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# LOS ALAMOS SCIENTIFIC LABORATORY

OF THE

UNIVERSITY OF CALIFORNIA

CONTRACT W-7405-ENG. 36 WITH

U. S. ATOMIC ENERGY COMMISSION

LOS ALAMOS NATIONAL LABORATORY



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TABLE OF  $\Delta x$ 

$$x(f_1, f_2) = \frac{1}{\pi} \int_0^1 \left[ g(f_2) - g(f_1) \right] \frac{d\mu}{1 - k_1^2 \mu^2}$$

$$g(f) = \arctan \left[ \frac{2}{\pi(1+f)\mu} - \frac{2}{\pi} \operatorname{arctanh} \mu \right]$$

$$\frac{1}{1+f_1} = \frac{\arctan k_1}{k_1}$$

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TABLE Δx

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$f_1 \backslash f_2$	-.000	-.005	-.010	-.015	-.020	-.025
0	.00000	.00086	.00173	.00261	.00519	.00437
.01	.01169	.00254	.00341	.00426	.00514	.00599
.02	.00332	.00417	.00501	.00584	.00673	.00756
.03	.00490	.00574	.00657	.00738	.00826	.00908
.04	.00642	.00724	.00807	.00887	.00974	.01055
.05	.00789	.00870	.00951	.01030	.01117	.01196
.06	.00930	.01010	.01091	.01170	.01255	.01333
.07	.01067	.01146	.01226	.01304	.01387	.01465
.08	.01199	.01277	.01356	.01433	.01515	.01594
.09	.01327	.01404	.01482	.01559	.01639	.01717
.10	.01449	.01528	.01605	.01680	.01758	.01836
.11	.01568	.01647	.01725	.01796	.01873	.01951
.12	.01682	.01762	.01842	.01910	.01985	.02062
.13	.01793	.01873	.01954	.02019	.02092	.02170
.14	.01900	.01979	.02060	.02124	.02196	.02273
.15	.02003	.02081	.02161	.02224	.02296	.02372
.16	.02103	.02179	.02257	.02322	.02392	.02468
.17	.02200	.02274	.02349	.02416	.02485	.02561
.18	.02293	.02365	.02437	.02507	.02576	.02650
.19	.02384	.02453	.02523	.02593	.02663	.02735
.20	.02471	.02539	.02608	.02677	.02747	.02817
.21	.02556	.02623	.02691	.02760	.02829	.02898
.22	.02637	.02704	.02771	.02840	.02907	.02977
.23	.02715	.02782	.02849	.02917	.02984	.03053
.24	.02792	.02857	.02923	.02992	.03057	.03126
.25	.02866	.02931	.02996	.03064	.03128	.03197
.26	.02937	.03002	.03067	.03133	.03197	.03265
.27	.03006	.03070	.03134	.03200	.03263	.03331
.28	.03073	.03136	.03199	.03265	.03327	.03394
.29	.03137	.03200	.03263	.03327	.03389	.03454
.30	.03200	.03262	.03324	.03387	.03449	.03513
.31	.03260	.03322	.03383	.03446	.03507	.03571
.32	.03319	.03380	.03440	.03503	.03563	.03627
.33	.03376	.03436	.03496	.03558	.03617	.03680
.34	.03431	.03490	.03549	.03611	.03669	.03732
.35	.03484	.03543	.03601	.03663	.03720	.03782
.36	.03535	.03593	.03651	.03713	.03769	.03831
.37	.03585	.03642	.03700	.03761	.03816	.03877
.38	.03633	.03690	.03747	.03807	.03862	.03922
.39	.03679	.03736	.03793	.03851	.03906	.03965
.40	.03724	.03780	.03836	.03894	.03949	.04007

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TABLE OF  $\Delta x$ 

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$f_1 \backslash f_2$	-.000	-.005	-.010	-.015	-.020	-.025
.40	.03724	.03780	.03836	.03894	.03949	.04007
.41	.03768	.03823	.03879	.03935	.03991	.04048
.42	.03810	.03865	.03920	.03976	.04030	.04087
.43	.03851	.03905	.03960	.04015	.04069	.04126
.44	.03890	.03944	.03998	.04053	.04106	.04162
.45	.03928	.03981	.04035	.04090	.04142	.04198
.46	.03965	.04018	.04071	.04125	.04177	.04232
.47	.04000	.04052	.04105	.04159	.04210	.04265
.48	.04034	.04086	.04139	.04191	.04243	.04297
.49	.04067	.04119	.04170	.04223	.04274	.04327
.50	.04099	.04150	.04201	.04253	.04304	.04356
.51	.04130	.04181	.04231	.04282	.04333	.04385
.52	.04160	.04211	.04260	.04311	.04361	.04412
.53	.04189	.04239	.04288	.04339	.04388	.04439
.54	.04217	.04267	.04316	.04366	.04414	.04466
.55	.04245	.04294	.04342	.04392	.04440	.04490
.56	.04271	.04319	.04367	.04416	.04464	.04514
.57	.04296	.04344	.04392	.04440	.04487	.04538
.58	.04320	.04368	.04415	.04463	.04510	.04559
.59	.04343	.04391	.04438	.04485	.04532	.04581
.60	.04366	.04413	.04459	.04506	.04553	.04601
.61	.04388	.04434	.04481	.04527	.04573	.04621
.62	.04409	.04455	.04501	.04548	.04593	.04641
.63	.04429	.04475	.04521	.04567	.04612	.04660
.64	.04449	.04495	.04540	.04585	.04630	.04677
.65	.04468	.04513	.04558	.04604	.04648	.04695
.66	.04487	.04531	.04576	.04620	.04664	.04711
.67	.04505	.04549	.04593	.04637	.04682	.04726
.68	.04521	.04565	.04609	.04653	.04696	.04742
.69	.04538	.04581	.04624	.04669	.04711	.04756
.70	.04554	.04596	.04639	.04683	.04726	.04770
.71	.04569	.04611	.04654	.04697	.04740	.04784
.72	.04584	.04626	.04668	.04710	.04753	.04797
.73	.04598	.04639	.04682	.04724	.04765	.04809
.74	.04611	.04652	.04694	.04736	.04778	.04821
.75	.04624	.04665	.04706	.04748	.04789	.04832
.76	.04636	.04677	.04718	.04760	.04800	.04843
.77	.04648	.04689	.04729	.04770	.04811	.04853
.78	.04660	.04699	.04740	.04780	.04821	.04862
.79	.04670	.04710	.04750	.04790	.04830	.04872
.80	.04681	.04720	.04760	.04799	.04839	.04880

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f1 \ f2	-.000	-.005	-.010	-.015	-.020	-.025
.80	.04681	.04720	.04760	.04799	.04839	.04880
.81	.04691	.04730	.04770	.04809	.04848	.04888
.82	.04701	.04739	.04779	.04818	.04857	.04897
.83	.04710	.04748	.04787	.04826	.04864	.04904
.84	.04718	.04757	.04796	.04834	.04872	.04912
.85	.04727	.04765	.04803	.04842	.04879	.04919
.86	.04735	.04773	.04811	.04848	.04886	.04925
.87	.04743	.04780	.04818	.04856	.04893	.04932
.88	.04750	.04787	.04824	.04862	.04899	.04937
.89	.04757	.04794	.04831	.04868	.04905	.04943
.90	.04763	.04800	.04836	.04874	.04910	.04948
.91	.04770	.04806	.04842	.04879	.04915	.04953
.92	.04776	.04811	.04847	.04884	.04920	.04957
.93	.04781	.04817	.04852	.04889	.04924	.04962
.94	.04786	.04822	.04857	.04893	.04928	.04965
.95	.04791	.04827	.04862	.04897	.04932	.04969
.96	.04796	.04831	.04866	.04902	.04936	.04972
.97	.04800	.04835	.04870	.04905	.04939	.04975
.98	.04804	.04838	.04873	.04908	.04942	.04978
.99	.04808	.04842	.04876	.04911	.04945	.04980
1.00	.04811	.04845	.04879	.04914	.04948	.04982
1.01	.04814	.04848	.04882	.04916	.04950	.04985
1.02	.04817	.04850	.04884	.04918	.04951	.04986
1.03	.04820	.04853	.04887	.04920	.04953	.04988
1.04	.04823	.04855	.04888	.04922	.04955	.04989
1.05	.04824	.04858	.04890	.04923	.04956	.04990
1.06	.04827	.04859	.04892	.04925	.04957	.04991
1.07	.04828	.04861	.04893	.04926	.04958	.04991
1.08	.04830	.04862	.04894	.04926	.04959	.04991
1.09	.04831	.04863	.04895	.04927	.04959	.04991
1.10	.04832	.04864	.04895	.04927	.04959	.04991
1.11	.04833	.04864	.04896	.04927	.04959	.04991
1.12	.04833	.04865	.04896	.04927	.04959	.04991
1.13	.04834	.04865	.04896	.04927	.04959	.04990
1.14	.04835	.04865	.04896	.04927	.04958	.04990
1.15	.04835	.04866	.04896	.04927	.04957	.04989
1.16	.04835	.04865	.04895	.04926	.04956	.04988
1.17	.04835	.04865	.04895	.04925	.04955	.04987
1.18	.04834	.04864	.04894	.04924	.04954	.04985
1.19	.04833	.04863	.04893	.04923	.04953	.04984
1.20	.04833	.04862	.04892	.04922	.04951	.04982

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TABLE OF  $\Delta Z$ 

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$f_1 \backslash f_2$	-.030	-.050	-.075	-.100	-.125	-.150
0	.00526	.00887	.01352	.01831	.02325	.02835
.01	.00689	.01044	.01503	.01975	.02464	.02968
.02	.00845	.01195	.01648	.02116	.02600	.03094
.03	.00997	.01342	.01789	.02250	.02729	.03217
.04	.01142	.01484	.01925	.02381	.02854	.03335
.05	.01283	.01620	.02055	.02506	.02973	.03448
.06	.01419	.01752	.02182	.02627	.03088	.03558
.07	.01550	.01879	.02305	.02744	.03199	.03663
.08	.01676	.02002	.02422	.02856	.03305	.03764
.09	.01798	.02121	.02536	.02964	.03407	.03861
.10	.01915	.02235	.02645	.03069	.03505	.03955
.11	.02029	.02346	.02751	.03169	.03600	.04044
.12	.02138	.02453	.02853	.03266	.03691	.04130
.13	.02244	.02555	.02950	.03359	.03779	.04213
.14	.02346	.02654	.03046	.03449	.03862	.04293
.15	.02444	.02749	.03136	.03536	.03943	.04370
.16	.02540	.02841	.03223	.03618	.04022	.04442
.17	.02632	.02929	.03308	.03697	.04096	.04512
.18	.02720	.03014	.03383	.03774	.04168	.04579
.19	.02806	.03095	.03466	.03847	.04238	.04643
.20	.02888	.03173	.03540	.03917	.04304	.04703
.21	.02968	.03250	.03613	.03986	.04369	.04764
.22	.03045	.03325	.03684	.04052	.04430	.04821
.23	.03120	.03398	.03752	.04116	.04489	.04876
.24	.03192	.03467	.03818	.04178	.04547	.04930
.25	.03262	.03534	.03881	.04237	.04602	.04981
.26	.03329	.03598	.03942	.04294	.04654	.05029
.27	.03394	.03661	.04000	.04349	.04705	.05076
.28	.03456	.03721	.04056	.04401	.04754	.05121
.29	.03517	.03778	.04111	.04451	.04801	.05164
.30	.03575	.03834	.04162	.04499	.04846	.05204
.31	.03632	.03889	.04213	.04547	.04889	.05244
.32	.03687	.03941	.04263	.04592	.04931	.05282
.33	.03740	.03992	.04310	.04636	.04971	.05319
.34	.03791	.04040	.04355	.04678	.05010	.05354
.35	.03841	.04087	.04399	.04719	.05047	.05387
.36	.03888	.04132	.04442	.04758	.05082	.05419
.37	.03935	.04177	.04482	.04795	.05117	.05450
.38	.03980	.04218	.04521	.04831	.05149	.05479
.39	.04022	.04258	.04558	.04865	.05181	.05506
.40	.04064	.04297	.04594	.04898	.05211	.05533

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f1 \ f2	-.030	-.050	-.075	-.100	-.125	-.150
.40	.04064	.04297	.04594	.04898	.05211	.05533
.41	.04104	.04335	.04630	.04930	.05240	.05559
.42	.04143	.04372	.04663	.04961	.05268	.05583
.43	.04180	.04408	.04696	.04991	.05295	.05607
.44	.04217	.04442	.04727	.05019	.05321	.05629
.45	.04252	.04474	.04757	.05047	.05345	.05650
.46	.04285	.04506	.04786	.05073	.05368	.05671
.47	.04318	.04536	.04814	.05098	.05390	.05690
.48	.04349	.04566	.04841	.05122	.05411	.05708
.49	.04379	.04593	.04866	.05144	.05431	.05726
.50	.04408	.04620	.04890	.05166	.05450	.05741
.51	.04434	.04646	.04914	.05187	.05469	.05757
.52	.04464	.04672	.04937	.05208	.05486	.05772
.53	.04490	.04696	.04959	.05227	.05503	.05786
.54	.04515	.04719	.04980	.05246	.05519	.05800
.55	.04539	.04743	.05000	.05264	.05534	.05812
.56	.04562	.04764	.05019	.05281	.05549	.05824
.57	.04585	.04785	.05038	.05297	.05562	.05835
.58	.04607	.04804	.05056	.05312	.05575	.05846
.59	.04628	.04824	.05072	.05326	.05587	.05855
.60	.04648	.04842	.05088	.05340	.05605	.05864
.61	.04668	.04860	.05104	.05353	.05610	.05873
.62	.04686	.04877	.05119	.05367	.05620	.05881
.63	.04705	.04894	.05134	.05379	.05631	.05888
.64	.04722	.04910	.05148	.05390	.05640	.05896
.65	.04739	.04925	.05161	.05401	.05649	.05902
.66	.04755	.04939	.05173	.05412	.05657	.05908
.67	.04771	.04953	.05185	.05422	.05665	.05914
.68	.04786	.04967	.05196	.05431	.05672	.05918
.69	.04800	.04979	.05207	.05440	.05679	.05923
.70	.04814	.04991	.05217	.05448	.05685	.05927
.71	.04826	.05003	.05227	.05456	.05691	.05931
.72	.04839	.05014	.05236	.05463	.05696	.05934
.73	.04851	.05024	.05245	.05469	.05701	.05937
.74	.04862	.05034	.05253	.05476	.05705	.05939
.75	.04873	.05044	.05261	.05482	.05709	.05941
.76	.04884	.05053	.05268	.05487	.05712	.05943
.77	.04893	.05062	.05275	.05492	.05715	.05944
.78	.04903	.05070	.05281	.05496	.05718	.05944
.79	.04912	.05077	.05287	.05501	.05720	.05945
.80	.04920	.05084	.05292	.05504	.05722	.05944

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TABLE OF  $\Delta \times$ 

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$f_1 \backslash f_2$	-.030	-.050	-.075	-.100	-.125	-.150
.80	.04920	.05084	.05292	.05504	.05722	.05944
.81	.04928	.05091	.05297	.05507	.05723	.05944
.82	.04936	.05097	.05302	.05510	.05725	.05944
.83	.04943	.05103	.05307	.05514	.05726	.05943
.84	.04950	.05109	.05310	.05516	.05727	.05942
.85	.04957	.05115	.05315	.05518	.05728	.05941
.86	.04963	.05120	.05318	.05520	.05727	.05940
.87	.04969	.05125	.05321	.05521	.05727	.05938
.88	.04974	.05129	.05324	.05523	.05727	.05936
.89	.04980	.05133	.05326	.05524	.05726	.05934
.90	.04985	.05136	.05328	.05524	.05725	.05931
.91	.04990	.05140	.05330	.05525	.05724	.05928
.92	.04993	.05143	.05332	.05525	.05723	.05926
.93	.04997	.05146	.05334	.05525	.05721	.05922
.94	.05001	.05148	.05335	.05525	.05720	.05919
.95	.05005	.05151	.05335	.05524	.05717	.05915
.96	.05008	.05153	.05336	.05523	.05715	.05911
.97	.05010	.05154	.05336	.05522	.05713	.05908
.98	.05013	.05156	.05336	.05521	.05710	.05903
.99	.05015	.05157	.05336	.05519	.05707	.05898
1.00	.05017	.05158	.05336	.05518	.05704	.05894
1.01	.05019	.05158	.05335	.05515	.05700	.05889
1.02	.05020	.05159	.05334	.05513	.05697	.05885
1.03	.05021	.05159	.05333	.05511	.05694	.05879
1.04	.05023	.05159	.05332	.05509	.05690	.05874
1.05	.05023	.05159	.05331	.05506	.05686	.05869
1.06	.05024	.05158	.05329	.05503	.05682	.05863
1.07	.05024	.05157	.05327	.05500	.05677	.05857
1.08	.05024	.05157	.05325	.05497	.05673	.05852
1.09	.05024	.05156	.05323	.05493	.05668	.05845
1.10	.05024	.05154	.05320	.05490	.05663	.05840
1.11	.05023	.05153	.05318	.05486	.05658	.05833
1.12	.05023	.05151	.05316	.05482	.05653	.05827
1.13	.05022	.05150	.05313	.05478	.05648	.05821
1.14	.05021	.05148	.05310	.05474	.05643	.05814
1.15	.05020	.05146	.05307	.05470	.05637	.05807
1.16	.05019	.05144	.05303	.05465	.05631	.05801
1.17	.05017	.05141	.05300	.05461	.05626	.05794
1.18	.05016	.05139	.05296	.05456	.05620	.05787
1.19	.05014	.05137	.05293	.05451	.05614	.05780
1.20	.05012	.05134	.05289	.05446	.05608	.05773

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f1 \ f2	-.20	-.25	-.30	-.35	-.40	-.50
0	.03906	.05048	.06269	.07575	.08971	.12058
.01	.04024	.05150	.06353	.07643	.09016	.12054
.02	.04136	.05247	.06434	.07706	.09057	.12049
.03	.04245	.05341	.06511	.07765	.09096	.12042
.04	.04349	.05431	.06585	.07821	.09133	.12033
.05	.04450	.05516	.06655	.07873	.09167	.12023
.06	.04546	.05599	.06722	.07923	.09197	.12010
.07	.04639	.05678	.06785	.07969	.09226	.11997
.08	.04728	.05753	.06845	.08013	.09253	.11982
.09	.04813	.05825	.06903	.08053	.09276	.11967
.10	.04895	.05894	.06957	.08091	.09298	.11949
.11	.04973	.05959	.07009	.08126	.09318	.11931
.12	.05047	.06021	.07057	.08159	.09335	.11911
.13	.05119	.06081	.07104	.08189	.09350	.11889
.14	.05188	.06138	.07146	.08218	.09364	.11867
.15	.05253	.06191	.07188	.08244	.09375	.11843
.16	.05316	.06241	.07226	.08269	.09384	.11818
.17	.05374	.06290	.07262	.08291	.09391	.11792
.18	.05431	.06335	.07295	.08312	.09397	.11765
.19	.05485	.06378	.07325	.08331	.09401	.11738
.20	.05536	.06418	.07354	.08348	.09403	.11708
.21	.05586	.06459	.07383	.08364	.09406	.11680
.22	.05634	.06497	.07410	.08380	.09407	.11652
.23	.05680	.06533	.07434	.08393	.09407	.11622
.24	.05724	.06567	.07458	.08404	.09406	.11591
.25	.05766	.06598	.07479	.08414	.09403	.11561
.26	.05806	.06629	.07499	.08423	.09400	.11529
.27	.05843	.06657	.07517	.08431	.09395	.11497
.28	.05880	.06684	.07534	.08437	.09389	.11465
.29	.05913	.06709	.07550	.08441	.09382	.11432
.30	.05945	.06734	.07563	.08445	.09374	.11398
.31	.05977	.06756	.07576	.08448	.09366	.11365
.32	.06008	.06778	.07589	.08450	.09358	.11332
.33	.06036	.06798	.07600	.08451	.09348	.11298
.34	.06063	.06817	.07610	.08451	.09338	.11264
.35	.06090	.06835	.07619	.08451	.09327	.11230
.36	.06113	.06851	.07626	.08449	.09315	.11196
.37	.06137	.06866	.07634	.08447	.09303	.11161
.38	.06159	.06880	.07639	.08443	.09290	.11126
.39	.06180	.06894	.07644	.08439	.09276	.11091
.40	.06199	.06905	.07647	.08434	.09261	.11055

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$f_1 \backslash f_2$	-.20	-.25	-.30	-.35	-.40	-.50
.40	.06199	.06905	.07647	.08434	.09261	.11055
.41	.06218	.06916	.07651	.08428	.09248	.11020
.42	.06236	.06927	.07654	.08423	.09232	.10985
.43	.06253	.06937	.07656	.08417	.09217	.10950
.44	.06269	.06946	.07657	.08410	.09202	.10915
.45	.06284	.06954	.07657	.08402	.09186	.10879
.46	.06298	.06961	.07658	.08394	.09169	.10844
.47	.06311	.06967	.07656	.08386	.09152	.10808
.48	.06323	.06972	.07655	.08376	.09134	.10772
.49	.06334	.06977	.07652	.08366	.09117	.10736
.50	.06344	.06981	.07649	.08356	.09099	.10701
.51	.06354	.06984	.07646	.08346	.09081	.10665
.52	.06363	.06987	.07643	.08335	.09062	.10630
.53	.06372	.06990	.07639	.08324	.09043	.10594
.54	.06380	.06992	.07634	.08312	.09025	.10558
.55	.06387	.06993	.07629	.08301	.09005	.10523
.56	.06394	.06994	.07624	.08288	.08985	.10488
.57	.06399	.06994	.07617	.08275	.08966	.10452
.58	.06404	.06993	.07611	.08262	.08946	.10416
.59	.06409	.06992	.07604	.08249	.08925	.10381
.60	.06412	.06991	.07596	.08235	.08904	.10346
.61	.06416	.06989	.07589	.08221	.08884	.10311
.62	.06420	.06987	.07581	.08207	.08864	.10276
.63	.06422	.06984	.07573	.08193	.08843	.10241
.64	.06424	.06981	.07565	.08179	.08823	.10206
.65	.06426	.06978	.07556	.08164	.08802	.10172
.66	.06427	.06974	.07546	.08149	.08781	.10137
.67	.06428	.06970	.07537	.08134	.08760	.10103
.68	.06429	.06965	.07527	.08119	.08739	.10068
.69	.06428	.06960	.07517	.08104	.08717	.10034
.70	.06428	.06955	.07507	.08088	.08696	.10000
.71	.06427	.06949	.07496	.08072	.08674	.09966
.72	.06426	.06944	.07486	.08056	.08653	.09932
.73	.06424	.06938	.07475	.08040	.08631	.09898
.74	.06423	.06932	.07464	.08024	.08610	.09865
.75	.06421	.06925	.07453	.08007	.08588	.09831
.76	.06418	.06918	.07441	.07991	.08566	.09798
.77	.06415	.06911	.07430	.07974	.08544	.09764
.78	.06412	.06904	.07418	.07957	.08522	.09731
.79	.06409	.06896	.07406	.07940	.08500	.09698
.80	.06405	.06888	.07393	.07923	.08478	.09665

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f <sub>1</sub> \ f <sub>2</sub>	-.20	-.25	-.30	-.35	-.40	-.50
.80	.06405	.06888	.07393	.07923	.08478	.09665
.81	.06401	.06881	.07381	.07907	.08456	.09633
.82	.06397	.06873	.07369	.07890	.08434	.09600
.83	.06393	.06864	.07356	.07873	.08412	.09567
.84	.06388	.06855	.07343	.07855	.08390	.09535
.85	.06383	.06846	.07331	.07838	.08369	.09503
.86	.06378	.06838	.07318	.07821	.08347	.09471
.87	.06373	.06828	.07304	.07803	.08325	.09440
.88	.06367	.06819	.07291	.07786	.08303	.09408
.89	.06361	.06810	.07278	.07769	.08281	.09376
.90	.06355	.06800	.07264	.07751	.08259	.09345
.91	.06349	.06791	.07251	.07734	.08237	.09314
.92	.06343	.06781	.07237	.07716	.08216	.09282
.93	.06336	.06770	.07224	.07698	.08194	.09252
.94	.06330	.06760	.07210	.07681	.08172	.09221
.95	.06323	.06750	.07196	.07663	.08150	.09190
.96	.06316	.06740	.07182	.07645	.08129	.09160
.97	.06309	.06729	.07169	.07628	.08107	.09129
.98	.06302	.06719	.07155	.07610	.08085	.09099
.99	.06294	.06708	.07140	.07592	.08064	.09069
1.00	.06286	.06697	.07126	.07574	.08042	.09039
1.01	.06278	.06686	.07112	.07557	.08020	.09009
1.02	.06270	.06675	.07098	.07539	.07999	.08980
1.03	.06263	.06664	.07083	.07521	.07978	.08950
1.04	.06254	.06653	.07069	.07503	.07956	.08921
1.05	.06246	.06642	.07055	.07485	.07935	.08892
1.06	.06238	.06631	.07040	.07467	.07914	.08863
1.07	.06230	.06619	.07026	.07450	.07892	.08834
1.08	.06221	.06608	.07011	.07432	.07871	.08805
1.09	.06212	.06596	.06996	.07414	.07850	.08777
1.10	.06204	.06585	.06981	.07396	.07829	.08748
1.11	.06195	.06573	.06967	.07379	.07808	.08720
1.12	.06186	.06561	.06952	.07361	.07786	.08692
1.13	.06177	.06550	.06938	.07343	.07766	.08664
1.14	.06168	.06538	.06923	.07326	.07745	.08636
1.15	.06159	.06527	.06908	.07308	.07724	.08608
1.16	.06150	.06514	.06894	.07290	.07703	.08581
1.17	.06141	.06502	.06879	.07273	.07682	.08553
1.18	.06131	.06490	.06864	.07255	.07661	.08526
1.19	.06122	.06479	.06850	.07237	.07641	.08499
1.20	.06112	.06466	.06835	.07220	.07620	.08472

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TABLE OF  $\Delta x$ 

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$f_1 \backslash f_2$	-.60	-.70	-.80	-.90	-1.00
0	.15537	.19298	.23002	.26236	.28954
.01	.15475	.19171	.22811	.25991	.28667
.02	.15414	.19046	.22622	.25751	.28385
.03	.15351	.18921	.22437	.25515	.28109
.04	.15289	.18799	.22254	.25282	.27837
.05	.15227	.18678	.22074	.25054	.27571
.06	.15163	.18558	.21898	.24830	.27310
.07	.15101	.18438	.21723	.24609	.27053
.08	.15037	.18321	.21552	.24394	.26802
.09	.14973	.18205	.21383	.24181	.26554
.10	.14910	.18089	.21216	.23971	.26311
.11	.14846	.17975	.21052	.23765	.26072
.12	.14782	.17862	.20890	.23562	.25837
.13	.14718	.17750	.20731	.23363	.25606
.14	.14654	.17638	.20574	.23167	.25379
.15	.14589	.17528	.20418	.22973	.25156
.16	.14523	.17419	.20266	.22783	.24936
.17	.14459	.17310	.20115	.22596	.24721
.18	.14393	.17203	.19965	.22412	.24508
.19	.14328	.17097	.19818	.22229	.24299
.20	.14262	.16991	.19673	.22051	.24093
.21	.14198	.16888	.19531	.21875	.23891
.22	.14134	.16784	.19390	.21702	.23693
.23	.14071	.16684	.19251	.21532	.23497
.24	.14007	.16583	.19115	.21365	.23304
.25	.13944	.16483	.18979	.21199	.23114
.26	.13881	.16385	.18846	.21037	.22927
.27	.13817	.16287	.18714	.20876	.22743
.28	.13755	.16190	.18584	.20718	.22562
.29	.13691	.16095	.18455	.20562	.22384
.30	.13628	.16000	.18328	.20408	.22208
.31	.13566	.15906	.18204	.20257	.22035
.32	.13505	.15814	.18081	.20108	.21864
.33	.13444	.15722	.17959	.19961	.21696
.34	.13383	.15631	.17840	.19816	.21531
.35	.13322	.15541	.17721	.19673	.21368
.36	.13262	.15452	.17604	.19532	.21207
.37	.13202	.15364	.17489	.19393	.21050
.38	.13142	.15277	.17375	.19257	.20893
.39	.13082	.15191	.17263	.19122	.20740
.40	.13023	.15105	.17151	.18988	.20588

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TABLE OF  $\Delta$  \*

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f1 \ f2	-.60	-.70	-.80	-.90	-1.00
.40	.13023	.15105	.17151	.18988	.20588
.41	.12965	.15021	.17042	.18856	.20438
.42	.12906	.14937	.16933	.18726	.20291
.43	.12848	.14854	.16827	.18598	.20145
.44	.12790	.14772	.16721	.18472	.20001
.45	.12732	.14691	.16616	.18347	.19860
.46	.12675	.14610	.16513	.18224	.19720
.47	.12619	.14531	.16411	.18102	.19582
.48	.12562	.14452	.16309	.17982	.19446
.49	.12506	.14374	.16210	.17863	.19312
.50	.12450	.14296	.16111	.17746	.19179
.51	.12395	.14220	.16014	.17630	.19048
.52	.12340	.14144	.15918	.17516	.18920
.53	.12286	.14069	.15823	.17404	.18792
.54	.12232	.13995	.15729	.17292	.18667
.55	.12178	.13921	.15635	.17183	.18543
.56	.12124	.13848	.15544	.17074	.18421
.57	.12071	.13776	.15453	.16967	.18299
.58	.12018	.13704	.15363	.16861	.18180
.59	.11966	.13633	.15274	.16756	.18062
.60	.11914	.13563	.15186	.16652	.17946
.61	.11862	.13494	.15099	.16550	.17831
.62	.11811	.13425	.15013	.16449	.17717
.63	.11760	.13357	.14928	.16350	.17606
.64	.11710	.13290	.14844	.16251	.17495
.65	.11659	.13223	.14761	.16154	.17385
.66	.11610	.13157	.14679	.16058	.17277
.67	.11560	.13092	.14598	.15963	.17171
.68	.11511	.13027	.14517	.15869	.17065
.69	.11462	.12963	.14437	.15776	.16961
.70	.11414	.12899	.14359	.15684	.16858
.71	.11365	.12836	.14281	.15593	.16756
.72	.11318	.12773	.14204	.15503	.16656
.73	.11271	.12711	.14128	.15414	.16556
.74	.11224	.12650	.14052	.15326	.16457
.75	.11177	.12589	.13977	.15240	.16360
.76	.11131	.12528	.13903	.15154	.16264
.77	.11085	.12469	.13830	.15069	.16169
.78	.11039	.12410	.13757	.14984	.16075
.79	.10993	.12351	.13685	.14901	.15982
.80	.10948	.12292	.13614	.14819	.15889

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TABLE OF  $\Delta^x$ 

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$f_1 \backslash f_2$	-.60	-.70	-.80	-.90	-1.00
.80	.10948	.12292	.13614	.14819	.15889
.81	.10904	.12235	.13544	.14738	.15798
.82	.10859	.12177	.13475	.14657	.15709
.83	.10815	.12121	.13406	.14578	.15620
.84	.10771	.12065	.13338	.14498	.15532
.85	.10728	.12010	.13270	.14421	.15445
.86	.10685	.11955	.13204	.14344	.15359
.87	.10642	.11900	.13137	.14267	.15274
.88	.10599	.11846	.13072	.14191	.15190
.89	.10557	.11793	.13007	.14116	.15106
.90	.10515	.11739	.12943	.14043	.15024
.91	.10473	.11687	.12880	.13970	.14943
.92	.10432	.11634	.12817	.13897	.14859
.93	.10391	.11583	.12754	.13825	.14778
.94	.10350	.11531	.12692	.13754	.14698
.95	.10310	.11481	.12631	.13684	.14620
.96	.10269	.11430	.12570	.13614	.14547
.97	.10229	.11380	.12511	.13545	.14471
.98	.10190	.11330	.12451	.13477	.14395
.99	.10151	.11280	.12392	.13410	.14320
1.00	.10112	.11232	.12334	.13342	.14246
1.01	.10073	.11183	.12276	.13276	.14172
1.02	.10034	.11135	.12218	.13210	.14100
1.03	.09996	.11087	.12161	.13145	.14027
1.04	.09958	.11040	.12105	.13081	.13956
1.05	.09920	.10993	.12049	.13017	.13885
1.06	.09883	.10947	.11994	.12954	.13815
1.07	.09845	.10900	.11939	.12891	.13745
1.08	.09808	.10855	.11884	.12829	.13676
1.09	.09771	.10810	.11830	.12767	.13609
1.10	.09735	.10764	.11777	.12706	.13541
1.11	.09699	.10719	.11724	.12646	.13474
1.12	.09663	.10675	.11671	.12586	.13408
1.13	.09627	.10631	.11619	.12527	.13343
1.14	.09591	.10588	.11568	.12468	.13278
1.15	.09556	.10544	.11516	.12410	.13213
1.16	.09521	.10501	.11466	.12352	.13150
1.17	.09486	.10459	.11416	.12295	.13087
1.18	.09452	.10417	.11366	.12239	.13024
1.19	.09417	.10374	.11316	.12182	.12962
1.20	.09383	.10333	.11267	.12127	.12901

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REC. FROM Ed. Dir

DATE 11-17-48

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