University of Economics, Prague
FACULTY OF INFORMATICS AND STATISTICS
Department of Statistics and Probability

STATISTICS

TABLES FOR 4ST601

Table I**. Probability Function for the Binomial Distribution**

n	*x*	.01	.05	.10	.15	.20	.25	.30	1/3	.35	.40	.45	.49	.50
2	0	.9801	.9025	.8100	.7225	.6400	.5625	.4900	.4444	.4225	.3600	.3025	.2601	.2500
	1	.0198	.0950	.1800	.2550	.3200	.3750	.4200	.4444	.4550	.4800	.4950	.4998	.5000
	2	.0001	.0225	.0100	.0225	.0400	.0625	.0900	.1111	.1225	.1600	.2025	.2401	.2500
3	0	.9703	.8574	.7290	.6141	.5120	.4219	.3430	.2963	.2746	.2160	.1664	.1327	.1250
	1	.0294	.1354	.2430	.3251	.3840	.4219	.4410	.4444	.4436	.4320	.4084	.3823	.3750
	2	.0003	.0071	.0270	.0574	.0960	.1406	.1850	.2222	.2389	.2880	.3341	.3674	.3750
	3	.0000	.0001	.0010	.0034	.0080	.0156	.0270	.0370	.0429	.0640	.0911	.1176	.1250
4	0	.9606	.8145	.6561	.5220	.4096	.3164	.2401	.1975	.1785	.1296	.0915	.0677	.0625
	1	.0388	.1715	.2916	.3685	.4096	.4219	.4116	.3951	.3845	.3456	.2995	.2600	.2500
	2	.0006	.0135	.0486	.0975	.1536	.2109	.2646	.2963	.3105	.3456	.3675	.3747	.3750
	3	.0000	.0005	.0036	.0115	.0256	.0469	.0756	.0988	.1125	.1536	.2005	.2400	.2500
	4	.0000	.0000	.0001	.0005	.0016	.0039	.0081	.0123	.0150	.0256	.0410	.0576	.0625
5	0	.9510	.7738	.5905	.4437	.3277	.2373	.1681	.1317	.1160	.0778	.0503	.0345	.0312
	1	.0480	.2036	.3280	.3915	.4096	.3955	.3602	.3292	.3124	.2592	.2059	.1657	.1562
	2	.0010	.0214	.0729	.1382	.2048	.2637	.3087	.3292	.3364	.3456	.3369	.3185	.3125
	3	.0000	.0011	.0081	.0244	.0512	.0879	.1323	.1646	.1811	.2304	.2757	.3060	.3125
	4	.0000	.0000	.0004	.0022	.0064	.0146	.0284	.0412	.0488	.0768	.1128	.1470	.1562
	5	.0000	.0000	.0000	.0001	.0003	.0010	.0024	.0041	.0053	.0102	.0185	.0283	.0312
6	0	.9415	.7351	.5314	.3771	.2621	.1780	.1176	.0878	.0754	.0467	.0277	.0176	.0156
	1	.0571	.2321	.3543	.3993	.3932	.3560	.3025	.2634	.2437	.1866	.1359	.1014	.0938
	2	.0014	.0305	.0984	.1762	.2458	.2966	.3241	.3292	.3280	.3110	.2780	.2437	.2344
	3	.0000	.0021	.0146	.0425	.0819	.1318	.1852	.2195	.2355	.2765	.3032	.3121	.3125
	4	.0000	.0001	.0012	.0055	.0154	.0330	.0595	.0823	.0951	.1382	.1861	.2249	.2344
	5	.0000	.0000	.0001	.0004	.0015	.0044	.0102	.0165	.0205	.0369	.0609	.0864	.0938
	6	.0000	.0000	.0000	.0000	.0001	.0002	.0007	.0014	.0018	.0041	.0083	.0139	.0156
7	0	.9321	.6983	.4783	.3206	.2097	.1335	.0824	.0585	.0490	.0280	.0152	.0090	.0078
	1	.0659	.2573	.3720	.3960	.3670	.3115	.2471	.2048	.1848	.1306	.0872	.0603	.0547
	2	.0020	.0406	.1240	.2097	.2753	.3115	.3171	.3073	.2985	.2613	.2140	.1740	.1641
	3	.0000	.0036	.0230	.0617	.1147	.1730	.2269	.2561	.2679	.2903	.2918	.2786	.2734
	4	.0000	.0002	.0026	.0109	.0287	.0577	.0972	.1280	.1442	.1935	.2388	.2676	.2734
	5	.0000	.0000	.0002	.0012	.0043	.0115	.0250	.0384	.0466	.0774	.1172	.1543	.1641
	6	.0000	.0000	.0000	.0001	.0004	.0013	.0036	.0064	.0084	.0172	.0320	.0494	.0547
	7	.0000	.0000	.0000	.0000	.0000	.0001	.0002	.0005	.0006	.0016	.0037	.0068	.0078
8	0	.9227	.6634	.4305	.2725	.1678	.1001	.0576	.0390	.0319	0168	.0084	.0046	.0039
	1	.0746	.2793	.3826	.3847	.3355	.2670	.1977	.1561	.1373	.0896	.0548	.0352	.0312
	2	.0026	.0515	.1488	.2376	.2936	.3115	.2965	.2731	.2587	.2090	.1569	.1183	.1094
	3	.0001	.0054	.0331	.0839	.1468	.2076	.2541	.2731	.2786	.2787	.2568	.2273	.2188
	4	.0000	.0004	.0046	.0185	.0459	.0865	.1361	.1707	.1875	.2322	.2627	.2730	.2734
	5	.0000	.0000	.0004	.0026	.0092	.0231	.0467	.0683	.0808	.1239	.1719	.2098	.2188
	6	.0000	.0000	.0000	.0002	.0011	.0038	.0100	.0171	.0217	.0413	.0703	.1008	.1094
	7	.0000	.0000	.0000	.0000	.0001	.0004	.0012	.0024	.0033	.0079	.0164	.0277	.0312
	8	.0000	.0000	.0000	.0000	.0000	.0000	.0001	.0002	.0002	.0007	.0017	.0033	.0039
9	0	.9135	.6302	.3874	.2316	.1342	.0751	.0404	.0260	.0207	.0101	.0046	.0023	.0020
	1	.0830	.2985	.3874	.3679	.3020	.2253	.1556	.1171	.1004	.0605	.0339	.0202	.0176
	2	.0034	.0629	.1722	.2597	.3020	.3003	.2668	.2341	.2162	.1612	.1110	.0776	.0703
	3	.0001	.0077	.0446	.1069	.1762	.2336	.2668	.2731	.2716	.2508	.2119	.1739	.1641
	4	.0000	.0006	.0074	.0283	.0661	.1168	.1715	.2048	.2194	.2508	.2600	.2506	.2461
	5	.0000	.0000	.0008	.0050	.0165	.0389	.0735	.1024	.1181	.1672	.2128	.2408	.2461
	6	.0000	.0000	.0001	.0006	.0028	.0087	.0210	.0341	.0424	.0743	.1160	.1542	.1641
	7	.0000	.0000	.0000	.0000	.0003	.0012	.0039	.0073	.0098	.0212	.0407	.0635	.0703
	8	.0000	.0000	.0000	.0000	.0000	.0001	.0004	.0009	.0013	.0035	.0083	.0153	.0176
	9	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0001	.0001	.0003	.0008	.0016	.0020
10	0	.9044	.5987	.3487	.1969	.1074	.0563	.0282	.0173	.0135	.0060	.0025	.0012	.0010
	1	.0914	.3151	.3874	.3474	.2684	.1877	.1211	.0867	.0725	.0403	.0207	.0114	.0098
	2	.0042	.0746	.1937	.2759	.3020	.2816	.2335	.1951	.1757	.1209	.0763	.0495	.0439
	3	.0001	.0105	.0574	.1298	.2013	.2503	.2668	.2601	.2522	.2150	.1665	.1267	.1172
	4	.0000	.010	.0112	.0401	.0881	.1460	.2001	.2276	.2377	.2508	.2384	.2130	.2051
	5	.0000	.0001	.0015	.0085	.0264	.0584	.1029	.1366	.1536	.2007	.2340	.2456	.2461
	6	.0000	.0000	.0001	.0012	.0055	.0162	.0368	.0569	.0689	.1115	.1596	.1966	.2051
	7	.0000	.0000	.0000	.0001	.0008	.0031	.0090	.0163	.0212	.0425	.0746	.1080	.1172
	8	.0000	.0000	.0000	.0000	.0001	.0004	.0014	.0030	.0043	.0106	.0229	.0389	.0439
	9	.0000	.0000	.0000	.0000	.0000	.0000	.0001	.0003	.0005	.0016	.0042	.0083	.0098
	10	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0001	.0003	.0008	.0010

Table II. **Probability Function for the Poisson Distribution**

	λ									
x	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
0	0.9048	8187	7408	6703	6065	5488	4966	4493	4066	3679
1	0905	1637	2222	2681	3033	3293	3476	3595	3659	3679
2	0045	0164	0333	0536	0758	0988	1217	1438	1647	1839
3	0002	0011	0033	0072	0126	0198	0284	0383	0494	0613
4	0000	0001	0003	0007	0016	0030	0050	0077	0111	0153
5	0000	0000	0000	0001	0002	0004	0007	0012	0020	0031
6	0000	0000	0000	0000	0000	0000	0001	0002	0003	0005
7	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001

	λ									
x	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
0	0.3329	3012	2725	2466	2231	2019	1827	1653	1496	1353
1	3662	3614	3543	3452	3347	3230	3106	2975	2842	2707
2	2014	2169	2303	2417	2510	2584	2640	2678	2700	2707
3	0738	0867	0998	1128	1255	1378	1496	1607	1710	1804
4	0203	0260	0324	0395	0471	0551	0636	0723	0812	0902
5	0045	0062	0084	0111	0141	0176	0216	0260	0309	0361
6	0008	0012	0018	0026	0035	0047	0061	0078	0098	0120
7	0001	0002	0003	0005	0008	0011	0015	0020	0027	0034
8	0000	0000	0001	0001	0001	0002	0003	0005	0006	0009
9	0000	0000	0000	0000	0000	0000	0001	0001	0001	0002

	λ									
x	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0
0	0.0498	0183	0067	0025	0009	0003	0001	0000	0000	0000
1	1494	0733	0337	0149	0064	0027	0011	0005	0002	0001
2	2240	1465	0842	0446	0223	0107	0050	0023	0010	0004
3	2240	1954	1404	0892	0521	0286	0150	0076	0037	0018
4	1680	1954	1755	1339	0912	0573	0337	0189	0102	0053
5	1008	1563	1755	1606	1277	0916	0607	0378	0224	0127
6	0504	1042	1462	1606	1490	1221	0911	0631	0411	0255
7	0216	0595	1044	1377	1490	1396	1171	0901	0646	0437
8	0081	0298	0653	1033	1304	1396	1318	1126	0888	0655
9	0027	0132	0363	0688	1014	1241	1318	1251	1085	0874
10	0008	0053	0181	0413	0710	0993	1186	1251	1194	1048
11	0002	0019	0082	0225	0452	0722	0970	1137	1194	1144
12	0002	0006	0034	0113	0264	0481	0728	0948	1094	1144
13		0002	0013	0052	0142	0296	0504	0729	0926	1056
14		0001	0005	0022	0071	0169	0324	0521	0728	0905
15			0002	0009	0033	0090	0194	0347	0534	0724
16				0003	0014	0045	0109	0217	0367	0543
17				0001	0006	0021	0058	0128	0237	0383
18					0002	0009	0029	0071	0145	0256
19					0001	0004	0014	0037	0084	0161
20						0002	0006	0019	0046	0097
21						0001	0003	0009	0024	0055
22							0001	0004	0012	0030
23								0002	0006	0016
24								0001	0003	0008
25									0001	0004
26										0002
27										0001

Table III.

Cumulative Distribution Function for the Standard Normal Distribution

$$\Phi(u) = \int_{-\infty}^{u} \frac{1}{\sqrt{2\pi}} e^{-\frac{x^2}{2}} dx$$

u	$\Phi(u)$	u	$\Phi(u)$	u	$\Phi(u)$	u	$\Phi(u)$
0.00	0.50000	0.40	0.65542	0.80	0.78814	1.20	0.88493
0.01	.50399	0.41	.65910	0.81	.79103	1.21	.88686
0.02	.50798	0.42	.66276	0.82	.79389	1.22	.88877
0.03	.51197	0.43	.66640	0.83	.79673	1.23	.89065
0.04	.51595	0.44	.67003	0.84	.79955	1.24	.89251
0.05	.51994	0.45	.67364	0.85	.80234	1.25	.89435
0.06	.52392	0.46	.67724	0.86	.80511	1.26	.89617
0.07	.52790	0.47	.68082	0.87	.80785	1.27	.89796
0.08	.53188	0.48	.68439	0.88	.81057	1.28	.89973
0.09	.53586	0.49	.68793	0.89	.81327	1.29	.90147
0.10	.53983	0.50	.69146	0.90	.81594	1.30	.90320
0.11	.54380	0.51	.69497	0.91	.81859	1.31	.90490
0.12	.54776	0.52	.69847	0.92	.82121	1.32	.90658
0.13	.55172	0.53	.70194	0.93	.82381	1.33	.90824
0.14	.55567	0.54	.70540	0.94	.82639	1.34	.90988
0.15	.55962	0.55	.70884	0.95	.82894	1.35	.91149
0.16	.56356	0.56	.71226	0.96	.83147	1.36	.91309
0.17	.56749	0.57	.71566	0.97	.83398	1.37	.91466
0.18	.57142	0.58	.71904	0.98	.83646	1.38	.91621
0.19	.57535	0.59	.72240	0.99	.83891	1.39	.91774
0.20	.57926	0.60	.72575	1.00	.84134	1.40	.91924
0.21	.58318	0.61	.72907	1.01	.84375	1.41	.92073
0.22	.58706	0.62	.73237	1.02	.84614	1.42	.92220
0.23	.59095	0.63	.73565	1.03	.84850	1.43	.92364
0.24	.59483	0.64	.73891	1.04	.85083	1.44	.92507
0.25	.59871	0.65	.74215	1.05	.85314	1.45	.92647
0.26	.60257	0.66	.74537	1.06	.85543	1.46	.92786
0.27	.60642	0.67	.74857	1.07	.85769	1.47	.92922
0.28	.61026	0.68	.75175	1.08	.85993	1.48	.93056
0.29	.61409	0.69	.75490	1.09	.86214	1.49	.93189
0.30	.61791	0.70	.75804	1.10	.86433	1.50	.93319
0.31	.62172	0.71	.76115	1.11	.86650	1.51	.93448
0.32	.62552	0.72	.76424	1.12	.86864	1.52	.93574
0.33	.62930	0.73	.76730	1.13	.87076	1.53	.93699
0.34	.63307	0.74	.77035	1.14	.87286	1.54	.93822
0.35	.63683	0.75	.77337	1.15	.87493	1.55	.93943
0.36	.64058	0.76	.77637	1.16	.87698	1.56	.94062
0.37	.64431	0.77	.77935	1.17	.87900	1.57	.94179
0.38	.64803	0.78	.78230	1.18	.88100	1.58	.94295
0.39	.65173	0.79	.78524	1.19	.88298	1.59	.94408

Table III. /cont./

Cumulative Distribution Function for the Standard Normal Distribution

$$\Phi(u) = \int_{-\infty}^{u} \frac{1}{\sqrt{2\pi}} e^{-\frac{x^2}{2}} dx$$

u	$\Phi(u)$	u	$\Phi(u)$	u	$\Phi(u)$	u	$\Phi(u)$
1.60	0.94520	2.00	0.97725	2.40	0.99180	3.10	0.99903
1.61	94630	2.01	97778	2.41	99202	3.12	99910
1.62	94738	2.02	97831	2.42	99224	3.14	99916
1.63	94845	2.03	97882	2.43	99245	3.16	99921
1.64	94950	2.04	97932	2.44	99266	3.18	99926
1.65	95053	2.05	97982	2.45	99286	3.20	99931
1.66	95154	2.06	98030	2.46	99305	3.22	99936
1.67	95254	2.07	98077	2.47	99324	3.24	99940
1.68	95352	2.08	98124	2.48	99343	3.26	99944
1.69	95449	2.09	98169	2.49	99361	3.28	99948
1.70	95543	2.10	98214	2.50	99379	3.30	99952
1.71	95637	2.11	98257	2.52	99413	3.32	99955
1.72	95728	2.12	98300	2.54	99446	3.34	99958
1.73	95818	2.13	98341	2.56	99477	3.36	99961
1.74	95907	2.14	98382	2.58	99506	3.38	99964
1.75	95994	2.15	98422	2.60	99534	3.40	99966
1.76	96080	2.16	98461	2.62	99560	3.42	99969
1.77	96164	2.17	98500	2.64	99585	3.44	99971
1.78	96246	2.18	98537	2.66	99609	3.46	99973
1.79	96327	2.19	98574	2.68	99632	3.48	99975
1.80	96407	2.20	98610	2.70	99653	3.50	99977
1.81	96485	2.21	98645	2.72	99674	3.55	99981
1.82	96562	2.22	98679	2.74	99693	3.60	99984
1.83	96638	2.23	98713	2.76	99711	3.65	99987
1.84	96712	2.24	98745	2.78	99728	3.70	99989
1.85	96784	2.25	98778	2.80	99744	3.75	99991
1.86	96856	2.26	98809	2.82	99760	3.80	99993
1.87	96926	2.27	98840	2.84	99774	3.85	99994
1.88	96995	2.28	98870	2.86	99788	3.90	99995
1.89	97062	2.29	98899	2.88	99801	3.95	99996
1.90	97128	2.30	98928	2.90	99813	4.00	99997
1.91	97193	2.31	98956	2.92	99825	4.05	99997
1.92	97257	2.32	98983	2.94	99836	4.10	99998
1.93	97320	2.33	99010	2.96	99846	4.15	99998
1.94	97381	2.34	99036	2.98	99856	4.20	99999
1.95	97441	2.35	99061	3.00	99865	4.25	99999
1.96	97500	2.36	99086	3.02	99874	4.30	99999
1.97	97558	2.37	99111	3.04	99882	4.35	99999
1.98	97615	2.38	99134	3.06	99890	4.40	99999
1.99	97670	2.39	99158	3.08	99897	4.45	1.00000

Due to the symmetry around zero, for negative values $u < 0$ are the CDF's values given by the formula:

$\Phi(-u) = 1 - \Phi(u)$

Table IV. **Quantiles of the Standard Normal Distribution (u_p)**

p	u_p	p	u_p	p	u_p	p	u_p
0.50	0.000	0.75	0.674	0.950	1.645	0.975	1.960
0.51	0.025	0.76	0.706	0.951	1.655	0.976	1.970
0.52	0.050	0.77	0.739	0.952	1.665	0.977	1.995
0.53	0.075	0.78	0.772	0.953	1.675	0.978	2.014
0.54	0.100	0.79	0.806	0.954	1.685	0.979	2.034
0.55	0.126	0.80	0.842	0.955	1.695	0.980	2.054
0.56	0.151	0.81	0.878	0.956	1.706	0.981	2.075
0.57	0.176	0.82	0.915	0.957	1.717	0.982	2.097
0.58	0.202	0.83	0.954	0.958	1.728	0.983	2.120
0.59	0.228	0.84	0.994	0.959	1.739	0.984	2.144
0.60	0.253	0.85	1.036	0.960	1.751	0.985	2.170
0.61	0.279	0.86	1.080	0.961	1.762	0.986	2.197
0.62	0.305	0.87	1.126	0.962	1.774	0.987	2.226
0.63	0.332	0.88	1.175	0.963	1.787	0.988	2.257
0.64	0.358	0.89	1.227	0.964	1.799	0.989	2.290
0.65	0.385	0.90	1.282	0.965	1.812	0.990	2.326
0.66	0.412	0.905	1.311	0.966	1.825	0.991	2.366
0.67	0.440	0.910	1.341	0.967	1.838	0.992	2.409
0.68	0.468	0.915	1.372	0.968	1.852	0.993	2.457
0.69	0.496	0.920	1.405	0.969	1.866	0.994	2.512
0.70	0.524	0.925	1.440	0.970	1.881	0.995	2.576
0.71	0.553	0.930	1.476	0.971	1.896	0.996	2.652
0.72	0.583	0.935	1.514	0.972	1.911	0.997	2.748
0.73	0.613	0.940	1.555	0.973	1.927	0.998	2.878
0.74	0.643	0.945	1.598	0.974	1.943	0.999	3.090

Due to the symmetry around zero, for $p < 0.5$ are the quantiles' values given by the formula $u_p = -u_{1-p}$.

Table V. **Quantiles of the χ^2 Distribution**

ν \ p	0.0005	0.001	0.005	0.01	0.025	0.05	0.10
1	0.06393	0.05157	0.04393	0.03157	0.03982	0.02393	0.0158
2	0.02100	0.02200	0.0100	0.0201	0.0506	0.103	0.211
3	0.0153	0.0243	0.0717	0.115	0.216	0.352	0.584
4	0.0639	0.0908	0.207	0.297	0.484	0.711	1.06
5	0.158	0.210	0.412	0.554	0.831	1.15	1.61
6	0.299	0.381	0.676	0.872	1.24	1.64	2.20
7	0.485	0.598	0.989	1.24	1.69	2.17	2.83
8	0.710	0.857	1.34	1.65	2.18	2.73	3.49
9	0.972	1.15	1.73	2.09	2.70	3.33	4.17
10	1.26	1.48	2.16	2.56	3.25	3.94	4.87
11	1.59	1.83	2.60	3.05	3.82	4.57	5.58
12	1.93	2.21	3.07	3.57	4.40	5.23	6.30
13	2.31	2.62	3.57	4.11	5.01	5.89	7.04
14	2.70	3.04	4.07	4.66	5.63	6.57	7.79
15	3.11	3.48	4.60	5.23	6.26	7.26	8.55
16	3.54	3.94	5.14	5.81	6.91	7.96	9.31
17	3.98	4.42	5.70	6.41	7.56	8.67	10.1
18	4.44	4.90	6.26	7.01	8.23	9.39	10.9
19	4.91	5.41	6.84	7.63	8.91	10.1	11.7
20	5.40	5.92	7.43	8.26	9.39	10.9	12.4
21	5.90	6.45	8.03	8.90	10.3	11.6	13.2
22	6.40	6.98	8.64	9.54	11.0	12.3	14.0
23	6.92	7.53	9.26	10.2	11.7	13.1	14.8
24	7.45	8.08	9.89	10.9	12.4	13.8	15.7
25	7.99	8.65	10.5	11.5	13.1	14.6	16.5
26	8.54	9.22	11.2	12.2	13.8	15.4	17.3
27	9.09	9.80	11.8	12.9	14.6	16.2	18.1
28	9.66	10.4	12.5	13.6	15.3	16.9	18.9
29	10.2	11.0	13.1	14.3	16.0	17.7	19.8
30	10.8	11.6	13.8	15.0	16.8	18.5	20.6

Table V. /cont./ **Quantiles of the χ^2 Distribution**

ν \ p	0.90	0.95	0.975	0.99	0.995	0.999	0.9995
1	2.71	3.84	5.02	6.63	7.88	10.8	12.1
2	4.61	5.99	7.38	9.21	10.6	13.8	15.2
3	6.25	7.81	9.35	11.3	12.8	16.3	17.7
4	7.78	9.49	11.1	13.3	14.9	18.5	20.0
5	9.24	11.1	12.8	15.1	16.7	20.5	22.1
6	10.6	12.6	14.4	16.8	18.5	22.5	24.1
7	12.0	14.1	16.0	18.5	20.3	24.3	26.0
8	13.4	15.5	17.5	20.1	22.0	26.1	27.9
9	14.7	16.9	19.0	21.7	23.6	27.9	29.7
10	16.0	18.3	20.5	23.2	25.2	29.6	31.4
11	17.3	19.7	21.9	24.7	26.8	31.3	33.1
12	18.5	21.0	23.3	26.2	28.3	32.9	34.8
13	19.8	22.4	24.7	27.7	29.8	34.5	36.5
14	21.0	23.7	26.1	29.1	31.3	36.1	38.1
15	22.3	25.0	27.5	30.6	32.8	37.7	39.7
16	23.5	26.3	28.8	32.0	34.3	39.3	41.3
17	24.8	27.6	30.2	33.4	35.7	40.8	42.9
18	26.0	28.9	31.5	34.8	37.2	42.3	44.4
19	27.2	30.1	32.9	36.2	38.6	43.8	46.0
20	28.4	31.4	34.2	37.6	40.0	452	47.5
21	29.6	32.7	35.5	38.9	41.4	46.8	49.0
22	30.9	33.9	36.8	40.3	42.8	48.3	50.5
23	32.0	35.2	38.1	41.6	44.2	49.7	52.0
24	33.2	36.4	39.4	43.0	45.6	51.2	53.5
25	34.4	37.7	40.6	44.3	46.9	52.6	54.9
26	35.6	38.9	41.9	45.6	48.3	54.1	56.4
27	36.7	40.1	43.2	47.0	49.6	55.5	57.9
28	37.9	41.3	44.5	48.3	51.0	56.9	59.3
29	39.1	42.6	45.7	49.6	52.3	58.3	60.7
30	40.3	43.8	47.0	50.9	53.7	59.7	62.2

Table VI. **Quantiles of the Student´s Distribution (t_p)**

	p				
ν	0.90	0.95	0.975	0.99	0.995
1	3.078	6.314	12.706	31.821	63.657
2	1.886	2.920	4.303	6.965	9.925
3	1.638	2.353	3.182	4.541	5.841
4	1.553	2.132	2.776	3.747	4.604
5	1.476	2.015	2.571	3.365	4.032
6	1.440	1.943	2.447	3.143	3.707
7	1.415	1.895	2.365	2.998	3.499
8	1.397	1.860	2.306	2.896	3.355
9	1.383	1.833	2.262	2.821	3.250
10	1.372	1.812	2.228	2.764	3.169
11	1.363	1.796	2.201	2.718	3.106
12	1.356	1.782	2.179	2.681	3.055
13	1.350	1.771	2.160	2.650	3.012
14	1.345	1.761	2.145	2.624	2.977
15	1.341	1.753	2.131	2.602	2.947
16	1.337	1.746	2.120	2.583	2.921
17	1.333	1.740	2.110	2.567	2.898
18	1.330	1.734	2.101	2.552	2.878
19	1.328	1.729	2.093	2.539	2.861
20	1.325	1.725	2.086	2.528	2.845
21	1.323	1.721	2.080	2.518	2.831
22	1.321	1.717	2.074	2.508	2.819
23	1.319	1.714	2.069	2.500	2.807
24	1.318	1.711	2.064	2.492	2.797
25	1.316	1.708	2.060	2.485	2.787
26	1.315	1.706	2.056	2.479	2.779
27	1.314	1.703	2.052	2.473	2.771
28	1.313	1.701	2.048	2.467	2.763
29	1.311	1.699	2.045	2.462	2.756
30	1.310	1.697	2.042	2.457	2.750

Table VII.a **Quantiles $F_{0.95}$ of the F-Distribution**

ν_2 \ ν_1	1	2	3	4	5	6	7	8	9
1	161.45	199.50	215.71	224.58	230.16	233.99	236.77	238.88	240.54
2	18.513	19.000	19.164	19.247	19.296	19.330	19.353	19.371	19.385
3	10.128	9.552	9.277	9.117	9.014	8.941	8.887	8.845	8.812
4	7.709	6.944	6.591	6.388	6.256	6.163	6.094	6.041	5.999
5	6.608	5.786	5.410	5.192	5.050	4.950	4.876	4.818	4.773
6	5.987	5.143	4.757	4.534	4.387	4.284	4.207	4.147	4.099
7	5.591	4.737	4.347	4.120	3.972	3.866	3.787	3.726	3.677
8	5.318	4.459	4.066	3.838	3.688	3.581	3.501	3.438	3.388
9	5.117	4.257	3.863	3.633	3.482	2.274	3.293	3.230	3.179
10	4.965	4.103	3.708	3.478	3.326	3.217	3.136	3.072	3.020
11	4.844	3.982	3.587	3.357	3.204	3.095	3.012	2.948	2.896
12	4.747	3.885	3.490	3.259	3.106	2.996	2.913	2.849	2.796
13	4.667	3.806	3.411	3.179	3.025	2.915	2.832	2.767	2.714
14	4.600	3.739	3.344	3.112	2.958	2.848	2.764	2.699	2.646
15	4.543	3.682	3.287	3.056	2.901	2.791	2.707	2.641	2.588
16	4.494	3.634	3.239	3.007	2.852	2.741	2.657	2.591	2.538
17	4.451	3.592	3.197	2.965	2.810	2.699	2.614	2.548	2.494
18	4.414	3.555	3.160	2.928	2.773	2.661	2.577	2.510	2.456
19	4.381	3.522	3.127	2.895	2.740	2.628	2.544	2.477	2.423
20	4.351	3.493	3.098	2.866	2.711	2.599	2.514	2.447	2.393
21	4.325	3.467	3.073	2.840	2.685	2.573	2.488	2.421	2.366
22	4.301	3.443	3.049	2.817	2.661	2.549	2.464	2.397	2.342
23	4.279	3.422	3.028	2.796	2.640	2.528	2.442	2.375	2.320
24	4.260	3.403	3.009	2.776	2.621	2.508	2.423	2.355	2.300
25	4.242	3.385	2.991	2.759	2.603	2.490	2.405	2.337	2.282
26	4.225	3.369	2.975	2.743	2.587	2.474	2.388	2.321	2.266
27	4.210	3.354	2.960	2.728	2.572	2.459	2.373	2.305	2.250
28	4.196	3.340	2.947	2.714	2.558	2.445	2.359	2.291	2.236
29	4.183	3.328	2.934	2.701	2.545	2.432	2.346	2.278	2.223
30	4.171	3.316	2.922	2.690	2.534	2.421	2.334	2.266	2.211
40	4.085	3.232	2.839	2.606	2.450	2.336	2.249	2.180	2.124
60	4.001	3.150	2.758	2.525	2.368	2.254	2.167	2.097	2.040
120	3.920	3.072	2.680	2.447	2.290	2.175	2.087	2.016	1.959
∞	3.842	2.996	2.605	2.372	2.214	2.099	2.010	1.938	1.880

Table VII.a /cont./ **Quantiles $F_{0.95}$ of the F-Distribution**

ν_2 \ ν_1	10	12	15	20	24	30	40	60	120	∞
1	241′.88	243.91	245.95	248.01	249.05	250.09	251.14	252.20	253.25	254.32
2	19.396	19.413	19.429	19.446	19.454	19.462	19.471	19.479	19.487	19.496
3	8.786	8.745	8.703	8.660	8.639	8.617	8.594	8.572	8.549	8.527
4	5.964	5.912	5.858	5.803	5.774	5.746	5.717	5.688	5.658	5.628
5	4.735	4.678	4.619	4.558	4.527	4.496	4.464	4.431	4.398	4.365
6	4.060	4.000	3.938	3.874	3.842	3.808	3.774	3.740	3.705	3.669
7	3.637	3.575	3.511	3.445	3.411	3.376	3.340	3.304	3.267	3.230
8	3.347	3.284	3.218	3.150	3.115	3.079	3.043	3.005	2.967	2.928
9	3.137	3.073	3.006	2.937	2.901	2.864	2.826	2.787	2.748	2.707
10	2.978	2.913	2.845	2.774	2.737	2.700	2.661	2.621	2.580	2.538
11	2.854	2.788	2.719	2.646	2.609	2.571	2.531	2.490	2.448	2.405
12	2.753	2.687	2.617	2.544	2.506	2.466	2.426	2.384	2.341	2.296
13	2.671	2.604	2.533	2.459	2.420	2.380	2.339	2.297	2.252	2.206
14	2.602	2.534	2.463	2.388	2.349	2.308	2.266	2.223	2.178	2.131
15	2.544	2.475	2.404	2.328	2.288	2.247	2.204	2.160	2.114	2.066
16	2.494	2.425	2.352	2.276	2.235	2.194	2.151	2.106	2.059	2.010
17	2.450	2.381	2.308	2.230	2.190	2.148	2.104	2.058	2.011	1.960
18	2.412	2.342	2.269	2.191	2.150	2.107	2.063	2.017	1.968	1.917
19	2.378	2.308	2.234	2.156	2.114	2.071	2.026	1.980	1.930	1.878
20	2.348	2.278	2.203	2.124	2.083	2.039	1.994	1.946	1.896	1.843
21	2.321	2.250	2.176	2.096	2.054	2.010	1.965	1.917	1.866	1.812
22	2.297	2.226	2.151	2.071	2.028	1.984	1.938	1.890	1.838	1.783
23	2.275	2.204	2.128	2.048	2.005	1.961	1.914	1.865	1.813	1.757
24	2.255	2.183	2.108	2.027	1.984	1.939	1.892	1.842	1.790	1.733
25	2.237	2.165	2.089	2.008	1.964	1.919	1.872	1.822	1.768	1.711
26	2.220	2.148	2.072	1.990	1.946	1.901	1.853	1.803	1.749	1.691
27	2.204	2.132	2.056	1.974	1.930	1.884	1.836	1.785	1.731	1.672
28	2.190	2.118	2.041	1.959	1.915	1.869	1.820	1.769	1.714	1.654
29	2.177	2.105	2.028	1.945	1.901	1.854	1.806	1.754	1.698	1.638
30	2.165	2.092	2.015	1.932	1.887	1.841	1.792	1.740	1.684	1.622
40	2.077	2.004	1.925	1.839	1.793	1.744	1.693	1.637	1.577	1.509
60	1.993	1.917	1.836	1.748	1.700	1.649	1.594	1.534	1.467	1.389
120	1.911	1.834	1.751	1.659	1.608	1.554	1.495	1.429	1.352	1.254
∞	1.831	1.752	1.666	1.571	1.517	1.459	1.394	1.318	1.221	1.000

Table VII.b **Quantiles $F_{0.975}$ of the F-Distribution**

ν_2 \ ν_1	1	2	3	4	5	6	7	8	9
1	647.79	799.50	864.16	899.58	921.85	937.11	948.22	956.66	963.28
2	38.506	39.000	39.165	39.248	39.298	39.331	39.355	39.373	39.387
3	17.443	16.044	15.439	15.101	14.885	14.735	14.624	14.540	14.473
4	12.218	10.649	9.979	9.605	9.365	9.197	9.074	8.980	8.905
5	10.007	8.434	7.764	7.388	7.146	6.978	6.853	6.757	6.681
6	8.813	7.260	6.599	6.227	5.988	5.820	5.696	5.600	5.523
7	8.073	6.542	5.890	5.523	5.285	5.119	4.995	4.899	4.823
8	7.571	6.060	5.416	5.053	4.817	4.652	4.529	4.433	4.357
9	7.209	5.715	5.078	4.718	4.484	4.320	4.197	4.102	4.026
10	6.937	5.456	4.826	4.468	4.236	4.072	3.950	3.855	3.779
11	6.724	5.256	4.630	4.275	4.044	3.881	3.759	3.664	3.588
12	6.554	5.096	4.474	4.121	3.891	3.728	3.607	3.512	3.436
13	6.414	4.965	4.347	3.996	3.767	3.604	3.483	3.388	3.312
14	6.298	4.857	4.242	3.892	3.663	3.501	3.380	3.285	3.209
15	6.200	4.765	4.153	3.804	3.576	3.415	3.293	3.199	3.123
16	6.115	4.687	4.077	3.729	3.502	3.341	3.219	3.125	3.049
17	6.042	4.619	4.011	3.665	3.438	3.277	3.156	3.061	2.985
18	5.978	4.560	3.954	3.608	3.382	3.221	3.100	3.005	2.929
19	5.922	4.508	3.903	3.559	3.333	3.172	3.051	2.956	2.880
20	5.872	4.461	3.859	3.515	3.289	3.128	3.007	2.913	2.837
21	5.827	4.420	3.819	3.475	3.250	3.090	2.969	2.874	2.798
22	5.786	4.383	3.783	3.440	3.215	3.055	2.934	2.839	2.763
23	5.750	4.349	3.751	3.408	3.184	3.023	2.902	2.808	2.731
24	5.717	4.319	3.721	3.379	3.155	2.995	2.874	2.779	2.703
25	5.686	4.291	3.694	3.353	3.129	2.969	2.848	2.753	2.677
26	5.659	4.266	3.670	3.329	3.105	2.945	2.824	2.729	2.653
27	5.633	4.242	3.647	3.307	3.083	2.923	2.802	2.707	2.631
28	5.610	4.221	3.626	3.286	3.063	2.903	2.782	2.687	2.611
29	5.588	4.201	3.607	3.267	3.044	2.884	2.763	2.669	2.592
30	5.568	4.182	3.589	3.250	3.027	2.867	2.746	2.651	2.557
40	5.424	4.051	3.463	3.126	2.904	2.744	2.624	2.529	2.452
60	5.286	3.925	3.343	3.008	2.786	2.627	2.507	2.412	2.334
120	5.152	3.805	3.227	2.894	2.674	2.515	2.395	2.299	2.222
∞	5.024	3.689	3.116	2.786	2.567	2.408	2.288	2.192	2.114

Table VII.b /cont./ **Quantiles $F_{0.975}$ of the F-Distribution**

ν_2 \ ν_1	10	12	15	20	24	30	40	60	120	∞
1	968.93	976.71	984.87	993.10	997.25	1001.4	1005.6	1009.8	1014.0	1018.3
2	39.398	39.415	39.431	39.448	39.456	39.465	39.473	39.481	39.490	39.498
3	14.419	14.337	14.253	14.167	14.124	14.081	14.037	13.992	13.947	13.902
4	8.844	8.751	8.657	8.560	8.511	8.461	8.411	8.360	8.309	8.257
5	6.619	6.525	6.428	6.329	6.278	6.227	6.175	6.125	6.069	6.0115
6	5.461	5.366	5.269	5.168	5.117	5.065	5.013	4.959	4.905	4.849
7	4.761	4.666	4.568	4.467	4.415	4.362	4.309	4.256	4.199	4.142
8	4.295	4.200	4.101	4.000	3.947	3.894	3.840	3.784	3.728	3.670
9	3.964	3.868	3.769	3.667	3.614	3.560	3.506	3.449	3.392	3.333
10	3.717	3.621	3.522	3.419	3.365	3.311	3.255	3.198	3.140	3.080
11	3.526	3.430	3.330	3.226	3.173	3.118	3.061	3.004	2.944	2.883
12	3.374	3.277	3.177	3.073	3.019	2.963	2.906	2.848	2.787	2.725
13	3.250	3.153	3.053	2.948	2.893	2.837	2.7880	2.720	2.659	2.596
14	3.147	3.050	2.949	2.844	2.789	2.732	2.674	2.614	2.552	2.487
15	3.060	2.963	2.862	2.756	2.701	2.644	2.585	2.524	2.461	2.395
16	2.986	2.889	2.788	2.681	2.625	2.568	2.509	2.447	2.383	2.316
17	2.922	2.825	2.723	2.616	2.560	2.502	2.442	2.380	2.315	2.247
18	2.866	2.769	2.667	2.559	2.503	2.445	2.384	2.321	2.256	2.187
19	2.817	2.720	2.617	2.509	2.452	2.394	2.333	2.270	2.203	2.133
20	2.774	2.676	2.573	2.465	2408	2.349	2.287	2.223	2.156	2.085
21	2.735	2.637	2.534	2.425	2.368	2.308	2.247	2.182	2.114	2.042
22	2.700	2.602	2.498	2.389	2.332	2.272	2.210	2.145	2.076	2.003
23	2.668	2.570	2.467	2.357	2.299	2.239	2.176	2.111	2.042	1.968
24	2.640	2.541	2.437	2.327	2.269	2.209	2.146	2.080	2.010	1.935
25	2.614	2.515	2.411	2.301	2.242	2.182	2.118	2.052	1.981	1.906
26	2.590	2.491	2.387	2.276	2.217	2.157	2.093	2.026	1.955	1.878
27	2.568	2.469	2.364	2.253	2.195	2.133	2.069	2.002	1.930	1.853
28	2.547	2.448	2.344	2.232	2.174	2.112	2.048	1.980	1.907	1.829
29	2.529	2.430	2.325	2.213	2.154	2.092	2.028	1.959	1.886	1.807
30	2.511	2.412	2.307	2.195	2.136	2.074	2.009	1.940	1.866	1.787
40	2.388	2.288	2.182	2.068	2.007	1.943	1.875	1.803	1.724	1.637
60	2.270	2.169	2.061	1.945	1.882	1.815	1.744	1.667	1.581	1.482
120	2.157	2.055	1.945	1.825	1.760	1.690	1.614	1.530	1.433	1.310
∞	2.048	1.945	1.833	1.709	1.640	1.556	1.484	1.388	1.268	1.000

Table VII.c **Quantiles $F_{0.99}$ of the F-Distribution**

ν_2 \ ν_1	1	2	3	4	5	6	7	8	9
1	4052.2	4999.5	5403.5	5624.6	5763.7	5859.0	5928.3	5981.6	6022.5
2	98.503	99.000	99.166	99.249	99.299	99.332	99.356	99.374	99.388
3	34.116	30.817	29.457	28.710	28.237	27.911	27.672	27.489	27.345
4	21.198	18.000	16.694	15.977	15.522	15.207	14.976	14.799	14.639
5	16.258	13.274	12.060	11.392	10.967	10.672	10.456	10.289	10.158
6	13.745	10.925	9.780	9.148	8.746	8.466	8.260	8.102	7.976
7	12.246	9.547	8.451	7.847	7.460	7.191	6.993	6.840	6.719
8	11.259	8.649	7.591	7.006	6.632	6.371	6.178	6.029	5.911
9	10.561	8.022	6.992	6.422	6.057	5.802	5.613	5.467	5.351
10	10.044	7.559	6.552	5.994	5.636	5.386	5.200	5.057	4.942
11	9.646	7.206	6.217	5.668	5.316	5.069	4.886	4.745	4.632
12	9.330	6.927	5.953	5.412	5.064	4.821	4.640	4.499	4.388
13	9.074	6.701	5.739	5.205	4.862	4.620	4.441	4.302	4.191
14	8.862	6.515	5.564	5.035	4.695	4.456	4.278	4.140	4.030
15	8.683	6.359	5.417	4.893	4.556	4.318	4.142	4.005	3.895
16	8.531	6.226	5.292	4.773	4.437	4.202	4.026	3.890	3.780
17	8.400	6.112	5.185	4.669	4.336	4.102	3.927	3.791	3.682
18	8.285	6.013	5.092	4.579	4.428	4.015	3.841	3.705	3.597
19	8.185	5.926	5.010	4.500	4.171	3.939	3.765	3.631	3.523
20	8.096	5.849	4.938	4.431	4.103	3.871	3.699	3.564	3.457
21	8.017	5.780	4.874	4.369	4.042	3.812	3.640	3.506	3.398
22	7.945	5.719	7.817	4.313	3.988	3.758	3.587	3.453	3.346
23	7.881	5.664	4.765	4.264	3.939	3.710	3.539	3.406	3.299
24	7.823	5.614	4.718	4.218	3.895	3.667	3.496	3.363	3.256
25	7.770	5.568	4.676	4.177	3.855	3.627	3.457	3.324	3.217
26	7.721	5.526	4.637	4.140	3.818	3.591	3.421	3.288	3.182
27	7.677	5.488	4.601	4.106	3.785	3.558	3.388	3.256	3.149
28	7.636	5.453	4.568	4.074	3.754	3.528	3.358	3.226	3.120
29	7.598	5.421	4.538	4.045	3.725	3.500	3.330	3.198	3.092
30	7.563	5.390	4.510	4.018	3.699	3.474	3.305	3.173	3.067
40	7.314	5.179	4.313	3.828	3.514	3.291	3.124	2.993	2.888
60	7.077	4.977	4.126	3.649	3.339	3.119	2.953	2.823	2.719
120	6.851	4.787	3.949	3.480	3.174	2.956	2.792	2.663	2.559
∞	6.635	4.605	3.782	3.319	3.017	2.802	2.639	2.511	2.407

Table VII.c /cont./ **Quantiles $F_{0.99}$ of the F-Distribution**

ν_2 \ ν_1	10	12	15	20	24	30	40	60	120	∞
1	6055.8	6106.3	6157.3	6208.7	6234.6	6260.7	6286.8	6313.0	6339.4	6366.0
2	99.399	99.416	99.432	99.449	99.458	99.466	99.474	99.483	99.491	99.501
3	27.229	27.052	26.872	26.690	26.598	26.505	26.411	26.316	26.221	26.125
4	14.546	14.374	14.198	14.020	13.929	13.838	13.745	13.652	13.558	13.463
5	10.051	9.888	9.722	9.553	9.467	9.379	9.291	9.202	9.112	9.020
6	7.874	7.718	7.559	7.396	7.313	7.229	7.143	7.057	6.969	6.880
7	6.620	6.469	6.314	6.155	6.074	5.992	5.908	5.824	5.737	5.650
8	5.814	5.667	5.515	5.359	5.279	5.198	5.116	5.032	4.946	4.859
9	5.257	5.111	4.962	4.808	4.729	4.649	4.567	4.483	4.398	4.311
10	4.849	4.706	4.558	4.405	7.327	4.247	4.165	4.082	3.997	3.909
11	4.539	4.397	4.251	4.099	4.021	3.941	3.860	3.776	3.690	3.603
12	4.296	4.155	4.010	3.858	3.781	3.701	3.619	3.536	3.449	3.361
13	4.100	3.960	3.815	3.665	3.587	3.507	3.425	3.341	3.255	3.165
14	3.939	3.800	3.656	3.505	3.427	3.348	3.266	3.181	3.094	3.004
15	3.805	3.666	3.522	3.372	3.294	3.214	3.132	3.047	2.960	2.868
16	3.691	3.553	3.409	3.259	3.181	3.101	3.018	2.933	2.845	2.753
17	3.593	3.455	3.312	3.162	3.084	3.003	2.921	2.835	2.746	2.653
18	3.508	3.371	3.227	3.077	2.999	2.919	2.835	2.749	2.660	2.566
19	3.434	3.297	3.153	3.003	2.925	2.844	2.761	2.674	2.584	2.489
20	3.368	3.231	3.088	2.938	2.859	2.779	2.695	2.608	2.517	2.421
21	3.310	3.173	3.030	2.880	2.801	2.720	2.636	2.548	2.457	2.360
22	3.258	3.121	2.978	2.827	2.749	2.668	2.583	2.495	2.403	2.306
23	3.211	3.074	2.931	2.781	2.702	2.620	2.536	2.447	2.354	2.256
24	3.168	3.032	2.889	2.738	2.659	2.577	2.492	2.404	2.310	2.211
25	3.129	2.993	2.850	2.699	2.620	2.538	2.453	2.364	2.270	2.169
26	3.094	2.958	2.815	2.664	2.585	2.503	2.417	2.327	2.233	2.132
27	3.062	2.926	2.783	2.632	2.552	2.470	2.384	2.294	2.198	2.097
28	3.032	2.896	2.753	2.602	2.522	2.440	2.354	2.263	2.167	2.064
29	3.005	2.869	2.726	2.574	2.495	2.412	2.325	2.234	2.138	2.034
30	2.979	2.843	2.700	2.549	2.469	2.386	2.299	2.208	2.111	2.006
40	2.801	2.665	2.522	2.369	2.288	2.203	2.114	2.019	1.917	1.805
60	2.632	2.496	2.352	2.198	2.115	2.029	1.936	1.836	1.726	1.601
120	2.472	2.336	2.192	2.035	1.950	1.860	1.763	1.656	1.533	1.381
∞	2.321	2.185	2.039	1.878	1.791	1.696	1.592	1.473	1.325	1.000

Table VII.d **Quantiles $F_{0.995}$ of the F-Distribution**

ν_2 \ ν_1	1	2	3	4	5	6	7	8	9
1	16211	20000	21615	22500	23056	23437	23715	23925	24091
2	198.50	199.00	199.17	199.25	199.30	199.33	199.36	199.37	199.39
3	55.552	49.799	47.467	46.196	45.392	44.838	44.434	44.126	43.882
4	31.333	26.284	24.259	23.155	22.456	21.975	21.622	21.352	21.139
5	22.785	18.314	16.530	15.556	14.940	14.513	14.200	13.961	13.772
6	18.635	14.544	12.917	12.028	11.464	11.073	10.786	10.566	10.391
7	16.236	12.404	10.882	10.050	9.522	9.155	8.885	8.678	8.514
8	14.688	11.042	9.597	8.805	8.3302	7.952	7.694	7.496	7.339
9	13.614	10.107	8.717	7.956	7.471	7.134	6.885	6.693	6.541
10	12.826	9.427	8.081	7.343	6.872	6.545	6.303	6.116	5.968
11	12.226	8.912	7.600	6.881	6.422	6.102	5.865	5.682	5.537
12	11.754	8.510	7.226	6.521	6.071	5.757	5.525	5.345	5.202
13	11.374	8.187	6.926	6.234	5.791	5.482	5.253	5.076	4.935
14	11.060	7.922	6.680	5.998	5.562	5.257	5.031	4.857	4.717
15	10.798	7.701	6.476	5.803	5.372	5.071	4.847	4.674	4.536
16	10.575	7.514	6.303	5.638	5.212	4.913	4.692	4.521	4.384
17	10.384	7.354	6.156	5.497	5.075	4.779	4.559	4.389	4.254
18	10.218	7.215	6.028	5.375	4.956	4.663	4.445	4.276	4.141
19	10.073	7.094	5.916	5.268	4.853	4.561	4.345	4.177	4.043
20	9.944	6.987	5.818	5.174	4.762	4.472	4.257	4.090	3.956
21	9.830	6.891	5.730	5.091	4.681	4.393	4.179	4.013	3.880
22	9.727	6.806	5.652	5.017	4.609	4.323	4.109	3.944	3.812
23	9.635	6.730	5.582	4.950	4.544	4.259	4.047	3.882	3.750
24	9.551	6.661	5.519	4.890	4.486	4.202	3.991	3.826	3.695
25	9.475	6.598	5.462	4.835	4.433	4.150	3.939	3.776	3.645
26	9.406	6.541	5.409	4.785	4.384	4.103	3.893	3.730	3.599
27	9.342	6.489	5.361	4.740	4.340	4.059	3.850	3.688	3.557
28	9.284	6.440	5.317	4.698	4.300	4.020	3.811	3.649	3.519
29	9.230	6.396	5.276	4.659	4.262	3.983	3.775	3.613	3.483
30	9.180	6.355	5.239	4.623	4.228	3.949	3.742	3.580	3.451
40	8.828	6.066	4.976	4.374	3.986	3.713	3.509	3.350	3.222
60	8.495	5.795	4.729	4.140	3.760	3.492	3.291	3.134	3.008
120	8.179	5.539	4.497	3.921	3.548	3.285	3.087	2.933	2.808
∞	7.879	5.298	4.279	3.715	3.350	3.091	2.897	2.744	2.621

Table VII.d /cont./ **Quantiles $F_{0.995}$ of the F-Distribution**

ν_2 \ ν_1	10	12	15	20	24	30	40	60	120	∞
1	24.224	24426	24630	24836	24940	25044	25148	25253	25359	25465
2	199.40	199.42	199.43	199.45	199.46	199.47	199.47	199.48	199.49	199.51
3	43.686	43.387	43.085	42.778	42.622	42.466	42.308	42.149	41.989	41.829
4	20.967	20.705	20.438	20.167	20.030	19.892	19.752	19.611	19.468	19.325
5	13.618	13.384	13.146	12.903	12.780	12.656	12.530	12.402	12.274	12.144
6	10.250	10.034	9.814	9.589	9.474	9.358	9.241	9.122	9.002	8.879
7	8.380	8.176	7.968	7.754	7.645	7.735	7.423	7.309	7.193	7.076
8	7.211	7.015	6.814	6.608	6.503	6.396	6.288	6.177	6.065	5.951
9	6.417	6.227	6.033	5.832	5.729	5.625	5.519	5.410	5.300	5.188
10	5.847	5.661	5.471	5.274	5.173	5.071	4.966	4.859	4.750	4.639
11	5.418	5.236	5.049	4.855	4.756	4.654	4.551	4.445	4.337	4.226
12	5.086	4.906	4.721	4.530	4.432	4.331	4.228	4.123	4.015	3.904
13	4.820	4.643	4.460	4.270	4.173	4.073	3.970	3.866	3.758	3.647
14	4.603	4.428	4.247	4.059	3.961	3.862	3.760	3.655	3.547	3.436
15	4.424	4.250	4.070	3.883	3.786	3.687	3.585	3.480	3.372	3.260
16	4.272	4.099	3.921	3.734	3.638	3.538	3.437	3.332	3.224	3.112
17	4.142	3.971	3.793	3.607	3.511	3.412	3.311	3.206	3.097	2.984
18	4.031	3.860	3.683	3.498	3.402	3.303	3.201	3.096	2.987	2.873
19	3.933	3.763	3.587	3.402	3.306	3.208	3.106	3.000	2.891	2.776
20	3.847	3.678	3.502	3.318	3.222	3.123	3.022	2.916	2.806	2.690
21	3.771	3.602	3.427	3.243	3.147	3.049	2.947	2.841	2.730	2.614
22	3.703	3.535	3.360	3.176	3.081	2.982	2.880	2.774	2.663	2.546
23	3.642	3.475	3.300	3.117	3.021	2.922	2.820	2.713	2.602	2.484
24	3.587	3.420	3.246	3.062	2.967	2.868	2.765	2.659	2.546	2.428
25	3.537	3.370	3.196	3.013	2.918	2.819	2.716	2.609	2.496	2.377
26	3.492	3.325	3.152	2.969	2.873	2.774	2.671	2.563	2.450	2.330
27	3.450	3.284	3.110	2.928	2.832	2.733	2.630	2.522	2.408	2.287
28	3.412	3.246	3.073	2.890	2.794	2.695	2.592	2.483	2.369	2.247
29	3.377	3.211	3.038	2.855	2.759	2.660	2.557	2.448	2.333	2.210
30	3.344	3.179	3.006	2.823	2.727	2.628	2.524	2.415	2.300	2.176
40	3.117	2.953	2.781	2.598	2.502	2.402	2.296	2.184	3.064	1.932
60	2.904	2.742	2.571	2.387	2.290	2.187	2.079	1.962	1.834	1.688
120	2.705	2.544	2.373	2.188	2.089	1.984	1.871	1.747	1.606	1.431
∞	2.519	2.358	2.187	2.000	1.898	1.789	1.669	1.533	1.364	1.000