

Figure 13.13h. 99th PERCENTILES FOR THE F DISTRIBUTION $[F_{v_1, v_2}]$

[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]

$df \rightarrow$ $v_2 \downarrow$		Each table entry is the value (y) of the random variable $Y \sim F_{v_1, v_2}$ such that $\Pr(Y \leq y) = 0.99$ (v_1 is the numerator, v_2 the denominator, degrees of freedom)																								1
		v_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		
2017-02-20	1	4052.2	4999.5	5403.4	5624.6	5763.6	5859.0	5928.4	5981.1	6022.5	6055.8	6106.3	6157.3	6208.7	6239.8	6260.6	6286.8	6302.5	6313.0	6323.6	6334.1	6347.7	6356.8	6362.7	1	
	2	98.503	99.000	99.166	99.249	99.299	99.333	99.356	99.374	99.388	99.399	99.416	99.433	99.449	99.459	99.466	99.474	99.479	99.482	99.486	99.489	99.493	99.496	99.498		
	3	34.116	30.817	29.457	28.710	28.237	27.911	27.672	27.489	27.345	27.229	27.052	26.872	26.690	26.579	26.505	26.411	26.354	26.316	26.278	26.240	26.191	26.158	26.137		
	4	21.198	18.000	16.694	15.977	15.522	15.207	14.976	14.799	14.659	14.546	14.374	14.198	14.020	13.911	13.838	13.745	13.690	13.652	13.615	13.577	13.528	13.496	13.475		
	5	16.2582	13.2739	12.0600	11.3919	10.9670	10.6723	10.4555	10.2893	10.1578	10.0510	9.8883	9.7222	9.5526	9.4491	9.3793	9.2912	9.2378	9.2020	9.1660	9.1299	9.0832	9.0519	9.0314	5	
	6	13.7450	10.9248	9.7795	9.1483	8.7459	8.4661	8.2600	8.1017	7.9761	7.8741	7.7183	7.5590	7.3958	7.2960	7.2285	7.1432	7.0915	7.0567	7.0218	6.9867	6.9412	6.9107	6.8908		
	7	12.2464	9.5466	8.4513	7.8466	7.4604	7.1914	6.9928	6.8400	6.7188	6.6201	6.4691	6.3143	6.1554	6.0580	5.9920	5.9084	5.8577	5.8236	5.7892	5.7547	5.7099	5.6798	5.6601		
	8	11.2586	8.6491	7.5910	7.0061	6.6318	6.3707	6.1776	6.0289	5.9106	5.8143	5.6667	5.5151	5.3591	5.2631	5.1981	5.1156	5.0654	5.0316	4.9976	4.9633	4.9188	4.8889	4.8694		
	9	10.5614	8.0215	6.9919	6.4221	6.0569	5.8018	5.6129	5.4671	5.3511	5.2565	5.1114	4.9621	4.8080	4.7130	4.6486	4.5666	4.5167	4.4831	4.4492	4.4150	4.3706	4.3407	4.3211		
	10	10.0443	7.5594	6.5523	5.9943	5.6363	5.3858	5.2001	5.0567	4.9424	4.8491	4.7059	4.5581	4.4054	4.3111	4.2469	4.1653	4.1155	4.0819	4.0479	4.0137	3.9692	3.9392	3.9196	10	
	11	9.6460	7.2057	6.2167	5.6683	5.3160	5.0692	4.8861	4.7445	4.6315	4.5393	4.3974	4.2509	4.0990	4.0051	3.9411	3.8596	3.8097	3.7761	3.7421	3.7077	3.6630	3.6329	3.6131		
	12	9.3302	6.9266	5.9525	5.4120	5.0643	4.8206	4.6395	4.4994	4.3875	4.2961	4.1553	4.0096	3.8584	3.7647	3.7008	3.6192	3.5692	3.5355	3.5014	3.4668	3.4219	3.3915	3.3716		
	13	9.0738	6.7010	5.7394	5.2053	4.8616	4.6204	4.4410	4.3021	4.1911	4.1003	3.9603	3.8154	3.6646	3.5710	3.5070	3.4253	3.3752	3.3413	3.3070	3.2723	3.2270	3.1964	3.1763		
	14	8.8616	6.5149	5.5639	5.0354	4.6950	4.4558	4.2779	4.1399	4.0297	3.9394	3.8001	3.6557	3.5052	3.4116	3.3476	3.2656	3.2153	3.1813	3.1468	3.1118	3.0662	3.0353	3.0150		
	15	8.6831	6.3589	5.4170	4.8932	4.5556	4.3183	4.1415	4.0045	3.8948	3.8049	3.6662	3.5222	3.3719	3.2782	3.2141	3.1319	3.0814	3.0471	3.0124	2.9772	2.9312	2.9000	2.8795	15	
	16	8.5310	6.2262	5.2922	4.7726	4.4374	4.2016	4.0259	3.8896	3.7804	3.6909	3.5527	3.4089	3.2587	3.1650	3.1007	3.0182	2.9675	2.9330	2.8981	2.8627	2.8163	2.7848	2.7641		
	17	8.3997	6.1121	5.1850	4.6690	4.3359	4.1015	3.9267	3.7910	3.6822	3.5931	3.4552	3.3117	3.1615	3.0676	3.0032	2.9205	2.8694	2.8348	2.7996	2.7639	2.7171	2.6853	2.6644		
	18	8.2854	6.0129	5.0919	4.5790	4.2479	4.0146	3.8406	3.7054	3.5971	3.5082	3.3706	3.2273	3.0771	2.9831	2.9185	2.8354	2.7841	2.7493	2.7139	2.6779	2.6307	2.5986	2.5775		
	19	8.1849	5.9259	5.0103	4.5003	4.1708	3.9386	3.7653	3.6305	3.5225	3.4338	3.2965	3.1533	3.0031	2.9089	2.8442	2.7608	2.7093	2.6742	2.6386	2.6023	2.5547	2.5223	2.5009		
20	8.0960	5.8489	4.9382	4.4307	4.1027	3.8714	3.6987	3.5644	3.4567	3.3682	3.2311	3.0880	2.9377	2.8434	2.7785	2.6947	2.6430	2.6077	2.5718	2.5353	2.4873	2.4546	2.4329	20		
F_{v_1, v_2} .99	22	7.9454	5.7190	4.8166	4.3134	3.9880	3.7583	3.5867	3.4530	3.3458	3.2576	3.1209	2.9779	2.8274	2.7328	2.6675	2.5831	2.5308	2.4951	2.4588	2.4217	2.3729	2.3395	2.3175		
	24	7.8229	5.6136	4.7181	4.2184	3.8951	3.6667	3.4959	3.3629	3.2560	3.1681	3.0316	2.8887	2.7380	2.6430	2.5773	2.4923	2.4395	2.4035	2.3667	2.3291	2.2794	2.2455	2.2230		
	26	7.7213	5.5263	4.6366	4.1400	3.8183	3.5911	3.4210	3.2884	3.1818	3.0941	2.9578	2.8150	2.6640	2.5686	2.5026	2.4170	2.3637	2.3273	2.2900	2.2519	2.2015	2.1669	2.1440		
	28	7.6356	5.4529	4.5681	4.0740	3.7539	3.5276	3.3581	3.2259	3.1195	3.0320	2.8959	2.7530	2.6017	2.5060	2.4397	2.3535	2.2997	2.2629	2.2253	2.1867	2.1355	2.1003	2.0769		
	30	7.5625	5.3903	4.5097	4.0179	3.6990	3.4735	3.3045	3.1726	3.0665	2.9791	2.8431	2.7002	2.5487	2.4526	2.3860	2.2992	2.2450	2.2079	2.1698	2.1307	2.0788	2.0430	2.0192	30	
	35	7.4191	5.2679	4.3957	3.9082	3.5919	3.3679	3.2000	3.0687	2.9630	2.8758	2.7400	2.5970	2.4448	2.3480	2.2806	2.1926	2.1374	2.0994	2.0604	2.0202	1.9666	1.9294	1.9046		
	40	7.3141	5.1785	4.3126	3.8283	3.5138	3.2910	3.1238	2.9930	2.8876	2.8005	2.6648	2.5216	2.3689	2.2714	2.2034	2.1142	2.0581	2.0194	1.9795	1.9383	1.8831	1.8447	1.8189		
	45	7.2339	5.1103	4.2492	3.7674	3.4544	3.2325	3.0658	2.9353	2.8301	2.7432	2.6076	2.4642	2.3109	2.2129	2.1443	2.0542	1.9972	1.9579	1.9172	1.8751	1.8185	1.7788	1.7521		
	50	7.1706	5.0566	4.1993	3.7195	3.4077	3.1864	3.0202	2.8900	2.7850	2.6981	2.5625	2.4190	2.2652	2.1667	2.0976	2.0066	1.9490	1.9090	1.8677	1.8248	1.7667	1.7260	1.6984	50	
	60	7.0771	4.9774	4.1259	3.6490	3.3389	3.1187	2.9530	2.8233	2.7185	2.6318	2.4961	2.3523	2.1978	2.0984	2.0285	1.9360	1.8772	1.8363	1.7937	1.7493	1.6889	1.6461	1.6169		
	70	7.0114	4.9219	4.0744	3.5996	3.2907	3.0712	2.9060	2.7765	2.6719	2.5852	2.4496	2.3055	2.1504	2.0503	1.9797	1.8861	1.8263	1.7846	1.7410	1.6954	1.6329	1.5882	1.5576		
	80	6.9627	4.8807	4.0363	3.5631	3.2550	3.0361	2.8713	2.7420	2.6374	2.5508	2.4151	2.2709	2.1153	2.0146	1.9435	1.8489	1.7883	1.7459	1.7015	1.6548	1.5905	1.5442	1.5122		
	90	6.9251	4.8491	4.0070	3.5350	3.2276	3.0091	2.8445	2.7154	2.6109	2.5243	2.3886	2.2442	2.0882	1.9871	1.9155	1.8201	1.7588	1.7158	1.6707	1.6231	1.5572	1.5094	1.4762		
	100	6.8953	4.8239	3.9837	3.5127	3.2059	2.9877	2.8233	2.6943	2.5898	2.5033	2.3676	2.2230	2.0666	1.9652	1.8933	1.7972	1.7353	1.6918	1.6461	1.5977	1.5303	1.4812	1.4468	100	
	125	6.8421	4.7791	3.9422	3.4729	3.1671	2.9495	2.7855	2.6567	2.5524	2.4659	2.3301	2.1852	2.0282	1.9260	1.8534	1.7560	1.6930	1.6485	1.6015	1.5515	1.4812	1.4292	1.3922		
	150	6.8069	4.7495	3.9149	3.4467	3.1416	2.9244	2.7606	2.6319	2.5277	2.4412	2.3053	2.1603	2.0028	1.9001	1.8270	1.7286	1.6648	1.6195</							