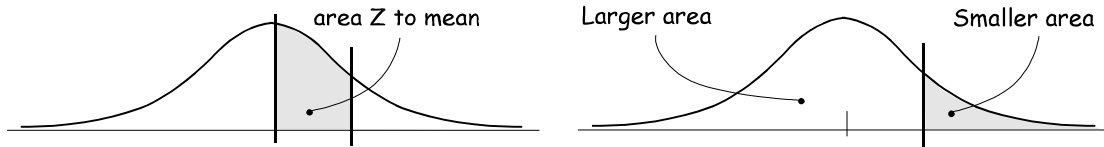


Table 1: Areas under the normal curve

($z = 0.0$ to $z = 0.67$)



z	z to mean	smaller area	larger area	z	z to mean	smaller area	larger area
0.00	0.0000	0.5000	0.5000	0.34	0.1331	0.3669	0.6331
0.01	0.0040	0.4960	0.5040	0.35	0.1368	0.3632	0.6368
0.02	0.0080	0.4920	0.5080	0.36	0.1406	0.3594	0.6406
0.03	0.0120	0.4880	0.5120	0.37	0.1443	0.3557	0.6443
0.04	0.0160	0.4840	0.5160	0.38	0.1480	0.3520	0.6480
0.05	0.0199	0.4801	0.5199	0.39	0.1517	0.3483	0.6517
0.06	0.0239	0.4761	0.5239	0.40	0.1554	0.3446	0.6554
0.07	0.0279	0.4721	0.5279	0.41	0.1591	0.3409	0.6591
0.08	0.0319	0.4681	0.5319	0.42	0.1628	0.3372	0.6628
0.09	0.0359	0.4641	0.5359	0.43	0.1664	0.3336	0.6664
0.10	0.0398	0.4602	0.5398	0.44	0.1700	0.3300	0.6700
0.11	0.0438	0.4562	0.5438	0.45	0.1736	0.3264	0.6736
0.12	0.0478	0.4522	0.5478	0.46	0.1772	0.3228	0.6772
0.13	0.0517	0.4483	0.5517	0.47	0.1808	0.3192	0.6808
0.14	0.0557	0.4443	0.5557	0.48	0.1844	0.3156	0.6844
0.15	0.0596	0.4404	0.5596	0.49	0.1879	0.3121	0.6879
0.16	0.0636	0.4364	0.5636	0.50	0.1915	0.3085	0.6915
0.17	0.0675	0.4325	0.5675	0.51	0.1950	0.3050	0.6950
0.18	0.0714	0.4286	0.5714	0.52	0.1985	0.3015	0.6985
0.19	0.0753	0.4247	0.5753	0.53	0.2019	0.2981	0.7019
0.20	0.0793	0.4207	0.5793	0.54	0.2054	0.2946	0.7054
0.21	0.0832	0.4168	0.5832	0.55	0.2088	0.2912	0.7088
0.22	0.0871	0.4129	0.5871	0.56	0.2123	0.2877	0.7123
0.23	0.0910	0.4090	0.5910	0.57	0.2157	0.2843	0.7157
0.24	0.0948	0.4052	0.5948	0.58	0.2190	0.2810	0.7190
0.25	0.0987	0.4013	0.5987	0.59	0.2224	0.2776	0.7224
0.26	0.1026	0.3974	0.6026	0.60	0.2257	0.2743	0.7257
0.27	0.1064	0.3936	0.6064	0.61	0.2291	0.2709	0.7291
0.28	0.1103	0.3897	0.6103	0.62	0.2324	0.2676	0.7324
0.29	0.1141	0.3859	0.6141	0.63	0.2357	0.2643	0.7357
0.30	0.1179	0.3821	0.6179	0.64	0.2389	0.2611	0.7389
0.31	0.1217	0.3783	0.6217	0.65	0.2422	0.2578	0.7422
0.32	0.1255	0.3745	0.6255	0.66	0.2454	0.2546	0.7454
0.33	0.1293	0.3707	0.6293	0.67	0.2486	0.2514	0.7486

(more ...)

Table 1: continued

($z = 0.68$ to $z = 1.49$)

z	z to mean	smaller area	larger area	z	z to mean	smaller area	larger area
0.68	0.2517	0.2483	0.7517	1.09	0.3621	0.1379	0.8621
0.69	0.2549	0.2451	0.7549	1.10	0.3643	0.1357	0.8643
0.70	0.2580	0.2420	0.7580	1.11	0.3665	0.1335	0.8665
0.71	0.2611	0.2389	0.7611	1.12	0.3686	0.1314	0.8686
0.72	0.2642	0.2358	0.7642	1.13	0.3708	0.1292	0.8708
0.73	0.2673	0.2327	0.7673	1.14	0.3729	0.1271	0.8729
0.74	0.2704	0.2296	0.7704	1.15	0.3749	0.1251	0.8749
0.75	0.2734	0.2266	0.7734	1.16	0.3770	0.1230	0.8770
0.76	0.2764	0.2236	0.7764	1.17	0.3790	0.1210	0.8790
0.77	0.2794	0.2206	0.7794	1.18	0.3810	0.1190	0.8810
0.78	0.2823	0.2177	0.7823	1.19	0.3830	0.1170	0.8830
0.79	0.2852	0.2148	0.7852	1.20	0.3849	0.1151	0.8849
0.80	0.2881	0.2119	0.7881	1.21	0.3869	0.1131	0.8869
0.81	0.2910	0.2090	0.7910	1.22	0.3888	0.1112	0.8888
0.82	0.2939	0.2061	0.7939	1.23	0.3907	0.1093	0.8907
0.83	0.2967	0.2033	0.7967	1.24	0.3925	0.1075	0.8925
0.84	0.2995	0.2005	0.7995	1.25	0.3944	0.1056	0.8944
0.85	0.3023	0.1977	0.8023	1.26	0.3962	0.1038	0.8962
0.86	0.3051	0.1949	0.8051	1.27	0.3980	0.1020	0.8980
0.87	0.3078	0.1922	0.8078	1.28	0.3997	0.1003	0.8997
0.88	0.3106	0.1894	0.8106	1.29	0.4015	0.0985	0.9015
0.89	0.3133	0.1867	0.8133	1.30	0.4032	0.0968	0.9032
0.90	0.3159	0.1841	0.8159	1.31	0.4049	0.0951	0.9049
0.91	0.3186	0.1814	0.8186	1.32	0.4066	0.0934	0.9066
0.92	0.3212	0.1788	0.8212	1.33	0.4082	0.0918	0.9082
0.93	0.3238	0.1762	0.8238	1.34	0.4099	0.0901	0.9099
0.94	0.3264	0.1736	0.8264	1.35	0.4115	0.0885	0.9115
0.95	0.3289	0.1711	0.8289	1.36	0.4131	0.0869	0.9131
0.96	0.3315	0.1685	0.8315	1.37	0.4147	0.0853	0.9147
0.97	0.3340	0.1660	0.8340	1.38	0.4162	0.0838	0.9162
0.98	0.3365	0.1635	0.8365	1.39	0.4177	0.0823	0.9177
0.99	0.3389	0.1611	0.8389	1.40	0.4192	0.0808	0.9192
1.00	0.3413	0.1587	0.8413	1.41	0.4207	0.0793	0.9207
1.01	0.3438	0.1562	0.8438	1.42	0.4222	0.0778	0.9222
1.02	0.3461	0.1539	0.8461	1.43	0.4236	0.0764	0.9236
1.03	0.3485	0.1515	0.8485	1.44	0.4251	0.0749	0.9251
1.04	0.3508	0.1492	0.8508	1.45	0.4265	0.0735	0.9265
1.05	0.3531	0.1469	0.8531	1.46	0.4279	0.0721	0.9279
1.06	0.3554	0.1446	0.8554	1.47	0.4292	0.0708	0.9292
1.07	0.3577	0.1423	0.8577	1.48	0.4306	0.0694	0.9306
1.08	0.3599	0.1401	0.8599	1.49	0.4319	0.0681	0.9319

(more ...)

TABLE 1: AREAS UNDER THE NORMAL CURVE - 195 -

Table 1: continued

($z = 1.50$ to $z = 2.31$)

z	z to mean	smaller area	larger area	z	z to mean	smaller area	larger area
1.50	0.4332	0.0668	0.9332	1.91	0.4719	0.0281	0.9719
1.51	0.4345	0.0655	0.9345	1.92	0.4726	0.0274	0.9726
1.52	0.4357	0.0643	0.9357	1.93	0.4732	0.0268	0.9732
1.53	0.4370	0.0630	0.9370	1.94	0.4738	0.0262	0.9738
1.54	0.4382	0.0618	0.9382	1.95	0.4744	0.0256	0.9744
1.55	0.4394	0.0606	0.9394	1.96	0.4750	0.0250	0.9750
1.56	0.4406	0.0594	0.9406	1.97	0.4756	0.0244	0.9756
1.57	0.4418	0.0582	0.9418	1.98	0.4761	0.0239	0.9761
1.58	0.4429	0.0571	0.9429	1.99	0.4767	0.0233	0.9767
1.59	0.4441	0.0559	0.9441	2.00	0.4772	0.0228	0.9772
1.60	0.4452	0.0548	0.9452	2.01	0.4778	0.0222	0.9778
1.61	0.4463	0.0537	0.9463	2.02	0.4783	0.0217	0.9783
1.62	0.4474	0.0526	0.9474	2.03	0.4788	0.0212	0.9788
1.63	0.4484	0.0516	0.9484	2.04	0.4793	0.0207	0.9793
1.64	0.4495	0.0505	0.9495	2.05	0.4798	0.0202	0.9798
1.65	0.4505	0.0495	0.9505	2.06	0.4803	0.0197	0.9803
1.66	0.4515	0.0485	0.9515	2.07	0.4808	0.0192	0.9808
1.67	0.4525	0.0475	0.9525	2.08	0.4812	0.0188	0.9812
1.68	0.4535	0.0465	0.9535	2.09	0.4817	0.0183	0.9817
1.69	0.4545	0.0455	0.9545	2.10	0.4821	0.0179	0.9821
1.70	0.4554	0.0446	0.9554	2.11	0.4826	0.0174	0.9826
1.71	0.4564	0.0436	0.9564	2.12	0.4830	0.0170	0.9830
1.72	0.4573	0.0427	0.9573	2.13	0.4834	0.0166	0.9834
1.73	0.4582	0.0418	0.9582	2.14	0.4838	0.0162	0.9838
1.74	0.4591	0.0409	0.9591	2.15	0.4842	0.0158	0.9842
1.75	0.4599	0.0401	0.9599	2.16	0.4846	0.0154	0.9846
1.76	0.4608	0.0392	0.9608	2.17	0.4850	0.0150	0.9850
1.77	0.4616	0.0384	0.9616	2.18	0.4854	0.0146	0.9854
1.78	0.4625	0.0375	0.9625	2.19	0.4857	0.0143	0.9857
1.79	0.4633	0.0367	0.9633	2.20	0.4861	0.0139	0.9861
1.80	0.4641	0.0359	0.9641	2.21	0.4864	0.0136	0.9864
1.81	0.4649	0.0351	0.9649	2.22	0.4868	0.0132	0.9868
1.82	0.4656	0.0344	0.9656	2.23	0.4871	0.0129	0.9871
1.83	0.4664	0.0336	0.9664	2.24	0.4875	0.0125	0.9875
1.84	0.4671	0.0329	0.9671	2.25	0.4878	0.0122	0.9878
1.85	0.4678	0.0322	0.9678	2.26	0.4881	0.0119	0.9881
1.86	0.4686	0.0314	0.9686	2.27	0.4884	0.0116	0.9884
1.87	0.4693	0.0307	0.9693	2.28	0.4887	0.0113	0.9887
1.88	0.4699	0.0301	0.9699	2.29	0.4890	0.0110	0.9890
1.89	0.4706	0.0294	0.9706	2.30	0.4893	0.0107	0.9893
1.90	0.4713	0.0287	0.9713	2.31	0.4896	0.0104	0.9896

(more...)

Table 1: continued

($z = 2.32$ to $z = 3.90$)

z	z to mean	smaller area	larger area	z	z to mean	smaller area	larger area
2.32	0.4898	0.0102	0.9898	2.73	0.4968	0.0032	0.9968
2.33	0.4901	0.0099	0.9901	2.74	0.4969	0.0031	0.9969
2.34	0.4904	0.0096	0.9904	2.75	0.4970	0.0030	0.9970
2.35	0.4906	0.0094	0.9906	2.76	0.4971	0.0029	0.9971
2.36	0.4909	0.0091	0.9909	2.77	0.4972	0.0028	0.9972
2.37	0.4911	0.0089	0.9911	2.78	0.4973	0.0027	0.9973
2.38	0.4913	0.0087	0.9913	2.79	0.49736	0.00264	0.99736
2.39	0.4916	0.0084	0.9916	2.80	0.49744	0.00256	0.99744
2.40	0.4918	0.0082	0.9918	2.81	0.49752	0.00248	0.99752
2.41	0.4920	0.0080	0.9920	2.82	0.49760	0.00240	0.99760
2.42	0.4922	0.0078	0.9922	2.83	0.49767	0.00233	0.99767
2.43	0.4925	0.0075	0.9925	2.84	0.49774	0.00226	0.99774
2.44	0.4927	0.0073	0.9927	2.85	0.49781	0.00219	0.99781
2.45	0.4929	0.0071	0.9929	2.86	0.49788	0.00212	0.99788
2.46	0.4931	0.0069	0.9931	2.87	0.49795	0.00205	0.99795
2.47	0.4932	0.0068	0.9932	2.88	0.49801	0.00199	0.99801
2.48	0.4934	0.0066	0.9934	2.89	0.49807	0.00193	0.99807
2.49	0.4936	0.0064	0.9936	2.90	0.49813	0.00187	0.99813
2.50	0.4938	0.0062	0.9938	2.91	0.49819	0.00181	0.99819
2.51	0.4940	0.0060	0.9940	2.92	0.49825	0.00175	0.99825
2.52	0.4941	0.0059	0.9941	2.93	0.49831	0.00169	0.99831
2.53	0.4943	0.0057	0.9943	2.94	0.49836	0.00164	0.99836
2.54	0.4945	0.0055	0.9945	2.95	0.49841	0.00159	0.99841
2.55	0.4946	0.0054	0.9946	2.96	0.49846	0.00154	0.99846
2.56	0.4948	0.0052	0.9948	2.98	0.49856	0.00144	0.99856
2.57	0.4949	0.0051	0.9949	3.00	0.49865	0.00135	0.99865
2.58	0.4951	0.0049	0.9951	3.02	0.49874	0.00126	0.99874
2.59	0.4952	0.0048	0.9952	3.04	0.49882	0.00118	0.99882
2.60	0.4953	0.0047	0.9953	3.06	0.49889	0.00111	0.99889
2.61	0.4955	0.0045	0.9955	3.08	0.49896	0.00104	0.99896
2.62	0.4956	0.0044	0.9956	3.10	0.49903	0.00097	0.99903
2.63	0.4957	0.0043	0.9957	3.15	0.49918	0.00082	0.99918
2.64	0.4959	0.0041	0.9959	3.20	0.49931	0.00069	0.99931
2.65	0.4960	0.0040	0.9960	3.25	0.49942	0.00058	0.99942
2.66	0.4961	0.0039	0.9961	3.30	0.49952	0.00048	0.99952
2.67	0.4962	0.0038	0.9962	3.40	0.49966	0.00034	0.99966
2.68	0.4963	0.0037	0.9963	3.50	0.49977	0.00023	0.99977
2.69	0.4964	0.0036	0.9964	3.60	0.49984	0.00016	0.99984
2.70	0.4965	0.0035	0.9965	3.70	0.49989	0.00011	0.99989
2.71	0.4966	0.0034	0.9966	3.80	0.49993	0.00007	0.99993
2.72	0.4967	0.0033	0.9967	3.90	0.49995	0.00005	0.99995

Table 2: Critical values of t

df	Level of significance for one-tailed test							
	.1	.05	.025	.01	.005	.0025	.001	.0005
	Level of significance for two-tailed test							
	.2	.1	.05	.02	.01	.005	.002	.001
1	3.078	6.314	12.706	31.821	63.657	127.321	318.309	636.619
2	1.886	2.920	4.303	6.965	9.925	14.089	22.327	31.599
3	1.638	2.353	3.182	4.541	5.841	7.453	10.215	12.924
4	1.533	2.132	2.776	3.747	4.604	5.598	7.173	8.610
5	1.476	2.015	2.571	3.365	4.032	4.773	5.893	6.869
6	1.440	1.943	2.447	3.143	3.707	4.317	5.208	5.959
7	1.415	1.895	2.365	2.998	3.499	4.029	4.785	5.408
8	1.397	1.860	2.306	2.896	3.355	3.833	4.501	5.041
9	1.383	1.833	2.262	2.821	3.250	3.690	4.297	4.781
10	1.372	1.812	2.228	2.764	3.169	3.581	4.144	4.587
11	1.363	1.796	2.201	2.718	3.106	3.497	4.025	4.437
12	1.356	1.782	2.179	2.681	3.055	3.428	3.930	4.318
13	1.350	1.771	2.160	2.650	3.012	3.372	3.852	4.221
14	1.345	1.761	2.145	2.624	2.977	3.326	3.787	4.140
15	1.341	1.753	2.131	2.602	2.947	3.286	3.733	4.073
16	1.337	1.746	2.120	2.583	2.921	3.252	3.686	4.015
17	1.333	1.740	2.110	2.567	2.898	3.222	3.646	3.965
18	1.330	1.734	2.101	2.552	2.878	3.197	3.610	3.922
19	1.328	1.729	2.093	2.539	2.861	3.174	3.579	3.883
20	1.325	1.725	2.086	2.528	2.845	3.153	3.552	3.850
21	1.323	1.721	2.080	2.518	2.831	3.135	3.527	3.819
22	1.321	1.717	2.074	2.508	2.819	3.119	3.505	3.792
23	1.319	1.714	2.069	2.500	2.807	3.104	3.485	3.768
24	1.318	1.711	2.064	2.492	2.797	3.091	3.467	3.745
25	1.316	1.708	2.060	2.485	2.787	3.078	3.450	3.725
26	1.315	1.706	2.056	2.479	2.779	3.067	3.435	3.707
27	1.314	1.703	2.052	2.473	2.771	3.057	3.421	3.690
28	1.313	1.701	2.048	2.467	2.763	3.047	3.408	3.674
29	1.311	1.699	2.045	2.462	2.756	3.038	3.396	3.659
30	1.310	1.697	2.042	2.457	2.750	3.030	3.385	3.646
40	1.303	1.684	2.021	2.423	2.704	2.971	3.307	3.551
50	1.299	1.676	2.009	2.403	2.678	2.937	3.261	3.496
60	1.296	1.671	2.000	2.390	2.660	2.915	3.232	3.460
70	1.294	1.667	1.994	2.381	2.648	2.899	3.211	3.435
80	1.292	1.664	1.990	2.374	2.639	2.887	3.195	3.416
90	1.291	1.662	1.987	2.368	2.632	2.878	3.183	3.402
100	1.290	1.660	1.984	2.364	2.626	2.871	3.174	3.390
110	1.289	1.659	1.982	2.361	2.621	2.865	3.166	3.381
120	1.289	1.658	1.980	2.358	2.617	2.860	3.160	3.373
∞	1.282	1.645	1.960	2.327	2.576	2.808	3.091	3.291

Table 3: Critical values of χ^2

df	Probability								
	.5	.3	.2	.1	.05	.02	.01	.005	.001
1	0.455	1.074	1.642	2.706	3.841	5.412	6.635	7.879	10.828
2	1.386	2.408	3.219	4.605	5.991	7.824	9.210	10.597	13.816
3	2.366	3.665	4.642	6.251	7.815	9.837	11.345	12.838	16.266
4	3.357	4.878	5.989	7.779	9.488	11.668	13.277	14.860	18.467
5	4.351	6.064	7.289	9.236	11.070	13.388	15.086	16.750	20.515
6	5.348	7.231	8.558	10.645	12.592	15.033	16.812	18.548	22.458
7	6.346	8.383	9.803	12.017	14.067	16.622	18.475	20.278	24.322
8	7.344	9.524	11.030	13.362	15.507	18.168	20.090	21.955	26.124
9	8.343	10.656	12.242	14.684	16.919	19.679	21.666	23.589	27.877
10	9.342	11.781	13.442	15.987	18.307	21.161	23.209	25.188	29.588
11	10.341	12.899	14.631	17.275	19.675	22.618	24.725	26.757	31.264
12	11.340	14.011	15.812	18.549	21.026	24.054	26.217	28.300	32.909
13	12.340	15.119	16.985	19.812	22.362	25.472	27.688	29.819	34.528
14	13.339	16.222	18.151	21.064	23.685	26.873	29.141	31.319	36.123
15	14.339	17.322	19.311	22.307	24.996	28.259	30.578	32.801	37.697
16	15.338	18.418	20.465	23.542	26.296	29.633	32.000	34.267	39.252
17	16.338	19.511	21.615	24.769	27.587	30.995	33.409	35.718	40.790
18	17.338	20.601	22.760	25.989	28.869	32.346	34.805	37.156	42.312
19	18.338	21.689	23.900	27.204	30.144	33.687	36.191	38.582	43.820
20	19.337	22.775	25.038	28.412	31.410	35.020	37.566	39.997	45.315
21	20.337	23.858	26.171	29.615	32.671	36.343	38.932	41.401	46.797
22	21.337	24.939	27.301	30.813	33.924	37.659	40.289	42.796	48.268
23	22.337	26.018	28.429	32.007	35.172	38.968	41.638	44.181	49.728
24	23.337	27.096	29.553	33.196	36.415	40.270	42.980	45.559	51.179
25	24.337	28.172	30.675	34.382	37.652	41.566	44.314	46.928	52.620
26	25.336	29.246	31.795	35.563	38.885	42.856	45.642	48.290	54.052
27	26.336	30.319	32.912	36.741	40.113	44.140	46.963	49.645	55.476
28	27.336	31.391	34.027	37.916	41.337	45.419	48.278	50.993	56.892
29	28.336	32.461	35.139	39.087	42.557	46.693	49.588	52.336	58.301
30	29.336	33.530	36.250	40.256	43.773	47.962	50.892	53.672	59.703
32	31.336	35.665	38.466	42.585	46.194	50.487	53.486	56.328	62.487
33	32.336	36.731	39.572	43.745	47.400	51.743	54.776	57.648	63.870
34	33.336	37.795	40.676	44.903	48.602	52.995	56.061	58.964	65.247
35	34.336	38.859	41.778	46.059	49.802	54.244	57.342	60.275	66.619
37	36.336	40.984	43.978	48.363	52.192	56.730	59.893	62.883	69.346
38	37.335	42.045	45.076	49.513	53.384	57.969	61.162	64.181	70.703
40	39.335	44.165	47.269	51.805	55.758	60.436	63.691	66.766	73.402
42	41.335	46.282	49.456	54.090	58.124	62.892	66.206	69.336	76.084
44	43.335	48.396	51.639	56.369	60.481	65.337	68.710	71.893	78.750
46	45.335	50.507	53.818	58.641	62.830	67.771	71.201	74.437	81.400

(more...)

Table 3: continued

df	Probability								
	.5	.3	.2	.1	.05	.02	.01	.005	.001
48	47.335	52.616	55.993	60.907	65.171	70.197	73.683	76.969	84.037
49	48.335	53.670	57.079	62.038	66.339	71.406	74.919	78.231	85.351
50	49.335	54.723	58.164	63.167	67.505	72.613	76.154	79.490	86.661
52	51.335	56.827	60.332	65.422	69.832	75.021	78.616	82.001	89.272
54	53.335	58.930	62.496	67.673	72.153	77.422	81.069	84.502	91.872
56	55.335	61.031	64.658	69.919	74.468	79.815	83.513	86.994	94.461
58	57.335	63.129	66.816	72.160	76.778	82.201	85.950	89.477	97.039
60	59.335	65.227	68.972	74.397	79.082	84.580	88.379	91.952	99.607
62	61.335	67.322	71.125	76.630	81.381	86.953	90.802	94.419	102.166
64	63.335	69.416	73.276	78.860	83.675	89.320	93.217	96.878	104.716
66	65.335	71.508	75.424	81.085	85.965	91.681	95.626	99.330	107.258
68	67.335	73.600	77.571	83.308	88.250	94.037	98.028	101.776	109.791
70	69.334	75.689	79.715	85.527	90.531	96.388	100.425	104.215	112.317
72	71.334	77.778	81.857	87.743	92.808	98.733	102.816	106.648	114.835
74	73.334	79.865	83.997	89.956	95.081	101.074	105.202	109.074	117.346
75	74.334	80.908	85.066	91.061	96.217	102.243	106.393	110.286	118.599
76	75.334	81.951	86.135	92.166	97.351	103.410	107.583	111.495	119.850
78	77.334	84.036	88.271	94.374	99.617	105.742	109.958	113.911	122.348
80	79.334	86.120	90.405	96.578	101.879	108.069	112.329	116.321	124.839
81	80.334	87.161	91.472	97.680	103.010	109.232	113.512	117.524	126.083
82	81.334	88.202	92.538	98.780	104.139	110.393	114.695	118.726	127.324
84	83.334	90.284	94.669	100.980	106.395	112.712	117.057	121.126	129.804
86	85.334	92.365	96.799	103.177	108.648	115.028	119.414	123.522	132.277
88	87.334	94.445	98.927	105.372	110.898	117.340	121.767	125.913	134.745
90	89.334	96.524	101.054	107.565	113.145	119.648	124.116	128.299	137.208
92	91.334	98.602	103.179	109.756	115.390	121.954	126.462	130.681	139.666
94	93.334	100.679	105.303	111.944	117.632	124.255	128.803	133.059	142.119
96	95.334	102.755	107.425	114.131	119.871	126.554	131.141	135.433	144.567
98	97.334	104.831	109.547	116.315	122.108	128.849	133.476	137.803	147.010
100	99.334	106.906	111.667	118.498	124.342	131.142	135.807	140.169	149.449
102	101.334	108.980	113.786	120.679	126.574	133.431	138.134	142.532	151.884
104	103.334	111.053	115.903	122.858	128.804	135.718	140.459	144.891	154.314
106	105.334	113.126	118.020	125.035	131.031	138.002	142.780	147.247	156.740
108	107.334	115.198	120.135	127.211	133.257	140.283	145.099	149.599	159.162
110	109.334	117.269	122.250	129.385	135.480	142.562	147.414	151.948	161.581
112	111.334	119.340	124.363	131.558	137.701	144.838	149.727	154.294	163.995
114	113.334	121.410	126.475	133.729	139.921	147.111	152.037	156.637	166.406
115	114.334	122.444	127.531	134.813	141.030	148.247	153.191	157.808	167.610
116	115.334	123.479	128.587	135.898	142.138	149.383	154.344	158.977	168.813
118	117.334	125.548	130.697	138.066	144.354	151.652	156.648	161.314	171.217

(more ...)

Table 3: continued

<i>df</i>	Probability								
	.5	.3	.2	.1	.05	.02	.01	.005	.001
120	119.334	127.616	132.806	140.233	146.567	153.918	158.950	163.648	173.617
122	121.334	129.684	134.915	142.398	148.779	156.183	161.250	165.980	176.014
124	123.334	131.751	137.022	144.562	150.989	158.445	163.546	168.308	178.408
125	124.334	132.784	138.076	145.643	152.094	159.575	164.694	169.471	179.604
126	125.334	133.817	139.129	146.724	153.198	160.705	165.841	170.634	180.799
128	127.334	135.883	141.235	148.885	155.405	162.963	168.133	172.957	183.186
130	129.334	137.949	143.340	151.045	157.610	165.219	170.423	175.278	185.571
132	131.334	140.014	145.444	153.204	159.814	167.473	172.711	177.597	187.953
134	133.334	142.078	147.548	155.361	162.016	169.725	174.996	179.913	190.331
136	135.334	144.142	149.651	157.518	164.216	171.976	177.280	182.226	192.707
138	137.334	146.206	151.753	159.673	166.415	174.224	179.561	184.538	195.080
140	139.334	148.269	153.854	161.827	168.613	176.471	181.840	186.847	197.451
142	141.334	150.331	155.954	163.980	170.809	178.716	184.118	189.154	199.819
144	143.334	152.393	158.054	166.132	173.004	180.959	186.393	191.458	202.184
146	145.334	154.455	160.153	168.283	175.198	183.200	188.666	193.761	204.547
148	147.334	156.516	162.251	170.432	177.390	185.440	190.938	196.062	206.907
150	149.334	158.577	164.349	172.581	179.581	187.678	193.208	198.360	209.265
160	159.334	168.876	174.828	183.311	190.516	198.846	204.530	209.824	221.019
180	179.334	189.446	195.743	204.704	212.304	221.077	227.056	232.620	244.370
200	199.334	209.985	216.609	226.021	233.994	243.187	249.445	255.264	267.541
300	299.334	312.346	320.397	331.789	341.395	352.425	359.906	366.844	381.425
400	399.334	414.335	423.590	436.649	447.632	460.211	468.724	476.606	493.132
500	499.333	516.087	526.401	540.930	553.127	567.070	576.493	585.207	603.446
600	599.333	617.671	628.943	644.800	658.094	673.270	683.516	692.982	712.771
700	702.000	719.128	731.280	748.359	762.661	778.972	789.974	800.131	821.347
800	802.000	820.483	833.456	851.671	866.911	884.279	895.984	906.786	929.329
900	902.000	921.756	935.499	954.782	970.904	989.263	1001.630	1013.036	1036.826
∞	1002.000	1022.960	1037.431	1057.724	1074.679	1093.977	1106.969	1118.948	1143.917

Table 4: Critical values of F

		Numerator degrees of freedom												
		(p = .05 p = .01)												
Denominator degrees of freedom		1	2	3	4	5	6	7	8	9	10	12	14	16
	1	161.45 4052.2	199.50 4999.5	215.71 5403.4	224.58 5624.6	230.16 5763.7	233.99 5859.0	236.77 5928.4	238.88 5981.1	240.54 6022.5	241.88 6055.9	243.91 6106.3	245.36 6142.7	246.46 6170.1
	2	18.51 98.50	19.00 99.00	19.16 99.17	19.25 99.25	19.30 99.30	19.33 99.33	19.35 99.36	19.37 99.37	19.38 99.39	19.40 99.40	19.41 99.42	19.42 99.43	19.43 99.44
	3	10.13 34.12	9.55 30.82	9.28 29.46	9.12 28.71	9.01 28.24	8.94 27.91	8.89 27.67	8.85 27.49	8.81 27.35	8.79 27.23	8.74 27.05	8.71 26.92	8.69 26.83
	4	7.71 21.20	6.94 18.00	6.59 16.69	6.39 15.98	6.26 15.52	6.16 15.21	6.09 14.98	6.04 14.80	6.00 14.66	5.96 14.55	5.91 14.37	5.87 14.25	5.84 14.15
	5	6.61 16.26	5.79 13.27	5.41 12.06	5.19 11.39	5.05 10.97	4.95 10.67	4.88 10.46	4.82 10.29	4.77 10.16	4.74 10.05	4.68 9.89	4.64 9.77	4.60 9.68
	6	5.99 13.75	5.14 10.92	4.76 9.78	4.53 9.15	4.39 8.75	4.28 8.47	4.21 8.26	4.15 8.10	4.10 7.98	4.06 7.87	4.00 7.72	3.96 7.60	3.92 7.52
	7	5.59 12.25	4.74 9.55	4.35 8.45	4.12 7.85	3.97 7.46	3.87 7.19	3.79 6.99	3.73 6.84	3.68 6.72	3.64 6.62	3.57 6.47	3.53 6.36	3.49 6.28
	8	5.32 11.26	4.46 8.65	4.07 7.59	3.84 7.01	3.69 6.63	3.58 6.37	3.50 6.18	3.44 6.03	3.39 5.91	3.35 5.81	3.28 5.67	3.24 5.56	3.20 5.48
	9	5.12 10.56	4.26 8.02	3.86 6.99	3.63 6.42	3.48 6.06	3.37 5.80	3.29 5.61	3.23 5.47	3.18 5.35	3.14 5.26	3.07 5.11	3.03 5.01	2.99 4.92
	10	4.96 10.04	4.10 7.56	3.71 6.55	3.48 5.99	3.33 5.64	3.22 5.39	3.14 5.20	3.07 5.06	3.02 4.94	2.98 4.85	2.91 4.71	2.86 4.60	2.83 4.52
	11	4.84 9.65	3.98 7.21	3.59 6.22	3.36 5.67	3.20 5.32	3.09 5.07	3.01 4.89	2.95 4.74	2.90 4.63	2.85 4.54	2.79 4.40	2.74 4.29	2.70 4.21
	12	4.75 9.33	3.89 6.93	3.49 5.95	3.26 5.41	3.11 5.06	3.00 4.82	2.91 4.64	2.85 4.50	2.80 4.39	2.75 4.30	2.69 4.16	2.64 4.05	2.60 3.97
	13	4.67 9.07	3.81 6.70	3.41 5.74	3.18 5.21	3.03 4.86	2.92 4.62	2.83 4.44	2.77 4.30	2.71 4.19	2.67 4.10	2.60 3.96	2.55 3.86	2.51 3.78
	14	4.60 8.86	3.74 6.51	3.34 5.56	3.11 5.04	2.96 4.69	2.85 4.46	2.76 4.28	2.70 4.14	2.65 4.03	2.60 3.94	2.53 3.80	2.48 3.70	2.44 3.62
	15	4.54 8.68	3.68 6.36	3.29 5.42	3.06 4.89	2.90 4.56	2.79 4.32	2.71 4.14	2.64 4.00	2.59 3.89	2.54 3.80	2.48 3.67	2.42 3.56	2.38 3.49
	16	4.49 8.53	3.63 6.23	3.24 5.29	3.01 4.77	2.85 4.44	2.74 4.20	2.66 4.03	2.59 3.89	2.54 3.78	2.49 3.69	2.42 3.55	2.37 3.45	2.33 3.37
	17	4.45 8.40	3.59 6.11	3.20 5.18	2.96 4.67	2.81 4.34	2.70 4.10	2.61 3.93	2.55 3.79	2.49 3.68	2.45 3.59	2.38 3.46	2.33 3.35	2.29 3.27

(more...)

Table 4: continued

		Numerator degrees of freedom												
		18	20	24	30	40	50	60	75	100	150	200	500	∞
Denominator degrees of freedom	1	247.32 6191.5	248.01 6208.7	249.05 6234.6	250.10 6260.6	251.14 6286.78	251.77 6302.5	252.20 6313.0	252.62 6323.6	253.04 6334.1	253.46 6344.7	253.68 6340.0	254.06 6359.5	254.32 6366.0
	2	19.44 99.44	19.45 99.45	19.45 99.46	19.46 99.47	19.47 99.47	19.48 99.48	19.48 99.48	19.48 99.49	19.49 99.49	19.49 99.49	19.49 99.49	19.49 99.50	19.50 99.50
	3	8.67 26.75	8.66 26.69	8.64 26.60	8.62 26.50	8.59 26.41	8.58 26.35	8.57 26.32	8.56 26.28	8.55 26.24	8.54 26.20	8.54 26.18	8.53 26.15	8.53 26.13
	4	5.82 14.08	5.80 14.02	5.77 13.93	5.75 13.84	5.72 13.75	5.70 13.69	5.69 13.65	5.68 13.61	5.66 13.58	5.65 13.54	5.65 13.52	5.64 13.49	5.63 13.46
	5	4.58 9.61	4.56 9.55	4.53 9.47	4.50 9.38	4.46 9.29	4.44 9.24	4.43 9.20	4.42 9.17	4.41 9.13	4.39 9.09	4.39 9.08	4.37 9.04	4.37 9.02
	6	3.90 7.45	3.87 7.40	3.84 7.31	3.81 7.23	3.77 7.14	3.75 7.09	3.74 7.06	3.73 7.02	3.71 6.99	3.70 6.95	3.69 6.93	3.68 6.90	3.67 6.88
	7	3.47 6.21	3.44 6.16	3.41 6.07	3.38 5.99	3.34 5.91	3.32 5.86	3.30 5.82	3.29 5.79	3.27 5.75	3.26 5.72	3.25 5.70	3.24 5.67	3.23 5.65
	8	3.17 5.41	3.15 5.36	3.12 5.28	3.08 5.20	3.04 5.12	3.02 5.07	3.01 5.03	2.99 5.00	2.97 4.96	2.96 4.93	2.95 4.91	2.94 4.88	2.93 4.86
	9	2.96 4.86	2.94 4.81	2.90 4.73	2.86 4.65	2.83 4.57	2.80 4.52	2.79 4.48	2.77 4.45	2.76 4.41	2.74 4.38	2.73 4.36	2.72 4.33	2.71 4.31
	10	2.80 4.46	2.77 4.41	2.74 4.33	2.70 4.25	2.66 4.17	2.64 4.12	2.62 4.08	2.60 4.05	2.59 4.01	2.57 3.98	2.56 3.96	2.55 3.93	2.54 3.91
	11	2.67 4.15	2.65 4.10	2.61 4.02	2.57 3.94	2.53 3.86	2.51 3.81	2.49 3.78	2.47 3.74	2.46 3.71	2.44 3.67	2.43 3.66	2.42 3.62	2.41 3.60
	12	2.57 3.91	2.54 3.86	2.51 3.78	2.47 3.70	2.43 3.62	2.40 3.57	2.38 3.54	2.37 3.50	2.35 3.47	2.33 3.43	2.32 3.41	2.31 3.38	2.30 3.36
	13	2.48 3.72	2.46 3.66	2.42 3.59	2.38 3.51	2.34 3.43	2.31 3.38	2.30 3.34	2.28 3.31	2.26 3.27	2.24 3.24	2.23 3.22	2.22 3.19	2.21 3.17
	14	2.41 3.56	2.39 3.51	2.35 3.43	2.31 3.35	2.27 3.27	2.24 3.22	2.22 3.18	2.21 3.15	2.19 3.11	2.17 3.08	2.16 3.06	2.14 3.03	2.13 3.01
	15	2.35 3.42	2.33 3.37	2.29 3.29	2.25 3.21	2.20 3.13	2.18 3.08	2.16 3.05	2.14 3.01	2.12 2.98	2.10 2.94	2.10 2.92	2.08 2.89	2.07 2.87
	16	2.30 3.31	2.28 3.26	2.24 3.18	2.19 3.10	2.15 3.02	2.12 2.97	2.11 2.93	2.09 2.90	2.07 2.86	2.05 2.83	2.04 2.81	2.02 2.78	2.01 2.75
	17	2.26 3.21	2.23 3.16	2.19 3.08	2.15 3.00	2.10 2.92	2.08 2.87	2.06 2.83	2.04 2.80	2.02 2.76	2.00 2.73	1.99 2.71	1.97 2.68	1.96 2.65

(more...)

Table 4: continued

		Numerator degrees of freedom												
		(p = .05 p = .01)												
Denominator degrees of freedom		1	2	3	4	5	6	7	8	9	10	12	14	16
	18		4.41	3.55	3.16	2.93	2.77	2.66	2.58	2.51	2.46	2.41	2.34	2.29
		8.29	6.01	5.09	4.58	4.25	4.01	3.84	3.71	3.60	3.51	3.37	3.27	3.19
19		4.38	3.52	3.13	2.90	2.74	2.63	2.54	2.48	2.42	2.38	2.31	2.26	2.21
		8.18	5.93	5.01	4.50	4.17	3.94	3.77	3.63	3.52	3.43	3.30	3.19	3.12
20		4.35	3.49	3.10	2.87	2.71	2.60	2.51	2.45	2.39	2.35	2.28	2.22	2.18
		8.10	5.85	4.94	4.43	4.10	3.87	3.70	3.56	3.46	3.37	3.23	3.13	3.05
21		4.32	3.47	3.07	2.84	2.68	2.57	2.49	2.42	2.37	2.32	2.25	2.20	2.16
		8.02	5.78	4.87	4.37	4.04	3.81	3.64	3.51	3.40	3.31	3.17	3.07	2.99
22		4.30	3.44	3.05	2.82	2.66	2.55	2.46	2.40	2.34	2.30	2.23	2.17	2.13
		7.95	5.72	4.82	4.31	3.99	3.76	3.59	3.45	3.35	3.26	3.12	3.02	2.94
23		4.28	3.42	3.03	2.80	2.64	2.53	2.44	2.37	2.32	2.27	2.20	2.15	2.11
		7.88	5.66	4.76	4.26	3.94	3.71	3.54	3.41	3.30	3.21	3.07	2.97	2.89
24		4.26	3.40	3.01	2.78	2.62	2.51	2.42	2.36	2.30	2.25	2.18	2.13	2.09
		7.82	5.61	4.72	4.22	3.90	3.67	3.50	3.36	3.26	3.17	3.03	2.93	2.85
25		4.24	3.39	2.99	2.76	2.60	2.49	2.40	2.34	2.28	2.24	2.16	2.11	2.07
		7.77	5.57	4.68	4.18	3.85	3.63	3.46	3.32	3.22	3.13	2.99	2.89	2.81
26		4.23	3.37	2.98	2.74	2.59	2.47	2.39	2.32	2.27	2.22	2.15	2.09	2.05
		7.72	5.53	4.64	4.14	3.82	3.59	3.42	3.29	3.18	3.09	2.96	2.86	2.78
27		4.21	3.35	2.96	2.73	2.57	2.46	2.37	2.31	2.25	2.20	2.13	2.08	2.04
		7.68	5.49	4.60	4.11	3.78	3.56	3.39	3.26	3.15	3.06	2.93	2.82	2.75
28		4.20	3.34	2.95	2.71	2.56	2.45	2.36	2.29	2.24	2.19	2.12	2.06	2.02
		7.64	5.45	4.57	4.07	3.75	3.53	3.36	3.23	3.12	3.03	2.90	2.79	2.72
29		4.18	3.33	2.93	2.70	2.55	2.43	2.35	2.28	2.22	2.18	2.10	2.05	2.01
		7.60	5.42	4.54	4.04	3.73	3.50	3.33	3.20	3.09	3.00	2.87	2.77	2.69
30		4.17	3.32	2.92	2.69	2.53	2.42	2.33	2.27	2.21	2.16	2.09	2.04	1.99
		7.56	5.39	4.51	4.02	3.70	3.47	3.30	3.17	3.07	2.98	2.84	2.74	2.66
35		4.12	3.27	2.87	2.64	2.49	2.37	2.29	2.22	2.16	2.11	2.04	1.99	1.94
		7.42	5.27	4.40	3.91	3.59	3.37	3.20	3.07	2.96	2.88	2.74	2.64	2.56
40		4.08	3.23	2.84	2.61	2.45	2.34	2.25	2.18	2.12	2.08	2.00	1.95	1.90
		7.31	5.18	4.31	3.83	3.51	3.29	3.12	2.99	2.89	2.80	2.66	2.56	2.48
50		4.03	3.18	2.79	2.56	2.40	2.29	2.20	2.13	2.07	2.03	1.95	1.89	1.85
		7.17	5.06	4.20	3.72	3.41	3.19	3.02	2.89	2.78	2.70	2.56	2.46	2.38
60		4.00	3.15	2.76	2.53	2.37	2.25	2.17	2.10	2.04	1.99	1.92	1.86	1.82
		7.08	4.98	4.13	3.65	3.34	3.12	2.95	2.82	2.72	2.63	2.50	2.39	2.31

(more ...)

Table 4: continued

		Numerator degrees of freedom												(p = .05 p = .01)	
		18	20	24	30	40	50	60	75	100	150	200	500	∞	
Denominator degrees of freedom	18	2.22 3.13	2.19 3.08	2.15 3.00	2.11 2.92	2.06 2.84	2.04 2.78	2.02 2.75	2.00 2.71	1.98 2.68	1.96 2.64	1.95 2.62	1.93 2.59	1.92 2.57	
	19	2.18 3.05	2.16 3.00	2.11 2.92	2.07 2.84	2.03 2.76	2.00 2.71	1.98 2.67	1.96 2.64	1.94 2.60	1.92 2.57	1.91 2.55	1.89 2.51	1.88 2.49	
	20	2.15 2.99	2.12 2.94	2.08 2.86	2.04 2.78	1.99 2.69	1.97 2.64	1.95 2.61	1.93 2.57	1.91 2.54	1.89 2.50	1.88 2.48	1.86 2.44	1.84 2.42	
	21	2.12 2.93	2.10 2.88	2.05 2.80	2.01 2.72	1.96 2.64	1.94 2.58	1.92 2.55	1.90 2.51	1.88 2.48	1.86 2.44	1.84 2.42	1.83 2.42	1.81 2.38	1.81 2.36
	22	2.10 2.88	2.07 2.83	2.03 2.75	1.98 2.67	1.94 2.58	1.91 2.53	1.89 2.50	1.87 2.46	1.85 2.42	1.83 2.38	1.82 2.36	1.80 2.33	1.78 2.31	
	23	2.08 2.83	2.05 2.78	2.01 2.70	1.96 2.62	1.91 2.54	1.88 2.48	1.86 2.45	1.84 2.41	1.82 2.37	1.80 2.34	1.79 2.32	1.77 2.28	1.76 2.26	
	24	2.05 2.79	2.03 2.74	1.98 2.66	1.94 2.58	1.89 2.49	1.86 2.44	1.84 2.40	1.82 2.37	1.80 2.33	1.78 2.29	1.77 2.27	1.75 2.24	1.73 2.21	
	25	2.04 2.75	2.01 2.70	1.96 2.62	1.92 2.54	1.87 2.45	1.84 2.40	1.82 2.36	1.80 2.33	1.78 2.29	1.76 2.25	1.75 2.23	1.73 2.19	1.71 2.17	
	26	2.02 2.72	1.99 2.66	1.95 2.58	1.90 2.50	1.85 2.42	1.82 2.36	1.80 2.33	1.78 2.29	1.76 2.25	1.74 2.21	1.73 2.19	1.71 2.16	1.69 2.13	
	27	2.00 2.68	1.97 2.63	1.93 2.55	1.88 2.47	1.84 2.38	1.81 2.33	1.79 2.29	1.76 2.26	1.74 2.22	1.72 2.18	1.71 2.16	1.69 2.12	1.67 2.10	
	28	1.99 2.65	1.96 2.60	1.91 2.52	1.87 2.44	1.82 2.35	1.79 2.30	1.77 2.26	1.75 2.23	1.73 2.19	1.70 2.15	1.69 2.13	1.67 2.09	1.65 2.07	
	29	1.97 2.63	1.94 2.57	1.90 2.49	1.85 2.41	1.81 2.33	1.77 2.27	1.75 2.23	1.73 2.20	1.71 2.16	1.69 2.12	1.67 2.10	1.65 2.06	1.64 2.04	
	30	1.96 2.60	1.93 2.55	1.89 2.47	1.84 2.39	1.79 2.30	1.76 2.25	1.74 2.21	1.72 2.17	1.70 2.13	1.67 2.09	1.66 2.07	1.64 2.03	1.62 2.01	
	35	1.91 2.50	1.88 2.44	1.83 2.36	1.79 2.28	1.74 2.19	1.70 2.14	1.68 2.10	1.66 2.06	1.63 2.02	1.61 1.98	1.60 1.96	1.57 1.92	1.56 1.89	
40	1.87 2.42	1.84 2.37	1.79 2.29	1.74 2.20	1.69 2.11	1.66 2.06	1.64 2.02	1.61 1.98	1.59 1.94	1.56 1.90	1.55 1.87	1.53 1.83	1.51 1.81		
50	1.81 2.32	1.78 2.27	1.74 2.18	1.69 2.10	1.63 2.01	1.60 1.95	1.58 1.91	1.55 1.87	1.52 1.82	1.50 1.78	1.48 1.76	1.46 1.71	1.44 1.68		
60	1.78 2.25	1.75 2.20	1.70 2.12	1.65 2.03	1.59 1.94	1.56 1.88	1.53 1.84	1.51 1.79	1.48 1.75	1.45 1.70	1.44 1.68	1.41 1.63	1.39 1.60		

(more...)

Table 4: continued

		Numerator degrees of freedom												
		(p = .05 p = .01)												
Denominator degrees of freedom		1	2	3	4	5	6	7	8	9	10	12	14	16
	75	3.97 6.99	3.12 4.90	2.73 4.05	2.49 3.58	2.34 3.27	2.22 3.05	2.13 2.89	2.06 2.76	2.01 2.65	1.96 2.57	1.88 2.43	1.83 2.33	1.78 2.25
	100	3.94 6.90	3.09 4.82	2.70 3.98	2.46 3.51	2.31 3.21	2.19 2.99	2.10 2.82	2.03 2.69	1.97 2.59	1.93 2.50	1.85 2.37	1.79 2.27	1.75 2.19
	125	3.92 6.84	3.07 4.78	2.68 3.94	2.44 3.47	2.29 3.17	2.17 2.95	2.08 2.79	2.01 2.66	1.96 2.55	1.91 2.47	1.83 2.33	1.77 2.23	1.73 2.15
	150	3.90 6.81	3.06 4.75	2.66 3.91	2.43 3.45	2.27 3.14	2.16 2.92	2.07 2.76	2.00 2.63	1.94 2.53	1.89 2.44	1.82 2.31	1.76 2.20	1.71 2.12
	200	3.89 6.76	3.04 4.71	2.65 3.88	2.42 3.41	2.26 3.11	2.14 2.89	2.06 2.73	1.98 2.60	1.93 2.50	1.88 2.41	1.80 2.27	1.74 2.17	1.69 2.09
	300	3.87 6.72	3.03 4.68	2.63 3.85	2.40 3.38	2.24 3.08	2.13 2.86	2.04 2.70	1.97 2.57	1.91 2.47	1.86 2.38	1.78 2.24	1.72 2.14	1.68 2.06
	400	3.86 6.70	3.02 4.66	2.63 3.83	2.39 3.37	2.24 3.06	2.12 2.85	2.03 2.68	1.96 2.56	1.90 2.45	1.85 2.37	1.78 2.23	1.72 2.13	1.67 2.05
	500	3.86 6.69	3.01 4.65	2.62 3.82	2.39 3.36	2.23 3.05	2.12 2.84	2.03 2.68	1.96 2.55	1.90 2.44	1.85 2.36	1.77 2.22	1.71 2.12	1.66 2.04
	600	3.86 6.68	3.01 4.64	2.62 3.81	2.39 3.35	2.23 3.05	2.11 2.83	2.02 2.67	1.95 2.54	1.90 2.44	1.85 2.35	1.77 2.21	1.71 2.11	1.66 2.03
	700	3.85 6.67	3.01 4.64	2.62 3.81	2.38 3.35	2.23 3.04	2.11 2.83	2.02 2.66	1.95 2.54	1.89 2.43	1.84 2.35	1.77 2.21	1.71 2.11	1.66 2.03
	800	3.85 6.67	3.01 4.63	2.62 3.81	2.38 3.34	2.23 3.04	2.11 2.82	2.02 2.66	1.95 2.53	1.89 2.43	1.84 2.34	1.76 2.21	1.70 2.10	1.66 2.02
	900	3.85 6.66	3.01 4.63	2.61 3.80	2.38 3.34	2.22 3.04	2.11 2.82	2.02 2.66	1.95 2.53	1.89 2.43	1.84 2.34	1.76 2.20	1.70 2.10	1.65 2.02
	∞	3.84 6.64	3.99 4.60	2.60 3.78	2.37 3.32	2.21 3.02	2.09 2.80	2.01 2.64	1.94 2.51	1.88 2.41	1.83 2.32	1.75 2.18	1.69 2.07	1.64 1.99

(more ...)

Table 4: continued

		Numerator degrees of freedom												(p = .05 p = .01)	
		18	20	24	30	40	50	60	75	100	150	200	500	∞	
Denominator degrees of freedom	75	1.74 2.18	1.71 2.13	1.66 2.05	1.61 1.96	1.55 1.87	1.52 1.81	1.49 1.76	1.47 1.72	1.44 1.67	1.41 1.62	1.39 1.60	1.36 1.55	1.34 1.52	
	100	1.71 2.12	1.68 2.07	1.63 1.98	1.57 1.89	1.52 1.80	1.48 1.74	1.45 1.69	1.42 1.65	1.39 1.60	1.36 1.55	1.34 1.52	1.30 1.47	1.28 1.43	
	125	1.69 2.08	1.66 2.03	1.60 1.94	1.55 1.85	1.49 1.76	1.45 1.69	1.42 1.65	1.40 1.60	1.36 1.55	1.33 1.50	1.31 1.47	1.27 1.41	1.25 1.37	
	150	1.67 2.06	1.64 2.00	1.59 1.92	1.54 1.83	1.48 1.73	1.44 1.66	1.41 1.62	1.38 1.57	1.34 1.52	1.31 1.46	1.29 1.43	1.25 1.38	1.22 1.33	
	200	1.66 2.03	1.62 1.97	1.57 1.89	1.52 1.79	1.46 1.69	1.41 1.63	1.39 1.58	1.35 1.53	1.32 1.48	1.28 1.42	1.26 1.39	1.22 1.33	1.19 1.28	
	300	1.64 1.99	1.61 1.94	1.55 1.85	1.50 1.76	1.43 1.66	1.39 1.59	1.36 1.55	1.33 1.50	1.30 1.44	1.26 1.38	1.23 1.35	1.19 1.28	1.15 1.22	
	400	1.63 1.98	1.60 1.92	1.54 1.84	1.49 1.75	1.42 1.64	1.38 1.58	1.35 1.53	1.32 1.48	1.28 1.42	1.24 1.36	1.22 1.32	1.17 1.25	1.13 1.19	
	500	1.62 1.97	1.59 1.92	1.54 1.83	1.48 1.74	1.42 1.63	1.38 1.57	1.35 1.52	1.31 1.47	1.28 1.41	1.23 1.34	1.21 1.31	1.16 1.23	1.12 1.17	
	600	1.62 1.96	1.59 1.91	1.54 1.82	1.48 1.73	1.41 1.63	1.37 1.56	1.34 1.51	1.31 1.46	1.27 1.40	1.23 1.34	1.20 1.30	1.15 1.22	1.11 1.15	
	700	1.62 1.96	1.59 1.90	1.53 1.82	1.48 1.72	1.41 1.62	1.37 1.55	1.34 1.50	1.30 1.45	1.27 1.39	1.22 1.33	1.20 1.29	1.15 1.21	1.10 1.14	
	800	1.62 1.96	1.58 1.90	1.53 1.81	1.47 1.72	1.41 1.62	1.37 1.55	1.34 1.50	1.30 1.45	1.26 1.39	1.22 1.32	1.20 1.29	1.14 1.20	1.09 1.13	
	900	1.62 1.95	1.58 1.90	1.53 1.81	1.47 1.72	1.41 1.61	1.36 1.55	1.33 1.50	1.30 1.44	1.26 1.39	1.22 1.32	1.19 1.28	1.14 1.20	1.09 1.12	
	∞	1.60 1.93	1.57 1.87	1.52 1.79	1.46 1.70	1.39 1.59	1.36 1.53	1.32 1.47	1.30 1.44	1.24 1.36	1.20 1.29	1.17 1.25	1.11 1.14	1.00 1.00	

Table 5: Fisher's r to Z *

r	Z	r	Z	r	Z	r	Z	r	Z
0.000	0.000	0.200	0.203	0.400	0.424	0.600	0.693	0.800	1.099
0.005	0.005	0.205	0.208	0.405	0.430	0.605	0.701	0.805	1.113
0.010	0.010	0.210	0.213	0.410	0.436	0.610	0.709	0.810	1.127
0.015	0.015	0.215	0.218	0.415	0.442	0.615	0.717	0.815	1.142
0.020	0.020	0.220	0.224	0.420	0.448	0.620	0.725	0.820	1.157
0.025	0.025	0.225	0.229	0.425	0.454	0.625	0.733	0.825	1.172
0.030	0.030	0.230	0.234	0.430	0.460	0.630	0.741	0.830	1.188
0.035	0.035	0.235	0.239	0.435	0.466	0.635	0.750	0.835	1.204
0.040	0.040	0.240	0.245	0.440	0.472	0.640	0.758	0.840	1.221
0.045	0.045	0.245	0.250	0.445	0.478	0.645	0.767	0.845	1.238
0.050	0.050	0.250	0.255	0.450	0.485	0.650	0.775	0.850	1.256
0.055	0.055	0.255	0.261	0.455	0.491	0.655	0.784	0.855	1.274
0.060	0.060	0.260	0.266	0.460	0.497	0.660	0.793	0.860	1.293
0.065	0.065	0.265	0.271	0.465	0.504	0.665	0.802	0.865	1.313
0.070	0.070	0.270	0.277	0.470	0.510	0.670	0.811	0.870	1.333
0.075	0.075	0.275	0.282	0.475	0.517	0.675	0.820	0.875	1.354
0.080	0.080	0.280	0.288	0.480	0.523	0.680	0.829	0.880	1.376
0.085	0.085	0.285	0.293	0.485	0.530	0.685	0.838	0.885	1.398
0.090	0.090	0.290	0.299	0.490	0.536	0.690	0.848	0.890	1.422
0.095	0.095	0.295	0.304	0.495	0.543	0.695	0.858	0.895	1.447
0.100	0.100	0.300	0.310	0.500	0.549	0.700	0.867	0.900	1.472
0.105	0.105	0.305	0.315	0.505	0.556	0.705	0.877	0.905	1.499
0.110	0.110	0.310	0.321	0.510	0.563	0.710	0.887	0.910	1.528
0.115	0.116	0.315	0.326	0.515	0.570	0.715	0.897	0.915	1.557
0.120	0.121	0.320	0.332	0.520	0.576	0.720	0.908	0.920	1.589
0.125	0.126	0.325	0.337	0.525	0.583	0.725	0.918	0.925	1.623
0.130	0.131	0.330	0.343	0.530	0.590	0.730	0.929	0.930	1.658
0.135	0.136	0.335	0.348	0.535	0.597	0.735	0.940	0.935	1.697
0.140	0.141	0.340	0.354	0.540	0.604	0.740	0.950	0.940	1.738
0.145	0.146	0.345	0.360	0.545	0.611	0.745	0.962	0.945	1.783
0.150	0.151	0.350	0.365	0.550	0.618	0.750	0.973	0.950	1.832
0.155	0.156	0.355	0.371	0.555	0.626	0.755	0.984	0.955	1.886
0.160	0.161	0.360	0.377	0.560	0.633	0.760	0.996	0.960	1.946
0.165	0.167	0.365	0.383	0.565	0.640	0.765	1.008	0.965	2.014
0.170	0.172	0.370	0.388	0.570	0.648	0.770	1.020	0.970	2.092
0.175	0.177	0.375	0.394	0.575	0.655	0.775	1.033	0.975	2.185
0.180	0.182	0.380	0.400	0.580	0.662	0.780	1.045	0.980	2.298
0.185	0.187	0.385	0.406	0.585	0.670	0.785	1.058	0.985	2.443
0.190	0.192	0.390	0.412	0.590	0.678	0.790	1.071	0.990	2.647
0.195	0.198	0.395	0.418	0.595	0.685	0.795	1.085	0.995	2.994

* Calculated as: $Z = 1/2 [\log_e(1+r) - \log_e(1-r)]$

Table 6: Critical values of r (two-tailed)

df	Probability				
	0.1	0.05	0.02	0.01	0.001
5	0.6695	0.7545	0.8329	0.8745	0.9509
6	0.6215	0.7068	0.7887	0.8344	0.9249
7	0.5823	0.6665	0.7499	0.7977	0.8983
8	0.5494	0.6319	0.7155	0.7646	0.8721
9	0.5215	0.6021	0.6851	0.7348	0.8471
10	0.4973	0.5760	0.6581	0.7079	0.8233
11	0.4762	0.5530	0.6339	0.6836	0.8010
12	0.4576	0.5325	0.6121	0.6614	0.7800
13	0.4409	0.5140	0.5923	0.6412	0.7604
14	0.4259	0.4974	0.5743	0.6226	0.7420
15	0.4124	0.4822	0.5578	0.6056	0.7247
16	0.4001	0.4684	0.5426	0.5898	0.7085
17	0.3888	0.4556	0.5286	0.5751	0.6932
18	0.3784	0.4438	0.5156	0.5615	0.6789
19	0.3688	0.4329	0.5034	0.5488	0.6653
20	0.3599	0.4228	0.4922	0.5369	0.6524
21	0.3516	0.4133	0.4816	0.5257	0.6403
22	0.3438	0.4044	0.4716	0.5152	0.6288
23	0.3366	0.3961	0.4623	0.5052	0.6178
24	0.3298	0.3883	0.4535	0.4958	0.6074
26	0.3173	0.3739	0.4372	0.4786	0.5880
28	0.3061	0.3610	0.4226	0.4630	0.5704
30	0.2960	0.3494	0.4094	0.4488	0.5542
32	0.2869	0.3388	0.3973	0.4358	0.5392
34	0.2786	0.3292	0.3862	0.4239	0.5255
36	0.2709	0.3203	0.3760	0.4129	0.5127
38	0.2639	0.3121	0.3666	0.4027	0.5007
40	0.2573	0.3045	0.3578	0.3932	0.4896
45	0.2429	0.2876	0.3384	0.3722	0.4647
50	0.2307	0.2733	0.3218	0.3542	0.4432
55	0.2201	0.2609	0.3075	0.3386	0.4245
60	0.2109	0.2501	0.2949	0.3249	0.4079
65	0.2027	0.2405	0.2837	0.3127	0.3931
70	0.1954	0.2319	0.2738	0.3018	0.3799
75	0.1889	0.2242	0.2647	0.2920	0.3678
80	0.1830	0.2172	0.2566	0.2830	0.3569
85	0.1776	0.2109	0.2491	0.2748	0.3468
90	0.1726	0.2050	0.2423	0.2674	0.3376
95	0.1681	0.1996	0.2360	0.2604	0.3291
100	0.1638	0.1947	0.2301	0.2540	0.3212
110	0.1563	0.1857	0.2196	0.2425	0.3069
120	0.1497	0.1779	0.2105	0.2324	0.2944
130	0.1438	0.1710	0.2024	0.2235	0.2833
140	0.1386	0.1649	0.1951	0.2156	0.2733

(more ...)

Table 6: continued

df	Probability				
	0.1	0.05	0.02	0.01	0.001
150	0.1340	0.1593	0.1886	0.2084	0.2644
160	0.1297	0.1543	0.1827	0.2019	0.2562
170	0.1259	0.1497	0.1773	0.1960	0.2488
180	0.1224	0.1456	0.1724	0.1905	0.2420
190	0.1191	0.1417	0.1678	0.1855	0.2357
200	0.1161	0.1381	0.1636	0.1809	0.2299
225	0.1095	0.1303	0.1544	0.1707	0.2170
250	0.1039	0.1237	0.1465	0.1620	0.2061
275	0.0991	0.1179	0.1398	0.1546	0.1967
300	0.0949	0.1129	0.1339	0.1481	0.1885
325	0.0912	0.1085	0.1287	0.1423	0.1812
350	0.0879	0.1046	0.1240	0.1372	0.1747
375	0.0849	0.1011	0.1198	0.1326	0.1689
400	0.0822	0.0979	0.1160	0.1284	0.1636
425	0.0798	0.0950	0.1126	0.1246	0.1587
450	0.0775	0.0923	0.1094	0.1211	0.1543
475	0.0755	0.0898	0.1065	0.1179	0.1503
500	0.0735	0.0876	0.1039	0.1149	0.1465
550	0.0701	0.0835	0.0990	0.1096	0.1397
600	0.0672	0.0800	0.0948	0.1050	0.1338
650	0.0645	0.0768	0.0911	0.1009	0.1286
700	0.0622	0.0741	0.0878	0.0972	0.1240
750	0.0601	0.0715	0.0849	0.0939	0.1198
800	0.0582	0.0693	0.0822	0.0910	0.1160
850	0.0564	0.0672	0.0797	0.0883	0.1126
900	0.0549	0.0653	0.0775	0.0858	0.1094
950	0.0534	0.0636	0.0754	0.0835	0.1065
1000	0.0520	0.0620	0.0735	0.0814	0.1038
1100	0.0496	0.0591	0.0701	0.0776	0.0990
1200	0.0475	0.0566	0.0671	0.0743	0.0948
1300	0.0457	0.0544	0.0645	0.0714	0.0911
1400	0.0440	0.0524	0.0622	0.0688	0.0878
1500	0.0425	0.0506	0.0601	0.0665	0.0849
1700	0.0399	0.0476	0.0564	0.0625	0.0797
1800	0.0388	0.0462	0.0548	0.0607	0.0775
1900	0.0378	0.0450	0.0534	0.0591	0.0754
2000	0.0368	0.0439	0.0520	0.0576	0.0735
2500	0.0329	0.0392	0.0466	0.0515	0.0658
3000	0.0301	0.0358	0.0425	0.0471	0.0601
4000	0.0261	0.0310	0.0368	0.0408	0.0520
5000	0.0233	0.0278	0.0329	0.0365	0.0466
6000	0.0213	0.0254	0.0301	0.0333	0.0425
7000	0.0197	0.0235	0.0279	0.0308	0.0394
9999	0.0165	0.0196	0.0233	0.0258	0.0329

Table 7: Random numbers (200 x 12)

	1	2	3	4	5	6	7	8	9	10	11	12
1	77073	51849	15761	85622	38905	72276	35466	67759	18843	82458	65979	97912
2	20837	95047	50724	16922	04405	30858	15787	23800	97665	49692	63862	20187
3	37504	15645	36630	28216	10056	97628	28670	53527	13431	32288	61192	46889
4	40392	58557	60446	11553	60013	38037	74917	24680	96583	58366	43385	64432
5	53408	14205	33152	70651	17314	93033	91498	05156	45630	89927	96910	64613
6	83662	06446	26077	60963	94985	11875	72384	45193	42431	37718	16388	31738
7	20781	65283	06185	35811	73248	69097	05306	75143	16052	83905	75986	95233
8	54068	15347	28066	92162	52503	13337	54139	10748	36134	00195	65383	87733
9	69082	45248	71749	84604	27996	19838	09911	58718	62903	07105	11175	16565
10	63397	11265	23439	36954	73244	98094	55031	96978	04461	59697	12560	92362
11	08171	14195	61156	43603	32512	14273	85582	70493	74326	87363	07377	79655
12	13133	12169	22748	13639	16566	16168	20635	06423	50596	51424	71806	29686
13	52516	20303	31485	66812	01278	69958	75378	68496	97829	04501	41987	66470
14	04896	82541	54028	34943	74763	30024	02524	14912	11774	74130	02698	36842
15	48157	59360	53531	87660	89286	24310	68200	29498	64755	24714	64913	77389
16	45765	70642	76212	85096	07584	56062	31830	52861	24820	44746	43479	46095
17	22039	95799	77230	92514	81015	06084	37047	41336	22480	12946	83275	01425
18	12180	00465	07963	24420	14038	32679	22147	16218	71982	94941	68620	91719
19	00381	98626	91451	07841	80847	95486	31261	89195	91619	28691	01136	90599
20	67964	64286	46929	26116	30469	81918	93602	52054	65240	84130	64708	30706
21	17396	68218	33021	76408	85880	80194	09667	58809	87667	11989	86906	24002
22	35110	86306	38729	07348	96574	07588	28435	01218	61957	00185	03221	24763
23	34741	80800	94816	63075	91192	56792	02681	56746	28773	82027	23169	01327
24	54007	80665	27399	92783	95272	33822	42494	96079	97787	90580	64953	48980
25	95005	43068	35887	48975	15254	68564	43652	46989	41425	22494	55882	08296
26	41335	09999	36482	43908	46195	86975	80459	68166	58730	58557	59732	15307
27	55603	06114	45903	91553	20440	18954	50071	33594	00431	38504	24494	61827
28	30435	11958	75257	41102	94193	90405	30588	78304	44521	57864	04817	48502
29	10231	45794	53082	33779	12851	85936	20325	89161	14729	46789	77232	30725
30	70819	46915	98876	04483	30267	95291	48762	41473	34289	91880	23704	79674
31	60075	63755	25355	29284	61818	59564	81074	98901	28931	32286	14290	67232
32	61780	29581	59971	24052	32427	86787	16483	15554	12839	73479	56066	00403
33	43460	22694	13926	50825	08373	14254	64301	99599	44684	94933	26237	64201
34	41592	30036	09316	72119	93400	57241	45029	85943	31584	17203	24429	71200
35	70877	14362	71558	74099	70080	24746	03933	00549	13741	34002	70935	90430
36	50590	64544	83973	30564	89045	75860	67075	14935	10968	30014	34443	83066
37	25565	55625	79789	09675	96585	92043	63641	09694	11726	71543	20908	91096
38	65104	93623	18479	72405	96391	42829	19825	90678	22196	46618	99610	35321
39	22208	45996	51070	32025	35678	39284	30773	93215	60431	62868	20488	27803
40	06277	81234	85277	40636	65631	58528	63342	78478	79006	41067	11405	81626

(more...)

Table 7: continued

	1	2	3	4	5	6	7	8	9	10	11	12
41	49637	46288	58906	24130	50492	12916	77852	43682	54700	34510	99835	15511
42	20696	21915	20605	06552	18913	63935	42015	32955	73168	27343	53753	23145
43	61525	45801	75401	64177	19553	20578	46032	46076	84445	59222	36618	32934
44	05249	09502	89138	32436	46759	75180	39461	13265	42365	25627	01767	91239
45	97223	11794	11679	74885	92146	91941	52064	37269	63636	23053	35796	18385
46	10796	43690	82173	69388	97081	25399	77624	15737	78140	97658	30055	24617
47	38722	94682	18037	40052	38731	43898	91198	60003	70416	77493	23253	03247
48	77156	58002	26004	36013	65998	15948	25931	08092	92112	16680	30022	79271
49	97959	87204	20952	39261	57594	82093	36337	15548	06520	72089	84446	75956
50	69941	84810	91343	90153	92783	99317	12551	39325	26468	31895	48687	77610
51	13589	90000	28902	51303	35906	57627	36774	53458	58230	54915	44336	44546
52	28496	27729	37172	47607	29714	95282	00029	84194	35186	58908	61847	57401
53	62811	51924	84678	80750	49972	69305	05630	08892	31830	62917	37724	22025
54	21576	22399	49991	82701	39049	90611	88388	27788	29902	53114	82324	04346
55	10828	71008	30032	40303	58749	90108	34513	50252	81942	87453	20243	20793
56	33999	10549	84318	22284	11715	86704	27196	82399	67477	83286	79068	88881
57	36076	26662	95763	83858	92031	52302	29031	23408	12706	40812	26708	67674
58	95274	58476	99681	28405	91567	60654	08285	44225	82093	25249	52810	64899
59	24751	77143	31327	97046	39066	82227	78451	11017	54872	33317	54878	19677
60	66686	88623	80504	21341	76694	90102	30368	90059	17480	76013	39892	52796
61	69102	86754	62596	49519	64097	78073	59694	64660	28483	09563	16098	44767
62	77881	38111	28158	49619	30189	79181	80772	30314	76965	35275	58678	87650
63	70116	36729	01277	58718	60807	68132	84510	44195	72804	00992	69876	95540
64	21598	82478	93163	74606	97779	58777	50216	75309	09341	93873	06957	21328
65	95117	29383	39354	21533	99375	94509	96220	63912	54917	81877	05009	70763
66	91344	15446	96607	64597	78048	36483	58766	70686	03679	27735	26766	52745
67	63271	87839	98528	43312	41266	42818	27370	97545	33960	64684	33582	97554
68	63081	99810	90831	95585	86737	85601	85199	27171	57414	41967	29762	97199
69	54739	86436	13434	81002	91847	61096	27928	71364	02420	60197	16214	05065
70	52521	11868	57838	71279	78496	80252	88378	66983	75584	32801	81523	49026
71	79295	09953	66247	99872	46169	50782	79682	12260	44007	15901	32234	40075
72	27516	57916	89496	56459	00364	14319	44529	84423	89235	66606	44691	08831
73	87331	59130	86596	16147	77840	51303	37483	75646	66807	17324	64105	97087
74	94389	84652	42837	50343	06910	25473	17273	98998	51984	80789	10581	24081
75	91813	84394	02933	81987	50149	40773	70651	28430	16153	77738	25938	34937
76	50995	62106	03714	10736	26527	28845	92523	28170	45345	06118	10441	78461
77	14836	39745	92732	38516	26385	50071	36813	01923	18973	67293	88992	73153
78	51146	09662	77056	70240	09914	19358	43993	88263	24128	03674	40714	71254
79	74236	78888	58938	69721	86472	20016	04118	06783	93705	99387	81204	90695
80	10711	05970	27415	60490	50546	18352	37177	25649	71922	89313	75685	25978

(more ...)

Table 7: continued

	1	2	3	4	5	6	7	8	9	10	11	12
81	29441	09766	33883	67848	16856	91182	82718	39197	83170	32539	73133	32947
82	62576	00799	21717	96171	39901	01586	42122	37894	73022	66882	85533	41909
83	32740	45134	59968	70328	91280	34053	12652	34853	67504	35711	89218	70225
84	81842	02442	26533	23848	03426	70055	07566	61059	12212	43649	96073	82883
85	14875	02451	86481	74778	84956	48666	24874	51846	67738	69754	44648	95067
86	68555	03233	22302	21855	13558	52662	86367	54455	10338	44302	68335	92425
87	89011	05530	40147	39412	91634	89675	65450	10157	08014	81044	98487	55372
88	97547	55794	28805	21309	39692	90537	48988	40582	59868	00923	97073	89681
89	74441	15013	14519	06162	50182	98659	52496	91491	81777	18169	49825	06906
90	52884	15473	40288	07576	21565	41787	99838	76438	86495	07966	79661	60362
91	73503	54660	67338	37470	55291	67767	47236	86180	22411	45056	43686	21660
92	74621	45204	33872	83554	78175	72615	35277	89568	54146	30621	34666	29112
93	73702	00198	12482	68989	81319	25467	08720	43569	55044	11729	22445	16374
94	14407	33879	93969	26444	28061	17203	23030	52243	40771	25978	10735	20974
95	46990	54575	32286	23945	32247	75062	60540	88920	69832	63820	07486	04098
96	94405	60994	23752	94225	30283	57136	69079	02056	54158	25512	75513	37285
97	74030	21491	83650	98014	11703	80022	24672	54808	51333	52974	17292	15838
98	59813	71342	30517	89734	55788	17716	47637	26627	18835	44267	90100	99177
99	49344	12855	46157	50989	69873	44034	77574	80587	20229	80408	12072	92543
100	23044	96164	26399	74813	75937	64356	16161	11283	20986	06352	54186	88134
101	70592	29386	85959	02754	77948	64314	18566	22074	96198	85493	79246	80020
102	61348	68791	55318	24950	19207	00000	90922	16166	97827	65847	90005	07344
103	56241	37591	77009	80199	96352	84504	47776	66715	70104	37846	63005	16270
104	46408	62619	20727	54004	40747	18911	27837	50274	54528	41165	45014	48298
105	07142	34893	41668	13936	07232	38454	84376	03728	39731	56439	62770	66058
106	52625	51648	39836	18708	18603	45381	02413	53443	01323	21789	95151	87046
107	51073	79771	95109	85112	71768	93024	42844	63254	02579	43456	62726	31932
108	33328	29636	79564	22082	28861	56233	93942	66676	22313	02506	08245	61391
109	42246	27389	15853	33650	39864	84827	80420	09357	57645	38185	63062	81519
110	74823	34050	69674	08243	36438	04377	51210	77749	20463	19815	23503	09273
111	54138	90832	11925	11331	38393	54944	38609	00403	61717	63518	32236	74013
112	66088	30636	89066	17531	33369	23123	24587	29637	04265	81649	70379	47779
113	35325	03561	39109	95564	29612	84790	58742	63001	55603	15336	36879	21304
114	66265	06727	53459	73133	42325	43551	51993	31804	24280	57696	90577	11875
115	02591	35699	91185	43264	28680	21503	95824	13758	23109	76829	51032	82141
116	27185	93205	86141	55788	16644	26960	08698	83766	55156	92691	54065	54892
117	52812	03905	14610	45629	75108	30109	25936	92285	23022	16494	04682	76104
118	96974	39501	82901	12826	50402	95030	55223	18348	63134	86097	16651	38010
119	33576	09751	80361	11662	91412	53998	40490	06691	48099	96220	52940	52092
120	54371	96670	31475	85713	69475	65045	94785	47729	69841	10900	83985	19358

(more...)

Table 7: continued

	1	2	3	4	5	6	7	8	9	10	11	12
121	99173	97732	73177	84349	46475	97074	17732	12272	53319	28276	18773	08529
122	24937	00642	83652	27771	31527	67018	58339	89121	56056	21309	28832	68702
123	73156	17963	97000	62839	32861	86990	32283	67499	42258	22797	38194	11774
124	14630	84010	42916	81819	23040	16562	42402	37521	99580	35507	60381	15787
125	50154	30385	65172	33809	14299	09329	86726	91088	10781	90296	96360	11432
126	56902	43089	85856	71632	16205	43053	83100	57341	16710	44493	81544	96646
127	88573	32548	28147	62456	82908	31264	38057	21492	99399	91505	16293	21683
128	32443	65449	98352	96414	25976	70628	29271	52190	46216	43640	46848	65030
129	41966	07458	40811	98138	88978	52905	64850	18688	84764	22105	04032	56875
130	05229	76603	63550	82254	34073	54353	00991	46992	92201	13356	72092	38622
131	79845	49220	37052	28686	15733	23948	77398	16562	47644	41531	04025	39366
132	18266	92004	07456	00076	70258	14398	70698	17932	79915	26946	67026	02099
133	70386	64308	19485	79984	83940	66553	52574	00513	15993	77588	07726	36224
134	43202	86393	92414	99194	40329	00392	80647	18405	23062	90426	76234	52641
135	27694	51816	68126	91972	67695	46595	13563	36614	65912	81625	58573	31904
136	06547	24058	39096	81070	39222	87527	63901	77709	50663	87061	31016	84357
137	14507	06180	57158	44785	86730	63211	70960	20022	94921	21355	02214	04082
138	72551	49326	11159	35423	48106	03532	59630	85588	71790	67918	87049	16035
139	34911	46513	42322	90137	19742	01041	82994	74578	16026	37074	89048	20573
140	35795	92067	58367	70654	68393	74407	49634	85242	51005	27057	33598	75188
141	54615	01777	60956	78324	83297	68330	14596	07437	88295	59930	38496	87798
142	29641	67391	25987	56226	82148	54603	04769	52291	54472	04581	91600	08270
143	68511	58453	04923	28140	36918	77325	95214	52346	75173	28363	81748	22575
144	24782	99002	18425	57688	46403	88511	89411	27208	82647	45940	03302	84804
145	67126	85635	52974	33319	78920	03763	28151	19810	44435	09307	09684	52914
146	77463	15603	23003	10156	78886	23704	86598	51311	77122	86015	52526	98843
147	75838	03712	78507	67069	21689	17145	45963	93312	81093	13424	03792	21171
148	75251	43065	86090	00337	49710	69504	52274	53479	05941	42074	28711	44338
149	65910	44307	60092	54607	64176	89872	76670	88408	61315	17974	78404	24616
150	34895	70599	56523	77866	84531	11746	08256	44860	47751	49864	51817	84933
151	77928	29571	89521	75718	79675	91429	32096	25331	32847	46697	27573	17291
152	00922	87091	26386	55504	50345	43138	13894	14309	90459	31526	42862	80109
153	33199	70199	22981	37232	55896	32344	91272	05555	59477	28871	20313	96824
154	09482	56474	52982	64737	21997	01651	43571	87431	41404	68389	02350	94372
155	98266	40111	34741	76892	17998	89338	87181	46111	76360	67370	71620	09332
156	86877	40112	60612	01358	22512	49079	55838	59493	91747	90464	21749	23638
157	71903	68239	90541	19877	70406	06195	16222	42879	56303	70552	65669	97528
158	40977	93987	38111	17937	61267	09638	82108	86760	69617	36696	37955	97572
159	09361	18940	15834	12825	37622	06975	27292	88547	07512	47641	97497	19814
160	78582	26438	27561	14158	43966	34169	70122	27275	01410	83372	21778	12132

(more ...)

Table 7: continued

	1	2	3	4	5	6	7	8	9	10	11	12
161	84900	12397	46125	11591	06591	71866	35292	42924	21732	37232	48467	76675
162	92811	65564	18434	19668	57697	00743	79462	04168	37135	18953	30574	46656
163	90702	17692	37743	32280	23493	31583	05191	40232	68151	06780	41466	10958
164	07442	71091	24499	38320	39273	60823	50146	90860	75254	79927	29072	01404
165	33621	58757	28145	32251	39123	23644	69603	12892	70211	32218	73691	13064
166	87883	41303	73864	24458	59158	61018	13250	87943	42595	81711	09290	31466
167	72514	41140	35950	96956	38084	68066	85052	57871	30415	80080	89044	46293
168	41944	50429	57915	65626	66205	04132	31416	04455	58905	03156	29220	90653
169	54938	42394	01143	01007	10526	98372	33568	68659	43423	10034	38564	32796
170	76474	96350	53339	64304	46322	25279	58706	67525	84608	04352	28807	46555
171	87860	56516	52741	10990	96097	93407	75375	15864	19358	34270	65715	60075
172	04497	66285	40907	11782	15907	36038	78375	34081	99281	04598	70788	29479
173	55773	71638	10195	32966	49657	70235	31571	12945	59158	54577	70804	00323
174	18451	04616	64410	32677	88655	13408	34566	47567	44504	77777	96224	23034
175	01028	74739	32958	11765	32253	72521	48001	39755	56465	01120	18649	31886
176	92375	45309	02821	06889	66640	01763	23899	64490	75891	85159	61358	43163
177	07326	23489	74920	71605	57699	41196	71981	76957	07937	86249	86816	10868
178	36240	77036	31424	28605	55992	45942	42128	30617	66967	00937	42971	01754
179	96908	19219	00831	55796	53218	27132	99373	57894	09832	39972	06140	83634
180	28213	64677	15225	77891	08332	22435	63134	87098	53487	55491	31899	13011
181	30301	52352	79678	39294	04054	31921	91189	97844	60061	37460	75980	79195
182	27346	95075	16359	36551	96412	95646	22237	31966	45334	13341	11105	34847
183	25963	47699	67452	63511	18263	41819	47697	32069	68017	51041	38708	53740
184	71727	13688	44449	41243	58343	67758	08290	16905	07762	54074	07260	07850
185	10824	02721	23369	57185	98753	36131	49924	71862	83628	22524	44318	50116
186	65195	17452	04597	53299	95138	68129	36824	84452	69575	45739	19098	77217
187	37783	04319	89208	02752	49909	17034	86938	62112	04293	42312	37204	79286
188	00254	52342	97275	93296	15294	40217	11400	91256	28827	80595	58086	39624
189	82824	07516	17713	94775	80945	33807	83681	20348	83145	05907	72072	00063
190	61752	59467	48113	23558	36302	24370	76078	39548	67026	96973	23193	97612
191	09966	91481	12724	36176	97063	34731	16787	36312	95701	35567	73458	06389
192	24965	78390	97469	45695	94990	90598	71533	52447	66513	83529	61156	39419
193	53128	18745	37312	86300	27796	64432	95616	08888	79059	29919	42158	35915
194	72563	62594	02732	04892	18336	57475	75561	46676	67438	27047	74994	09296
195	59120	23812	95923	64941	57884	45329	34050	62312	70646	38511	52198	77070
196	09374	43666	78729	88486	71645	32154	99472	22953	61106	96709	75842	60117
197	70625	84819	43861	59107	02621	35493	20644	50260	17835	43838	73255	92358
198	01510	73691	24417	60606	97891	53491	20038	63499	16784	85616	46524	26532
199	32015	60738	14567	11688	24411	74204	33864	46295	68446	66475	29263	17758
200	28747	36120	57690	88095	03462	74523	02326	86998	63421	14677	65037	64407