

Statistical Tables

% points of t_n

n	0.995	0.99	0.975	0.95
1	63.66	31.82	12.71	6.31
2	9.92	6.96	4.30	2.92
3	5.84	4.54	3.18	2.35
4	4.60	3.75	2.78	2.13
5	4.03	3.36	2.57	2.02
6	3.71	3.14	2.45	1.94
7	3.50	3.00	2.36	1.89
8	3.36	2.90	2.31	1.86
9	3.25	2.82	2.26	1.83
10	3.17	2.76	2.23	1.81
11	3.11	2.72	2.20	1.80
12	3.05	2.68	2.18	1.78
13	3.01	2.65	2.16	1.77
14	2.98	2.62	2.14	1.76
15	2.95	2.60	2.13	1.75
16	2.92	2.58	2.12	1.75
17	2.90	2.57	2.11	1.74
18	2.88	2.55	2.10	1.73
19	2.86	2.54	2.09	1.73
20	2.85	2.53	2.09	1.72
21	2.83	2.52	2.08	1.72
22	2.82	2.51	2.07	1.72
23	2.81	2.50	2.07	1.71
24	2.80	2.49	2.06	1.71
25	2.79	2.49	2.06	1.71
26	2.78	2.48	2.06	1.71
27	2.77	2.47	2.05	1.70
28	2.76	2.47	2.05	1.70
29	2.76	2.46	2.05	1.70
30	2.75	2.46	2.04	1.70
40	2.70	2.42	2.02	1.68
60	2.66	2.39	2.00	1.67
120	2.62	2.36	1.98	1.66

% points of $N(0, 1)$

0.995	0.99	0.975	0.95	0.90
2.58	2.33	1.96	1.645	1.282

% points of χ_n^2

n	0.99	0.975	0.95	0.9
1	6.63	5.02	3.84	2.71
2	9.21	7.38	5.99	4.61
3	11.34	9.35	7.81	6.25
4	13.28	11.14	9.49	7.78
5	15.09	12.83	11.07	9.24
6	16.81	14.45	12.59	10.64
7	18.48	16.01	14.07	12.02
8	20.09	17.53	15.51	13.36
9	21.67	19.02	16.92	14.68
10	23.21	20.48	18.31	15.99
11	24.73	21.92	19.68	17.28
12	26.22	23.34	21.03	18.55
13	27.69	24.74	22.36	19.81
14	29.14	26.12	23.68	21.06
15	30.58	27.49	25.00	22.31
16	32.00	28.85	26.30	23.54
17	33.41	30.19	27.59	24.77
18	34.81	31.53	28.87	25.99
19	36.19	32.85	30.14	27.20
20	37.57	34.17	31.41	28.41
30	50.89	46.98	43.77	40.26
40	63.69	59.34	55.76	51.81
50	76.15	71.42	67.50	63.17
60	88.38	83.30	79.08	74.40
70	100.4	95.02	90.53	85.53
80	112.3	106.6	101.8	96.58
90	124.1	118.1	113.1	107.5
100	135.8	129.5	124.3	118.5

95% points of F_{n_1, n_2}

$n_2 \backslash n_1$	1	2	3	4	5	6	8	12	16	20	30	40	50
1	161.4	199.5	215.7	224.5	230.1	233.9	238.8	243.9	246.4	248.0	250.1	251.1	251.7
2	18.51	19.00	19.16	19.25	19.30	19.33	19.37	19.41	19.43	19.45	19.46	19.47	19.48
3	10.13	9.55	9.28	9.12	9.01	8.94	8.85	8.74	8.69	8.66	8.62	8.59	8.58
4	7.71	6.94	6.59	6.39	6.26	6.16	6.04	5.91	5.84	5.80	5.75	5.72	5.70
5	6.61	5.79	5.41	5.19	5.05	4.95	4.82	4.68	4.60	4.56	4.50	4.46	4.44
6	5.99	5.14	4.76	4.53	4.39	4.28	4.15	4.00	3.92	3.87	3.81	3.77	3.75
7	5.59	4.74	4.35	4.12	3.97	3.87	3.73	3.57	3.49	3.44	3.38	3.34	3.32
8	5.32	4.46	4.07	3.84	3.69	3.58	3.44	3.28	3.20	3.15	3.08	3.04	3.02
9	5.12	4.26	3.86	3.63	3.48	3.37	3.23	3.07	2.99	2.94	2.86	2.83	2.80
10	4.96	4.10	3.71	3.48	3.33	3.22	3.07	2.91	2.83	2.77	2.70	2.66	2.64
11	4.84	3.98	3.59	3.36	3.20	3.09	2.95	2.79	2.70	2.65	2.57	2.53	2.51
12	4.75	3.89	3.49	3.26	3.11	3.00	2.85	2.69	2.60	2.54	2.47	2.43	2.40
13	4.67	3.81	3.41	3.18	3.03	2.92	2.77	2.60	2.51	2.46	2.38	2.34	2.31
14	4.60	3.74	3.34	3.11	2.96	2.85	2.70	2.53	2.44	2.39	2.31	2.27	2.24
15	4.54	3.68	3.29	3.06	2.90	2.79	2.64	2.48	2.38	2.33	2.25	2.20	2.18
16	4.49	3.63	3.24	3.01	2.85	2.74	2.59	2.42	2.33	2.28	2.19	2.15	2.12
17	4.45	3.59	3.20	2.96	2.81	2.70	2.55	2.38	2.29	2.23	2.15	2.10	2.08
18	4.41	3.55	3.16	2.93	2.77	2.66	2.51	2.34	2.25	2.19	2.11	2.06	2.04
19	4.38	3.52	3.13	2.90	2.74	2.63	2.48	2.31	2.21	2.16	2.07	2.03	2.00
20	4.35	3.49	3.10	2.87	2.71	2.60	2.45	2.28	2.18	2.12	2.04	1.99	1.97
22	4.30	3.44	3.05	2.82	2.66	2.55	2.40	2.23	2.13	2.07	1.98	1.94	1.91
24	4.26	3.40	3.01	2.78	2.62	2.51	2.36	2.18	2.09	2.03	1.94	1.89	1.86
26	4.23	3.37	2.98	2.74	2.59	2.47	2.32	2.15	2.05	1.99	1.90	1.85	1.82
28	4.20	3.34	2.95	2.71	2.56	2.45	2.29	2.12	2.02	1.96	1.87	1.82	1.79
30	4.17	3.32	2.92	2.69	2.53	2.42	2.27	2.09	1.99	1.93	1.84	1.79	1.76
40	4.08	3.23	2.84	2.61	2.45	2.34	2.18	2.00	1.90	1.84	1.74	1.69	1.66
50	4.03	3.18	2.79	2.56	2.40	2.29	2.13	1.95	1.85	1.78	1.69	1.63	1.60
60	4.00	3.15	2.76	2.53	2.37	2.25	2.10	1.92	1.82	1.75	1.65	1.59	1.56
70	3.98	3.13	2.74	2.50	2.35	2.23	2.07	1.89	1.79	1.72	1.62	1.57	1.53
80	3.96	3.11	2.72	2.49	2.33	2.21	2.06	1.88	1.77	1.70	1.60	1.54	1.51
100	3.94	3.09	2.70	2.46	2.31	2.19	2.03	1.85	1.75	1.68	1.57	1.52	1.48

These tables give values x such that a certain percentage of the distribution lies less than x .

E.g. if $X \sim t_3$, then $\mathbb{P}(X \leq 5.84) = 0.995$, and $\mathbb{P}(-5.84 \leq X \leq 5.84) = 0.99$. If $X \sim F_{8,5}$, then $\mathbb{P}(X \leq 4.82) = 0.95$.

The tables can be used to conduct various hypothesis tests with sizes 0.01, 0.05 and 0.10. For the F -distribution, only the 95% point is shown; this is what is needed to conduct a one-sided test of size 0.05. Tables for other percentage points can be found in any statistics book or can be computed by computer software. (These tables were constructed using functions available in Microsoft Excel.)

Note that the percentage points for t_n tend to those for $N(0, 1)$ as $n \rightarrow \infty$.