

Table 3 Percentage points of the χ^2 distribution

α	.995	.99	.975	.95	.50	.20	.10	.05	.025	.01	.005
ν											
1	0.000	0.0002	0.001	0.0039	0.45	1.64	2.71	3.84	5.02	6.63	7.88
2	0.010	0.020	0.051	0.103	1.39	3.22	4.61	5.99	7.38	9.21	10.60
3	0.072	0.115	0.216	0.352	2.37	4.64	6.25	7.81	9.35	11.34	12.84
4	0.207	0.30	0.484	0.71	3.36	5.99	7.78	9.49	11.14	13.28	14.86
5	0.412	0.55	0.831	1.15	4.35	7.29	9.24	11.07	12.83	15.09	16.75
6	0.676	0.87	1.24	1.64	5.35	8.56	10.64	12.59	14.45	16.81	18.55
7	0.989	1.24	1.69	2.17	6.35	9.80	12.02	14.07	16.01	18.48	20.28
8	1.34	1.65	2.18	2.73	7.34	11.03	13.36	15.51	17.53	20.09	21.95
9	1.73	2.09	2.70	3.33	8.34	12.24	14.68	16.92	19.02	21.67	23.59
10	2.16	2.56	3.25	3.94	9.34	13.44	15.99	18.31	20.48	23.21	25.19
11	2.60	3.05	3.82	4.57	10.34	14.63	17.28	19.68	21.92	24.72	26.76
12	3.07	3.57	4.40	5.23	11.34	15.81	18.55	21.03	23.34	26.22	28.30
13	3.57	4.11	5.01	5.89	12.34	16.98	19.81	22.36	24.74	27.69	29.82
14	4.07	4.66	5.63	6.57	13.34	18.15	21.06	23.68	26.12	29.14	31.32
15	4.60	5.23	6.26	7.26	14.34	19.31	22.31	25.00	27.49	30.58	32.80
16	5.14	5.81	6.91	7.96	15.34	20.47	23.54	26.30	28.85	32.00	34.27
17	5.70	6.41	7.56	8.67	16.34	21.61	24.77	27.59	30.19	33.41	35.72
18	6.26	7.02	8.23	9.39	17.34	22.76	25.99	28.87	31.53	34.81	37.16
19	6.84	7.63	8.91	10.12	18.34	23.90	27.20	30.14	32.85	36.19	38.58
20	7.43	8.26	9.59	10.85	19.34	25.04	28.41	31.41	34.17	37.57	40.00
21	8.03	8.90	10.28	11.59	20.34	26.17	29.62	32.67	35.48	38.93	41.40
22	8.64	9.54	10.98	12.34	21.34	27.30	30.81	33.92	36.78	40.29	42.80
23	9.26	10.20	11.69	13.09	22.34	28.43	32.01	35.17	38.08	41.64	44.18
24	9.89	10.86	12.40	13.85	23.34	29.55	33.20	36.42	39.36	42.98	45.56
25	10.52	11.52	13.12	14.61	24.34	30.68	34.38	37.65	40.65	44.31	46.93
26	11.16	12.20	13.84	15.38	25.34	31.79	35.56	38.89	41.92	45.64	48.29
27	11.81	12.88	14.57	16.15	26.34	32.91	36.74	40.11	43.19	46.96	49.64
28	12.46	13.57	15.31	16.93	27.34	34.03	37.92	41.34	44.46	48.28	50.99
29	13.12	14.26	16.05	17.71	28.34	35.14	39.09	42.56	45.72	49.59	52.34
30	13.79	14.95	16.79	18.49	29.34	36.25	40.26	43.77	46.98	50.89	53.67
40	20.71	22.16	24.43	26.51	39.34	47.27	51.81	55.76	59.34	63.69	66.77
50	27.99	29.71	32.36	34.76	49.33	58.16	63.17	67.50	71.41	76.15	79.49
60	35.53	37.48	40.48	43.19	59.33	68.97	74.40	79.08	83.30	88.38	91.95
70	43.28	45.44	48.76	51.74	69.33	79.71	85.53	90.53	95.02	100.43	104.2
80	51.17	53.54	57.15	60.39	79.33	90.41	96.58	101.88	106.63	112.33	116.3
90	59.20	61.75	65.65	69.13	89.33	101.05	107.57	113.15	118.14	124.12	128.3
100	67.33	70.06	74.22	77.93	99.33	111.67	118.50	124.34	129.56	135.81	140.2

