Tables*

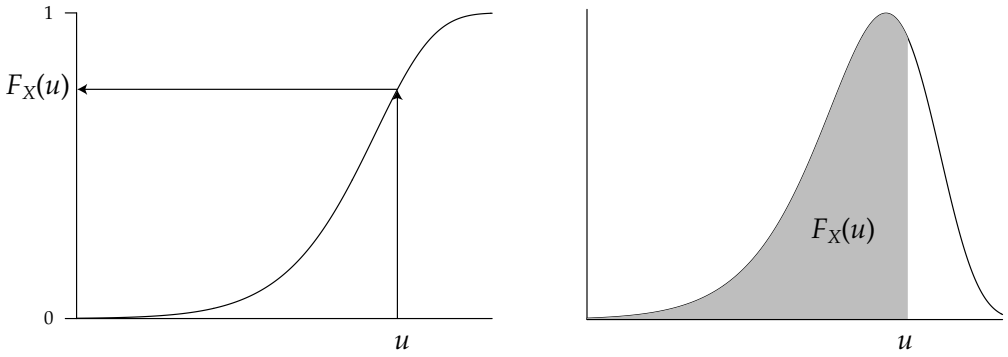
1 Reminder

1.1 Distribution function

The distribution function of a real-valued random variable X is the function F_X, from $\mathbb{R}$ in $[0,1]$, is defined by:

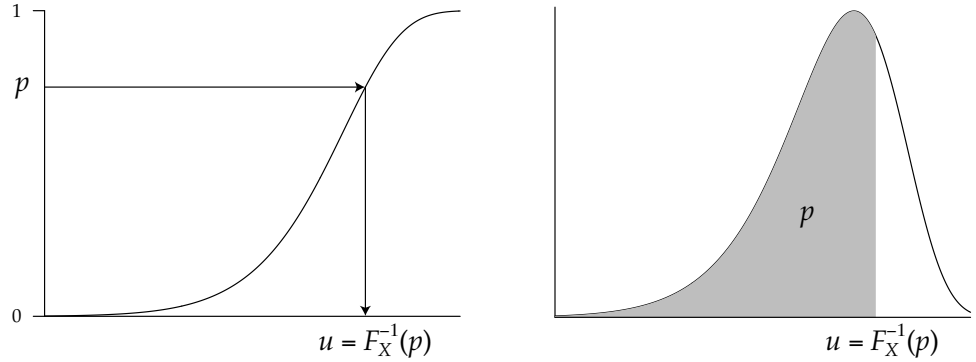
$$F_X(u) = \mathbb{P}[X \leqslant u].$$

The value $F_X(u)$ is the surface under the density function curve on the left side of u:



1.2 Quantile function

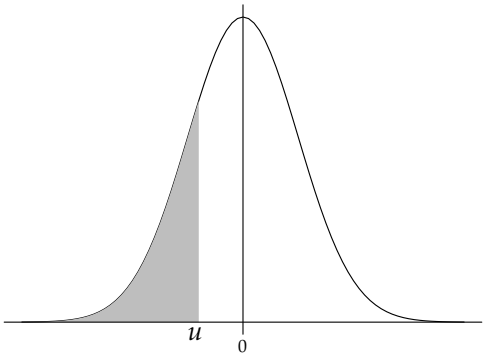
The quantile function of a probability distribution is the inverse F_X^{-1} of its distribution function. For p in the interval $[0;1]$, it returns the value of u such that $\mathbb{P}[X \leqslant u] = p$.



Given $p \in [0,1]$, it returns $u \in \mathbb{R}$ such that on the left side of u, the surface under the density function curve of X is p.

*Typeset with LaTeX2ε system. Computations of the tabulated values and graphics performed with R.

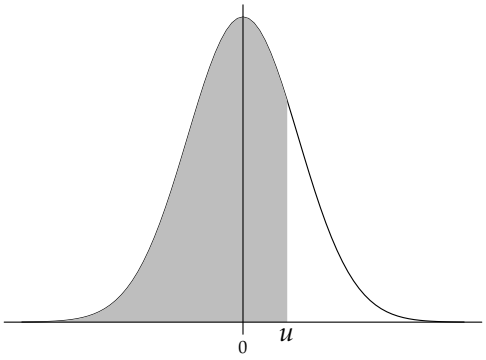
Normal variables
Distribution function of $\mathcal{Z} : \mathcal{N}(0;1)$



$$p : \mathbb{P}[Z \leqslant u = u_1 - u_2] = p$$

	u_2									
u_1	0.09	0.08	0.07	0.06	0.05	0.04	0.03	0.02	0.01	0.00
-3.90	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-3.80	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
-3.70	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
-3.60	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002
-3.50	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
-3.40	0.0002	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
-3.30	0.0003	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0005	0.0005
-3.20	0.0005	0.0005	0.0005	0.0006	0.0006	0.0006	0.0006	0.0006	0.0007	0.0007
-3.10	0.0007	0.0007	0.0008	0.0008	0.0008	0.0008	0.0009	0.0009	0.0009	0.0010
-3.00	0.0010	0.0010	0.0011	0.0011	0.0011	0.0012	0.0012	0.0013	0.0013	0.0013
-2.90	0.0014	0.0014	0.0015	0.0015	0.0016	0.0016	0.0017	0.0018	0.0018	0.0019
-2.80	0.0019	0.0020	0.0021	0.0021	0.0022	0.0023	0.0023	0.0024	0.0025	0.0026
-2.70	0.0026	0.0027	0.0028	0.0029	0.0030	0.0031	0.0032	0.0033	0.0034	0.0035
-2.60	0.0036	0.0037	0.0038	0.0039	0.0040	0.0041	0.0043	0.0044	0.0045	0.0047
-2.50	0.0048	0.0049	0.0051	0.0052	0.0054	0.0055	0.0057	0.0059	0.0060	0.0062
-2.40	0.0064	0.0066	0.0068	0.0069	0.0071	0.0073	0.0075	0.0078	0.0080	0.0082
-2.30	0.0084	0.0087	0.0089	0.0091	0.0094	0.0096	0.0099	0.0102	0.0104	0.0107
-2.20	0.0110	0.0113	0.0116	0.0119	0.0122	0.0125	0.0129	0.0132	0.0136	0.0139
-2.10	0.0143	0.0146	0.0150	0.0154	0.0158	0.0162	0.0166	0.0170	0.0174	0.0179
-2.00	0.0183	0.0188	0.0192	0.0197	0.0202	0.0207	0.0212	0.0217	0.0222	0.0228
-1.90	0.0233	0.0239	0.0244	0.0250	0.0256	0.0262	0.0268	0.0274	0.0281	0.0287
-1.80	0.0294	0.0301	0.0307	0.0314	0.0322	0.0329	0.0336	0.0344	0.0351	0.0359
-1.70	0.0367	0.0375	0.0384	0.0392	0.0401	0.0409	0.0418	0.0427	0.0436	0.0446
-1.60	0.0455	0.0465	0.0475	0.0485	0.0495	0.0505	0.0516	0.0526	0.0537	0.0548
-1.50	0.0559	0.0571	0.0582	0.0594	0.0606	0.0618	0.0630	0.0643	0.0655	0.0668
-1.40	0.0681	0.0694	0.0708	0.0721	0.0735	0.0749	0.0764	0.0778	0.0793	0.0808
-1.30	0.0823	0.0838	0.0853	0.0869	0.0885	0.0901	0.0918	0.0934	0.0951	0.0968
-1.20	0.0985	0.1003	0.1020	0.1038	0.1056	0.1075	0.1093	0.1112	0.1131	0.1151
-1.10	0.1170	0.1190	0.1210	0.1230	0.1251	0.1271	0.1292	0.1314	0.1335	0.1357
-1.00	0.1379	0.1401	0.1423	0.1446	0.1469	0.1492	0.1515	0.1539	0.1562	0.1587
-0.90	0.1611	0.1635	0.1660	0.1685	0.1711	0.1736	0.1762	0.1788	0.1814	0.1841
-0.80	0.1867	0.1894	0.1922	0.1949	0.1977	0.2005	0.2033	0.2061	0.2090	0.2119
-0.70	0.2148	0.2177	0.2206	0.2236	0.2266	0.2296	0.2327	0.2358	0.2389	0.2420
-0.60	0.2451	0.2483	0.2514	0.2546	0.2578	0.2611	0.2643	0.2676	0.2709	0.2743
-0.50	0.2776	0.2810	0.2843	0.2877	0.2912	0.2946	0.2981	0.3015	0.3050	0.3085
-0.40	0.3121	0.3156	0.3192	0.3228	0.3264	0.3300	0.3336	0.3372	0.3409	0.3446
-0.30	0.3483	0.3520	0.3557	0.3594	0.3632	0.3669	0.3707	0.3745	0.3783	0.3821
-0.20	0.3859	0.3897	0.3936	0.3974	0.4013	0.4052	0.4090	0.4129	0.4168	0.4207
-0.10	0.4247	0.4286	0.4325	0.4364	0.4404	0.4443	0.4483	0.4522	0.4562	0.4602
0.00	0.4641	0.4681	0.4721	0.4761	0.4801	0.4840	0.4880	0.4920	0.4960	0.5000

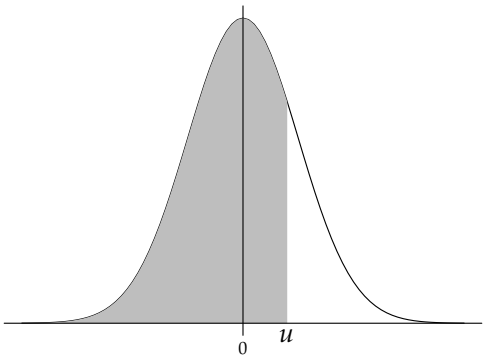
Normal variables
Distribution function of $\mathcal{Z} : \mathcal{N}(0;1)$



$$p : \mathbb{P}[Z \leqslant u = u_1 + u_2] = p$$

	u_2									
u_1	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.00	0.5000	0.5040	0.5080	0.5120	0.5160	0.5199	0.5239	0.5279	0.5319	0.5359
0.10	0.5398	0.5438	0.5478	0.5517	0.5557	0.5596	0.5636	0.5675	0.5714	0.5753
0.20	0.5793	0.5832	0.5871	0.5910	0.5948	0.5987	0.6026	0.6064	0.6103	0.6141
0.30	0.6179	0.6217	0.6255	0.6293	0.6331	0.6368	0.6406	0.6443	0.6480	0.6517
0.40	0.6554	0.6591	0.6628	0.6664	0.6700	0.6736	0.6772	0.6808	0.6844	0.6879
0.50	0.6915	0.6950	0.6985	0.7019	0.7054	0.7088	0.7123	0.7157	0.7190	0.7224
0.60	0.7257	0.7291	0.7324	0.7357	0.7389	0.7422	0.7454	0.7486	0.7517	0.7549
0.70	0.7580	0.7611	0.7642	0.7673	0.7704	0.7734	0.7764	0.7794	0.7823	0.7852
0.80	0.7881	0.7910	0.7939	0.7967	0.7995	0.8023	0.8051	0.8078	0.8106	0.8133
0.90	0.8159	0.8186	0.8212	0.8238	0.8264	0.8289	0.8315	0.8340	0.8365	0.8389
1.00	0.8413	0.8438	0.8461	0.8485	0.8508	0.8531	0.8554	0.8577	0.8599	0.8621
1.10	0.8643	0.8665	0.8686	0.8708	0.8729	0.8749	0.8770	0.8790	0.8810	0.8830
1.20	0.8849	0.8869	0.8888	0.8907	0.8925	0.8944	0.8962	0.8980	0.8997	0.9015
1.30	0.9032	0.9049	0.9066	0.9082	0.9099	0.9115	0.9131	0.9147	0.9162	0.9177
1.40	0.9192	0.9207	0.9222	0.9236	0.9251	0.9265	0.9279	0.9292	0.9306	0.9319
1.50	0.9332	0.9345	0.9357	0.9370	0.9382	0.9394	0.9406	0.9418	0.9429	0.9441
1.60	0.9452	0.9463	0.9474	0.9484	0.9495	0.9505	0.9515	0.9525	0.9535	0.9545
1.70	0.9554	0.9564	0.9573	0.9582	0.9591	0.9599	0.9608	0.9616	0.9625	0.9633
1.80	0.9641	0.9649	0.9656	0.9664	0.9671	0.9678	0.9686	0.9693	0.9699	0.9706
1.90	0.9713	0.9719	0.9726	0.9732	0.9738	0.9744	0.9750	0.9756	0.9761	0.9767
2.00	0.9772	0.9778	0.9783	0.9788	0.9793	0.9798	0.9803	0.9808	0.9812	0.9817
2.10	0.9821	0.9826	0.9830	0.9834	0.9838	0.9842	0.9846	0.9850	0.9854	0.9857
2.20	0.9861	0.9864	0.9868	0.9871	0.9875	0.9878	0.9881	0.9884	0.9887	0.9890
2.30	0.9893	0.9896	0.9898	0.9901	0.9904	0.9906	0.9909	0.9911	0.9913	0.9916
2.40	0.9918	0.9920	0.9922	0.9925	0.9927	0.9929	0.9931	0.9932	0.9934	0.9936
2.50	0.9938	0.9940	0.9941	0.9943	0.9945	0.9946	0.9948	0.9949	0.9951	0.9952
2.60	0.9953	0.9955	0.9956	0.9957	0.9959	0.9960	0.9961	0.9962	0.9963	0.9964
2.70	0.9965	0.9966	0.9967	0.9968	0.9969	0.9970	0.9971	0.9972	0.9973	0.9974
2.80	0.9974	0.9975	0.9976	0.9977	0.9977	0.9978	0.9979	0.9979	0.9980	0.9981
2.90	0.9981	0.9982	0.9982	0.9983	0.9984	0.9984	0.9985	0.9985	0.9986	0.9986
3.00	0.9987	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989	0.9989	0.9990	0.9990
3.10	0.9990	0.9991	0.9991	0.9991	0.9992	0.9992	0.9992	0.9992	0.9993	0.9993
3.20	0.9993	0.9993	0.9994	0.9994	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995
3.30	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9997
3.40	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998
3.50	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
3.60	0.9998	0.9998	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
3.70	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
3.80	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
3.90	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

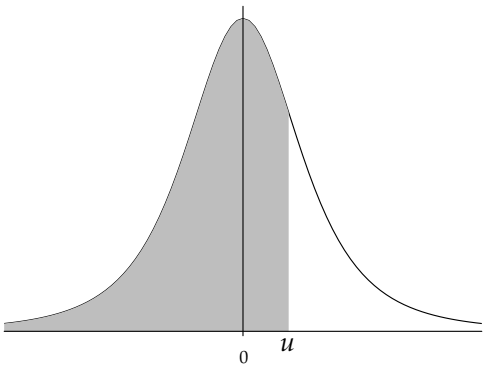
Normal variables
Quantile function of $\mathcal{Z} : \mathcal{N}(0;1)$



$$u : \mathbb{P}[\mathcal{Z} \leqslant u] = p = p_1 + p_2$$

	p_2									
p_1	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.50	0.0000	0.0025	0.0050	0.0075	0.0100	0.0125	0.0150	0.0175	0.0201	0.0226
0.51	0.0251	0.0276	0.0301	0.0326	0.0351	0.0376	0.0401	0.0426	0.0451	0.0476
0.52	0.0502	0.0527	0.0552	0.0577	0.0602	0.0627	0.0652	0.0677	0.0702	0.0728
0.53	0.0753	0.0778	0.0803	0.0828	0.0853	0.0878	0.0904	0.0929	0.0954	0.0979
0.54	0.1004	0.1030	0.1055	0.1080	0.1105	0.1130	0.1156	0.1181	0.1206	0.1231
0.55	0.1257	0.1282	0.1307	0.1332	0.1358	0.1383	0.1408	0.1434	0.1459	0.1484
0.56	0.1510	0.1535	0.1560	0.1586	0.1611	0.1637	0.1662	0.1687	0.1713	0.1738
0.57	0.1764	0.1789	0.1815	0.1840	0.1866	0.1891	0.1917	0.1942	0.1968	0.1993
0.58	0.2019	0.2045	0.2070	0.2096	0.2121	0.2147	0.2173	0.2198	0.2224	0.2250
0.59	0.2275	0.2301	0.2327	0.2353	0.2378	0.2404	0.2430	0.2456	0.2482	0.2508
0.60	0.2533	0.2559	0.2585	0.2611	0.2637	0.2663	0.2689	0.2715	0.2741	0.2767
0.61	0.2793	0.2819	0.2845	0.2871	0.2898	0.2924	0.2950	0.2976	0.3002	0.3029
0.62	0.3055	0.3081	0.3107	0.3134	0.3160	0.3186	0.3213	0.3239	0.3266	0.3292
0.63	0.3319	0.3345	0.3372	0.3398	0.3425	0.3451	0.3478	0.3505	0.3531	0.3558
0.64	0.3585	0.3611	0.3638	0.3665	0.3692	0.3719	0.3745	0.3772	0.3799	0.3826
0.65	0.3853	0.3880	0.3907	0.3934	0.3961	0.3989	0.4016	0.4043	0.4070	0.4097
0.66	0.4125	0.4152	0.4179	0.4207	0.4234	0.4261	0.4289	0.4316	0.4344	0.4372
0.67	0.4399	0.4427	0.4454	0.4482	0.4510	0.4538	0.4565	0.4593	0.4621	0.4649
0.68	0.4677	0.4705	0.4733	0.4761	0.4789	0.4817	0.4845	0.4874	0.4902	0.4930
0.69	0.4959	0.4987	0.5015	0.5044	0.5072	0.5101	0.5129	0.5158	0.5187	0.5215
0.70	0.5244	0.5273	0.5302	0.5330	0.5359	0.5388	0.5417	0.5446	0.5476	0.5505
0.71	0.5534	0.5563	0.5592	0.5622	0.5651	0.5681	0.5710	0.5740	0.5769	0.5799
0.72	0.5828	0.5858	0.5888	0.5918	0.5948	0.5978	0.6008	0.6038	0.6068	0.6098
0.73	0.6128	0.6158	0.6189	0.6219	0.6250	0.6280	0.6311	0.6341	0.6372	0.6403
0.74	0.6433	0.6464	0.6495	0.6526	0.6557	0.6588	0.6620	0.6651	0.6682	0.6713
0.75	0.6745	0.6776	0.6808	0.6840	0.6871	0.6903	0.6935	0.6967	0.6999	0.7031
0.76	0.7063	0.7095	0.7128	0.7160	0.7192	0.7225	0.7257	0.7290	0.7323	0.7356
0.77	0.7388	0.7421	0.7454	0.7488	0.7521	0.7554	0.7588	0.7621	0.7655	0.7688
0.78	0.7722	0.7756	0.7790	0.7824	0.7858	0.7892	0.7926	0.7961	0.7995	0.8030
0.79	0.8064	0.8099	0.8134	0.8169	0.8204	0.8239	0.8274	0.8310	0.8345	0.8381
0.80	0.8416	0.8452	0.8488	0.8524	0.8560	0.8596	0.8633	0.8669	0.8705	0.8742
0.81	0.8779	0.8816	0.8853	0.8890	0.8927	0.8965	0.9002	0.9040	0.9078	0.9116
0.82	0.9154	0.9192	0.9230	0.9269	0.9307	0.9346	0.9385	0.9424	0.9463	0.9502
0.83	0.9542	0.9581	0.9621	0.9661	0.9701	0.9741	0.9782	0.9822	0.9863	0.9904
0.84	0.9945	0.9986	1.0027	1.0069	1.0110	1.0152	1.0194	1.0237	1.0279	1.0322
0.85	1.0364	1.0407	1.0450	1.0494	1.0537	1.0581	1.0625	1.0669	1.0714	1.0758
0.86	1.0803	1.0848	1.0893	1.0939	1.0985	1.1031	1.1077	1.1123	1.1170	1.1217
0.87	1.1264	1.1311	1.1359	1.1407	1.1455	1.1503	1.1552	1.1601	1.1650	1.1700
0.88	1.1750	1.1800	1.1850	1.1901	1.1952	1.2004	1.2055	1.2107	1.2160	1.2212
0.89	1.2265	1.2319	1.2372	1.2426	1.2481	1.2536	1.2591	1.2646	1.2702	1.2759
0.90	1.2816	1.2873	1.2930	1.2988	1.3047	1.3106	1.3165	1.3225	1.3285	1.3346
0.91	1.3408	1.3469	1.3532	1.3595	1.3658	1.3722	1.3787	1.3852	1.3917	1.3984
0.92	1.4051	1.4118	1.4187	1.4255	1.4325	1.4395	1.4466	1.4538	1.4611	1.4684
0.93	1.4758	1.4833	1.4909	1.4985	1.5063	1.5141	1.5220	1.5301	1.5382	1.5464
0.94	1.5548	1.5632	1.5718	1.5805	1.5893	1.5982	1.6072	1.6164	1.6258	1.6352
0.95	1.6449	1.6546	1.6646	1.6747	1.6849	1.6954	1.7060	1.7169	1.7279	1.7392
0.96	1.7507	1.7624	1.7744	1.7866	1.7991	1.8119	1.8250	1.8384	1.8522	1.8663
0.97	1.8808	1.8957	1.9110	1.9268	1.9431	1.9600	1.9774	1.9954	2.0141	2.0335
0.98	2.0537	2.0749	2.0969	2.1201	2.1444	2.1701	2.1973	2.2262	2.2571	2.2904
0.99	2.3263	2.3656	2.4089	2.4573	2.5121	2.5758	2.6521	2.7478	2.8782	3.0902

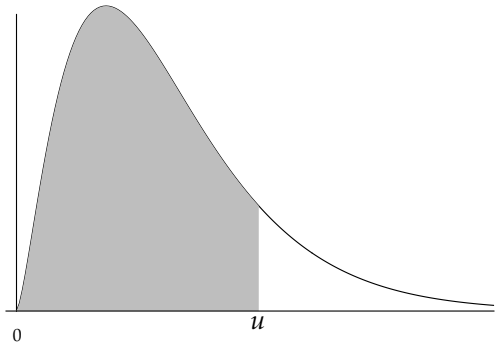
Student variables
Quantile function of the variable $T : \mathcal{T}(\nu)$



$$u : \mathbb{P}[T \leqslant u] = p$$

	p									
ν	0.600	0.700	0.800	0.900	0.950	0.975	0.990	0.995	0.999	0.9995
1	0.325	0.727	1.376	3.078	6.314	12.706	31.821	63.657	318.309	636.619
2	0.289	0.617	1.061	1.886	2.920	4.303	6.965	9.925	22.327	31.599
3	0.277	0.584	0.978	1.638	2.353	3.182	4.541	5.841	10.215	12.924
4	0.271	0.569	0.941	1.533	2.132	2.776	3.747	4.604	7.173	8.610
5	0.267	0.559	0.920	1.476	2.015	2.571	3.365	4.032	5.893	6.869
6	0.265	0.553	0.906	1.440	1.943	2.447	3.143	3.707	5.208	5.959
7	0.263	0.549	0.896	1.415	1.895	2.365	2.998	3.499	4.785	5.408
8	0.262	0.546	0.889	1.397	1.860	2.306	2.896	3.355	4.501	5.041
9	0.261	0.543	0.883	1.383	1.833	2.262	2.821	3.250	4.297	4.781
10	0.260	0.542	0.879	1.372	1.812	2.228	2.764	3.169	4.144	4.587
11	0.260	0.540	0.876	1.363	1.796	2.201	2.718	3.106	4.025	4.437
12	0.259	0.539	0.873	1.356	1.782	2.179	2.681	3.055	3.930	4.318
13	0.259	0.538	0.870	1.350	1.771	2.160	2.650	3.012	3.852	4.221
14	0.258	0.537	0.868	1.345	1.761	2.145	2.624	2.977	3.787	4.140
15	0.258	0.536	0.866	1.341	1.753	2.131	2.602	2.947	3.733	4.073
16	0.258	0.535	0.865	1.337	1.746	2.120	2.583	2.921	3.686	4.015
17	0.257	0.534	0.863	1.333	1.740	2.110	2.567	2.898	3.646	3.965
18	0.257	0.534	0.862	1.330	1.734	2.101	2.552	2.878	3.610	3.922
19	0.257	0.533	0.861	1.328	1.729	2.093	2.539	2.861	3.579	3.883
20	0.257	0.533	0.860	1.325	1.725	2.086	2.528	2.845	3.552	3.850
21	0.257	0.532	0.859	1.323	1.721	2.080	2.518	2.831	3.527	3.819
22	0.256	0.532	0.858	1.321	1.717	2.074	2.508	2.819	3.505	3.792
23	0.256	0.532	0.858	1.319	1.714	2.069	2.500	2.807	3.485	3.768
24	0.256	0.531	0.857	1.318	1.711	2.064	2.492	2.797	3.467	3.745
25	0.256	0.531	0.856	1.316	1.708	2.060	2.485	2.787	3.450	3.725
26	0.256	0.531	0.856	1.315	1.706	2.056	2.479	2.779	3.435	3.707
27	0.256	0.531	0.855	1.314	1.703	2.052	2.473	2.771	3.421	3.690
28	0.256	0.530	0.855	1.313	1.701	2.048	2.467	2.763	3.408	3.674
29	0.256	0.530	0.854	1.311	1.699	2.045	2.462	2.756	3.396	3.659
30	0.256	0.530	0.854	1.310	1.697	2.042	2.457	2.750	3.385	3.646
32	0.255	0.530	0.853	1.309	1.694	2.037	2.449	2.738	3.365	3.622
34	0.255	0.529	0.852	1.307	1.691	2.032	2.441	2.728	3.348	3.601
36	0.255	0.529	0.852	1.306	1.688	2.028	2.434	2.719	3.333	3.582
38	0.255	0.529	0.851	1.304	1.686	2.024	2.429	2.712	3.319	3.566
40	0.255	0.529	0.851	1.303	1.684	2.021	2.423	2.704	3.307	3.551
50	0.255	0.528	0.849	1.299	1.676	2.009	2.403	2.678	3.261	3.496
60	0.254	0.527	0.848	1.296	1.671	2.000	2.390	2.660	3.232	3.460
70	0.254	0.527	0.847	1.294	1.667	1.994	2.381	2.648	3.211	3.435
80	0.254	0.526	0.846	1.292	1.664	1.990	2.374	2.639	3.195	3.416
90	0.254	0.526	0.846	1.291	1.662	1.987	2.368	2.632	3.183	3.402
100	0.254	0.526	0.845	1.290	1.660	1.984	2.364	2.626	3.174	3.390
200	0.254	0.525	0.843	1.286	1.653	1.972	2.345	2.601	3.131	3.340
500	0.253	0.525	0.842	1.283	1.648	1.965	2.334	2.586	3.107	3.310
∞	0.253	0.524	0.842	1.282	1.645	1.960	2.326	2.576	3.090	3.291

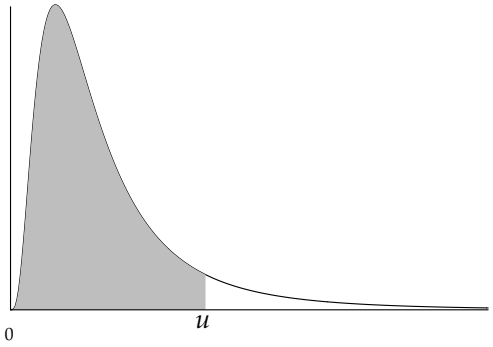
Chi-squared variables
Quantile function of the variable $X : \mathcal{X}^2(\nu)$



$$u : \mathbb{P}[X \leqslant u] = p$$

	p												
ν	0.001	0.005	0.010	0.025	0.050	0.100	0.500	0.900	0.950	0.975	0.990	0.995	0.999
1	0.000	0.000	0.000	0.001	0.004	0.016	0.455	2.706	3.841	5.024	6.635	7.879	10.83
2	0.002	0.010	0.020	0.051	0.103	0.211	1.386	4.605	5.991	7.378	9.210	10.60	13.82
3	0.024	0.072	0.115	0.216	0.352	0.584	2.366	6.251	7.815	9.348	11.34	12.84	16.27
4	0.091	0.207	0.297	0.484	0.711	1.064	3.357	7.779	9.488	11.14	13.28	14.86	18.47
5	0.210	0.412	0.554	0.831	1.145	1.610	4.351	9.236	11.07	12.83	15.09	16.75	20.52
6	0.381	0.676	0.872	1.237	1.635	2.204	5.348	10.64	12.59	14.45	16.81	18.55	22.46
7	0.598	0.989	1.239	1.690	2.167	2.833	6.346	12.02	14.07	16.01	18.48	20.28	24.32
8	0.857	1.344	1.646	2.180	2.733	3.490	7.344	13.36	15.51	17.53	20.09	21.95	26.12
9	1.152	1.735	2.088	2.700	3.325	4.168	8.343	14.68	16.92	19.02	21.67	23.59	27.88
10	1.479	2.156	2.558	3.247	3.940	4.865	9.342	15.99	18.31	20.48	23.21	25.19	29.59
11	1.834	2.603	3.053	3.816	4.575	5.578	10.34	17.28	19.68	21.92	24.72	26.76	31.26
12	2.214	3.074	3.571	4.404	5.226	6.304	11.34	18.55	21.03	23.34	26.22	28.30	32.91
13	2.617	3.565	4.107	5.009	5.892	7.042	12.34	19.81	22.36	24.74	27.69	29.82	34.53
14	3.041	4.075	4.660	5.629	6.571	7.790	13.34	21.06	23.68	26.12	29.14	31.32	36.12
15	3.483	4.601	5.229	6.262	7.261	8.547	14.34	22.31	25.00	27.49	30.58	32.80	37.70
16	3.942	5.142	5.812	6.908	7.962	9.312	15.34	23.54	26.30	28.85	32.00	34.27	39.25
17	4.416	5.697	6.408	7.564	8.672	10.09	16.34	24.77	27.59	30.19	33.41	35.72	40.79
18	4.905	6.265	7.015	8.231	9.390	10.86	17.34	25.99	28.87	31.53	34.81	37.16	42.31
19	5.407	6.844	7.633	8.907	10.12	11.65	18.34	27.20	30.14	32.85	36.19	38.58	43.82
20	5.921	7.434	8.260	9.591	10.85	12.44	19.34	28.41	31.41	34.17	37.57	40.00	45.31
21	6.447	8.034	8.897	10.28	11.59	13.24	20.34	29.62	32.67	35.48	38.93	41.40	46.80
22	6.983	8.643	9.542	10.98	12.34	14.04	21.34	30.81	33.92	36.78	40.29	42.80	48.27
23	7.529	9.260	10.20	11.69	13.09	14.85	22.34	32.01	35.17	38.08	41.64	44.18	49.73
24	8.085	9.886	10.86	12.40	13.85	15.66	23.34	33.20	36.42	39.36	42.98	45.56	51.18
25	8.649	10.52	11.52	13.12	14.61	16.47	24.34	34.38	37.65	40.65	44.31	46.93	52.62
26	9.222	11.16	12.20	13.84	15.38	17.29	25.34	35.56	38.89	41.92	45.64	48.29	54.05
27	9.803	11.81	12.88	14.57	16.15	18.11	26.34	36.74	40.11	43.19	46.96	49.64	55.48
28	10.39	12.46	13.56	15.31	16.93	18.94	27.34	37.92	41.34	44.46	48.28	50.99	56.89
29	10.99	13.12	14.26	16.05	17.71	19.77	28.34	39.09	42.56	45.72	49.59	52.34	58.30
30	11.59	13.79	14.95	16.79	18.49	20.60	29.34	40.26	43.77	46.98	50.89	53.67	59.70
32	12.81	15.13	16.36	18.29	20.07	22.27	31.34	42.58	46.19	49.48	53.49	56.33	62.49
34	14.06	16.50	17.79	19.81	21.66	23.95	33.34	44.90	48.60	51.97	56.06	58.96	65.25
36	15.32	17.89	19.23	21.34	23.27	25.64	35.34	47.21	51.00	54.44	58.62	61.58	67.99
38	16.61	19.29	20.69	22.88	24.88	27.34	37.34	49.51	53.38	56.90	61.16	64.18	70.70
40	17.92	20.71	22.16	24.43	26.51	29.05	39.34	51.81	55.76	59.34	63.69	66.77	73.40
50	24.67	27.99	29.71	32.36	34.76	37.69	49.33	63.17	67.50	71.42	76.15	79.49	86.66
55	28.17	31.73	33.57	36.40	38.96	42.06	54.33	68.80	73.31	77.38	82.29	85.75	93.17
60	31.74	35.53	37.48	40.48	43.19	46.46	59.33	74.40	79.08	83.30	88.38	91.95	99.61
65	35.36	39.38	41.44	44.60	47.45	50.88	64.33	79.97	84.82	89.18	94.42	98.11	106.0
70	39.04	43.28	45.44	48.76	51.74	55.33	69.33	85.53	90.53	95.02	100.4	104.2	112.3
75	42.76	47.21	49.48	52.94	56.05	59.79	74.33	91.06	96.22	100.8	106.4	110.3	118.6
80	46.52	51.17	53.54	57.15	60.39	64.28	79.33	96.58	101.9	106.6	112.3	116.3	124.8
85	50.32	55.17	57.63	61.39	64.75	68.78	84.33	102.1	107.5	112.4	118.2	122.3	131.0
90	54.16	59.20	61.75	65.65	69.13	73.29	89.33	107.6	113.1	118.1	124.1	128.3	137.2
95	58.02	63.25	65.90	69.92	73.52	77.82	94.33	113.0	118.8	123.9	130.0	134.2	143.3
100	61.92	67.33	70.06	74.22	77.93	82.36	99.33	118.5	124.3	129.6	135.8	140.2	149.4

Fisher variables
97.5% quantile of the variable $F : \mathcal{F}(\nu_1, \nu_2)$



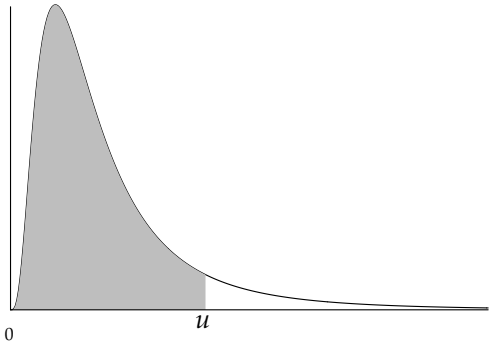
$$u_{\nu_1,\nu_2;0.975} = \mathbb{P}[F \leqslant u_{\nu_1,\nu_2;0.975}] = 0.975$$

	ν_1												
ν_2	1	2	3	4	5	6	7	8	9	10	11	12	14
1	648	799	864	900	922	937	948	957	963	969	973	977	983
2	38.5	39.0	39.2	39.2	39.3	39.3	39.4	39.4	39.4	39.4	39.4	39.4	39.4
3	17.4	16.0	15.4	15.1	14.9	14.7	14.6	14.5	14.5	14.4	14.4	14.3	14.3
4	12.2	10.6	9.98	9.60	9.36	9.20	9.07	8.98	8.90	8.84	8.79	8.75	8.68
5	10.0	8.43	7.76	7.39	7.15	6.98	6.85	6.76	6.68	6.62	6.57	6.52	6.46
6	8.81	7.26	6.60	6.23	5.99	5.82	5.70	5.60	5.52	5.46	5.41	5.37	5.30
7	8.07	6.54	5.89	5.52	5.29	5.12	4.99	4.90	4.82	4.76	4.71	4.67	4.60
8	7.57	6.06	5.42	5.05	4.82	4.65	4.53	4.43	4.36	4.30	4.24	4.20	4.13
9	7.21	5.71	5.08	4.72	4.48	4.32	4.20	4.10	4.03	3.96	3.91	3.87	3.80
10	6.94	5.46	4.83	4.47	4.24	4.07	3.95	3.85	3.78	3.72	3.66	3.62	3.55
11	6.72	5.26	4.63	4.28	4.04	3.88	3.76	3.66	3.59	3.53	3.47	3.43	3.36
12	6.55	5.10	4.47	4.12	3.89	3.73	3.61	3.51	3.44	3.37	3.32	3.28	3.21
13	6.41	4.97	4.35	4.00	3.77	3.60	3.48	3.39	3.31	3.25	3.20	3.15	3.08
14	6.30	4.86	4.24	3.89	3.66	3.50	3.38	3.29	3.21	3.15	3.09	3.05	2.98
15	6.20	4.77	4.15	3.80	3.58	3.41	3.29	3.20	3.12	3.06	3.01	2.96	2.89
16	6.12	4.69	4.08	3.73	3.50	3.34	3.22	3.12	3.05	2.99	2.93	2.89	2.82
17	6.04	4.62	4.01	3.66	3.44	3.28	3.16	3.06	2.98	2.92	2.87	2.82	2.75
18	5.98	4.56	3.95	3.61	3.38	3.22	3.10	3.01	2.93	2.87	2.81	2.77	2.70
19	5.92	4.51	3.90	3.56	3.33	3.17	3.05	2.96	2.88	2.82	2.76	2.72	2.65
20	5.87	4.46	3.86	3.51	3.29	3.13	3.01	2.91	2.84	2.77	2.72	2.68	2.60
21	5.83	4.42	3.82	3.48	3.25	3.09	2.97	2.87	2.80	2.73	2.68	2.64	2.56
22	5.79	4.38	3.78	3.44	3.22	3.05	2.93	2.84	2.76	2.70	2.65	2.60	2.53
23	5.75	4.35	3.75	3.41	3.18	3.02	2.90	2.81	2.73	2.67	2.62	2.57	2.50
24	5.72	4.32	3.72	3.38	3.15	2.99	2.87	2.78	2.70	2.64	2.59	2.54	2.47
25	5.69	4.29	3.69	3.35	3.13	2.97	2.85	2.75	2.68	2.61	2.56	2.51	2.44
26	5.66	4.27	3.67	3.33	3.10	2.94	2.82	2.73	2.65	2.59	2.54	2.49	2.42
27	5.63	4.24	3.65	3.31	3.08	2.92	2.80	2.71	2.63	2.57	2.51	2.47	2.39
28	5.61	4.22	3.63	3.29	3.06	2.90	2.78	2.69	2.61	2.55	2.49	2.45	2.37
29	5.59	4.20	3.61	3.27	3.04	2.88	2.76	2.67	2.59	2.53	2.48	2.43	2.36
30	5.57	4.18	3.59	3.25	3.03	2.87	2.75	2.65	2.57	2.51	2.46	2.41	2.34
32	5.53	4.15	3.56	3.22	3.00	2.84	2.71	2.62	2.54	2.48	2.43	2.38	2.31
34	5.50	4.12	3.53	3.19	2.97	2.81	2.69	2.59	2.52	2.45	2.40	2.35	2.28
36	5.47	4.09	3.50	3.17	2.94	2.78	2.66	2.57	2.49	2.43	2.37	2.33	2.25
38	5.45	4.07	3.48	3.15	2.92	2.76	2.64	2.55	2.47	2.41	2.35	2.31	2.23
40	5.42	4.05	3.46	3.13	2.90	2.74	2.62	2.53	2.45	2.39	2.33	2.29	2.21
50	5.34	3.97	3.39	3.05	2.83	2.67	2.55	2.46	2.38	2.32	2.26	2.22	2.14
60	5.29	3.93	3.34	3.01	2.79	2.63	2.51	2.41	2.33	2.27	2.22	2.17	2.09
70	5.25	3.89	3.31	2.97	2.75	2.59	2.47	2.38	2.30	2.24	2.18	2.14	2.06
80	5.22	3.86	3.28	2.95	2.73	2.57	2.45	2.35	2.28	2.21	2.16	2.11	2.03
90	5.20	3.84	3.26	2.93	2.71	2.55	2.43	2.34	2.26	2.19	2.14	2.09	2.02
100	5.18	3.83	3.25	2.92	2.70	2.54	2.42	2.32	2.24	2.18	2.12	2.08	2.00
∞	5.02	3.69	3.12	2.79	2.57	2.41	2.29	2.19	2.11	2.05	1.99	1.94	1.87

Remark : to find $u_{\nu_1,\nu_2;0.025}$ such $\mathbb{P}[F \leqslant u_{\nu_1,\nu_2;0.025}] = 0.025$, use the following equality:

$$u_{\nu_1,\nu_2;0.025} = \frac{1}{u_{\nu_2,\nu_1;0.975}}$$

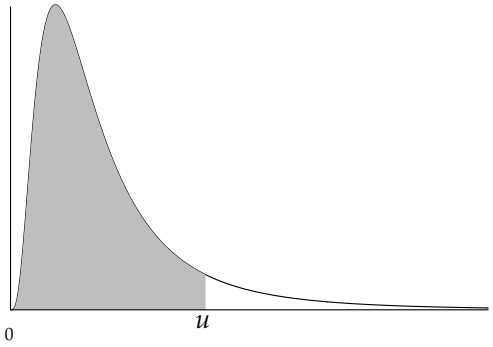
Fisher variables
97.5% quantile of the variable $F : \mathcal{F}(\nu_1, \nu_2)$



$$u_{\nu_1,\nu_2;0.975} = \mathbb{P}[F \leqslant u_{\nu_1,\nu_2;0.975}] = 0.975$$

	ν_1												
ν_2	16	18	20	22	24	26	28	30	40	60	80	100	∞
1	987	990	993	995	997	999	1000	1001	1006	1010	1012	1013	1018
2	39.4	39.4	39.4	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5
3	14.2	14.2	14.2	14.1	14.1	14.1	14.1	14.1	14.0	14.0	14.0	14.0	13.9
4	8.63	8.59	8.56	8.53	8.51	8.49	8.48	8.46	8.41	8.36	8.33	8.32	8.26
5	6.40	6.36	6.33	6.30	6.28	6.26	6.24	6.23	6.18	6.12	6.10	6.08	6.02
6	5.24	5.20	5.17	5.14	5.12	5.10	5.08	5.07	5.01	4.96	4.93	4.92	4.85
7	4.54	4.50	4.47	4.44	4.41	4.39	4.38	4.36	4.31	4.25	4.23	4.21	4.14
8	4.08	4.03	4.00	3.97	3.95	3.93	3.91	3.89	3.84	3.78	3.76	3.74	3.67
9	3.74	3.70	3.67	3.64	3.61	3.59	3.58	3.56	3.51	3.45	3.42	3.40	3.33
10	3.50	3.45	3.42	3.39	3.37	3.34	3.33	3.31	3.26	3.20	3.17	3.15	3.08
11	3.30	3.26	3.23	3.20	3.17	3.15	3.13	3.12	3.06	3.00	2.97	2.96	2.88
12	3.15	3.11	3.07	3.04	3.02	3.00	2.98	2.96	2.91	2.85	2.82	2.80	2.72
13	3.03	2.98	2.95	2.92	2.89	2.87	2.85	2.84	2.78	2.72	2.69	2.67	2.60
14	2.92	2.88	2.84	2.81	2.79	2.77	2.75	2.73	2.67	2.61	2.58	2.56	2.49
15	2.84	2.79	2.76	2.73	2.70	2.68	2.66	2.64	2.59	2.52	2.49	2.47	2.40
16	2.76	2.72	2.68	2.65	2.63	2.60	2.58	2.57	2.51	2.45	2.42	2.40	2.32
17	2.70	2.65	2.62	2.59	2.56	2.54	2.52	2.50	2.44	2.38	2.35	2.33	2.25
18	2.64	2.60	2.56	2.53	2.50	2.48	2.46	2.44	2.38	2.32	2.29	2.27	2.19
19	2.59	2.55	2.51	2.48	2.45	2.43	2.41	2.39	2.33	2.27	2.24	2.22	2.13
20	2.55	2.50	2.46	2.43	2.41	2.39	2.37	2.35	2.29	2.22	2.19	2.17	2.09
21	2.51	2.46	2.42	2.39	2.37	2.34	2.33	2.31	2.25	2.18	2.15	2.13	2.04
22	2.47	2.43	2.39	2.36	2.33	2.31	2.29	2.27	2.21	2.14	2.11	2.09	2.00
23	2.44	2.39	2.36	2.33	2.30	2.28	2.26	2.24	2.18	2.11	2.08	2.06	1.97
24	2.41	2.36	2.33	2.30	2.27	2.25	2.23	2.21	2.15	2.08	2.05	2.02	1.94
25	2.38	2.34	2.30	2.27	2.24	2.22	2.20	2.18	2.12	2.05	2.02	2.00	1.91
26	2.36	2.31	2.28	2.24	2.22	2.19	2.17	2.16	2.09	2.03	1.99	1.97	1.88
27	2.34	2.29	2.25	2.22	2.19	2.17	2.15	2.13	2.07	2.00	1.97	1.94	1.85
28	2.32	2.27	2.23	2.20	2.17	2.15	2.13	2.11	2.05	1.98	1.94	1.92	1.83
29	2.30	2.25	2.21	2.18	2.15	2.13	2.11	2.09	2.03	1.96	1.92	1.90	1.81
30	2.28	2.23	2.20	2.16	2.14	2.11	2.09	2.07	2.01	1.94	1.90	1.88	1.79
32	2.25	2.20	2.16	2.13	2.10	2.08	2.06	2.04	1.98	1.91	1.87	1.85	1.75
34	2.22	2.17	2.13	2.10	2.07	2.05	2.03	2.01	1.95	1.88	1.84	1.82	1.72
36	2.20	2.15	2.11	2.08	2.05	2.03	2.00	1.99	1.92	1.85	1.81	1.79	1.69
38	2.17	2.13	2.09	2.05	2.03	2.00	1.98	1.96	1.90	1.82	1.79	1.76	1.66
40	2.15	2.11	2.07	2.03	2.01	1.98	1.96	1.94	1.88	1.80	1.76	1.74	1.64
50	2.08	2.03	1.99	1.96	1.93	1.91	1.89	1.87	1.80	1.72	1.68	1.66	1.55
60	2.03	1.98	1.94	1.91	1.88	1.86	1.83	1.82	1.74	1.67	1.63	1.60	1.48
70	2.00	1.95	1.91	1.88	1.85	1.82	1.80	1.78	1.71	1.63	1.59	1.56	1.44
80	1.97	1.92	1.88	1.85	1.82	1.79	1.77	1.75	1.68	1.60	1.55	1.53	1.40
90	1.95	1.91	1.86	1.83	1.80	1.77	1.75	1.73	1.66	1.58	1.53	1.50	1.37
100	1.94	1.89	1.85	1.81	1.78	1.76	1.74	1.71	1.64	1.56	1.51	1.48	1.35
∞	1.80	1.75	1.71	1.67	1.64	1.61	1.59	1.57	1.48	1.39	1.33	1.30	1.00

Fisher variables
99.5% quantile of the variable $F : \mathcal{F}(\nu_1, \nu_2)$



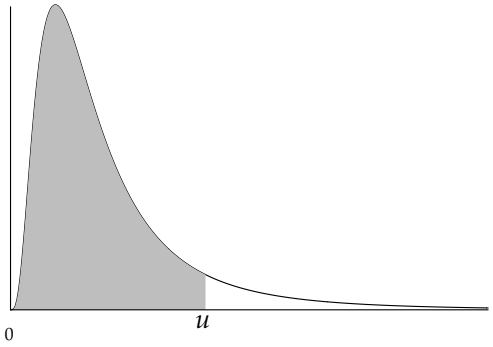
$$u_{\nu_1,\nu_2;0.995} = \mathbb{P}[F \leqslant u_{\nu_1,\nu_2;0.995}] = 0.995$$

	ν_1												
ν_2	1	2	3	4	5	6	7	8	9	10	11	12	14
1	—	—	—	—	—	—	—	—	—	—	—	—	—
2	199	199	199	199	199	199	199	199	199	199	199	199	199
3	55.6	49.8	47.5	46.2	45.4	44.8	44.4	44.1	43.9	43.7	43.5	43.4	43.2
4	31.3	26.3	24.3	23.2	22.5	22.0	21.6	21.4	21.1	21.0	20.8	20.7	20.5
5	22.8	18.3	16.5	15.6	14.9	14.5	14.2	14.0	13.8	13.6	13.5	13.4	13.2
6	18.6	14.5	12.9	12.0	11.5	11.1	10.8	10.6	10.4	10.3	10.1	10.0	9.88
7	16.2	12.4	10.9	10.1	9.52	9.16	8.89	8.68	8.51	8.38	8.27	8.18	8.03
8	14.7	11.0	9.60	8.81	8.30	7.95	7.69	7.50	7.34	7.21	7.10	7.01	6.87
9	13.6	10.1	8.72	7.96	7.47	7.13	6.88	6.69	6.54	6.42	6.31	6.23	6.09
10	12.8	9.43	8.08	7.34	6.87	6.54	6.30	6.12	5.97	5.85	5.75	5.66	5.53
11	12.2	8.91	7.60	6.88	6.42	6.10	5.86	5.68	5.54	5.42	5.32	5.24	5.10
12	11.8	8.51	7.23	6.52	6.07	5.76	5.52	5.35	5.20	5.09	4.99	4.91	4.77
13	11.4	8.19	6.93	6.23	5.79	5.48	5.25	5.08	4.94	4.82	4.72	4.64	4.51
14	11.1	7.92	6.68	6.00	5.56	5.26	5.03	4.86	4.72	4.60	4.51	4.43	4.30
15	10.8	7.70	6.48	5.80	5.37	5.07	4.85	4.67	4.54	4.42	4.33	4.25	4.12
16	10.6	7.51	6.30	5.64	5.21	4.91	4.69	4.52	4.38	4.27	4.18	4.10	3.97
17	10.4	7.35	6.16	5.50	5.07	4.78	4.56	4.39	4.25	4.14	4.05	3.97	3.84
18	10.2	7.21	6.03	5.37	4.96	4.66	4.44	4.28	4.14	4.03	3.94	3.86	3.73
19	10.1	7.09	5.92	5.27	4.85	4.56	4.34	4.18	4.04	3.93	3.84	3.76	3.64
20	9.94	6.99	5.82	5.17	4.76	4.47	4.26	4.09	3.96	3.85	3.76	3.68	3.55
21	9.83	6.89	5.73	5.09	4.68	4.39	4.18	4.01	3.88	3.77	3.68	3.60	3.48
22	9.73	6.81	5.65	5.02	4.61	4.32	4.11	3.94	3.81	3.70	3.61	3.54	3.41
23	9.63	6.73	5.58	4.95	4.54	4.26	4.05	3.88	3.75	3.64	3.55	3.47	3.35
24	9.55	6.66	5.52	4.89	4.49	4.20	3.99	3.83	3.69	3.59	3.50	3.42	3.30
25	9.48	6.60	5.46	4.84	4.43	4.15	3.94	3.78	3.64	3.54	3.45	3.37	3.25
26	9.41	6.54	5.41	4.79	4.38	4.10	3.89	3.73	3.60	3.49	3.40	3.33	3.20
27	9.34	6.49	5.36	4.74	4.34	4.06	3.85	3.69	3.56	3.45	3.36	3.28	3.16
28	9.28	6.44	5.32	4.70	4.30	4.02	3.81	3.65	3.52	3.41	3.32	3.25	3.12
29	9.23	6.40	5.28	4.66	4.26	3.98	3.77	3.61	3.48	3.38	3.29	3.21	3.09
30	9.18	6.35	5.24	4.62	4.23	3.95	3.74	3.58	3.45	3.34	3.25	3.18	3.06
32	9.09	6.28	5.17	4.56	4.17	3.89	3.68	3.52	3.39	3.29	3.20	3.12	3.00
34	9.01	6.22	5.11	4.50	4.11	3.84	3.63	3.47	3.34	3.24	3.15	3.07	2.95
36	8.94	6.16	5.06	4.46	4.06	3.79	3.58	3.42	3.30	3.19	3.10	3.03	2.90
38	8.88	6.11	5.02	4.41	4.02	3.75	3.54	3.39	3.26	3.15	3.06	2.99	2.87
40	8.83	6.07	4.98	4.37	3.99	3.71	3.51	3.35	3.22	3.12	3.03	2.95	2.83
50	8.63	5.90	4.83	4.23	3.85	3.58	3.38	3.22	3.09	2.99	2.90	2.82	2.70
60	8.49	5.79	4.73	4.14	3.76	3.49	3.29	3.13	3.01	2.90	2.82	2.74	2.62
70	8.40	5.72	4.66	4.08	3.70	3.43	3.23	3.08	2.95	2.85	2.76	2.68	2.56
80	8.33	5.67	4.61	4.03	3.65	3.39	3.19	3.03	2.91	2.80	2.72	2.64	2.52
90	8.28	5.62	4.57	3.99	3.62	3.35	3.15	3.00	2.87	2.77	2.68	2.61	2.49
100	8.24	5.59	4.54	3.96	3.59	3.33	3.13	2.97	2.85	2.74	2.66	2.58	2.46
∞	7.88	5.30	4.28	3.72	3.35	3.09	2.90	2.74	2.62	2.52	2.43	2.36	2.24

Remark : to find $u_{\nu_1,\nu_2;0.005}$ such $\mathbb{P}[F \leqslant u_{\nu_1,\nu_2;0.005}] = 0.005$, use the following equality:

$$u_{\nu_1,\nu_2;0.005} = \frac{1}{u_{\nu_2,\nu_1;0.995}}$$

Fisher variables
99.5% quantile of the variable $F : \mathcal{F}(\nu_1, \nu_2)$



$$u_{\nu_1,\nu_2;0.995} = \mathbb{P}[F \leqslant u_{\nu_1,\nu_2;0.995}] = 0.995$$

	ν_1												
ν_2	16	18	20	22	24	26	28	30	40	60	80	100	∞
1	—	—	—	—	—	—	—	—	—	—	—	—	—
2	199	199	199	199	199	199	199	199	199	199	199	199	199
3	43.0	42.9	42.8	42.7	42.6	42.6	42.5	42.5	42.3	42.1	42.1	42.0	41.8
4	20.4	20.3	20.2	20.1	20.0	20.0	19.9	19.9	19.8	19.6	19.5	19.5	19.3
5	13.1	13.0	12.9	12.8	12.8	12.7	12.7	12.7	12.5	12.4	12.3	12.3	12.1
6	9.76	9.66	9.59	9.53	9.47	9.43	9.39	9.36	9.24	9.12	9.06	9.03	8.88
7	7.91	7.83	7.75	7.69	7.64	7.60	7.57	7.53	7.42	7.31	7.25	7.22	7.08
8	6.76	6.68	6.61	6.55	6.50	6.46	6.43	6.40	6.29	6.18	6.12	6.09	5.95
9	5.98	5.90	5.83	5.78	5.73	5.69	5.65	5.62	5.52	5.41	5.36	5.32	5.19
10	5.42	5.34	5.27	5.22	5.17	5.13	5.10	5.07	4.97	4.86	4.80	4.77	4.64
11	5.00	4.92	4.86	4.80	4.76	4.72	4.68	4.65	4.55	4.45	4.39	4.36	4.23
12	4.67	4.59	4.53	4.48	4.43	4.39	4.36	4.33	4.23	4.12	4.07	4.04	3.90
13	4.41	4.33	4.27	4.22	4.17	4.13	4.10	4.07	3.97	3.87	3.81	3.78	3.65
14	4.20	4.12	4.06	4.01	3.96	3.92	3.89	3.86	3.76	3.66	3.60	3.57	3.44
15	4.02	3.95	3.88	3.83	3.79	3.75	3.72	3.69	3.58	3.48	3.43	3.39	3.26
16	3.87	3.80	3.73	3.68	3.64	3.60	3.57	3.54	3.44	3.33	3.28	3.25	3.11
17	3.75	3.67	3.61	3.56	3.51	3.47	3.44	3.41	3.31	3.21	3.15	3.12	2.98
18	3.64	3.56	3.50	3.45	3.40	3.36	3.33	3.30	3.20	3.10	3.04	3.01	2.87
19	3.54	3.46	3.40	3.35	3.31	3.27	3.24	3.21	3.11	3.00	2.95	2.91	2.78
20	3.46	3.38	3.32	3.27	3.22	3.18	3.15	3.12	3.02	2.92	2.86	2.83	2.69
21	3.38	3.31	3.24	3.19	3.15	3.11	3.08	3.05	2.95	2.84	2.79	2.75	2.61
22	3.31	3.24	3.18	3.12	3.08	3.04	3.01	2.98	2.88	2.77	2.72	2.69	2.55
23	3.25	3.18	3.12	3.06	3.02	2.98	2.95	2.92	2.82	2.71	2.66	2.62	2.48
24	3.20	3.12	3.06	3.01	2.97	2.93	2.90	2.87	2.77	2.66	2.60	2.57	2.43
25	3.15	3.08	3.01	2.96	2.92	2.88	2.85	2.82	2.72	2.61	2.55	2.52	2.38
26	3.11	3.03	2.97	2.92	2.87	2.84	2.80	2.77	2.67	2.56	2.51	2.47	2.33
27	3.07	2.99	2.93	2.88	2.83	2.79	2.76	2.73	2.63	2.52	2.47	2.43	2.29
28	3.03	2.95	2.89	2.84	2.79	2.76	2.72	2.69	2.59	2.48	2.43	2.39	2.25
29	2.99	2.92	2.86	2.80	2.76	2.72	2.69	2.66	2.56	2.45	2.39	2.36	2.21
30	2.96	2.89	2.82	2.77	2.73	2.69	2.66	2.63	2.52	2.42	2.36	2.32	2.18
32	2.90	2.83	2.77	2.71	2.67	2.63	2.60	2.57	2.47	2.36	2.30	2.26	2.11
34	2.85	2.78	2.72	2.66	2.62	2.58	2.55	2.52	2.42	2.30	2.25	2.21	2.06
36	2.81	2.73	2.67	2.62	2.58	2.54	2.50	2.48	2.37	2.26	2.20	2.17	2.01
38	2.77	2.70	2.63	2.58	2.54	2.50	2.47	2.44	2.33	2.22	2.16	2.12	1.97
40	2.74	2.66	2.60	2.55	2.50	2.46	2.43	2.40	2.30	2.18	2.12	2.09	1.93
50	2.61	2.53	2.47	2.42	2.37	2.33	2.30	2.27	2.16	2.05	1.99	1.95	1.79
60	2.53	2.45	2.39	2.33	2.29	2.25	2.22	2.19	2.08	1.96	1.90	1.86	1.69
70	2.47	2.39	2.33	2.28	2.23	2.19	2.16	2.13	2.02	1.90	1.84	1.80	1.62
80	2.43	2.35	2.29	2.23	2.19	2.15	2.11	2.08	1.97	1.85	1.79	1.75	1.56
90	2.39	2.32	2.25	2.20	2.15	2.12	2.08	2.05	1.94	1.82	1.75	1.71	1.52
100	2.37	2.29	2.23	2.17	2.13	2.09	2.05	2.02	1.91	1.79	1.72	1.68	1.49
∞	2.14	2.06	2.00	1.95	1.90	1.86	1.82	1.79	1.67	1.53	1.45	1.40	1.00