50*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 $\Pr(Y \le y) = 0.5$ (ν_1 is the numerator, ν_2 the denominator, degrees of freedom)

University of Waterloo

2017-02-20

$F^{.50}_{\nu_1,\nu_2}$

$Df \rightarrow$ / $\downarrow$ 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	1.0000	1.5000	1.7092	1.8227	1.8937	1.9422	1.9774	2.0041	2.0250	2.0419	2.0674	2.0931	2.1191	2.1347	2.1452	2.1584	2.1663	2.1716	2.1769	2.1822	2.1890	2.1935	2.1965	1
2	.66667	1.0000	1.1349	1.2071	1.2519	1.2824	1.3046	1.3213	1.3344	1.3450	1.3610	1.3771	1.3933	1.4031	1.4096	1.4178	1.4228	1.4261	1.4294	1.4327	1.4370	1.4398	1.4417	
3	.58506	.88110	1.0000	1.0632	1.1024	1.1289	1.1482	1.1627	1.1741	1.1833	1.1972	1.2111	1.2252	1.2337	1.2393	1.2465	1.2507	1.2536	1.2565	1.2593	1.2630	1.2655	1.2671	
4	.54863	.82843	.94053	1.0000	1.0367	1.0617	1.0797	1.0933	1.1040	1.1126	1.1255	1.1386	1.1517	1.1596	1.1649	1.1716	1.1756	1.1782	1.1809	1.1836	1.1870	1.1893	1.1908	
5	.52807	.79877	.90715	.96456	1.0000	1.0240	1.0414	1.0545	1.0648	1.0730	1.0855	1.0980	1.1106	1.1183	1.1234	1.1297	1.1336	1.1361	1.1387	1.1413	1.1446	1.1468	1.1483	5
6	.51489	.77976	.88578	.94191	.97654	1.0000	1.0169	1.0298	1.0398	1.0478	1.0600	1.0722	1.0845	1.0919	1.0969	1.1031	1.1068	1.1093	1.1118	1.1143	1.1176	1.1197	1.1211	
7	.50572	.76655	.87094	.92619	.96026	.98334	1.0000	1.0126	1.0224	1.0304	1.0423	1.0543	1.0664	1.0737	1.0785	1.0846	1.0883	1.0908	1.0932	1.0957	1.0989	1.1010	1.1023	
8	.49898	.75683	.86004	.91465	.94831	.97111	.98757	1.0000	1.0097	1.0175	1.0293	1.0412	1.0531	1.0603	1.0651	1.0711	1.0747	1.0772	1.0796	1.0820	1.0851	1.0872	1.0886	
9	.49382	.74938	.85168	.90580	.93916	.96175	.97805	.99037	1.0000	1.0077	1.0194	1.0311	1.0429	1.0500	1.0548	1.0608	1.0643	1.0667	1.0691	1.0715	1.0746	1.0767	1.0780	
10	.48974	.74349	.84508	.89882	.93193	.95436	.97054	.98276	.99232	1.0000	1.0116	1.0232	1.0349	1.0420	1.0467	1.0526	1.0562	1.0585	1.0609	1.0633	1.0664	1.0684	1.0697	10
11	.48643	.73872	.83973	.89316	.92608	.94837	.96445	.97660	.98610	.99374	1.0052	1.0168	1.0284	1.0354	1.0401	1.0460	1.0495	1.0519	1.0542	1.0566	1.0597	1.0617	1.0630	
12	.48370	.73477	.83531	.88848	.92124	.94342	.95943	.97152	.98097	.98856	1.0000	1.0115	1.0231	1.0300	1.0347	1.0405	1.0440	1.0464	1.0487	1.0511	1.0541	1.0561	1.0575	
13	.48140	.73145	.83159	.88455	.91718	.93927	.95520	.96724	.97665	.98421	.99560	1.0071	1.0186	1.0255	1.0301	1.0360	1.0395	1.0418	1.0441	1.0465	1.0495	1.0515	1.0528	
14	.47944	.72863	.82842	.88119	.91371	.93572	.95160	.96360	.97298	.98051	.99186	1.0033	1.0147	1.0216	1.0263	1.0321	1.0355	1.0379	1.0402	1.0425	1.0455	1.0475	1.0488	
15	.47775	.72619	.82568	.87830	.91072	.93267	.94850	.96046	.96981	.97732	.98863	1.0000	1.0114	1.0183	1.0229	1.0287	1.0322	1.0345	1.0368	1.0391	1.0421	1.0441	1.0454	15
16	.47628	.72406	.82330	.87579	.90812	.93001	.94580	.95772	.96705	.97454	.98582	.99716	1.0086	1.0154	1.0200	1.0258	1.0292	1.0315	1.0338	1.0362	1.0391	1.0411	1.0424	
17	.47499	.72219	.82121	.87357	.90583	.92767	.94342	.95532	.96462	.97209	.98335	.99466	1.0060	1.0129	1.0175	1.0232	1.0266	1.0289	1.0313	1.0336	1.0365	1.0385	1.0398	
18	.47384	.72054	.81935	.87161	.90381	.92560	.94132	.95319	.96247	.96993	.98116	.99244	1.0038	1.0106	1.0152	1.0209	1.0244	1.0267	1.0290	1.0313	1.0342	1.0362	1.0375	
19	.47282	.71906	.81770	.86986	.90200	.92375	.93944	.95129	.96056	.96800	.97920	.99047	1.0018	1.0086	1.0132	1.0189	1.0223	1.0246	1.0269	1.0292	1.0322	1.0341	1.0354	
20	.47191	.71773	.81621	.86829	.90038	.92209	.93776	.94959	.95884	.96626	.97745	.98870	1.0000	1.0068	1.0114	1.0171	1.0205	1.0228	1.0251	1.0274	1.0303	1.0323	1.0336	20
22	.47033	.71545	.81365	.86559	.89758	.91924	.93486	.94665	.95588	.96328	.97444	.98565	.99692	1.0037	1.0082	1.0139	1.0173	1.0196	1.0219	1.0242	1.0271	1.0291	1.0304	
24	.46902	.71356	.81153	.86335	.89526	.91687	.93245	.94422	.95342	.96081	.97194	.98312	.99436	1.0011	1.0057	1.0113	1.0147	1.0170	1.0193	1.0216	1.0245	1.0265	1.0277	
26	.46791	.71196	.80974	.86145	.89331	.91487	.93042	.94217	.95135	.95872	.96983	.98099	.99220	.99896	1.0035	1.0091	1.0125	1.0148	1.0171	1.0193	1.0223	1.0242	1.0255	
28	.46697	.71059	.80821	.85984	.89164	.91316	.92869	.94041	.94958	.95694	.96802	.97917	.99036	.99710	1.0016	1.0073	1.0106	1.0129	1.0152	1.0175	1.0204	1.0223	1.0236	
30	.46616	.70941	.80689	.85844	.89019	.91169	.92719	.93890	.94805	.95540	.96647	.97759	.98877	.99550	1.0000	1.0056	1.0090	1.0113	1.0135	1.0158	1.0187	1.0207	1.0220	30
35	.46453	.70706	.80425	.85565	.88731	.90874	.92420	.93587	.94500	.95232	.96336	.97445	.98560	.99231	.99679	1.0024	1.0058	1.0080	1.0103	1.0126	1.0155	1.0174	1.0187	
40	.46332	.70530	.80228	.85357	.88516	.90654	.92197	.93361	.94272	.95003	.96104	.97211	.98323	.98992	.99440	1.0000	1.0034	1.0056	1.0079	1.0101	1.0130	1.0150	1.0162	
45	.46237	.70393	.80075	.85195	.88349	.90484	.92024	.93186	.94095	.94825	.95924	.97029	.98139	.98807	.99254	.99813	1.0015	1.0037	1.0060	1.0082	1.0111	1.0131	1.0143	
50	.46162	.70285	.79953	.85066	.88216	.90348	.91885	.93047	.93954	.94683	.95781	.96884	.97992	.98660	.99106	.99664	1.0000	1.0022	1.0045	1.0067	1.0096	1.0115	1.0128	50
60	.46050	.70122	.79770	.84873	.88017	.90144	.91679	.92837	.93743	.94471	.95566	.96667	.97773	.98439	.98884	.99441	.99776	1.0000	1.0022	1.0045	1.0074	1.0093	1.0105	
70	.45970	.70006	.79640	.84736	.87875	.89999	.91531	.92689	.93593	.94319	.95413	.96512	.97617	.98282	.98726	.99283	.99617	.99840	1.0006	1.0029	1.0058	1.0077	1.0089	
80	.45910	.69919	.79543	.84633	.87768	.89891	.91421	.92577	.93480	.94206	.95299	.96397	.97500	.98164	.98608	.99164	.99498	.99721	.99944	1.0017	1.0046	1.0065	1.0077	
90	.45863	.69851	.79467	.84553	.87686	.89806	.91336	.92490	.93393	.94118	.95210	.96307	.97409	.98073	.98516	.99072	.99405	.99628	.99851	1.0007	1.0036	1.0055	1.0068	
100	.45826	.69797	.79407	.84489	.87620	.89739	.91267	.92421	.93323	.94048	.95139	.96235	.97337	.98000	.98443	.98998	.99332	.99554	.99777	1.0000	1.0029	1.0048	1.0060	100
125	.45759	.69701	.79298	.84374	.87501	.89618	.91144	.92297	.93198	.93921	.95011	.96106	.97206	.97869	.98311	.98866	.99199	.99421	.99644	.99866	1.0015	1.0034	1.0047	
150	.45715	.69636	.79226	.84298	.87422	.89537	.91062	.92214	.93114	.93837	.94926	.96020	.97119	.97781	.98224	.98777	.99110	.99332	.99555	.99777	1.0006	1.0025	1.0038	
175	.45683	.69590	.79174	.84243	.87366	.89480	.91004	.92155	.93055	.93777	.94865	.95959	.97058	.97719	.98161	.98715	.99047	.99269	.99491	.99714	1.0000	1.0019	1.0032	
200	.45660	.69556	.79136	.84203	.87324	.89436	.90960	.92111	.93010	.93732	.94820	.95913	.97011	.97672	.98114	.98667	.99000	.99222	.99444	.99666	.99952	1.0014	1.0027	
250	.45626	.69507	.79082	.84145	.87265	.89376	.90899	.92049	.92948	.93669	.94756	.95849	.96946	.97607	.98049	.98601	.98934	.99156	.99378	.99600	.99886	1.0008	1.0020	250
300	.45604	.69475	.79046	.84107	.87226	.89336	.90858	.92007	.92906	.93627	.94714	.95806	.96903	.97564	.98005	.98558	.98890	.99111	.99333	.99555	.99841	1.0003	1.0016	
350	.45588	.69452	.79020	.84080	.87197	.89307	.90829	.91978	.92876	.93597	.94684	.95775	.96872	.97532	.97974	.98526	.98858	.99080	.99302	.99524	.99809	1.0000	1.0012	
400	.45576	.69435	.79001	.84060	.87176	.89286	.90807	.91956	.92854	.93575	.94661	.95753	.96849	.97509	.97950	.98503	.98835	.99056	.99278	.99500	.99786	.99976	1.0010	
450	.45567	.69422	.78986	.84044	.87160	.89269	.90790	.91939	.92837	.93558	.94644	.95735	.96831	.97491	.97932	.98484	.98816	.99038	.99260	.99482	.99767	.99958	1.0008	
500	.45560	.69411	.78974	.84031	.87147	.89256	.90777	.91925	.92823	.93544	.94629	.95720	.96817	.97477	.97918	.98470	.98802	.99023	.99245	.99467	.99752	.99943	1.0007	500
600	.45549	.69395	.78956	.84012	.87127	.89236	.90756	.91904	.92802	.93523	.94608	.95699	.96795	.97455	.97896	.98448	.98780	.99001	.99223	.99445	.99730	.99921	1.0004	
700	.45541	.69383	.78943	.83999	.87113	.89221	.90742	.91890	.92787	.93508	.94593	.95684	.96780	.97439	.97880	.98432	.98764	.98985	.99207	.99429	.99714	.99905	1.0003	
800	.45535	.69375	.78933	.83989	.87103	.89210	.90731	.91879	.92776	.93497	.94582	.95672	.96768	.97428	.97868	.98420	.98752	.98974	.99195	.99417	.99702	.99893	1.0002	
900	.45530	.69368	.78926	.83981	.87095	.89202	.90722	.91870	.92767	.93488	.94573	.95664	.96759	.97419	.97859	.98411	.98743	.98964	.99186	.99408	.99693	.99884	1.0001	
1,000	.45527	.69363	.78920	.83974	.87088	.89195	.90715	.91863	.92760	.93481	.94566	.95656	.96752	.97411	.97852	.98404	.98736	.98957	.99179	.99400	.99686	.99876	1.0000	1,000
2,000	.45510	.69339	.78893	.83946	.87059	.89165	.90685	.91832	.92729	.93450	.94534	.95624	.96719	.97379	.97819	.98371	.98703	.98924	.99146	.99367	.99653	.99843	.99967	
3,000	.45505	.69331	.78884	.83936	.87049	.89155	.90675	.91822	.92719	.93439	.94524	.95614	.96709	.97368	.97809	.98360	.98692	.98913	.99135	.99356	.99641	.99832	.99956	
4,000	.45502	.69327	.78879	.83932	.87044	.89150	.90670	.91817	.92714	.93434	.94519	.95608	.96703	.97363	.97803	.98355	.98686	.98908	.99129	.99351	.99636	.99826	.99950	
5,000	.45500	.69324	.78877	.83929	.87041	.89147	.90667	.91814	.92711	.93431	.94515	.95605	.96700	.97359	.97800	.98351	.98683	.98904	.99126	.99347	.99633	.99823	.99947	
7,500	.45498	.69321	.78873	.83925	.87037	.89143	.90663	.91810	.92706	.93427	.94511	.95601	.96696	.97355	.97795	.98347	.98679	.98900	.99121	.99343	.99628	.99818	.99942	
10,000	.45497	.69320	.78871	.83923	.87035	.89141	.90661	.91808	.92704	.93424	.94509	.95599	.96694	.97353	.97793	.98345	.98676	.98898	.99119	.99341	.99626	.99816	.99940	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	

$F^{.50}_{\nu_1,\nu_2}$

W. H. Cherry