686815	1.07861348	1.08035881
62,	1.08210414	1.08384947	1.08559479	1.08734012	1.08908545	1.09083078	1.09257611	1.09432144	1.09606677	1.09781210
63,	1.09955743	1.10130276	1.10304809	1.10479342	1.10653875	1.10828408	1.11002940	1.11177473	1.11352006	1.11526539
64,	1.11701072	1.11875605	1.12050138	1.12224671	1.12399204	1.12573737	1.12748270	1.12922803	1.13097336	1.13271868
65,	1.13446401	1.13620934	1.13795467	1.13970000	1.14144533	1.14319066	1.14493599	1.14668132	1.14842665	1.15017198
66,	1.15191731	1.15366264	1.15540796	1.15715329	1.15889862	1.16064395	1.16238928	1.16413461	1.16587994	1.16762527
67,	1.16937060	1.17111593	1.17286126	1.17460659	1.17635192	1.17809725	1.17984257	1.18158790	1.18333323	1.18507856
68,	1.18682389	1.18856922	1.19031455	1.19205988	1.19380521	1.19555054	1.19729587	1.19904120	1.20078653	1.20253185
69,	1.20427718	1.20602251	1.20776784	1.20951317	1.21125850	1.21300383	1.21474916	1.21649449	1.21823982	1.21998515
70,	1.22173048	1.22347581	1.22522113	1.22696646	1.22871179	1.23045712	1.23220245	1.23394778	1.23569311	1.23743844
71,	1.23918377	1.24092910	1.24267443	1.24441976	1.24616509	1.24791042	1.24965574	1.25140107	1.25314640	1.25489173
72,	1.25663706	1.25838239	1.26012772	1.26187305	1.26361838	1.26536371	1.26710904	1.26885437	1.27059970	1.27234502
73,	1.27409035	1.27583568	1.27758101	1.27932634	1.28107167	1.28281700	1.28456233	1.28630766	1.28805299	1.28979832
74,	1.29154365	1.29328898	1.29503430	1.29677963	1.29852496	1.30027029	1.30201562	1.30376095	1.30550628	1.30725161
75,	1.30899694	1.31074227	1.31248760	1.31423293	1.31597826	1.31772359	1.31946891	1.32121424	1.32295957	1.32470490
76,	1.32645023	1.32819556	1.32994089	1.33168622	1.33343155	1.33517688	1.33692221	1.33866754	1.34041287	1.34215819
77,	1.34390352	1.34564885	1.34739418	1.34913951	1.35088484	1.35263017	1.35437550	1.35612083	1.35786616	1.35961149
78,	1.36135682	1.36310215	1.36484748	1.36659280	1.36833813	1.37008346	1.37182879	1.37357412	1.37531945	1.37706478
79,	1.37881011	1.38055544	1.38230077	1.38404610	1.38579143	1.38753676	1.38928208	1.39102741	1.39277274	1.39451807
80,	1.39626340	1.39800873	1.39975406	1.40149939	1.40324472	1.40499005	1.40673538	1.40848071	1.41022604	1.41197136
81,	1.41371669	1.41546202	1.41720735	1.41895268	1.42069801	1.42244334	1.42418867	1.42593400	1.42767933	1.42942466
82,	1.43116999	1.43291532	1.43466065	1.43640597	1.43815130	1.43989663	1.44164196	1.44338729	1.44513262	1.44687795
83,	1.44862328	1.45036861	1.45211394	1.45385927	1.45560460	1.45734993	1.45909525	1.46084058	1.46258591	1.46433124
84,	1.46607657	1.46782190	1.46956723	1.47131256	1.47305789	1.47480322	1.47654855	1.47829388	1.48003921	1.48178453
85,	1.48352986	1.48527519	1.48702052	1.48876585	1.49051118	1.49225651	1.49400184	1.49574717	1.49749250	1.49923783
86,	1.50098316	1.50272849	1.50447382	1.50621914	1.50796447	1.50970980	1.51145513	1.51320046	1.51494579	1.51669112
87,	1.51843645	1.52018178	1.52192711	1.52367244	1.52541777	1.52716310	1.52890842	1.53065375	1.53239908	1.53414441
88,	1.53588974	1.53763507	1.53938040	1.54112573	1.54287106	1.54461639	1.54636172	1.54810705	1.54985238	1.55159771
89,	1.55334303	1.55508836	1.55683369	1.55857902	1.56032435	1.56206968	1.56381501	1.56556034	1.56730567	1.56905100
α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°

α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°
90,	1.57079633	1.57254166	1.57428699	1.57603231	1.57777764	1.57952297	1.58126830	1.58301363	1.58475896	1.58650429
91,	1.58824962	1.58999495	1.59174028	1.59348561	1.59523094	1.59697627	1.59872159	1.60046692	1.60221225	1.60395758
92,	1.60570291	1.60744824	1.60919357	1.61093890	1.61268423	1.61442956	1.61617489	1.61792022	1.61966555	1.62141088
93,	1.62315620	1.62490153	1.62664686	1.62839219	1.63013752	1.63188285	1.63362818	1.63537351	1.63711884	1.63886417
94,	1.64060950	1.64235483	1.64410016	1.64584548	1.64759081	1.64933614	1.65108147	1.65282680	1.65457213	1.65631746
95,	1.65806279	1.65980812	1.66155345	1.66329878	1.66504411	1.66678944	1.66853476	1.67028009	1.67202542	1.67377075
96,	1.67551608	1.67726141	1.67900674	1.68075207	1.68249740	1.68424273	1.68598806	1.68773339	1.68947872	1.69122405
97,	1.69296937	1.69471470	1.69646003	1.69820536	1.69995069	1.70169602	1.70344135	1.70518668	1.70693201	1.70867734
98,	1.71042267	1.71216800	1.71391333	1.71565865	1.71740398	1.71914931	1.72089464	1.72263997	1.72438530	1.72613063
99,	1.72787596	1.72962129	1.73136662	1.73311195	1.73485728	1.73660261	1.73834793	1.74009326	1.74183859	1.74358392
100,	1.74532925	1.74707458	1.74881991	1.75056524	1.75231057	1.75405590	1.75580123	1.75754656	1.75929189	1.76103722
101,	1.76278254	1.76452787	1.76627320	1.76801853	1.76976386	1.77150919	1.77325452	1.77499985	1.77674518	1.77849051
102,	1.78023584	1.78198117	1.78372650	1.78547182	1.78721715	1.78896248	1.79070781	1.79245314	1.79419847	1.79594380
103,	1.79768913	1.79943446	1.80117979	1.80292512	1.80467045	1.80641578	1.80816111	1.80990643	1.81165176	1.81339709
104,	1.81514242	1.81688775	1.81863308	1.82037841	1.82212374	1.82386907	1.82561440	1.82735973	1.82910506	1.83085039
105,	1.83259571	1.83434104	1.83608637	1.83783170	1.83957703	1.84132236	1.84306769	1.84481302	1.84655835	1.84830368
106,	1.85004901	1.85179434	1.85353967	1.85528499	1.85703032	1.85877565	1.86052098	1.86226631	1.86401164	1.86575697
107,	1.86750230	1.86924763	1.87099296	1.87273829	1.87448362	1.87622895	1.87797428	1.87971960	1.88146493	1.88321026
108,	1.88495559	1.88670092	1.88844625	1.89019158	1.89193691	1.89368224	1.89542757	1.89717290	1.89891823	1.90066356
109,	1.90240888	1.90415421	1.90589954	1.90764487	1.90939020	1.91113553	1.91288086	1.91462619	1.91637152	1.91811685
110,	1.91986218	1.92160751	1.92335284	1.92509816	1.92684349	1.92858882	1.93033415	1.93207948	1.93382481	1.93557014
111,	1.93731547	1.93906080	1.94080613	1.94255146	1.94429679	1.94604212	1.94778745	1.94953277	1.95127810	1.95302343
112,	1.95476876	1.95651409	1.95825942	1.96000475	1.96175008	1.96349541	1.96524074	1.96698607	1.96873140	1.97047673
113,	1.97222205	1.97396738	1.97571271	1.97745804	1.97920337	1.98094870	1.98269403	1.98443936	1.98618469	1.98793002
114,	1.98967535	1.99142068	1.99316601	1.99491134	1.99665666	1.99840199	2.00014732	2.00189265	2.00363798	2.00538331
115,	2.00712864	2.00887397	2.01061930	2.01236463	2.01410996	2.01585529	2.01760062	2.01934594	2.02109127	2.02283660
116,	2.02458193	2.02632726	2.02807259	2.02981792	2.03156325	2.03330858	2.03505391	2.03679924	2.03854457	2.04028990
117,	2.04203522	2.04378055	2.04552588	2.04727121	2.04901654	2.05076187	2.05250720	2.05425253	2.05599786	2.05774319
118,	2.05948852	2.06123385	2.06297918	2.06472451	2.06646983	2.06821516	2.06996049	2.07170582	2.07345115	2.07519648
119,	2.07694181	2.07868714	2.08043247	2.08217780	2.08392313	2.08566846	2.08741379	2.08915911	2.09090444	2.09264977
α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°

α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°
120,	2.09439510	2.09614043	2.09788576	2.09963109	2.10137642	2.10312175	2.10486708	2.10661241	2.10835774	2.11010307
121,	2.11184839	2.11359372	2.11533905	2.11708438	2.11882971	2.12057504	2.12232037	2.12406570	2.12581103	2.12755636
122,	2.12930169	2.13104702	2.13279235	2.13453768	2.13628300	2.13802833	2.13977366	2.14151899	2.14326432	2.14500965
123,	2.14675498	2.14850031	2.15024564	2.15199097	2.15373630	2.15548163	2.15722696	2.15897228	2.16071761	2.16246294
124,	2.16420827	2.16595360	2.16769893	2.16944426	2.17118959	2.17293492	2.17468025	2.17642558	2.17817091	2.17991624
125,	2.18166156	2.18340689	2.18515222	2.18689755	2.18864288	2.19038821	2.19213354	2.19387887	2.19562420	2.19736953
126,	2.19911486	2.20086019	2.20260552	2.20435085	2.20609617	2.20784150	2.20958683	2.21133216	2.21307749	2.21482282
127,	2.21656815	2.21831348	2.22005881	2.22180414	2.22354947	2.22529480	2.22704013	2.22878545	2.23053078	2.23227611
128,	2.23402144	2.23576677	2.23751210	2.23925743	2.24100276	2.24274809	2.24449342	2.24623875	2.24798408	2.24972941
129,	2.25147474	2.25322006	2.25496539	2.25671072	2.25845605	2.26020138	2.26194671	2.26369204	2.26543737	2.26718270
130,	2.26892803	2.27067336	2.27241869	2.27416402	2.27590934	2.27765467	2.27940000	2.28114533	2.28289066	2.28463599
131,	2.28638132	2.28812665	2.28987198	2.29161731	2.29336264	2.29510797	2.29685330	2.29859862	2.30034395	2.30208928
132,	2.30383461	2.30557994	2.30732527	2.30907060	2.31081593	2.31256126	2.31430659	2.31605192	2.31779725	2.31954258
133,	2.32128791	2.32303323	2.32477856	2.32652389	2.32826922	2.33001455	2.33175988	2.33350521	2.33525054	2.33699587
134,	2.33874120	2.34048653	2.34223186	2.34397719	2.34572251	2.34746784	2.34921317	2.35095850	2.35270383	2.35444916
135,	2.35619449	2.35793982	2.35968515	2.36143048	2.36317581	2.36492114	2.36666647	2.36841179	2.37015712	2.37190245
136,	2.37364778	2.37539311	2.37713844	2.37888377	2.38062910	2.38237443	2.38411976	2.38586509	2.38761042	2.38935575
137,	2.39110108	2.39284640	2.39459173	2.39633706	2.39808239	2.39982772	2.40157305	2.40331838	2.40506371	2.40680904
138,	2.40855437	2.41029970	2.41204503	2.41379036	2.41553568	2.41728101	2.41902634	2.42077167	2.42251700	2.42426233
139,	2.42600766	2.42775299	2.42949832	2.43124365	2.43298898	2.43473431	2.43647964	2.43822497	2.43997029	2.44171562
140,	2.44346095	2.44520628	2.44695161	2.44869694	2.45044227	2.45218760	2.45393293	2.45567826	2.45742359	2.45916892
141,	2.46091425	2.46265957	2.46440490	2.46615023	2.46789556	2.46964089	2.47138622	2.47313155	2.47487688	2.47662221
142,	2.47836754	2.48011287	2.48185820	2.48360353	2.48534885	2.48709418	2.48883951	2.49058484	2.49233017	2.49407550
143,	2.49582083	2.49756616	2.49931149	2.50105682	2.50280215	2.50454748	2.50629281	2.50803814	2.50978346	2.51152879
144,	2.51327412	2.51501945	2.51676478	2.51851011	2.52025544	2.52200077	2.52374610	2.52549143	2.52723676	2.52898209
145,	2.53072742	2.53247274	2.53421807	2.53596340	2.53770873	2.53945406	2.54119939	2.54294472	2.54469005	2.54643538
146,	2.54818071	2.54992604	2.55167137	2.55341670	2.55516202	2.55690735	2.55865268	2.56039801	2.56214334	2.56388867
147,	2.56563400	2.56737933	2.56912466	2.57086999	2.57261532	2.57436065	2.57610598	2.57785131	2.57959663	2.58134196
148,	2.58308729	2.58483262	2.58657795	2.58832328	2.59006861	2.59181394	2.59355927	2.59530460	2.59704993	2.59879526
149,	2.60054059	2.60228591	2.60403124	2.60577657	2.60752190	2.60926723	2.61101256	2.61275789	2.61450322	2.61624855
α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°

α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°
150,	2.61799388	2.61973921	2.62148454	2.62322987	2.62497519	2.62672052	2.62846585	2.63021118	2.63195651	2.63370184
151,	2.63544717	2.63719250	2.63893783	2.64068316	2.64242849	2.64417382	2.64591915	2.64766448	2.64940980	2.65115513
152,	2.65290046	2.65464579	2.65639112	2.65813645	2.65988178	2.66162711	2.66337244	2.66511777	2.66686310	2.66860843
153,	2.67035376	2.67209908	2.67384441	2.67558974	2.67733507	2.67908040	2.68082573	2.68257106	2.68431639	2.68606172
154,	2.68780705	2.68955238	2.69129771	2.69304304	2.69478837	2.69653369	2.69827902	2.70002435	2.70176968	2.70351501
155,	2.70526034	2.70700567	2.70875100	2.71049633	2.71224166	2.71398699	2.71573232	2.71747765	2.71922297	2.72096830
156,	2.72271363	2.72445896	2.72620429	2.72794962	2.72969495	2.73144028	2.73318561	2.73493094	2.73667627	2.73842160
157,	2.74016693	2.74191225	2.74365758	2.74540291	2.74714824	2.74889357	2.75063890	2.75238423	2.75412956	2.75587489
158,	2.75762022	2.75936555	2.76111088	2.76285621	2.76460154	2.76634686	2.76809219	2.76983752	2.77158285	2.77332818
159,	2.77507351	2.77681884	2.77856417	2.78030950	2.78205483	2.78380016	2.78554549	2.78729082	2.78903614	2.79078147
160,	2.79252680	2.79427213	2.79601746	2.79776279	2.79950812	2.80125345	2.80299878	2.80474411	2.80648944	2.80823477
161,	2.80998010	2.81172542	2.81347075	2.81521608	2.81696141	2.81870674	2.82045207	2.82219740	2.82394273	2.82568806
162,	2.82743339	2.82917872	2.83092405	2.83266938	2.83441471	2.83616003	2.83790536	2.83965069	2.84139602	2.84314135
163,	2.84488668	2.84663201	2.84837734	2.85012267	2.85186800	2.85361333	2.85535866	2.85710399	2.85884931	2.86059464
164,	2.86233997	2.86408530	2.86583063	2.86757596	2.86932129	2.87106662	2.87281195	2.87455728	2.87630261	2.87804794
165,	2.87979327	2.88153860	2.88328392	2.88502925	2.88677458	2.88851991	2.89026524	2.89201057	2.89375590	2.89550123
166,	2.89724656	2.89899189	2.90073722	2.90248255	2.90422788	2.90597320	2.90771853	2.90946386	2.91120919	2.91295452
167,	2.91469985	2.91644518	2.91819051	2.91993584	2.92168117	2.92342650	2.92517183	2.92691716	2.92866248	2.93040781
168,	2.93215314	2.93389847	2.93564380	2.93738913	2.93913446	2.94087979	2.94262512	2.94437045	2.94611578	2.94786111
169,	2.94960644	2.95135177	2.95309709	2.95484242	2.95658775	2.95833308	2.96007841	2.96182374	2.96356907	2.96531440
170,	2.96705973	2.96880506	2.97055039	2.97229572	2.97404105	2.97578637	2.97753170	2.97927703	2.98102236	2.98276769
171,	2.98451302	2.98625835	2.98800368	2.98974901	2.99149434	2.99323967	2.99498500	2.99673033	2.99847565	3.00022098
172,	3.00196631	3.00371164	3.00545697	3.00720230	3.00894763	3.01069296	3.01243829	3.01418362	3.01592895	3.01767428
173,	3.01941961	3.02116494	3.02291026	3.02465559	3.02640092	3.02814625	3.02989158	3.03163691	3.03338224	3.03512757
174,	3.03687290	3.03861823	3.04036356	3.04210889	3.04385422	3.04559954	3.04734487	3.04909020	3.05083553	3.05258086
175,	3.05432619	3.05607152	3.05781685	3.05956218	3.06130751	3.06305284	3.06479817	3.06654350	3.06828883	3.07003415
176,	3.07177948	3.07352481	3.07527014	3.07701547	3.07876080	3.08050613	3.08225146	3.08399679	3.08574212	3.08748745
177,	3.08923278	3.09097811	3.09272343	3.09446876	3.09621409	3.09795942	3.09970475	3.10145008	3.10319541	3.10494074
178,	3.10668607	3.10843140	3.11017673	3.11192206	3.11366739	3.11541271	3.11715804	3.11890337	3.12064870	3.12239403
179,	3.12413936	3.12588469	3.12763002	3.12937535	3.13112068	3.13286601	3.13461134	3.13635667	3.13810200	3.13984732
α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°

α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°
180,	3.14159265	3.14333798	3.14508331	3.14682864	3.14857397	3.15031930	3.15206463	3.15380996	3.15555529	3.15730062
181,	3.15904595	3.16079128	3.16253660	3.16428193	3.16602726	3.16777259	3.16951792	3.17126325	3.17300858	3.17475391
182,	3.17649924	3.17824457	3.17998990	3.18173523	3.18348056	3.18522588	3.18697121	3.18871654	3.19046187	3.19220720
183,	3.19395253	3.19569786	3.19744319	3.19918852	3.20093385	3.20267918	3.20442451	3.20616984	3.20791517	3.20966049
184,	3.21140582	3.21315115	3.21489648	3.21664181	3.21838714	3.22013247	3.22187780	3.22362313	3.22536846	3.22711379
185,	3.22885912	3.23060445	3.23234977	3.23409510	3.23584043	3.23758576	3.23933109	3.24107642	3.24282175	3.24456708
186,	3.24631241	3.24805774	3.24980307	3.25154840	3.25329373	3.25503905	3.25678438	3.25852971	3.26027504	3.26202037
187,	3.26376570	3.26551103	3.26725636	3.26900169	3.27074702	3.27249235	3.27423768	3.27598301	3.27772834	3.27947366
188,	3.28121899	3.28296432	3.28470965	3.28645498	3.28820031	3.28994564	3.29169097	3.29343630	3.29518163	3.29692696
189,	3.29867229	3.30041762	3.30216294	3.30390827	3.30565360	3.30739893	3.30914426	3.31088959	3.31263492	3.31438025
190,	3.31612558	3.31787091	3.31961624	3.32136157	3.32310690	3.32485223	3.32659755	3.32834288	3.33008821	3.33183354
191,	3.33357887	3.33532420	3.33706953	3.33881486	3.34056019	3.34230552	3.34405085	3.34579618	3.34754151	3.34928683
192,	3.35103216	3.35277749	3.35452282	3.35626815	3.35801348	3.35975881	3.36150414	3.36324947	3.36499480	3.36674013
193,	3.36848546	3.37023079	3.37197611	3.37372144	3.37546677	3.37721210	3.37895743	3.38070276	3.38244809	3.38419342
194,	3.38593875	3.38768408	3.38942941	3.39117474	3.39292007	3.39466540	3.39641072	3.39815605	3.39990138	3.40164671
195,	3.40339204	3.40513737	3.40688270	3.40862803	3.41037336	3.41211869	3.41386402	3.41560935	3.41735468	3.41910000
196,	3.42084533	3.42259066	3.42433599	3.42608132	3.42782665	3.42957198	3.43131731	3.43306264	3.43480797	3.43655330
197,	3.43829863	3.44004396	3.44178928	3.44353461	3.44527994	3.44702527	3.44877060	3.45051593	3.45226126	3.45400659
198,	3.45575192	3.45749725	3.45924258	3.46098791	3.46273324	3.46447857	3.46622389	3.46796922	3.46971455	3.47145988
199,	3.47320521	3.47495054	3.47669587	3.47844120	3.48018653	3.48193186	3.48367719	3.48542252	3.48716785	3.48891317
200,	3.49065850	3.49240383	3.49414916	3.49589449	3.49763982	3.49938515	3.50113048	3.50287581	3.50462114	3.50636647
201,	3.50811180	3.50985713	3.51160246	3.51334778	3.51509311	3.51683844	3.51858377	3.52032910	3.52207443	3.52381976
202,	3.52556509	3.52731042	3.52905575	3.53080108	3.53254641	3.53429174	3.53603706	3.53778239	3.53952772	3.54127305
203,	3.54301838	3.54476371	3.54650904	3.54825437	3.54999970	3.55174503	3.55349036	3.55523569	3.55698102	3.55872634
204,	3.56047167	3.56221700	3.56396233	3.56570766	3.56745299	3.56919832	3.57094365	3.57268898	3.57443431	3.57617964
205,	3.57792497	3.57967030	3.58141563	3.58316095	3.58490628	3.58665161	3.58839694	3.59014227	3.59188760	3.59363293
206,	3.59537826	3.59712359	3.59886892	3.60061425	3.60235958	3.60410491	3.60585023	3.60759556	3.60934089	3.61108622
207,	3.61283155	3.61457688	3.61632221	3.61806754	3.61981287	3.62155820	3.62330353	3.62504886	3.62679419	3.62853951
208,	3.63028484	3.63203017	3.63377550	3.63552083	3.63726616	3.63901149	3.64075682	3.64250215	3.64424748	3.64599281
209,	3.64773814	3.64948347	3.65122880	3.65297412	3.65471945	3.65646478	3.65821011	3.65995544	3.66170077	3.66344610
α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°

α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°
210,	3.66519143	3.66693676	3.66868209	3.67042742	3.67217275	3.67391808	3.67566340	3.67740873	3.67915406	3.68089939
211,	3.68264472	3.68439005	3.68613538	3.68788071	3.68962604	3.69137137	3.69311670	3.69486203	3.69660736	3.69835268
212,	3.70009801	3.70184334	3.70358867	3.70533400	3.70707933	3.70882466	3.71056999	3.71231532	3.71406065	3.71580598
213,	3.71755131	3.71929664	3.72104197	3.72278729	3.72453262	3.72627795	3.72802328	3.72976861	3.73151394	3.73325927
214,	3.73500460	3.73674993	3.73849526	3.74024059	3.74198592	3.74373125	3.74547657	3.74722190	3.74896723	3.75071256
215,	3.75245789	3.75420322	3.75594855	3.75769388	3.75943921	3.76118454	3.76292987	3.76467520	3.76642053	3.76816586
216,	3.76991118	3.77165651	3.77340184	3.77514717	3.77689250	3.77863783	3.78038316	3.78212849	3.78387382	3.78561915
217,	3.78736448	3.78910981	3.79085514	3.79260046	3.79434579	3.79609112	3.79783645	3.79958178	3.80132711	3.80307244
218,	3.80481777	3.80656310	3.80830843	3.81005376	3.81179909	3.81354442	3.81528974	3.81703507	3.81878040	3.82052573
219,	3.82227106	3.82401639	3.82576172	3.82750705	3.82925238	3.83099771	3.83274304	3.83448837	3.83623370	3.83797903
220,	3.83972435	3.84146968	3.84321501	3.84496034	3.84670567	3.84845100	3.85019633	3.85194166	3.85368699	3.85543232
221,	3.85717765	3.85892298	3.86066831	3.86241363	3.86415896	3.86590429	3.86764962	3.86939495	3.87114028	3.87288561
222,	3.87463094	3.87637627	3.87812160	3.87986693	3.88161226	3.88335759	3.88510291	3.88684824	3.88859357	3.89033890
223,	3.89208423	3.89382956	3.89557489	3.89732022	3.89906555	3.90081088	3.90255621	3.90430154	3.90604687	3.90779220
224,	3.90953752	3.91128285	3.91302818	3.91477351	3.91651884	3.91826417	3.92000950	3.92175483	3.92350016	3.92524549
225,	3.92699082	3.92873615	3.93048148	3.93222680	3.93397213	3.93571746	3.93746279	3.93920812	3.94095345	3.94269878
226,	3.94444411	3.94618944	3.94793477	3.94968010	3.95142543	3.95317076	3.95491609	3.95666141	3.95840674	3.96015207
227,	3.96189740	3.96364273	3.96538806	3.96713339	3.96887872	3.97062405	3.97236938	3.97411471	3.97586004	3.97760537
228,	3.97935069	3.98109602	3.98284135	3.98458668	3.98633201	3.98807734	3.98982267	3.99156800	3.99331333	3.99505866
229,	3.99680399	3.99854932	4.00029465	4.00203997	4.00378530	4.00553063	4.00727596	4.00902129	4.01076662	4.01251195
230,	4.01425728	4.01600261	4.01774794	4.01949327	4.02123860	4.02298393	4.02472926	4.02647458	4.02821991	4.02996524
231,	4.03171057	4.03345590	4.03520123	4.03694656	4.03869189	4.04043722	4.04218255	4.04392788	4.04567321	4.04741854
232,	4.04916386	4.05090919	4.05265452	4.05439985	4.05614518	4.05789051	4.05963584	4.06138117	4.06312650	4.06487183
233,	4.06661716	4.06836249	4.07010782	4.07185314	4.07359847	4.07534380	4.07708913	4.07883446	4.08057979	4.08232512
234,	4.08407045	4.08581578	4.08756111	4.08930644	4.09105177	4.09279710	4.09454243	4.09628775	4.09803308	4.09977841
235,	4.10152374	4.10326907	4.10501440	4.10675973	4.10850506	4.11025039	4.11199572	4.11374105	4.11548638	4.11723171
236,	4.11897703	4.12072236	4.12246769	4.12421302	4.12595835	4.12770368	4.12944901	4.13119434	4.13293967	4.13468500
237,	4.13643033	4.13817566	4.13992099	4.14166631	4.14341164	4.14515697	4.14690230	4.14864763	4.15039296	4.15213829
238,	4.15388362	4.15562895	4.15737428	4.15911961	4.16086494	4.16261027	4.16435560	4.16610092	4.16784625	4.16959158
239,	4.17133691	4.17308224	4.17482757	4.17657290	4.17831823	4.18006356	4.18180889	4.18355422	4.18529955	4.18704488
α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°

α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°
240,	4.18879020	4.19053553	4.19228086	4.19402619	4.19577152	4.19751685	4.19926218	4.20100751	4.20275284	4.20449817
241,	4.20624350	4.20798883	4.20973416	4.21147949	4.21322481	4.21497014	4.21671547	4.21846080	4.22020613	4.22195146
242,	4.22369679	4.22544212	4.22718745	4.22893278	4.23067811	4.23242344	4.23416877	4.23591409	4.23765942	4.23940475
243,	4.24115008	4.24289541	4.24464074	4.24638607	4.24813140	4.24987673	4.25162206	4.25336739	4.25511272	4.25685805
244,	4.25860337	4.26034870	4.26209403	4.26383936	4.26558469	4.26733002	4.26907535	4.27082068	4.27256601	4.27431134
245,	4.27605667	4.27780200	4.27954733	4.28129266	4.28303798	4.28478331	4.28652864	4.28827397	4.29001930	4.29176463
246,	4.29350996	4.29525529	4.29700062	4.29874595	4.30049128	4.30223661	4.30398194	4.30572726	4.30747259	4.30921792
247,	4.31096325	4.31270858	4.31445391	4.31619924	4.31794457	4.31968990	4.32143523	4.32318056	4.32492589	4.32667122
248,	4.32841654	4.33016187	4.33190720	4.33365253	4.33539786	4.33714319	4.33888852	4.34063385	4.34237918	4.34412451
249,	4.34586984	4.34761517	4.34936050	4.35110583	4.35285115	4.35459648	4.35634181	4.35808714	4.35983247	4.36157780
250,	4.36332313	4.36506846	4.36681379	4.36855912	4.37030445	4.37204978	4.37379511	4.37554043	4.37728576	4.37903109
251,	4.38077642	4.38252175	4.38426708	4.38601241	4.38775774	4.38950307	4.39124840	4.39299373	4.39473906	4.39648439
252,	4.39822972	4.39997504	4.40172037	4.40346570	4.40521103	4.40695636	4.40870169	4.41044702	4.41219235	4.41393768
253,	4.41568301	4.41742834	4.41917367	4.42091900	4.42266432	4.42440965	4.42615498	4.42790031	4.42964564	4.43139097
254,	4.43313630	4.43488163	4.43662696	4.43837229	4.44011762	4.44186295	4.44360828	4.44535360	4.44709893	4.44884426
255,	4.45058959	4.45233492	4.45408025	4.45582558	4.45757091	4.45931624	4.46106157	4.46280690	4.46455223	4.46629756
256,	4.46804289	4.46978821	4.47153354	4.47327887	4.47502420	4.47676953	4.47851486	4.48026019	4.48200552	4.48375085
257,	4.48549618	4.48724151	4.48898684	4.49073217	4.49247749	4.49422282	4.49596815	4.49771348	4.49945881	4.50120414
258,	4.50294947	4.50469480	4.50644013	4.50818546	4.50993079	4.51167612	4.51342145	4.51516677	4.51691210	4.51865743
259,	4.52040276	4.52214809	4.52389342	4.52563875	4.52738408	4.52912941	4.53087474	4.53262007	4.53436540	4.53611073
260,	4.53785606	4.53960138	4.54134671	4.54309204	4.54483737	4.54658270	4.54832803	4.55007336	4.55181869	4.55356402
261,	4.55530935	4.55705468	4.55880001	4.56054534	4.56229066	4.56403599	4.56578132	4.56752665	4.56927198	4.57101731
262,	4.57276264	4.57450797	4.57625330	4.57799863	4.57974396	4.58148929	4.58323462	4.58497994	4.58672527	4.58847060
263,	4.59021593	4.59196126	4.59370659	4.59545192	4.59719725	4.59894258	4.60068791	4.60243324	4.60417857	4.60592390
264,	4.60766923	4.60941455	4.61115988	4.61290521	4.61465054	4.61639587	4.61814120	4.61988653	4.62163186	4.62337719
265,	4.62512252	4.62686785	4.62861318	4.63035851	4.63210383	4.63384916	4.63559449	4.63733982	4.63908515	4.64083048
266,	4.64257581	4.64432114	4.64606647	4.64781180	4.64955713	4.65130246	4.65304779	4.65479312	4.65653844	4.65828377
267,	4.66002910	4.66177443	4.66351976	4.66526509	4.66701042	4.66875575	4.67050108	4.67224641	4.67399174	4.67573707
268,	4.67748240	4.67922772	4.68097305	4.68271838	4.68446371	4.68620904	4.68795437	4.68969970	4.69144503	4.69319036
269,	4.69493569	4.69668102	4.69842635	4.70017168	4.70191700	4.70366233	4.70540766	4.70715299	4.70889832	4.71064365
α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°

α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°
270,	4.71238898	4.71413431	4.71587964	4.71762497	4.71937030	4.72111563	4.72286096	4.72460629	4.72635161	4.72809694
271,	4.72984227	4.73158760	4.73333293	4.73507826	4.73682359	4.73856892	4.74031425	4.74205958	4.74380491	4.74555024
272,	4.74729557	4.74904089	4.75078622	4.75253155	4.75427688	4.75602221	4.75776754	4.75951287	4.76125820	4.76300353
273,	4.76474886	4.76649419	4.76823952	4.76998485	4.77173017	4.77347550	4.77522083	4.77696616	4.77871149	4.78045682
274,	4.78220215	4.78394748	4.78569281	4.78743814	4.78918347	4.79092880	4.79267413	4.79441946	4.79616478	4.79791011
275,	4.79965544	4.80140077	4.80314610	4.80489143	4.80663676	4.80838209	4.81012742	4.81187275	4.81361808	4.81536341
276,	4.817110874	4.81885406	4.82059939	4.82234472	4.82409005	4.82583538	4.82758071	4.82932604	4.83107137	4.83281670
277,	4.83456203	4.83630736	4.83805269	4.83979802	4.84154335	4.84328867	4.84503400	4.84677933	4.84852466	4.85026999
278,	4.85201532	4.85376065	4.85550598	4.85725131	4.85899664	4.86074197	4.86248730	4.86423263	4.86597795	4.86772328
279,	4.86946861	4.87121394	4.87295927	4.87470460	4.87644993	4.87819526	4.87994059	4.88168592	4.88343125	4.88517658
280,	4.88692191	4.88866723	4.89041256	4.89215789	4.89390322	4.89564855	4.89739388	4.89913921	4.90088454	4.90262987
281,	4.90437520	4.90612053	4.90786586	4.90961119	4.91135652	4.91310184	4.91484717	4.91659250	4.91833783	4.92008316
282,	4.92182849	4.92357382	4.92531915	4.92706448	4.92880981	4.93055514	4.93230047	4.93404580	4.93579112	4.93753645
283,	4.93928178	4.94102711	4.94277244	4.94451777	4.94626310	4.94800843	4.94975376	4.95149909	4.95324442	4.95498975
284,	4.95673508	4.95848040	4.96022573	4.96197106	4.96371639	4.96546172	4.96720705	4.96895238	4.97069771	4.97244304
285,	4.97418837	4.97593370	4.97767903	4.97942436	4.98116969	4.98291501	4.98466034	4.98640567	4.98815100	4.98989633
286,	4.99164166	4.99338699	4.99513232	4.99687765	4.99862298	5.00036831	5.00211364	5.00385897	5.00560429	5.00734962
287,	5.00909495	5.01084028	5.01258561	5.01433094	5.01607627	5.01782160	5.01956693	5.02131226	5.02305759	5.02480292
288,	5.02654825	5.02829357	5.03003890	5.03178423	5.03352956	5.03527489	5.03702022	5.03876555	5.04051088	5.04225621
289,	5.04400154	5.04574687	5.04749220	5.04923753	5.05098286	5.05272818	5.05447351	5.05621884	5.05796417	5.05970950
290,	5.06145483	5.06320016	5.06494549	5.06669082	5.06843615	5.07018148	5.07192681	5.07367214	5.07541746	5.07716279
291,	5.07890812	5.08065345	5.08239878	5.08414411	5.08588944	5.08763477	5.08938010	5.09112543	5.09287076	5.09461609
292,	5.09636142	5.09810675	5.09985207	5.10159740	5.10334273	5.10508806	5.10683339	5.10857872	5.11032405	5.11206938
293,	5.11381471	5.11556004	5.11730537	5.11905070	5.12079603	5.12254135	5.12428668	5.12603201	5.12777734	5.12952267
294,	5.13126800	5.13301333	5.13475866	5.13650399	5.13824932	5.13999465	5.14173998	5.14348531	5.14523063	5.14697596
295,	5.14872129	5.15046662	5.15221195	5.15395728	5.15570261	5.15744794	5.15919327	5.16093860	5.16268393	5.16442926
296,	5.16617459	5.16791992	5.16966524	5.17141057	5.17315590	5.17490123	5.17664656	5.17839189	5.18013722	5.18188255
297,	5.18362788	5.18537321	5.18711854	5.18886387	5.19060920	5.19235452	5.19409985	5.19584518	5.19759051	5.19933584
298,	5.20108117	5.20282650	5.20457183	5.20631716	5.20806249	5.20980782	5.21155315	5.21329848	5.21504380	5.21678913
299,	5.21853446	5.22027979	5.22202512	5.22377045	5.22551578	5.22726111	5.22900644	5.23075177	5.23249710	5.23424243
α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°

α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°
300,	5.23598776	5.23773309	5.23947841	5.24122374	5.24296907	5.24471440	5.24645973	5.24820506	5.24995039	5.25169572
301,	5.25344105	5.25518638	5.25693171	5.25867704	5.26042237	5.26216769	5.26391302	5.26565835	5.26740368	5.26914901
302,	5.27089434	5.27263967	5.27438500	5.27613033	5.27787566	5.27962099	5.28136632	5.28311165	5.28485698	5.28660230
303,	5.28834763	5.29009296	5.29183829	5.29358362	5.29532895	5.29707428	5.29881961	5.30056494	5.30231027	5.30405560
304,	5.30580093	5.30754626	5.30929158	5.31103691	5.31278224	5.31452757	5.31627290	5.31801823	5.31976356	5.32150889
305,	5.32325422	5.32499955	5.32674488	5.32849021	5.33023554	5.33198086	5.33372619	5.33547152	5.33721685	5.33896218
306,	5.34070751	5.34245284	5.34419817	5.34594350	5.34768883	5.34943416	5.35117949	5.35292482	5.35467015	5.35641547
307,	5.35816080	5.35990613	5.36165146	5.36339679	5.36514212	5.36688745	5.36863278	5.37037811	5.37212344	5.37386877
308,	5.37561410	5.37735943	5.37910475	5.38085008	5.38259541	5.38434074	5.38608607	5.38783140	5.38957673	5.39132206
309,	5.39306739	5.39481272	5.39655805	5.39830338	5.40004871	5.40179403	5.40353936	5.40528469	5.40703002	5.40877535
310,	5.41052068	5.41226601	5.41401134	5.41575667	5.41750200	5.41924733	5.42099266	5.42273799	5.42448332	5.42622864
311,	5.42797397	5.42971930	5.43146463	5.43320996	5.43495529	5.43670062	5.43844595	5.44019128	5.44193661	5.44368194
312,	5.44542727	5.44717260	5.44891792	5.45066325	5.45240858	5.45415391	5.45589924	5.45764457	5.45938990	5.46113523
313,	5.46288056	5.46462589	5.46637122	5.46811655	5.46986188	5.47160721	5.47335253	5.47509786	5.47684319	5.47858852
314,	5.48033385	5.48207918	5.48382451	5.48556984	5.48731517	5.48906050	5.49080583	5.49255116	5.49429649	5.49604181
315,	5.49778714	5.49953247	5.50127780	5.50302313	5.50476846	5.50651379	5.50825912	5.51000445	5.51174978	5.51349511
316,	5.51524044	5.51698577	5.51873109	5.52047642	5.52222175	5.52396708	5.52571241	5.52745774	5.52920307	5.53094840
317,	5.53269373	5.53443906	5.53618439	5.53792972	5.53967505	5.54142038	5.54316570	5.54491103	5.54665636	5.54840169
318,	5.55014702	5.55189235	5.55363768	5.55538301	5.55712834	5.55887367	5.56061900	5.56236433	5.56410966	5.56585498
319,	5.56760031	5.56934564	5.57109097	5.57283630	5.57458163	5.57632696	5.57807229	5.57981762	5.58156295	5.58330828
320,	5.58505361	5.58679894	5.58854426	5.59028959	5.59203492	5.59378025	5.59552558	5.59727091	5.59901624	5.60076157
321,	5.60250690	5.60425223	5.60599756	5.60774289	5.60948822	5.61123355	5.61297887	5.61472420	5.61646953	5.61821486
322,	5.61996019	5.62170552	5.62345085	5.62519618	5.62694151	5.62868684	5.63043217	5.63217750	5.63392283	5.63566815
323,	5.63741348	5.63915881	5.64090414	5.64264947	5.64439480	5.64614013	5.64788546	5.64963079	5.65137612	5.65312145
324,	5.65486678	5.65661211	5.65835743	5.66010276	5.66184809	5.66359342	5.66533875	5.66708408	5.66882941	5.67057474
325,	5.67232007	5.67406540	5.67581073	5.67755606	5.67930139	5.68104672	5.68279204	5.68453737	5.68628270	5.68802803
326,	5.68977336	5.69151869	5.69326402	5.69500935	5.69675468	5.69850001	5.70024534	5.70199067	5.70373600	5.70548132
327,	5.70722665	5.70897198	5.71071731	5.71246264	5.71420797	5.71595330	5.71769863	5.71944396	5.72118929	5.72293462
328,	5.72467995	5.72642528	5.72817061	5.72991593	5.73166126	5.73340659	5.73515192	5.73689725	5.73864258	5.74038791
329,	5.74213324	5.74387857	5.74562390	5.74736923	5.74911456	5.75085989	5.75260521	5.75435054	5.75609587	5.75784120
α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°

α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°
330,	5.75958653	5.76133186	5.76307719	5.76482252	5.76656785	5.76831318	5.77005851	5.77180384	5.77354917	5.77529449
331,	5.77703982	5.77878515	5.78053048	5.78227581	5.78402114	5.78576647	5.78751180	5.78925713	5.79100246	5.79274779
332,	5.79449312	5.79623845	5.79798378	5.79972910	5.80147443	5.80321976	5.80496509	5.80671042	5.80845575	5.81020108
333,	5.81194641	5.81369174	5.81543707	5.81718240	5.81892773	5.82067306	5.82241838	5.82416371	5.82590904	5.82765437
334,	5.82939970	5.83114503	5.83289036	5.83463569	5.83638102	5.83812635	5.83987168	5.84161701	5.84336234	5.84510766
335,	5.84685299	5.84859832	5.85034365	5.85208898	5.85383431	5.85557964	5.85732497	5.85907030	5.86081563	5.86256096
336,	5.86430629	5.86605162	5.86779695	5.86954227	5.87128760	5.87303293	5.87477826	5.87652359	5.87826892	5.88001425
337,	5.88175958	5.88350491	5.88525024	5.88699557	5.88874090	5.89048623	5.89223155	5.89397688	5.89572221	5.89746754
338,	5.89921287	5.90095820	5.90270353	5.90444886	5.90619419	5.90793952	5.90968485	5.91143018	5.91317551	5.91492084
339,	5.91666616	5.91841149	5.92015682	5.92190215	5.92364748	5.92539281	5.92713814	5.92888347	5.93062880	5.93237413
340,	5.93411946	5.93586479	5.93761012	5.93935544	5.94110077	5.94284610	5.94459143	5.94633676	5.94808209	5.94982742
341,	5.95157275	5.95331808	5.95506341	5.95680874	5.95855407	5.96029940	5.96204472	5.96379005	5.96553538	5.96728071
342,	5.96902604	5.97077137	5.97251670	5.97426203	5.97600736	5.97775269	5.97949802	5.98124335	5.98298868	5.98473401
343,	5.98647933	5.98822466	5.98996999	5.99171532	5.99346065	5.99520598	5.99695131	5.99869664	6.00044197	6.00218730
344,	6.00393263	6.00567796	6.00742329	6.00916861	6.01091394	6.01265927	6.01440460	6.01614993	6.01789526	6.01964059
345,	6.02138592	6.02313125	6.02487658	6.02662191	6.02836724	6.03011257	6.03185789	6.03360322	6.03534855	6.03709388
346,	6.03883921	6.04058454	6.04232987	6.04407520	6.04582053	6.04756586	6.04931119	6.05105652	6.05280185	6.05454718
347,	6.05629250	6.05803783	6.05978316	6.06152849	6.06327382	6.06501915	6.06676448	6.06850981	6.07025514	6.07200047
348,	6.07374580	6.07549113	6.07723646	6.07898178	6.08072711	6.08247244	6.08421777	6.08596310	6.08770843	6.08945376
349,	6.09119909	6.09294442	6.09468975	6.09643508	6.09818041	6.09992574	6.10167106	6.10341639	6.10516172	6.10690705
350,	6.10865238	6.11039771	6.11214304	6.11388837	6.11563370	6.11737903	6.11912436	6.12086969	6.12261502	6.12436035
351,	6.12610567	6.12785100	6.12959633	6.13134166	6.13308699	6.13483232	6.13657765	6.13832298	6.14006831	6.14181364
352,	6.14355897	6.14530430	6.14704963	6.14879495	6.15054028	6.15228561	6.15403094	6.15577627	6.15752160	6.15926693
353,	6.16101226	6.16275759	6.16450292	6.16624825	6.16799358	6.16973891	6.17148424	6.17322956	6.17497489	6.17672022
354,	6.17846555	6.18021088	6.18195621	6.18370154	6.18544687	6.18719220	6.18893753	6.19068286	6.19242819	6.19417352
355,	6.19591884	6.19766417	6.19940950	6.20115483	6.20290016	6.20464549	6.20639082	6.20813615	6.20988148	6.21162681
356,	6.21337214	6.21511747	6.21686280	6.21860812	6.22035345	6.22209878	6.22384411	6.22558944	6.22733477	6.22908010
357,	6.23082543	6.23257076	6.23431609	6.23606142	6.23780675	6.23955208	6.24129741	6.24304273	6.24478806	6.24653339
358,	6.24827872	6.25002405	6.25176938	6.25351471	6.25526004	6.25700537	6.25875070	6.26049603	6.26224136	6.26398669
359,	6.26573201	6.26747734	6.26922267	6.27096800	6.27271333	6.27445866	6.27620399	6.27794932	6.27969465	6.28143998
α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°

(1. Tabellenspalte: Anfangsziffern der Zahl in Grad, weitere Spalten: Endziffer der Zahl in Grad; Bogenmaß)

