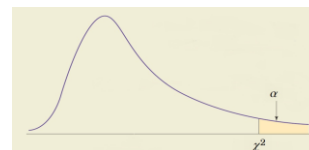


# Bảng giá trị tới hạn Chi-Square $\chi^2_\alpha(n)$

Ghi chú: n là số bậc tự do

Ví dụ:  $\chi^2_{0.025}(19) = 32.852$

Ý nghĩa:  $X \sim \chi^2(19): P(X > 32.852) = 0.025$



n\α	0.005	0.01	0.02	0.025	0.05	0.1	0.9	0.95	0.975	0.98	0.99	0.995
1	7.879	6.635	5.412	5.024	3.841	2.706	0.016	0.004	0.001	0.001	0.000	0.000
2	10.597	9.210	7.824	7.378	5.991	4.605	0.211	0.103	0.051	0.040	0.020	0.010
3	12.838	11.345	9.837	9.348	7.815	6.251	0.584	0.352	0.216	0.185	0.115	0.072
4	14.860	13.277	11.668	11.143	9.488	7.779	1.064	0.711	0.484	0.429	0.297	0.207
5	16.750	15.086	13.388	12.833	11.070	9.236	1.610	1.145	0.831	0.752	0.554	0.412
6	18.548	16.812	15.033	14.449	12.592	10.645	2.204	1.635	1.237	1.134	0.872	0.676
7	20.278	18.475	16.622	16.013	14.067	12.017	2.833	2.167	1.690	1.564	1.239	0.989
8	21.955	20.090	18.168	17.535	15.507	13.362	3.490	2.733	2.180	2.032	1.646	1.344
9	23.589	21.666	19.679	19.023	16.919	14.684	4.168	3.325	2.700	2.532	2.088	1.735
10	25.188	23.209	21.161	20.483	18.307	15.987	4.865	3.940	3.247	3.059	2.558	2.156
11	26.757	24.725	22.618	21.920	19.675	17.275	5.578	4.575	3.816	3.609	3.053	2.603
12	28.300	26.217	24.054	23.337	21.026	18.549	6.304	5.226	4.404	4.178	3.571	3.074
13	29.819	27.688	25.472	24.736	22.362	19.812	7.042	5.892	5.009	4.765	4.107	3.565
14	31.319	29.141	26.873	26.119	23.685	21.064	7.790	6.571	5.629	5.368	4.660	4.075
15	32.801	30.578	28.259	27.488	24.996	22.307	8.547	7.261	6.262	5.985	5.229	4.601
16	34.267	32.000	29.633	28.845	26.296	23.542	9.312	7.962	6.908	6.614	5.812	5.142
17	35.718	33.409	30.995	30.191	27.587	24.769	10.085	8.672	7.564	7.255	6.408	5.697
18	37.156	34.805	32.346	31.526	28.869	25.989	10.865	9.390	8.231	7.906	7.015	6.265
19	38.582	36.191	33.687	32.852	30.144	27.204	11.651	10.117	8.907	8.567	7.633	6.844
20	39.997	37.566	35.020	34.170	31.410	28.412	12.443	10.851	9.591	9.237	8.260	7.434
21	41.401	38.932	36.343	35.479	32.671	29.615	13.240	11.591	10.283	9.915	8.897	8.034
22	42.796	40.289	37.659	36.781	33.924	30.813	14.041	12.338	10.982	10.600	9.542	8.643
23	44.181	41.638	38.968	38.076	35.172	32.007	14.848	13.091	11.689	11.293	10.196	9.260
24	45.559	42.980	40.270	39.364	36.415	33.196	15.659	13.848	12.401	11.992	10.856	9.886
25	46.928	44.314	41.566	40.646	37.652	34.382	16.473	14.611	13.120	12.697	11.524	10.520
26	48.290	45.642	42.856	41.923	38.885	35.563	17.292	15.379	13.844	13.409	12.198	11.160
27	49.645	46.963	44.140	43.195	40.113	36.741	18.114	16.151	14.573	14.125	12.879	11.808
28	50.993	48.278	45.419	44.461	41.337	37.916	18.939	16.928	15.308	14.847	13.565	12.461
29	52.336	49.588	46.693	45.722	42.557	39.087	19.768	17.708	16.047	15.574	14.256	13.121
30	53.672	50.892	47.962	46.979	43.773	40.256	20.599	18.493	16.791	16.306	14.953	13.787
31	55.003	52.191	49.226	48.232	44.985	41.422	21.434	19.281	17.539	17.042	15.655	14.458
32	56.328	53.486	50.487	49.480	46.194	42.585	22.271	20.072	18.291	17.783	16.362	15.134
33	57.648	54.776	51.743	50.725	47.400	43.745	23.110	20.867	19.047	18.527	17.074	15.815
34	58.964	56.061	52.995	51.966	48.602	44.903	23.952	21.664	19.806	19.275	17.789	16.501
35	60.275	57.342	54.244	53.203	49.802	46.059	24.797	22.465	20.569	20.027	18.509	17.192
36	61.581	58.619	55.489	54.437	50.998	47.212	25.643	23.269	21.336	20.783	19.233	17.887
37	62.883	59.893	56.730	55.668	52.192	48.363	26.492	24.075	22.106	21.542	19.960	18.586
38	64.181	61.162	57.969	56.896	53.384	49.513	27.343	24.884	22.878	22.304	20.691	19.289
39	65.476	62.428	59.204	58.120	54.572	50.660	28.196	25.695	23.654	23.069	21.426	19.996
40	66.766	63.691	60.436	59.342	55.758	51.805	29.051	26.509	24.433	23.838	22.164	20.707
41	68.053	64.950	61.665	60.561	56.942	52.949	29.907	27.326	25.215	24.609	22.906	21.421
42	69.336	66.206	62.892	61.777	58.124	54.090	30.765	28.144	25.999	25.383	23.650	22.138
43	70.616	67.459	64.116	62.990	59.304	55.230	31.625	28.965	26.785	26.159	24.398	22.859
44	71.893	68.710	65.337	64.201	60.481	56.369	32.487	29.787	27.575	26.939	25.148	23.584
45	73.166	69.957	66.555	65.410	61.656	57.505	33.350	30.612	28.366	27.720	25.901	24.311
46	74.437	71.201	67.771	66.617	62.830	58.641	34.215	31.439	29.160	28.505	26.657	25.041

$n \backslash \alpha$	0.005	0.01	0.02	0.025	0.05	0.1	0.9	0.95	0.975	0.98	0.99	0.995
47	75.704	72.443	68.985	67.821	64.001	59.774	35.081	32.268	29.956	29.291	27.416	25.775
48	76.969	73.683	70.197	69.023	65.171	60.907	35.949	33.098	30.755	30.080	28.177	26.511
49	78.231	74.919	71.406	70.222	66.339	62.038	36.818	33.930	31.555	30.871	28.941	27.249
50	79.490	76.154	72.613	71.420	67.505	63.167	37.689	34.764	32.357	31.664	29.707	27.991
51	80.747	77.386	73.818	72.616	68.669	64.295	38.560	35.600	33.162	32.459	30.475	28.735
52	82.001	78.616	75.021	73.810	69.832	65.422	39.433	36.437	33.968	33.256	31.246	29.481
53	83.253	79.843	76.223	75.002	70.993	66.548	40.308	37.276	34.776	34.055	32.018	30.230
54	84.502	81.069	77.422	76.192	72.153	67.673	41.183	38.116	35.586	34.856	32.793	30.981
55	85.749	82.292	78.619	77.380	73.311	68.796	42.060	38.958	36.398	35.659	33.570	31.735
56	86.994	83.513	79.815	78.567	74.468	69.919	42.937	39.801	37.212	36.464	34.350	32.490
57	88.236	84.733	81.009	79.752	75.624	71.040	43.816	40.646	38.027	37.270	35.131	33.248
58	89.477	85.950	82.201	80.936	76.778	72.160	44.696	41.492	38.844	38.078	35.913	34.008
59	90.715	87.166	83.391	82.117	77.931	73.279	45.577	42.339	39.662	38.888	36.698	34.770
60	91.952	88.379	84.580	83.298	79.082	74.397	46.459	43.188	40.482	39.699	37.485	35.534
61	93.186	89.591	85.767	84.476	80.232	75.514	47.342	44.038	41.303	40.512	38.273	36.301
62	94.419	90.802	86.953	85.654	81.381	76.630	48.226	44.889	42.126	41.327	39.063	37.068
63	95.649	92.010	88.137	86.830	82.529	77.745	49.111	45.741	42.950	42.143	39.855	37.838
64	96.878	93.217	89.320	88.004	83.675	78.860	49.996	46.595	43.776	42.960	40.649	38.610
65	98.105	94.422	90.501	89.177	84.821	79.973	50.883	47.450	44.603	43.779	41.444	39.383
66	99.330	95.626	91.681	90.349	85.965	81.085	51.770	48.305	45.431	44.599	42.240	40.158
67	100.554	96.828	92.860	91.519	87.108	82.197	52.659	49.162	46.261	45.421	43.038	40.935
68	101.776	98.028	94.037	92.689	88.250	83.308	53.548	50.020	47.092	46.244	43.838	41.713
69	102.996	99.228	95.213	93.856	89.391	84.418	54.438	50.879	47.924	47.068	44.639	42.494
70	104.215	100.425	96.388	95.023	90.531	85.527	55.329	51.739	48.758	47.893	45.442	43.275
71	105.432	101.621	97.561	96.189	91.670	86.635	56.221	52.600	49.592	48.720	46.246	44.058
72	106.648	102.816	98.733	97.353	92.808	87.743	57.113	53.462	50.428	49.548	47.051	44.843
73	107.862	104.010	99.904	98.516	93.945	88.850	58.006	54.325	51.265	50.377	47.858	45.629
74	109.074	105.202	101.074	99.678	95.081	89.956	58.900	55.189	52.103	51.208	48.666	46.417
75	110.286	106.393	102.243	100.839	96.217	91.061	59.795	56.054	52.942	52.039	49.475	47.206
76	111.495	107.583	103.410	101.999	97.351	92.166	60.690	56.920	53.782	52.872	50.286	47.997
77	112.704	108.771	104.576	103.158	98.484	93.270	61.586	57.786	54.623	53.705	51.097	48.788
78	113.911	109.958	105.742	104.316	99.617	94.374	62.483	58.654	55.466	54.540	51.910	49.582
79	115.117	111.144	106.906	105.473	100.749	95.476	63.380	59.522	56.309	55.376	52.725	50.376
80	116.321	112.329	108.069	106.629	101.879	96.578	64.278	60.391	57.153	56.213	53.540	51.172
81	117.524	113.512	109.232	107.783	103.010	97.680	65.176	61.261	57.998	57.051	54.357	51.969
82	118.726	114.695	110.393	108.937	104.139	98.780	66.076	62.132	58.845	57.890	55.174	52.767
83	119.927	115.876	111.553	110.090	105.267	99.880	66.976	63.004	59.692	58.729	55.993	53.567
84	121.126	117.057	112.712	111.242	106.395	100.980	67.876	63.876	60.540	59.570	56.813	54.368
85	122.325	118.236	113.871	112.393	107.522	102.079	68.777	64.749	61.389	60.412	57.634	55.170
86	123.522	119.414	115.028	113.544	108.648	103.177	69.679	65.623	62.239	61.255	58.456	55.973
87	124.718	120.591	116.184	114.693	109.773	104.275	70.581	66.498	63.089	62.098	59.279	56.777
88	125.913	121.767	117.340	115.841	110.898	105.372	71.484	67.373	63.941	62.943	60.103	57.582
89	127.106	122.942	118.495	116.989	112.022	106.469	72.387	68.249	64.793	63.788	60.928	58.389
90	128.299	124.116	119.648	118.136	113.145	107.565	73.291	69.126	65.647	64.635	61.754	59.196
91	129.491	125.289	120.801	119.282	114.268	108.661	74.196	70.003	66.501	65.482	62.581	60.005
92	130.681	126.462	121.954	120.427	115.390	109.756	75.100	70.882	67.356	66.330	63.409	60.815
93	131.871	127.633	123.105	121.571	116.511	110.850	76.006	71.760	68.211	67.179	64.238	61.625
94	133.059	128.803	124.255	122.715	117.632	111.944	76.912	72.640	69.068	68.028	65.068	62.437
95	134.247	129.973	125.405	123.858	118.752	113.038	77.818	73.520	69.925	68.879	65.898	63.250
97	136.619	132.309	127.702	126.141	120.990	115.223	79.633	75.282	71.642	70.582	67.562	64.878
99	138.987	134.642	129.996	128.422	123.225	117.407	81.449	77.046	73.361	72.288	69.230	66.510