SOURCEBOOK

Intro Articles

Statistical Tables

Abstract: This chapter provides basic statistical tables. Tables included are the Standard Normal Distribution, Student's (t) Distribution, Snedecor's F Distribution, Tukey's HSD Distribution, and power tables for Cohen's d and Eta-Squared. These tables were used in the annotated output sections of this project.

Keywords: Statistical tables, normal distribution, critical values, power tables

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Standard Normal Distribution

Tabled Values are Percentile Rank (PR) and Two-Tailed Probabilities (p) for the Given Normal Deviate (z)

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

Tabled Values are Percentile Rank (PR) and Two-Tailed Probabilities (p) for the Given Normal Deviate (z)

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

Student's *t* Distribution

Tabled Values are *t* Statistics for the Given Probability and Degrees of Freedom

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

Power Table for Cohen's d

Tabled Values are Probabilities for a One-Sample Design, α = .05, n = Sample Size

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

n	.10	.20	.30	.40	.50	.60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	1.50	1.60
								Cohen's d Effect Size								
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

Tabled Values are Probabilities for a Dependent-Samples Design, α = .05, n = Sample Size

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

Tabled Values are Probabilities for a Dependent-Samples Design, α = .01, n = Sample Size

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

Tabled Values are Probabilities for a Two-Sample Design, α = .05, n = Sample Size

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

Tabled Values are Probabilities for a Two-Sample Design, α = .01, n = Sample Size

n	.10	.20	.30	.40	.50	.60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	1.50	1.60
								Cohen's d Effect Size								
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

Snedecor's F Distribution

Tabled Values are *F* Statistics for the Given Probabilities and Degrees of Freedom

$df_{EFFECT} = 1$			$df_{EFFECT} = 2$			$df_{EFFECT} = 3$			$df_{EFFECT} = 4$		
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

Tabled Values are F Statistics for the Given Criteria and $df_{EFFECT} = 1$

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

Tabled Values are *F* Statistics for the Given Criteria and 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	.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

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

Tabled Values are F Statistics for the Given Criteria and $df_{EFFECT} = 4$

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

Power Table for Eta-Squared

Tables Values are Probabilities for a Single-Factor Design, df_{EFFECT} = 2, α = .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

Tables Values are Probabilities for a Single-Factor Design, df_{EFFECT} = 3, α = .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

Tables Values are Probabilities for a Single-Factor Design, df$_{EFFECT}$ = 2, α = .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

Tables Values are Probabilities for a Single-Factor Design, df_{EFFECT} = 3, α = .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

Tukey's HSD Distribution

Tabled Values are HSD Statistics for the Given Probabilities and Degrees of Freedom

$df_{EFFECT} = 1$			$df_{EFFECT} = 2$			$df_{EFFECT} = 3$			$df_{EFFECT} = 4$		
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

Tabled Values are HSD Statistics for the Given Criteria and $df_{EFFECT} = 1$

df$_{ERROR}$	Two-Tailed p Values														
	.90	.80	.70	.60	.50	.40	.30	.20	.10	.05	.04	.03	.02	.01	.001
2	.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

Tabled Values are HSD Statistics for the Given Criteria and df_{EFFECT} = 2

df_ERROR	.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

Two-Tailed p Values

Tabled Values are HSD Statistics for the Given Criteria and 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	.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

Tabled Values are HSD Statistics for the Given Criteria and $df_{EFFECT} = 4$

df_{ERROR}	.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

Two-Tailed *p* Values