

STATISTICAL TABLES FOR PSYCHOLOGISTS

**CRAIG A. WENDORF
DEPT. OF PSYCHOLOGY
UW - STEVENS POINT**

TABLE 1: THE STANDARD NORMAL DISTRIBUTION

Z	PR	p	Z	PR	p	Z	PR	p	Z	PR	p
< -3.400	<.001	<.001	-2.560	.005	.010	-1.700	.045	.089	-0.840	.200	.401
-3.400	<.001	.001	-2.540	.006	.011	-1.680	.046	.093	-0.820	.206	.412
-3.380	<.001	.001	-2.520	.006	.012	-1.660	.048	.097	-0.800	.212	.424
-3.360	<.001	.001	-2.500	.006	.012	-1.640	.051	.101	-0.780	.218	.435
-3.340	<.001	.001	-2.480	.007	.013	-1.620	.053	.105	-0.760	.224	.447
-3.320	<.001	.001	-2.460	.007	.014	-1.600	.055	.110	-0.740	.230	.459
-3.300	<.001	.001	-2.440	.007	.015	-1.580	.057	.114	-0.720	.236	.472
-3.280	.001	.001	-2.420	.008	.016	-1.560	.059	.119	-0.700	.242	.484
-3.260	.001	.001	-2.400	.008	.016	-1.540	.062	.124	-0.680	.248	.497
-3.240	.001	.001	-2.380	.009	.017	-1.520	.064	.129	-0.660	.255	.509
-3.220	.001	.001	-2.360	.009	.018	-1.500	.067	.134	-0.640	.261	.522
-3.200	.001	.001	-2.340	.010	.019	-1.480	.069	.139	-0.620	.268	.535
-3.180	.001	.001	-2.320	.010	.020	-1.460	.072	.144	-0.600	.274	.549
-3.160	.001	.002	-2.300	.011	.021	-1.440	.075	.150	-0.580	.281	.562
-3.140	.001	.002	-2.280	.011	.023	-1.420	.078	.156	-0.560	.288	.575
-3.120	.001	.002	-2.260	.012	.024	-1.400	.081	.162	-0.540	.295	.589
-3.100	.001	.002	-2.240	.013	.025	-1.380	.084	.168	-0.520	.302	.603
-3.080	.001	.002	-2.220	.013	.026	-1.360	.087	.174	-0.500	.309	.617
-3.060	.001	.002	-2.200	.014	.028	-1.340	.090	.180	-0.480	.316	.631
-3.040	.001	.002	-2.180	.015	.029	-1.320	.093	.187	-0.460	.323	.646
-3.020	.001	.003	-2.160	.015	.031	-1.300	.097	.194	-0.440	.330	.660
-3.000	.001	.003	-2.140	.016	.032	-1.280	.100	.201	-0.420	.337	.674
-2.980	.001	.003	-2.120	.017	.034	-1.260	.104	.208	-0.400	.345	.689
-2.960	.002	.003	-2.100	.018	.036	-1.240	.107	.215	-0.380	.352	.704
-2.940	.002	.003	-2.080	.019	.038	-1.220	.111	.222	-0.360	.359	.719
-2.920	.002	.004	-2.060	.020	.039	-1.200	.115	.230	-0.340	.367	.734
-2.900	.002	.004	-2.040	.021	.041	-1.180	.119	.238	-0.320	.374	.749
-2.880	.002	.004	-2.020	.022	.043	-1.160	.123	.246	-0.300	.382	.764
-2.860	.002	.004	-2.000	.023	.046	-1.140	.127	.254	-0.280	.390	.779
-2.840	.002	.005	-1.980	.024	.048	-1.120	.131	.263	-0.260	.397	.795
-2.820	.002	.005	-1.960	.025	.050	-1.100	.136	.271	-0.240	.405	.810
-2.800	.003	.005	-1.940	.026	.052	-1.080	.140	.280	-0.220	.413	.826
-2.780	.003	.005	-1.920	.027	.055	-1.060	.145	.289	-0.200	.421	.841
-2.760	.003	.006	-1.900	.029	.057	-1.040	.149	.298	-0.180	.429	.857
-2.740	.003	.006	-1.880	.030	.060	-1.020	.154	.308	-0.160	.436	.873
-2.720	.003	.007	-1.860	.031	.063	-1.000	.159	.317	-0.140	.444	.889
-2.700	.003	.007	-1.840	.033	.066	-0.980	.164	.327	-0.120	.452	.904
-2.680	.004	.007	-1.820	.034	.069	-0.960	.169	.337	-0.100	.460	.920
-2.660	.004	.008	-1.800	.036	.072	-0.940	.174	.347	-0.080	.468	.936
-2.640	.004	.008	-1.780	.038	.075	-0.920	.179	.358	-0.060	.476	.952
-2.620	.004	.009	-1.760	.039	.078	-0.900	.184	.368	-0.040	.484	.968
-2.600	.005	.009	-1.740	.041	.082	-0.880	.189	.379	-0.020	.492	.984
-2.580	.005	.010	-1.720	.043	.085	-0.860	.195	.390	0.000	.500	1.000

TABLE 1 (CONTINUED)

Z	PR	p	Z	PR	p	Z	PR	p	Z	PR	p
0.000	.500	1.000	0.860	.805	.390	1.720	.957	.085	2.580	.995	.010
0.020	.508	.984	0.880	.811	.379	1.740	.959	.082	2.600	.995	.009
0.040	.516	.968	0.900	.816	.368	1.760	.961	.078	2.620	.996	.009
0.060	.524	.952	0.920	.821	.358	1.780	.962	.075	2.640	.996	.008
0.080	.532	.936	0.940	.826	.347	1.800	.964	.072	2.660	.996	.008
0.100	.540	.920	0.960	.831	.337	1.820	.966	.069	2.680	.996	.007
0.120	.548	.904	0.980	.836	.327	1.840	.967	.066	2.700	.997	.007
0.140	.556	.889	1.000	.841	.317	1.860	.969	.063	2.720	.997	.007
0.160	.564	.873	1.020	.846	.308	1.880	.970	.060	2.740	.997	.006
0.180	.571	.857	1.040	.851	.298	1.900	.971	.057	2.760	.997	.006
0.200	.579	.841	1.060	.855	.289	1.920	.973	.055	2.780	.997	.005
0.220	.587	.826	1.080	.860	.280	1.940	.974	.052	2.800	.997	.005
0.240	.595	.810	1.100	.864	.271	1.960	.975	.050	2.820	.998	.005
0.260	.603	.795	1.120	.869	.263	1.980	.976	.048	2.840	.998	.005
0.280	.610	.779	1.140	.873	.254	2.000	.977	.046	2.860	.998	.004
0.300	.618	.764	1.160	.877	.246	2.020	.978	.043	2.880	.998	.004
0.320	.626	.749	1.180	.881	.238	2.040	.979	.041	2.900	.998	.004
0.340	.633	.734	1.200	.885	.230	2.060	.980	.039	2.920	.998	.004
0.360	.641	.719	1.220	.889	.222	2.080	.981	.038	2.940	.998	.003
0.380	.648	.704	1.240	.893	.215	2.100	.982	.036	2.960	.998	.003
0.400	.655	.689	1.260	.896	.208	2.120	.983	.034	2.980	.999	.003
0.420	.663	.674	1.280	.900	.201	2.140	.984	.032	3.000	.999	.003
0.440	.670	.660	1.300	.903	.194	2.160	.985	.031	3.020	.999	.003
0.460	.677	.646	1.320	.907	.187	2.180	.985	.029	3.040	.999	.002
0.480	.684	.631	1.340	.910	.180	2.200	.986	.028	3.060	.999	.002
0.500	.691	.617	1.360	.913	.174	2.220	.987	.026	3.080	.999	.002
0.520	.698	.603	1.380	.916	.168	2.240	.987	.025	3.100	.999	.002
0.540	.705	.589	1.400	.919	.162	2.260	.988	.024	3.120	.999	.002
0.560	.712	.575	1.420	.922	.156	2.280	.989	.023	3.140	.999	.002
0.580	.719	.562	1.440	.925	.150	2.300	.989	.021	3.160	.999	.002
0.600	.726	.549	1.460	.928	.144	2.320	.990	.020	3.180	.999	.001
0.620	.732	.535	1.480	.931	.139	2.340	.990	.019	3.200	.999	.001
0.640	.739	.522	1.500	.933	.134	2.360	.991	.018	3.220	.999	.001
0.660	.745	.509	1.520	.936	.129	2.380	.991	.017	3.240	.999	.001
0.680	.752	.497	1.540	.938	.124	2.400	.992	.016	3.260	.999	.001
0.700	.758	.484	1.560	.941	.119	2.420	.992	.016	3.280	.999	.001
0.720	.764	.472	1.580	.943	.114	2.440	.993	.015	3.300	>.999	.001
0.740	.770	.459	1.600	.945	.110	2.460	.993	.014	3.320	>.999	.001
0.760	.776	.447	1.620	.947	.105	2.480	.993	.013	3.340	>.999	.001
0.780	.782	.435	1.640	.949	.101	2.500	.994	.012	3.360	>.999	.001
0.800	.788	.424	1.660	.952	.097	2.520	.994	.012	3.380	>.999	.001
0.820	.794	.412	1.680	.954	.093	2.540	.994	.011	3.400	>.999	.001
0.840	.800	.401	1.700	.955	.089	2.560	.995	.010	> 3.400	>.999	<.001

TABLE 2: CRITICAL VALUES OF THE t DISTRIBUTION

df _{ERROR}	Two-Tailed p Values														
	.90	.80	.70	.60	.50	.40	.30	.20	.10	.05	.04	.03	.02	.01	.001
2	.142	.289	.445	.617	.816	1.06	1.386	1.886	2.920	4.303	4.849	5.643	6.965	9.925	31.599
3	.137	.277	.424	.584	.765	.978	1.250	1.638	2.353	3.182	3.482	3.896	4.541	5.841	12.924
4	.134	.271	.414	.569	.741	.941	1.190	1.533	2.132	2.776	2.999	3.298	3.747	4.604	8.610
5	.132	.267	.408	.559	.727	.920	1.156	1.476	2.015	2.571	2.757	3.003	3.365	4.032	6.869
6	.131	.265	.404	.553	.718	.906	1.134	1.440	1.943	2.447	2.612	2.829	3.143	3.707	5.959
7	.130	.263	.402	.549	.711	.896	1.119	1.415	1.895	2.365	2.517	2.715	2.998	3.499	5.408
8	.130	.262	.399	.546	.706	.889	1.108	1.397	1.860	2.306	2.449	2.634	2.896	3.355	5.041
9	.129	.261	.398	.543	.703	.883	1.100	1.383	1.833	2.262	2.398	2.574	2.821	3.250	4.781
10	.129	.260	.397	.542	.700	.879	1.093	1.372	1.812	2.228	2.359	2.527	2.764	3.169	4.587
11	.129	.260	.396	.540	.697	.876	1.088	1.363	1.796	2.201	2.328	2.491	2.718	3.106	4.437
12	.128	.259	.395	.539	.695	.873	1.083	1.356	1.782	2.179	2.303	2.461	2.681	3.055	4.318
13	.128	.259	.394	.538	.694	.870	1.079	1.350	1.771	2.160	2.282	2.436	2.650	3.012	4.221
14	.128	.258	.393	.537	.692	.868	1.076	1.345	1.761	2.145	2.264	2.415	2.624	2.977	4.140
15	.128	.258	.393	.536	.691	.866	1.074	1.341	1.753	2.131	2.249	2.397	2.602	2.947	4.073
16	.128	.258	.392	.535	.690	.865	1.071	1.337	1.746	2.120	2.235	2.382	2.583	2.921	4.015
17	.128	.257	.392	.534	.689	.863	1.069	1.333	1.740	2.110	2.224	2.368	2.567	2.898	3.965
18	.127	.257	.392	.534	.688	.862	1.067	1.330	1.734	2.101	2.214	2.356	2.552	2.878	3.922
19	.127	.257	.391	.533	.688	.861	1.066	1.328	1.729	2.093	2.205	2.346	2.539	2.861	3.883
20	.127	.257	.391	.533	.687	.860	1.064	1.325	1.725	2.086	2.197	2.336	2.528	2.845	3.850
21	.127	.257	.391	.532	.686	.859	1.063	1.323	1.721	2.080	2.189	2.328	2.518	2.831	3.819
22	.127	.256	.390	.532	.686	.858	1.061	1.321	1.717	2.074	2.183	2.320	2.508	2.819	3.792
23	.127	.256	.390	.532	.685	.858	1.060	1.319	1.714	2.069	2.177	2.313	2.500	2.807	3.768
24	.127	.256	.390	.531	.685	.857	1.059	1.318	1.711	2.064	2.172	2.307	2.492	2.797	3.745
25	.127	.256	.390	.531	.684	.856	1.058	1.316	1.708	2.060	2.167	2.301	2.485	2.787	3.725
26	.127	.256	.390	.531	.684	.856	1.058	1.315	1.706	2.056	2.162	2.296	2.479	2.779	3.707
27	.127	.256	.389	.531	.684	.855	1.057	1.314	1.703	2.052	2.158	2.291	2.473	2.771	3.690
28	.127	.256	.389	.530	.683	.855	1.056	1.313	1.701	2.048	2.154	2.286	2.467	2.763	3.674
29	.127	.256	.389	.530	.683	.854	1.055	1.311	1.699	2.045	2.150	2.282	2.462	2.756	3.659
30	.127	.256	.389	.530	.683	.854	1.055	1.310	1.697	2.042	2.147	2.278	2.457	2.750	3.646
35	.127	.255	.388	.529	.682	.852	1.052	1.306	1.690	2.030	2.133	2.262	2.438	2.724	3.591
40	.126	.255	.388	.529	.681	.851	1.050	1.303	1.684	2.021	2.123	2.250	2.423	2.704	3.551
45	.126	.255	.388	.528	.680	.850	1.049	1.301	1.679	2.014	2.115	2.241	2.412	2.690	3.520
50	.126	.255	.388	.528	.679	.849	1.047	1.299	1.676	2.009	2.109	2.234	2.403	2.678	3.496
55	.126	.255	.387	.527	.679	.848	1.046	1.297	1.673	2.004	2.104	2.228	2.396	2.668	3.476
60	.126	.254	.387	.527	.679	.848	1.045	1.296	1.671	2.000	2.099	2.223	2.390	2.660	3.460
70	.126	.254	.387	.527	.678	.847	1.044	1.294	1.667	1.994	2.093	2.215	2.381	2.648	3.435
80	.126	.254	.387	.526	.678	.846	1.043	1.292	1.664	1.990	2.088	2.209	2.374	2.639	3.416
90	.126	.254	.387	.526	.677	.846	1.042	1.291	1.662	1.987	2.084	2.205	2.368	2.632	3.402
100	.126	.254	.386	.526	.677	.845	1.042	1.290	1.660	1.984	2.081	2.201	2.364	2.626	3.390
120	.126	.254	.386	.526	.677	.845	1.041	1.289	1.658	1.980	2.076	2.196	2.358	2.617	3.373
240	.126	.254	.386	.525	.676	.843	1.039	1.285	1.651	1.970	2.065	2.183	2.342	2.596	3.332
∞	.126	.253	.385	.524	.674	.842	1.036	1.282	1.645	1.960	2.054	2.170	2.326	2.576	3.291

TABLE 3: POWER TABLE FOR COHEN'S d

One-sample design, $\alpha = .05$, all probabilities are two-tailed

n	Cohen's d Effect Size															
	.10	.20	.30	.40	.50	.60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	1.50	1.60
3	.032	.041	.052	.065	.079	.095	.113	.133	.155	.179	.204	.230	.258	.287	.316	.347
4	.035	.048	.064	.084	.108	.136	.169	.205	.245	.289	.335	.383	.433	.483	.533	.582
5	.037	.054	.076	.104	.138	.180	.227	.281	.339	.401	.466	.530	.594	.654	.711	.762
6	.039	.060	.088	.124	.169	.224	.286	.356	.430	.507	.583	.655	.722	.781	.833	.875
7	.041	.066	.099	.144	.200	.268	.345	.428	.515	.600	.681	.754	.816	.867	.908	.938
8	.043	.071	.111	.164	.231	.311	.401	.496	.591	.681	.761	.828	.882	.922	.951	.971
9	.045	.077	.122	.184	.262	.354	.455	.559	.659	.748	.823	.882	.925	.955	.975	.986
10	.047	.082	.134	.204	.293	.396	.506	.616	.717	.803	.871	.920	.954	.975	.987	.994
11	.049	.087	.145	.224	.323	.436	.554	.668	.767	.848	.907	.947	.972	.986	.994	.997
12	.050	.092	.156	.244	.353	.475	.599	.714	.810	.883	.933	.965	.983	.993	.997	.999
13	.052	.098	.168	.264	.382	.512	.640	.754	.845	.911	.953	.977	.990	.996	.999	>.999
14	.053	.103	.179	.283	.410	.547	.678	.790	.875	.932	.967	.985	.994	.998	.999	>.999
15	.055	.108	.190	.303	.438	.580	.713	.821	.899	.949	.977	.991	.997	.999	>.999	>.999
16	.057	.113	.202	.322	.465	.612	.745	.848	.919	.962	.984	.994	.998	.999	>.999	>.999
17	.058	.118	.213	.341	.491	.642	.773	.872	.936	.972	.989	.996	.999	>.999	>.999	>.999
18	.059	.123	.224	.360	.516	.670	.799	.892	.949	.979	.992	.998	.999	>.999	>.999	>.999
19	.061	.128	.235	.379	.541	.696	.823	.909	.960	.984	.995	.999	>.999	>.999	>.999	>.999
20	.062	.133	.246	.397	.564	.721	.844	.924	.968	.989	.997	.999	>.999	>.999	>.999	>.999
21	.064	.139	.258	.415	.587	.744	.862	.936	.975	.992	.998	.999	>.999	>.999	>.999	>.999
22	.065	.144	.269	.433	.609	.765	.879	.947	.980	.994	.998	>.999	>.999	>.999	>.999	>.999
23	.067	.149	.280	.450	.630	.785	.894	.956	.985	.996	.999	>.999	>.999	>.999	>.999	>.999
24	.068	.154	.291	.467	.650	.804	.907	.963	.988	.997	.999	>.999	>.999	>.999	>.999	>.999
25	.069	.159	.302	.484	.670	.821	.919	.970	.991	.998	>.999	>.999	>.999	>.999	>.999	>.999
26	.071	.164	.312	.500	.688	.836	.929	.975	.993	.998	>.999	>.999	>.999	>.999	>.999	>.999
27	.072	.169	.323	.517	.706	.851	.938	.979	.994	.999	>.999	>.999	>.999	>.999	>.999	>.999
28	.074	.174	.334	.532	.723	.864	.946	.983	.996	.999	>.999	>.999	>.999	>.999	>.999	>.999
29	.075	.179	.345	.548	.739	.877	.953	.986	.997	.999	>.999	>.999	>.999	>.999	>.999	>.999
30	.076	.184	.355	.563	.754	.888	.959	.988	.997	>.999	>.999	>.999	>.999	>.999	>.999	>.999
35	.083	.209	.407	.633	.820	.932	.980	.996	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
40	.090	.234	.456	.694	.869	.959	.991	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
45	.096	.259	.503	.747	.907	.976	.996	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
50	.103	.283	.548	.792	.934	.986	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
55	.109	.307	.589	.830	.954	.992	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
60	.115	.331	.628	.862	.968	.995	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
70	.128	.378	.697	.910	.985	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
80	.141	.424	.755	.942	.993	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
90	.154	.467	.804	.964	.997	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
100	.166	.508	.844	.977	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
120	.191	.584	.903	.991	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
240	.338	.870	.996	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
360	.473	.966	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999

TABLE 3 (CONTINUED)

One-sample design, $\alpha = .01$, all probabilities are two-tailed

n	Cohen's d Effect Size															
	.10	.20	.30	.40	.50	.60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	1.50	1.60
3	.007	.008	.011	.013	.016	.020	.024	.028	.033	.039	.045	.052	.059	.066	.074	.083
4	.007	.010	.014	.018	.024	.031	.040	.050	.062	.076	.091	.108	.128	.149	.172	.196
5	.008	.012	.017	.024	.034	.046	.061	.080	.102	.128	.158	.192	.229	.269	.313	.358
6	.008	.013	.021	.031	.045	.064	.088	.117	.153	.194	.242	.294	.350	.410	.471	.532
7	.009	.015	.024	.038	.058	.084	.118	.160	.211	.269	.334	.403	.476	.548	.619	.685
8	.009	.017	.028	.046	.072	.106	.151	.207	.273	.348	.428	.511	.593	.671	.741	.802
9	.010	.018	.033	.055	.087	.131	.188	.258	.339	.427	.519	.610	.694	.769	.832	.883
10	.010	.020	.037	.064	.103	.157	.226	.310	.404	.504	.603	.696	.777	.844	.896	.934
11	.011	.022	.042	.073	.120	.184	.266	.362	.468	.576	.678	.768	.841	.897	.937	.964
12	.011	.024	.046	.083	.137	.212	.306	.415	.530	.642	.743	.826	.890	.934	.964	.981
13	.012	.026	.051	.093	.156	.241	.347	.466	.587	.701	.797	.872	.925	.959	.979	.990
14	.012	.028	.056	.104	.175	.271	.388	.515	.641	.752	.842	.907	.950	.975	.989	.995
15	.013	.030	.061	.115	.194	.301	.428	.562	.689	.797	.878	.933	.967	.985	.994	.998
16	.013	.031	.066	.126	.214	.331	.467	.606	.733	.835	.907	.953	.978	.991	.997	.999
17	.014	.033	.072	.137	.235	.361	.505	.648	.772	.866	.930	.967	.986	.995	.998	.999
18	.014	.035	.077	.149	.255	.391	.542	.686	.806	.893	.947	.977	.991	.997	.999	>.999
19	.015	.037	.083	.161	.276	.421	.577	.721	.836	.915	.961	.984	.994	.998	>.999	>.999
20	.015	.040	.089	.174	.297	.450	.611	.754	.862	.932	.971	.989	.997	.999	>.999	>.999
21	.016	.042	.095	.186	.318	.479	.642	.783	.885	.947	.979	.993	.998	.999	>.999	>.999
22	.016	.044	.101	.199	.340	.507	.672	.809	.904	.958	.985	.995	.999	>.999	>.999	>.999
23	.017	.046	.107	.212	.361	.534	.701	.833	.920	.968	.989	.997	.999	>.999	>.999	>.999
24	.017	.048	.113	.225	.381	.560	.727	.855	.934	.975	.992	.998	>.999	>.999	>.999	>.999
25	.017	.050	.120	.238	.402	.586	.752	.873	.946	.981	.994	.999	>.999	>.999	>.999	>.999
26	.018	.052	.126	.252	.423	.610	.775	.890	.956	.985	.996	.999	>.999	>.999	>.999	>.999
27	.018	.055	.133	.265	.443	.634	.796	.905	.964	.989	.997	.999	>.999	>.999	>.999	>.999
28	.019	.057	.139	.278	.463	.657	.815	.918	.970	.991	.998	>.999	>.999	>.999	>.999	>.999
29	.019	.059	.146	.292	.483	.678	.833	.929	.976	.993	.999	>.999	>.999	>.999	>.999	>.999
30	.020	.062	.153	.305	.503	.699	.850	.939	.980	.995	.999	>.999	>.999	>.999	>.999	>.999
35	.022	.074	.188	.373	.594	.788	.913	.973	.993	.999	>.999	>.999	>.999	>.999	>.999	>.999
40	.024	.086	.224	.439	.674	.854	.952	.988	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999
45	.027	.100	.262	.503	.743	.902	.974	.995	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
50	.029	.113	.299	.562	.799	.936	.986	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
55	.032	.128	.338	.618	.846	.959	.993	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
60	.034	.142	.376	.668	.882	.974	.996	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
70	.039	.173	.450	.755	.934	.990	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
80	.045	.205	.520	.823	.964	.996	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
90	.050	.238	.586	.874	.981	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
100	.056	.271	.646	.913	.990	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
120	.067	.339	.747	.959	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
240	.150	.692	.979	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
360	.246	.885	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999

TABLE 3 (CONTINUED)

Dependent-samples design, $\alpha = .05$, all probabilities are two-tailed

n	Cohen's d Effect Size															
	.10	.20	.30	.40	.50	.60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	1.50	1.60
3	.034	.046	.061	.079	.100	.126	.155	.188	.226	.267	.311	.357	.406	.455	.506	.555
4	.037	.053	.074	.100	.133	.173	.219	.271	.329	.391	.456	.521	.586	.648	.707	.760
5	.039	.059	.086	.121	.166	.219	.281	.351	.425	.502	.579	.653	.722	.783	.835	.878
6	.041	.065	.098	.142	.198	.265	.341	.425	.513	.599	.681	.755	.818	.870	.911	.941
7	.043	.071	.110	.162	.229	.309	.399	.495	.590	.681	.762	.830	.884	.924	.953	.972
8	.045	.076	.121	.183	.261	.352	.454	.558	.659	.749	.824	.884	.927	.957	.976	.987
9	.047	.081	.133	.203	.291	.394	.505	.616	.717	.804	.872	.922	.955	.976	.988	.994
10	.048	.087	.144	.223	.322	.435	.554	.668	.768	.848	.908	.948	.973	.987	.994	.998
11	.050	.092	.156	.243	.352	.474	.598	.714	.810	.884	.934	.966	.984	.993	.997	.999
12	.052	.097	.167	.263	.381	.511	.640	.754	.846	.911	.953	.978	.990	.996	.999	>.999
13	.053	.103	.178	.283	.409	.546	.678	.790	.875	.933	.967	.986	.994	.998	.999	>.999
14	.055	.108	.190	.302	.437	.580	.713	.822	.900	.950	.977	.991	.997	.999	>.999	>.999
15	.056	.113	.201	.321	.464	.612	.744	.849	.920	.962	.984	.994	.998	.999	>.999	>.999
16	.058	.118	.212	.341	.490	.642	.773	.872	.936	.972	.989	.996	.999	>.999	>.999	>.999
17	.059	.123	.224	.359	.516	.670	.799	.892	.949	.979	.993	.998	.999	>.999	>.999	>.999
18	.061	.128	.235	.378	.540	.696	.823	.909	.960	.985	.995	.999	>.999	>.999	>.999	>.999
19	.062	.133	.246	.396	.564	.721	.843	.924	.968	.989	.997	.999	>.999	>.999	>.999	>.999
20	.064	.138	.257	.414	.587	.744	.862	.936	.975	.992	.998	.999	>.999	>.999	>.999	>.999
21	.065	.143	.268	.432	.609	.765	.879	.947	.980	.994	.998	>.999	>.999	>.999	>.999	>.999
22	.067	.148	.279	.450	.630	.785	.894	.956	.985	.996	.999	>.999	>.999	>.999	>.999	>.999
23	.068	.153	.290	.467	.650	.804	.907	.963	.988	.997	.999	>.999	>.999	>.999	>.999	>.999
24	.069	.159	.301	.484	.669	.821	.919	.970	.991	.998	>.999	>.999	>.999	>.999	>.999	>.999
25	.071	.164	.312	.500	.688	.836	.929	.975	.993	.998	>.999	>.999	>.999	>.999	>.999	>.999
26	.072	.169	.323	.516	.706	.851	.938	.979	.994	.999	>.999	>.999	>.999	>.999	>.999	>.999
27	.074	.174	.334	.532	.722	.864	.946	.983	.996	.999	>.999	>.999	>.999	>.999	>.999	>.999
28	.075	.179	.344	.547	.738	.877	.953	.986	.997	.999	>.999	>.999	>.999	>.999	>.999	>.999
29	.076	.184	.355	.562	.754	.888	.959	.988	.997	>.999	>.999	>.999	>.999	>.999	>.999	>.999
30	.078	.189	.365	.577	.768	.898	.965	.991	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999
35	.084	.214	.417	.645	.830	.938	.983	.997	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
40	.091	.239	.466	.705	.878	.963	.992	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
45	.097	.263	.512	.756	.913	.978	.996	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
50	.104	.288	.556	.800	.938	.987	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
55	.110	.312	.597	.836	.957	.993	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
60	.117	.336	.635	.867	.970	.996	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
70	.129	.383	.703	.914	.986	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
80	.142	.428	.760	.945	.994	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
90	.155	.471	.808	.965	.997	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
100	.167	.512	.847	.978	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
120	.192	.588	.905	.992	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
240	.339	.871	.996	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
360	.474	.966	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999

TABLE 3 (CONTINUED)

Dependent-samples design, $\alpha = .01$, all probabilities are two-tailed

n	Cohen's d Effect Size															
	.10	.20	.30	.40	.50	.60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	1.50	1.60
3	.007	.010	.013	.018	.023	.030	.039	.049	.061	.075	.091	.110	.130	.153	.179	.206
4	.008	.012	.017	.025	.035	.048	.065	.085	.110	.140	.175	.214	.258	.306	.357	.410
5	.008	.014	.021	.032	.048	.068	.095	.129	.170	.218	.273	.334	.399	.467	.536	.603
6	.009	.015	.025	.040	.062	.091	.129	.177	.235	.301	.375	.453	.533	.612	.686	.753
7	.010	.017	.030	.049	.077	.116	.166	.229	.303	.386	.474	.564	.650	.729	.798	.855
8	.010	.019	.034	.058	.093	.142	.205	.283	.372	.468	.566	.660	.745	.817	.875	.919
9	.011	.021	.039	.067	.110	.169	.245	.337	.439	.545	.648	.741	.819	.881	.925	.956
10	.011	.023	.044	.077	.128	.198	.287	.391	.504	.616	.719	.806	.874	.924	.957	.977
11	.012	.025	.048	.088	.146	.227	.328	.444	.564	.679	.778	.857	.915	.953	.976	.988
12	.012	.027	.053	.098	.166	.257	.370	.495	.620	.734	.827	.896	.943	.971	.987	.994
13	.013	.029	.059	.109	.185	.288	.411	.544	.671	.782	.867	.926	.962	.983	.993	.997
14	.013	.030	.064	.120	.205	.318	.451	.589	.717	.822	.898	.947	.976	.990	.996	.999
15	.014	.032	.069	.132	.226	.349	.490	.632	.759	.856	.923	.963	.984	.994	.998	.999
16	.014	.034	.075	.144	.247	.379	.528	.672	.795	.885	.942	.975	.990	.997	.999	>.999
17	.014	.036	.080	.156	.268	.409	.564	.709	.827	.908	.957	.983	.994	.998	.999	>.999
18	.015	.039	.086	.168	.289	.439	.598	.743	.854	.927	.968	.988	.996	.999	>.999	>.999
19	.015	.041	.092	.181	.310	.468	.631	.773	.878	.943	.977	.992	.998	.999	>.999	>.999
20	.016	.043	.098	.194	.331	.496	.662	.801	.898	.955	.983	.995	.999	>.999	>.999	>.999
21	.016	.045	.104	.207	.352	.524	.691	.826	.915	.965	.988	.996	.999	>.999	>.999	>.999
22	.017	.047	.111	.220	.373	.551	.718	.848	.930	.973	.991	.998	.999	>.999	>.999	>.999
23	.017	.049	.117	.233	.394	.577	.743	.868	.942	.979	.994	.998	>.999	>.999	>.999	>.999
24	.018	.051	.123	.246	.415	.602	.767	.885	.953	.984	.996	.999	>.999	>.999	>.999	>.999
25	.018	.054	.130	.260	.436	.626	.789	.901	.961	.988	.997	.999	>.999	>.999	>.999	>.999
26	.019	.056	.136	.273	.456	.649	.809	.914	.968	.991	.998	>.999	>.999	>.999	>.999	>.999
27	.019	.058	.143	.287	.476	.671	.828	.926	.974	.993	.998	>.999	>.999	>.999	>.999	>.999
28	.020	.061	.150	.300	.495	.692	.845	.936	.979	.995	.999	>.999	>.999	>.999	>.999	>.999
29	.020	.063	.157	.314	.515	.712	.860	.946	.983	.996	.999	>.999	>.999	>.999	>.999	>.999
30	.021	.065	.164	.327	.534	.731	.874	.953	.986	.997	.999	>.999	>.999	>.999	>.999	>.999
35	.023	.078	.199	.395	.622	.812	.928	.979	.996	.999	>.999	>.999	>.999	>.999	>.999	>.999
40	.025	.091	.236	.460	.698	.872	.960	.991	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
45	.028	.104	.274	.523	.763	.915	.979	.996	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
50	.030	.118	.312	.581	.816	.945	.989	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
55	.032	.132	.350	.635	.859	.964	.994	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
60	.035	.147	.388	.684	.893	.978	.997	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
70	.040	.178	.462	.767	.940	.991	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
80	.045	.210	.532	.833	.968	.997	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
90	.051	.243	.596	.882	.983	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
100	.057	.277	.655	.918	.991	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
120	.068	.345	.754	.962	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
240	.151	.696	.980	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
360	.247	.887	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999

TABLE 3 (CONTINUED)

Two-sample design, $\alpha = .05$, all probabilities are two-tailed

n	Cohen's d Effect Size															
	.10	.20	.30	.40	.50	.60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	1.50	1.60
3	.031	.039	.048	.058	.070	.083	.099	.116	.136	.157	.181	.206	.233	.262	.293	.325
4	.033	.043	.055	.070	.087	.108	.131	.158	.189	.222	.259	.299	.341	.385	.430	.476
5	.034	.047	.062	.081	.104	.131	.163	.200	.241	.286	.335	.386	.440	.495	.549	.603
6	.036	.050	.068	.092	.120	.154	.195	.240	.292	.347	.406	.467	.529	.591	.650	.705
7	.037	.053	.075	.102	.136	.177	.226	.280	.341	.406	.473	.541	.608	.672	.731	.785
8	.038	.056	.081	.112	.152	.200	.256	.320	.389	.461	.535	.608	.677	.740	.797	.845
9	.039	.059	.087	.123	.168	.223	.287	.358	.434	.513	.592	.667	.735	.796	.848	.890
10	.040	.062	.093	.133	.184	.245	.316	.395	.478	.562	.643	.718	.785	.841	.887	.922
11	.041	.065	.099	.143	.200	.268	.346	.431	.520	.607	.690	.763	.826	.877	.917	.946
12	.042	.068	.104	.153	.215	.290	.374	.466	.559	.649	.731	.802	.861	.906	.939	.963
13	.043	.071	.110	.163	.231	.312	.403	.499	.596	.687	.768	.835	.889	.928	.956	.974
14	.044	.074	.116	.174	.246	.333	.430	.531	.630	.721	.800	.863	.911	.946	.968	.983
15	.045	.076	.122	.184	.262	.355	.457	.562	.663	.753	.828	.887	.930	.959	.977	.988
16	.046	.079	.127	.194	.277	.376	.483	.591	.693	.781	.853	.907	.945	.969	.984	.992
17	.047	.082	.133	.204	.293	.396	.508	.619	.721	.807	.875	.924	.957	.977	.989	.995
18	.048	.084	.139	.214	.308	.417	.532	.645	.746	.830	.894	.938	.966	.983	.992	.997
19	.048	.087	.145	.224	.323	.436	.556	.670	.770	.851	.910	.949	.974	.987	.994	.998
20	.049	.090	.150	.234	.338	.456	.578	.693	.792	.869	.924	.959	.980	.991	.996	.999
21	.050	.092	.156	.244	.352	.475	.600	.716	.812	.885	.935	.967	.984	.993	.997	.999
22	.051	.095	.162	.253	.367	.494	.621	.736	.830	.900	.946	.973	.988	.995	.998	.999
23	.052	.097	.167	.263	.382	.512	.641	.756	.847	.912	.954	.978	.991	.996	.999	>.999
24	.053	.100	.173	.273	.396	.530	.661	.774	.863	.924	.962	.983	.993	.997	.999	>.999
25	.053	.103	.179	.283	.410	.547	.679	.791	.877	.934	.968	.986	.994	.998	.999	>.999
26	.054	.105	.184	.293	.424	.564	.697	.807	.889	.942	.973	.989	.996	.999	>.999	>.999
27	.055	.108	.190	.302	.438	.581	.714	.822	.901	.950	.978	.991	.997	.999	>.999	>.999
28	.056	.110	.196	.312	.451	.597	.730	.836	.911	.957	.981	.993	.998	.999	>.999	>.999
29	.056	.113	.201	.322	.465	.612	.745	.849	.920	.963	.984	.994	.998	.999	>.999	>.999
30	.057	.115	.207	.331	.478	.627	.760	.861	.929	.968	.987	.995	.999	>.999	>.999	>.999
35	.061	.128	.235	.378	.541	.697	.823	.910	.960	.985	.995	.999	>.999	>.999	>.999	>.999
40	.064	.141	.263	.423	.598	.755	.871	.942	.978	.993	.998	>.999	>.999	>.999	>.999	>.999
45	.068	.153	.290	.467	.650	.804	.907	.964	.988	.997	.999	>.999	>.999	>.999	>.999	>.999
50	.071	.166	.318	.508	.697	.844	.934	.977	.994	.999	>.999	>.999	>.999	>.999	>.999	>.999
55	.075	.179	.344	.547	.738	.877	.953	.986	.997	.999	>.999	>.999	>.999	>.999	>.999	>.999
60	.078	.191	.371	.584	.775	.903	.967	.991	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999
70	.085	.216	.422	.652	.836	.941	.984	.997	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
80	.092	.241	.470	.710	.882	.965	.993	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
90	.098	.266	.517	.761	.916	.979	.997	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
100	.105	.290	.560	.804	.940	.988	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
120	.117	.338	.638	.870	.971	.996	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
240	.193	.590	.907	.992	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
360	.268	.764	.980	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999

TABLE 3 (CONTINUED)

Two-sample design, $\alpha = .01$, all probabilities are two-tailed

n	Cohen's d Effect Size															
	.10	.20	.30	.40	.50	.60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	1.50	1.60
3	.006	.008	.010	.013	.015	.019	.023	.028	.033	.039	.046	.054	.063	.073	.084	.097
4	.007	.009	.012	.016	.021	.027	.034	.043	.054	.066	.080	.097	.116	.137	.161	.187
5	.007	.010	.014	.020	.027	.036	.047	.061	.077	.097	.121	.148	.178	.213	.251	.291
6	.008	.011	.016	.023	.033	.045	.061	.080	.104	.132	.166	.204	.247	.294	.345	.399
7	.008	.012	.018	.027	.039	.055	.075	.101	.133	.170	.214	.264	.318	.377	.439	.503
8	.008	.013	.021	.031	.046	.065	.091	.123	.163	.210	.264	.325	.390	.458	.528	.597
9	.009	.014	.023	.035	.053	.076	.108	.147	.195	.252	.316	.386	.459	.535	.609	.679
10	.009	.015	.025	.039	.060	.088	.125	.172	.228	.294	.367	.445	.525	.605	.680	.748
11	.009	.016	.027	.043	.067	.100	.143	.197	.262	.336	.417	.502	.587	.668	.741	.805
12	.009	.017	.029	.048	.075	.112	.162	.223	.296	.378	.467	.556	.643	.723	.793	.851
13	.010	.018	.031	.052	.083	.125	.181	.250	.331	.420	.514	.607	.694	.772	.837	.888
14	.010	.019	.034	.057	.091	.138	.200	.277	.365	.461	.559	.654	.740	.813	.872	.916
15	.010	.020	.036	.061	.099	.152	.220	.304	.399	.500	.602	.697	.780	.848	.901	.938
16	.010	.021	.038	.066	.108	.166	.241	.331	.432	.538	.642	.735	.815	.877	.923	.955
17	.011	.022	.040	.071	.117	.180	.261	.358	.465	.575	.679	.770	.845	.902	.941	.967
18	.011	.023	.043	.076	.126	.194	.282	.385	.497	.609	.713	.801	.871	.922	.955	.976
19	.011	.023	.045	.081	.135	.209	.303	.412	.528	.642	.745	.829	.893	.938	.966	.983
20	.012	.024	.048	.086	.144	.223	.323	.438	.558	.673	.773	.853	.912	.951	.975	.988
21	.012	.025	.050	.091	.153	.238	.344	.464	.587	.702	.799	.875	.928	.962	.981	.992
22	.012	.026	.053	.097	.163	.253	.365	.489	.614	.729	.823	.893	.941	.970	.986	.994
23	.012	.027	.055	.102	.173	.269	.385	.514	.641	.754	.844	.910	.952	.977	.990	.996
24	.012	.028	.058	.108	.183	.284	.406	.538	.666	.777	.863	.924	.961	.982	.992	.997
25	.013	.029	.060	.113	.193	.299	.426	.562	.690	.799	.881	.936	.968	.986	.994	.998
26	.013	.030	.063	.119	.203	.314	.446	.584	.713	.818	.896	.946	.975	.989	.996	.999
27	.013	.031	.066	.125	.213	.329	.466	.606	.734	.837	.909	.955	.980	.992	.997	.999
28	.013	.032	.068	.130	.223	.345	.485	.628	.754	.853	.921	.962	.984	.994	.998	.999
29	.014	.033	.071	.136	.233	.360	.504	.648	.773	.868	.932	.968	.987	.995	.998	>.999
30	.014	.034	.074	.142	.244	.375	.523	.668	.791	.882	.941	.974	.990	.996	.999	>.999
35	.015	.039	.088	.173	.296	.449	.611	.755	.864	.934	.972	.990	.997	.999	>.999	>.999
40	.016	.045	.103	.205	.349	.520	.687	.823	.914	.964	.987	.996	.999	>.999	>.999	>.999
45	.017	.050	.119	.238	.402	.586	.752	.874	.947	.981	.994	.999	>.999	>.999	>.999	>.999
50	.019	.056	.135	.271	.453	.646	.806	.912	.968	.990	.998	>.999	>.999	>.999	>.999	>.999
55	.020	.061	.152	.305	.502	.699	.850	.940	.981	.995	.999	>.999	>.999	>.999	>.999	>.999
60	.021	.067	.170	.339	.549	.747	.886	.959	.989	.998	>.999	>.999	>.999	>.999	>.999	>.999
70	.023	.080	.205	.406	.636	.824	.935	.982	.996	.999	>.999	>.999	>.999	>.999	>.999	>.999
80	.026	.093	.242	.471	.710	.881	.964	.992	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
90	.028	.106	.280	.533	.772	.921	.981	.997	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
100	.030	.120	.318	.591	.824	.949	.990	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
120	.035	.150	.394	.692	.898	.979	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
240	.069	.347	.758	.963	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
360	.108	.540	.925	.997	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999

TABLE 4: CRITICAL VALUES OF THE F DISTRIBUTION

df _{EFFECT} = 1			df _{EFFECT} = 2			df _{EFFECT} = 3			df _{EFFECT} = 4		
df _{ERROR}	p = .05	p = .01	df _{ERROR}	p = .05	p = .01	df _{ERROR}	p = .05	p = .01	df _{ERROR}	p = .05	p = .01
2	18.513	98.503	2	19.000	99.000	2	19.164	99.166	2	19.247	99.249
3	10.128	34.116	3	9.552	30.817	3	9.277	29.457	3	9.117	28.710
4	7.709	21.198	4	6.944	18.000	4	6.591	16.694	4	6.388	15.977
5	6.608	16.258	5	5.786	13.274	5	5.409	12.060	5	5.192	11.392
6	5.987	13.745	6	5.143	10.925	6	4.757	9.780	6	4.534	9.148
7	5.591	12.246	7	4.737	9.547	7	4.347	8.451	7	4.120	7.847
8	5.318	11.259	8	4.459	8.649	8	4.066	7.591	8	3.838	7.006
9	5.117	10.561	9	4.256	8.022	9	3.863	6.992	9	3.633	6.422
10	4.965	10.044	10	4.103	7.559	10	3.708	6.552	10	3.478	5.994
11	4.844	9.646	11	3.982	7.206	11	3.587	6.217	11	3.357	5.668
12	4.747	9.330	12	3.885	6.927	12	3.490	5.953	12	3.259	5.412
13	4.667	9.074	13	3.806	6.701	13	3.411	5.739	13	3.179	5.205
14	4.600	8.862	14	3.739	6.515	14	3.344	5.564	14	3.112	5.035
15	4.543	8.683	15	3.682	6.359	15	3.287	5.417	15	3.056	4.893
16	4.494	8.531	16	3.634	6.226	16	3.239	5.292	16	3.007	4.773
17	4.451	8.400	17	3.592	6.112	17	3.197	5.185	17	2.965	4.669
18	4.414	8.285	18	3.555	6.013	18	3.160	5.092	18	2.928	4.579
19	4.381	8.185	19	3.522	5.926	19	3.127	5.010	19	2.895	4.500
20	4.351	8.096	20	3.493	5.849	20	3.098	4.938	20	2.866	4.431
21	4.325	8.017	21	3.467	5.780	21	3.072	4.874	21	2.840	4.369
22	4.301	7.945	22	3.443	5.719	22	3.049	4.817	22	2.817	4.313
23	4.279	7.881	23	3.422	5.664	23	3.028	4.765	23	2.796	4.264
24	4.260	7.823	24	3.403	5.614	24	3.009	4.718	24	2.776	4.218
25	4.242	7.770	25	3.385	5.568	25	2.991	4.675	25	2.759	4.177
26	4.225	7.721	26	3.369	5.526	26	2.975	4.637	26	2.743	4.140
27	4.210	7.677	27	3.354	5.488	27	2.960	4.601	27	2.728	4.106
28	4.196	7.636	28	3.340	5.453	28	2.947	4.568	28	2.714	4.074
29	4.183	7.598	29	3.328	5.420	29	2.934	4.538	29	2.701	4.045
30	4.171	7.562	30	3.316	5.390	30	2.922	4.510	30	2.690	4.018
35	4.121	7.419	35	3.267	5.268	35	2.874	4.396	35	2.641	3.908
40	4.085	7.314	40	3.232	5.179	40	2.839	4.313	40	2.606	3.828
45	4.057	7.234	45	3.204	5.110	45	2.812	4.249	45	2.579	3.767
50	4.034	7.171	50	3.183	5.057	50	2.790	4.199	50	2.557	3.720
55	4.016	7.119	55	3.165	5.013	55	2.773	4.159	55	2.540	3.681
60	4.001	7.077	60	3.150	4.977	60	2.758	4.126	60	2.525	3.649
70	3.978	7.011	70	3.128	4.922	70	2.736	4.074	70	2.503	3.600
80	3.960	6.963	80	3.111	4.881	80	2.719	4.036	80	2.486	3.563
90	3.947	6.925	90	3.098	4.849	90	2.706	4.007	90	2.473	3.535
100	3.936	6.895	100	3.087	4.824	100	2.696	3.984	100	2.463	3.513
120	3.920	6.851	120	3.072	4.787	120	2.680	3.949	120	2.447	3.480
240	3.880	6.742	240	3.033	4.695	240	2.642	3.864	240	2.409	3.398
∞	3.842	6.635	∞	2.996	4.605	∞	2.605	3.782	∞	2.372	3.319

TABLE 4 (CONTINUED)

df_{EFFECT} = 1

df _{ERROR}	Two-Tailed p Values														
	.90	.80	.70	.60	.50	.40	.30	.20	.10	.05	.04	.03	.02	.01	.001
2	.020	.083	.198	.381	.667	1.13	1.922	3.556	8.526	18.51	23.51	31.84	48.51	98.50	998.50
3	.019	.077	.180	.342	.585	.957	1.562	2.682	5.538	10.13	12.12	15.18	20.62	34.12	167.03
4	.018	.073	.172	.323	.549	.885	1.415	2.351	4.545	7.709	8.991	10.87	14.04	21.20	74.137
5	.017	.071	.167	.313	.528	.846	1.336	2.178	4.060	6.608	7.598	9.017	11.32	16.26	47.181
6	.017	.070	.163	.306	.515	.820	1.286	2.073	3.776	5.987	6.824	8.003	9.876	13.75	35.507
7	.017	.069	.161	.302	.506	.803	1.253	2.002	3.589	5.591	6.334	7.369	8.988	12.25	29.245
8	.017	.069	.160	.298	.499	.790	1.228	1.951	3.458	5.318	5.998	6.937	8.389	11.26	25.415
9	.017	.068	.158	.295	.494	.780	1.209	1.913	3.360	5.117	5.753	6.624	7.961	10.56	22.857
10	.017	.068	.157	.293	.490	.773	1.195	1.883	3.285	4.965	5.566	6.388	7.638	10.04	21.040
11	.017	.067	.156	.292	.486	.767	1.183	1.859	3.225	4.844	5.420	6.203	7.388	9.646	19.687
12	.016	.067	.156	.290	.484	.761	1.173	1.839	3.177	4.747	5.303	6.055	7.188	9.330	18.643
13	.016	.067	.155	.289	.481	.757	1.165	1.823	3.136	4.667	5.206	5.933	7.024	9.074	17.815
14	.016	.067	.155	.288	.479	.754	1.158	1.809	3.102	4.600	5.125	5.832	6.888	8.862	17.143
15	.016	.067	.154	.287	.478	.750	1.152	1.797	3.073	4.543	5.056	5.746	6.773	8.683	16.587
16	.016	.066	.154	.286	.476	.748	1.147	1.787	3.048	4.494	4.997	5.672	6.674	8.531	16.120
17	.016	.066	.154	.286	.475	.745	1.143	1.778	3.026	4.451	4.945	5.608	6.589	8.400	15.722
18	.016	.066	.153	.285	.474	.743	1.139	1.770	3.007	4.414	4.900	5.552	6.515	8.285	15.379
19	.016	.066	.153	.284	.473	.741	1.135	1.763	2.990	4.381	4.861	5.502	6.449	8.185	15.081
20	.016	.066	.153	.284	.472	.740	1.132	1.757	2.975	4.351	4.825	5.458	6.391	8.096	14.819
21	.016	.066	.153	.284	.471	.738	1.129	1.751	2.961	4.325	4.794	5.419	6.339	8.017	14.587
22	.016	.066	.152	.283	.470	.737	1.127	1.746	2.949	4.301	4.765	5.383	6.292	7.945	14.380
23	.016	.066	.152	.283	.470	.735	1.124	1.741	2.937	4.279	4.739	5.351	6.249	7.881	14.195
24	.016	.066	.152	.282	.469	.734	1.122	1.737	2.927	4.260	4.716	5.322	6.211	7.823	14.028
25	.016	.066	.152	.282	.468	.733	1.120	1.733	2.918	4.242	4.694	5.295	6.176	7.770	13.877
26	.016	.066	.152	.282	.468	.732	1.118	1.729	2.909	4.225	4.674	5.271	6.144	7.721	13.739
27	.016	.065	.152	.282	.467	.731	1.117	1.726	2.901	4.210	4.656	5.248	6.114	7.677	13.613
28	.016	.065	.152	.281	.467	.730	1.115	1.723	2.894	4.196	4.639	5.228	6.087	7.636	13.498
29	.016	.065	.151	.281	.467	.730	1.114	1.720	2.887	4.183	4.624	5.208	6.062	7.598	13.391
30	.016	.065	.151	.281	.466	.729	1.112	1.717	2.881	4.171	4.609	5.190	6.038	7.562	13.293
35	.016	.065	.151	.280	.465	.726	1.107	1.706	2.855	4.121	4.550	5.117	5.942	7.419	12.896
40	.016	.065	.151	.279	.463	.724	1.103	1.698	2.835	4.085	4.507	5.064	5.872	7.314	12.609
45	.016	.065	.150	.279	.462	.722	1.099	1.692	2.820	4.057	4.473	5.022	5.818	7.234	12.392
50	.016	.065	.150	.279	.462	.721	1.097	1.687	2.809	4.034	4.447	4.990	5.776	7.171	12.222
55	.016	.065	.150	.278	.461	.719	1.095	1.683	2.799	4.016	4.425	4.963	5.741	7.119	12.085
60	.016	.065	.150	.278	.460	.719	1.093	1.679	2.791	4.001	4.407	4.941	5.713	7.077	11.973
70	.016	.065	.150	.278	.460	.717	1.090	1.674	2.779	3.978	4.380	4.907	5.668	7.011	11.799
80	.016	.065	.150	.277	.459	.716	1.088	1.670	2.769	3.960	4.359	4.882	5.635	6.963	11.671
90	.016	.065	.149	.277	.459	.715	1.087	1.667	2.762	3.947	4.343	4.862	5.610	6.925	11.573
100	.016	.065	.149	.277	.458	.714	1.085	1.664	2.756	3.936	4.330	4.847	5.590	6.895	11.495
120	.016	.064	.149	.276	.458	.713	1.084	1.661	2.748	3.920	4.311	4.823	5.559	6.851	11.380
240	.016	.064	.149	.276	.456	.711	1.079	1.651	2.727	3.880	4.264	4.766	5.485	6.742	11.099
∞	.016	.064	.148	.275	.455	.708	1.074	1.642	2.706	3.842	4.218	4.709	5.412	6.635	10.828

TABLE 4 (CONTINUED)

df_{EFFECT} = 2

df _{ERROR}	Two-Tailed <i>p</i> Values														
	.90	.80	.70	.60	.50	.40	.30	.20	.10	.05	.04	.03	.02	.01	.001
2	.111	.250	.429	.667	1.00	1.50	2.333	4.000	9.000	19.00	24.00	32.33	49.00	99.00	999.00
3	.109	.241	.403	.609	.881	1.26	1.847	2.886	5.462	9.552	11.32	14.04	18.86	30.82	148.50
4	.108	.236	.390	.582	.828	1.16	1.651	2.472	4.325	6.944	8.000	9.547	12.14	18.00	61.246
5	.108	.233	.383	.567	.799	1.11	1.547	2.259	3.780	5.786	6.560	7.665	9.454	13.27	37.122
6	.107	.232	.379	.557	.780	1.07	1.481	2.130	3.463	5.143	5.772	6.655	8.052	10.92	27.000
7	.107	.230	.375	.550	.767	1.05	1.437	2.043	3.257	4.737	5.280	6.032	7.203	9.547	21.689
8	.107	.229	.373	.545	.757	1.03	1.405	1.981	3.113	4.459	4.944	5.611	6.637	8.649	18.494
9	.107	.229	.371	.541	.749	1.02	1.380	1.935	3.006	4.256	4.702	5.309	6.234	8.022	16.387
10	.106	.228	.370	.538	.743	1.01	1.361	1.899	2.924	4.103	4.518	5.082	5.934	7.559	14.905
11	.106	.228	.368	.535	.739	.997	1.346	1.870	2.860	3.982	4.375	4.905	5.701	7.206	13.812
12	.106	.227	.367	.533	.735	.990	1.333	1.846	2.807	3.885	4.260	4.764	5.516	6.927	12.974
13	.106	.227	.367	.531	.731	.984	1.323	1.826	2.763	3.806	4.165	4.648	5.366	6.701	12.313
14	.106	.227	.366	.530	.729	.979	1.314	1.809	2.726	3.739	4.087	4.552	5.241	6.515	11.779
15	.106	.226	.365	.529	.726	.975	1.306	1.795	2.695	3.682	4.020	4.470	5.135	6.359	11.339
16	.106	.226	.365	.527	.724	.971	1.299	1.783	2.668	3.634	3.963	4.401	5.046	6.226	10.971
17	.106	.226	.364	.526	.722	.968	1.293	1.772	2.645	3.592	3.913	4.340	4.968	6.112	10.658
18	.106	.226	.364	.526	.721	.965	1.288	1.762	2.624	3.555	3.870	4.288	4.900	6.013	10.390
19	.106	.226	.363	.525	.719	.962	1.284	1.754	2.606	3.522	3.831	4.241	4.840	5.926	10.157
20	.106	.226	.363	.524	.718	.960	1.279	1.746	2.589	3.493	3.797	4.200	4.788	5.849	9.953
21	.106	.226	.363	.523	.717	.957	1.276	1.739	2.575	3.467	3.767	4.163	4.740	5.780	9.772
22	.106	.225	.363	.523	.715	.956	1.272	1.733	2.561	3.443	3.739	4.130	4.698	5.719	9.612
23	.106	.225	.362	.522	.714	.954	1.269	1.728	2.549	3.422	3.715	4.100	4.660	5.664	9.469
24	.106	.225	.362	.522	.714	.952	1.266	1.722	2.538	3.403	3.692	4.073	4.625	5.614	9.339
25	.106	.225	.362	.521	.713	.951	1.264	1.718	2.528	3.385	3.671	4.048	4.593	5.568	9.223
26	.106	.225	.362	.521	.712	.949	1.261	1.713	2.519	3.369	3.652	4.025	4.564	5.526	9.116
27	.106	.225	.361	.521	.711	.948	1.259	1.709	2.511	3.354	3.635	4.004	4.538	5.488	9.019
28	.106	.225	.361	.520	.711	.947	1.257	1.706	2.503	3.340	3.619	3.985	4.513	5.453	8.931
29	.106	.225	.361	.520	.710	.946	1.255	1.702	2.495	3.328	3.604	3.967	4.491	5.420	8.849
30	.106	.225	.361	.520	.709	.945	1.254	1.699	2.489	3.316	3.590	3.950	4.470	5.390	8.773
35	.106	.225	.360	.518	.707	.941	1.246	1.686	2.461	3.267	3.534	3.883	4.384	5.268	8.470
40	.106	.224	.360	.517	.705	.938	1.241	1.676	2.440	3.232	3.492	3.833	4.321	5.179	8.251
45	.106	.224	.360	.517	.704	.935	1.237	1.668	2.425	3.204	3.461	3.795	4.273	5.110	8.086
50	.106	.224	.359	.516	.703	.933	1.233	1.662	2.412	3.183	3.435	3.764	4.235	5.057	7.956
55	.106	.224	.359	.516	.702	.932	1.231	1.657	2.402	3.165	3.415	3.740	4.204	5.013	7.853
60	.106	.224	.359	.515	.701	.930	1.228	1.653	2.393	3.150	3.398	3.720	4.179	4.977	7.768
70	.106	.224	.358	.515	.700	.928	1.225	1.647	2.380	3.128	3.372	3.688	4.139	4.922	7.637
80	.105	.224	.358	.514	.699	.927	1.222	1.642	2.370	3.111	3.352	3.665	4.110	4.881	7.540
90	.105	.224	.358	.514	.699	.926	1.220	1.639	2.363	3.098	3.337	3.647	4.087	4.849	7.466
100	.105	.224	.358	.513	.698	.925	1.219	1.636	2.356	3.087	3.325	3.632	4.069	4.824	7.408
120	.105	.224	.358	.513	.697	.923	1.216	1.631	2.347	3.072	3.307	3.611	4.042	4.787	7.321
240	.105	.223	.357	.512	.695	.920	1.210	1.620	2.325	3.033	3.262	3.558	3.976	4.695	7.110
∞	.105	.223	.357	.511	.693	.916	1.204	1.609	2.303	2.996	3.219	3.507	3.912	4.605	6.908

TABLE 4 (CONTINUED)

df_{EFFECT} = 3

df _{ERROR}	Two-Tailed p Values														
	.90	.80	.70	.60	.50	.40	.30	.20	.10	.05	.04	.03	.02	.01	.001
2	.183	.346	.541	.792	1.13	1.64	2.484	4.156	9.162	19.16	24.16	32.50	49.17	99.17	999.17
3	.186	.341	.516	.728	1.00	1.37	1.940	2.936	5.391	9.277	10.96	13.53	18.11	29.46	141.11
4	.187	.338	.504	.699	.941	1.26	1.721	2.485	4.191	6.591	7.557	8.972	11.34	16.69	56.177
5	.188	.337	.497	.682	.907	1.20	1.605	2.253	3.619	5.409	6.098	7.080	8.670	12.06	33.202
6	.189	.337	.493	.672	.886	1.16	1.532	2.113	3.289	4.757	5.305	6.073	7.287	9.780	23.703
7	.190	.336	.490	.664	.871	1.13	1.482	2.019	3.074	4.347	4.811	5.454	6.454	8.451	18.772
8	.190	.336	.488	.659	.860	1.11	1.446	1.951	2.924	4.066	4.476	5.039	5.901	7.591	15.829
9	.191	.336	.487	.655	.852	1.10	1.419	1.901	2.813	3.863	4.234	4.741	5.510	6.992	13.902
10	.191	.336	.485	.651	.845	1.08	1.398	1.861	2.728	3.708	4.052	4.517	5.218	6.552	12.553
11	.191	.336	.484	.649	.840	1.07	1.381	1.830	2.660	3.587	3.910	4.344	4.993	6.217	11.561
12	.192	.336	.483	.646	.835	1.07	1.366	1.804	2.606	3.490	3.795	4.205	4.814	5.953	10.804
13	.192	.335	.483	.645	.832	1.06	1.355	1.783	2.560	3.411	3.702	4.092	4.669	5.739	10.209
14	.192	.335	.482	.643	.828	1.05	1.345	1.765	2.522	3.344	3.624	3.998	4.549	5.564	9.729
15	.192	.335	.482	.642	.826	1.05	1.336	1.749	2.490	3.287	3.558	3.918	4.447	5.417	9.335
16	.192	.335	.481	.640	.823	1.04	1.328	1.736	2.462	3.239	3.502	3.850	4.361	5.292	9.006
17	.193	.335	.481	.639	.821	1.04	1.322	1.724	2.437	3.197	3.453	3.791	4.286	5.185	8.727
18	.193	.335	.480	.638	.819	1.04	1.316	1.713	2.416	3.160	3.410	3.740	4.221	5.092	8.487
19	.193	.335	.480	.638	.818	1.03	1.311	1.704	2.397	3.127	3.372	3.694	4.164	5.010	8.280
20	.193	.335	.480	.637	.816	1.03	1.306	1.696	2.380	3.098	3.338	3.654	4.113	4.938	8.098
21	.193	.335	.479	.636	.815	1.03	1.302	1.688	2.365	3.072	3.308	3.618	4.068	4.874	7.938
22	.193	.335	.479	.636	.814	1.03	1.298	1.682	2.351	3.049	3.281	3.586	4.028	4.817	7.796
23	.193	.335	.479	.635	.813	1.02	1.295	1.676	2.339	3.028	3.257	3.557	3.991	4.765	7.669
24	.193	.335	.479	.635	.812	1.02	1.292	1.670	2.327	3.009	3.234	3.530	3.958	4.718	7.554
25	.193	.335	.479	.634	.811	1.02	1.289	1.665	2.317	2.991	3.214	3.506	3.928	4.675	7.451
26	.193	.335	.479	.634	.810	1.02	1.286	1.660	2.307	2.975	3.196	3.484	3.900	4.637	7.357
27	.193	.335	.478	.633	.809	1.02	1.284	1.656	2.299	2.960	3.178	3.464	3.874	4.601	7.272
28	.193	.335	.478	.633	.808	1.02	1.281	1.652	2.291	2.947	3.163	3.445	3.851	4.568	7.193
29	.193	.335	.478	.633	.808	1.02	1.279	1.648	2.283	2.934	3.148	3.428	3.829	4.538	7.121
30	.193	.335	.478	.632	.807	1.01	1.277	1.645	2.276	2.922	3.135	3.412	3.809	4.510	7.054
35	.194	.335	.477	.631	.804	1.01	1.269	1.630	2.247	2.874	3.079	3.346	3.727	4.396	6.787
40	.194	.335	.477	.630	.802	1.01	1.263	1.620	2.226	2.839	3.038	3.298	3.667	4.313	6.595
45	.194	.335	.477	.629	.801	1.00	1.258	1.611	2.210	2.812	3.007	3.261	3.622	4.249	6.450
50	.194	.335	.477	.629	.800	1.00	1.255	1.605	2.197	2.790	2.982	3.231	3.585	4.199	6.336
55	.194	.335	.476	.628	.799	1.00	1.252	1.599	2.186	2.773	2.962	3.208	3.556	4.159	6.246
60	.194	.335	.476	.628	.798	.998	1.249	1.595	2.177	2.758	2.946	3.188	3.532	4.126	6.171
70	.194	.335	.476	.627	.796	.996	1.245	1.588	2.164	2.736	2.920	3.158	3.494	4.074	6.057
80	.194	.335	.476	.626	.795	.994	1.242	1.583	2.154	2.719	2.901	3.135	3.467	4.036	5.972
90	.194	.335	.476	.626	.795	.993	1.240	1.579	2.146	2.706	2.886	3.118	3.445	4.007	5.908
100	.194	.335	.476	.626	.794	.992	1.238	1.576	2.139	2.696	2.874	3.104	3.428	3.984	5.857
120	.194	.335	.475	.625	.793	.990	1.235	1.571	2.130	2.680	2.856	3.083	3.403	3.949	5.781
240	.195	.335	.475	.624	.791	.986	1.228	1.559	2.107	2.642	2.813	3.032	3.340	3.864	5.598
∞	.195	.335	.475	.623	.789	.982	1.222	1.547	2.084	2.605	2.770	2.983	3.279	3.782	5.422

TABLE 4 (CONTINUED)

df_{EFFECT} = 4

df _{ERROR}	Two-Tailed p Values														
	.90	.80	.70	.60	.50	.40	.30	.20	.10	.05	.04	.03	.02	.01	.001
2	.231	.405	.606	.860	1.21	1.72	2.561	4.236	9.243	19.25	24.25	32.58	49.25	99.25	999.25
3	.239	.402	.581	.793	1.06	1.43	1.985	2.956	5.343	9.117	10.75	13.25	17.69	28.71	137.10
4	.243	.403	.570	.763	1.00	1.31	1.753	2.483	4.107	6.388	7.305	8.648	10.90	15.98	53.436
5	.247	.404	.565	.747	.965	1.24	1.629	2.240	3.520	5.192	5.835	6.751	8.233	11.39	31.085
6	.249	.404	.562	.736	.942	1.20	1.551	2.092	3.181	4.534	5.038	5.744	6.859	9.148	21.924
7	.251	.405	.559	.729	.926	1.17	1.499	1.994	2.961	4.120	4.543	5.127	6.035	7.847	17.198
8	.253	.406	.558	.723	.915	1.15	1.460	1.923	2.806	3.838	4.207	4.713	5.489	7.006	14.392
9	.254	.406	.556	.719	.906	1.13	1.431	1.870	2.693	3.633	3.965	4.417	5.103	6.422	12.560
10	.255	.407	.556	.716	.899	1.12	1.408	1.829	2.605	3.478	3.783	4.195	4.816	5.994	11.283
11	.256	.407	.555	.713	.893	1.11	1.390	1.796	2.536	3.357	3.641	4.023	4.594	5.668	10.346
12	.257	.407	.554	.711	.888	1.10	1.375	1.768	2.480	3.259	3.527	3.886	4.419	5.412	9.633
13	.257	.408	.554	.709	.885	1.09	1.362	1.746	2.434	3.179	3.434	3.773	4.276	5.205	9.073
14	.258	.408	.553	.708	.881	1.09	1.352	1.727	2.395	3.112	3.356	3.680	4.158	5.035	8.622
15	.258	.408	.553	.706	.878	1.08	1.342	1.710	2.361	3.056	3.290	3.602	4.058	4.893	8.253
16	.259	.408	.553	.705	.876	1.08	1.334	1.696	2.333	3.007	3.234	3.534	3.974	4.773	7.944
17	.259	.409	.552	.704	.874	1.07	1.327	1.684	2.308	2.965	3.185	3.476	3.901	4.669	7.683
18	.260	.409	.552	.703	.872	1.07	1.321	1.673	2.286	2.928	3.142	3.425	3.837	4.579	7.459
19	.260	.409	.552	.702	.870	1.07	1.316	1.663	2.266	2.895	3.105	3.380	3.781	4.500	7.265
20	.260	.409	.552	.702	.868	1.06	1.311	1.654	2.249	2.866	3.071	3.341	3.731	4.431	7.096
21	.260	.409	.552	.701	.867	1.06	1.306	1.646	2.233	2.840	3.041	3.305	3.687	4.369	6.947
22	.261	.409	.551	.700	.866	1.06	1.302	1.639	2.219	2.817	3.014	3.273	3.647	4.313	6.814
23	.261	.409	.551	.700	.864	1.06	1.298	1.633	2.207	2.796	2.990	3.244	3.611	4.264	6.696
24	.261	.409	.551	.699	.863	1.06	1.295	1.627	2.195	2.776	2.968	3.218	3.579	4.218	6.589
25	.261	.410	.551	.699	.862	1.05	1.292	1.622	2.184	2.759	2.948	3.194	3.549	4.177	6.493
26	.261	.410	.551	.698	.861	1.05	1.289	1.617	2.174	2.743	2.929	3.173	3.522	4.140	6.406
27	.262	.410	.551	.698	.861	1.05	1.286	1.612	2.165	2.728	2.912	3.153	3.498	4.106	6.326
28	.262	.410	.551	.698	.860	1.05	1.284	1.608	2.157	2.714	2.896	3.134	3.475	4.074	6.253
29	.262	.410	.551	.697	.859	1.05	1.282	1.604	2.149	2.701	2.882	3.117	3.453	4.045	6.186
30	.262	.410	.551	.697	.858	1.05	1.280	1.600	2.142	2.690	2.868	3.101	3.434	4.018	6.125
35	.262	.410	.550	.696	.856	1.04	1.271	1.585	2.113	2.641	2.813	3.036	3.354	3.908	5.876
40	.263	.410	.550	.695	.854	1.04	1.264	1.574	2.091	2.606	2.773	2.989	3.295	3.828	5.698
45	.263	.411	.550	.694	.852	1.03	1.259	1.565	2.074	2.579	2.742	2.952	3.251	3.767	5.564
50	.263	.411	.550	.693	.851	1.03	1.255	1.558	2.061	2.557	2.717	2.923	3.215	3.720	5.459
55	.264	.411	.550	.693	.850	1.03	1.252	1.552	2.050	2.540	2.697	2.900	3.187	3.681	5.375
60	.264	.411	.550	.693	.849	1.03	1.249	1.548	2.041	2.525	2.680	2.881	3.163	3.649	5.307
70	.264	.411	.549	.692	.847	1.03	1.245	1.540	2.027	2.503	2.655	2.851	3.127	3.600	5.201
80	.264	.411	.549	.691	.846	1.02	1.242	1.535	2.016	2.486	2.636	2.828	3.100	3.563	5.123
90	.265	.411	.549	.691	.846	1.02	1.239	1.531	2.008	2.473	2.621	2.811	3.079	3.535	5.064
100	.265	.411	.549	.691	.845	1.02	1.237	1.527	2.002	2.463	2.609	2.798	3.062	3.513	5.017
120	.265	.412	.549	.690	.844	1.02	1.234	1.522	1.992	2.447	2.592	2.777	3.037	3.480	4.947
240	.265	.412	.549	.689	.842	1.02	1.227	1.510	1.968	2.409	2.549	2.727	2.976	3.398	4.778
∞	.266	.412	.549	.688	.839	1.01	1.220	1.497	1.945	2.372	2.506	2.678	2.917	3.319	4.617

TABLE 5: POWER TABLE FOR ETA-SQUARED

Single-factor design, $df_{EFFECT} = 2$, $\alpha = .05$, $n =$ sample size per condition

n	Eta-Squared															
	0.01	0.02	0.04	0.06	0.09	0.12	0.16	0.20	0.25	0.30	0.36	0.42	0.49	0.56	0.64	0.72
3	.053	.056	.062	.069	.079	.091	.108	.127	.154	.186	.232	.288	.368	.467	.608	.770
4	.055	.060	.071	.083	.102	.123	.154	.190	.241	.299	.381	.473	.594	.722	.860	.957
5	.057	.065	.081	.098	.127	.158	.205	.258	.333	.415	.523	.637	.765	.876	.960	.994
6	.059	.069	.091	.114	.152	.195	.258	.328	.424	.525	.647	.763	.875	.950	.990	.999
7	.062	.074	.101	.131	.179	.233	.312	.398	.510	.622	.747	.852	.937	.982	.998	>.999
8	.064	.079	.112	.147	.207	.272	.366	.465	.588	.705	.824	.911	.970	.994	>.999	>.999
9	.066	.084	.122	.165	.235	.311	.418	.528	.659	.773	.880	.948	.986	.998	>.999	>.999
10	.069	.089	.133	.182	.263	.350	.469	.587	.720	.829	.920	.970	.994	.999	>.999	>.999
11	.071	.094	.145	.200	.291	.388	.518	.641	.772	.872	.947	.983	.997	>.999	>.999	>.999
12	.074	.099	.156	.218	.320	.425	.564	.689	.817	.906	.966	.991	.999	>.999	>.999	>.999
13	.076	.104	.167	.237	.348	.462	.607	.733	.853	.931	.978	.995	>.999	>.999	>.999	>.999
14	.079	.110	.179	.255	.376	.497	.647	.772	.884	.950	.986	.997	>.999	>.999	>.999	>.999
15	.081	.115	.191	.273	.403	.531	.684	.806	.908	.964	.991	.999	>.999	>.999	>.999	>.999
16	.083	.120	.202	.292	.430	.564	.718	.836	.928	.975	.995	.999	>.999	>.999	>.999	>.999
17	.086	.126	.214	.310	.457	.595	.750	.861	.944	.982	.997	>.999	>.999	>.999	>.999	>.999
18	.088	.131	.226	.328	.483	.625	.778	.884	.957	.987	.998	>.999	>.999	>.999	>.999	>.999
19	.091	.137	.238	.346	.508	.653	.804	.903	.967	.991	.999	>.999	>.999	>.999	>.999	>.999
20	.093	.142	.250	.364	.533	.680	.827	.919	.975	.994	.999	>.999	>.999	>.999	>.999	>.999
21	.096	.148	.262	.382	.556	.705	.848	.933	.981	.996	>.999	>.999	>.999	>.999	>.999	>.999
22	.099	.153	.274	.400	.579	.728	.867	.944	.985	.997	>.999	>.999	>.999	>.999	>.999	>.999
23	.101	.159	.286	.418	.602	.750	.883	.954	.989	.998	>.999	>.999	>.999	>.999	>.999	>.999
24	.104	.164	.298	.435	.623	.771	.898	.962	.992	.999	>.999	>.999	>.999	>.999	>.999	>.999
25	.106	.170	.310	.452	.644	.790	.911	.969	.994	.999	>.999	>.999	>.999	>.999	>.999	>.999
26	.109	.176	.322	.469	.664	.808	.923	.975	.995	.999	>.999	>.999	>.999	>.999	>.999	>.999
27	.111	.181	.334	.486	.683	.825	.933	.979	.996	>.999	>.999	>.999	>.999	>.999	>.999	>.999
28	.114	.187	.346	.502	.701	.840	.942	.983	.997	>.999	>.999	>.999	>.999	>.999	>.999	>.999
29	.117	.193	.357	.518	.718	.854	.950	.986	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999
30	.119	.199	.369	.534	.735	.867	.957	.989	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
35	.133	.228	.427	.608	.807	.919	.980	.996	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
40	.146	.257	.482	.674	.862	.951	.991	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
45	.160	.286	.535	.731	.903	.972	.996	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
50	.174	.316	.584	.780	.932	.984	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
55	.188	.345	.630	.821	.954	.991	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
60	.203	.374	.672	.856	.968	.995	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
70	.231	.430	.745	.909	.986	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
80	.260	.485	.805	.943	.994	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
90	.290	.536	.853	.965	.997	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
100	.319	.584	.890	.979	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
120	.376	.670	.940	.993	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
240	.669	.938	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
360	.847	.991	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999

TABLE 5 (CONTINUED)

Single-factor design, $df_{\text{EFFECT}} = 3$, $\alpha = .05$, n = sample size per condition

n	Eta-Squared															
	0.01	0.02	0.04	0.06	0.09	0.12	0.16	0.20	0.25	0.30	0.36	0.42	0.49	0.56	0.64	0.72
3	.053	.056	.063	.070	.082	.095	.114	.136	.168	.207	.261	.328	.424	.540	.695	.854
4	.055	.061	.073	.085	.107	.131	.167	.208	.269	.338	.433	.540	.674	.803	.921	.984
5	.058	.066	.083	.102	.134	.171	.225	.288	.375	.472	.594	.715	.840	.932	.985	.999
6	.060	.071	.094	.120	.164	.213	.287	.369	.480	.594	.724	.836	.930	.980	.998	>.999
7	.062	.076	.105	.138	.194	.257	.350	.449	.576	.697	.821	.912	.972	.995	>.999	>.999
8	.065	.081	.117	.158	.226	.302	.412	.525	.661	.780	.888	.955	.989	.999	>.999	>.999
9	.067	.086	.129	.177	.258	.348	.472	.595	.734	.844	.933	.978	.996	>.999	>.999	>.999
10	.070	.092	.141	.198	.291	.392	.530	.659	.794	.892	.960	.989	.999	>.999	>.999	>.999
11	.073	.097	.154	.218	.324	.437	.584	.715	.843	.927	.977	.995	>.999	>.999	>.999	>.999
12	.075	.103	.167	.239	.357	.479	.634	.764	.882	.951	.987	.998	>.999	>.999	>.999	>.999
13	.078	.109	.180	.260	.390	.521	.679	.806	.912	.968	.993	.999	>.999	>.999	>.999	>.999
14	.080	.115	.193	.281	.422	.560	.721	.842	.935	.979	.996	>.999	>.999	>.999	>.999	>.999
15	.083	.121	.207	.303	.454	.598	.759	.872	.953	.986	.998	>.999	>.999	>.999	>.999	>.999
16	.086	.126	.220	.324	.485	.633	.792	.897	.966	.991	.999	>.999	>.999	>.999	>.999	>.999
17	.088	.132	.234	.346	.515	.667	.822	.918	.975	.995	.999	>.999	>.999	>.999	>.999	>.999
18	.091	.139	.248	.367	.544	.698	.848	.935	.983	.997	>.999	>.999	>.999	>.999	>.999	>.999
19	.094	.145	.261	.388	.572	.727	.870	.948	.988	.998	>.999	>.999	>.999	>.999	>.999	>.999
20	.097	.151	.275	.409	.599	.754	.890	.959	.991	.999	>.999	>.999	>.999	>.999	>.999	>.999
21	.099	.157	.289	.430	.625	.778	.907	.968	.994	.999	>.999	>.999	>.999	>.999	>.999	>.999
22	.102	.164	.303	.450	.650	.801	.922	.975	.996	>.999	>.999	>.999	>.999	>.999	>.999	>.999
23	.105	.170	.317	.470	.674	.822	.935	.981	.997	>.999	>.999	>.999	>.999	>.999	>.999	>.999
24	.108	.176	.331	.490	.696	.841	.945	.985	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999
25	.111	.183	.345	.509	.717	.858	.954	.989	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
26	.114	.189	.359	.528	.738	.874	.962	.991	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
27	.117	.196	.373	.547	.757	.888	.969	.993	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
28	.119	.202	.387	.565	.775	.901	.974	.995	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
29	.122	.209	.401	.583	.792	.912	.979	.996	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
30	.125	.216	.414	.600	.807	.922	.982	.997	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
35	.140	.249	.480	.680	.873	.959	.994	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
40	.156	.283	.543	.747	.918	.979	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
45	.171	.318	.601	.803	.948	.990	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
50	.187	.352	.654	.849	.968	.995	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
55	.204	.386	.703	.885	.981	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
60	.220	.419	.746	.913	.988	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
70	.254	.484	.817	.952	.996	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
80	.287	.545	.871	.975	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
90	.321	.602	.911	.987	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
100	.355	.654	.939	.993	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
120	.422	.744	.973	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
240	.743	.971	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
360	.906	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999

TABLE 5 (CONTINUED)

Single-factor design, $df_{\text{EFFECT}} = 2$, $\alpha = .01$, $n =$ sample size per condition

n	Eta-Squared															
	0.01	0.02	0.04	0.06	0.09	0.12	0.16	0.20	0.25	0.30	0.36	0.42	0.49	0.56	0.64	0.72
3	.011	.011	.013	.015	.018	.021	.026	.031	.040	.051	.067	.089	.124	.175	.264	.408
4	.011	.013	.016	.019	.025	.032	.042	.056	.076	.102	.143	.198	.283	.399	.573	.775
5	.012	.014	.019	.024	.034	.045	.064	.088	.125	.172	.244	.337	.470	.627	.809	.945
6	.013	.016	.022	.030	.044	.062	.090	.126	.183	.254	.358	.482	.642	.797	.930	.990
7	.013	.017	.026	.037	.056	.080	.120	.170	.248	.342	.473	.615	.775	.901	.978	.999
8	.014	.019	.030	.043	.069	.100	.153	.218	.317	.432	.581	.727	.867	.956	.994	>.999
9	.015	.021	.034	.051	.083	.123	.189	.270	.388	.518	.675	.813	.926	.981	.999	>.999
10	.016	.022	.039	.059	.098	.146	.227	.322	.457	.598	.755	.876	.960	.993	>.999	>.999
11	.017	.024	.043	.067	.114	.172	.266	.376	.524	.670	.819	.921	.980	.997	>.999	>.999
12	.017	.026	.048	.076	.130	.198	.307	.429	.587	.733	.869	.950	.990	.999	>.999	>.999
13	.018	.028	.053	.086	.148	.226	.347	.481	.645	.787	.906	.970	.995	>.999	>.999	>.999
14	.019	.030	.058	.095	.167	.254	.388	.531	.698	.832	.934	.982	.998	>.999	>.999	>.999
15	.020	.032	.064	.106	.186	.283	.429	.578	.745	.869	.955	.989	.999	>.999	>.999	>.999
16	.021	.034	.070	.116	.205	.312	.469	.623	.786	.899	.969	.994	>.999	>.999	>.999	>.999
17	.022	.036	.076	.127	.225	.341	.507	.665	.822	.923	.979	.996	>.999	>.999	>.999	>.999
18	.023	.039	.082	.138	.246	.371	.545	.703	.853	.941	.986	.998	>.999	>.999	>.999	>.999
19	.023	.041	.088	.150	.266	.400	.581	.739	.879	.956	.991	.999	>.999	>.999	>.999	>.999
20	.024	.043	.094	.162	.288	.429	.615	.771	.901	.967	.994	.999	>.999	>.999	>.999	>.999
21	.025	.046	.101	.174	.309	.458	.648	.800	.920	.976	.996	>.999	>.999	>.999	>.999	>.999
22	.026	.048	.108	.187	.330	.486	.678	.826	.935	.982	.998	>.999	>.999	>.999	>.999	>.999
23	.027	.050	.115	.199	.352	.513	.707	.849	.948	.987	.998	>.999	>.999	>.999	>.999	>.999
24	.028	.053	.122	.212	.373	.540	.734	.870	.959	.990	.999	>.999	>.999	>.999	>.999	>.999
25	.029	.056	.129	.225	.394	.566	.759	.888	.967	.993	.999	>.999	>.999	>.999	>.999	>.999
26	.030	.058	.136	.238	.415	.592	.783	.904	.974	.995	>.999	>.999	>.999	>.999	>.999	>.999
27	.031	.061	.144	.252	.436	.616	.804	.918	.979	.996	>.999	>.999	>.999	>.999	>.999	>.999
28	.032	.064	.151	.265	.457	.640	.824	.930	.984	.998	>.999	>.999	>.999	>.999	>.999	>.999
29	.033	.066	.159	.279	.478	.662	.842	.940	.987	.998	>.999	>.999	>.999	>.999	>.999	>.999
30	.034	.069	.167	.292	.498	.684	.859	.950	.990	.999	>.999	>.999	>.999	>.999	>.999	>.999
35	.040	.084	.208	.361	.593	.777	.921	.979	.997	>.999	>.999	>.999	>.999	>.999	>.999	>.999
40	.046	.100	.251	.430	.677	.848	.958	.992	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
45	.052	.117	.296	.496	.749	.899	.978	.997	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
50	.058	.134	.341	.559	.807	.934	.989	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
55	.065	.153	.386	.618	.855	.958	.995	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
60	.072	.172	.430	.671	.892	.974	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
70	.087	.213	.516	.762	.942	.990	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
80	.103	.255	.596	.833	.971	.997	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
90	.119	.299	.667	.885	.986	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
100	.137	.343	.730	.923	.993	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
120	.175	.431	.828	.967	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
240	.431	.823	.994	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
360	.662	.962	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999

TABLE 5 (CONTINUED)

Single-factor design, $df_{\text{EFFECT}} = 3$, $\alpha = .01$, $n =$ sample size per condition

n	Eta-Squared															
	0.01	0.02	0.04	0.06	0.09	0.12	0.16	0.20	0.25	0.30	0.36	0.42	0.49	0.56	0.64	0.72
3	.011	.012	.013	.015	.018	.022	.028	.035	.046	.060	.081	.111	.160	.232	.355	.542
4	.011	.013	.016	.020	.027	.035	.048	.064	.091	.125	.180	.253	.366	.511	.706	.889
5	.012	.014	.020	.026	.037	.051	.074	.104	.152	.214	.308	.425	.585	.751	.907	.985
6	.013	.016	.023	.032	.049	.070	.106	.152	.226	.317	.447	.593	.760	.894	.978	.999
7	.014	.018	.028	.040	.063	.093	.143	.208	.307	.425	.579	.731	.875	.961	.996	>.999
8	.014	.019	.032	.048	.078	.118	.185	.268	.392	.530	.693	.833	.940	.987	.999	>.999
9	.015	.021	.037	.057	.095	.145	.230	.332	.476	.625	.785	.902	.973	.996	>.999	>.999
10	.016	.023	.042	.066	.114	.175	.277	.396	.556	.709	.854	.945	.989	.999	>.999	>.999
11	.017	.025	.047	.076	.134	.207	.326	.460	.630	.778	.904	.970	.996	>.999	>.999	>.999
12	.018	.027	.053	.087	.154	.240	.375	.522	.696	.835	.939	.984	.998	>.999	>.999	>.999
13	.019	.030	.059	.098	.177	.274	.425	.580	.753	.879	.962	.992	.999	>.999	>.999	>.999
14	.019	.032	.065	.110	.200	.309	.473	.635	.802	.913	.977	.996	>.999	>.999	>.999	>.999
15	.020	.034	.072	.123	.223	.345	.520	.685	.843	.938	.986	.998	>.999	>.999	>.999	>.999
16	.021	.036	.078	.136	.248	.380	.565	.730	.877	.957	.992	.999	>.999	>.999	>.999	>.999
17	.022	.039	.086	.150	.273	.416	.608	.770	.905	.970	.995	>.999	>.999	>.999	>.999	>.999
18	.023	.041	.093	.164	.298	.451	.648	.806	.927	.980	.997	>.999	>.999	>.999	>.999	>.999
19	.024	.044	.101	.178	.324	.485	.686	.837	.944	.986	.998	>.999	>.999	>.999	>.999	>.999
20	.025	.047	.108	.193	.350	.519	.721	.864	.958	.991	.999	>.999	>.999	>.999	>.999	>.999
21	.026	.050	.117	.208	.376	.551	.753	.887	.968	.994	>.999	>.999	>.999	>.999	>.999	>.999
22	.027	.052	.125	.224	.401	.583	.782	.907	.977	.996	>.999	>.999	>.999	>.999	>.999	>.999
23	.028	.055	.133	.239	.427	.613	.808	.924	.983	.997	>.999	>.999	>.999	>.999	>.999	>.999
24	.030	.058	.142	.255	.452	.642	.832	.938	.987	.998	>.999	>.999	>.999	>.999	>.999	>.999
25	.031	.061	.151	.272	.477	.670	.854	.949	.991	.999	>.999	>.999	>.999	>.999	>.999	>.999
26	.032	.064	.160	.288	.502	.696	.873	.959	.993	.999	>.999	>.999	>.999	>.999	>.999	>.999
27	.033	.068	.170	.304	.526	.721	.890	.967	.995	>.999	>.999	>.999	>.999	>.999	>.999	>.999
28	.034	.071	.179	.321	.550	.744	.905	.974	.997	>.999	>.999	>.999	>.999	>.999	>.999	>.999
29	.035	.074	.189	.338	.573	.766	.918	.979	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999
30	.036	.078	.199	.355	.595	.786	.930	.983	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999
35	.043	.095	.250	.438	.697	.868	.969	.995	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
40	.049	.115	.303	.518	.779	.922	.987	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
45	.057	.136	.358	.593	.844	.956	.995	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
50	.064	.158	.412	.661	.892	.976	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
55	.072	.181	.466	.721	.927	.987	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
60	.081	.205	.518	.773	.951	.993	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
70	.099	.255	.614	.855	.979	.998	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
80	.118	.308	.698	.910	.992	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
90	.139	.361	.769	.947	.997	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
100	.161	.414	.826	.969	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
120	.208	.518	.907	.990	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
240	.518	.903	.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999
360	.763	.988	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999

TABLE 6: CRITICAL VALUES OF TUKEY'S HSD STATISTIC

df _{EFFECT} = 1			df _{EFFECT} = 2			df _{EFFECT} = 3			df _{EFFECT} = 4		
df _{ERROR}	p = .05	p = .01	df _{ERROR}	p = .05	p = .01	df _{ERROR}	p = .05	p = .01	df _{ERROR}	p = .05	p = .01
2	4.303	9.925	2	5.891	13.449	2	6.928	15.764	2	7.694	17.478
3	3.182	5.841	3	4.179	7.508	3	4.826	8.605	3	5.304	9.422
4	2.776	4.604	4	3.564	5.742	4	4.071	6.486	4	4.446	7.042
5	2.571	4.032	5	3.254	4.933	5	3.690	5.518	5	4.012	5.955
6	2.447	3.707	6	3.068	4.476	6	3.462	4.973	6	3.751	5.343
7	2.365	3.499	7	2.945	4.186	7	3.310	4.626	7	3.578	4.953
8	2.306	3.355	8	2.857	3.985	8	3.202	4.387	8	3.455	4.684
9	2.262	3.250	9	2.792	3.838	9	3.122	4.212	9	3.363	4.488
10	2.228	3.169	10	2.741	3.727	10	3.059	4.079	10	3.291	4.339
11	2.201	3.106	11	2.701	3.639	11	3.010	3.974	11	3.234	4.222
12	2.179	3.055	12	2.668	3.568	12	2.969	3.890	12	3.187	4.127
13	2.160	3.012	13	2.640	3.510	13	2.935	3.821	13	3.149	4.049
14	2.145	2.977	14	2.617	3.461	14	2.907	3.763	14	3.116	3.984
15	2.131	2.947	15	2.597	3.420	15	2.882	3.714	15	3.088	3.929
16	2.120	2.921	16	2.580	3.384	16	2.861	3.671	16	3.064	3.881
17	2.110	2.898	17	2.565	3.353	17	2.843	3.634	17	3.042	3.840
18	2.101	2.878	18	2.552	3.326	18	2.826	3.602	18	3.024	3.803
19	2.093	2.861	19	2.540	3.302	19	2.812	3.574	19	3.007	3.771
20	2.086	2.845	20	2.530	3.280	20	2.799	3.548	20	2.992	3.743
21	2.080	2.831	21	2.521	3.261	21	2.787	3.526	21	2.979	3.717
22	2.074	2.819	22	2.512	3.244	22	2.777	3.505	22	2.967	3.694
23	2.069	2.807	23	2.504	3.228	23	2.767	3.487	23	2.956	3.674
24	2.064	2.797	24	2.497	3.214	24	2.759	3.470	24	2.946	3.655
25	2.060	2.787	25	2.491	3.201	25	2.751	3.454	25	2.937	3.637
26	2.056	2.779	26	2.485	3.189	26	2.743	3.440	26	2.928	3.621
27	2.052	2.771	27	2.479	3.178	27	2.737	3.427	27	2.921	3.607
28	2.048	2.763	28	2.474	3.168	28	2.730	3.415	28	2.913	3.593
29	2.045	2.756	29	2.470	3.159	29	2.725	3.404	29	2.907	3.581
30	2.042	2.750	30	2.465	3.150	30	2.719	3.394	30	2.901	3.569
35	2.030	2.724	35	2.447	3.114	35	2.697	3.351	35	2.875	3.522
40	2.021	2.704	40	2.434	3.088	40	2.680	3.320	40	2.856	3.487
45	2.014	2.690	45	2.424	3.068	45	2.668	3.296	45	2.841	3.460
50	2.009	2.678	50	2.415	3.052	50	2.658	3.277	50	2.830	3.438
55	2.004	2.668	55	2.409	3.039	55	2.649	3.262	55	2.820	3.421
60	2.000	2.660	60	2.403	3.028	60	2.643	3.249	60	2.812	3.407
70	1.994	2.648	70	2.395	3.011	70	2.632	3.229	70	2.800	3.384
80	1.990	2.639	80	2.388	2.999	80	2.624	3.214	80	2.791	3.368
90	1.987	2.632	90	2.383	2.989	90	2.618	3.203	90	2.784	3.355
100	1.984	2.626	100	2.379	2.981	100	2.613	3.193	100	2.778	3.345
120	1.980	2.617	120	2.373	2.970	120	2.605	3.180	120	2.770	3.329
240	1.970	2.596	240	2.358	2.941	240	2.587	3.146	240	2.749	3.292
∞	1.960	2.576	∞	2.344	2.914	∞	2.569	3.113	∞	2.728	3.255

Note. Tabled values are values of the Studentized Range Statistic (q) divided by the square root of 2.

TABLE 6 (CONTINUED)

df_{EFFECT} = 1

df _{ERROR}	Two-Tailed <i>p</i> Values														
	.90	.80	.70	.60	.50	.40	.30	.20	.10	.05	.04	.03	.02	.01	.001
2	.142	.289	.445	.617	.816	1.06	1.386	1.886	2.920	4.303	4.849	5.643	6.965	9.925	31.599
3	.137	.277	.424	.584	.765	.978	1.250	1.638	2.353	3.182	3.482	3.896	4.541	5.841	12.924
4	.134	.271	.414	.569	.741	.941	1.190	1.533	2.132	2.776	2.999	3.298	3.747	4.604	8.610
5	.132	.267	.408	.559	.727	.920	1.156	1.476	2.015	2.571	2.757	3.003	3.365	4.032	6.869
6	.131	.265	.404	.553	.718	.906	1.134	1.440	1.943	2.447	2.612	2.829	3.143	3.707	5.959
7	.130	.263	.402	.549	.711	.896	1.119	1.415	1.895	2.365	2.517	2.715	2.998	3.499	5.408
8	.130	.262	.399	.546	.706	.889	1.108	1.397	1.860	2.306	2.449	2.634	2.896	3.355	5.041
9	.129	.261	.398	.543	.703	.883	1.100	1.383	1.833	2.262	2.398	2.574	2.821	3.250	4.781
10	.129	.260	.397	.542	.700	.879	1.093	1.372	1.812	2.228	2.359	2.527	2.764	3.169	4.587
11	.129	.260	.396	.540	.697	.876	1.088	1.363	1.796	2.201	2.328	2.491	2.718	3.106	4.437
12	.128	.259	.395	.539	.695	.873	1.083	1.356	1.782	2.179	2.303	2.461	2.681	3.055	4.318
13	.128	.259	.394	.538	.694	.870	1.079	1.350	1.771	2.160	2.282	2.436	2.650	3.012	4.221
14	.128	.258	.393	.537	.692	.868	1.076	1.345	1.761	2.145	2.264	2.415	2.624	2.977	4.140
15	.128	.258	.393	.536	.691	.866	1.074	1.341	1.753	2.131	2.249	2.397	2.602	2.947	4.073
16	.128	.258	.392	.535	.690	.865	1.071	1.337	1.746	2.120	2.235	2.382	2.583	2.921	4.015
17	.128	.257	.392	.534	.689	.863	1.069	1.333	1.740	2.110	2.224	2.368	2.567	2.898	3.965
18	.127	.257	.392	.534	.688	.862	1.067	1.330	1.734	2.101	2.214	2.356	2.552	2.878	3.922
19	.127	.257	.391	.533	.688	.861	1.066	1.328	1.729	2.093	2.205	2.346	2.539	2.861	3.883
20	.127	.257	.391	.533	.687	.860	1.064	1.325	1.725	2.086	2.197	2.336	2.528	2.845	3.850
21	.127	.257	.391	.532	.686	.859	1.063	1.323	1.721	2.080	2.189	2.328	2.518	2.831	3.819
22	.127	.256	.390	.532	.686	.858	1.061	1.321	1.717	2.074	2.183	2.320	2.508	2.819	3.792
23	.127	.256	.390	.532	.685	.858	1.060	1.319	1.714	2.069	2.177	2.313	2.500	2.807	3.768
24	.127	.256	.390	.531	.685	.857	1.059	1.318	1.711	2.064	2.172	2.307	2.492	2.797	3.745
25	.127	.256	.390	.531	.684	.856	1.058	1.316	1.708	2.060	2.167	2.301	2.485	2.787	3.725
26	.127	.256	.390	.531	.684	.856	1.058	1.315	1.706	2.056	2.162	2.296	2.479	2.779	3.707
27	.127	.256	.389	.531	.684	.855	1.057	1.314	1.703	2.052	2.158	2.291	2.473	2.771	3.690
28	.127	.256	.389	.530	.683	.855	1.056	1.313	1.701	2.048	2.154	2.286	2.467	2.763	3.674
29	.127	.256	.389	.530	.683	.854	1.055	1.311	1.699	2.045	2.150	2.282	2.462	2.756	3.659
30	.127	.256	.389	.530	.683	.854	1.055	1.310	1.697	2.042	2.147	2.278	2.457	2.750	3.646
35	.127	.255	.388	.529	.682	.852	1.052	1.306	1.690	2.030	2.133	2.262	2.438	2.724	3.591
40	.126	.255	.388	.529	.681	.851	1.050	1.303	1.684	2.021	2.123	2.250	2.423	2.704	3.551
45	.126	.255	.388	.528	.680	.850	1.049	1.301	1.679	2.014	2.115	2.241	2.412	2.690	3.520
50	.126	.255	.388	.528	.679	.849	1.047	1.299	1.676	2.009	2.109	2.234	2.403	2.678	3.496
55	.126	.255	.387	.527	.679	.848	1.046	1.297	1.673	2.004	2.104	2.228	2.396	2.668	3.476
60	.126	.254	.387	.527	.679	.848	1.045	1.296	1.671	2.000	2.099	2.223	2.390	2.660	3.460
70	.126	.254	.387	.527	.678	.847	1.044	1.294	1.667	1.994	2.093	2.215	2.381	2.648	3.435
80	.126	.254	.387	.526	.678	.846	1.043	1.292	1.664	1.990	2.088	2.209	2.374	2.639	3.416
90	.126	.254	.387	.526	.677	.846	1.042	1.291	1.662	1.987	2.084	2.205	2.368	2.632	3.402
100	.126	.254	.386	.526	.677	.845	1.042	1.290	1.660	1.984	2.081	2.201	2.364	2.626	3.390
120	.126	.254	.386	.526	.677	.845	1.041	1.289	1.658	1.980	2.076	2.196	2.358	2.617	3.373
240	.126	.254	.386	.525	.676	.843	1.039	1.285	1.651	1.970	2.065	2.183	2.342	2.596	3.332
∞	.126	.253	.385	.524	.674	.842	1.036	1.282	1.645	1.960	2.054	2.170	2.326	2.576	3.291

TABLE 6 (CONTINUED)

df_{EFFECT} = 2

df _{ERROR}	Two-Tailed p Values														
	.90	.80	.70	.60	.50	.40	.30	.20	.10	.05	.04	.03	.02	.01	.001
2	.449	.674	.883	1.10	1.35	1.65	2.063	2.701	4.054	5.891	6.621	7.685	9.461	13.45	42.765
3	.445	.661	.855	1.05	1.27	1.52	1.835	2.295	3.159	4.179	4.550	5.066	5.873	7.508	16.487
4	.443	.655	.842	1.03	1.23	1.45	1.735	2.124	2.811	3.564	3.826	4.180	4.715	5.742	10.595
5	.442	.651	.835	1.02	1.21	1.42	1.679	2.030	2.628	3.254	3.465	3.746	4.162	4.933	8.253
6	.441	.649	.830	1.01	1.19	1.40	1.643	1.972	2.516	3.068	3.251	3.492	3.842	4.476	7.042
7	.441	.647	.826	1.00	1.18	1.38	1.618	1.931	2.440	2.945	3.110	3.325	3.634	4.186	6.315
8	.440	.646	.823	.995	1.17	1.37	1.600	1.902	2.386	2.857	3.010	3.207	3.489	3.985	5.833
9	.440	.644	.821	.992	1.17	1.36	1.586	1.879	2.345	2.792	2.935	3.120	3.382	3.838	5.493
10	.440	.644	.820	.989	1.16	1.35	1.575	1.861	2.312	2.741	2.877	3.053	3.300	3.727	5.240
11	.439	.643	.818	.986	1.16	1.35	1.566	1.847	2.287	2.701	2.832	2.999	3.235	3.639	5.045
12	.439	.642	.817	.984	1.16	1.34	1.559	1.835	2.266	2.668	2.794	2.956	3.182	3.568	4.891
13	.439	.642	.816	.983	1.15	1.34	1.553	1.826	2.248	2.640	2.763	2.920	3.139	3.510	4.766
14	.439	.642	.815	.981	1.15	1.33	1.547	1.817	2.233	2.617	2.737	2.890	3.102	3.461	4.662
15	.439	.641	.815	.980	1.15	1.33	1.543	1.810	2.220	2.597	2.715	2.864	3.071	3.420	4.575
16	.439	.641	.814	.979	1.15	1.33	1.539	1.804	2.209	2.580	2.695	2.841	3.044	3.384	4.501
17	.439	.641	.813	.978	1.15	1.33	1.535	1.798	2.199	2.565	2.679	2.822	3.021	3.353	4.437
18	.439	.640	.813	.977	1.14	1.33	1.532	1.793	2.191	2.552	2.664	2.805	3.000	3.326	4.381
19	.438	.640	.813	.977	1.14	1.32	1.529	1.789	2.183	2.540	2.651	2.790	2.982	3.302	4.332
20	.438	.640	.812	.976	1.14	1.32	1.527	1.785	2.176	2.530	2.639	2.776	2.966	3.280	4.289
21	.438	.640	.812	.975	1.14	1.32	1.525	1.782	2.170	2.521	2.628	2.764	2.951	3.261	4.250
22	.438	.640	.811	.975	1.14	1.32	1.523	1.778	2.164	2.512	2.619	2.753	2.938	3.244	4.215
23	.438	.640	.811	.974	1.14	1.32	1.521	1.775	2.159	2.504	2.610	2.743	2.926	3.228	4.184
24	.438	.639	.811	.974	1.14	1.32	1.519	1.773	2.155	2.497	2.602	2.734	2.915	3.214	4.156
25	.438	.639	.811	.973	1.14	1.32	1.518	1.770	2.150	2.491	2.595	2.726	2.905	3.201	4.130
26	.438	.639	.810	.973	1.14	1.31	1.516	1.768	2.146	2.485	2.588	2.718	2.896	3.189	4.106
27	.438	.639	.810	.973	1.14	1.31	1.515	1.766	2.143	2.479	2.582	2.711	2.888	3.178	4.084
28	.438	.639	.810	.972	1.14	1.31	1.514	1.764	2.140	2.474	2.576	2.704	2.880	3.168	4.065
29	.438	.639	.810	.972	1.14	1.31	1.512	1.762	2.136	2.470	2.571	2.698	2.873	3.159	4.046
30	.438	.639	.810	.972	1.14	1.31	1.511	1.761	2.134	2.465	2.566	2.693	2.866	3.150	4.029
35	.438	.639	.809	.971	1.13	1.31	1.507	1.754	2.122	2.447	2.546	2.670	2.838	3.114	3.959
40	.438	.638	.808	.970	1.13	1.31	1.504	1.749	2.113	2.434	2.531	2.653	2.818	3.088	3.909
45	.438	.638	.808	.969	1.13	1.30	1.501	1.745	2.106	2.424	2.519	2.639	2.802	3.068	3.870
50	.438	.638	.808	.968	1.13	1.30	1.499	1.742	2.100	2.415	2.510	2.629	2.790	3.052	3.839
55	.438	.638	.808	.968	1.13	1.30	1.498	1.739	2.096	2.409	2.503	2.620	2.780	3.039	3.814
60	.438	.638	.807	.968	1.13	1.30	1.496	1.737	2.092	2.403	2.497	2.613	2.772	3.028	3.794
70	.438	.637	.807	.967	1.13	1.30	1.494	1.734	2.086	2.395	2.487	2.602	2.759	3.011	3.762
80	.438	.637	.807	.967	1.13	1.30	1.492	1.731	2.082	2.388	2.480	2.594	2.749	2.999	3.738
90	.437	.637	.806	.966	1.13	1.30	1.491	1.729	2.079	2.383	2.474	2.588	2.741	2.989	3.720
100	.437	.637	.806	.966	1.13	1.30	1.490	1.728	2.076	2.379	2.470	2.583	2.735	2.981	3.706
120	.437	.637	.806	.966	1.13	1.30	1.489	1.725	2.072	2.373	2.463	2.575	2.726	2.970	3.684
240	.437	.637	.805	.965	1.12	1.29	1.485	1.719	2.062	2.358	2.447	2.556	2.704	2.941	3.632
∞	.437	.636	.805	.964	1.12	1.29	1.481	1.714	2.052	2.344	2.430	2.538	2.682	2.914	3.581

TABLE 6 (CONTINUED)

df_{EFFECT} = 3

df _{ERROR}	Two-Tailed <i>p</i> Values														
	.90	.80	.70	.60	.50	.40	.30	.20	.10	.05	.04	.03	.02	.01	.001
2	.672	.926	1.16	1.40	1.68	2.02	2.490	3.223	4.789	6.928	7.780	9.023	11.10	15.76	50.056
3	.676	.918	1.13	1.34	1.58	1.85	2.201	2.710	3.676	4.826	5.246	5.830	6.746	8.605	18.839
4	.679	.914	1.12	1.32	1.53	1.77	2.073	2.494	3.243	4.071	4.360	4.752	5.345	6.486	11.906
5	.681	.913	1.11	1.30	1.50	1.73	2.001	2.375	3.015	3.690	3.919	4.224	4.676	5.518	9.166
6	.683	.912	1.10	1.29	1.48	1.70	1.955	2.300	2.874	3.462	3.657	3.914	4.290	4.973	7.753
7	.684	.911	1.10	1.28	1.47	1.68	1.924	2.248	2.780	3.310	3.484	3.711	4.039	4.626	6.907
8	.685	.911	1.10	1.28	1.46	1.66	1.900	2.210	2.711	3.202	3.361	3.568	3.864	4.387	6.348
9	.686	.911	1.10	1.27	1.45	1.65	1.882	2.182	2.660	3.122	3.270	3.462	3.735	4.212	5.953
10	.686	.910	1.10	1.27	1.45	1.64	1.868	2.159	2.619	3.059	3.200	3.380	3.636	4.079	5.661
11	.687	.910	1.09	1.27	1.44	1.63	1.856	2.141	2.587	3.010	3.143	3.315	3.558	3.974	5.436
12	.687	.910	1.09	1.27	1.44	1.63	1.847	2.125	2.560	2.969	3.098	3.263	3.494	3.890	5.258
13	.688	.910	1.09	1.26	1.44	1.62	1.839	2.113	2.538	2.935	3.060	3.219	3.442	3.821	5.113
14	.688	.910	1.09	1.26	1.43	1.62	1.832	2.102	2.519	2.907	3.028	3.182	3.398	3.763	4.993
15	.688	.910	1.09	1.26	1.43	1.62	1.826	2.093	2.503	2.882	3.000	3.151	3.360	3.714	4.893
16	.688	.910	1.09	1.26	1.43	1.61	1.821	2.085	2.489	2.861	2.977	3.124	3.328	3.671	4.808
17	.689	.910	1.09	1.26	1.43	1.61	1.816	2.078	2.477	2.843	2.956	3.100	3.299	3.634	4.734
18	.689	.910	1.09	1.26	1.43	1.61	1.812	2.071	2.466	2.826	2.938	3.079	3.275	3.602	4.670
19	.689	.910	1.09	1.26	1.42	1.60	1.809	2.066	2.456	2.812	2.922	3.061	3.253	3.574	4.613
20	.689	.910	1.09	1.26	1.42	1.60	1.805	2.061	2.448	2.799	2.907	3.044	3.233	3.548	4.564
21	.689	.910	1.09	1.26	1.42	1.60	1.803	2.056	2.440	2.787	2.894	3.029	3.216	3.526	4.519
22	.689	.909	1.09	1.25	1.42	1.60	1.800	2.052	2.433	2.777	2.882	3.016	3.200	3.505	4.479
23	.690	.909	1.09	1.25	1.42	1.60	1.797	2.048	2.426	2.767	2.872	3.004	3.185	3.487	4.444
24	.690	.909	1.09	1.25	1.42	1.60	1.795	2.045	2.421	2.759	2.862	2.993	3.172	3.470	4.411
25	.690	.909	1.09	1.25	1.42	1.59	1.793	2.042	2.415	2.751	2.853	2.983	3.160	3.454	4.381
26	.690	.909	1.09	1.25	1.42	1.59	1.791	2.039	2.410	2.743	2.845	2.973	3.149	3.440	4.354
27	.690	.909	1.09	1.25	1.42	1.59	1.790	2.036	2.406	2.737	2.838	2.965	3.139	3.427	4.330
28	.690	.909	1.09	1.25	1.42	1.59	1.788	2.034	2.402	2.730	2.831	2.957	3.130	3.415	4.307
29	.690	.909	1.09	1.25	1.42	1.59	1.787	2.031	2.398	2.725	2.824	2.949	3.121	3.404	4.286
30	.690	.909	1.09	1.25	1.42	1.59	1.785	2.029	2.394	2.719	2.818	2.943	3.113	3.394	4.266
35	.691	.909	1.09	1.25	1.41	1.59	1.780	2.020	2.379	2.697	2.793	2.915	3.080	3.351	4.186
40	.691	.909	1.09	1.25	1.41	1.58	1.775	2.014	2.368	2.680	2.775	2.894	3.056	3.320	4.128
45	.691	.909	1.09	1.25	1.41	1.58	1.772	2.009	2.359	2.668	2.761	2.878	3.037	3.296	4.084
50	.691	.909	1.09	1.25	1.41	1.58	1.769	2.005	2.352	2.658	2.750	2.865	3.022	3.277	4.049
55	.691	.909	1.09	1.25	1.41	1.58	1.767	2.001	2.347	2.649	2.741	2.855	3.010	3.262	4.020
60	.691	.909	1.08	1.25	1.41	1.58	1.765	1.999	2.342	2.643	2.733	2.846	3.000	3.249	3.997
70	.692	.909	1.08	1.25	1.41	1.57	1.763	1.994	2.335	2.632	2.721	2.833	2.984	3.229	3.961
80	.692	.909	1.08	1.25	1.40	1.57	1.760	1.991	2.329	2.624	2.712	2.823	2.972	3.214	3.934
90	.692	.909	1.08	1.25	1.40	1.57	1.759	1.988	2.325	2.618	2.705	2.815	2.963	3.203	3.913
100	.692	.909	1.08	1.24	1.40	1.57	1.757	1.986	2.321	2.613	2.700	2.809	2.956	3.193	3.897
120	.692	.909	1.08	1.24	1.40	1.57	1.755	1.983	2.316	2.605	2.692	2.800	2.945	3.180	3.872
240	.692	.909	1.08	1.24	1.40	1.57	1.751	1.976	2.304	2.587	2.672	2.777	2.918	3.146	3.812
∞	.693	.909	1.08	1.24	1.40	1.56	1.746	1.968	2.291	2.569	2.652	2.754	2.892	3.113	3.754

TABLE 6 (CONTINUED)

df_{EFFECT} = 4

df _{ERROR}	Two-Tailed <i>p</i> Values														
	.90	.80	.70	.60	.50	.40	.30	.20	.10	.05	.04	.03	.02	.01	.001
2	.834	1.11	1.36	1.62	1.92	2.29	2.800	3.605	5.330	7.694	8.637	10.01	12.31	17.48	55.467
3	.847	1.10	1.33	1.55	1.80	2.09	2.466	3.013	4.057	5.304	5.762	6.397	7.394	9.422	20.596
4	.855	1.10	1.31	1.52	1.75	2.00	2.317	2.762	3.560	4.446	4.756	5.176	5.813	7.042	12.888
5	.861	1.10	1.31	1.51	1.71	1.95	2.234	2.624	3.298	4.012	4.254	4.578	5.059	5.955	9.850
6	.865	1.10	1.30	1.49	1.69	1.91	2.180	2.537	3.136	3.751	3.956	4.227	4.622	5.343	8.287
7	.868	1.10	1.30	1.49	1.68	1.89	2.143	2.477	3.027	3.578	3.759	3.996	4.339	4.953	7.351
8	.871	1.10	1.30	1.48	1.67	1.87	2.115	2.433	2.948	3.455	3.619	3.834	4.141	4.684	6.733
9	.873	1.11	1.30	1.48	1.66	1.86	2.094	2.399	2.888	3.363	3.515	3.713	3.995	4.488	6.297
10	.874	1.11	1.30	1.47	1.65	1.85	2.077	2.373	2.841	3.291	3.435	3.620	3.883	4.339	5.975
11	.876	1.11	1.29	1.47	1.65	1.84	2.064	2.351	2.804	3.234	3.371	3.546	3.794	4.222	5.726
12	.877	1.11	1.29	1.47	1.64	1.83	2.052	2.333	2.773	3.187	3.318	3.486	3.722	4.127	5.530
13	.878	1.11	1.29	1.47	1.64	1.83	2.043	2.318	2.747	3.149	3.275	3.437	3.663	4.049	5.370
14	.879	1.11	1.29	1.46	1.64	1.82	2.035	2.306	2.725	3.116	3.238	3.395	3.613	3.984	5.239
15	.880	1.11	1.29	1.46	1.63	1.82	2.028	2.295	2.706	3.088	3.207	3.359	3.570	3.929	5.128
16	.880	1.11	1.29	1.46	1.63	1.81	2.022	2.285	2.690	3.064	3.180	3.328	3.534	3.881	5.034
17	.881	1.11	1.29	1.46	1.63	1.81	2.016	2.277	2.676	3.042	3.156	3.301	3.502	3.840	4.953
18	.882	1.11	1.29	1.46	1.63	1.81	2.012	2.270	2.663	3.024	3.135	3.277	3.474	3.803	4.882
19	.882	1.11	1.29	1.46	1.63	1.80	2.007	2.263	2.652	3.007	3.117	3.256	3.449	3.771	4.820
20	.883	1.11	1.29	1.46	1.62	1.80	2.004	2.257	2.642	2.992	3.101	3.237	3.427	3.743	4.766
21	.883	1.11	1.29	1.46	1.62	1.80	2.000	2.252	2.633	2.979	3.086	3.221	3.407	3.717	4.717
22	.883	1.11	1.29	1.46	1.62	1.80	1.997	2.247	2.625	2.967	3.072	3.205	3.389	3.694	4.673
23	.884	1.11	1.29	1.46	1.62	1.80	1.994	2.243	2.617	2.956	3.060	3.192	3.373	3.674	4.634
24	.884	1.11	1.29	1.45	1.62	1.79	1.992	2.238	2.611	2.946	3.049	3.179	3.358	3.655	4.598
25	.884	1.11	1.29	1.45	1.62	1.79	1.989	2.235	2.604	2.937	3.039	3.167	3.344	3.637	4.565
26	.885	1.11	1.29	1.45	1.62	1.79	1.987	2.231	2.599	2.928	3.029	3.157	3.332	3.621	4.536
27	.885	1.11	1.29	1.45	1.62	1.79	1.985	2.228	2.593	2.921	3.021	3.147	3.320	3.607	4.508
28	.885	1.11	1.29	1.45	1.62	1.79	1.983	2.225	2.588	2.913	3.013	3.138	3.310	3.593	4.483
29	.885	1.11	1.29	1.45	1.62	1.79	1.981	2.223	2.584	2.907	3.005	3.130	3.300	3.581	4.460
30	.886	1.11	1.29	1.45	1.61	1.79	1.980	2.220	2.579	2.901	2.999	3.122	3.291	3.569	4.439
35	.886	1.11	1.29	1.45	1.61	1.78	1.973	2.210	2.562	2.875	2.970	3.090	3.253	3.522	4.351
40	.887	1.11	1.29	1.45	1.61	1.78	1.968	2.202	2.549	2.856	2.949	3.066	3.226	3.487	4.287
45	.888	1.11	1.29	1.45	1.61	1.78	1.964	2.196	2.539	2.841	2.933	3.048	3.204	3.460	4.239
50	.888	1.11	1.29	1.45	1.61	1.77	1.961	2.191	2.531	2.830	2.920	3.033	3.187	3.438	4.200
55	.888	1.11	1.29	1.45	1.61	1.77	1.958	2.187	2.524	2.820	2.910	3.022	3.174	3.421	4.169
60	.889	1.11	1.29	1.45	1.61	1.77	1.956	2.184	2.519	2.812	2.901	3.012	3.162	3.407	4.144
70	.889	1.11	1.29	1.45	1.60	1.77	1.953	2.178	2.510	2.800	2.887	2.996	3.144	3.384	4.104
80	.889	1.11	1.29	1.45	1.60	1.77	1.950	2.175	2.504	2.791	2.877	2.985	3.131	3.368	4.074
90	.890	1.11	1.29	1.45	1.60	1.77	1.948	2.172	2.499	2.784	2.869	2.976	3.121	3.355	4.052
100	.890	1.11	1.29	1.45	1.60	1.76	1.946	2.169	2.495	2.778	2.863	2.969	3.113	3.345	4.034
120	.890	1.11	1.29	1.44	1.60	1.76	1.944	2.166	2.489	2.770	2.854	2.959	3.100	3.329	4.007
240	.891	1.11	1.29	1.44	1.60	1.76	1.938	2.157	2.474	2.749	2.831	2.933	3.070	3.292	3.942
∞	.892	1.11	1.29	1.44	1.60	1.76	1.932	2.148	2.460	2.728	2.808	2.907	3.040	3.255	3.878