Title
TABLE OF THE SOLUTIONS OF a tan{ajrx)=-b tan(anx)

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University of California

Ernest O. Lawrence Radiation Laboratory

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Paul Concus

June 2, 1967

Berkeley, California

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ABSTRACT

The first ten positive values of x satisfying $a \tan(\pi x) = -b \tan(a\pi x)$ are given to four places for several values of a and b in the range $0.001 \leq a \leq 1.0$ and $0.001 \leq b \leq 1000$.

The first ten positive values of x satisfying $a \tan(\pi x) = -b \tan(a\pi x)$ are given to four places for several values of a and b in the range $0.001 \leq a \leq 1.0$ and $0.001 \leq b \leq 1000$. These solutions are used in the series solution of a diffusion problem, where the eigenvalue relationships

$$\tan \lambda_k = - \frac{M}{\alpha} \tan \alpha \lambda_k \qquad \text{for } k = 1, 2, \cdots ,$$

must be solved for λ_k.[1] If the parameters of the diffusion problem lie in the range $0.001 \leq \alpha \leq 1.0$ and $0.001 \leq M \leq 1000$, then Table I may be used directly by taking $a = \alpha$ and $b = M$. The eigenvalues are then given by $\lambda_k = \pi x_k$. If, on the other hand, $1.0 < \alpha \leq 1000$, then take $a = \frac{1}{\alpha}$ and $b = \frac{1}{M}$, and the eigenvalues are given by $\lambda_k = \pi x_k / \alpha$.

For each α, M pair the solutions were calculated by first locating the interval of the appropriate branch of tan x in which the solution for a particular k lay and then using Newton's method to obtain this solution to at least eight digits. Table I gives the rounded values of these solutions. The calculations were performed on a CDC 6600 computer using a Chippewa FORTRAN program.

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[1] Paul Concus and Donald R. Olander, Transient Diffusion in a Composite Slab, Lawrence Radiation Laboratory Report UCRL-17607, June 1967 (to be published).

Table I. The first ten positive solutions of
a tan (πx) = - b tan (aπx)

x_1

a \ b	.001	.01	.03	.1	.2	.5	1.0	2.0	5.0	10	30	100	1000
.001	.9990	.9901	.9710	.9112	.8447	.7286	.6458	.5846	.5375	.5195	.5067	.5020	.5002
.005	.9990	.9901	.9710	.9112	.8447	.7286	.6458	.5846	.5375	.5195	.5067	.5020	.5002
.010	.9990	.9901	.9709	.9112	.8447	.7286	.6458	.5846	.5375	.5195	.5067	.5020	.5002
.020	.9990	.9901	.9709	.9112	.8446	.7285	.6457	.5846	.5375	.5195	.5067	.5020	.5002
.030	.9990	.9901	.9709	.9111	.8444	.7284	.6456	.5845	.5375	.5195	.5067	.5020	.5002
.040	.9990	.9901	.9708	.9109	.8443	.7282	.6455	.5845	.5375	.5195	.5067	.5020	.5002
.050	.9990	.9900	.9707	.9107	.8440	.7280	.6454	.5844	.5374	.5194	.5067	.5020	.5002
.060	.9990	.9900	.9706	.9105	.8437	.7278	.6453	.5843	.5374	.5194	.5066	.5020	.5002
.070	.9990	.9899	.9705	.9102	.8434	.7275	.6451	.5842	.5374	.5194	.5066	.5020	.5002
.080	.9990	.9899	.9704	.9099	.8430	.7271	.6448	.5841	.5373	.5194	.5066	.5020	.5002
.090	.9990	.9898	.9702	.9095	.8425	.7267	.6446	.5840	.5373	.5193	.5066	.5020	.5002
.100	.9990	.9898	.9701	.9091	.8420	.7263	.6443	.5838	.5372	.5193	.5066	.5020	.5002
.150	.9989	.9893	.9688	.9062	.8385	.7234	.6425	.5828	.5368	.5191	.5065	.5020	.5002
.200	.9988	.9886	.9669	.9019	.8333	.7194	.6399	.5814	.5362	.5188	.5064	.5020	.5002
.250	.9987	.9875	.9641	.8959	.8264	.7140	.6366	.5796	.5354	.5184	.5063	.5019	.5002
.300	.9985	.9858	.9597	.8874	.8173	.7074	.6325	.5774	.5345	.5180	.5062	.5019	.5002
.350	.9982	.9830	.9530	.8759	.8057	.6993	.6276	.5747	.5334	.5174	.5060	.5018	.5002
.400	.9976	.9777	.9421	.8604	.7913	.6899	.6220	.5716	.5321	.5168	.5058	.5017	.5002
.450	.9957	.9661	.9234	.8398	.7738	.6790	.6155	.5681	.5306	.5160	.5055	.5017	.5002
.500	.9799	.9369	.8924	.8136	.7532	.6667	.6082	.5641	.5290	.5152	.5052	.5016	.5002
.550	.9056	.8820	.8482	.7822	.7298	.6530	.6001	.5597	.5271	.5142	.5049	.5015	.5001
.600	.8318	.8195	.7975	.7472	.7040	.6380	.5912	.5548	.5250	.5132	.5045	.5014	.5001
.650	.7684	.7612	.7471	.7108	.6768	.6220	.5816	.5494	.5227	.5120	.5041	.5013	.5001
.700	.7138	.7093	.7001	.6747	.6490	.6051	.5713	.5436	.5202	.5107	.5037	.5011	.5001
.750	.6663	.6635	.6575	.6401	.6214	.5877	.5604	.5374	.5175	.5093	.5032	.5010	.5001
.800	.6248	.6230	.6191	.6075	.5946	.5699	.5489	.5307	.5145	.5077	.5027	.5008	.5001
.850	.5881	.5870	.5846	.5773	.5689	.5520	.5370	.5236	.5113	.5060	.5021	.5006	.5001
.900	.5555	.5549	.5536	.5494	.5445	.5343	.5249	.5161	.5078	.5042	.5015	.5005	.5000
.950	.5263	.5260	.5255	.5237	.5215	.5169	.5125	.5082	.5040	.5022	.5008	.5002	.5000
1.000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000

x_2

a \ b	.001	.01	.03	.1	.2	.5	1.0	2.0	5.0	10	30	100	1000
.001	1.9980	1.9802	1.9424	1.8336	1.7362	1.6192	1.5639	1.5329	1.5134	1.5067	1.5022	1.5007	1.5001
.005	1.9980	1.9802	1.9424	1.8336	1.7361	1.6192	1.5639	1.5329	1.5134	1.5067	1.5022	1.5007	1.5001
.010	1.9980	1.9802	1.9423	1.8335	1.7360	1.6191	1.5639	1.5329	1.5134	1.5067	1.5022	1.5007	1.5001
.020	1.9980	1.9801	1.9421	1.8331	1.7356	1.6189	1.5637	1.5328	1.5133	1.5067	1.5022	1.5007	1.5001
.030	1.9980	1.9800	1.9417	1.8324	1.7349	1.6184	1.5635	1.5327	1.5133	1.5067	1.5022	1.5007	1.5001
.040	1.9980	1.9798	1.9413	1.8313	1.7339	1.6178	1.5631	1.5325	1.5132	1.5066	1.5022	1.5007	1.5001
.050	1.9979	1.9796	1.9406	1.8300	1.7325	1.6170	1.5627	1.5323	1.5131	1.5066	1.5022	1.5007	1.5001
.060	1.9979	1.9793	1.9398	1.8284	1.7309	1.6161	1.5622	1.5320	1.5130	1.5065	1.5022	1.5007	1.5001
.070	1.9979	1.9789	1.9388	1.8264	1.7289	1.6149	1.5615	1.5317	1.5129	1.5065	1.5022	1.5007	1.5001
.080	1.9978	1.9784	1.9376	1.8241	1.7267	1.6136	1.5608	1.5313	1.5127	1.5064	1.5021	1.5006	1.5001
.090	1.9978	1.9779	1.9362	1.8213	1.7240	1.6120	1.5600	1.5309	1.5126	1.5063	1.5021	1.5006	1.5001
.100	1.9977	1.9773	1.9345	1.8182	1.7210	1.6103	1.5590	1.5304	1.5124	1.5062	1.5021	1.5006	1.5001
.150	1.9971	1.9717	1.9206	1.7947	1.7000	1.5986	1.5527	1.5272	1.5111	1.5056	1.5019	1.5006	1.5001
.200	1.9952	1.9556	1.8872	1.7524	1.6667	1.5811	1.5434	1.5224	1.5091	1.5046	1.5015	1.5005	1.5000
.250	1.9599	1.8762	1.7964	1.6811	1.6176	1.5571	1.5306	1.5159	1.5065	1.5033	1.5011	1.5003	1.5000
.300	1.6647	1.6488	1.6234	1.5782	1.5516	1.5255	1.5138	1.5072	1.5030	1.5015	1.5005	1.5002	1.5000
.350	1.4292	1.4340	1.4427	1.4608	1.4729	1.4859	1.4922	1.4959	1.4983	1.4991	1.4997	1.4999	1.5000
.400	1.2520	1.2678	1.2948	1.3505	1.3907	1.4391	1.4649	1.4810	1.4920	1.4959	1.4986	1.4996	1.5000
.450	1.1153	1.1435	1.1834	1.2582	1.3137	1.3871	1.4314	1.4615	1.4834	1.4915	1.4971	1.4991	1.4999
.500	1.0201	1.0631	1.1076	1.1864	1.2468	1.3333	1.3918	1.4359	1.4710	1.4848	1.4948	1.4984	1.4998
.550	1.0035	1.0278	1.0629	1.1334	1.1913	1.2808	1.3474	1.4029	1.4525	1.4742	1.4908	1.4972	1.4997
.600	1.0016	1.0149	1.0388	1.0955	1.1468	1.2319	1.3002	1.3619	1.4239	1.4550	1.4824	1.4943	1.4994
.650	1.0010	1.0092	1.0254	1.0687	1.1116	1.1878	1.2526	1.3143	1.3813	1.4188	1.4584	1.4821	1.4975
.700	1.0006	1.0061	1.0173	1.0496	1.0840	1.1488	1.2066	1.2633	1.3258	1.3609	1.3970	1.4167	1.4272
.750	1.0004	1.0042	1.0120	1.0357	1.0622	1.1148	1.1635	1.2118	1.2643	1.2919	1.3170	1.3280	1.3328
.800	1.0003	1.0028	1.0083	1.0252	1.0448	1.0853	1.1239	1.1624	1.2030	1.2232	1.2400	1.2469	1.2497
.850	1.0002	1.0019	1.0055	1.0170	1.0306	1.0597	1.0879	1.1162	1.1453	1.1591	1.1702	1.1745	1.1763
.900	1.0001	1.0011	1.0033	1.0104	1.0189	1.0373	1.0555	1.0737	1.0922	1.1007	1.1074	1.1100	1.1110
.950	1.0001	1.0005	1.0015	1.0048	1.0088	1.0176	1.0263	1.0351	1.0438	1.0478	1.0509	1.0521	1.0526
1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Table I (cont.)

x_3

a \ b	.001	.01	.03	.1	.2	.5	1.0	2.0	5.0	10	30	100	1000
.001	2.9970	2.9704	2.9147	2.7719	2.6710	2.5771	2.5397	2.5201	2.5081	2.5040	2.5014	2.5004	2.5000
.005	2.9970	2.9704	2.9146	2.7718	2.6710	2.5770	2.5397	2.5201	2.5081	2.5040	2.5013	2.5004	2.5000
.010	2.9970	2.9703	2.9144	2.7716	2.6707	2.5769	2.5396	2.5200	2.5081	2.5040	2.5013	2.5004	2.5000
.020	2.9970	2.9700	2.9138	2.7704	2.6698	2.5765	2.5394	2.5199	2.5080	2.5040	2.5013	2.5004	2.5000
.030	2.9969	2.9696	2.9126	2.7685	2.6682	2.5757	2.5389	2.5197	2.5079	2.5040	2.5013	2.5004	2.5000
.040	2.9969	2.9690	2.9110	2.7657	2.6660	2.5746	2.5384	2.5194	2.5078	2.5039	2.5013	2.5004	2.5000
.050	2.9968	2.9681	2.9087	2.7621	2.6631	2.5731	2.5376	2.5190	2.5077	2.5038	2.5013	2.5004	2.5000
.060	2.9966	2.9669	2.9058	2.7575	2.6594	2.5713	2.5367	2.5186	2.5075	2.5037	2.5012	2.5004	2.5000
.070	2.9965	2.9654	2.9020	2.7519	2.6551	2.5692	2.5356	2.5180	2.5072	2.5036	2.5012	2.5004	2.5000
.080	2.9963	2.9635	2.8973	2.7451	2.6499	2.5667	2.5343	2.5173	2.5070	2.5035	2.5012	2.5004	2.5000
.090	2.9960	2.9610	2.8913	2.7369	2.6439	2.5638	2.5328	2.5166	2.5067	2.5033	2.5011	2.5003	2.5000
.100	2.9956	2.9576	2.8837	2.7273	2.6369	2.5605	2.5311	2.5157	2.5063	2.5032	2.5011	2.5003	2.5000
.150	2.9871	2.9007	2.7918	2.6481	2.5856	2.5374	2.5192	2.5098	2.5039	2.5020	2.5007	2.5002	2.5000
.200	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000
.250	2.0401	2.1238	2.2036	2.3189	2.3824	2.4429	2.4694	2.4841	2.4935	2.4967	2.4989	2.4997	2.5000
.300	2.0032	2.0297	2.0767	2.1800	2.2600	2.3624	2.4197	2.4563	2.4816	2.4906	2.4968	2.4990	2.4999
.350	2.0012	2.0122	2.0346	2.0974	2.1601	2.2639	2.3404	2.4015	2.4535	2.4751	2.4913	2.4973	2.4997
.400	2.0006	2.0057	2.0166	2.0501	2.0882	2.1632	2.2301	2.2941	2.3629	2.4012	2.4423	2.4682	2.4899
.450	2.0002	2.0023	2.0067	2.0207	2.0376	2.0739	2.1093	2.1447	2.1815	2.1992	2.2138	2.2196	2.2220
.500	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
.550	1.9998	1.9981	1.9945	1.9831	1.9692	1.9393	1.9099	1.8806	1.8505	1.8362	1.8247	1.8202	1.8184
.600	1.9996	1.9962	1.9889	1.9665	1.9405	1.8876	1.8380	1.7888	1.7359	1.7081	1.6830	1.6720	1.6672
.650	1.9993	1.9934	1.9813	1.9466	1.9097	1.8409	1.7800	1.7209	1.6557	1.6189	1.5798	1.5563	1.5409
.700	1.9986	1.9872	1.9667	1.9177	1.8727	1.7958	1.7316	1.6706	1.6050	1.5688	1.5320	1.5120	1.5014
.750	1.9866	1.9578	1.9275	1.8715	1.8254	1.7502	1.6890	1.6323	1.5737	1.5438	1.5172	1.5056	1.5006
.800	1.8738	1.8641	1.8465	1.8050	1.7670	1.7027	1.6497	1.6012	1.5529	1.5299	1.5110	1.5034	1.5003
.850	1.7642	1.7600	1.7514	1.7268	1.7009	1.6531	1.6120	1.5741	1.5374	1.5206	1.5074	1.5023	1.5002
.900	1.6664	1.6644	1.6602	1.6471	1.6321	1.6021	1.5748	1.5491	1.5243	1.5133	1.5047	1.5014	1.5001
.950	1.5789	1.5781	1.5764	1.5710	1.5645	1.5507	1.5375	1.5247	1.5122	1.5066	1.5023	1.5007	1.5001
1.000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000

x_4

a \ b	.001	.01	.03	.1	.2	.5	1.0	2.0	5.0	10	30	100	1000
.001	3.9960	3.9606	3.8882	3.7251	3.6315	3.5564	3.5286	3.5144	3.5058	3.5029	3.5010	3.5003	3.5000
.005	3.9960	3.9605	3.8881	3.7249	3.6314	3.5563	3.5286	3.5144	3.5058	3.5029	3.5010	3.5003	3.5000
.010	3.9960	3.9604	3.8877	3.7244	3.6310	3.5562	3.5285	3.5143	3.5058	3.5029	3.5010	3.5003	3.5000
.020	3.9959	3.9598	3.8862	3.7223	3.6295	3.5555	3.5282	3.5142	3.5057	3.5028	3.5009	3.5003	3.5000
.030	3.9958	3.9587	3.8835	3.7187	3.6270	3.5543	3.5276	3.5139	3.5056	3.5028	3.5009	3.5003	3.5000
.040	3.9956	3.9571	3.8795	3.7136	3.6234	3.5527	3.5268	3.5135	3.5054	3.5027	3.5009	3.5003	3.5000
.050	3.9954	3.9547	3.8740	3.7067	3.6187	3.5506	3.5257	3.5129	3.5052	3.5026	3.5009	3.5003	3.5000
.060	3.9950	3.9515	3.8664	3.6979	3.6129	3.5480	3.5243	3.5122	3.5049	3.5025	3.5008	3.5002	3.5000
.070	3.9945	3.9468	3.8560	3.6869	3.6057	3.5448	3.5227	3.5114	3.5046	3.5023	3.5008	3.5002	3.5000
.080	3.9938	3.9401	3.8419	3.6732	3.5971	3.5410	3.5208	3.5105	3.5042	3.5021	3.5007	3.5002	3.5000
.090	3.9925	3.9297	3.8222	3.6566	3.5869	3.5366	3.5186	3.5094	3.5038	3.5019	3.5006	3.5002	3.5000
.100	3.9903	3.9127	3.7944	3.6364	3.5750	3.5315	3.5160	3.5081	3.5032	3.5016	3.5005	3.5002	3.5000
.150	3.3411	3.3862	3.4292	3.4694	3.4831	3.4928	3.4963	3.4981	3.4993	3.4996	3.4999	3.5000	3.5000
.200	3.0048	3.0444	3.1128	3.2476	3.3333	3.4189	3.4566	3.4776	3.4909	3.4954	3.4985	3.4995	3.5000
.250	3.0013	3.0125	3.0359	3.1041	3.1736	3.2860	3.3634	3.4204	3.4646	3.4816	3.4937	3.4981	3.4998
.300	3.0003	3.0034	3.0100	3.0310	3.0561	3.1092	3.1600	3.2102	3.2639	3.2918	3.3170	3.3280	3.3328
.350	2.9999	2.9986	2.9958	2.9869	2.9761	2.9525	2.9291	2.9057	2.8819	2.8708	2.8621	2.8587	2.8573
.400	2.9994	2.9943	2.9834	2.9499	2.9118	2.8368	2.7699	2.7059	2.6371	2.5988	2.5577	2.5318	2.5101
.450	2.9986	2.9867	2.9634	2.9020	2.8435	2.7471	2.6736	2.6118	2.5556	2.5306	2.5110	2.5034	2.5003
.500	2.9799	2.9369	2.8924	2.8136	2.7532	2.6667	2.6082	2.5641	2.5290	2.5152	2.5052	2.5016	2.5002
.550	2.7264	2.7186	2.7038	2.6667	2.6339	2.5854	2.5536	2.5308	2.5135	2.5070	2.5024	2.5007	2.5001
.600	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000
.650	2.3082	2.3127	2.3218	2.3469	2.3716	2.4124	2.4423	2.4656	2.4844	2.4918	2.4972	2.4991	2.4999
.700	2.1442	2.1551	2.1747	2.2204	2.2612	2.3275	2.3789	2.4228	2.4624	2.4797	2.4928	2.4978	2.4998
.750	2.0134	2.0422	2.0725	2.1285	2.1746	2.2498	2.3110	2.3677	2.4263	2.4562	2.4828	2.4944	2.4994
.800	2.0012	2.0112	2.0292	2.0723	2.1123	2.1819	2.2417	2.2999	2.3648	2.4020	2.4424	2.4683	2.4899
.850	2.0005	2.0050	2.0143	2.0410	2.0696	2.1243	2.1741	2.2236	2.2780	2.3072	2.3344	2.3468	2.3523
.900	2.0003	2.0025	2.0074	2.0224	2.0399	2.0761	2.1107	2.1453	2.1816	2.1992	2.2138	2.2196	2.2220
.950	2.0001	2.0011	2.0032	2.0098	2.0179	2.0353	2.0526	2.0699	2.0874	2.0954	2.1018	2.1042	2.1052
1.000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000

Table I (cont.)

x_5

a \ b	.001	.01	.03	.1	.2	.5	1.0	2.0	5.0	10	30	100	1000
.001	4.9950	4.9509	4.8632	4.6898	4.6059	4.5443	4.5224	4.5112	4.5045	4.5023	4.5008	4.5002	4.5000
.005	4.9950	4.9508	4.8630	4.6896	4.6057	4.5442	4.5223	4.5112	4.5045	4.5022	4.5007	4.5002	4.5000
.010	4.9950	4.9505	4.8623	4.6888	4.6052	4.5440	4.5222	4.5112	4.5045	4.5022	4.5007	4.5002	4.5000
.020	4.9948	4.9493	4.8594	4.6856	4.6032	4.5431	4.5218	4.5109	4.5044	4.5022	4.5007	4.5002	4.5000
.030	4.9946	4.9471	4.8544	4.6802	4.5998	4.5416	4.5210	4.5105	4.5042	4.5021	4.5007	4.5002	4.5000
.040	4.9942	4.9436	4.8466	4.6723	4.5948	4.5395	4.5199	4.5100	4.5040	4.5020	4.5007	4.5002	4.5000
.050	4.9936	4.9383	4.8352	4.6616	4.5883	4.5367	4.5185	4.5093	4.5037	4.5019	4.5006	4.5002	4.5000
.060	4.9927	4.9301	4.8186	4.6476	4.5799	4.5331	4.5167	4.5084	4.5034	4.5017	4.5006	4.5002	4.5000
.070	4.9911	4.9166	4.7942	4.6297	4.5696	4.5288	4.5145	4.5073	4.5029	4.5015	4.5005	4.5001	4.5000
.080	4.9879	4.8923	4.7577	4.6073	4.5571	4.5236	4.5119	4.5060	4.5024	4.5012	4.5004	4.5001	4.5000
.090	4.9785	4.8417	4.7024	4.5794	4.5420	4.5173	4.5087	4.5044	4.5018	4.5009	4.5003	4.5001	4.5000
.100	4.9010	4.7264	4.6208	4.5455	4.5239	4.5099	4.5050	4.5025	4.5010	4.5005	4.5002	4.5001	4.5000
.150	4.0065	4.0589	4.1466	4.2985	4.3782	4.4454	4.4717	4.4856	4.4942	4.4971	4.4990	4.4997	4.5000
.200	4.0012	4.0114	4.0331	4.0981	4.1667	4.2806	4.3601	4.4186	4.4638	4.4812	4.4936	4.4980	4.4998
.250	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
.300	3.9992	3.9924	3.9779	3.9336	3.8841	3.7915	3.7145	3.6461	3.5792	3.5465	3.5181	3.5058	3.5006
.350	3.9972	3.9745	3.9340	3.8426	3.7680	3.6647	3.6009	3.5569	3.5247	3.5127	3.5043	3.5013	3.5001
.400	3.7480	3.7322	3.7052	3.6495	3.6093	3.5609	3.5351	3.5190	3.5080	3.5041	3.5014	3.5004	3.5000
.450	3.3342	3.3419	3.3562	3.3899	3.4169	3.4519	3.4717	3.4845	3.4934	3.4966	3.4989	3.4997	3.5000
.500	3.0201	3.0631	3.1076	3.1864	3.2468	3.3333	3.3918	3.4359	3.4710	3.4848	3.4948	3.4984	3.4998
.550	3.0011	3.0108	3.0300	3.0809	3.1305	3.2162	3.2862	3.3500	3.4150	3.4484	3.4791	3.4931	3.4993
.600	3.0004	3.0038	3.0111	3.0335	3.0595	3.1124	3.1620	3.2112	3.2641	3.2919	3.3170	3.3280	3.3328
.650	3.0001	3.0008	3.0023	3.0070	3.0129	3.0257	3.0384	3.0511	3.0640	3.0698	3.0744	3.0761	3.0768
.700	2.9999	2.9985	2.9957	2.9867	2.9758	2.9522	2.9289	2.9056	2.8819	2.8708	2.8621	2.8587	2.8573
.750	2.9996	2.9958	2.9880	2.9643	2.9378	2.8852	2.8365	2.7882	2.7357	2.7081	2.6830	2.6720	2.6672
.800	2.9988	2.9888	2.9708	2.9277	2.8877	2.8181	2.7583	2.7001	2.6352	2.5980	2.5576	2.5317	2.5101
.850	2.9389	2.9233	2.9005	2.8538	2.8135	2.7461	2.6894	2.6353	2.5776	2.5471	2.5190	2.5062	2.5007
.900	2.7773	2.7732	2.7648	2.7408	2.7153	2.6674	2.6251	2.5849	2.5442	2.5248	2.5091	2.5028	2.5003
.950	2.6314	2.6301	2.6271	2.6179	2.6070	2.5842	2.5625	2.5414	2.5207	2.5113	2.5040	2.5012	2.5001
1.000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000

x_6

a \ b	.001	.01	.03	.1	.2	.5	1.0	2.0	5.0	10	30	100	1000
.001	5.9940	5.9413	5.8398	5.6630	5.5883	5.5364	5.5183	5.5092	5.5037	5.5018	5.5006	5.5002	5.5000
.005	5.9940	5.9411	5.8395	5.6626	5.5881	5.5364	5.5183	5.5092	5.5037	5.5018	5.5006	5.5002	5.5000
.010	5.9939	5.9406	5.8384	5.6616	5.5875	5.5361	5.5182	5.5091	5.5036	5.5018	5.5006	5.5002	5.5000
.020	5.9937	5.9385	5.8337	5.6573	5.5849	5.5350	5.5176	5.5088	5.5035	5.5018	5.5006	5.5002	5.5000
.030	5.9933	5.9345	5.8252	5.6499	5.5805	5.5331	5.5167	5.5084	5.5033	5.5017	5.5006	5.5002	5.5000
.040	5.9925	5.9279	5.8117	5.6390	5.5741	5.5304	5.5153	5.5077	5.5031	5.5015	5.5005	5.5002	5.5000
.050	5.9913	5.9167	5.7909	5.6240	5.5656	5.5269	5.5135	5.5068	5.5027	5.5014	5.5005	5.5001	5.5000
.060	5.9888	5.8965	5.7585	5.6041	5.5546	5.5223	5.5112	5.5056	5.5023	5.5011	5.5004	5.5001	5.5000
.070	5.9826	5.8548	5.7073	5.5782	5.5407	5.5166	5.5084	5.5042	5.5017	5.5008	5.5003	5.5001	5.5000
.080	5.9481	5.7513	5.6269	5.5453	5.5235	5.5096	5.5048	5.5024	5.5010	5.5005	5.5002	5.5000	5.5000
.090	5.5494	5.5248	5.5118	5.5042	5.5022	5.5009	5.5004	5.5002	5.5001	5.5000	5.5000	5.5000	5.5000
.100	5.0990	5.2736	5.3792	5.4545	5.4761	5.4901	5.4950	5.4975	5.4990	5.4995	5.4998	5.4999	5.5000
.150	5.0021	5.0208	5.0595	5.1650	5.2569	5.3711	5.4289	5.4627	5.4847	5.4923	5.4974	5.4992	5.4999
.200	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000
.250	4.9987	4.9875	4.9641	4.8959	4.8264	4.7140	4.6366	4.5796	4.5354	4.5184	4.5063	4.5019	4.5002
.300	4.9665	4.8960	4.8265	4.7180	4.6507	4.5785	4.5435	4.5230	4.5095	4.5048	4.5016	4.5005	4.5000
.350	4.2878	4.3041	4.3313	4.3842	4.4193	4.4576	4.4763	4.4874	4.4948	4.4974	4.4991	4.4997	4.5000
.400	4.0024	4.0223	4.0579	4.1396	4.2087	4.3101	4.3780	4.4284	4.4679	4.4832	4.4942	4.4983	4.4998
.450	4.0005	4.0051	4.0147	4.0446	4.0788	4.1469	4.2087	4.2689	4.3343	4.3707	4.4086	4.4302	4.4427
.500	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
.550	3.9996	3.9959	3.9879	3.9635	3.9352	3.8780	3.8248	3.7722	3.7152	3.6848	3.6562	3.6430	3.6371
.600	3.9984	3.9851	3.9612	3.9045	3.8532	3.7681	3.6998	3.6381	3.5761	3.5450	3.5176	3.5057	3.5006
.650	3.8447	3.8331	3.8124	3.7644	3.7223	3.6558	3.6062	3.5657	3.5309	3.5165	3.5058	3.5018	3.5002
.700	3.5713	3.5700	3.5672	3.5592	3.5506	3.5353	3.5235	3.5141	3.5064	3.5034	3.5012	3.5004	3.5000
.750	3.3337	3.3365	3.3425	3.3599	3.3786	3.4123	3.4396	3.4626	3.4825	3.4907	3.4968	3.4990	3.4999
.800	3.1262	3.1359	3.1535	3.1950	3.2330	3.2973	3.3503	3.3988	3.4471	3.4701	3.4890	3.4966	3.4997
.850	3.0023	3.0180	3.0409	3.0881	3.1290	3.1982	3.2572	3.3147	3.3789	3.4157	3.4553	3.4797	3.4969
.900	3.0005	3.0047	3.0135	3.0387	3.0658	3.1178	3.1653	3.2127	3.2645	3.2920	3.3170	3.3280	3.3328
.950	3.0002	3.0017	3.0049	3.0152	3.0274	3.0535	3.0789	3.1043	3.1303	3.1426	3.1524	3.1562	3.1577
1.000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000

Table I (cont.)

x_7

a \ b	.001	.01	.03	.1	.2	.5	1.0	2.0	5.0	10	30	100	1000
.001	6.9930	6.9317	6.8182	6.6422	6.5756	6.5309	6.5155	6.5078	6.5031	6.5016	6.5005	6.5002	6.5000
.005	6.9930	6.9315	6.8177	6.6418	6.5753	6.5308	6.5155	6.5078	6.5031	6.5016	6.5005	6.5002	6.5000
.010	6.9929	6.9307	6.8160	6.6405	6.5746	6.5305	6.5153	6.5077	6.5031	6.5015	6.5005	6.5002	6.5000
.020	6.9925	6.9273	6.8090	6.6350	6.5714	6.5292	6.5147	6.5073	6.5029	6.5015	6.5005	6.5001	6.5000
.030	6.9918	6.9206	6.7961	6.6256	6.5661	6.5270	6.5135	6.5068	6.5027	6.5014	6.5005	6.5001	6.5000
.040	6.9904	6.9086	6.7746	6.6115	6.5583	6.5237	6.5119	6.5060	6.5024	6.5012	6.5004	6.5001	6.5000
.050	6.9876	6.8856	6.7396	6.5918	6.5476	6.5193	6.5097	6.5049	6.5019	6.5010	6.5003	6.5001	6.5000
.060	6.9797	6.8341	6.6820	6.5652	6.5336	6.5136	6.5068	6.5034	6.5014	6.5007	6.5002	6.5001	6.5000
.070	6.9126	6.6932	6.5886	6.5301	6.5155	6.5063	6.5032	6.5016	6.5006	6.5003	6.5001	6.5000	6.5000
.080	6.2889	6.4042	6.4562	6.4850	6.4922	6.4968	6.4984	6.4992	6.4997	6.4998	6.4999	6.5000	6.5000
.090	6.0264	6.1778	6.3155	6.4290	6.4626	6.4846	6.4922	6.4961	6.4984	6.4992	6.4997	6.4999	6.5000
.100	6.0097	6.0873	6.2056	6.3636	6.4250	6.4685	6.4840	6.4919	6.4968	6.4984	6.4995	6.4998	6.5000
.150	6.0007	6.0068	6.0200	6.0614	6.1095	6.2029	6.2818	6.3519	6.4200	6.4531	6.4818	6.4941	6.4994
.200	5.9988	5.9886	5.9669	5.9019	5.8333	5.7194	5.6399	5.5814	5.5362	5.5188	5.5064	5.5020	5.5002
.250	5.9599	5.8762	5.7964	5.6811	5.6176	5.5571	5.5306	5.5159	5.5065	5.5033	5.5011	5.5003	5.5000
.300	5.0335	5.1040	5.1735	5.2820	5.3493	5.4215	5.4565	5.4770	5.4905	5.4952	5.4984	5.4995	5.5000
.350	5.0009	5.0089	5.0257	5.0755	5.1289	5.2248	5.3018	5.3686	5.4317	5.4612	5.4856	5.4955	5.4995
.400	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000
.450	4.9993	4.9931	4.9800	4.9409	4.8980	4.8173	4.7476	4.6822	4.6130	4.5752	4.5364	4.5144	4.5018
.500	4.9799	4.9369	4.8924	4.8136	4.7532	4.6667	4.6082	4.5641	4.5290	4.5152	4.5052	4.5016	4.5002
.550	4.5453	4.5440	4.5413	4.5341	4.5273	4.5171	4.5106	4.5060	4.5026	4.5013	4.5005	4.5001	4.5000
.600	4.1682	4.1805	4.2025	4.2528	4.2960	4.3620	4.4088	4.4452	4.4750	4.4868	4.4955	4.4986	4.4999
.650	4.0015	4.0137	4.0359	4.0884	4.1364	4.2173	4.2837	4.3453	4.4098	4.4439	4.4764	4.4920	4.4991
.700	4.0003	4.0033	4.0095	4.0288	4.0511	4.0970	4.1405	4.1838	4.2299	4.2533	4.2734	4.2818	4.2853
.750	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
.800	3.9997	3.9972	3.9917	3.9748	3.9552	3.9147	3.8761	3.8376	3.7970	3.7768	3.7600	3.7531	3.7503
.850	3.9989	3.9895	3.9725	3.9319	3.8940	3.8277	3.7701	3.7135	3.6500	3.6135	3.5740	3.5496	3.5325
.900	3.8878	3.8791	3.8632	3.8253	3.7901	3.7288	3.6761	3.6253	3.5709	3.5424	3.5167	3.5054	3.5006
.950	3.6840	3.6819	3.6776	3.6642	3.6488	3.6171	3.5875	3.5587	3.5299	3.5165	3.5059	3.5018	3.5002
1.000	3.5000	3.5000	3.5000	3.5000	3.5000	3.5000	3.5000	3.5000	3.5000	3.5000	3.5000	3.5000	3.5000

x_8

a \ b	.001	.01	.03	.1	.2	.5	1.0	2.0	5.0	10	30	100	1000
.001	7.9920	7.9223	7.7982	7.6258	7.5660	7.5269	7.5135	7.5067	7.5027	7.5014	7.5005	7.5001	7.5000
.005	7.9920	7.9220	7.7975	7.6253	7.5657	7.5267	7.5134	7.5067	7.5027	7.5013	7.5004	7.5001	7.5000
.010	7.9918	7.9208	7.7952	7.6237	7.5648	7.5264	7.5132	7.5066	7.5027	7.5013	7.5004	7.5001	7.5000
.020	7.9913	7.9156	7.7855	7.6171	7.5611	7.5248	7.5125	7.5062	7.5025	7.5012	7.5004	7.5001	7.5000
.030	7.9901	7.9051	7.7670	7.6055	7.5548	7.5222	7.5112	7.5056	7.5022	7.5011	7.5004	7.5001	7.5000
.040	7.9875	7.8840	7.7350	7.5881	7.5454	7.5184	7.5092	7.5046	7.5018	7.5009	7.5003	7.5001	7.5000
.050	7.9806	7.8362	7.6802	7.5632	7.5324	7.5131	7.5066	7.5033	7.5013	7.5007	7.5002	7.5001	7.5000
.060	7.9312	7.6988	7.5878	7.5291	7.5148	7.5060	7.5030	7.5015	7.5006	7.5003	7.5001	7.5000	7.5000
.070	7.2209	7.3859	7.4501	7.4833	7.4914	7.4965	7.4983	7.4991	7.4996	7.4998	7.4999	7.5000	7.5000
.080	7.0203	7.1573	7.3011	7.4241	7.4602	7.4837	7.4918	7.4959	7.4983	7.4992	7.4997	7.4999	7.5000
.090	7.0081	7.0757	7.1879	7.3522	7.4185	7.4658	7.4827	7.4913	7.4965	7.4982	7.4994	7.4998	7.5000
.100	7.0044	7.0424	7.1163	7.2727	7.3631	7.4395	7.4689	7.4843	7.4937	7.4968	7.4989	7.4997	7.5000
.150	6.9997	6.9967	6.9902	6.9696	6.9446	6.8915	6.8406	6.7900	6.7361	6.7082	6.6830	6.6720	6.6672
.200	6.9952	6.9556	6.8872	6.7524	6.6667	6.5811	6.5434	6.5224	6.5091	6.5046	6.5015	6.5005	6.5000
.250	6.0401	6.1238	6.2036	6.3189	6.3824	6.4429	6.4694	6.4841	6.4935	6.4967	6.4989	6.4997	6.5000
.300	6.0008	6.0076	6.0221	6.0664	6.1159	6.2085	6.2855	6.3539	6.4208	6.4535	6.4819	6.4942	6.4994
.350	5.9997	5.9971	5.9914	5.9734	5.9518	5.9057	5.8613	5.8170	5.7703	5.7468	5.7266	5.7182	5.7147
.400	5.9976	5.9777	5.9421	5.8604	5.7913	5.6899	5.6220	5.5716	5.5321	5.5168	5.5058	5.5017	5.5002
.450	5.5553	5.5529	5.5483	5.5371	5.5279	5.5160	5.5094	5.5051	5.5022	5.5011	5.5004	5.5001	5.5000
.500	5.0201	5.0631	5.1076	5.1864	5.2468	5.3333	5.3918	5.4359	5.4710	5.4848	5.4948	5.4984	5.4998
.550	5.0006	5.0057	5.0164	5.0485	5.0842	5.1530	5.2147	5.2746	5.3401	5.3769	5.4156	5.4383	5.4524
.600	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000
.650	4.9995	4.9952	4.9861	4.9589	4.9284	4.8687	4.8141	4.7602	4.7013	4.6693	4.6382	4.6232	4.6162
.700	4.9856	4.9548	4.9224	4.8629	4.8143	4.7363	4.6742	4.6183	4.5630	4.5361	4.5136	4.5043	4.5004
.750	4.6663	4.6635	4.6575	4.6401	4.6214	4.5877	4.5604	4.5374	4.5175	4.5093	4.5032	4.5010	4.5001
.800	4.3752	4.3770	4.3809	4.3925	4.4054	4.4301	4.4511	4.4693	4.4855	4.4923	4.4973	4.4992	4.4999
.850	4.1188	4.1280	4.1447	4.1843	4.2209	4.2837	4.3368	4.3867	4.4384	4.4642	4.4864	4.4957	4.4996
.900	4.0011	4.0099	4.0259	4.0644	4.1004	4.1637	4.2191	4.2739	4.3358	4.3712	4.4086	4.4302	4.4427
.950	4.0002	4.0024	4.0070	4.0212	4.0378	4.0721	4.1051	4.1380	4.1724	4.1891	4.2027	4.2081	4.2103
1.000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000

Table I (cont.)

x_9

a \ b	.001	.01	.03	.1	.2	.5	1.0	2.0	5.0	10	30	100	1000
.001	8.9910	8.9131	8.7799	8.6127	8.5585	8.5237	8.5119	8.5060	8.5024	8.5012	8.5004	8.5001	8.5000
.005	8.9910	8.9126	8.7790	8.6121	8.5582	8.5236	8.5118	8.5059	8.5024	8.5012	8.5004	8.5001	8.5000
.010	8.9908	8.9109	8.7760	8.6102	8.5571	8.5232	8.5116	8.5058	8.5023	8.5012	8.5004	8.5001	8.5000
.020	8.9899	8.9034	8.7631	8.6024	8.5529	8.5214	8.5107	8.5054	8.5022	8.5011	8.5004	8.5001	8.5000
.030	8.9880	8.8872	8.7379	8.5886	8.5456	8.5184	8.5092	8.5046	8.5019	8.5009	8.5003	8.5001	8.5000
.040	8.9832	8.8508	8.6926	8.5676	8.5345	8.5139	8.5070	8.5035	8.5014	8.5007	8.5002	8.5001	8.5000
.050	8.9615	8.7492	8.6125	8.5371	8.5188	8.5076	8.5038	8.5019	8.5008	8.5004	8.5001	8.5000	8.5000
.060	8.3712	8.4561	8.4822	8.4942	8.4971	8.4988	8.4994	8.4997	8.4999	8.4999	8.5000	8.5000	8.5000
.070	8.0232	8.1762	8.3234	8.4358	8.4667	8.4864	8.4932	8.4966	8.4986	8.4993	8.4998	8.4999	8.5000
.080	8.0084	8.0787	8.1954	8.3604	8.4240	8.4683	8.4840	8.4920	8.4968	8.4984	8.4995	8.4998	8.5000
.090	8.0043	8.0415	8.1148	8.2722	8.3634	8.4399	8.4692	8.4844	8.4937	8.4969	8.4990	8.4997	8.5000
.100	8.0023	8.0227	8.0655	8.1818	8.2790	8.3897	8.4410	8.4696	8.4876	8.4938	8.4979	8.4994	8.4999
.150	7.9985	7.9848	7.9560	7.8720	7.7893	7.6690	7.5984	7.5533	7.5223	7.5114	7.5038	7.5012	7.5001
.200	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000
.250	7.0013	7.0125	7.0359	7.1041	7.1736	7.2860	7.3634	7.4204	7.4646	7.4816	7.4937	7.4981	7.4998
.300	6.9997	6.9966	6.9900	6.9690	6.9439	6.8908	6.8400	6.7898	6.7361	6.7082	6.6830	6.6720	6.6672
.350	6.9945	6.9565	6.9024	6.8007	6.7265	6.6321	6.5781	6.5429	6.5182	6.5093	6.5031	6.5009	6.5001
.400	6.2520	6.2678	6.2948	6.3505	6.3907	6.4391	6.4649	6.4810	6.4920	6.4959	6.4986	6.4996	6.5000
.450	6.0010	6.0095	6.0269	6.0765	6.1277	6.2181	6.2916	6.3573	6.4221	6.4541	6.4821	6.4942	6.4994
.500	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000
.550	5.9992	5.9923	5.9780	5.9371	5.8942	5.8156	5.7483	5.6846	5.6164	5.5787	5.5393	5.5163	5.5021
.600	5.8318	5.8195	5.7975	5.7472	5.7040	5.6380	5.5912	5.5548	5.5250	5.5132	5.5045	5.5014	5.5001
.650	5.3849	5.3874	5.3925	5.4072	5.4221	5.4473	5.4656	5.4797	5.4909	5.4952	5.4984	5.4995	5.5000
.700	5.0144	5.0452	5.0776	5.1371	5.1857	5.2637	5.3258	5.3817	5.4370	5.4639	5.4864	5.4957	5.4996
.750	5.0004	5.0042	5.0120	5.0357	5.0622	5.1148	5.1635	5.2118	5.2643	5.2919	5.3170	5.3280	5.3328
.800	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000
.850	4.9996	4.9963	4.9894	4.9685	4.9450	4.8981	4.8543	4.8107	4.7638	4.7397	4.7188	4.7100	4.7063
.900	4.9888	4.9648	4.9394	4.8921	4.8523	4.7853	4.7281	4.6720	4.6093	4.5736	4.5359	4.5143	4.5018
.950	4.7365	4.7337	4.7277	4.7096	4.6894	4.6494	4.6126	4.5768	4.5400	4.5225	4.5082	4.5025	4.5003
1.000	4.5000	4.5000	4.5000	4.5000	4.5000	4.5000	4.5000	4.5000	4.5000	4.5000	4.5000	4.5000	4.5000

x_{10}

a \ b	.001	.01	.03	.1	.2	.5	1.0	2.0	5.0	10	30	100	1000
.001	9.9900	9.9040	9.7632	9.6019	9.5525	9.5212	9.5106	9.5053	9.5021	9.5011	9.5004	9.5001	9.5000
.005	9.9899	9.9033	9.7620	9.6012	9.5522	9.5211	9.5106	9.5053	9.5021	9.5011	9.5004	9.5001	9.5000
.010	9.9897	9.9010	9.7582	9.5990	9.5510	9.5206	9.5103	9.5052	9.5021	9.5010	9.5003	9.5001	9.5000
.020	9.9885	9.8906	9.7418	9.5901	9.5462	9.5187	9.5094	9.5047	9.5019	9.5009	9.5003	9.5001	9.5000
.030	9.9854	9.8662	9.7087	9.5741	9.5378	9.5152	9.5076	9.5038	9.5015	9.5008	9.5003	9.5001	9.5000
.040	9.9758	9.8036	9.6475	9.5491	9.5249	9.5100	9.5050	9.5025	9.5010	9.5005	9.5002	9.5001	9.5000
.050	9.8112	9.5976	9.5384	9.5122	9.5062	9.5025	9.5012	9.5006	9.5003	9.5001	9.5000	9.5000	9.5000
.060	9.0394	9.2438	9.3790	9.4591	9.4791	9.4915	9.4957	9.4979	9.4991	9.4996	9.4999	9.5000	9.5000
.070	9.0104	9.0962	9.2276	9.3855	9.4392	9.4750	9.4874	9.4937	9.4975	9.4987	9.4996	9.4999	9.5000
.080	9.0048	9.0466	9.1278	9.2917	9.3787	9.4477	9.4733	9.4865	9.4946	9.4973	9.4991	9.4997	9.5000
.090	9.0024	9.0236	9.0681	9.1883	9.2865	9.3953	9.4444	9.4714	9.4884	9.4942	9.4981	9.4994	9.4999
.100	9.0010	9.0102	9.0299	9.0909	9.1580	9.2737	9.3557	9.4162	9.4628	9.4807	9.4934	9.4980	9.4998
.150	8.9959	8.9604	8.8934	8.7503	8.6597	8.5745	8.5391	8.5200	8.5081	8.5041	8.5014	8.5004	8.5000
.200	8.0048	8.0444	8.1128	8.2476	8.3333	8.4189	8.4566	8.4776	8.4909	8.4954	8.4985	8.4995	8.5000
.250	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000
.300	7.9968	7.9703	7.9233	7.8200	7.7400	7.6376	7.5803	7.5437	7.5184	7.5094	7.5032	7.5010	7.5001
.350	7.1480	7.1829	7.2306	7.3134	7.3676	7.4288	7.4597	7.4785	7.4910	7.4955	7.4985	7.4995	7.5000
.400	7.0006	7.0057	7.0166	7.0501	7.0882	7.1632	7.2301	7.2941	7.3629	7.4012	7.4423	7.4682	7.4899
.450	6.9996	6.9964	6.9896	6.9680	6.9425	6.8894	6.8392	6.7894	6.7360	6.7082	6.6830	6.6720	6.6672
.500	6.9799	6.9369	6.8924	6.8136	6.7532	6.6667	6.6082	6.5641	6.5290	6.5152	6.5052	6.5016	6.5002
.550	6.3641	6.3683	6.3765	6.3984	6.4185	6.4486	6.4681	6.4819	6.4921	6.4959	6.4986	6.4996	6.5000
.600	6.0016	6.0149	6.0388	6.0955	6.1468	6.2319	6.3002	6.3619	6.4239	6.4550	6.4824	6.4943	6.4994
.650	6.0002	6.0016	6.0046	6.0143	6.0261	6.0515	6.0765	6.1015	6.1270	6.1390	6.1485	6.1522	6.1537
.700	5.9997	5.9967	5.9905	5.9712	5.9489	5.9030	5.8595	5.8162	5.7701	5.7467	5.7266	5.7182	5.7147
.750	5.9866	5.9578	5.9275	5.8715	5.8254	5.7502	5.6890	5.6323	5.5737	5.5438	5.5172	5.5056	5.5006
.800	5.6248	5.6230	5.6191	5.6075	5.5946	5.5699	5.5489	5.5307	5.5145	5.5077	5.5027	5.5008	5.5001
.850	5.2944	5.2974	5.3035	5.3217	5.3417	5.3799	5.4132	5.4436	5.4722	5.4849	5.4946	5.4984	5.4998
.900	5.0112	5.0352	5.0606	5.1079	5.1477	5.2147	5.2719	5.3280	5.3907	5.4264	5.4641	5.4857	5.4982
.950	5.0003	5.0033	5.0095	5.0282	5.0493	5.0916	5.1312	5.1709	5.2131	5.2344	5.2524	5.2598	5.2628
1.000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000