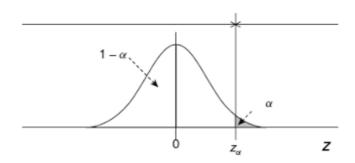
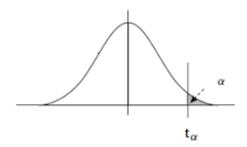
## Critical values of z (Normal Curve Areas)



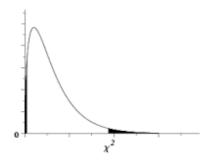
α	$\mathbf{z}_{\alpha}$	α	$\mathbf{z}_{a}$	α	$\mathbf{z}_{a}$	α	$\mathbf{Z}_{\alpha}$	α	$\mathbf{z}_{a}$	α	$\mathbf{z}_{\alpha}$
0.5	0	0.37	0.331	0.24	0.706	0.11	1.226	0.025	1.959	0.012	2.257
0.49	0.025	0.36	0.358	0.23	0.738	0.1	1.281	0.024	1.977	0.011	2.29
0.48	0.05	0.35	0.385	0.22	0.772	0.09	1.34	0.023	1.995	0.01	2.326
0.47	0.075	0.34	0.412	0.21	0.806	0.08	1.405	0.022	2.014	0.009	2.365
0.46	0.1	0.33	0.439	0.2	0.841	0.07	1.475	0.021	2.033	0.008	2.408
0.45	0.125	0.32	0.467	0.19	0.877	0.06	1.554	0.02	2.053	0.007	2.457
0.44	0.15	0.31	0.495	0.18	0.915	0.05	1.644	0.019	2.074	0.007	2.457
0.43	0.176	0.3	0.524	0.17	0.954	0.04	1.75	0.018	2.096	0.006	2.512
0.42	0.201	0.29	0.553	0.16	0.994	0.03	1.88	0.017	2.12	0.005	2.575
0.41	0.227	0.28	0.582	0.15	1.036	0.029	1.895	0.016	2.144	0.004	2.652
0.4	0.253	0.27	0.612	0.14	1.08	0.028	1.911	0.015	2.17	0.003	2.747
0.39	0.279	0.26	0.643	0.13	1.126	0.027	1.926	0.014	2.197	0.002	2.878
0.38	0.305	0.25	0.674	0.12	1.174	0.026	1.943	0.013	2.226	0.001	3.09

## Critical values of t



df/a	.40	.25	.10	.05	.025	.01	.005	.001	.0005
1	0.325	1.000	3.078	6.314	12.706	31.821	63.657	318.309	636.619
2	0.289	0.816	1.886	2.920	4.303	6.965	9.925	22.327	31.599
3	0.277	0.765	1.638	2.353	3.182	4.541	5.841	10.215	12.924
4	0.271	0.741	1.533	2.132	2.776	3.747	4.604	7.173	8.610
5	0.267	0.727	1.476	2.015	2.571	3.365	4.032	5.893	6.869
6	0.265	0.718	1.440	1.943	2.447	3.143	3.707	5.208	5.959
7	0.263	0.711	1.415	1.895	2.365	2.998	3.499	4.785	5.408
8	0.262	0.706	1.397	1.860	2.306	2.896	3.355	4.501	5.041
9	0.261	0.703	1.383	1.833	2.262	2.821	3.250	4.297	4.781
10	0.260	0.700	1.372	1.812	2.228	2.764	3.169	4.144	4.587
11	0.260	0.697	1.363	1.796	2.201	2.718	3.106	4.025	4.437
12	0.259	0.695	1.356	1.782	2.179	2.681	3.055	3.930	4.318
13	0.259	0.694	1.350	1.771	2.160	2.650	3.012	3.852	4.221
14	0.258	0.692	1.345	1.761	2.145	2.624	2.977	3.787	4.140
15	0.258	0.691	1.341	1.753	2.131	2.602	2.947	3.733	4.073
16	0.258	0.690	1.337	1.746	2.120	2.583	2.921	3.686	4.015
17	0.257	0.689	1.333	1.740	2.110	2.567	2.898	3.646	3.965
18	0.257	0.688	1.330	1.734	2.101	2.552	2.878	3.610	3.922
19	0.257	0.688	1.328	1.729	2.093	2.539	2.861	3.579	3.883
20	0.257	0.687	1.325	1.725	2.086	2.528	2.845	3.552	3.850
21	0.257	0.686	1.323	1.721	2.080	2.518	2.831	3.527	3.819
22	0.256	0.686	1.321	1.717	2.074	2.508	2.819	3.505	3.792
23	0.256	0.685	1.319	1.714	2.069	2.500	2.807	3.485	3.768
24	0.256	0.685	1.318	1.711	2.064	2.492	2.797	3.467	3.745
25	0.256	0.684	1.316	1.708	2.060	2.485	2.787	3.450	3.725
26	0.256	0.684	1.315	1.706	2.056	2.479	2.779	3.435	3.707
27	0.256	0.684	1.314	1.703	2.052	2.473	2.771	3.421	3.690
28	0.256	0.683	1.313	1.701	2.048	2.467	2.763	3.408	3.674
29	0.256	0.683	1.311	1.699	2.045	2.462	2.756	3.396	3.659
30	0.256	0.683	1.310	1.697	2.042	2.457	2.750	3.385	3.646
35	0.255	0.682	1.306	1.690	2.030	2.438	2.724	3.340	3.591
40	0.255	0.681	1.303	1.684	2.021	2.423	2.704	3.307	3.551
50	0.255	0.679	1.299	1.676	2.009	2.403	2.678	3.261	3.496
60	0.254	0.679	1.296	1.671	2.000	2.390	2.660	3.232	3.460
120	0.254	0.677	1.289	1.658	1.980	2.358	2.617	3.160	3.373
inf.	0.253	0.674	1.282	1.645	1.960	2.326	2.576	3.090	3.291

## Critical values of $\chi^2$



n\α	0.9995	0.999	0.995	0.99	0.975	0.95	0.9
1	0	0	0.00003	0.00015	0.00098	0.00393	0.0158
2	0.001	0.002	0.01	0.0201	0.0506	0.103	0.211
3	0.0153	0.024	0.0717	0.115	0.216	0.352	0.584
4	0.0639	0.090	0.207	0.297	0.484	0.711	1.064
5	0.158	0.21	0.412	0.554	0.831	1.145	1.61
6	0.299	0.381	0.676	0.872	1.237	1.635	2.204
7	0.485	0.598	0.989	1.239	1.69	2.167	2.833
8	0.71	0.857	1.344	1.646	2.18	2.733	3.49
9	0.972	1.153	1.735	2.088	2.7	3.325	4.168
10	1.265	1.479	2.156	2.558	3.247	3.94	4.865
11	1.587	1.834	2.603	3.053	3.816	4.575	5.578
12	1.934	2.214	3.074	3.571	4.404	5.226	6.304
13	2.305	2.617	3.565	4.107	5.009	5.892	7.042
14	2.697	3.041	4.075	4.66	5.629	6.571	7.79
15	3.108	3.483	4.601	5.229	6.262	7.261	8.547
16	3.536	3.942	5.142	5.812	6.908	7.962	9.312
17	3.98	4.416	5.697	6.408	7.564	8.672	10.085
18	4.439	4.905	6.265	7.015	8.231	9.39	10.865
19	4.912	5.407	6.844	7.633	8.907	10.117	11.651
20	5.398	5.921	7.434	8.26	9.591	10.851	12.443
21	5.896	6.447	8.034	8.897	10.283	11.591	13.24
22	6.404	6.983	8.643	9.542	10.982	12.338	14.041
23	6.924	7.529	9.16	10.196	11.688	13.091	14.848
24	7.453	8.085	9.886	10.856	12.401	13.848	15.659
25	7.991	8.649	10.52	11.524	13.12	14.611	16.473
26	8.538	9.222	11.16	12.198	13.844	15.379	17.292
27	9.093	9.803	11.808	12.879	14.573	16.151	18.114
28	9.656	10.391	12.461	13.565	15.308	16.928	18.939
29	10.227	10.986	13.121	14.256	16.047	17.708	19.768
30	10.804	11.588	13.787	14.953	16.791	18.493	20.599
31	11.389	12.196	14.458	15.655	17.539	19.281	21.434
32	11.979	12.811	15.134	16.362	18.291	20.072	22.271

33	12.576	13.431	15.815	17.073	19.047	20.867	23.11
34	13.179	14.057	16.501	17.789	19.806	21.664	23.952
35	13.788	14.688	17.192	18.509	20.569	22.465	24.797
36	14.401	15.324	17.887	19.233	21.336	23.269	25.643
37	15.02	15.965	18.586	19.96	22.106	24.075	26.492
38	15.644	16.611	19.289	20.691	22.878	24.884	27.343
39	16.273	17.262	19.996	21.426	23.654	25.695	28.196
40	16.906	17.916	20.707	22.164	24.433	26.509	29.051
50	23.461	24.674	27.991	29.707	32.357	34.764	37.689

## Critical values of $\chi^2$

0.1	0.05	0.025	0.01	0.005	0.001	0.0005	$\alpha \mid n$
2.706	3.841	5.024	6.635	7.879	10.828	12.116	1
4.605	5.991	7.378	9.21	10.597	13.816	15.202	2
6.251	7.815	9.348	11.345	12.838	16.266	17.73	3
7.779	9.488	11.143	13.277	14.86	18.467	19.997	4
9.236	11.07	12.832	15.086	16.75	20.515	22.105	5
10.345	12.592	14.449	16.812	18.548	22.458	24.103	6
12.017	14.067	16.013	18.475	20.278	24.322	26.018	7
13.362	15.507	17.535	20.09	21.955	26.125	27.868	8
14.684	16.919	19.023	21.666	23.589	27.877	29.666	9
15.987	18.307	20.483	23.209	25.188	29.588	31.42	10
17.275	19.675	21.92	24.725	26.757	31.264	33.136	11
18.549	21.026	23.336	26.217	28.3	32.909	34.821	12
19.812	22.362	24.736	27.688	29.819	34.528	36.478	13
21.064	23.685	26.119	29.141	31.319	36.123	38.109	14
22.307	24.996	27.488	30.578	32.801	37.697	39.719	15
23.542	26.296	28.845	32.000	34.267	39.252	41.308	16
24.769	27.587	30.191	33.409	35.718	40.79	42.879	17
25.989	28.869	31.526	34.805	37.156	42.312	44.434	18
27.204	30.144	32.852	36.191	38.582	43.82	45.973	19
28.412	31.41	34.17	37.566	39.997	45.315	47.498	20
29.615	32.671	35.479	38.932	41.401	46.797	49.01	21
30.813	33.924	36.781	40.289	42.796	48.268	50.511	22
32.007	35.172	38.076	41.638	44.181	49.728	52.000	23
33.196	36.415	39.364	42.98	45.558	51.179	53.479	24
34.382	37.652	40.646	44.314	46.928	52.62	54.947	25
35.563	38.885	41.923	45.642	48.29	54.052	56.407	26
36.741	40.113	43.194	46.963	49.645	55.476	57.858	27
37.916	41.337	44.461	48.278	50.993	56.892	59.300	28
39.087	42.557	45.722	49.588	52.336	58.301	60.735	29
40.256	43.773	46.979	50.892	53.672	59.703	62.162	30