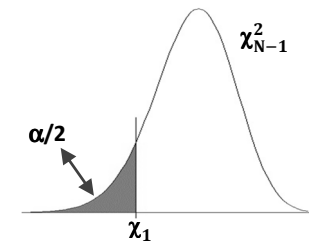




Distribución Chi Cuadrado χ^2

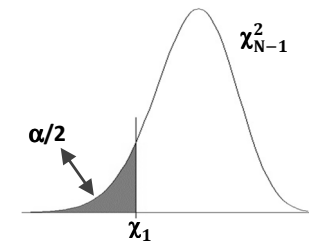


Contiene los valores de χ^2 tales que $\frac{\alpha}{2} = P(\chi_v^2 \leq \chi_1)$, donde v son los Grados de Libertad

v grados de libertad	$\alpha/2$	0,995	0,99	0,975	0,95	0,9	0,75	0,5	0,25	0,1	0,05	0,025	0,01	0,005
	1	7,879	6,635	5,024	3,842	2,706	1,323	0,455	0,102	0,016	0,004	0,001	0,000	0,000
	2	10,597	9,210	7,378	5,992	4,605	2,773	1,386	0,575	0,211	0,103	0,051	0,020	0,010
	3	12,838	11,345	9,348	7,815	6,251	4,108	2,366	1,213	0,584	0,352	0,216	0,115	0,072
	4	14,860	13,277	11,143	9,488	7,779	5,385	3,357	1,923	1,064	0,711	0,484	0,297	0,207
	5	16,750	15,086	12,833	11,071	9,236	6,626	4,352	2,675	1,610	1,146	0,831	0,554	0,412
	6	18,548	16,812	14,449	12,592	10,645	7,841	5,348	3,455	2,204	1,635	1,237	0,872	0,676
	7	20,278	18,475	16,013	14,067	12,017	9,037	6,346	4,255	2,833	2,167	1,690	1,239	0,989
	8	21,955	20,090	17,535	15,507	13,362	10,219	7,344	5,071	3,490	2,733	2,180	1,647	1,344
	9	23,589	21,666	19,023	16,919	14,684	11,389	8,343	5,899	4,168	3,325	2,700	2,088	1,735
	10	25,188	23,209	20,483	18,307	15,987	12,549	9,342	6,737	4,865	3,940	3,247	2,558	2,156
	11	26,757	24,725	21,920	19,675	17,275	13,701	10,341	7,584	5,578	4,575	3,816	3,054	2,603
	12	28,300	26,217	23,337	21,026	18,549	14,845	11,340	8,438	6,304	5,226	4,404	3,571	3,074
	13	29,819	27,688	24,736	22,362	19,812	15,984	12,340	9,299	7,042	5,892	5,009	4,107	3,565
	14	31,319	29,141	26,119	23,685	21,064	17,117	13,339	10,165	7,790	6,571	5,629	4,660	4,075
	15	32,802	30,578	27,488	24,996	22,307	18,245	14,339	11,037	8,547	7,261	6,262	5,229	4,601
	16	34,267	32,000	28,845	26,296	23,542	19,369	15,339	11,912	9,312	7,962	6,908	5,812	5,142
	17	35,718	33,409	30,191	27,587	24,769	20,489	16,338	12,792	10,085	8,672	7,564	6,408	5,697
	18	37,156	34,805	31,526	28,869	25,989	21,605	17,338	13,675	10,865	9,390	8,231	7,015	6,265
	19	38,582	36,191	32,852	30,144	27,204	22,718	18,338	14,562	11,651	10,117	8,907	7,633	6,844
	20	39,997	37,566	34,170	31,410	28,412	23,828	19,337	15,452	12,443	10,851	9,591	8,260	7,434
	21	41,401	38,932	35,479	32,671	29,615	24,935	20,337	16,344	13,240	11,591	10,283	8,897	8,034
	22	42,796	40,289	36,781	33,925	30,813	26,039	21,337	17,240	14,042	12,338	10,982	9,543	8,643
	23	44,181	41,638	38,076	35,173	32,007	27,141	22,337	18,137	14,848	13,091	11,689	10,196	9,260
	24	45,558	42,980	39,364	36,415	33,196	28,241	23,337	19,037	15,659	13,848	12,401	10,856	9,886
	25	46,928	44,314	40,647	37,653	34,382	29,339	24,337	19,939	16,473	14,611	13,120	11,524	10,520
	26	48,290	45,642	41,923	38,885	35,563	30,435	25,337	20,843	17,292	15,379	13,844	12,198	11,160
	27	49,645	46,963	43,195	40,113	36,741	31,528	26,336	21,749	18,114	16,151	14,573	12,879	11,808
	28	50,994	48,278	44,461	41,337	37,916	32,621	27,336	22,657	18,939	16,928	15,308	13,565	12,461
	29	52,336	49,588	45,722	42,557	39,088	33,711	28,336	23,567	19,768	17,708	16,047	14,256	13,121



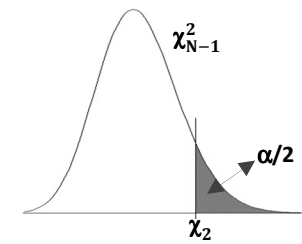
Distribución Chi Cuadrado χ^2



	$\alpha/2$	0,995	0,99	0,975	0,95	0,9	0,75	0,5	0,25	0,1	0,05	0,025	0,01	0,005
v grados de libertad	30	53,672	50,892	46,979	43,773	40,256	34,800	29,336	24,478	20,599	18,493	16,791	14,954	13,787
	31	55,003	52,191	48,232	44,985	41,422	35,887	30,336	25,390	21,434	19,281	17,539	15,656	14,458
	32	56,328	53,486	49,480	46,194	42,585	36,973	31,336	26,304	22,271	20,072	18,291	16,362	15,134
	33	57,648	54,775	50,725	47,400	43,745	38,058	32,336	27,219	23,110	20,867	19,047	17,074	15,815
	34	58,964	56,061	51,966	48,602	44,903	39,141	33,336	28,136	23,952	21,664	19,806	17,789	16,501
	35	60,275	57,342	53,203	49,802	46,059	40,223	34,336	29,054	24,797	22,465	20,569	18,509	17,192
	36	61,581	58,619	54,437	50,999	47,212	41,304	35,336	29,973	25,643	23,269	21,336	19,233	17,887
	37	62,883	59,893	55,668	52,192	48,363	42,383	36,336	30,893	26,492	24,075	22,106	19,960	18,586
	38	64,181	61,162	56,896	53,384	49,513	43,462	37,335	31,815	27,343	24,884	22,879	20,691	19,289
	39	65,475	62,428	58,120	54,572	50,660	44,540	38,335	32,737	28,196	25,695	23,654	21,426	19,996
	40	66,766	63,691	59,342	55,759	51,805	45,616	39,335	33,660	29,051	26,509	24,433	22,164	20,707
	45	73,166	69,957	65,410	61,656	57,505	50,985	44,335	38,291	33,350	30,612	28,366	25,901	24,311
	50	79,490	76,154	71,420	67,505	63,167	56,334	49,335	42,942	37,689	34,764	32,357	29,707	27,991
	55	85,749	82,292	77,380	73,312	68,796	61,665	54,335	47,611	42,060	38,958	36,398	33,571	31,735
	60	91,952	88,379	83,298	79,082	74,397	66,982	59,335	52,294	46,459	43,188	40,482	37,485	35,534
	70	104,215	100,425	95,023	90,531	85,527	77,577	69,335	61,698	55,329	51,739	48,758	45,442	43,275
	80	116,321	112,329	106,629	101,880	96,578	88,130	79,334	71,145	64,278	60,392	57,153	53,540	51,172
	90	128,299	124,116	118,136	113,145	107,565	98,650	89,334	80,625	73,291	69,126	65,647	61,754	59,196
	100	140,170	135,807	129,561	124,342	118,498	109,141	99,334	90,133	82,358	77,929	74,222	70,065	67,328
v grados de libertad	120	163,649	158,950	152,211	146,567	140,233	130,055	119,334	109,220	100,624	95,705	91,573	86,923	83,852
	140	186,847	181,841	174,648	168,613	161,827	150,894	139,334	128,380	119,029	113,659	109,137	104,034	100,655
	160	209,824	204,530	196,915	190,516	183,311	171,675	159,334	147,599	137,546	131,756	126,870	121,346	117,679
	180	232,620	227,056	219,044	212,304	204,704	192,409	179,334	166,865	156,153	149,969	144,741	138,821	134,884
	200	255,264	249,445	241,058	233,994	226,021	213,102	199,334	186,172	174,835	168,279	162,728	156,432	152,241
	250	311,346	304,939	295,689	287,882	279,050	264,697	249,334	234,577	221,806	214,392	208,098	200,939	196,160
	300	366,844	359,906	349,875	341,395	331,789	316,138	299,334	283,135	269,068	260,878	253,912	245,973	240,663
	500	585,206	576,493	563,851	553,127	540,930	520,951	499,334	478,323	459,926	449,147	439,936	429,387	422,303
	600	692,981	683,516	669,769	658,094	644,800	622,988	599,334	576,286	556,056	544,180	534,019	522,365	514,529



Distribución Chi Cuadrado χ^2

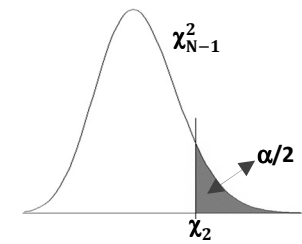


Contiene los valores de χ^2 tales que $\frac{\alpha}{2} = P(\chi^2_{\nu} \geq \chi_2)$, donde ν son los Grados de Libertad

	$\alpha/2$	0,005	0,01	0,025	0,05	0,1	0,25	0,5	0,75	0,9	0,95	0,975	0,99	0,995
v grados de libertad	1	7,879	6,635	5,024	3,842	2,706	1,323	0,455	0,102	0,016	0,004	0,001	0,000	0,000
	2	10,597	9,210	7,378	5,992	4,605	2,773	1,386	0,575	0,211	0,103	0,051	0,020	0,010
	3	12,838	11,345	9,348	7,815	6,251	4,108	2,366	1,213	0,584	0,352	0,216	0,115	0,072
	4	14,860	13,277	11,143	9,488	7,779	5,385	3,357	1,923	1,064	0,711	0,484	0,297	0,207
	5	16,750	15,086	12,833	11,071	9,236	6,626	4,352	2,675	1,610	1,146	0,831	0,554	0,412
	6	18,548	16,812	14,449	12,592	10,645	7,841	5,348	3,455	2,204	1,635	1,237	0,872	0,676
	7	20,278	18,475	16,013	14,067	12,017	9,037	6,346	4,255	2,833	2,167	1,690	1,239	0,989
	8	21,955	20,090	17,535	15,507	13,362	10,219	7,344	5,071	3,490	2,733	2,180	1,647	1,344
	9	23,589	21,666	19,023	16,919	14,684	11,389	8,343	5,899	4,168	3,325	2,700	2,088	1,735
	10	25,188	23,209	20,483	18,307	15,987	12,549	9,342	6,737	4,865	3,940	3,247	2,558	2,156
	11	26,757	24,725	21,920	19,675	17,275	13,701	10,341	7,584	5,578	4,575	3,816	3,054	2,603
	12	28,300	26,217	23,337	21,026	18,549	14,845	11,340	8,438	6,304	5,226	4,404	3,571	3,074
	13	29,819	27,688	24,736	22,362	19,812	15,984	12,340	9,299	7,042	5,892	5,009	4,107	3,565
	14	31,319	29,141	26,119	23,685	21,064	17,117	13,339	10,165	7,790	6,571	5,629	4,660	4,075
	15	32,802	30,578	27,488	24,996	22,307	18,245	14,339	11,037	8,547	7,261	6,262	5,229	4,601
	16	34,267	32,000	28,845	26,296	23,542	19,369	15,339	11,912	9,312	7,962	6,908	5,812	5,142
	17	35,718	33,409	30,191	27,587	24,769	20,489	16,338	12,792	10,085	8,672	7,564	6,408	5,697
	18	37,156	34,805	31,526	28,869	25,989	21,605	17,338	13,675	10,865	9,390	8,231	7,015	6,265
	19	38,582	36,191	32,852	30,144	27,204	22,718	18,338	14,562	11,651	10,117	8,907	7,633	6,844
	20	39,997	37,566	34,170	31,410	28,412	23,828	19,337	15,452	12,443	10,851	9,591	8,260	7,434
	21	41,401	38,932	35,479	32,671	29,615	24,935	20,337	16,344	13,240	11,591	10,283	8,897	8,034
	22	42,796	40,289	36,781	33,925	30,813	26,039	21,337	17,240	14,042	12,338	10,982	9,543	8,643
	23	44,181	41,638	38,076	35,173	32,007	27,141	22,337	18,137	14,848	13,091	11,689	10,196	9,260
	24	45,558	42,980	39,364	36,415	33,196	28,241	23,337	19,037	15,659	13,848	12,401	10,856	9,886
	25	46,928	44,314	40,647	37,653	34,382	29,339	24,337	19,939	16,473	14,611	13,120	11,524	10,520
	26	48,290	45,642	41,923	38,885	35,563	30,435	25,337	20,843	17,292	15,379	13,844	12,198	11,160
	27	49,645	46,963	43,195	40,113	36,741	31,528	26,336	21,749	18,114	16,151	14,573	12,879	11,808
	28	50,994	48,278	44,461	41,337	37,916	32,621	27,336	22,657	18,939	16,928	15,308	13,565	12,461
	29	52,336	49,588	45,722	42,557	39,088	33,711	28,336	23,567	19,768	17,708	16,047	14,256	13,121



Distribución Chi Cuadrado χ^2



	ν/α	0,005	0,01	0,025	0,05	0,1	0,25	0,5	0,75	0,9	0,95	0,975	0,99	0,995
ν grados de libertad	30	53,672	50,892	46,979	43,773	40,256	34,800	29,336	24,478	20,599	18,493	16,791	14,954	13,787
	31	55,003	52,191	48,232	44,985	41,422	35,887	30,336	25,390	21,434	19,281	17,539	15,656	14,458
	32	56,328	53,486	49,480	46,194	42,585	36,973	31,336	26,304	22,271	20,072	18,291	16,362	15,134
	33	57,648	54,775	50,725	47,400	43,745	38,058	32,336	27,219	23,110	20,867	19,047	17,074	15,815
	34	58,964	56,061	51,966	48,602	44,903	39,141	33,336	28,136	23,952	21,664	19,806	17,789	16,501
	35	60,275	57,342	53,203	49,802	46,059	40,223	34,336	29,054	24,797	22,465	20,569	18,509	17,192
	36	61,581	58,619	54,437	50,999	47,212	41,304	35,336	29,973	25,643	23,269	21,336	19,233	17,887
	37	62,883	59,893	55,668	52,192	48,363	42,383	36,336	30,893	26,492	24,075	22,106	19,960	18,586
	38	64,181	61,162	56,896	53,384	49,513	43,462	37,335	31,815	27,343	24,884	22,879	20,691	19,289
	39	65,475	62,428	58,120	54,572	50,660	44,540	38,335	32,737	28,196	25,695	23,654	21,426	19,996
	40	66,766	63,691	59,342	55,759	51,805	45,616	39,335	33,660	29,051	26,509	24,433	22,164	20,707
	45	73,166	69,957	65,410	61,656	57,505	50,985	44,335	38,291	33,350	30,612	28,366	25,901	24,311
	50	79,490	76,154	71,420	67,505	63,167	56,334	49,335	42,942	37,689	34,764	32,357	29,707	27,991
	55	85,749	82,292	77,380	73,312	68,796	61,665	54,335	47,611	42,060	38,958	36,398	33,571	31,735
	60	91,952	88,379	83,298	79,082	74,397	66,982	59,335	52,294	46,459	43,188	40,482	37,485	35,534
	70	104,215	100,425	95,023	90,531	85,527	77,577	69,335	61,698	55,329	51,739	48,758	45,442	43,275
	80	116,321	112,329	106,629	101,880	96,578	88,130	79,334	71,145	64,278	60,392	57,153	53,540	51,172
	90	128,299	124,116	118,136	113,145	107,565	98,650	89,334	80,625	73,291	69,126	65,647	61,754	59,196
	100	140,170	135,807	129,561	124,342	118,498	109,141	99,334	90,133	82,358	77,929	74,222	70,065	67,328
	120	163,649	158,950	152,211	146,567	140,233	130,055	119,334	109,220	100,624	95,705	91,573	86,923	83,852
	140	186,847	181,841	174,648	168,613	161,827	150,894	139,334	128,380	119,029	113,659	109,137	104,034	100,655
	160	209,824	204,530	196,915	190,516	183,311	171,675	159,334	147,599	137,546	131,756	126,870	121,346	117,679
	180	232,620	227,056	219,044	212,304	204,704	192,409	179,334	166,865	156,153	149,969	144,741	138,821	134,884
	200	255,264	249,445	241,058	233,994	226,021	213,102	199,334	186,172	174,835	168,279	162,728	156,432	152,241
	250	311,346	304,939	295,689	287,882	279,050	264,697	249,334	234,577	221,806	214,392	208,098	200,939	196,160
	300	366,844	359,906	349,875	341,395	331,789	316,138	299,334	283,135	269,068	260,878	253,912	245,973	240,663
	500	585,206	576,493	563,851	553,127	540,930	520,951	499,334	478,323	459,926	449,147	439,936	429,387	422,303
	600	692,981	683,516	669,769	658,094	644,800	622,988	599,334	576,286	556,056	544,180	534,019	522,365	514,529