χ^2_ν left half

χ^2_ν left half

Df (ν)	Each table entry is the value (y) of the random variable $Y \sim \chi^2_\nu$ such that $\Pr(Y \le y)$ = the probability given in the column heading																		
	0.000 001	0.000 005	0.000 01	0.000 05	0.000 1	0.000 5	0.001	***0.005***	0.01	***0.025***	0.05	0.10	0.15	0.20	0.25	0.30	0.40	0.50	
1	$.0^{11}157\,080$	$.0^{10}392\,699$	$.0^{9}157\,080$	$.0^{8}392\,699$	$.0^{7}157\,080$	$.0^{6}392\,699$	$.0^{5}157\,080$	*$.0^{4}392\,704$*	$.0^{3}157\,788$	*$.0^{3}982\,069$*	.00393 214	.0157 908	.0357 658	.0641 848	.101 531	.148 472	.274 996	.454 936	1
2	$.0^{5}200\,000$	$.0^{4}100\,000$	$.0^{4}200\,001$	$.0^{3}100\,003$	$.0^{3}200\,010$	.00100 025	.00200 100	*.0100 251*	.0201 007	*.0506 356*	.102 587	.210 721	.325 038	.446 287	.575 364	.713 350	1.02 165	1.38 629	
3	$.0^{3}241\,810$	$.0^{3}707\,124$	.00112 258	.00328 387	.00521 483	.0152 790	.0242 976	*.0717 218*	.114 832	*.215 795*	.351 846	.584 374	.797 771	1.00 517	1.21 253	1.42 365	1.86 917	2.36 597	
4	.002 830	.006 331	.008 958	.020 067	.028 418	.063 922	.090 804	*.206 989*	.297 109	*.484 419*	.710 723	1.06 362	1.36 648	1.64 878	1.92 256	2.19 470	2.75 284	3.35 669	
5	.012 896	.024 591	.032 484	.062 101	.082 177	.158 138	.210 213	*.411 742*	.554 298	*.831 212*	1.14 548	1.61 031	1.99 382	2.34 253	2.67 460	2.99 991	3.65 550	4.35 146	5
6	.036 509	.062 633	.079 074	.136 181	.172 352	.299 408	.381 067	*.675 727*	.872 090	*1.23 734*	1.63 538	2.20 413	2.66 127	3.07 009	3.45 460	3.82 755	4.57 015	5.34 812	
7	.078 524	.125 010	.152 860	.244 572	.299 967	.484 875	.598 494	*.989 256*	1.23 904	*1.68 987*	2.16 735	2.83 311	3.35 828	3.82 232	4.25 485	4.67 133	5.49 323	6.34 581	
8	.141 985	.213 843	.255 358	.386 877	.463 594	.710 379	.857 105	*1.34 441*	1.64 650	*2.17 973*	2.73 264	3.48 954	4.07 820	4.59 357	5.07 064	5.52 742	6.42 265	7.34 412	
9	.228 385	.329 590	.386 459	.561 424	.660 809	.971 699	1.15 195	*1.73 493*	2.08 790	*2.70 039*	3.32 511	4.16 816	4.81 652	5.38 005	5.89 883	6.39 331	7.35 703	8.34 283	
10	.338 126	.471 719	.545 170	.766 047	.888 920	1.26 498	1.47 874	*2.15 586*	2.55 821	*3.24 697*	3.94 030	4.86 518	5.57 006	6.17 908	6.73 720	7.26 722	8.29 547	9.34 182	10
11	.470 918	.639 174	.730 073	.998 472	1.14 530	1.58 685	1.83 385	*2.60 322*	3.05 348	*3.81 575*	4.57 481	5.57 778	6.33 643	6.98 867	7.58 414	8.14 787	9.23 729	10.3 410	
12	.626 063	.830 648	.939 595	1.25 651	1.42 750	1.93 438	2.21 421	*3.07 382*	3.57 057	*4.40 379*	5.22 603	6.30 380	7.11 384	7.80 733	8.43 842	9.03 428	10.1 820	11.3 403	
13	.802 643	1.04 475	1.17 214	1.53 813	1.73 332	2.30 506	2.61 722	*3.56 503*	4.10 692	*5.00 875*	5.89 186	7.04 150	7.90 084	8.63 386	9.29 907	9.92 568	11.1 291	12.3 398	
14	.999 638	1.28 010	1.42 618	1.84 147	2.06 080	2.69 673	3.04 067	*4.07 467*	4.66 043	*5.62 873*	6.57 063	7.78 953	8.69 630	9.46 733	10.1 653	10.8 215	12.0 785	13.3 393	
15	1.21 600	1.53 538	1.70 028	2.16 488	2.40 819	3.10 752	3.48 268	*4.60 092*	5.22 935	*6.26 214*	7.26 094	8.54 676	9.49 928	10.3 070	11.0 365	11.7 212	13.0 297	14.3 389	15
16	1.45 069	1.80 933	1.99 310	2.50 685	2.77 394	3.53 581	3.94 163	*5.14 221*	5.81 221	*6.90 766*	7.96 165	9.31 224	10.3 090	11.1 521	11.9 122	12.6 243	13.9 827	15.3 385	
17	1.70 272	2.10 078	2.30 342	2.86 604	3.15 667	3.98 018	4.41 609	*5.69 722*	6.40 776	*7.56 419*	8.67 176	10.0 852	11.1 249	12.0 023	12.7 919	13.5 307	14.9 373	16.3 382	
18	1.97 114	2.40 868	2.63 012	3.24 126	3.55 517	4.43 939	4.90 485	*6.26 480*	7.01 491	*8.23 075*	9.39 046	10.8 649	11.9 463	12.8 570	13.6 753	14.4 399	15.8 932	17.3 379	
19	2.25 505	2.73 204	2.97 218	3.63 142	3.96 832	4.91 234	5.40 682	*6.84 397*	7.63 273	*8.90 652*	10.1 170	11.6 509	12.7 727	13.7 158	14.5 620	15.3 517	16.8 504	18.3 377	
20	2.55 364	3.06 994	3.32 868	4.03 555	4.39 516	5.39 807	5.92 104	*7.43 384*	8.26 040	*9.59 078*	10.8 508	12.4 426	13.6 039	14.5 784	15.4 518	16.2 659	17.8 088	19.3 374	20
21	2.86 612	3.42 156	3.69 875	4.45 278	4.83 481	5.89 570	6.44 668	*8.03 365*	8.89 720	*10.2 829*	11.5 913	13.2 396	14.4 393	15.4 446	16.3 444	17.1 823	18.7 683	20.3 372	
22	3.19 177	3.78 613	4.08 162	4.88 231	5.28 646	6.40 447	6.98 297	*8.64 272*	9.54 249	*10.9 823*	12.3 380	14.0 415	15.2 788	16.3 140	17.2 396	18.1 007	19.7 288	21.3 370	
23	3.52 993	4.16 296	4.47 659	5.32 341	5.74 941	6.92 368	7.52 924	*9.26 042*	10.1 957	*11.6 886*	13.0 905	14.8 480	16.1 219	17.1 865	18.1 373	19.0 211	20.6 902	22.3 369	
24	3.87 997	4.55 139	4.88 300	5.77 544	6.22 300	7.45 269	8.08 488	*9.88 623*	10.8 564	*12.4 012*	13.8 484	15.6 587	16.9 686	18.0 618	19.0 373	19.9 432	21.6 525	23.3 367	
25	4.24 133	4.95 084	5.30 025	6.23 780	6.70 663	7.99 096	8.64 934	*10.5 197*	11.5 240	*13.1 197*	14.6 114	16.4 734	17.8 184	18.9 398	19.9 393	20.8 670	22.6 156	24.3 366	25
26	4.61 346	5.36 076	5.72 780	6.70 994	7.19 978	8.53 795	9.22 213	*11.1 602*	12.1 981	*13.8 439*	15.3 792	17.2 919	18.6 714	19.8 202	20.8 434	21.7 924	23.5 794	25.3 365	
27	4.99 587	5.78 064	6.16 513	7.19 136	7.70 193	9.09 320	9.80 278	*11.8 076*	12.8 785	*14.5 734*	16.1 514	18.1 139	19.5 272	20.7 030	21.7 494	22.7 192	24.5 440	26.3 363	
28	5.38 810	6.21 001	6.61 177	7.68 159	8.21 264	9.65 627	10.3 909	*12.4 613*	13.5 647	*15.3 079*	16.9 279	18.9 392	20.3 857	21.5 880	22.6 572	23.6 475	25.5 093	27.3 362	
29	5.78 970	6.64 843	7.06 730	8.18 022	8.73 149	10.2 268	10.9 861	*13.1 211*	14.2 565	*16.0 471*	17.7 084	19.7 677	21.2 468	22.4 751	23.5 666	24.5 770	26.4 751	28.3 361	
30	6.20 029	7.09 551	7.53 131	8.68 684	9.25 809	10.8 044	11.5 880	*13.7 867*	14.9 535	*16.7 908*	18.4 927	20.5 992	22.1 103	23.3 641	24.4 776	25.5 078	27.4 416	29.3 360	30
32	7.04 694	8.01 414	8.48 330	9.72 266	10.3 331	11.9 794	12.8 107	*15.1 340*	16.3 622	*18.2 908*	20.0 719	22.2 706	23.8 442	25.1 478	26.3 041	27.3 728	29.3 763	31.3 359	
34	7.92 529	8.96 319	9.46 505	10.7 864	11.4 352	13.1 791	14.0 567	*16.5 013*	17.7 891	*19.8 063*	21.6 643	23.9 523	25.5 864	26.9 383	28.1 361	29.2 421	31.3 130	33.3 357	
36	8.83 296	9.94 029	10.4 742	11.8 759	12.5 622	14.4 012	15.3 241	*17.8 867*	19.2 327	*21.3 359*	23.2 686	25.6 433	27.3 362	28.7 350	29.9 730	31.1 152	33.2 517	35.3 356	
38	9.76 781	10.9 433	11.5 087	12.9 891	13.7 120	15.6 441	16.6 112	*19.2 889*	20.6 914	*22.8 785*	24.8 839	27.3 430	29.0 931	30.5 373	31.8 146	32.9 919	35.1 920	37.3 355	
40	10.7 280	11.9 705	12.5 667	14.1 242	14.8 831	16.9 062	17.9 164	*20.7 065*	22.1 643	*24.4 330*	26.5 093	29.0 505	30.8 563	32.3 450	33.6 603	34.8 719	37.1 340	39.3 353	40
42	11.7 118	13.0 202	13.6 467	15.2 798	16.0 738	18.1 861	19.2 385	22.1 385	23.6 501	25.9 987	28.1 440	30.7 654	32.6 255	34.1 574	35.5 099	36.7 550	39.0 774	41.3 352	
44	12.7 176	14.0 908	14.7 471	16.4 544	17.2 829	19.4 825	20.5 763	*23.5 837*	25.1 480	*27.5 746*	29.7 875	32.4 871	34.4 002	35.9 743	37.3 631	38.6 408	41.0 222	43.3 352	
46	13.7 443	15.1 811	15.8 667	17.6 469	18.5 093	20.7 945	21.9 287	*25.0 413*	26.6 572	*29.1 601*	31.4 390	34.2 152	36.1 801	37.7 955	39.2 197	40.5 292	42.9 682	45.3 351	
48	14.7 905	16.2 900	17.0 043	18.8 561	19.7 517	22.1 209	23.2 949	*26.5 106*	28.1 770	*30.7 545*	33.0 981	35.9 491	37.9 648	39.6 205	41.0 794	42.4 201	44.9 154	47.3 350	
50	15.8 551	17.4 163	18.1 588	20.0 810	21.0 093	23.4 610	24.6 739	*27.9 907*	29.7 067	*32.3 574*	34.7 643	37.6 886	39.7 539	41.4 492	42.9 421	44.3 133	46.8 638	49.3 349	50
55	18.5 907	20.3 020	21.1 134	23.2 066	24.2 141	26.8 658	28.1 731	*31.7 348*	33.5 705	*36.3 981*	38.9 580	42.0 596	44.2 448	46.0 356	47.6 105	49.0 554	51.7 391	54.3 348	
60	21.4 218	23.2 780	24.1 556	26.4 133	27.4 969	30.3 405	31.7 383	*35.5 345*	37.4 849	*40.4 817*	43.1 880	46.4 589	48.7 587	50.6 406	52.2 938	53.8 091	56.6 200	59.3 347	
65	24.3 372	26.3 333	27.2 749	29.6 913	30.8 483	33.8 767	35.3 616	*39.3 831*	41.4 436	*44.6 030*	47.4 496	50.8 829	53.2 926	55.2 620	56.9 903	58.5 731	61.5 059	64.3 346	
70	27.3 280	29.4 596	30.4 631	33.0 328	34.2 607	37.4 674	39.0 364	*43.2 752*	45.4 417	*48.7 576*	51.7 393	55.3 289	57.8 443	59.8 978	61.6 983	63.3 460	66.3 961	69.3 345	
75	30.3 865	32.6 495	33.7 130	36.4 314	37.7 279	41.1 072	42.7 573	*47.2 060*	49.4 750	*52.9 419*	56.0 541	59.7 946	62.4 119	64.5 466	66.4 168	68.1 271	71.2 903	74.3 344	75
80	33.5 063	35.8 972	37.0 189	39.8 814	41.2 445	44.7 911	46.5 199	*51.1 719*	53.5 401	*57.1 532*	60.3 915	64.2 778	66.9 938	69.2 069	71.1 445	72.9 153	76.1 879	79.3 343	
85	36.6 822	39.1 973	40.3 757	43.3 784	44.8 061	48.5 151	50.3 203	*55.1 696*	57.6 339	*61.3 888*	64.7 494	68.7 772	71.5 887	73.8 779	75.8 807	77.7 102	81.0 888	84.3 343	
90	39.9 092	42.5 454	43.7 790	46.9 182	48.4 087	52.2 758	54.1 552	*59.1 963*	61.7 541	*65.6 466*	69.1 260	73.2 911	76.1 954	78.5 584	80.6 247	82.5 111	85.9 925	89.3 342	
95	43.1 835	45.9 378	47.2 252	50.4 973	52.0 492	56.0 702	58.0 220	*63.2 497*	65.8 984	*69.9 249*	73.5 198	77.8 184	80.8 130	83.2 478	85.3 757	87.3 175	90.8 990	94.3 342	
99	45.8 344	48.6 812	50.0 108	53.3 870	54.9 869	59.1 282	61.1 365	*66.5 101*	69.2 299	*73.3 611*	77.0 463	81.4 493	84.5 143	87.0 052	89.1 812	91.1 663	94.8 259	98.3 341	99
100	46.5 014	49.3 710	50.7 110	54.1 129	55.7 246	59.8 957	61.9 179	*67.3 276*	70.0 649	*74.2 219*	77.9 295	82.3 581	85.4 406	87.9 453	90.1 332	92.1 289	95.8 078	99.3 341	100
125	63.6 466	67.0 574	68.6 435	72.6 534	74.5 449	79.4 179	81.7 697	*88.0 289*	91.1 798	*95.9 457*	100. 178	105. 213	108. 705	111. 536	114. 004	116. 251	120. 383	124. 334	
150	81.5 306	85.4 344	87.2 445	91.8 070	93.9 528	99.4 629	102. 113	*109. 142*	112. 668	*117. 985*	122. 692	128. 275	132. 137	135. 263	137. 983	140. 457	145. 000	149. 334	
200	118. 873	123. 657	125. 868	131. 416	134. 015	140. 660	143. 843	*152. 241*	156. 432	*162. 728*	168. 279	174. 835	179. 355	183. 003	186. 172	189. 049	194. 319	199. 334	
250	157. 704	163. 269	165. 834	172. 255	175. 254	182. 902	186. 554	*196. 161*	200. 939	*208. 098*	214. 392	221. 806	226. 905	231. 013	234. 577	237. 809	243. 720	249. 334	250
								99% CI		95% CI	90% CI								

Superscripts in the first three lines of table entries give the number of leading zeros.