Figure 6.6. PERCENTILES FOR THE K DISTRIBUTION [K_ν]

[Calculated with *qchisq* in R version 2.14.0 using 17-digit arithmetic; accuracy of all digits in the table entries has *not* been verified]

Each table entry is the value (y) of the random variable $Y \sim K_\nu$ such that $\Pr(Y \le y)$ = the probability given in the column heading

Df (ν)	0.50	0.60	0.70	0.75	0.80	0.85	0.90	0.95	***0.975***	0.99	***0.995***	0.999	0.999 5	0.999 9	0.999 95	0.999 99	0.999 995	0.999 999	
1	0.674 490	0.841 621	1.036 433	1.150 349	1.281 552	1.439 531	1.644 854	1.959 964	*2.241 403*	2.575 829	*2.807 034*	3.290 527	3.480 756	3.890 592	4.055 627	4.417 173	4.564 788	4.891 638	1
2	0.832 555	0.957 231	1.097 257	1.177 410	1.268 636	1.377 360	1.517 427	1.730 818	*1.920 646*	2.145 966	*2.301 807*	2.628 261	2.756 973	3.034 854	3.146 981	3.393 070	3.493 719	3.716 922	
3	0.888 064	0.990 987	1.105 271	1.170 234	1.243 869	1.331 296	1.443 536	1.613 973	*1.765 258*	1.944 639	*2.068 668*	2.328 536	2.431 049	2.652 515	2.741 943	2.938 353	3.018 739	3.197 126	
4	0.916 064	1.005 563	1.104 359	1.160 309	1.223 583	1.298 546	1.394 582	1.540 108	*1.669 078*	1.821 861	*1.927 450*	2.148 652	2.235 920	2.424 497	2.500 667	2.668 017	2.736 534	2.888 635	
5	0.932 894	1.013 101	1.101 311	1.151 145	1.207 417	1.273 986	1.359 144	1.487 985	*1.602 030*	1.737 025	*1.830 279*	2.025 587	2.102 633	2.269 133	2.336 395	2.484 198	2.544 723	2.679 111	5
6	0.944 115	1.017 412	1.097 811	1.143 154	1.194 296	1.254 731	1.331 956	1.448 654	*1.551 847*	1.673 912	*1.758 199*	1.934 672	2.004 279	2.154 698	2.215 466	2.349 009	2.403 701	2.525 151	
7	0.952 126	1.020 029	1.094 364	1.136 231	1.183 412	1.239 118	1.310 236	1.417 601	*1.512 461*	1.624 601	*1.702 005*	1.864 016	1.927 907	2.065 966	2.121 739	2.244 311	2.294 513	2.405 999	
8	0.958 131	1.021 673	1.091 127	1.130 202	1.174 207	1.226 126	1.292 361	1.392 269	*1.480 479*	1.584 702	*1.656 614*	1.807 086	1.866 415	1.994 606	2.046 391	2.160 197	2.206 809	2.310 328	
9	0.962 799	1.022 722	1.088 137	1.124 907	1.166 293	1.215 092	1.277 309	1.371 089	*1.453 837*	1.551 558	*1.618 962*	1.759 961	1.815 544	1.935 629	1.984 137	2.090 738	2.134 399	2.231 366	
10	0.966 531	1.023 388	1.085 390	1.120 217	1.159 395	1.205 568	1.264 404	1.353 035	*1.431 195*	1.523 458	*1.587 078*	1.720 125	1.772 563	1.885 842	1.931 597	2.032 146	2.073 327	2.164 787	10
11	0.969 583	1.023 800	1.082 869	1.116 028	1.153 312	1.197 235	1.253 178	1.337 404	*1.411 642*	1.499 241	*1.559 628*	1.685 881	1.735 632	1.843 095	1.886 497	1.981 871	2.020 933	2.107 684	
12	0.972 125	1.024 038	1.080 552	1.112 258	1.147 896	1.189 864	1.243 294	1.323 697	*1.394 533*	1.478 089	*1.535 674*	1.656 037	1.703 459	1.805 879	1.847 242	1.938 129	1.975 352	2.058 018	
13	0.974 275	1.024 153	1.078 415	1.108 842	1.143 032	1.183 280	1.234 502	1.311 547	*1.379 398*	1.459 406	*1.514 531*	1.629 728	1.675 107	1.773 104	1.812 676	1.899 627	1.935 235	2.014 315	
14	0.976 117	1.024 182	1.076 439	1.105 730	1.138 632	1.177 353	1.226 614	1.300 681	*1.365 884*	1.442 746	*1.495 693*	1.606 311	1.649 879	1.743 955	1.781 941	1.865 401	1.899 579	1.975 480	
15	0.977 714	1.024 149	1.074 607	1.102 878	1.134 626	1.171 979	1.219 484	1.290 886	*1.353 721*	1.427 770	*1.478 768*	1.585 293	1.627 242	1.717 813	1.754 381	1.834 721	1.867 620	1.940 678	15
16	0.979 110	1.024 071	1.072 902	1.100 252	1.130 959	1.167 076	1.212 998	1.281 996	*1.342 697*	1.414 212	*1.463 455*	1.566 292	1.606 784	1.694 198	1.729 488	1.807 017	1.838 764	1.909 260	
17	0.980 342	1.023 960	1.071 311	1.097 823	1.127 584	1.162 579	1.207 063	1.273 880	*1.332 645*	1.401 861	*1.449 512*	1.549 008	1.588 177	1.672 729	1.706 861	1.781 841	1.812 543	1.880 717	
18	0.981 436	1.023 825	1.069 822	1.095 569	1.124 464	1.158 435	1.201 606	1.266 432	*1.323 429*	1.390 550	*1.436 749*	1.533 196	1.571 160	1.653 101	1.686 177	1.758 833	1.788 582	1.854 637	
19	0.982 415	1.023 672	1.068 425	1.093 469	1.121 569	1.154 598	1.196 565	1.259 564	*1.314 941*	1.380 139	*1.425 007*	1.518 659	1.555 519	1.635 068	1.667 176	1.737 701	1.766 576	1.830 689	
20	0.983 296	1.023 508	1.067 112	1.091 506	1.118 872	1.151 034	1.191 889	1.253 205	*1.307 088*	1.370 515	*1.414 158*	1.505 237	1.541 078	1.618 425	1.649 641	1.718 205	1.746 275	1.808 600	20
21	0.984 093	1.023 335	1.065 873	1.089 665	1.116 352	1.147 710	1.187 536	1.247 294	*1.299 796*	1.361 585	*1.404 094*	1.492 793	1.527 694	1.603 003	1.633 395	1.700 145	1.727 471	1.788 142	
22	0.984 818	1.023 156	1.064 703	1.087 935	1.113 991	1.144 601	1.183 471	1.241 781	*1.293 001*	1.353 268	*1.394 725*	1.481 215	1.515 243	1.588 661	1.618 289	1.683 354	1.709 990	1.769 126	
23	0.985 479	1.022 974	1.063 595	1.086 305	1.111 771	1.141 684	1.179 663	1.236 623	*1.286 648*	1.345 498	*1.385 974*	1.470 407	1.503 622	1.575 280	1.604 194	1.667 692	1.693 685	1.751 391	
24	0.986 085	1.022 789	1.062 543	1.084 765	1.109 679	1.138 941	1.176 085	1.231 784	*1.280 691*	1.338 217	*1.377 778*	1.460 288	1.492 743	1.562 756	1.591 005	1.653 038	1.678 430	1.734 801	
25	0.986 643	1.022 604	1.061 544	1.083 307	1.107 704	1.136 354	1.172 716	1.227 232	*1.275 092*	1.331 377	*1.370 079*	1.450 788	1.482 531	1.551 003	1.578 629	1.639 289	1.664 119	1.719 239	25
26	0.987 157	1.022 419	1.060 594	1.081 924	1.105 834	1.133 909	1.169 536	1.222 940	*1.269 815*	1.324 934	*1.362 829*	1.441 847	1.472 921	1.539 946	1.566 986	1.626 357	1.650 658	1.704 602	
27	0.987 634	1.022 236	1.059 687	1.080 610	1.104 061	1.131 593	1.166 527	1.218 883	*1.264 831*	1.318 851	*1.355 987*	1.433 411	1.463 856	1.529 518	1.556 006	1.614 164	1.637 967	1.690 805	
28	0.988 076	1.022 054	1.058 821	1.079 360	1.102 377	1.129 396	1.163 675	1.215 042	*1.260 113*	1.313 097	*1.349 515*	1.425 436	1.455 286	1.519 662	1.545 630	1.602 643	1.625 976	1.677 770	
29	0.988 488	1.021 873	1.057 994	1.078 167	1.100 773	1.127 307	1.160 967	1.211 397	*1.255 639*	1.307 642	*1.343 382*	1.417 881	1.447 169	1.510 329	1.535 804	1.591 734	1.614 623	1.665 429	
30	0.988 872	1.021 696	1.057 201	1.077 029	1.099 245	1.125 318	1.158 390	1.207 932	*1.251 389*	1.302 462	*1.337 559*	1.410 710	1.439 466	1.501 473	1.526 482	1.581 386	1.603 854	1.653 725	30
32	0.989 568	1.021 348	1.055 712	1.074 898	1.096 391	1.121 610	1.153 591	1.201 487	*1.243 489*	1.292 838	*1.326 745*	1.397 400	1.425 170	1.485 043	1.509 189	1.562 192	1.583 881	1.632 019	
34	0.990 183	1.021 012	1.054 338	1.072 940	1.093 774	1.118 218	1.149 209	1.195 609	*1.236 289*	1.284 076	*1.316 903*	1.385 293	1.412 168	1.470 106	1.493 469	1.544 750	1.565 732	1.612 299	
36	0.990 729	1.020 688	1.053 064	1.071 131	1.091 365	1.115 099	1.145 185	1.190 220	*1.229 694*	1.276 053	*1.307 895*	1.374 219	1.400 278	1.456 451	1.479 100	1.528 809	1.549 147	1.594 281	
38	0.991 217	1.020 376	1.051 879	1.069 455	1.089 136	1.112 219	1.141 474	1.185 255	*1.223 622*	1.268 672	*1.299 609*	1.364 039	1.389 351	1.443 905	1.465 899	1.514 168	1.533 915	1.577 736	
40	0.991 657	1.020 076	1.050 772	1.067 895	1.087 066	1.109 548	1.138 036	1.180 662	*1.218 008*	1.261 851	*1.291 956*	1.354 640	1.379 263	1.432 326	1.453 717	1.500 659	1.519 862	1.562 474	40
42	0.992 055	1.019 787	1.049 736	1.066 439	1.085 137	1.107 062	1.134 840	1.176 395	*1.212 796*	1.255 523	*1.284 857*	1.345 927	1.369 912	1.421 596	1.442 430	1.488 145	1.506 845	1.548 338	
44	0.992 416	1.019 510	1.048 762	1.065 075	1.083 334	1.104 740	1.131 858	1.172 419	*1.207 942*	1.249 632	*1.278 249*	1.337 820	1.361 213	1.411 618	1.431 934	1.476 510	1.494 743	1.535 198	
46	0.992 746	1.019 243	1.047 846	1.063 793	1.081 642	1.102 565	1.129 068	1.168 701	*1.203 406*	1.244 129	*1.272 079*	1.330 253	1.353 095	1.402 307	1.422 141	1.465 656	1.483 455	1.522 942	
48	0.993 049	1.018 987	1.046 981	1.062 587	1.080 052	1.100 523	1.126 449	1.165 214	*1.199 154*	1.238 973	*1.266 300*	1.323 168	1.345 495	1.393 593	1.412 977	1.455 501	1.472 892	1.511 477	
50	0.993 327	1.018 740	1.046 162	1.061 448	1.078 553	1.098 599	1.123 985	1.161 936	*1.195 159*	1.234 130	*1.260 873*	1.316 517	1.338 361	1.385 415	1.404 376	1.445 971	1.462 983	1.500 720	50
55	0.993 934	1.018 162	1.044 296	1.058 859	1.075 151	1.094 241	1.118 410	1.154 529	*1.186 136*	1.223 201	*1.248 628*	1.301 520	1.322 279	1.366 986	1.384 998	1.424 506	1.440 662	1.476 497	
60	0.994 440	1.017 635	1.042 645	1.056 578	1.072 163	1.090 421	1.113 530	1.148 056	*1.178 259*	1.213 668	*1.237 953*	1.288 457	1.308 273	1.350 944	1.368 133	1.405 830	1.421 243	1.455 429	
65	0.994 868	1.017 151	1.041 171	1.054 549	1.069 512	1.087 036	1.109 213	1.142 337	*1.171 305*	1.205 258	*1.228 540*	1.276 944	1.295 934	1.336 815	1.353 282	1.389 389	1.404 151	1.436 888	
70	0.995 235	1.016 706	1.039 844	1.052 729	1.067 137	1.084 009	1.105 357	1.137 235	*1.165 107*	1.197 767	*1.220 157*	1.266 699	1.284 955	1.324 250	1.340 075	1.374 773	1.388 956	1.420 410	
75	0.995 553	1.016 294	1.038 641	1.051 083	1.064 993	1.081 281	1.101 886	1.132 647	*1.159 536*	1.191 038	*1.212 631*	1.257 506	1.275 104	1.312 980	1.328 231	1.361 668	1.375 335	1.405 639	75
80	0.995 831	1.015 912	1.037 543	1.049 585	1.063 046	1.078 806	1.098 739	1.128 492	*1.154 494*	1.184 951	*1.205 825*	1.249 196	1.266 202	1.302 798	1.317 532	1.349 832	1.363 033	1.392 303	
85	0.996 076	1.015 557	1.036 537	1.048 214	1.061 266	1.076 546	1.095 869	1.124 705	*1.149 902*	1.179 410	*1.199 630*	1.241 637	1.258 105	1.293 539	1.307 805	1.339 073	1.351 852	1.380 183	
90	0.996 294	1.015 225	1.035 609	1.046 953	1.059 632	1.074 472	1.093 237	1.121 236	*1.145 697*	1.174 338	*1.193 961*	1.234 722	1.250 699	1.285 074	1.298 911	1.329 238	1.341 632	1.369 106	
95	0.996 489	1.014 915	1.034 750	1.045 788	1.058 123	1.072 559	1.090 812	1.118 042	*1.141 827*	1.169 672	*1.188 748*	1.228 365	1.243 892	1.277 294	1.290 739	1.320 203	1.332 243	1.358 931	
99	0.996 631	1.014 680	1.034 107	1.044 917	1.056 996	1.071 132	1.089 003	1.115 661	*1.138 943*	1.166 197	*1.184 866*	1.223 632	1.238 825	1.271 505	1.284 658	1.313 481	1.325 258	1.351 363	99
100	0.996 665	1.014 623	1.033 952	1.044 707	1.056 725	1.070 789	1.088 568	1.115 088	*1.138 250*	1.165 361	*1.183 932*	1.222 494	1.237 606	1.270 113	1.283 196	1.311 865	1.323 579	1.349 544	100
125	0.997 332	1.013 391	1.030 665	1.040 272	1.051 003	1.063 556	1.079 418	1.103 064	*1.123 703*	1.147 847	*1.164 376*	1.198 679	1.212 115	1.241 004	1.252 626	1.278 087	1.288 486	1.311 532	
150	0.997 777	1.012 434	1.028 194	1.036 955	1.046 738	1.058 180	1.072 633	1.094 168	*1.112 955*	1.134 923	*1.149 957*	1.181 142	1.193 352	1.219 596	1.230 151	1.253 267	1.262 707	1.283 621	
200	0.998 333	1.011 023	1.024 659	1.032 236	1.040 694	1.050 581	1.063 064	1.081 652	*1.097 857*	1.116 793	*1.129 744*	1.156 591	1.167 096	1.189 664	1.198 737	1.218 599	1.226 707	1.244 665	
250	0.998 666	1.010 015	1.022 204	1.028 974	1.036 530	1.045 360	1.056 504	1.073 092	*1.087 545*	1.104 427	*1.115 968*	1.139 881	1.149 234	1.169 321	1.177 393	1.195 060	1.202 269	1.218 234	250

The K distribution is introduced and used in Appendices 3 and 4 of Figure 6.3 on pages 6.29 and 6.30.

90% CI 95% CI 99% CI

(continued overleaf)

K_ν right half

K_ν right half