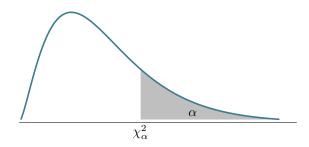
Valores Críticos para a Distribuição χ^2

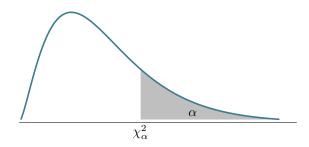
$$F(x) = \int_0^x \frac{1}{2^{m/2} \Gamma(m/2)} u^{\frac{m}{2} - 1} \exp\left(-\frac{u}{2}\right) du$$



	α										
\underline{m}	0.995	0.99	0.98	0.975	0.95	0.9	0.8	0.75	0.7	0.5	
1	3.9e-05	0.0002	0.0006	0.0010	0.0039	0.0158	0.0642	0.1015	0.1485	0.4549	
2	0.0105	0.0205	0.0405	0.0505	0.1025	0.2105	0.4465	0.5755	0.7135	1.3855	
3	0.0725	0.0265 0.1155	0.1855	0.2165	0.3525	0.5845	1.0055	1.2125	1.4245	2.3665	
4	0.2075	0.2975	0.4295	0.4845	0.7115	1.0645	1.6495	1.9235	2.1955	3.3575	
5	0.4125	0.5545	0.7525	0.8315	1.1455	1.6105	2.3425	2.6745	3.0005	4.3515	
6	0.6765	0.8725	1.1345	1.2375	1.6355	2.2045	3.0705	3.4555	3.8285	5.3485	
7	0.9895	1.2395	1.5645	1.6905	2.1675	2.8335	3.8225	4.2555	4.6715	6.3455	
8	1.3445	1.6465	2.0325	2.1805	2.7335	3.4905	4.5945	5.0715	5.5275	7.3445	
9	1.7355	2.0885	2.5325	2.7005	3.3255	4.1685	5.3805	5.8995	6.3935	8.3425	
10	2.1565	2.5585	3.0595	3.2475	3.9405	4.8655	6.1795	6.7375	7.2675	9.3425	
11	2.6035	3.0535	3.6095	3.8165	4.5755	5.5785	6.9885	7.5845	8.1485	10.3415	
12	3.0745	3.5715	4.1785	4.4045	5.2265	6.3045	7.8075	8.4385	9.0345	11.3405	
13	3.5655	4.1075	4.7655	5.0095	5.8925	7.0415	8.6345	9.2995	9.9255	12.3395	
14	4.0755	4.6605	5.3685	5.6295	6.5715	7.7905	9.4675	10.1655	10.8215	13.3395	
15	4.6015	5.2295	5.9855	6.2625	7.2615	8.5475	10.3075	11.0365	11.7215	14.3385	
	× 4 40×	- 040-	0.04.15	a a a a a =	- 0005	0.0405	44 4505	44.0405	10.0015	45 0005	
16	5.1425	5.8125	6.6145	6.9085	7.9625	9.3125	11.1525	11.9125	12.6245	15.3385	
17	5.6975	6.4085	7.2555	7.5645	8.6725	10.0855	12.0025	12.7925	13.5305	16.3385	
18	6.2655	7.0155	7.9065	8.2315	9.3905	10.8655	12.8575	13.6755	14.4405	17.3385	
19	6.8445	7.6335	8.5675	8.9065	10.1175	11.6515	13.7155	14.5625	15.3515	18.3375	
20	7.4345	8.2605	9.2375	9.5915	10.8515	12.4435	14.5785	15.4525	16.2665	19.3375	
21	8.0345	8.8975	9.9145	10.2835	11.5915	13.2395	15.4445	16.3445	17.1825	20.3375	
22	8.6435	9.5425	10.6005	10.9825	12.3385	14.0415	16.3145	17.2405	18.1015	21.3375	
23	9.2605	10.1965	11.2925	11.6885	13.0905	14.8485	17.1865	18.1375	19.0215	22.3365	
24	9.8865	10.8565	11.9925	12.4015	13.8485	15.6595	18.0625	19.0375	19.9435	23.3375	
25	10.5205	11.5245	12.6975	13.1205	14.6115	16.4735	18.9395	19.9395	20.8675	24.3365	
26	11.1605	12.1985	13.4095	13.8445	15.3795	17.2925	19.8205	20.8435	21.7925	25.3365	
27	11.8075	12.8785	14.1255	14.5735	16.1515	18.1145	20.7035	21.7495	22.7195	26.3365	
28	12.4615	13.5655	14.8475	15.3085	16.9285	18.9395	21.5885	22.6575	23.6475	27.3365	
29	13.1215	14.2565	15.5745	16.0475	17.7085	19.7675	22.4755	23.5665	24.5765	28.3355	
30	13.7875	14.9535	16.3065	16.7915	18.4935	20.5995	23.3645	24.4785	25.5085	29.3365	
40	20.7075	22.1645	23.8385	24.4335	26.5095	29.0515	32.3455	33.6605	34.8725	39.3355	
50	27.9915	29.7075	31.6645	32.3575	34.7645	37.6895	41.4495	42.9425	44.3135	49.3355	
60	35.5345	37.4855	39.6995	40.4825	43.1885	46.4595	50.6415	52.2945	53.8095	59.3355	

Valores Críticos para a Distribuição χ^2

$$F(x) = \int_0^x \frac{1}{2^{m/2} \Gamma(m/2)} u^{\frac{m}{2} - 1} \exp\left(-\frac{u}{2}\right) du$$



	α									
m	0.3	0.25	0.2	0.1	0.05	0.025	0.02	0.01	0.005	0.001
-	1.0740	1 0000	1 0404	0.7055	0.0414	F 0000	F 4110	0.0040	E 0504	10.0050
1	1.0742	1.3233	1.6424	2.7055	3.8414	5.0239	5.4119	6.6349	7.8794	10.8276
2	2.4065	2.7715	3.2165	4.6005	5.9815	7.3585	7.7995	9.1615	10.4995	13.3695
3	3.6645	4.1085	4.6415	6.2505	7.8115	9.3415	9.8285	11.3275	12.8025	16.0945
$\frac{4}{5}$	4.8785 6.0645	5.3855 6.6255	5.9895 7.2885	7.7795 9.2345	9.4885	$11.1435 \\ 12.8245$	11.6685	$13.2775 \\ 15.0655$	14.8605	18.4675
อ	0.0049	0.0255	1.2000	9.2349	11.0665	12.6240	13.3785	15.0055	16.7095	20.3225
6	7.2315	7.8415	8.5585	10.6455	12.5925	14.4495	15.0335	16.8125	18.5485	22.4585
7	8.3835	9.0365	9.8025	12.0155	14.0625	16.0035	16.6115	18.4535	20.2335	24.1155
8	9.5245	10.2195	11.0305	13.3625	15.5075	17.5355	18.1685	20.0905	21.9555	26.1245
9	10.6565	11.3885	12.2415	14.6815	16.9145	19.0135	19.6675	21.6425	23.5425	27.6595
10	11.7815	12.5495	13.4425	15.9875	18.3075	20.4835	21.1615	23.2095	25.1885	29.5885
11	12.8985	13.7005	14.6305	17.2725	19.6705	21.9095	22.6055	24.6995	26.7075	31.0355
12	14.0115	14.8455	15.8125	18.5495	21.0265	21.3035 23.3375	24.0545	26.2175	28.3005	32.9095
13	15.1185	15.9835	16.9835	19.8095	22.3565	24.7245	25.4585	27.6615	29.7675	34.2905
14	16.2225	17.1175	18.1515	21.0645	23.6855	26.1195	26.8735	29.1415	31.3195	36.1235
15	17.3215	18.2445	19.3095	22.3045	24.9905	27.4775	28.2455	30.5505	32.7475	37.4505
	11.0210	10.2110	10.0000	0010	_1.0000	_,,,,,,	20.2100	30.3000	32.1.1.3	3111303
16	18.4185	19.3695	20.4655	23.5425	26.2965	28.8455	29.6335	32.0005	34.2675	39.2525
17	19.5105	20.4875	21.6135	24.7665	27.5815	30.1795	30.9805	33.3795	35.6625	40.5345
18	20.6015	21.6055	22.7605	25.9895	28.8695	31.5265	32.3465	34.8055	37.1565	42.3125
19	21.6885	22.7165	23.8995	27.2005	30.1375	32.8395	33.6725	36.1605	38.5245	43.5565
20	22.7755	23.8285	25.0385	28.4125	31.4105	34.1705	35.0205	37.5665	39.9975	45.3155
21	23.8575	24.9335	26.1695	29.6115	32.6645	35.4665	36.3275	38.9015	41.3415	46.5255
22	24.9395	26.0395	27.3015	30.8135	33.9245	36.7815	37.6595	40.2895	42.7965	48.2685
23	26.0175	27.1405	28.4275	32.0035	35.1655	38.0625	38.9515	41.6065	44.1195	49.4495
24	27.0965	28.2415	29.5535	33.1965	36.4155	39.3645	40.2705	42.9805	45.5595	51.1795
25	28.1715	29.3375	30.6735	34.3785	37.6455	40.6325	41.5495	44.2815	46.8645	52.3345
26	29.2465	30.4355	31.7955	35.5635	38.8855	41.9235	42.8565	45.6425	48.2905	54.0525
27	30.3185	31.5275	32.9105	36.7375	40.1065	43.1805	44.1225	46.9295	49.5805	55.1835
28	31.3915	32.6205	34.0275	37.9165	41.3375	44.4615	45.4195	48.2785	50.9935	56.8925
29	32.4605	33.7095	35.1375	39.0835	42.5495	45.7075	46.6745	49.5535	52.2695	58.0025
30	33.5305	34.8005	36.2505	40.2565	43.7735	46.9795	47.9625	50.8925	53.6725	59.7035
40	44.1655	45.6165	47.2695	51.8055	55.7585	59.3425	60.4365	63.6915	66.7665	73.4025
50	54.7235	56.3345	58.1645	63.1675	67.5055	71.4205	72.6135	76.1545	79.4905	86.6615
60	65.2275	66.9815	68.9725	74.3975	79.0825	83.2985	84.5805	88.3795	91.9525	99.6075
===	00.2210	00.3013	00.3120	14.0910	19.0020	09.4900	04.0000	00.0190	91.9040	<i>99.</i> 0070