85*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 $\Pr(Y \le y) = 0.85$ (ν_1 is the numerator, ν_2 the denominator, degrees of freedom)

F_{ν_1,ν_2} .85

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	17.350	21.722	23.572	24.582	25.217	25.652	25.968	26.208	26.397	26.549	26.779	27.011	27.245	27.386	27.481	27.600	27.672	27.719	27.767	27.815	27.877	27.918	27.945	1
2	5.2072	5.6667	5.8258	5.9065	5.9553	5.9880	6.0114	6.0290	6.0427	6.0537	6.0702	6.0867	6.1033	6.1132	6.1199	6.1282	6.1332	6.1365	6.1398	6.1431	6.1474	6.1503	6.1521	
3	3.7030	3.8133	3.8209	3.8166	3.8109	3.8058	3.8013	3.7976	3.7945	3.7918	3.7874	3.7828	3.7778	3.7746	3.7724	3.7695	3.7678	3.7666	3.7654	3.7642	3.7626	3.7616	3.7609	
4	3.1620	3.1640	3.1236	3.0916	3.0678	3.0497	3.0357	3.0245	3.0153	3.0078	2.9959	2.9835	2.9704	2.9623	2.9567	2.9496	2.9453	2.9423	2.9394	2.9364	2.9325	2.9299	2.9282	
5	2.8878	2.8395	2.7764	2.7309	2.6980	2.6733	2.6543	2.6391	2.6268	2.6165	2.6006	2.5838	2.5662	2.5552	2.5477	2.5381	2.5322	2.5282	2.5242	2.5202	2.5149	2.5113	2.5090	5
6	2.7231	2.6462	2.5699	2.5164	2.4780	2.4493	2.4270	2.4093	2.3949	2.3830	2.3643	2.3446	2.3239	2.3110	2.3021	2.2907	2.2837	2.2790	2.2742	2.2694	2.2631	2.2589	2.2561	
7	2.6134	2.5183	2.4334	2.3746	2.3324	2.3009	2.2764	2.2570	2.2411	2.2279	2.2072	2.1854	2.1623	2.1479	2.1379	2.1252	2.1173	2.1120	2.1066	2.1012	2.0941	2.0893	2.0861	
8	2.5352	2.4274	2.3366	2.2740	2.2291	2.1955	2.1694	2.1486	2.1316	2.1174	2.0952	2.0717	2.0468	2.0310	2.0202	2.0063	1.9978	1.9920	1.9861	1.9801	1.9723	1.9670	1.9635	
9	2.4766	2.3597	2.2644	2.1989	2.1520	2.1168	2.0894	2.0675	2.0496	2.0347	2.0112	1.9863	1.9598	1.9431	1.9316	1.9167	1.9075	1.9013	1.8949	1.8885	1.8801	1.8744	1.8706	
10	2.4312	2.3072	2.2086	2.1408	2.0922	2.0557	2.0273	2.0046	1.9860	1.9704	1.9459	1.9198	1.8920	1.8744	1.8622	1.8465	1.8368	1.8301	1.8234	1.8166	1.8076	1.8015	1.7975	10
11	2.3949	2.2654	2.1640	2.0945	2.0446	2.0071	1.9778	1.9543	1.9351	1.9190	1.8936	1.8666	1.8376	1.8192	1.8065	1.7900	1.7797	1.7728	1.7657	1.7585	1.7490	1.7425	1.7383	
12	2.3653	2.2313	2.1278	2.0568	2.0058	1.9673	1.9374	1.9133	1.8935	1.8770	1.8508	1.8229	1.7929	1.7738	1.7606	1.7434	1.7327	1.7254	1.7180	1.7105	1.7005	1.6937	1.6893	
13	2.3407	2.2030	2.0976	2.0254	1.9735	1.9343	1.9037	1.8791	1.8589	1.8419	1.8151	1.7864	1.7556	1.7358	1.7221	1.7043	1.6932	1.6857	1.6779	1.6701	1.6597	1.6526	1.6479	
14	2.3198	2.1791	2.0722	1.9989	1.9462	1.9064	1.8752	1.8502	1.8296	1.8123	1.7849	1.7555	1.7238	1.7036	1.6894	1.6710	1.6596	1.6517	1.6437	1.6356	1.6248	1.6174	1.6125	
15	2.3020	2.1586	2.0504	1.9763	1.9228	1.8825	1.8509	1.8254	1.8044	1.7868	1.7589	1.7289	1.6965	1.6757	1.6613	1.6423	1.6305	1.6224	1.6142	1.6057	1.5945	1.5869	1.5818	15
16	2.2865	2.1409	2.0316	1.9567	1.9027	1.8618	1.8298	1.8040	1.7827	1.7648	1.7364	1.7059	1.6728	1.6515	1.6367	1.6173	1.6051	1.5968	1.5883	1.5796	1.5680	1.5601	1.5549	
17	2.2730	2.1255	2.0152	1.9396	1.8850	1.8437	1.8113	1.7852	1.7636	1.7455	1.7167	1.6856	1.6520	1.6303	1.6151	1.5952	1.5828	1.5742	1.5655	1.5565	1.5446	1.5365	1.5311	
18	2.2611	2.1119	2.0007	1.9245	1.8695	1.8278	1.7951	1.7686	1.7468	1.7285	1.6993	1.6678	1.6335	1.6114	1.5960	1.5757	1.5629	1.5542	1.5452	1.5360	1.5238	1.5154	1.5098	
19	2.2506	2.0998	1.9878	1.9111	1.8556	1.8136	1.7806	1.7539	1.7319	1.7133	1.6838	1.6518	1.6171	1.5946	1.5789	1.5582	1.5451	1.5362	1.5270	1.5176	1.5050	1.4964	1.4907	
20	2.2411	2.0890	1.9764	1.8992	1.8433	1.8010	1.7677	1.7408	1.7185	1.6997	1.6699	1.6376	1.6023	1.5795	1.5635	1.5424	1.5291	1.5200	1.5106	1.5010	1.4881	1.4793	1.4734	20
22	2.2249	2.0705	1.9567	1.8787	1.8222	1.7793	1.7455	1.7182	1.6956	1.6765	1.6460	1.6130	1.5769	1.5535	1.5370	1.5152	1.5015	1.4920	1.4822	1.4722	1.4587	1.4495	1.4433	
24	2.2116	2.0553	1.9405	1.8618	1.8047	1.7614	1.7272	1.6995	1.6766	1.6572	1.6263	1.5927	1.5559	1.5319	1.5149	1.4925	1.4783	1.4685	1.4584	1.4480	1.4340	1.4244	1.4179	
26	2.2004	2.0425	1.9269	1.8476	1.7901	1.7464	1.7119	1.6839	1.6607	1.6411	1.6097	1.5756	1.5381	1.5136	1.4962	1.4733	1.4587	1.4486	1.4382	1.4274	1.4130	1.4029	1.3962	
28	2.1908	2.0317	1.9154	1.8356	1.7777	1.7336	1.6988	1.6705	1.6471	1.6273	1.5955	1.5610	1.5228	1.4979	1.4802	1.4568	1.4418	1.4315	1.4207	1.4096	1.3947	1.3843	1.3773	
30	2.1826	2.0223	1.9054	1.8252	1.7669	1.7226	1.6875	1.6590	1.6354	1.6154	1.5833	1.5483	1.5097	1.4843	1.4663	1.4424	1.4271	1.4165	1.4055	1.3941	1.3787	1.3680	1.3608	30
35	2.1663	2.0038	1.8857	1.8046	1.7457	1.7007	1.6651	1.6362	1.6121	1.5917	1.5590	1.5231	1.4834	1.4572	1.4385	1.4135	1.3975	1.3864	1.3748	1.3627	1.3463	1.3348	1.3270	
40	2.1542	1.9900	1.8711	1.7894	1.7299	1.6845	1.6485	1.6192	1.5948	1.5741	1.5408	1.5043	1.4637	1.4368	1.4175	1.3917	1.3751	1.3635	1.3514	1.3387	1.3214	1.3092	1.3009	
45	2.1449	1.9794	1.8598	1.7776	1.7177	1.6719	1.6357	1.6061	1.5814	1.5605	1.5268	1.4897	1.4483	1.4209	1.4012	1.3747	1.3575	1.3455	1.3329	1.3197	1.3016	1.2888	1.2800	
50	2.1374	1.9710	1.8508	1.7682	1.7080	1.6620	1.6254	1.5956	1.5707	1.5496	1.5155	1.4780	1.4361	1.4081	1.3880	1.3609	1.3433	1.3309	1.3180	1.3043	1.2855	1.2721	1.2629	50
60	2.1264	1.9584	1.8375	1.7543	1.6936	1.6471	1.6102	1.5800	1.5548	1.5334	1.4988	1.4606	1.4176	1.3889	1.3682	1.3401	1.3218	1.3088	1.2952	1.2807	1.2606	1.2462	1.2362	
70	2.1185	1.9495	1.8280	1.7444	1.6833	1.6365	1.5993	1.5689	1.5435	1.5218	1.4868	1.4481	1.4045	1.3752	1.3540	1.3251	1.3062	1.2928	1.2785	1.2634	1.2423	1.2269	1.2162	
80	2.1126	1.9428	1.8209	1.7370	1.6757	1.6287	1.5912	1.5606	1.5350	1.5132	1.4779	1.4388	1.3946	1.3649	1.3433	1.3138	1.2944	1.2805	1.2659	1.2502	1.2281	1.2119	1.2006	
90	2.1081	1.9377	1.8155	1.7313	1.6698	1.6226	1.5850	1.5542	1.5285	1.5065	1.4710	1.4315	1.3869	1.3568	1.3349	1.3049	1.2851	1.2709	1.2559	1.2397	1.2169	1.2000	1.1880	
100	2.1045	1.9336	1.8111	1.7267	1.6650	1.6177	1.5800	1.5491	1.5232	1.5012	1.4654	1.4257	1.3807	1.3503	1.3282	1.2977	1.2776	1.2632	1.2478	1.2312	1.2077	1.1901	1.1776	100
125	2.0980	1.9262	1.8033	1.7185	1.6566	1.6089	1.5710	1.5399	1.5138	1.4916	1.4555	1.4153	1.3696	1.3386	1.3160	1.2847	1.2640	1.2490	1.2329	1.2156	1.1905	1.1716	1.1579	
150	2.0936	1.9213	1.7981	1.7131	1.6509	1.6031	1.5650	1.5338	1.5075	1.4852	1.4488	1.4083	1.3622	1.3308	1.3078	1.2760	1.2548	1.2394	1.2229	1.2048	1.1787	1.1586	1.1439	
175	2.0906	1.9178	1.7944	1.7092	1.6469	1.5990	1.5608	1.5294	1.5031	1.4806	1.4441	1.4034	1.3569	1.3252	1.3020	1.2697	1.2481	1.2325	1.2156	1.1970	1.1700	1.1490	1.1333	
200	2.0883	1.9152	1.7916	1.7063	1.6439	1.5959	1.5576	1.5261	1.4997	1.4772	1.4406	1.3996	1.3529	1.3210	1.2976	1.2650	1.2431	1.2272	1.2100	1.1911	1.1633	1.1415	1.1250	
250	2.0850	1.9116	1.7877	1.7023	1.6397	1.5916	1.5531	1.5216	1.4951	1.4724	1.4356	1.3944	1.3473	1.3151	1.2914	1.2583	1.2360	1.2198	1.2021	1.1826	1.1537	1.1305	1.1128	250
300	2.0829	1.9092	1.7852	1.6996	1.6369	1.5887	1.5502	1.5185	1.4920	1.4693	1.4323	1.3909	1.3436	1.3112	1.2872	1.2538	1.2313	1.2148	1.1968	1.1769	1.1471	1.1229	1.1040	
350	2.0814	1.9074	1.7833	1.6977	1.6349	1.5866	1.5481	1.5164	1.4897	1.4670	1.4299	1.3884	1.3409	1.3083	1.2843	1.2506	1.2278	1.2112	1.1930	1.1727	1.1422	1.1173	1.0975	
400	2.0802	1.9061	1.7819	1.6963	1.6334	1.5851	1.5465	1.5147	1.4881	1.4653	1.4282	1.3866	1.3389	1.3062	1.2821	1.2482	1.2253	1.2085	1.1901	1.1696	1.1385	1.1129	1.0923	
450	2.0793	1.9051	1.7809	1.6951	1.6323	1.5839	1.5452	1.5135	1.4868	1.4640	1.4268	1.3851	1.3374	1.3046	1.2803	1.2463	1.2232	1.2063	1.1878	1.1671	1.1356	1.1095	1.0882	
500	2.0786	1.9043	1.7800	1.6942	1.6314	1.5829	1.5443	1.5125	1.4857	1.4629	1.4257	1.3840	1.3361	1.3032	1.2789	1.2448	1.2216	1.2046	1.1860	1.1651	1.1333	1.1067	1.0848	500
600	2.0776	1.9031	1.7787	1.6929	1.6300	1.5815	1.5428	1.5109	1.4842	1.4613	1.4240	1.3822	1.3342	1.3013	1.2768	1.2425	1.2192	1.2021	1.1832	1.1621	1.1297	1.1023	1.0794	
700	2.0768	1.9023	1.7778	1.6919	1.6290	1.5805	1.5417	1.5099	1.4831	1.4602	1.4228	1.3810	1.3329	1.2998	1.2753	1.2409	1.2175	1.2002	1.1812	1.1599	1.1271	1.0992	1.0754	
800	2.0762	1.9016	1.7771	1.6912	1.6282	1.5797	1.5409	1.5091	1.4823	1.4593	1.4220	1.3801	1.3319	1.2988	1.2742	1.2397	1.2162	1.1988	1.1798	1.1583	1.1252	1.0968	1.0723	
900	2.0758	1.9011	1.7766	1.6907	1.6277	1.5791	1.5403	1.5084	1.4816	1.4587	1.4213	1.3793	1.3311	1.2979	1.2733	1.2387	1.2151	1.1977	1.1786	1.1570	1.1236	1.0948	1.0698	
1,000	2.0754	1.9007	1.7762	1.6902	1.6272	1.5786	1.5398	1.5079	1.4811	1.4581	1.4207	1.3788	1.3305	1.2973	1.2727	1.2380	1.2143	1.1969	1.1777	1.1560	1.1224	1.0933	1.0678	1,000
2,000	2.0738	1.8989	1.7743	1.6882	1.6251	1.5765	1.5376	1.5057	1.4788	1.4558	1.4182	1.3761	1.3277	1.2943	1.2695	1.2345	1.2106	1.1930	1.1734	1.1513	1.1167	1.0861	1.0579	
3,000	2.0733	1.8983	1.7736	1.6876	1.6244	1.5758	1.5369	1.5049	1.4780	1.4550	1.4174	1.3753	1.3268	1.2933	1.2684	1.2334	1.2094	1.1917	1.1720	1.1498	1.1148	1.0836	1.0543	
4,000	2.0730	1.8980	1.7733	1.6872	1.6241	1.5754	1.5365	1.5045	1.4776	1.4546	1.4170	1.3748	1.3263	1.2928	1.2679	1.2328	1.2088	1.1910	1.1713	1.1490	1.1138	1.0823	1.0524	
5,000	2.0729	1.8978	1.7731	1.6870	1.6239	1.5752	1.5363	1.5043	1.4774	1.4543	1.4168	1.3746	1.3260	1.2925	1.2676	1.2325	1.2084	1.1906	1.1709	1.1485	1.1132	1.0815	1.0512	
7,500	2.0727	1.8976	1.7729	1.6868	1.6236	1.5749	1.5360	1.5040	1.4771	1.4540	1.4164	1.3742	1.3256	1.2921	1.2672	1.2320	1.2079	1.1901	1.1703	1.1479	1.1125	1.0805	1.0497	
10,000	2.0726	1.8975	1.7727	1.6866	1.6235	1.5748	1.5359	1.5038	1.4769	1.4539	1.4163	1.3741	1.3254	1.2919	1.2670	1.2318	1.2077	1.1898	1.1700	1.1475	1.1121	1.0800	1.0489	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} .85

W.H. Cherry