

# F Table for $\alpha=0.10$

(see next table below for 12 to  $\infty$ )

DF2	DF1									
	1	2	3	4	5	6	7	8	9	10
1	39.86346	49.5	53.59324	55.83296	57.24008	58.20442	58.90595	59.43898	59.85759	60.19498
2	8.52632	9	9.16179	9.24342	9.29263	9.32553	9.34908	9.36677	9.38054	9.39157
3	5.53832	5.46238	5.39077	5.34264	5.30916	5.28473	5.26619	5.25167	5.24	5.23041
4	4.54477	4.32456	4.19086	4.10725	4.05058	4.00975	3.97897	3.95494	3.93567	3.91988
5	4.06042	3.77972	3.61948	3.5202	3.45298	3.40451	3.3679	3.33928	3.31628	3.2974
6	3.77595	3.4633	3.28876	3.18076	3.10751	3.05455	3.01446	2.98304	2.95774	2.93693
7	3.58943	3.25744	3.07407	2.96053	2.88334	2.82739	2.78493	2.75158	2.72468	2.70251
8	3.45792	3.11312	2.9238	2.80643	2.72645	2.66833	2.62413	2.58935	2.56124	2.53804
9	3.3603	3.00645	2.81286	2.69268	2.61061	2.55086	2.50531	2.46941	2.44034	2.41632
10	3.28502	2.92447	2.72767	2.60534	2.52164	2.46058	2.41397	2.37715	2.34731	2.3226
11	3.2252	2.85951	2.66023	2.53619	2.45118	2.38907	2.34157	2.304	2.2735	2.24823
12	3.17655	2.8068	2.60552	2.4801	2.39402	2.33102	2.28278	2.24457	2.21352	2.18776
13	3.13621	2.76317	2.56027	2.43371	2.34672	2.28298	2.2341	2.19535	2.16382	2.13763
14	3.10221	2.72647	2.52222	2.39469	2.30694	2.24256	2.19313	2.1539	2.12195	2.0954
15	3.07319	2.69517	2.48979	2.36143	2.27302	2.20808	2.15818	2.11853	2.08621	2.05932
16	3.04811	2.66817	2.46181	2.33274	2.24376	2.17833	2.128	2.08798	2.05533	2.02815
17	3.02623	2.64464	2.43743	2.30775	2.21825	2.15239	2.10169	2.06134	2.02839	2.00094
18	3.00698	2.62395	2.41601	2.28577	2.19583	2.12958	2.07854	2.03789	2.00467	1.97698
19	2.9899	2.60561	2.39702	2.2663	2.17596	2.10936	2.05802	2.0171	1.98364	1.95573
20	2.97465	2.58925	2.38009	2.24893	2.15823	2.09132	2.0397	1.99853	1.96485	1.93674
21	2.96096	2.57457	2.36489	2.23334	2.14231	2.07512	2.02325	1.98186	1.94797	1.91967
22	2.94858	2.56131	2.35117	2.21927	2.12794	2.0605	2.0084	1.9668	1.93273	1.90425
23	2.93736	2.54929	2.33873	2.20651	2.11491	2.04723	1.99492	1.95312	1.91888	1.89025
24	2.92712	2.53833	2.32739	2.19488	2.10303	2.03513	1.98263	1.94066	1.90625	1.87748
25	2.91774	2.52831	2.31702	2.18424	2.09216	2.02406	1.97138	1.92925	1.89469	1.86578
26	2.90913	2.5191	2.30749	2.17447	2.08218	2.01389	1.96104	1.91876	1.88407	1.85503
27	2.90119	2.51061	2.29871	2.16546	2.07298	2.00452	1.95151	1.90909	1.87427	1.84511
28	2.89385	2.50276	2.2906	2.15714	2.06447	1.99585	1.9427	1.90014	1.8652	1.83593
29	2.88703	2.49548	2.28307	2.14941	2.05658	1.98781	1.93452	1.89184	1.85679	1.82741
30	2.88069	2.48872	2.27607	2.14223	2.04925	1.98033	1.92692	1.88412	1.84896	1.81949
40	2.83535	2.44037	2.22609	2.09095	1.99682	1.92688	1.87252	1.82886	1.7929	1.76269
60	2.79107	2.39325	2.17741	2.04099	1.94571	1.87472	1.81939	1.77483	1.73802	1.70701
120	2.74781	2.34734	2.12999	1.9923	1.89587	1.82381	1.76748	1.72196	1.68425	1.65238
$\infty$	2.70554	2.30259	2.0838	1.94486	1.84727	1.77411	1.71672	1.6702	1.63152	1.59872

DF2	DF1								
	12	15	20	24	30	40	60	120	$\infty$
1	60.70521	61.22034	61.74029	62.00205	62.26497	62.52905	62.79428	63.06064	63.32812
2	9.40813	9.42471	9.44131	9.44962	9.45793	9.46624	9.47456	9.48289	9.49122
3	5.21562	5.20031	5.18448	5.17636	5.16811	5.15972	5.15119	5.14251	5.1337
4	3.89553	3.87036	3.84434	3.83099	3.81742	3.80361	3.78957	3.77527	3.76073
5	3.26824	3.23801	3.20665	3.19052	3.17408	3.15732	3.14023	3.12279	3.105
6	2.90472	2.87122	2.83634	2.81834	2.79996	2.78117	2.76195	2.74229	2.72216
7	2.66811	2.63223	2.59473	2.57533	2.55546	2.5351	2.51422	2.49279	2.47079
8	2.50196	2.46422	2.42464	2.4041	2.38302	2.36136	2.3391	2.31618	2.29257
9	2.37888	2.33962	2.29832	2.27683	2.25472	2.23196	2.20849	2.18427	2.15923
10	2.28405	2.24351	2.20074	2.17843	2.15543	2.13169	2.10716	2.08176	2.05542
11	2.20873	2.16709	2.12305	2.10001	2.07621	2.05161	2.02612	1.99965	1.97211
12	2.14744	2.10485	2.05968	2.03599	2.01149	1.9861	1.95973	1.93228	1.90361
13	2.09659	2.05316	2.00698	1.98272	1.95757	1.93147	1.90429	1.87591	1.8462
14	2.05371	2.00953	1.96245	1.93766	1.91193	1.88516	1.85723	1.828	1.79728
15	2.01707	1.97222	1.92431	1.89904	1.87277	1.84539	1.81676	1.78672	1.75505
16	1.98539	1.93992	1.89127	1.86556	1.83879	1.81084	1.78156	1.75075	1.71817
17	1.95772	1.91169	1.86236	1.83624	1.80901	1.78053	1.75063	1.71909	1.68564
18	1.93334	1.88681	1.83685	1.81035	1.78269	1.75371	1.72322	1.69099	1.65671
19	1.9117	1.86471	1.81416	1.78731	1.75924	1.72979	1.69876	1.66587	1.63077
20	1.89236	1.84494	1.79384	1.76667	1.73822	1.70833	1.67678	1.64326	1.60738
21	1.87497	1.82715	1.77555	1.74807	1.71927	1.68896	1.65691	1.62278	1.58615
22	1.85925	1.81106	1.75899	1.73122	1.70208	1.67138	1.63885	1.60415	1.56678
23	1.84497	1.79643	1.74392	1.71588	1.68643	1.65535	1.62237	1.58711	1.54903
24	1.83194	1.78308	1.73015	1.70185	1.6721	1.64067	1.60726	1.57146	1.5327
25	1.82	1.77083	1.71752	1.68898	1.65895	1.62718	1.59335	1.55703	1.5176
26	1.80902	1.75957	1.70589	1.67712	1.64682	1.61472	1.5805	1.54368	1.5036
27	1.79889	1.74917	1.69514	1.66616	1.6356	1.6032	1.56859	1.53129	1.49057
28	1.78951	1.73954	1.68519	1.656	1.62519	1.5925	1.55753	1.51976	1.47841
29	1.78081	1.7306	1.67593	1.64655	1.61551	1.58253	1.54721	1.50899	1.46704
30	1.7727	1.72227	1.66731	1.63774	1.60648	1.57323	1.53757	1.49891	1.45636
40	1.71456	1.66241	1.60515	1.57411	1.54108	1.50562	1.46716	1.42476	1.37691
60	1.65743	1.60337	1.54349	1.51072	1.47554	1.43734	1.3952	1.34757	1.29146
120	1.6012	1.545	1.48207	1.44723	1.40938	1.3676	1.32034	1.26457	1.19256
$\infty$	1.54578	1.48714	1.4206	1.38318	1.34187	1.29513	1.23995	1.1686	1

# F Table for $\alpha=0.05$

(see next table below for 12 to  $\infty$ )

DF2	DF1									
	1	2	3	4	5	6	8	9	10	
1	161.4476	199.5	215.7073	224.5832	230.1619	233.986	238.8827	240.5433	241.8817	
2	18.5128	19	19.1643	19.2468	19.2964	19.3295	19.371	19.3848	19.3959	
3	10.128	9.5521	9.2766	9.1172	9.0135	8.9406	8.8452	8.8123	8.7855	
4	7.7086	6.9443	6.5914	6.3882	6.2561	6.1631	6.041	5.9988	5.9644	
5	6.6079	5.7861	5.4095	5.1922	5.0503	4.9503	4.8183	4.7725	4.7351	
6	5.9874	5.1433	4.7571	4.5337	4.3874	4.2839	4.1468	4.099	4.06	
7	5.5914	4.7374	4.3468	4.1203	3.9715	3.866	3.7257	3.6767	3.6365	
8	5.3177	4.459	4.0662	3.8379	3.6875	3.5806	3.4381	3.3881	3.3472	
9	5.1174	4.2565	3.8625	3.6331	3.4817	3.3738	3.2296	3.1789	3.1373	
10	4.9646	4.1028	3.7083	3.478	3.3258	3.2172	3.0717	3.0204	2.9782	
11	4.8443	3.9823	3.5874	3.3567	3.2039	3.0946	2.948	2.8962	2.8536	
12	4.7472	3.8853	3.4903	3.2592	3.1059	2.9961	2.8486	2.7964	2.7534	
13	4.6672	3.8056	3.4105	3.1791	3.0254	2.9153	2.7669	2.7144	2.671	
14	4.6001	3.7389	3.3439	3.1122	2.9582	2.8477	2.6987	2.6458	2.6022	
15	4.5431	3.6823	3.2874	3.0556	2.9013	2.7905	2.6408	2.5876	2.5437	
16	4.494	3.6337	3.2389	3.0069	2.8524	2.7413	2.5911	2.5377	2.4935	
17	4.4513	3.5915	3.1968	2.9647	2.81	2.6987	2.548	2.4943	2.4499	
18	4.4139	3.5546	3.1599	2.9277	2.7729	2.6613	2.5102	2.4563	2.4117	
19	4.3807	3.5219	3.1274	2.8951	2.7401	2.6283	2.4768	2.4227	2.3779	
20	4.3512	3.4928	3.0984	2.8661	2.7109	2.599	2.4471	2.3928	2.3479	
21	4.3248	3.4668	3.0725	2.8401	2.6848	2.5727	2.4205	2.366	2.321	
22	4.3009	3.4434	3.0491	2.8167	2.6613	2.5491	2.3965	2.3419	2.2967	
23	4.2793	3.4221	3.028	2.7955	2.64	2.5277	2.3748	2.3201	2.2747	
24	4.2597	3.4028	3.0088	2.7763	2.6207	2.5082	2.3551	2.3002	2.2547	
25	4.2417	3.3852	2.9912	2.7587	2.603	2.4904	2.3371	2.2821	2.2365	
26	4.2252	3.369	2.9752	2.7426	2.5868	2.4741	2.3205	2.2655	2.2197	
27	4.21	3.3541	2.9604	2.7278	2.5719	2.4591	2.3053	1.7306	1.6717	
28	4.196	3.3404	2.9467	2.7141	2.5581	2.4453	2.2913	2.236	2.19	
29	4.183	3.3277	2.934	2.7014	2.5454	2.4324	2.2783	2.2229	2.1768	
30	4.1709	3.3158	2.9223	2.6896	2.5336	2.4205	2.2662	2.2107	2.1646	
40	4.0847	3.2317	2.8387	2.606	2.4495	2.3359	2.1802	2.124	2.0772	
60	4.0012	3.1504	2.7581	2.5252	2.3683	2.2541	2.097	2.0401	1.9926	
120	3.9201	3.0718	2.6802	2.4472	2.2899	2.175	2.0164	1.9588	1.9105	
∞	3.8415	2.9957	2.6049	2.3719	2.2141	2.0986	1.9384	1.8799	1.8307	

DF2	DF1							
	12	15	20	24	30	40	120	$\infty$
1	243.906	245.9499	248.0131	249.0518	250.0951	251.1432	253.2529	254.3144
2	19.4125	19.4291	19.4458	19.4541	19.4624	19.4707	19.4874	19.4957
3	8.7446	8.7029	8.6602	8.6385	8.6166	8.5944	8.5494	8.5264
4	5.9117	5.8578	5.8025	5.7744	5.7459	5.717	5.6581	5.6281
5	4.6777	4.6188	4.5581	4.5272	4.4957	4.4638	4.3985	4.365
6	3.9999	3.9381	3.8742	3.8415	3.8082	3.7743	3.7047	3.6689
7	3.5747	3.5107	3.4445	3.4105	3.3758	3.3404	3.2674	3.2298
8	3.2839	3.2184	3.1503	3.1152	3.0794	3.0428	2.9669	2.9276
9	3.0729	3.0061	2.9365	2.9005	2.8637	2.8259	2.7475	2.7067
10	2.913	2.845	2.774	2.7372	2.6996	2.6609	2.5801	2.5379
11	2.7876	2.7186	2.6464	2.609	2.5705	2.5309	2.448	2.4045
12	2.6866	2.6169	2.5436	2.5055	2.4663	2.4259	2.341	2.2962
13	2.6037	2.5331	2.4589	2.4202	2.3803	2.3392	2.2524	2.2064
14	2.5342	2.463	2.3879	2.3487	2.3082	2.2664	2.1778	2.1307
15	2.4753	2.4034	2.3275	2.2878	2.2468	2.2043	2.1141	2.0658
16	2.4247	2.3522	2.2756	2.2354	2.1938	2.1507	2.0589	2.0096
17	2.3807	2.3077	2.2304	2.1898	2.1477	2.104	2.0107	1.9604
18	2.3421	2.2686	2.1906	2.1497	2.1071	2.0629	1.9681	1.9168
19	2.308	2.2341	2.1555	2.1141	2.0712	2.0264	1.9302	1.878
20	2.2776	2.2033	2.1242	2.0825	2.0391	1.9938	1.8963	1.8432
21	2.2504	2.1757	2.096	2.054	2.0102	1.9645	1.8657	1.8117
22	2.2258	2.1508	2.0707	2.0283	1.9842	1.938	1.838	1.7831
23	2.2036	2.1282	2.0476	2.005	1.9605	1.9139	1.8128	1.757
24	2.1834	2.1077	2.0267	1.9838	1.939	1.892	1.7896	1.733
25	2.1649	2.0889	2.0075	1.9643	1.9192	1.8718	1.7684	1.711
26	2.1479	2.0716	1.9898	1.9464	1.901	1.8533	1.7488	1.6906
27	2.1323	2.0558	1.9736	1.9299	1.8842	1.8361	1.7306	1.6717
28	2.1179	2.0411	1.9586	1.9147	1.8687	1.8203	1.7138	1.6541
29	2.1045	2.0275	1.9446	1.9005	1.8543	1.8055	1.6981	1.6376
30	2.0921	2.0148	1.9317	1.8874	1.8409	1.7918	1.6835	1.6223
40	2.0035	1.9245	1.8389	1.7929	1.7444	1.6928	1.5766	1.5089
60	1.9174	1.8364	1.748	1.7001	1.6491	1.5943	1.4673	1.3893
120	1.8337	1.7505	1.6587	1.6084	1.5543	1.4952	1.3519	1.2539
$\infty$	1.7522	1.6664	1.5705	1.5173	1.4591	1.394	1.2214	1

# F Table for $\alpha=0.025$

(see next table below for 12 to  $\infty$ )

DF2	DF1									
	1	2	3	4	5	6	8	9	10	
1	647.789	799.5	864.163	899.5833	921.8479	937.1111	956.6562	963.2846	968.6274	
2	38.5063	39	39.1655	39.2484	39.2982	39.3315	39.373	39.3869	39.398	
3	17.4434	16.0441	15.4392	15.101	14.8848	14.7347	14.5399	14.4731	14.4189	
4	12.2179	10.6491	9.9792	9.6045	9.3645	9.1973	8.9796	8.9047	8.8439	
5	10.007	8.4336	7.7636	7.3879	7.1464	6.9777	6.7572	6.6811	6.6192	
6	8.8131	7.2599	6.5988	6.2272	5.9876	5.8198	5.5996	5.5234	5.4613	
7	8.0727	6.5415	5.8898	5.5226	5.2852	5.1186	4.8993	4.8232	4.7611	
8	7.5709	6.0595	5.416	5.0526	4.8173	4.6517	4.4333	4.3572	4.2951	
9	7.2093	5.7147	5.0781	4.7181	4.4844	4.3197	4.102	4.026	3.9639	
10	6.9367	5.4564	4.8256	4.4683	4.2361	4.0721	3.8549	3.779	3.7168	
11	6.7241	5.2559	4.63	4.2751	4.044	3.8807	3.6638	3.5879	3.5257	
12	6.5538	5.0959	4.4742	4.1212	3.8911	3.7283	3.5118	3.4358	3.3736	
13	6.4143	4.9653	4.3472	3.9959	3.7667	3.6043	3.388	3.312	3.2497	
14	6.2979	4.8567	4.2417	3.8919	3.6634	3.5014	3.2853	3.2093	3.1469	
15	6.1995	4.765	4.1528	3.8043	3.5764	3.4147	3.1987	3.1227	3.0602	
16	6.1151	4.6867	4.0768	3.7294	3.5021	3.3406	3.1248	3.0488	2.9862	
17	6.042	4.6189	4.0112	3.6648	3.4379	3.2767	3.061	2.9849	2.9222	
18	5.9781	4.5597	3.9539	3.6083	3.382	3.2209	3.0053	2.9291	2.8664	
19	5.9216	4.5075	3.9034	3.5587	3.3327	3.1718	2.9563	2.8801	2.8172	
20	5.8715	4.4613	3.8587	3.5147	3.2891	3.1283	2.9128	2.8365	2.7737	
21	5.8266	4.4199	3.8188	3.4754	3.2501	3.0895	2.874	2.7977	2.7348	
22	5.7863	4.3828	3.7829	3.4401	3.2151	3.0546	2.8392	2.7628	2.6998	
23	5.7498	4.3492	3.7505	3.4083	3.1835	3.0232	2.8077	2.7313	2.6682	
24	5.7166	4.3187	3.7211	3.3794	3.1548	2.9946	2.7791	2.7027	2.6396	
25	5.6864	4.2909	3.6943	3.353	3.1287	2.9685	2.7531	2.6766	2.6135	
26	5.6586	4.2655	3.6697	3.3289	3.1048	2.9447	2.7293	2.6528	1.878	
27	5.6331	4.2421	3.6472	3.3067	3.0828	2.9228	2.7074	2.6309	2.5676	
28	5.6096	4.2205	3.6264	3.2863	3.0626	2.9027	2.6872	2.6106	2.5473	
29	5.5878	4.2006	3.6072	3.2674	3.0438	2.884	2.6686	2.5919	2.5286	
30	5.5675	4.1821	3.5894	3.2499	3.0265	2.8667	2.6513	2.5746	2.5112	
40	5.4239	4.051	3.4633	3.1261	2.9037	2.7444	2.5289	2.4519	2.3882	
60	5.2856	3.9253	3.3425	3.0077	2.7863	2.6274	2.4117	2.3344	2.2702	
120	5.1523	3.8046	3.2269	2.8943	2.674	2.5154	2.2994	2.2217	2.157	
INF	5.0239	3.6889	3.1161	2.7858	2.5665	2.4082	2.1918	2.1136	2.0483	

DF2	DF1							
	12	15	20	24	30	40	120	$\infty$
1	976.7079	984.8668	993.1028	997.2492	1001.414	1005.598	1014.02	1018.258
2	39.4146	39.4313	39.4479	39.4562	39.465	39.473	39.49	39.498
3	14.3366	14.2527	14.1674	14.1241	14.081	14.037	13.947	13.902
4	8.7512	8.6565	8.5599	8.5109	8.461	8.411	8.309	8.257
5	6.5245	6.4277	6.3286	6.278	6.227	6.175	6.069	6.015
6	5.3662	5.2687	5.1684	5.1172	5.065	5.012	4.904	4.849
7	4.6658	4.5678	4.4667	4.415	4.362	4.309	4.199	4.142
8	4.1997	4.1012	3.9995	3.9472	3.894	3.84	3.728	3.67
9	3.8682	3.7694	3.6669	3.6142	3.56	3.505	3.392	3.333
10	3.6209	3.5217	3.4185	3.3654	3.311	3.255	3.14	3.08
11	3.4296	3.3299	3.2261	3.1725	3.118	3.061	2.944	2.883
12	3.2773	3.1772	3.0728	3.0187	2.963	2.906	2.787	2.725
13	3.1532	3.0527	2.9477	2.8932	2.837	2.78	2.659	2.595
14	3.0502	2.9493	2.8437	2.7888	2.732	2.674	2.552	2.487
15	2.9633	2.8621	2.7559	2.7006	2.644	2.585	2.461	2.395
16	2.889	2.7875	2.6808	2.6252	2.568	2.509	2.383	2.316
17	2.8249	2.723	2.6158	2.5598	2.502	2.442	2.315	2.247
18	2.7689	2.6667	2.559	2.5027	2.445	2.384	2.256	2.187
19	2.7196	2.6171	2.5089	2.4523	2.394	2.333	2.203	2.133
20	2.6758	2.5731	2.4645	2.4076	2.349	2.287	2.156	2.085
21	2.6368	2.5338	2.4247	2.3675	2.308	2.246	2.114	2.042
22	2.6017	2.4984	2.389	2.3315	2.272	2.21	2.076	2.003
23	2.5699	2.4665	2.3567	2.2989	2.239	2.176	2.041	1.968
24	2.5411	2.4374	2.3273	2.2693	2.209	2.146	2.01	1.935
25	2.5149	2.411	2.3005	2.2422	2.182	2.118	1.981	1.906
26	2.4908	2.3867	2.2759	2.2174	2.157	2.093	1.954	1.878
27	2.4688	2.3644	2.2533	2.1946	2.133	2.069	1.93	1.853
28	2.4484	2.3438	2.2324	2.1735	2.112	2.048	1.907	1.829
29	2.4295	2.3248	2.2131	2.154	2.092	2.028	1.886	1.807
30	2.412	2.3072	2.1952	2.1359	2.074	2.009	1.866	1.787
40	2.2882	2.1819	2.0677	2.0069	1.943	1.875	1.724	1.637
60	2.1692	2.0613	1.9445	1.8817	1.815	1.744	1.581	1.482
120	2.0548	1.945	1.8249	1.7597	1.69	1.614	1.433	1.31
INF	1.9447	1.8326	1.7085	1.6402	1.566	1.484	1.268	1

# F Table for $\alpha=0.01$

(see next table below for 12 to  $\infty$ )

DF2	DF1									
	1	2	3	4	5	6	8	9	10	
1	4052.181	4999.5	5403.352	5624.583	5763.65	5858.986	5981.07	6022.473	6055.847	
2	98.503	99	99.166	99.249	99.299	99.333	99.374	99.388	99.399	
3	34.116	30.817	29.457	28.71	28.237	27.911	27.489	27.345	27.229	
4	21.198	18	16.694	15.977	15.522	15.207	14.799	14.659	14.546	
5	16.258	13.274	12.06	11.392	10.967	10.672	10.289	10.158	10.051	
6	13.745	10.925	9.78	9.148	8.746	8.466	8.102	7.976	7.874	
7	12.246	9.547	8.451	7.847	7.46	7.191	6.84	6.719	6.62	
8	11.259	8.649	7.591	7.006	6.632	6.371	6.029	5.911	5.814	
9	10.561	8.022	6.992	6.422	6.057	5.802	5.467	5.351	5.257	
10	10.044	7.559	6.552	5.994	5.636	5.386	5.057	4.942	4.849	
11	9.646	7.206	6.217	5.668	5.316	5.069	4.744	4.632	4.539	
12	9.33	6.927	5.953	5.412	5.064	4.821	4.499	4.388	4.296	
13	9.074	6.701	5.739	5.205	4.862	4.62	4.302	4.191	4.1	
14	8.862	6.515	5.564	5.035	4.695	4.456	4.14	4.03	3.939	
15	8.683	6.359	5.417	4.893	4.556	4.318	4.004	3.895	3.805	
16	8.531	6.226	5.292	4.773	4.437	4.202	3.89	3.78	3.691	
17	8.4	6.112	5.185	4.669	4.336	4.102	3.791	3.682	3.593	
18	8.285	6.013	5.092	4.579	4.248	4.015	3.705	3.597	3.508	
19	8.185	5.926	5.01	4.5	4.171	3.939	3.631	3.523	3.434	
20	8.096	5.849	4.938	4.431	4.103	3.871	3.564	3.457	3.368	
21	8.017	5.78	4.874	4.369	4.042	3.812	3.506	3.398	3.31	
22	7.945	5.719	4.817	4.313	3.988	3.758	3.453	3.346	3.258	
23	7.881	5.664	4.765	4.264	3.939	3.71	3.406	3.299	3.211	
24	7.823	5.614	4.718	4.218	3.895	3.667	3.363	3.256	3.168	
25	7.77	5.568	4.675	4.177	3.855	3.627	3.324	3.217	3.129	
26	7.721	5.526	4.637	4.14	3.818	3.591	3.288	3.182	3.094	
27	7.677	5.488	4.601	4.106	3.785	3.558	3.256	3.149	3.062	
28	7.636	5.453	4.568	4.074	3.754	3.528	3.226	3.12	3.032	
29	7.598	5.42	4.538	4.045	3.725	3.499	3.198	3.092	3.005	
30	7.562	5.39	4.51	4.018	3.699	3.473	3.173	3.067	2.979	
40	7.314	5.179	4.313	3.828	3.514	3.291	2.993	2.888	2.801	
60	7.077	4.977	4.126	3.649	3.339	3.119	2.823	2.718	2.632	
120	6.851	4.787	3.949	3.48	3.174	2.956	2.663	2.559	2.472	
∞	6.635	4.605	3.782	3.319	3.017	2.802	2.511	2.407	2.321	

DF2	DF1							
	12	15	20	24	30	40	120	$\infty$
1	6106.321	6157.285	6208.73	6234.631	6260.649	6286.782	6339.391	6365.864
2	99.416	99.433	99.449	99.458	99.466	99.474	99.491	99.499
3	27.052	26.872	26.69	26.598	26.505	26.411	26.221	26.125
4	14.374	14.198	14.02	13.929	13.838	13.745	13.558	13.463
5	9.888	9.722	9.553	9.466	9.379	9.291	9.112	9.02
6	7.718	7.559	7.396	7.313	7.229	7.143	6.969	6.88
7	6.469	6.314	6.155	6.074	5.992	5.908	5.737	5.65
8	5.667	5.515	5.359	5.279	5.198	5.116	4.946	4.859
9	5.111	4.962	4.808	4.729	4.649	4.567	4.398	4.311
10	4.706	4.558	4.405	4.327	4.247	4.165	3.996	3.909
11	4.397	4.251	4.099	4.021	3.941	3.86	3.69	3.602
12	4.155	4.01	3.858	3.78	3.701	3.619	3.449	3.361
13	3.815	3.665	3.587	3.507	3.425	3.341	3.165	3.1748
14	3.8	3.656	3.505	3.427	3.348	3.266	3.094	3.004
15	3.666	3.522	3.372	3.294	3.214	3.132	2.959	2.868
16	3.553	3.409	3.259	3.181	3.101	3.018	2.845	2.753
17	3.455	3.312	3.162	3.084	3.003	2.92	2.746	2.653
18	3.371	3.227	3.077	2.999	2.919	2.835	2.66	2.566
19	3.297	3.153	3.003	2.925	2.844	2.761	2.584	2.489
20	3.231	3.088	2.938	2.859	2.778	2.695	2.517	2.421
21	3.173	3.03	2.88	2.801	2.72	2.636	2.457	2.36
22	3.121	2.978	2.827	2.749	2.667	2.583	2.403	2.305
23	3.074	2.931	2.781	2.702	2.62	2.535	2.354	2.256
24	3.032	2.889	2.738	2.659	2.577	2.492	2.31	2.211
25	2.993	2.85	2.699	2.62	2.538	2.453	2.27	2.169
26	2.958	2.815	2.664	2.585	2.503	2.417	2.233	2.131
27	2.926	2.783	2.632	2.552	2.47	2.384	2.198	2.097
28	2.896	2.753	2.602	2.522	2.44	2.354	2.167	2.064
29	2.868	2.726	2.574	2.495	2.412	2.325	2.138	2.034
30	2.843	2.7	2.549	2.469	2.386	2.299	2.111	2.006
40	2.665	2.522	2.369	2.288	2.203	2.114	1.917	1.805
60	2.496	2.352	2.198	2.115	2.028	1.936	1.726	1.601
120	2.336	2.192	2.035	1.95	1.86	1.763	1.533	1.381
$\infty$	2.185	2.039	1.878	1.791	1.696	1.592	1.325	1