

Snedecor's *F* Distribution

F Statistics for the Given Two-Tailed Probabilities (*p*) and Degrees of Freedom (*df*)

df _{EFFECT} = 1			df _{EFFECT} = 2			df _{EFFECT} = 3			df _{EFFECT} = 4		
df _{ERROR}	<i>p</i> = .05	<i>p</i> = .01	df _{ERROR}	<i>p</i> = .05	<i>p</i> = .01	df _{ERROR}	<i>p</i> = .05	<i>p</i> = .01	df _{ERROR}	<i>p</i> = .05	<i>p</i> = .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

F Statistics for the Given Two-Tailed Probabilities (p) and $df_{\text{EFFECT}} = 1$

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

F Statistics for the Given Two-Tailed Probabilities (p) and $df_{\text{EFFECT}} = 2$

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

F Statistics for the Given Two-Tailed Probabilities (p) and $df_{\text{EFFECT}} = 3$

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

F Statistics for the Given Two-Tailed Probabilities (p) and $df_{\text{EFFECT}} = 4$

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