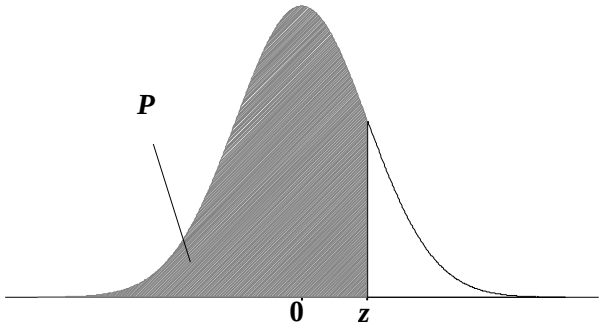
Statistical Services Centre

University of Reading

Statistical Tables

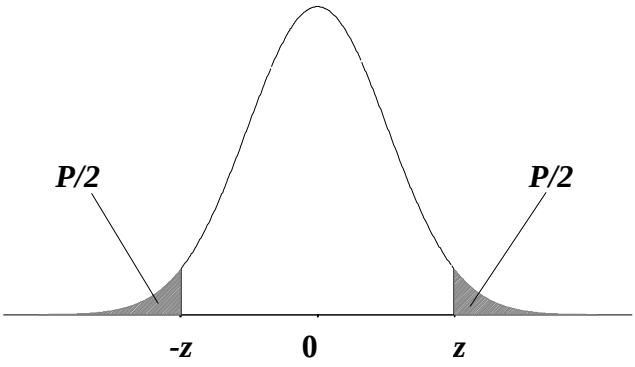
1. The Standard Normal Distribution



The normal distribution with mean 0 and standard deviation 1 is tabulated below. For each value *z*, the quantity given is the proportion *P* of the distribution less than *z*. For a normal distribution, with mean μ and variance σ^2, the proportion of the distribution less than some value x, is obtained by calculating $z=(x-\mu)/\sigma$ and reading off the proportion corresponding to this value *z*.

z	*P*	*z*	*P*	*z*	*P*	*z*	*P*	*z*	*P*	*z*	*P*
-4.00	0.00003	**-2.05**	0.0202	**-1.00**	0.1587	**0.00**	0.5000	**1.05**	0.8531	**2.10**	0.9821
-3.50	0.00023	**-2.00**	.0228	**-0.95**	.1711	**0.05**	.5199	**1.10**	.8643	**2.15**	.9842
-3.00	0.0013	**-1.95**	.0256	**-0.90**	.1841	**0.10**	.5398	**1.15**	.8749	**2.20**	.9861
-2.95	0.0016	**-1.90**	0.0287	**-0.85**	0.1977	**0.15**	0.5596	**1.20**	0.8849	**2.25**	0.9878
-2.90	.0019	**-1.85**	.0322	**-0.80**	.2119	**0.20**	.5793	**1.25**	.8944	**2.30**	.9893
-2.85	.0022	**-1.80**	.0359	**-0.75**	.2266	**0.25**	.5987	**1.30**	.9032	**2.35**	.9906
-2.80	0.0026	**-1.75**	0.0401	**-0.70**	0.2420	**0.30**	0.6179	**1.35**	0.9115	**2.40**	0.9918
-2.75	.0030	**-1.70**	.0446	**-0.65**	.2578	**0.35**	.6368	**1.40**	.9192	**2.45**	.9929
-2.70	.0035	**-1.65**	.0495	**-0.60**	.2743	**0.40**	.6554	**1.45**	.9265	**2.50**	.9938
-2.65	0.0040	**-1.60**	0.0548	**-0.55**	0.2912	**0.45**	0.6736	**1.50**	0.9332	**2.55**	0.9946
-2.60	.0047	**-1.55**	.0606	**-0.50**	.3085	**0.50**	.6915	**1.55**	.9394	**2.60**	.9953
-2.55	.0054	**-1.50**	.0668	**-0.45**	.3264	**0.55**	.7088	**1.60**	.9452	**2.65**	.9960
-2.50	0.0062	**-1.45**	0.0735	**-0.40**	0.3446	**0.60**	0.7257	**1.65**	0.9505	**2.70**	0.9965
-2.45	.0071	**-1.40**	.0808	**-0.35**	.3632	**0.65**	.7422	**1.70**	.9554	**2.75**	.9970
-2.40	.0082	**-1.35**	.0885	**-0.30**	.3821	**0.70**	.7580	**1.75**	.9599	**2.80**	.9974
-2.35	0.0094	**-1.30**	0.0968	**-0.25**	0.4013	**0.75**	0.7734	**1.80**	0.9641	**2.85**	0.9978
-2.30	.0107	**-1.25**	.1056	**-0.20**	.4207	**0.80**	.7881	**1.85**	.9678	**2.90**	.9981
-2.25	.0122	**-1.20**	.1151	**-0.15**	.4404	**0.85**	.8023	**1.90**	.9713	**2.95**	.9984
-2.20	0.0139	**-1.15**	0.1251	**-0.10**	0.4602	**0.90**	0.8159	**1.95**	0.9744	**3.00**	0.9987
-2.15	.0158	**-1.10**	.1357	**-0.05**	.4801	**0.95**	.8289	**2.00**	.9772	**3.50**	.99977
-2.10	.0179	**-1.05**	.1469	**0.00**	.5000	**1.00**	.8413	**2.05**	.9798	**4.00**	.99997

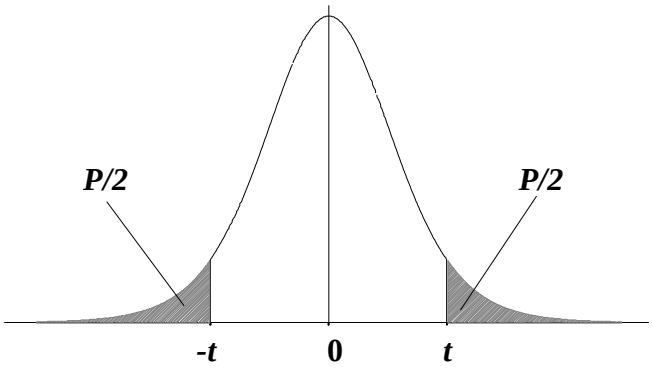
2. Percentage Points of the Normal Distribution



This table gives percentage points of the standard normal distribution. These are the values of z for which a given percentage, P, of the standard normal distribution lies outside the range from $-z$ to $+z$.

P	***z***
90	0.1257
80	0.2533
70	0.3853
60	0.5244
50	0.6745
40	0.8416
30	1.0364
20	1.2816
15	1.4395
10	1.6449
5	**1.9600**
2	2.3263
1	2.5758
0.5	2.8070
0.25	3.0233
0.1	3.2905
0.01	3.8906

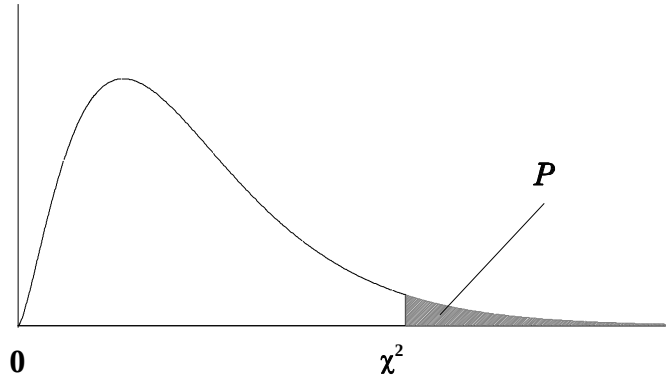
3. Percentage Points of Student's t Distribution



This table gives percentage points of the t-distribution on *v* d.f. These are the values of *t* for which a given percentage, *P*, of the t-distribution lies outside the range -*t* to +*t*. As the number of degrees of freedom increases, the distribution becomes closer to the standard normal distribution.

P	**50**	**20**	**10**	**5**	**2**	**1**	**0.2**	**0.1**
***v* = 1**	1.00	3.08	6.31	12.7	31.8	63.7	318	637
2	0.82	1.89	2.92	4.30	6.96	9.92	22.3	31.6
3	0.76	1.64	2.35	3.18	4.54	5.84	10.2	12.9
4	0.74	1.53	2.13	2.78	3.75	4.60	7.17	8.61
5	0.73	1.48	2.02	2.57	3.36	4.03	5.89	6.87
6	0.72	1.44	1.94	2.45	3.14	3.71	5.21	5.96
7	0.71	1.42	1.89	2.36	3.00	3.50	4.79	5.41
8	0.71	1.40	1.86	2.31	2.90	3.36	4.50	5.04
9	0.70	1.38	1.83	2.26	2.82	3.25	4.30	4.78
10	0.70	1.37	1.81	2.23	2.76	3.17	4.14	4.59
11	0.70	1.36	1.80	2.20	2.72	3.11	4.03	4.44
12	0.70	1.36	1.78	2.18	2.68	3.05	3.93	4.32
13	0.69	1.35	1.77	2.16	2.65	3.01	3.85	4.22
14	0.69	1.35	1.76	2.14	2.62	2.98	3.79	4.14
15	0.69	1.34	1.75	2.13	2.60	2.95	3.73	4.07
16	0.69	1.34	1.75	2.12	2.58	2.92	3.69	4.01
17	0.69	1.33	1.74	2.11	2.57	2.90	3.65	3.96
18	0.69	1.33	1.73	2.10	2.55	2.88	3.61	3.92
19	0.69	1.33	1.73	2.09	2.54	2.86	3.58	3.88
20	0.69	1.32	1.72	2.09	2.53	2.85	3.55	3.85
22	0.69	1.32	1.72	2.07	2.51	2.82	3.51	3.79
24	0.68	1.32	1.71	2.06	2.49	2.80	3.47	3.75
26	0.68	1.32	1.71	2.06	2.48	2.78	3.44	3.71
28	0.68	1.31	1.70	2.05	2.47	2.76	3.41	3.67
30	0.68	1.31	1.70	2.04	2.46	2.75	3.39	3.65
35	0.68	1.31	1.69	2.03	2.44	2.72	3.34	3.59
40	0.68	1.30	1.68	2.02	2.42	2.70	3.31	3.55
45	0.68	1.30	1.68	2.01	2.41	2.69	3.28	3.52
50	0.68	1.30	1.68	2.01	2.40	2.68	3.26	3.50
55	0.68	1.30	1.67	2.00	2.40	2.67	3.25	3.48
60	0.68	1.30	1.67	2.00	2.39	2.66	3.23	3.46
∞	**0.67**	**1.28**	**1.64**	**1.96**	**2.33**	**2.58**	**3.09**	**3.29**

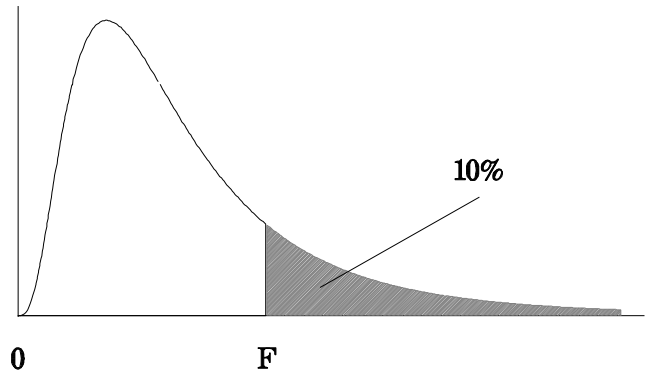
4. Percentage Points of the Chi-Square Distribution



This table gives percentage points of the chi-square distribution on ν d.f. These are the values of χ^2 for which a given percentage, P, of the chi-square distribution is greater than χ^2.

P	97.5	95	50	10	5	2.5	1	0.1
$\nu = 1$	.000982	0.00393	0.45	2.71	3.84	5.02	6.64	10.8
2	0.0506	0.103	1.39	4.61	5.99	7.38	9.21	13.8
3	0.216	0.352	2.37	6.25	7.81	9.35	11.3	16.3
4	0.484	0.711	3.36	7.78	9.49	11.1	13.3	18.5
5	0.831	1.15	4.35	9.24	11.1	12.8	15.1	20.5
6	1.24	1.64	5.35	10.6	12.6	14.5	16.8	22.5
7	1.69	2.17	6.35	12.0	14.1	16.0	18.5	24.3
8	2.18	2.73	7.34	13.4	15.5	17.5	20.1	26.1
9	2.70	3.33	8.34	14.7	16.9	19.0	21.7	27.9
10	3.25	3.94	9.34	16.0	18.3	20.5	23.2	29.6
11	3.82	4.57	10.3	17.3	19.7	21.9	24.7	31.3
12	4.40	5.23	11.3	18.5	21.0	23.3	26.2	32.9
13	5.01	5.89	12.3	19.8	22.4	24.7	27.7	34.5
14	5.63	6.57	13.3	21.1	23.7	26.1	29.1	36.1
15	6.26	7.26	14.3	22.3	25.0	27.5	30.6	37.7
16	6.91	7.96	15.3	23.5	26.3	28.8	32.0	39.3
17	7.56	8.67	16.3	24.8	27.6	30.2	33.4	40.8
18	8.23	9.39	17.3	26.0	28.9	31.5	34.8	42.3
19	8.91	10.1	18.3	27.2	30.1	32.9	36.2	43.8
20	9.59	10.9	19.3	28.4	31.4	34.2	37.6	45.3
22	11.0	12.3	21.3	30.8	33.9	36.8	40.3	48.3
24	12.4	13.9	23.3	33.2	36.4	39.4	43.0	51.2
26	13.8	15.4	25.3	35.6	38.9	41.9	45.6	54.1
28	15.3	16.9	27.3	37.9	41.3	44.5	48.3	56.9
30	16.8	18.5	29.3	40.3	43.8	47.0	50.9	59.7
35	20.6	22.5	34.3	46.1	49.8	53.2	57.3	66.6
40	24.4	26.5	39.3	51.8	55.8	59.3	63.7	73.4
45	28.4	30.6	44.3	57.5	61.7	65.4	70.0	80.1
50	32.4	34.8	49.3	63.2	67.5	71.4	76.2	86.7
55	36.4	39.0	54.3	68.8	73.3	77.4	82.3	93.2
60	40.5	43.2	59.3	74.4	79.1	83.3	88.4	99.7

5. Percentage Points of the F Distribution

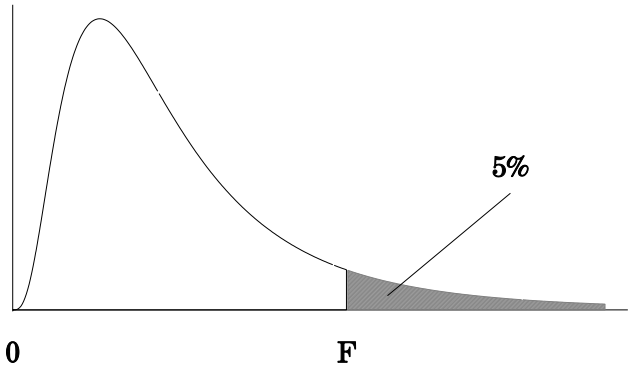


These tables give values for which the percentage of the F distribution in the title is above the tabulated value F.
The F distribution arises from the ratio of two independent estimates of a variance; ν_1 represents the degrees of freedom of the estimate in the numerator and ν_2 the degrees of freedom of the estimate in the denominator.

(a) 10% Points of the F distribution

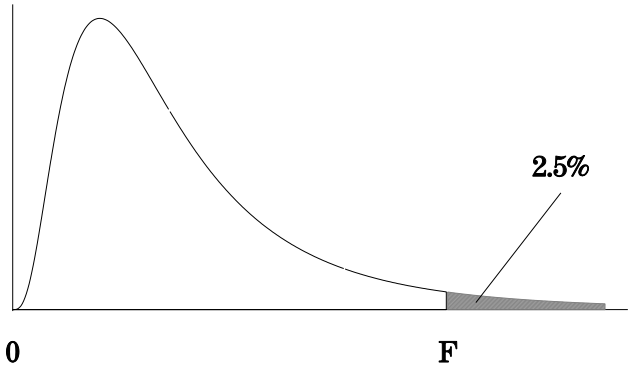
ν_1	1	2	3	4	5	6	7	8	10	12	24
$\nu_2 = 2$	8.53	9.00	9.16	9.24	9.29	9.33	9.35	9.37	9.39	9.41	9.45
3	5.54	5.46	5.39	5.34	5.31	5.28	5.27	5.25	5.23	5.22	5.18
4	4.54	4.32	4.19	4.11	4.05	4.01	3.98	3.95	3.92	3.90	3.83
5	4.06	3.78	3.62	3.52	3.45	3.40	3.37	3.34	3.30	3.27	3.19
6	3.78	3.46	3.29	3.18	3.11	3.05	3.01	2.98	2.94	2.90	2.82
7	3.59	3.26	3.07	2.96	2.88	2.83	2.78	2.75	2.70	2.67	2.58
8	3.46	3.11	2.92	2.81	2.73	2.67	2.62	2.59	2.54	2.50	2.40
9	3.36	3.01	2.81	2.69	2.61	2.55	2.51	2.47	2.42	2.38	2.28
10	3.28	2.92	2.73	2.61	2.52	2.46	2.41	2.38	2.32	2.28	2.18
11	3.23	2.86	2.66	2.54	2.45	2.39	2.34	2.30	2.25	2.21	2.10
12	3.18	2.81	2.61	2.48	2.39	2.33	2.28	2.24	2.19	2.15	2.04
13	3.14	2.76	2.56	2.43	2.35	2.28	2.23	2.20	2.14	2.10	1.98
14	3.10	2.73	2.52	2.39	2.31	2.24	2.19	2.15	2.10	2.05	1.94
15	3.07	2.70	2.49	2.36	2.27	2.21	2.16	2.12	2.06	2.02	1.90
16	3.05	2.67	2.46	2.33	2.24	2.18	2.13	2.09	2.03	1.99	1.87
17	3.03	2.64	2.44	2.31	2.22	2.15	2.10	2.06	2.00	1.96	1.84
18	3.01	2.62	2.42	2.29	2.20	2.13	2.08	2.04	1.98	1.93	1.81
19	2.99	2.61	2.40	2.27	2.18	2.11	2.06	2.02	1.96	1.91	1.79
20	2.97	2.59	2.38	2.25	2.16	2.09	2.04	2.00	1.94	1.89	1.77
22	2.95	2.56	2.35	2.22	2.13	2.06	2.01	1.97	1.90	1.86	1.73
24	2.93	2.54	2.33	2.19	2.10	2.04	1.98	1.94	1.88	1.83	1.70
26	2.91	2.52	2.31	2.17	2.08	2.01	1.96	1.92	1.86	1.81	1.68
28	2.89	2.50	2.29	2.16	2.06	2.00	1.94	1.90	1.84	1.79	1.66
30	2.88	2.49	2.28	2.14	2.05	1.98	1.93	1.88	1.82	1.77	1.64
35	2.85	2.46	2.25	2.11	2.02	1.95	1.90	1.85	1.79	1.74	1.60
40	2.84	2.44	2.23	2.09	2.00	1.93	1.87	1.83	1.76	1.71	1.57
45	2.82	2.42	2.21	2.07	1.98	1.91	1.85	1.81	1.74	1.70	1.55
50	2.81	2.41	2.20	2.06	1.97	1.90	1.84	1.80	1.73	1.68	1.54
55	2.80	2.40	2.19	2.05	1.95	1.88	1.83	1.78	1.72	1.67	1.52
60	2.79	2.39	2.18	2.04	1.95	1.87	1.82	1.77	1.71	1.66	1.51

(b) 5% Points of the F distribution



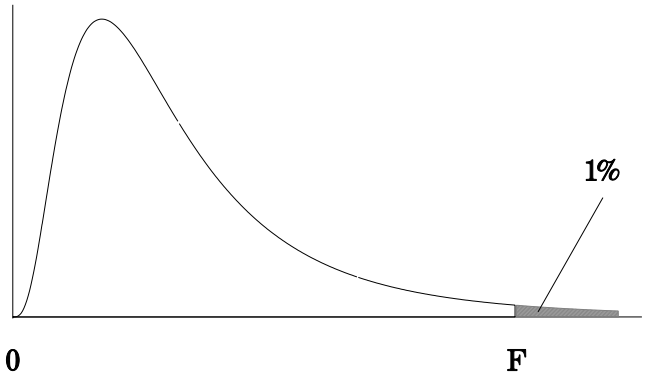
ν_1	1	2	3	4	5	6	7	8	10	12	24
ν_2 = **2**	18.5	19.0	19.2	19.2	19.3	19.3	19.4	19.4	19.4	19.4	19.5
3	10.1	9.55	9.28	9.12	9.01	8.94	8.89	8.85	8.79	8.74	8.64
4	7.71	6.94	6.59	6.39	6.26	6.16	6.09	6.04	5.96	5.91	5.77
5	6.61	5.79	5.41	5.19	5.05	4.95	4.88	4.82	4.74	4.68	4.53
6	5.99	5.14	4.76	4.53	4.39	4.28	4.21	4.15	4.06	4.00	3.84
7	5.59	4.74	4.35	4.12	3.97	3.87	3.79	3.73	3.64	3.57	3.41
8	5.32	4.46	4.07	3.84	3.69	3.58	3.50	3.44	3.35	3.28	3.12
9	5.12	4.26	3.86	3.63	3.48	3.37	3.29	3.23	3.14	3.07	2.90
10	4.96	4.10	3.71	3.48	3.33	3.22	3.14	3.07	2.98	2.91	2.74
11	4.84	3.98	3.59	3.36	3.20	3.09	3.01	2.95	2.85	2.79	2.61
12	4.75	3.89	3.49	3.26	3.11	3.00	2.91	2.85	2.75	2.69	2.51
13	4.67	3.81	3.41	3.18	3.03	2.92	2.83	2.77	2.67	2.60	2.42
14	4.60	3.74	3.34	3.11	2.96	2.85	2.76	2.70	2.60	2.53	2.35
15	4.54	3.68	3.29	3.06	2.90	2.79	2.71	2.64	2.54	2.48	2.29
16	4.49	3.63	3.24	3.01	2.85	2.74	2.66	2.59	2.49	2.42	2.24
17	4.45	3.59	3.20	2.96	2.81	2.70	2.61	2.55	2.45	2.38	2.19
18	4.41	3.55	3.16	2.93	2.77	2.66	2.58	2.51	2.41	2.34	2.15
19	4.38	3.52	3.13	2.90	2.74	2.63	2.54	2.48	2.38	2.31	2.11
20	4.35	3.49	3.10	2.87	2.71	2.60	2.51	2.45	2.35	2.28	2.08
22	4.30	3.44	3.05	2.82	2.66	2.55	2.46	2.40	2.30	2.23	2.03
24	4.26	3.40	3.01	2.78	2.62	2.51	2.42	2.36	2.25	2.18	1.98
26	4.23	3.37	2.98	2.74	2.59	2.47	2.39	2.32	2.22	2.15	1.95
28	4.20	3.34	2.95	2.71	2.56	2.45	2.36	2.29	2.19	2.12	1.91
30	4.17	3.32	2.92	2.69	2.53	2.42	2.33	2.27	2.16	2.09	1.89
35	4.12	3.27	2.87	2.64	2.49	2.37	2.29	2.22	2.11	2.04	1.83
40	4.08	3.23	2.84	2.61	2.45	2.34	2.25	2.18	2.08	2.00	1.79
45	4.06	3.20	2.81	2.58	2.42	2.31	2.22	2.15	2.05	1.97	1.76
50	4.03	3.18	2.79	2.56	2.40	2.29	2.20	2.13	2.03	1.95	1.74
55	4.02	3.16	2.77	2.54	2.38	2.27	2.18	2.11	2.01	1.93	1.72
60	4.00	3.15	2.76	2.53	2.37	2.25	2.17	2.10	1.99	1.92	1.70

(c) 2.5% Points of the F distribution



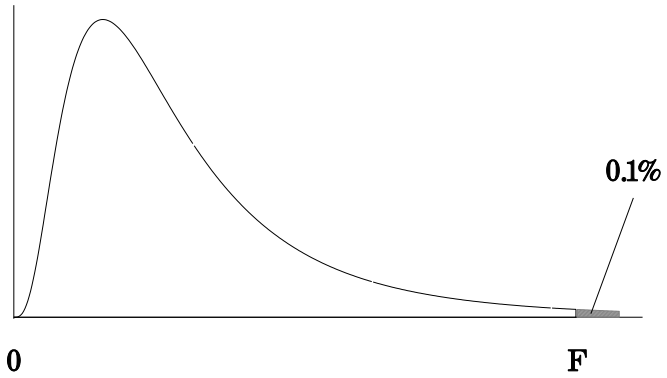
ν_1	1	2	3	4	5	6	7	8	10	12	24
ν_2 = **2**	38.5	39.0	39.2	39.3	39.3	39.3	39.4	39.4	39.4	39.4	39.5
3	17.4	16.0	15.4	15.1	14.9	14.7	14.6	14.5	14.4	14.3	14.1
4	12.2	10.7	9.98	9.60	9.36	9.20	9.07	8.98	8.84	8.75	8.51
5	10.0	8.43	7.76	7.39	7.15	6.98	6.85	6.76	6.62	6.52	6.28
6	8.81	7.26	6.60	6.23	5.99	5.82	5.70	5.60	5.46	5.37	5.12
7	8.07	6.54	5.89	5.52	5.29	5.12	4.99	4.90	4.76	4.67	4.41
8	7.57	6.06	5.42	5.05	4.82	4.65	4.53	4.43	4.30	4.20	3.95
9	7.21	5.71	5.08	4.72	4.48	4.32	4.20	4.10	3.96	3.87	3.61
10	6.94	5.46	4.83	4.47	4.24	4.07	3.95	3.85	3.72	3.62	3.37
11	6.72	5.26	4.63	4.28	4.04	3.88	3.76	3.66	3.53	3.43	3.17
12	6.55	5.10	4.47	4.12	3.89	3.73	3.61	3.51	3.37	3.28	3.02
13	6.41	4.97	4.35	4.00	3.77	3.60	3.48	3.39	3.25	3.15	2.89
14	6.30	4.86	4.24	3.89	3.66	3.50	3.38	3.29	3.15	3.05	2.79
15	6.20	4.77	4.15	3.80	3.58	3.41	3.29	3.20	3.06	2.96	2.70
16	6.12	4.69	4.08	3.73	3.50	3.34	3.22	3.12	2.99	2.89	2.63
17	6.04	4.62	4.01	3.66	3.44	3.28	3.16	3.06	2.92	2.82	2.56
18	5.98	4.56	3.95	3.61	3.38	3.22	3.10	3.01	2.87	2.77	2.50
19	5.92	4.51	3.90	3.56	3.33	3.17	3.05	2.96	2.82	2.72	2.45
20	5.87	4.46	3.86	3.51	3.29	3.13	3.01	2.91	2.77	2.68	2.41
22	5.79	4.38	3.78	3.44	3.22	3.05	2.93	2.84	2.70	2.60	2.33
24	5.72	4.32	3.72	3.38	3.15	2.99	2.87	2.78	2.64	2.54	2.27
26	5.66	4.27	3.67	3.33	3.10	2.94	2.82	2.73	2.59	2.49	2.22
28	5.61	4.22	3.63	3.29	3.06	2.90	2.78	2.69	2.55	2.45	2.17
30	5.57	4.18	3.59	3.25	3.03	2.87	2.75	2.65	2.51	2.41	2.14
35	5.48	4.11	3.52	3.18	2.96	2.80	2.68	2.58	2.44	2.34	2.06
40	5.42	4.05	3.46	3.13	2.90	2.74	2.62	2.53	2.39	2.29	2.01
45	5.38	4.01	3.42	3.09	2.86	2.70	2.58	2.49	2.35	2.25	1.96
50	5.34	3.97	3.39	3.05	2.83	2.67	2.55	2.46	2.32	2.22	1.93
55	5.31	3.95	3.36	3.03	2.81	2.65	2.53	2.43	2.29	2.19	1.90
60	5.29	3.93	3.34	3.01	2.79	2.63	2.51	2.41	2.27	2.17	1.88

(d) 1% Points of the F distribution



ν_1	1	2	3	4	5	6	7	8	10	12	24
$\nu_2 = 2$	98.5	99.0	99.2	99.3	99.3	99.3	99.4	99.4	99.4	99.4	99.5
3	34.1	30.8	29.5	28.7	28.2	27.9	27.7	27.5	27.2	27.1	26.6
4	21.2	18.0	16.7	16.0	15.5	15.2	15.0	14.8	14.6	14.4	13.9
5	16.3	13.3	12.1	11.4	11.0	10.7	10.5	10.3	10.1	9.89	9.47
6	13.8	10.9	9.78	9.15	8.75	8.47	8.26	8.10	7.87	7.72	7.31
7	12.3	9.55	8.45	7.85	7.46	7.19	6.99	6.84	6.62	6.47	6.07
8	11.3	8.65	7.59	7.01	6.63	6.37	6.18	6.03	5.81	5.67	5.28
9	10.6	8.02	6.99	6.42	6.06	5.80	5.61	5.47	5.26	5.11	4.73
10	10.0	7.56	6.55	5.99	5.64	5.39	5.20	5.06	4.85	4.71	4.33
11	9.65	7.21	6.22	5.67	5.32	5.07	4.89	4.74	4.54	4.40	4.02
12	9.33	6.93	5.95	5.41	5.06	4.82	4.64	4.50	4.30	4.16	3.78
13	9.07	6.70	5.74	5.21	4.86	4.62	4.44	4.30	4.10	3.96	3.59
14	8.86	6.51	5.56	5.04	4.69	4.46	4.28	4.14	3.94	3.80	3.43
15	8.68	6.36	5.42	4.89	4.56	4.32	4.14	4.00	3.80	3.67	3.29
16	8.53	6.23	5.29	4.77	4.44	4.20	4.03	3.89	3.69	3.55	3.18
17	8.40	6.11	5.18	4.67	4.34	4.10	3.93	3.79	3.59	3.46	3.08
18	8.29	6.01	5.09	4.58	4.25	4.01	3.84	3.71	3.51	3.37	3.00
19	8.18	5.93	5.01	4.50	4.17	3.94	3.77	3.63	3.43	3.30	2.92
20	8.10	5.85	4.94	4.43	4.10	3.87	3.70	3.56	3.37	3.23	2.86
22	7.95	5.72	4.82	4.31	3.99	3.76	3.59	3.45	3.26	3.12	2.75
24	7.82	5.61	4.72	4.22	3.90	3.67	3.50	3.36	3.17	3.03	2.66
26	7.72	5.53	4.64	4.14	3.82	3.59	3.42	3.29	3.09	2.96	2.58
28	7.64	5.45	4.57	4.07	3.75	3.53	3.36	3.23	3.03	2.90	2.52
30	7.56	5.39	4.51	4.02	3.70	3.47	3.30	3.17	2.98	2.84	2.47
35	7.42	5.27	4.40	3.91	3.59	3.37	3.20	3.07	2.88	2.74	2.36
40	7.31	5.18	4.31	3.83	3.51	3.29	3.12	2.99	2.80	2.66	2.29
45	7.23	5.11	4.25	3.77	3.45	3.23	3.07	2.94	2.74	2.61	2.23
50	7.17	5.06	4.20	3.72	3.41	3.19	3.02	2.89	2.70	2.56	2.18
55	7.12	5.01	4.16	3.68	3.37	3.15	2.98	2.85	2.66	2.53	2.15
60	7.08	4.98	4.13	3.65	3.34	3.12	2.95	2.82	2.63	2.50	2.12

(e) 0.1% Points of the F distribution



ν_1	1	2	3	4	5	6	7	8	10	12	24
$\nu_2 = 2$	998.5	999.0	999.2	999.3	999.3	999.3	999.4	999.4	999.4	999.4	999.5
3	167.0	148.5	141.1	137.1	134.6	132.9	131.6	130.6	129.3	128.3	125.9
4	74.1	61.3	56.2	53.4	51.7	50.5	49.7	49.0	48.1	47.4	45.8
5	47.2	37.1	33.2	31.1	29.8	28.8	28.2	27.7	26.9	26.4	25.1
6	35.5	27.0	23.7	21.9	20.8	20.0	19.5	19.0	18.4	18.0	16.9
7	29.3	21.7	18.8	17.2	16.2	15.5	15.0	14.6	14.1	13.7	12.7
8	25.4	18.5	15.8	14.4	13.5	12.9	12.4	12.1	11.5	11.2	10.3
9	22.9	16.4	13.9	12.6	11.7	11.1	10.7	10.4	9.89	9.57	8.72
10	21.0	14.9	12.6	11.3	10.5	9.93	9.52	9.20	8.75	8.45	7.64
11	19.7	13.8	11.6	10.4	9.58	9.05	8.66	8.35	7.92	7.63	6.85
12	18.6	13.0	10.8	9.63	8.89	8.38	8.00	7.71	7.29	7.00	6.25
13	17.8	12.3	10.2	9.07	8.35	7.86	7.49	7.21	6.80	6.52	5.78
14	17.1	11.8	9.73	8.62	7.92	7.44	7.08	6.80	6.40	6.13	5.41
15	16.6	11.3	9.34	8.25	7.57	7.09	6.74	6.47	6.08	5.81	5.10
16	16.1	11.0	9.01	7.94	7.27	6.80	6.46	6.19	5.81	5.55	4.85
17	15.7	10.7	8.73	7.68	7.02	6.56	6.22	5.96	5.58	5.32	4.63
18	15.4	10.4	8.49	7.46	6.81	6.35	6.02	5.76	5.39	5.13	4.45
19	15.1	10.2	8.28	7.27	6.62	6.18	5.85	5.59	5.22	4.97	4.29
20	14.8	9.95	8.10	7.10	6.46	6.02	5.69	5.44	5.08	4.82	4.15
22	14.4	9.61	7.80	6.81	6.19	5.76	5.44	5.19	4.83	4.58	3.92
24	14.0	9.34	7.55	6.59	5.98	5.55	5.23	4.99	4.64	4.39	3.74
26	13.7	9.12	7.36	6.41	5.80	5.38	5.07	4.83	4.48	4.24	3.59
28	13.5	8.93	7.19	6.25	5.66	5.24	4.93	4.69	4.35	4.11	3.46
30	13.3	8.77	7.05	6.12	5.53	5.12	4.82	4.58	4.24	4.00	3.36
35	12.9	8.47	6.79	5.88	5.30	4.89	4.59	4.36	4.03	3.79	3.16
40	12.6	8.25	6.59	5.70	5.13	4.73	4.44	4.21	3.87	3.64	3.01
45	12.4	8.09	6.45	5.56	5.00	4.61	4.32	4.09	3.76	3.53	2.90
50	12.2	7.96	6.34	5.46	4.90	4.51	4.22	4.00	3.67	3.44	2.82
55	12.1	7.85	6.25	5.38	4.82	4.43	4.15	3.92	3.60	3.37	2.75
60	12.0	7.77	6.17	5.31	4.76	4.37	4.09	3.86	3.54	3.32	2.69

6. Random Numbers

Each digit is independent and has a probability of 1/10. The table was computed from a population in which the digits 0 to 9 were equally likely.

77	21	24	33	39	07	83	00	02	77	28	11	37	33
78	02	65	38	92	90	07	13	11	95	58	88	64	55
77	10	41	31	90	76	35	00	25	78	80	18	77	32
85	21	57	89	27	08	70	32	14	58	81	83	41	55
75	05	14	19	00	64	53	01	50	80	01	88	74	21
57	19	77	98	74	82	07	22	42	89	12	37	16	56
59	59	47	98	07	41	38	12	06	09	19	80	44	13
76	96	73	88	44	25	72	27	21	90	22	76	69	67
96	90	76	82	74	19	81	28	61	91	95	02	47	31
63	61	36	80	48	50	26	71	16	08	25	65	91	75
65	02	65	25	45	97	17	84	12	19	59	27	79	18
37	16	64	00	80	06	62	11	62	88	59	54	12	53
58	29	55	59	57	73	78	43	28	99	91	77	93	89
79	68	43	00	06	63	26	10	26	83	94	48	25	31
87	92	56	91	74	30	83	39	85	99	11	73	34	98
96	86	39	03	67	35	64	09	62	36	46	86	54	13
72	20	60	14	48	08	36	92	58	99	15	30	47	87
67	61	97	37	73	55	47	97	25	65	67	67	41	35
25	09	03	43	83	82	60	26	81	96	51	05	77	72
72	14	78	75	39	54	75	77	55	59	71	73	15	56
59	93	34	37	34	27	07	66	15	63	14	50	74	29
21	48	85	56	91	43	50	71	58	96	14	31	55	61
96	32	49	79	42	71	79	69	52	39	45	04	49	91
16	85	53	65	11	36	08	14	86	60	40	18	51	15
64	28	96	90	23	12	98	92	28	94	57	41	99	11
60	54	36	51	15	63	83	42	63	08	01	89	18	53
42	86	68	06	36	25	82	26	85	49	76	15	90	13
00	49	62	15	53	32	31	28	38	88	14	97	80	33
26	64	87	61	67	53	23	68	51	98	60	59	02	33
02	95	21	53	34	23	10	82	82	82	48	71	02	39
65	47	77	14	75	30	32	81	10	83	03	97	24	37
28	55	15	36	46	33	06	22	29	23	81	14	20	91
59	75	78	49	51	02	20	17	02	30	32	78	44	79
87	54	57	69	63	31	61	25	92	31	16	44	02	10
94	53	87	97	15	23	08	71	26	06	25	87	48	97
79	43	75	93	39	10	18	51	28	17	65	43	22	06
48	38	71	77	53	37	80	13	60	63	59	75	89	73
98	30	59	32	90	05	86	12	83	70	50	30	25	65
85	80	16	77	35	74	09	32	06	30	91	55	92	33
87	03	96	27	05	59	64	25	33	07	03	08	55	58