

PERCENTILES FOR THE K DISTRIBUTION [K_v]

[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]

2010-06-20

K_v
right
half

(continued overleaf)

Df (v)	Each table entry is the value (y) of the random variable $Y \sim K_v$, such that $\Pr(Y \leq y) =$ the probability given in the column heading																		
	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				

K_v
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University of Waterloo

K_v
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W.H. Cherry

#HL105.2

Df (v)	Each table entry is the value (y) of the random variable $Y \sim K_\nu$, such that $\Pr(Y \leq y)$ = 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 ⁵ 125 331	.0 ⁵ 626 657	.0 ⁴ 125 331	.0 ⁴ 626 657	.0 ³ 125 331	.0 ³ 626 657	.00125 331	.00626 661	.0125 335	.0313 380	.0627 068	.125 661	.189 118	.253 347	.318 639	.385 320	.524 401	.674 490	1
2	.00100 000	.00223 607	.00316 229	.00707 116	.0100 003	.0223 635	.0316 307	.0707 993	.100 251	.159 116	.226 480	.324 593	.403 136	.472 381	.536 360	.597 223	.714 721	.832 555	
3	.00897 794	.0153 528	.0193 441	.0330 851	.0416 927	.0713 652	.0899 955	.154 620	.195 646	.268 201	.342 465	.441 352	.515 678	.578 842	.635 750	.688 876	.789 339	.888 064	
4	.0265 978	.0397 845	.0473 224	.0708 290	.0842 889	.126 414	.150 669	.227 480	.272 539	.348 001	.421 522	.515 661	.584 482	.642 023	.693 282	.740 726	.829 585	.916 064	
5	.0507 861	.0701 297	.0806 032	.111 446	.128 201	.177 841	.205 043	.286 964	.332 956	.407 728	.478 639	.567 505	.631 477	.684 476	.731 383	.774 585	.855 044	.932 894	5
6	.0780 049	.102 170	.114 800	.150 655	.169 486	.223 386	.252 014	.335 591	.381 246	.454 119	.522 076	.606 098	.665 992	.715 319	.758 793	.798 702	.872 750	.944 115	
7	.105 913	.133 636	.147 774	.186 919	.207 008	.263 188	.292 402	.375 929	.420 721	.491 335	.556 436	.636 184	.692 643	.738 949	.779 638	.816 904	.885 860	.952 126	
8	.133 222	.163 494	.178 661	.219 908	.240 726	.297 989	.327 320	.409 941	.453 665	.521 983	.584 448	.660 449	.713 985	.757 758	.796 134	.831 221	.896 008	.958 131	
9	.159 299	.191 366	.207 219	.249 761	.270 967	.328 583	.357 763	.439 056	.481 652	.547 762	.607 830	.680 536	.731 553	.773 165	.809 583	.842 833	.904 128	.962 799	
10	.183 882	.217 191	.233 489	.276 775	.298 148	.355 666	.384 544	.464 312	.505 788	.569 822	.627 718	.697 509	.746 328	.786 071	.820 805	.852 480	.910 795	.966 531	10
11	.206 908	.241 053	.257 624	.301 281	.322 673	.379 814	.408 306	.486 474	.526 868	.588 970	.644 897	.712 089	.758 973	.797 078	.830 342	.860 648	.916 380	.969 583	
12	.228 412	.263 098	.279 821	.323 588	.344 903	.401 495	.429 555	.506 115	.545 479	.605 791	.659 926	.724 787	.769 948	.806 604	.838 571	.867 673	.921 139	.972 125	
13	.248 479	.283 488	.300 275	.343 973	.365 147	.421 084	.448 692	.523 673	.562 065	.620 716	.673 216	.735 972	.779 587	.814 950	.845 762	.873 793	.925 250	.974 275	
14	.267 213	.302 384	.319 171	.362 676	.383 666	.438 889	.466 037	.539 489	.576 964	.634 076	.685 077	.745 919	.788 140	.822 337	.852 111	.879 183	.928 843	.976 117	
15	.284 722	.319 935	.336 678	.379 901	.400 682	.455 157	.481 850	.553 830	.590 443	.646 124	.695 746	.754 840	.795 792	.828 933	.857 770	.883 975	.932 014	.977 714	15
16	.301 112	.336 278	.352 943	.395 826	.416 379	.470 094	.496 338	.566 911	.602 713	.657 061	.705 410	.762 899	.802 692	.834 870	.862 852	.888 269	.934 837	.979 110	
17	.316 481	.351 533	.368 097	.410 598	.430 914	.483 868	.509 677	.578 904	.613 944	.667 047	.714 215	.770 225	.808 952	.840 247	.867 448	.892 145	.937 370	.980 342	
18	.330 919	.365 808	.382 254	.424 347	.444 420	.496 621	.522 007	.589 953	.624 273	.676 213	.722 282	.776 922	.814 666	.845 148	.871 630	.895 664	.939 657	.981 436	
19	.344 510	.379 198	.395 513	.437 181	.457 011	.508 472	.533 450	.600 174	.633 816	.684 663	.729 708	.783 075	.819 908	.849 637	.875 455	.898 878	.941 735	.982 415	
20	.357 326	.391 787	.407 963	.449 197	.468 784	.519 522	.544 107	.609 666	.642 666	.692 487	.736 574	.788 752	.824 738	.853 769	.878 970	.901 827	.943 632	.983 296	20
21	.369 434	.403 647	.419 679	.460 475	.479 822	.529 856	.554 062	.618 510	.650 904	.699 758	.742 945	.794 013	.829 208	.857 588	.882 215	.904 546	.945 372	.984 093	
22	.380 894	.414 845	.430 730	.471 087	.490 198	.539 548	.563 389	.626 778	.658 597	.706 538	.748 878	.798 905	.833 360	.861 131	.885 223	.907 061	.946 976	.984 818	
23	.391 759	.425 439	.441 174	.481 095	.499 974	.548 661	.572 152	.634 529	.665 802	.712 880	.754 422	.803 470	.837 229	.864 430	.888 019	.909 397	.948 459	.985 479	
24	.402 076	.435 478	.451 063	.490 554	.509 207	.557 251	.580 405	.641 815	.672 569	.718 829	.759 617	.807 741	.840 847	.867 511	.890 628	.911 574	.949 835	.986 085	
25	.411 890	.445 010	.460 445	.499 512	.517 943	.565 366	.588 195	.648 680	.678 940	.724 423	.764 497	.811 749	.844 238	.870 397	.893 070	.913 609	.951 117	.986 643	25
26	.421 237	.454 074	.469 361	.508 011	.526 227	.573 047	.595 565	.655 164	.684 952	.729 697	.769 094	.815 520	.847 426	.873 107	.895 361	.915 516	.952 314	.987 157	
27	.430 154	.462 707	.477 847	.516 088	.534 094	.580 332	.602 549	.661 300	.690 639	.734 680	.773 434	.819 076	.850 429	.875 658	.897 515	.917 308	.953 434	.987 634	
28	.438 671	.470 942	.485 937	.523 777	.541 580	.587 254	.609 182	.667 119	.696 027	.739 398	.777 539	.822 436	.853 265	.878 065	.899 547	.918 995	.954 487	.988 076	
29	.446 816	.478 807	.493 660	.531 109	.548 713	.593 841	.615 491	.672 647	.701 143	.743 873	.781 430	.825 619	.855 949	.880 342	.901 466	.920 588	.955 477	.988 488	
30	.454 617	.486 330	.501 043	.538 109	.555 521	.600 121	.621 502	.677 907	.706 009	.748 126	.785 125	.828 638	.858 494	.882 499	.903 283	.922 095	.956 410	.988 872	30
32	.469 273	.500 442	.514 882	.551 211	.568 252	.611 847	.632 719	.687 705	.715 066	.756 033	.791 989	.834 240	.863 210	.886 492	.906 644	.924 878	.958 128	.989 568	
34	.482 801	.513 443	.527 621	.563 248	.579 940	.622 591	.642 987	.696 657	.723 333	.763 241	.798 239	.839 332	.867 491	.890 113	.909 688	.927 394	.959 673	.990 183	
36	.495 338	.525 470	.539 398	.574 357	.590 719	.632 483	.652 434	.704 878	.730 918	.769 846	.803 959	.843 987	.871 401	.893 417	.912 461	.929 684	.961 071	.990 729	
38	.506 999	.536 640	.550 328	.584 651	.600 702	.641 629	.661 163	.712 463	.737 910	.775 929	.809 222	.848 264	.874 990	.896 445	.915 000	.931 777	.962 344	.991 217	
40	.517 880	.547 049	.560 507	.594 226	.609 981	.650 120	.669 261	.719 488	.744 383	.781 554	.814 084	.852 211	.878 298	.899 235	.917 337	.933 701	.963 509	.991 657	40
42	.528 064	.556 780	.570 018	.603 162	.618 635	.658 029	.676 801	.726 021	.750 398	.786 776	.818 594	.855 868	.881 362	.901 816	.919 497	.935 478	.964 580	.992 055	
44	.537 622	.565 902	.578 931	.611 526	.626 733	.665 421	.683 844	.732 115	.756 007	.791 640	.822 793	.859 269	.884 208	.904 212	.921 500	.937 123	.965 568	.992 416	
46	.546 616	.574 478	.587 305	.619 377	.634 331	.672 349	.690 443	.737 819	.761 252	.796 187	.826 714	.862 443	.886 862	.906 444	.923 365	.938 654	.966 484	.992 746	
48	.555 099	.582 559	.595 194	.626 766	.641 478	.678 861	.696 642	.743 172	.766 173	.800 449	.830 387	.865 413	.889 344	.908 530	.925 106	.940 081	.967 336	.993 049	
50	.563 117	.590 191	.602 642	.633 736	.648 218	.684 996	.702 480	.748 208	.770 801	.804 455	.833 838	.868 201	.891 672	.910 486	.926 737	.941 417	.968 130	.993 327	50
55	.581 388	.607 559	.619 581	.649 568	.663 519	.698 905	.715 708	.759 602	.781 263	.813 501	.841 622	.874 483	.896 912	.914 883	.930 400	.944 413	.969 902	.993 934	
60	.597 519	.622 868	.634 502	.663 491	.676 965	.711 108	.727 305	.769 572	.790 410	.821 399	.848 410	.879 952	.901 468	.918					