W. H. Cherry

2017-02-20

99.9995*th* PERCENTILES FOR THE *F* DISTRIBUTION [F_{ν_1,ν_2}]

[Calculated with *qf* in **R** Version 3.2.2 using 17-digit arithmetic; the accuracy of all digits in the table entries has *not* been verified]

Each table entry is the value (y) of the random variable $Y \sim F_{\nu_1,\nu_2}$ such that $\Pr(Y \le y) = 0.999995$ (ν_1 is the numerator, ν_2 the denominator, degrees of freedom)

F_{ν_1,ν_2} .999995

Df → ↓ ν_2 / ν_1	1	2	3	4	5	6	7	8	9	10	12	15	20	25	30	40	50	60	75	100	175	350	1,000	
1	16211389382	19999999999	21615185843	22499999999	23056198233	23437499999	23714946754	23925781249	24091374480	24224853515	24426727294	24630560702	24836320907	24960687119	25043972115	25148494902	25211428791	25253475786	25295595246	25337786831	25392138582	25428438643	25452061683	1
2	199998.5	199999.0	199999.2	199999.2	199999.3	199999.3	199999.4	199999.4	199999.4	199999.4	199999.4	199999.4	199999.4	199999.5	199999.5	199999.5	199999.5	199999.5	199999.5	199999.5	199999.5	199999.5	199999.5	
3	5791.9	5128.4	4865.7	4723.7	4634.5	4573.2	4528.6	4494.5	4467.7	4446.1	4413.3	4380.1	4346.4	4325.9	4312.2	4295.0	4284.6	4277.6	4270.6	4263.6	4254.6	4248.6	4244.7	
4	1092.11	892.43	814.94	773.26	747.13	729.19	716.09	706.11	698.24	691.89	682.24	672.46	662.52	656.49	652.44	647.34	644.26	642.20	640.13	638.06	635.38	633.59	632.42	
5	424.00	327.38	290.42	270.63	258.23	249.72	243.51	238.77	235.04	232.02	227.43	222.77	218.04	215.16	213.22	210.78	209.31	208.32	207.33	206.33	205.05	204.19	203.63	5
6	232.867	172.441	149.578	137.371	129.733	124.490	120.661	117.740	115.437	113.573	110.741	107.862	104.933	103.149	101.949	100.435	99.519	98.905	98.289	97.670	96.870	96.334	95.985	
7	154.675	110.958	94.549	85.810	80.347	76.596	73.857	71.766	70.117	68.782	66.752	64.687	62.583	61.300	60.436	59.345	58.685	58.242	57.797	57.350	56.772	56.385	56.132	
8	115.158	80.590	67.694	60.839	56.556	53.616	51.469	49.829	48.535	47.487	45.893	44.270	42.614	41.603	40.922	40.061	39.539	39.189	38.837	38.484	38.026	37.719	37.519	
9	92.253	63.298	52.549	46.844	43.281	40.835	39.048	37.683	36.606	35.733	34.404	33.050	31.668	30.823	30.253	29.532	29.094	28.801	28.506	28.209	27.824	27.566	27.398	
10	77.655	52.435	43.108	38.164	35.077	32.958	31.410	30.227	29.293	28.536	27.383	26.207	25.005	24.269	23.773	23.144	22.762	22.506	22.248	21.989	21.652	21.426	21.279	10
11	67.688	45.104	36.778	32.369	29.618	27.728	26.348	25.292	24.459	23.783	22.753	21.702	20.627	19.968	19.523	18.959	18.616	18.386	18.154	17.921	17.618	17.415	17.282	
12	60.520	39.883	32.295	28.280	25.775	24.054	22.797	21.836	21.076	20.460	19.521	18.562	17.579	16.977	16.570	16.053	15.739	15.528	15.315	15.100	14.822	14.635	14.513	
13	55.153	36.007	28.981	25.267	22.950	21.358	20.195	19.305	18.602	18.031	17.161	16.272	15.360	14.801	14.422	13.942	13.649	13.452	13.254	13.054	12.794	12.619	12.505	
14	51.0030	33.0302	26.4477	22.9693	20.7994	19.3094	18.2195	17.3861	16.7271	16.1925	15.3768	14.5423	13.6860	13.1601	12.8038	12.3513	12.0757	11.8901	11.7029	11.5140	11.2686	11.1033	10.9951	
15	47.7097	30.6826	24.4562	21.1677	19.1165	17.7077	16.6772	15.8889	15.2655	14.7596	13.9874	13.1969	12.3851	11.8861	11.5477	11.1176	10.8555	10.6788	10.5005	10.3206	10.0866	9.9288	9.8255	15
16	45.0392	28.7891	22.8550	19.7221	17.7682	16.4262	15.4442	14.6930	14.0987	13.6163	12.8797	12.1253	11.3499	10.8727	10.5490	10.1372	9.8860	9.7165	9.5455	9.3728	9.1480	8.9963	8.8969	
17	42.8343	27.2330	21.5427	18.5397	16.6669	15.3804	14.4390	13.7186	13.1486	12.6858	11.9789	11.2544	10.5092	10.0503	9.7387	9.3420	9.0998	8.9364	8.7713	8.6045	8.3872	8.2405	8.1443	
18	40.9855	25.9338	20.4498	17.5565	15.7522	14.5128	13.6056	12.9113	12.3618	11.9155	11.2337	10.5346	9.8148	9.3712	9.0698	8.6859	8.4512	8.2928	8.1327	7.9708	7.7598	7.6172	7.5236	
19	39.4149	24.8342	19.5268	16.7275	14.9819	13.7826	12.9047	12.2327	11.7008	11.2687	10.6082	9.9308	9.2328	8.8023	8.5095	8.1363	7.9081	7.7539	7.5980	7.4403	7.2345	7.0954	7.0040	
20	38.0652	23.8925	18.7378	16.0199	14.3250	13.1605	12.3080	11.6552	11.1385	10.7186	10.0767	9.4179	8.7387	8.3194	8.0341	7.6702	7.4474	7.2969	7.1445	6.9903	6.7890	6.6528	6.5633	20
22	35.8680	22.3660	17.4624	14.8779	13.2664	12.1589	11.3480	10.7268	10.2349	9.8351	9.2236	8.5953	7.9468	7.5459	7.2728	6.9239	6.7100	6.5653	6.4187	6.2701	6.0759	5.9443	5.8577	
24	34.1584	21.1844	16.4781	13.9985	12.4523	11.3897	10.6114	10.0151	9.5427	9.1587	8.5709	7.9666	7.3420	6.9554	6.6918	6.3545	6.1474	6.0071	5.8649	5.7206	5.5317	5.4035	5.3190	
26	32.7922	20.2441	15.6968	13.3017	11.8083	10.7818	10.0297	9.4534	8.9967	8.6253	8.0567	7.4716	6.8663	6.4911	6.2349	5.9069	5.7052	5.5684	5.4296	5.2886	5.1038	4.9780	4.8951	
28	31.6764	19.4790	15.0626	12.7369	11.2868	10.2899	9.5595	8.9996	8.5559	8.1949	7.6419	7.0726	6.4830	6.1171	5.8671	5.5464	5.3490	5.2151	5.0790	4.9406	4.7589	4.6350	4.5533	
30	30.7487	18.8449	14.5378	12.2703	10.8564	9.8844	9.1720	8.6258	8.1928	7.8405	7.3007	6.7445	6.1680	5.8098	5.5649	5.2503	5.0565	4.9248	4.7909	4.6545	4.4753	4.3529	4.2720	30
35	28.9964	17.6523	13.5537	11.3967	10.0518	9.1270	8.4489	7.9289	7.5164	7.1806	6.6656	6.1344	5.5827	5.2390	5.0035	4.7003	4.5129	4.3853	4.2553	4.1225	3.9474	3.8273	3.7478	
40	27.7667	16.8198	12.8688	10.7902	9.4941	8.6027	7.9490	7.4474	7.0494	6.7253	6.2279	5.7143	5.1798	4.8463	4.6173	4.3219	4.1387	4.0138	3.8862	3.7557	3.5828	3.4639	3.3848	
45	26.8573	16.2065	12.3655	10.3452	9.0855	8.2190	7.5834	7.0955	6.7083	6.3929	5.9085	5.4079	4.8863	4.5602	4.3359	4.0460	3.8659	3.7428	3.6168	3.4877	3.3160	3.1975	3.1185	
50	26.1578	15.7363	11.9804	10.0052	8.7736	7.9263	7.3047	6.8275	6.4486	6.1398	5.6656	5.1750	4.6632	4.3428	4.1221	3.8363	3.6584	3.5365	3.4117	3.2834	3.1123	2.9938	2.9145	50
60	25.1533	15.0632	11.4303	9.5203	8.3293	7.5098	6.9084	6.4465	6.0796	5.7805	5.3208	4.8447	4.3469	4.0345	3.8189	3.5388	3.3638	3.2435	3.1200	2.9925	2.8216	2.7023	2.6219	
70	24.4670	14.6051	11.0567	9.1915	8.0284	7.2280	6.6404	6.1891	5.8305	5.5380	5.0882	4.6220	4.1338	3.8268	3.6145	3.3381	3.1648	3.0455	2.9225	2.7953	2.6237	2.5032	2.4214	
80	23.9687	14.2732	10.7865	8.9540	7.8113	7.0248	6.4473	6.0037	5.6511	5.3634	4.9209	4.4618	3.9806	3.6775	3.4675	3.1937	3.0216	2.9028	2.7800	2.6526	2.4801	2.3581	2.2749	
90	23.5905	14.0219	10.5822	8.7745	7.6473	6.8714	6.3016	5.8638	5.5158	5.2318	4.7948	4.3412	3.8652	3.5650	3.3568	3.0848	2.9134	2.7949	2.6723	2.5446	2.3710	2.2475	2.1628	
100	23.2937	13.8250	10.4222	8.6341	7.5191	6.7515	6.1878	5.7546	5.4102	5.1291	4.6964	4.2471	3.7752	3.4773	3.2704	2.9997	2.8290	2.7107	2.5880	2.4600	2.2852	2.1601	2.0739	100
125	22.7720	13.4795	10.1419	8.3884	7.2949	6.5420	5.9890	5.5638	5.2258	4.9498	4.5247	4.0829	3.6181	3.3242	3.1196	2.8512	2.6812	2.5631	2.4401	2.3112	2.1336	2.0050	1.9151	
150	22.4330	13.2555	9.9604	8.2294	7.1499	6.4065	5.8605	5.4407	5.1067	4.8341	4.4140	3.9770	3.5169	3.2254	3.0224	2.7553	2.5857	2.4676	2.3442	2.2144	2.0343	1.9025	1.8093	
175	22.1951	13.0984	9.8333	8.1181	7.0484	6.3119	5.7707	5.3546	5.0236	4.7533	4.3366	3.9031	3.4463	3.1565	2.9544	2.6883	2.5189	2.4006	2.2769	2.1463	1.9640	1.8294	1.7331	
200	22.0189	12.9823	9.7393	8.0359	6.9735	6.2420	5.7045	5.2911	4.9622	4.6936	4.2796	3.8486	3.3941	3.1057	2.9043	2.6388	2.4695	2.3512	2.2271	2.0957	1.9116	1.7744	1.6754	
250	21.7753	12.8219	9.6096	7.9225	6.8703	6.1456	5.6132	5.2036	4.8777	4.6115	4.2010	3.7735	3.3224	3.0357	2.8353	2.5706	2.4014	2.2828	2.1582	2.0257	1.8385	1.6971	1.5933	250
300	21.6150	12.7164	9.5244	7.8480	6.8025	6.0824	5.5533	5.1462	4.8223	4.5577	4.1496	3.7244	3.2754	2.9898	2.7901	2.5258	2.3567	2.2379	2.1128	1.9794	1.7899	1.6451	1.5372	
350	21.5015	12.6418	9.4642	7.7954	6.7546	6.0377	5.5109	5.1057	4.7832	4.5196	4.1132	3.6896	3.2422	2.9574	2.7581	2.4942	2.3250	2.2061	2.0807	1.9466	1.7551	1.6076	1.4962	
400	21.4169	12.5862	9.4193	7.7562	6.7189	6.0045	5.4794	5.0755	4.7540	4.4913	4.0861	3.6638	3.2175	2.9333	2.7343	2.4706	2.3015	2.1824	2.0567	1.9220	1.7290	1.5792	1.4648	
450	21.3514	12.5432	9.3846	7.7259	6.6913	5.9788	5.4551	5.0522	4.7315	4.4695	4.0652	3.6438	3.1984	2.9147	2.7159	2.4524	2.2832	2.1640	2.0381	1.9030	1.7087	1.5570	1.4399	
500	21.2992	12.5090	9.3570	7.7017	6.6694	5.9583	5.4357	5.0336	4.7136	4.4521	4.0486	3.6279	3.1832	2.8999	2.7013	2.4379	2.2687	2.1494	2.0232	1.8877	1.6924	1.5391	1.4196	500
600	21.2213	12.4578	9.3157	7.6657	6.6366	5.9277	5.4068	5.0059	4.6868	4.4261	4.0237	3.6042	3.1606	2.8778	2.6795	2.4163	2.2470	2.1276	2.0011	1.8650	1.6680	1.5120	1.3885	
700	21.1658	12.4214	9.2863	7.6401	6.6133	5.9060	5.3862	4.9862	4.6678	4.4076	4.0061	3.5874	3.1445	2.8620	2.6639	2.4009	2.2316	2.1120	1.9853	1.8488	1.6505	1.4924	1.3657	
800	21.1244	12.3942	9.2644	7.6209	6.5959	5.8898	5.3708	4.9715	4.6536	4.3938	3.9929	3.5748	3.1324	2.8503	2.6524	2.3894	2.2201	2.1004	1.9735	1.8366	1.6373	1.4776	1.3482	
900	21.0922	12.3731	9.2474	7.6061	6.5824	5.8772	5.3589	4.9601	4.6426	4.3832	3.9827	3.5650	3.1231	2.8412	2.6434	2.3805	2.2111	2.0914	1.9643	1.8272	1.6271	1.4660	1.3343	
1,000	21.0665	12.3563	9.2338	7.5942	6.5716	5.8672	5.3494	4.9510	4.6339	4.3746	3.9746	3.5573	3.1157	2.8339	2.6362	2.3734	2.2040	2.0842	1.9570	1.8196	1.6189	1.4566	1.3230	1,000
2,000	20.9515	12.2809	9.1730	7.5412	6.5234	5.8223	5.3069	4.9103	4.5946	4.3365	3.9381	3.5225	3.0824	2.8015	2.6041	2.3415	2.1720	2.0520	1.9242	1.7857	1.5818	1.4139	1.2696	
3,000	20.9133	12.2559	9.1529	7.5236	6.5074	5.8074	5.2928	4.8968	4.5816	4.3238	3.9260	3.5109	3.0714	2.7907	2.5935	2.3310	2.1614	2.0413	1.9133	1.7744	1.5694	1.3994	1.2506	
4,000	20.8943	12.2434	9.1429	7.5148	6.4995	5.8000	5.2858	4.8901	4.5751	4.3175	3.9200	3.5052	3.0659	2.7853	2.5882	2.3257	2.1561	2.0359	1.9078	1.7688	1.5632	1.3921	1.2408	
5,000	20.8829	12.2359	9.1368	7.5096	6.4947	5.7955	5.2816	4.8861	4.5712	4.3138	3.9164	3.5017	3.0626	2.7821	2.5850	2.3226	2.1530	2.0327	1.9046	1.7654	1.5594	1.3876	1.2348	
7,500	20.8677	12.2260	9.1288	7.5026	6.4883	5.7896	5.2760	4.8807	4.5660	4.3087	3.9116	3.4972	3.0582	2.7778	2.5808	2.3184	2.1487	2.0284	1.9002	1.7609	1.5544	1.3817	1.2267	
10,000	20.8601	12.2210	9.1248	7.4991	6.4851	5.7866	5.2732	4.8780	4.5634	4.3062	3.9092	3.4949	3.0560	2.7757	2.5787	2.3163	2.1466	2.0263	1.8981	1.7586	1.5519	1.3787	1.2226	10,000
	1	2	3	4	5	6	7	8	9	10	12	15	20	25	30	40	50	60	75	100	175	350	1,000	

F_{ν_1,ν_2} .999995

2017-02-20

99.9999*th* PERCENTILES FOR THE *F* DISTRIBUTION [F_{ν_1,ν_2}]

[calculated with *qf* in **R** version 3.3.2 using 17-digit arithmetic; the accuracy of all digits in the table entries has *not* been verified]

Each table entry is the value (y) of the random variable $Y \sim F_{\nu_1,\nu_2}$ such that $\Pr(Y \le y) = 0.999999$ (ν_1 is the numerator, ν_2 the denominator, degrees of freedom)

F_{ν_1,ν_2} .999999

Df → ↓ ν_2 / ν_1	1	2	3	4	5	6	7	8	9	10	12	15	20	25	30	40	50	60	75	100	175	350	1,000
1	405 284 734 545	499 999 999 971	540 379 646 061	562 499 999 967	576 404 955 798	585 937 499 966	592 873 668 821	598 144 531 215	602 284 361 977	605 621 337 855	610 668 182 338	615 764 017 527	620 908 022 648	624 017 177 963	626 099 302 860	628 712 372 532	630 285 719 746	631 336 894 630	632 389 881 125	633 444 670 751	634 803 464 541	635 710 966 051	636 301 542 062
2	999 998.5	999 999.0	999 999.2	999 999.2	999 999.3	999 999.3	999 999.4	999 999.4	999 999.4	999 999.4	999 999.4	999 999.4	999 999.4	999 999.5	999 999.5	999 999.5	999 999.5	999 999.5	999 999.5	999 999.5	999 999.5	999 999.5	999 999.5
3	16 940.2	14 998.5	14 229.7	13 814.1	13 553.1	13 373.9	13 243.2	13 143.7	13 065.3	13 002.0	12 906.0	12 808.7	12 710.2	12 650.4	12 610.3	12 559.9	12 529.4	12 509.1	12 488.6	12 468.2	12 441.8	12 424.4	12 412.6
4	2446.16	1998.00	1824.19	1730.72	1672.12	1631.88	1602.52	1580.14	1562.51	1548.26	1526.64	1504.70	1482.44	1468.92	1459.84	1448.40	1441.50	1436.88	1432.24	1427.59	1421.59	1417.57	1414.96
5	811.02	625.47	554.59	516.64	492.88	476.57	464.67	455.59	448.43	442.65	433.86	424.94	415.87	410.36	406.65	401.98	399.16	397.27	395.37	393.47	391.01	389.36	388.29
6	401.92	297.00	257.37	236.23	223.01	213.94	207.32	202.27	198.28	195.06	190.17	185.19	180.13	177.05	174.97	172.36	170.77	169.71	168.65	167.58	166.20	165.27	164.67
7	248.599	177.782	151.266	137.160	128.349	122.302	117.888	114.521	111.864	109.715	106.447	103.123	99.737	97.674	96.284	94.530	93.468	92.756	92.041	91.322	90.393	89.771	89.364
8	175.752	122.491	102.683	92.170	85.608	81.106	77.819	75.311	73.332	71.730	69.293	66.813	64.284	62.741	61.701	60.387	59.591	59.057	58.520	57.981	57.283	56.814	56.509
9	135.415	92.450	76.556	68.135	62.883	59.281	56.650	54.642	53.058	51.774	49.822	47.832	45.802	44.562	43.726	42.669	42.027	41.597	41.164	40.729	40.165	39.787	39.540
10	110.597	74.245	60.855	53.772	49.357	46.328	44.116	42.428	41.095	40.016	38.372	36.696	34.985	33.938	33.232	32.338	31.796	31.431	31.065	30.696	30.218	29.898	29.688
11	94.118	62.307	50.631	44.462	40.618	37.982	36.057	34.586	33.425	32.485	31.052	29.591	28.097	27.183	26.565	25.783	25.308	24.988	24.667	24.344	23.924	23.642	23.458
12	82.532	54.000	43.558	38.048	34.615	32.261	30.541	29.228	28.191	27.350	26.069	24.762	23.424	22.605	22.051	21.349	20.922	20.635	20.346	20.055	19.677	19.423	19.257
13	74.017	47.949	38.432	33.414	30.289	28.146	26.581	25.385	24.440	23.674	22.507	21.315	20.094	19.346	18.839	18.197	17.806	17.543	17.278	17.011	16.665	16.432	16.279
14	67.5362	43.3780	34.5771	29.9399	27.0527	25.0729	23.6264	22.5212	21.6480	20.9400	19.8605	18.7573	17.6264	16.9326	16.4627	15.8665	15.5034	15.2591	15.0127	14.7642	14.4415	14.2242	14.0820
15	62.4611	39.8218	31.5891	27.2541	24.5556	22.7051	21.3531	20.3198	19.5033	18.8411	17.8311	16.7983	15.7389	15.0883	14.6475	14.0876	13.7464	13.5167	13.2849	13.0510	12.7471	12.5422	12.4081
16	58.3927	36.9873	29.2155	25.1254	22.5799	20.8343	19.5587	18.5837	17.8131	17.1880	16.2343	15.2586	14.2569	13.6413	13.2239	12.6934	12.3699	12.1519	11.9319	11.7097	11.4208	11.2260	11.0983
17	55.0669	34.6819	27.2907	23.4028	20.9835	19.3244	18.1118	17.1849	16.4522	15.8577	14.9504	14.0218	13.0677	12.4809	12.0828	11.5763	11.2673	11.0589	10.8486	10.6360	10.3594	10.1727	10.0503
18	52.3027	32.7743	25.7023	21.9839	19.6703	18.0837	16.9240	16.0374	15.3364	14.7675	13.8991	13.0098	12.0956	11.5328	11.1508	10.6645	10.3675	10.1672	9.9648	9.7602	9.4937	9.3137	9.1957
19	49.9724	31.1727	24.3718	20.7974	18.5736	17.0485	15.9337	15.0813	14.4072	13.8601	13.0246	12.1688	11.2883	10.7459	10.3775	9.9082	9.6214	9.4278	9.2321	9.0342	8.7763	8.6019	8.4875
20	47.9838	29.8107	23.2429	19.7921	17.6455	16.1732	15.0970	14.2739	13.6229	13.0945	12.2874	11.4601	10.6086	10.0837	9.7269	9.2721	8.9940	8.8061	8.6162	8.4240	8.1733	8.0037	7.8923
22	44.7746	27.6231	21.4347	18.1851	16.1639	14.7777	13.7641	12.9888	12.3754	11.8773	11.1162	10.3354	9.5309	9.0342	8.6963	8.2649	8.0008	7.8222	7.6414	7.4583	7.2191	7.0570	6.9505
24	42.3028	25.9473	20.0541	16.9610	15.0373	13.7179	12.7531	12.0148	11.4306	10.9561	10.2307	9.4861	8.7179	8.2431	7.9197	7.5064	7.2530	7.0815	6.9077	6.7314	6.5009	6.3445	6.2415
26	40.3441	24.6255	18.9681	16.0000	14.1543	12.8882	11.9622	11.2536	10.6927	10.2370	9.5401	8.8243	8.0850	7.6276	7.3157	6.9167	6.6716	6.5056	6.3373	6.1664	5.9425	5.7904	5.6901
28	38.7558	23.5577	18.0931	15.2269	13.4448	12.2223	11.3281	10.6436	10.1017	9.6613	8.9877	8.2953	7.5796	7.1362	6.8336	6.4461	6.2079	6.0463	5.8823	5.7156	5.4970	5.3482	5.2500
30	37.4431	22.6783	17.3738	14.5924	12.8632	11.6769	10.8090	10.1446	9.6185	9.1908	8.5365	7.8635	7.1673	6.7356	6.4407	6.0627	5.8299	5.6720	5.5115	5.3482	5.1338	4.9876	4.8910
35	34.9841	21.0385	16.0365	13.4153	11.7858	10.6677	9.8496	9.2231	8.7267	8.3231	7.7051	7.0687	6.4092	5.9993	5.7187	5.3582	5.1356	4.9842	4.8301	4.6729	4.4657	4.3240	4.2300
40	33.2751	19.9052	15.1155	12.6065	11.0469	9.9768	9.1935	8.5935	8.1180	7.7312	7.1386	6.5278	5.8938	5.4990	5.2283	4.8797	4.6640	4.5170	4.3670	4.2137	4.0110	3.8717	3.7791
45	32.0204	19.0766	14.4439	12.0179	10.5100	9.4752	8.7177	8.1372	7.6772	7.3028	6.7289	6.1370	5.5217	5.1380	4.8745	4.5345	4.3236	4.1796	4.0325	3.8818	3.6819	3.5440	3.4521
50	31.0608	18.4450	13.9330	11.5708	10.1026	9.0950	8.3573	7.7919	7.3437	6.9789	6.4194	5.8419	5.2410	4.8657	4.6076	4.2741	4.0668	3.9250	3.7799	3.6310	3.4328	3.2956	3.2039
60	29.6910	17.5468	13.2081	10.9376	9.5264	8.5579	7.8485	7.3048	6.8735	6.5224	5.9835	5.4267	4.8462	4.4829	4.2325	3.9079	3.7055	3.5666	3.4241	3.2772	3.0807	2.9438	2.8517
70	28.7612	16.9394	12.7191	10.5112	9.1389	8.1970	7.5071	6.9781	6.5584	6.2166	5.6918	5.1491	4.5824	4.2271	3.9818	3.6631	3.4638	3.3267	3.1856	3.0398	2.8437	2.7061	2.6130
80	28.0891	16.5015	12.3673	10.2047	8.8607	7.9381	7.2623	6.7440	6.3327	5.9977	5.4831	4.9505	4.3939	4.0443	3.8027	3.4881	3.2909	3.1549	3.0147	2.8694	2.6730	2.5344	2.4401
90	27.5808	16.1710	12.1021	9.9740	8.6514	7.7435	7.0784	6.5682	6.1632	5.8333	5.3265	4.8017	4.2526	3.9073	3.6684	3.3568	3.1611	3.0259	2.8863	2.7411	2.5441	2.4043	2.3086
100	27.1830	15.9128	11.8951	9.7940	8.4883	7.5919	6.9351	6.4313	6.0314	5.7055	5.2047	4.6859	4.1428	3.8009	3.5640	3.2548	3.0601	2.9255	2.7862	2.6410	2.4432	2.3021	2.2050
125	26.4861	15.4615	11.5337	9.4802	8.2041	7.3279	6.6858	6.1931	5.8020	5.4832	4.9930	4.4848	3.9520	3.6160	3.3827	3.0774	2.8845	2.7507	2.6116	2.4661	2.2662	2.1217	2.0211
150	26.0348	15.1698	11.3006	9.2779	8.0210	7.1579	6.5254	6.0400	5.6546	5.3404	4.8571	4.3558	3.8297	3.4974	3.2664	2.9634	2.7716	2.6381	2.4991	2.3530	2.1509	2.0034	1.8994
175	25.7188	14.9659	11.1378	9.1368	7.8933	7.0395	6.4137	5.9334	5.5519	5.2409	4.7625	4.2660	3.7445	3.4149	3.1855	2.8841	2.6929	2.5596	2.4205	2.2738	2.0698	1.9195	1.8124
200	25.4852	14.8154	11.0176	9.0326	7.7992	6.9522	6.3313	5.8548	5.4763	5.1677	4.6929	4.1999	3.6819	3.3541	3.1259	2.8257	2.6349	2.5017	2.3624	2.2152	2.0095	1.8567	1.7468
250	25.1630	14.6079	10.8522	8.8894	7.6697	6.8321	6.2181	5.7468	5.3725	5.0671	4.5972	4.1092	3.5959	3.2708	3.0441	2.7454	2.5552	2.4220	2.2824	2.1343	1.9257	1.7687	1.6538
300	24.9512	14.4717	10.7436	8.7954	7.5848	6.7535	6.1440	5.6762	5.3045	5.0013	4.5347	4.0498	3.5397	3.2163	2.9906	2.6929	2.5029	2.3698	2.2299	2.0810	1.8702	1.7098	1.5905
350	24.8014	14.3755	10.6670	8.7291	7.5249	6.6980	6.0917	5.6263	5.2565	4.9549	4.4905	4.0080	3.5000	3.1778	2.9529	2.6559	2.4661	2.3329	2.1928	2.0433	1.8306	1.6674	1.5445
400	24.6899	14.3039	10.6100	8.6798	7.4804	6.6567	6.0528	5.5892	5.2209	4.9204	4.4577	3.9769	3.4706	3.1493	2.9248	2.6283	2.4386	2.3054	2.1651	2.0151	1.8010	1.6354	1.5093
450	24.6037	14.2485	10.5659	8.6417	7.4460	6.6248	6.0228	5.5606	5.1933	4.8937	4.4324	3.9529	3.4478	3.1272	2.9032	2.6070	2.4175	2.2842	2.1437	1.9933	1.7779	1.6104	1.4815
500	24.5349	14.2044	10.5308	8.6113	7.4186	6.5995	5.9989	5.5378	5.1714	4.8725	4.4123	3.9338	3.4298	3.1097	2.8860	2.5901	2.4006	2.2673	2.1266	1.9759	1.7595	1.5903	1.4589
600	24.4324	14.1386	10.4784	8.5661	7.3778	6.5616	5.9633	5.5038	5.1388	4.8409	4.3823	3.9054	3.4028	3.0835	2.8603	2.5649	2.3754	2.2421	2.1012	1.9499	1.7318	1.5598	1.4242
700	24.3594	14.0918	10.4412	8.5339	7.3487	6.5348	5.9380	5.4797	5.1156	4.8185	4.3609	3.8852	3.3837	3.0650	2.8421	2.5469	2.3576	2.2242	2.0831	1.9314	1.7120	1.5379	1.3989
800	24.3049	14.0569	10.4134	8.5099	7.3271	6.5147	5.9191	5.4617	5.0983	4.8017	4.3450	3.8701	3.3694	3.0512	2.8285	2.5336	2.3442	2.2108	2.0695	1.9176	1.6972	1.5213	1.3795
900	24.2627	14.0298	10.3919	8.4913	7.3103	6.4992	5.9044	5.4478	5.0849	4.7887	4.3327	3.8584	3.3583	3.0404	2.8179	2.5232	2.3339	2.2004	2.0590	1.9068	1.6856	1.5084	1.3641
1,000	24.2289	14.0081	10.3747	8.4764	7.2969	6.4868	5.8928	5.4366	5.0742	4.7784	4.3229	3.8491	3.3495	3.0319	2.8095	2.5149	2.3256	2.1921	2.0506	1.8982	1.6764	1.4979	1.3516
2,000	24.0779	13.9114	10.2978	8.4100	7.2370	6.4313	5.8405	5.3869	5.0263	4.7321	4.2789	3.8074	3.3100	2.9936	2.7720	2.4779	2.2887	2.1550	2.0131	1.8597	1.6346	1.4503	1.2926
3,000	24.0278	13.8793	10.2723	8.3880	7.2171	6.4129	5.8232	5.3704	5.0105	4.7168	4.2644	3.7936	3.2970	2.9809	2.7595	2.4657	2.2765	2.1427	2.0006	1.8468	1.6207	1.4342	1.2717
4,000	24.0028	13.8633	10.2596	8.3770	7.2072	6.4038	5.8146	5.3622	5.0026	4.7091	4.2571	3.7868	3.2905	2.9746	2.7533	2.4596	2.2704	2.1366	1.9944	1.8404	1.6137	1.4260	1.2610
5,000	23.9879	13.8538	10.2520	8.3704	7.2013	6.3983	5.8094	5.3572	4.9979	4.7046	4.2528	3.7826	3.2866	2.9709	2.7496	2.4559	2.2667	2.1329	1.9907	1.8366	1.6095	1.4211	1.2544
7,500	23.9679	13.8410	10.2419	8.3617	7.1934	6.3910	5.8026	5.3507	4.9916	4.6985	4.2470	3.7772	3.2814	2.9658	2.7447	2.4510	2.2619	2.1280	1.9857	1.8315	1.6039	1.4145	1.2455
10,000	23.9580	13.8346	10.2368	8.3573	7.1895	6.3873	5.7991	5.3474	4.9884	4.6954	4.2441	3.7744	3.2788	2.9633	2.7422	2.4486	2.2594	2.1256	1.9833	1.8289	1.6011	1.4112	1.2410

F_{ν_1,ν_2} .999999