Statistical tables *†‡§

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^{*}MTEX sources of these tables available at http://www.york.ac.uk/depts/maths/tables/sources.htm.

Data sources for Section 6 and Section 7 are the images at http://gulliver.trb.org/publications/nchrp/cd-22/v2appendixc.html.

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1 Normal cumulative distribution function

0.00 0.01 0.02 0.03 0.04 0.05 0.06 0.08 0.09 0.07 \boldsymbol{x} $0.5000\ 0.5040\ 0.5080\ 0.5120\ 0.5160\ 0.5199\ 0.5239\ 0.5279\ 0.5319\ 0.5359$ 0.0 0.5398 0.5438 0.5478 0.5517 0.5557 0.5596 0.5636 0.5675 0.5714 0.5753 0.5793 0.5832 0.5871 0.5910 0.5948 0.5987 0.6026 0.6064 0.6103 0.6141 0.6179 0.6217 0.6255 0.6293 0.6331 0.6368 0.6406 0.6443 0.6480 0.6517 0.3 $0.6554\ 0.6591\ 0.6628\ 0.6664\ 0.6700\ 0.6736\ 0.6772\ 0.6808\ 0.6844\ 0.6879$ 0.4 0.5 0.6915 0.6950 0.6985 0.7019 0.7054 0.7088 0.7123 0.7157 0.7190 0.72240.6 $0.7257\ 0.7291\ 0.7324\ 0.7357\ 0.7389\ 0.7422\ 0.7454\ 0.7486\ 0.7517\ 0.7549$ 0.7580 0.7611 0.7642 0.7673 0.7703 0.7734 0.7764 0.7794 0.7823 0.7852 0.7 8.0 $0.7881 \ 0.7910 \ 0.7939 \ 0.7967 \ 0.7995 \ 0.8023 \ 0.8051 \ 0.8078 \ 0.8106 \ 0.8133$ 0.9 $0.8159 \ 0.8186 \ 0.8212 \ 0.8238 \ 0.8264 \ 0.8289 \ 0.8315 \ 0.8340 \ 0.8365 \ 0.8389$ $0.8413\ 0.8438\ 0.8461\ 0.8485\ 0.8508\ 0.8531\ 0.8554\ 0.8577\ 0.8599\ 0.8621$ 1.0 $0.8643 \ 0.8665 \ 0.8686 \ 0.8708 \ 0.8729 \ 0.8749 \ 0.8770 \ 0.8790 \ 0.8810 \ 0.8830$ 1.1 1.2 0.8849 0.8869 0.8888 0.8907 0.8925 0.8944 0.8962 0.8980 0.8997 0.9015 1.3 0.9032 0.9049 0.9066 0.9082 0.9099 0.9115 0.9131 0.9147 0.9162 0.9177 0.9192 0.9207 0.9222 0.9236 0.9251 0.9265 0.9279 0.9292 0.9306 0.9319 0.9332 0.9345 0.9357 0.9370 0.9382 0.9394 0.9406 0.9418 0.9429 0.9441 1.5 0.9452 0.9463 0.9474 0.9484 0.9495 0.9505 0.9515 0.9525 0.9535 0.9545 1.6 1.7 0.9554 0.9564 0.9573 0.9582 0.9591 0.9599 0.9608 0.9616 0.9625 0.9633 0.9641 0.9649 0.9656 0.9664 0.9671 0.9678 0.9686 0.9693 0.9699 0.9706 1.9 $0.9713\ 0.9719\ 0.9726\ 0.9732\ 0.9738\ 0.9744\ 0.9750\ 0.9756\ 0.9761\ 0.9767$ 2.0 $0.9772\ 0.9778\ 0.9783\ 0.9788\ 0.9793\ 0.9798\ 0.9803\ 0.9808\ 0.9812\ 0.9817$ 0.9821 0.9826 0.9830 0.9834 0.9838 0.9842 0.9846 0.9850 0.9854 0.9857 2.1 2.2 0.9861 0.9864 0.9868 0.9871 0.9875 0.9878 0.9881 0.9884 0.9887 0.9890 2.3 0.9893 0.9896 0.9898 0.9901 0.9904 0.9906 0.9909 0.9911 0.9913 0.9916 0.9918 0.9920 0.9922 0.9925 0.9927 0.9929 0.9931 0.9932 0.9934 0.9936 0.9938 0.9940 0.9941 0.9943 0.9945 0.9946 0.9948 0.9949 0.9951 0.9952 0.9953 0.9955 0.9956 0.9957 0.9959 0.9960 0.9961 0.9962 0.9963 0.9964 2.6 2.7 0.9965 0.9966 0.9967 0.9968 0.9969 0.9970 0.9971 0.9972 0.9973 0.9974 0.9974 0.9975 0.9976 0.9977 0.9977 0.9978 0.9979 0.9979 0.9980 0.9981 2.8 0.9981 0.9982 0.9982 0.9983 0.9984 0.9984 0.9985 0.9985 0.9986 0.9986 0.9987 0.9987 0.9987 0.9988 0.9988 0.9989 0.9989 0.9989 0.9990 0.9990 3.0 3.1 0.9990 0.9991 0.9991 0.9991 0.9992 0.9992 0.9992 0.9993 0.9993 0.9993 0.9993 0.9994 0.9994 0.9994 0.9994 0.9995 0.9995 0.9995 0.9995 0.9995 0.9995 0.9996 0.9996 0.9996 0.9996 0.9996 0.9997 3.3 0.9997 0.9997 0.9997 0.9997 0.9997 0.9997 0.9997 0.9997 0.9998 3.4 0.9998 0.9998 0.9998 0.9998 0.9998 0.9998 0.9998 0.9998 0.9998 3.5 0.9998 0.9998 0.9999 0.9999 0.9999 0.9999 0.9999 0.9999 0.9999 3.6 3.7 0.9999 0.9999 0.9999 0.9999 0.9999 0.9999 0.9999 0.9999 0.9999 3.8 0.9999 0.9999 0.9999 0.9999 0.9999 0.9999 0.9999 0.9999 0.9999 $1.0000\ 1.0000\ 1.0000\ 1.0000\ 1.0000\ 1.0000\ 1.0000\ 1.0000\ 1.0000$ 3.9

2 Student's $t_n(\alpha)$ percentage points (quantiles)

 $n \setminus \alpha$ 60.0% 66.7% 75.0% 80.0% 87.5% 90.0% 95.0% 97.5% 99.0% 99.5% 99.9% 0.325 0.577 1.000 1.376 2.414 3.078 6.31412.70631.82163.657318.31 0.289 0.500 0.816 1.061 1.604 1.886 2.920 4.303 6.965 9.925 22.327 $0.277 \ 0.476 \ 0.765 \ 0.978 \ 1.423 \ 1.638 \ 2.353 \ 3.182 \ 4.541 \ 5.841 \ 10.215$ 0.271 0.464 0.741 0.941 1.344 1.533 2.132 2.776 3.747 4.604 7.173 0.267 0.457 0.727 0.920 1.301 1.476 2.015 2.571 3.365 4.032 5.893 0.265 0.453 0.718 0.906 1.273 1.440 1.943 2.447 3.143 3.707 5.208 $0.263\ 0.449\ 0.711\ 0.896\ 1.254\ 1.415\ 1.895\ 2.365\ 2.998\ 3.499\ 4.785$ 0.262 0.447 0.706 0.889 1.240 1.397 1.860 2.306 2.896 3.355 4.501 0.261 0.445 0.703 0.883 1.230 1.383 1.833 2.262 2.821 3.250 4.297 $0.260\ 0.444\ 0.700\ 0.879\ 1.221\ 1.372\ 1.812\ 2.228\ 2.764\ 3.169\ 4.144$ 10 0.260 0.443 0.697 0.876 1.214 1.363 1.796 2.201 2.718 3.106 4.025 11 12 $0.259\ 0.442\ 0.695\ 0.873\ 1.209\ 1.356\ 1.782\ 2.179\ 2.681\ 3.055\ 3.930$ 0.259 0.441 0.694 0.870 1.204 1.350 1.771 2.160 2.650 3.012 3.852 13 0.258 0.440 0.692 0.868 1.200 1.345 1.761 2.145 2.624 2.977 3.787 0.258 0.439 0.691 0.866 1.197 1.341 1.753 2.131 2.602 2.947 3.733 15 0.258 0.439 0.690 0.865 1.194 1.337 1.746 2.120 2.583 2.921 3.686 17 0.257 0.438 0.689 0.863 1.191 1.333 1.740 2.110 2.567 2.898 3.646 0.257 0.438 0.688 0.862 1.189 1.330 1.734 2.101 2.552 2.878 3.610 18 0.257 0.438 0.688 0.861 1.187 1.328 1.729 2.093 2.539 2.861 3.579 19 $0.257 \ 0.437 \ 0.687 \ 0.860 \ 1.185 \ 1.325 \ 1.725 \ 2.086 \ 2.528 \ 2.845 \ 3.552$ 20 $0.257 \ 0.437 \ 0.686 \ 0.859 \ 1.183 \ 1.323 \ 1.721 \ 2.080 \ 2.518 \ 2.831 \ 3.527$ 21 $0.256\ 0.437\ 0.686\ 0.858\ 1.182\ 1.321\ 1.717\ 2.074\ 2.508\ 2.819\ 3.505$ $0.256\ 0.436\ 0.685\ 0.858\ 1.180\ 1.319\ 1.714\ 2.069\ 2.500\ 2.807\ 3.485$ 0.256 0.436 0.685 0.857 1.179 1.318 1.711 2.064 2.492 2.797 3.467 $0.256\ 0.436\ 0.684\ 0.856\ 1.178\ 1.316\ 1.708\ 2.060\ 2.485\ 2.787\ 3.450$ 0.256 0.436 0.684 0.856 1.177 1.315 1.706 2.056 2.479 2.779 3.435 26 27 0.256 0.435 0.684 0.855 1.176 1.314 1.703 2.052 2.473 2.771 3.421 0.256 0.435 0.683 0.855 1.175 1.313 1.701 2.048 2.467 2.763 3.408 0.256 0.435 0.683 0.854 1.174 1.311 1.699 2.045 2.462 2.756 3.396 0.256 0.435 0.683 0.854 1.173 1.310 1.697 2.042 2.457 2.750 3.385 0.255 0.434 0.682 0.852 1.170 1.306 1.690 2.030 2.438 2.724 3.340 0.255 0.434 0.681 0.851 1.167 1.303 1.684 2.021 2.423 2.704 3.307 45 0.255 0.434 0.680 0.850 1.165 1.301 1.679 2.014 2.412 2.690 3.281 0.255 0.433 0.679 0.849 1.164 1.299 1.676 2.009 2.403 2.678 3.261 50 0.255 0.433 0.679 0.848 1.163 1.297 1.673 2.004 2.396 2.668 3.245 55 0.254 0.433 0.679 0.848 1.162 1.296 1.671 2.000 2.390 2.660 3.232 60 0.253 0.431 0.674 0.842 1.150 1.282 1.645 1.960 2.326 2.576 3.090

3 $\chi_n^2(\alpha)$ percentage points (quantiles)

 $n \setminus \alpha$ 0.1% 0.5% 1.0% 2.5% 5.0% 10.0% 12.5% 20.0% 25.0% 33.3% 50.0% 1 0.000 0.000 0.000 0.001 0.004 0.016 0.025 0.064 0.102 0.186 0.455 $2 \quad 0.002 \quad 0.010 \quad 0.020 \quad 0.051 \quad 0.103 \quad 0.211 \quad 0.267 \quad 0.446 \quad 0.575 \quad 0.811 \quad 1.386$ 3 0.024 0.072 0.115 0.216 0.352 0.584 0.692 1.005 1.213 1.568 2.366 4 0.091 0.207 0.297 0.484 0.711 1.064 1.219 1.649 1.923 2.378 3.357 $5 \quad 0.210 \quad 0.412 \quad 0.554 \quad 0.831 \quad 1.145 \quad 1.610 \quad 1.808 \quad 2.343 \quad 2.675 \quad 3.216 \quad 4.351$ $6 \quad 0.381 \quad 0.676 \quad 0.872 \quad 1.237 \quad 1.635 \quad 2.204 \quad 2.441 \quad 3.070 \quad 3.455 \quad 4.074 \quad 5.348$ 7 0.598 0.989 1.239 1.690 2.167 2.833 3.106 3.822 4.255 4.945 6.346 8 0.857 1.344 1.646 2.180 2.733 3.490 3.797 4.594 5.071 5.826 7.344 9 1.152 1.735 2.088 2.700 3.325 4.168 4.507 5.380 5.899 6.716 8.343 10 1.479 2.156 2.558 3.247 3.940 4.865 5.234 6.179 6.737 7.612 9.342 11 1.834 2.603 3.053 3.816 4.575 5.578 5.975 6.989 7.584 8.514 10.341 12 2.214 3.074 3.571 4.404 5.226 6.304 6.729 7.807 8.438 9.420 11.340 13 2.617 3.565 4.107 5.009 5.892 7.042 7.493 8.634 9.299 10.331 12.340 14 3.041 4.075 4.660 5.629 6.571 7.790 8.266 9.467 10.165 11.245 13.339 15 3.483 4.601 5.229 6.262 7.261 8.547 9.048 10.307 11.037 12.163 14.339 16 3.942 5.142 5.812 6.908 7.962 9.312 9.837 11.152 11.912 13.083 15.338 17 4.416 5.697 6.408 7.564 8.672 10.085 10.633 12.002 12.792 14.006 16.338 18 4.905 6.265 7.015 8.231 9.390 10.865 11.435 12.857 13.675 14.931 17.338 19 5.407 6.844 7.633 8.907 10.117 11.651 12.242 13.716 14.562 15.859 18.338 20 5.921 7.434 8.260 9.591 10.851 12.443 13.055 14.578 15.452 16.788 19.337 21 6.447 8.034 8.897 10.283 11.591 13.240 13.873 15.445 16.344 17.720 20.337 22 6.983 8.643 9.542 10.982 12.338 14.041 14.695 16.314 17.240 18.653 21.337 23 7.529 9.260 10.196 11.689 13.091 14.848 15.521 17.187 18.137 19.587 22.337 24 8.085 9.886 10.856 12.401 13.848 15.659 16.351 18.062 19.037 20.523 23.337 25 8.649 10.520 11.524 13.120 14.611 16.473 17.184 18.940 19.939 21.461 24.337 26 9.222 11.160 12.198 13.844 15.379 17.292 18.021 19.820 20.843 22.399 25.336 27 9.803 11.808 12.879 14.573 16.151 18.114 18.861 20.703 21.749 23.339 26.336 28 10.391 12.461 13.565 15.308 16.928 18.939 19.704 21.588 22.657 24.280 27.336 29 10.986 13.121 14.256 16.047 17.708 19.768 20.550 22.475 23.567 25.222 28.336 30 11.588 13.787 14.953 16.791 18.493 20.599 21.399 23.364 24.478 26.165 29.336 35 14.688 17.192 18.509 20.569 22.465 24.797 25.678 27.836 29.054 30.894 34.336 40 17.916 20.707 22.164 24.433 26.509 29.051 30.008 32.345 33.660 35.643 39.335 45 21.251 24.311 25.901 28.366 30.612 33.350 34.379 36.884 38.291 40.407 44.335 50 24.674 27.991 29.707 32.357 34.764 37.689 38.785 41.449 42.942 45.184 49.335 55 28.173 31.735 33.570 36.398 38.958 42.060 43.220 46.036 47.610 49.972 54.335 60 31.738 35.534 37.485 40.482 43.188 46.459 47.680 50.641 52.294 54.770 59.335

1 0.708 0.936 1.323 1.642 2.354 2.706 3.841 5.024 6.635 7.879 10.828 2 1.833 2.197 2.773 3.219 4.159 4.605 5.991 7.378 9.210 10.597 13.816 3 2.946 3.405 4.108 4.642 5.739 6.251 7.815 9.348 11.345 12.838 16.266 4 4.045 4.579 5.385 5.989 7.214 7.779 9.488 11.143 13.277 14.860 18.467 5 5.132 5.730 6.626 7.289 8.625 9.236 11.070 12.833 15.086 16.750 20.515 6 6.211 6.867 7.841 8.558 9.992 10.645 12.592 14.449 16.812 18.548 22.458 7 7.283 7.992 9.037 9.803 11.326 12.017 14.067 16.013 18.475 20.278 24.322 8 8.351 9.107 10.219 11.030 12.636 13.362 15.507 17.535 20.090 21.955 26.125 9 9.414 10.215 11.389 12.242 13.926 14.684 16.919 19.023 21.666 23.589 27.877 10 10.473 11.317 12.549 13.442 15.198 15.987 18.307 20.483 23.209 25.188 29.588 11 11.530 12.414 13.701 14.631 16.457 17.275 19.675 21.920 24.725 26.757 31.264 12 12.584 13.506 14.845 15.812 17.703 18.549 21.026 23.337 26.217 28.300 32.910 13 13.636 14.595 15.984 16.985 18.939 19.812 22.362 24.736 27.688 29.819 34.528 14 14.685 15.680 17.117 18.151 20.166 21.064 23.685 26.119 29.141 31.319 36.123 15 15.733 16.761 18.245 19.311 21.384 22.307 24.996 27.488 30.578 32.801 37.697 16 16.780 17.840 19.369 20.465 22.595 23.542 26.296 28.845 32.000 34.267 39.252 17 17.824 18.917 20.489 21.615 23.799 24.769 27.587 30.191 33.409 35.718 40.790 18 18.868 19.991 21.605 22.760 24.997 25.989 28.869 31.526 34.805 37.156 42.312 19 19.910 21.063 22.718 23.900 26.189 27.204 30.144 32.852 36.191 38.582 43.820 20 20.951 22.133 23.828 25.038 27.376 28.412 31.410 34.170 37.566 39.997 45.315 21 21.991 23.201 24.935 26.171 28.559 29.615 32.671 35.479 38.932 41.401 46.797 22 23.031 24.268 26.039 27.301 29.737 30.813 33.924 36.781 40.289 42.796 48.268 23 24.069 25.333 27.141 28.429 30.911 32.007 35.172 38.076 41.638 44.181 49.728 24 25.106 26.397 28.241 29.553 32.081 33.196 36.415 39.364 42.980 45.559 51.179 25 26.143 27.459 29.339 30.675 33.247 34.382 37.652 40.646 44.314 46.928 52.620 26 27.179 28.520 30.435 31.795 34.410 35.563 38.885 41.923 45.642 48.290 54.052 27 28.214 29.580 31.528 32.912 35.570 36.741 40.113 43.195 46.963 49.645 55.476 28 29.249 30.639 32.620 34.027 36.727 37.916 41.337 44.461 48.278 50.993 56.892 29 30.283 31.697 33.711 35.139 37.881 39.087 42.557 45.722 49.588 52.336 58.301 30 31.316 32.754 34.800 36.250 39.033 40.256 43.773 46.979 50.892 53.672 59.703 35 36.475 38.024 40.223 41.778 44.753 46.059 49.802 53.203 57.342 60.275 66.619 40 41.622 43.275 45.616 47.269 50.424 51.805 55.758 59.342 63.691 66.766 73.402 45 46.761 48.510 50.985 52.729 56.052 57.505 61.656 65.410 69.957 73.166 80.077 50 51.892 53.733 56.334 58.164 61.647 63.167 67.505 71.420 76.154 79.490 86.661 55 57.016 58.945 61.665 63.577 67.211 68.796 73.311 77.380 82.292 85.749 93.168 60 62.135 64.147 66.981 68.972 72.751 74.397 79.082 83.298 88.379 91.952 99.607

4 Percentage points of the F distribution (quantiles), $F_{n,m}(p)$

n= degrees of freedom in denominator m= degrees of freedom in numerator $F_{n,m}(\alpha)=\frac{1}{F_{m,n}(1-\alpha)}$

30 $n \backslash m$ 2 10 12 15 20 1 0.500 1.50 1.71 1.82 1.89 1.94 1.98 2.00 2.04 2.07 2.09 2.12 2.15 2.17 2.20 0.600 2.63 2.93 3.09 3.20 3.27 3.32 3.36 3.41 3.45 3.48 3.52 3.56 3.59 3.64 4.00 4.42 4.64 4.78 4.88 4.95 5.00 5.08 5.13 5.18 5.24 5.29 5.33 5.39 0.667 0.750 7.50 8.20 8.58 8.82 8.98 9.10 9.19 9.32 9.41 9.50 9.58 9.67 9.74 9.85 0.800 12.0 13.1 13.6 14.0 14.3 14.4 14.6 14.8 14.9 15.0 15.2 15.3 15.4 15.6 2 0.500 1.00 1.13 1.21 1.25 1.28 1.30 1.32 1.35 1.36 1.38 1.39 1.41 1.42 1.44 0.600 $1.50\,1.64\,1.72\,1.76\,1.80\,1.82\,1.84\,1.86\,1.88\,1.89\,1.91\,1.92\,1.94\,1.96$ 0.667 2.00 2.15 2.22 2.27 2.30 2.33 2.34 2.37 2.38 2.40 2.42 2.43 2.45 2.47 0.750 3.00 3.15 3.23 3.28 3.31 3.34 3.35 3.38 3.39 3.41 3.43 3.44 3.46 3.48 0.800 4.00 4.16 4.24 4.28 4.32 4.34 4.36 4.38 4.40 4.42 4.43 4.45 4.47 4.48 3 0.500 $0.88\,1.00\,1.06\,1.10\,1.13\,1.15\,1.16\,1.18\,1.20\,1.21\,1.23\,1.24\,1.25\,1.27$ 0.600 1.26 1.37 1.43 1.47 1.49 1.51 1.52 1.54 1.55 1.56 1.57 1.58 1.59 1.60 0.667 $1.62\,1.72\,1.77\,1.80\,1.82\,1.83\,1.84\,1.86\,1.87\,1.88\,1.89\,1.90\,1.90\,1.91$ 0.750 2.28 2.36 2.39 2.41 2.42 2.43 2.44 2.44 2.45 2.46 2.46 2.47 2.47 2.47 0.800 0.500 0.83 0.94 1.00 1.04 1.06 1.08 1.09 1.11 1.13 1.14 1.15 1.16 1.18 1.19 0.600 1.16 1.26 1.31 1.34 1.36 1.37 1.38 1.40 1.41 1.42 1.43 1.43 1.44 1.45 0.667 1.46 1.55 1.58 1.61 1.62 1.63 1.64 1.65 1.65 1.66 1.67 1.67 1.68 1.68 0.750 0.800 2.47 2.48 2.48 2.48 2.47 2.47 2.47 2.46 2.46 2.45 2.44 2.44 2.43 2.43 5 0.500 $0.80\,0.91\,0.96\,1.00\,1.02\,1.04\,1.05\,1.07\,1.09\,1.10\,1.11\,1.12\,1.13\,1.15$ 0.600 $1.11\,1.20\,1.24\,1.27\,1.29\,1.30\,1.31\,1.32\,1.33\,1.34\,1.34\,1.35\,1.36\,1.37$ 0.667 1.38 1.45 1.48 1.50 1.51 1.52 1.53 1.53 1.54 1.54 1.54 1.55 1.55 1.55 0.750 0.800 2.26 2.25 2.24 2.23 2.22 2.21 2.20 2.19 2.18 2.18 2.17 2.16 2.15 2.13 6 0.500 $0.78\,0.89\,0.94\,0.98\,1.00\,1.02\,1.03\,1.05\,1.06\,1.07\,1.08\,1.10\,1.11\,1.12$ 0.600 $1.07\,1.16\,1.20\,1.22\,1.24\,1.25\,1.26\,1.27\,1.28\,1.29\,1.29\,1.30\,1.31\,1.31$ 0.667 1.33 1.39 1.42 1.44 1.44 1.45 1.45 1.46 1.46 1.47 1.47 1.47 1.47 1.47 0.750 1.76 1.78 1.79 1.79 1.78 1.78 1.78 1.77 1.77 1.76 1.76 1.75 1.75 1.74 0.800 $2.13\,2.11\,2.09\,2.08\,2.06\,2.05\,2.04\,2.03\,2.02\,2.01\,2.00\,1.98\,1.97\,1.95$ 7 0.500 $0.77\,0.87\,0.93\,0.96\,0.98\,1.00\,1.01\,1.03\,1.04\,1.05\,1.07\,1.08\,1.09\,1.10$ 0.600 1.05 1.13 1.17 1.19 1.21 1.22 1.23 1.24 1.24 1.25 1.26 1.26 1.27 1.27 0.667 0.750 1.70 1.72 1.72 1.71 1.71 1.70 1.70 1.69 1.68 1.68 1.67 1.66 1.66 1.65 0.800 $2.04\,2.02\,1.99\,1.97\,1.96\,1.94\,1.93\,1.92\,1.91\,1.89\,1.88\,1.86\,1.85\,1.83$

7 8 10 12 15 20 $n \backslash m$ 3 6 30 50∞ 0.500 $0.76\,0.86\,0.91\,0.95\,0.97\,0.99\,1.00\,1.02\,1.03\,1.04\,1.05\,1.07\,1.07\,1.09$ 0.600 1.03 1.11 1.15 1.17 1.19 1.20 1.20 1.21 1.22 1.22 1.23 1.24 1.24 1.25 $1.26\,1.32\,1.35\,1.36\,1.36\,1.37\,1.37\,1.37\,1.37\,1.38\,1.38\,1.38\,1.38\,1.37\,1.37$ 0.667 0.750 1.66 1.67 1.66 1.66 1.65 1.64 1.64 1.63 1.62 1.62 1.61 1.60 1.59 1.58 0.800 1.98 1.95 1.92 1.90 1.88 1.87 1.86 1.84 1.83 1.81 1.80 1.78 1.76 1.74 0.500 $0.75\,0.85\,0.91\,0.94\,0.96\,0.98\,0.99\,1.01\,1.02\,1.03\,1.04\,1.05\,1.06\,1.08$ 0.600 $1.02\,1.10\,1.13\,1.15\,1.17\,1.18\,1.18\,1.19\,1.20\,1.21\,1.21\,1.21\,1.22\,1.22\,1.22$ 0.667 $1.24\,1.30\,1.32\,1.33\,1.34\,1.34\,1.34\,1.34\,1.35\,1.35\,1.35\,1.35\,1.34\,1.34\,1.34$ 0.750 1.62 1.63 1.63 1.62 1.61 1.60 1.60 1.59 1.58 1.57 1.56 1.55 1.54 1.53 0.800 $1.93\,1.90\,1.87\,1.85\,1.83\,1.81\,1.80\,1.78\,1.76\,1.75\,1.73\,1.71\,1.70\,1.67$ 10 0.500 $0.74\,0.85\,0.90\,0.93\,0.95\,0.97\,0.98\,1.00\,1.01\,1.02\,1.03\,1.05\,1.06\,1.07$ 0.600 $1.01\,1.08\,1.12\,1.14\,1.15\,1.16\,1.17\,1.18\,1.18\,1.19\,1.19\,1.20\,1.20\,1.21$ 0.667 0.750 1.60 1.60 1.59 1.59 1.58 1.57 1.56 1.55 1.54 1.53 1.52 1.51 1.50 1.48 0.800 1.90 1.86 1.83 1.80 1.78 1.77 1.75 1.73 1.72 1.70 1.68 1.66 1.65 1.62 $0.74\,0.84\,0.89\,0.93\,0.95\,0.96\,0.98\,0.99\,1.01\,1.02\,1.03\,1.04\,1.05\,1.06$ 11 0.500 0.600 1.00 1.07 1.11 1.13 1.14 1.15 1.16 1.17 1.17 1.18 1.18 1.18 1.19 1.19 0.667 0.750 $1.58\,1.58\,1.57\,1.56\,1.55\,1.54\,1.53\,1.52\,1.51\,1.50\,1.49\,1.48\,1.47\,1.45$ 0.800 1.87 1.83 1.80 1.77 1.75 1.73 1.72 1.69 1.68 1.66 1.64 1.62 1.60 1.57 12 0.500 $0.73\,0.84\,0.89\,0.92\,0.94\,0.96\,0.97\,0.99\,1.00\,1.01\,1.02\,1.03\,1.04\,1.06$ 0.600 $0.99\,1.07\,1.10\,1.12\,1.13\,1.14\,1.15\,1.16\,1.16\,1.17\,1.17\,1.17\,1.17\,1.18\,1.18$ 0.667 1.21 1.26 1.27 1.28 1.29 1.29 1.29 1.29 1.29 1.29 1.29 1.28 1.28 1.27 0.750 1.56 1.56 1.55 1.54 1.53 1.52 1.51 1.50 1.49 1.48 1.47 1.45 1.44 1.42 0.800 1.85 1.80 1.77 1.74 1.72 1.70 1.69 1.66 1.65 1.63 1.61 1.59 1.57 1.54 $0.73\,0.83\,0.88\,0.92\,0.94\,0.96\,0.97\,0.98\,1.00\,1.01\,1.02\,1.03\,1.04\,1.05$ 13 0.500 0.600 0.98 1.06 1.09 1.11 1.13 1.13 1.14 1.15 1.15 1.16 1.16 1.16 1.17 1.17 0.667 $1.20\,1.25\,1.26\,1.27\,1.28\,1.28\,1.28\,1.28\,1.28\,1.28\,1.28\,1.27\,1.27\,1.27\,1.26$ 0.750 1.55 1.55 1.53 1.52 1.51 1.50 1.49 1.48 1.47 1.46 1.45 1.43 1.42 1.40 0.800 1.83 1.78 1.75 1.72 1.69 1.68 1.66 1.64 1.62 1.60 1.58 1.56 1.54 1.51 14 0.500 $0.73\,0.83\,0.88\,0.91\,0.94\,0.95\,0.96\,0.98\,0.99\,1.00\,1.01\,1.03\,1.04\,1.05$ 0.600 0.98 1.05 1.09 1.11 1.12 1.13 1.13 1.14 1.14 1.15 1.15 1.16 1.16 1.16 1.19 1.24 1.26 1.26 1.27 1.27 1.27 1.27 1.27 1.26 1.26 1.26 1.25 1.24 0.667 0.750 1.53 1.53 1.52 1.51 1.50 1.49 1.48 1.46 1.45 1.44 1.43 1.41 1.40 1.38 0.800 1.81 1.76 1.73 1.70 1.67 1.65 1.64 1.62 1.60 1.58 1.56 1.53 1.51 1.48

 $n \backslash m$ 2 7 8 10 12 15 20 3 6 $30 \quad 50 \quad \infty$ 15 0.500 $0.73\,0.83\,0.88\,0.91\,0.93\,0.95\,0.96\,0.98\,0.99\,1.00\,1.01\,1.02\,1.03\,1.05$ 0.600 $0.97\,1.05\,1.08\,1.10\,1.11\,1.12\,1.13\,1.13\,1.14\,1.14\,1.15\,1.15\,1.15\,1.15\,1.15$ 1.18 1.23 1.25 1.25 1.26 1.26 1.26 1.26 1.26 1.25 1.25 1.25 1.25 1.24 1.23 0.667 0.750 1.52 1.52 1.51 1.49 1.48 1.47 1.46 1.45 1.44 1.43 1.41 1.40 1.38 1.36 0.800 1.80 1.75 1.71 1.68 1.66 1.64 1.62 1.60 1.58 1.56 1.54 1.51 1.49 1.46 16 0.500 $0.72\,0.82\,0.88\,0.91\,0.93\,0.95\,0.96\,0.97\,0.99\,1.00\,1.01\,1.02\,1.03\,1.04$ 0.600 0.667 0.750 1.51 1.51 1.50 1.48 1.47 1.46 1.45 1.44 1.43 1.41 1.40 1.38 1.37 1.34 0.800 1.78 1.74 1.70 1.67 1.64 1.62 1.61 1.58 1.56 1.54 1.52 1.49 1.47 1.43 17 0.500 $0.72\,0.82\,0.87\,0.91\,0.93\,0.94\,0.96\,0.97\,0.98\,0.99\,1.01\,1.02\,1.03\,1.04$ 0.600 $0.97\,1.04\,1.07\,1.09\,1.10\,1.11\,1.12\,1.12\,1.13\,1.13\,1.13\,1.13\,1.14\,1.14\,1.14$ 0.667 0.750 1.51 1.50 1.49 1.47 1.46 1.45 1.44 1.43 1.41 1.40 1.39 1.37 1.36 1.33 0.800 1.77 1.72 1.68 1.65 1.63 1.61 1.59 1.57 1.55 1.53 1.50 1.48 1.46 1.42 $0.72\,0.82\,0.87\,0.90\,0.93\,0.94\,0.95\,0.97\,0.98\,0.99\,1.00\,1.02\,1.02\,1.04$ 18 0.500 0.600 0.667 $1.17\,1.21\,1.23\,1.24\,1.24\,1.24\,1.24\,1.24\,1.23\,1.23\,1.23\,1.23\,1.22\,1.22\,1.21$ 0.750 1.50 1.49 1.48 1.46 1.45 1.44 1.43 1.42 1.40 1.39 1.38 1.36 1.34 1.32 0.800 1.76 1.71 1.67 1.64 1.62 1.60 1.58 1.55 1.53 1.51 1.49 1.46 1.44 1.40 19 0.500 $0.72\,0.82\,0.87\,0.90\,0.92\,0.94\,0.95\,0.97\,0.98\,0.99\,1.00\,1.01\,1.02\,1.04$ 0.600 0.667 0.750 1.49 1.49 1.47 1.46 1.44 1.43 1.42 1.41 1.40 1.38 1.37 1.35 1.33 1.30 0.800 1.75 1.70 1.66 1.63 1.61 1.58 1.57 1.54 1.52 1.50 1.48 1.45 1.43 1.39 20 0.500 $0.72\, 0.82\, 0.87\, 0.90\, 0.92\, 0.94\, 0.95\, 0.97\, 0.98\, 0.99\, 1.00\, 1.01\, 1.02\, 1.03\, 0.92\, 0.94\, 0.95\, 0.97\, 0.98\, 0.99\, 0.99\, 0.90$ 0.600 0.667 0.750 1.49 1.48 1.47 1.45 1.44 1.43 1.42 1.40 1.39 1.37 1.36 1.34 1.32 1.29 0.800 1.75 1.70 1.65 1.62 1.60 1.58 1.56 1.53 1.51 1.49 1.47 1.44 1.41 1.37 0.500 $0.72\,0.81\,0.87\,0.90\,0.92\,0.94\,0.95\,0.96\,0.98\,0.99\,1.00\,1.01\,1.02\,1.03$ 21 0.600 0.667 0.750 $1.48\,1.48\,1.46\,1.44\,1.43\,1.42\,1.41\,1.39\,1.38\,1.37\,1.35\,1.33\,1.32\,1.28$ 1.74 1.69 1.65 1.61 1.59 1.57 1.55 1.52 1.50 1.48 1.46 1.43 1.40 1.36 0.800

 $n \backslash m$ 7 8 10 12 15 20 3 6 30 50 22 0.500 $0.72\,0.81\,0.87\,0.90\,0.92\,0.93\,0.95\,0.96\,0.97\,0.99\,1.00\,1.01\,1.02\,1.03$ 0.600 0.667 1.16 1.20 1.21 1.22 1.22 1.22 1.22 1.22 1.21 1.21 1.21 1.20 1.19 1.18 0.750 1.48 1.47 1.45 1.44 1.42 1.41 1.40 1.39 1.37 1.36 1.34 1.32 1.31 1.28 0.800 1.73 1.68 1.64 1.61 1.58 1.56 1.54 1.51 1.49 1.47 1.45 1.42 1.39 1.35 23 0.500 $0.71\,0.81\,0.86\,0.90\,0.92\,0.93\,0.95\,0.96\,0.97\,0.98\,1.00\,1.01\,1.02\,1.03$ 0.600 0.667 0.750 1.47 1.47 1.45 1.43 1.42 1.41 1.40 1.38 1.37 1.35 1.34 1.32 1.30 1.27 0.800 1.73 1.68 1.63 1.60 1.57 1.55 1.53 1.51 1.49 1.46 1.44 1.41 1.38 1.34 24 0.500 $0.71\,0.81\,0.86\,0.90\,0.92\,0.93\,0.94\,0.96\,0.97\,0.98\,0.99\,1.01\,1.01\,1.03$ 0.600 0.667 0.750 $1.47\,1.46\,1.44\,1.43\,1.41\,1.40\,1.39\,1.38\,1.36\,1.35\,1.33\,1.31\,1.29\,1.26$ 0.800 1.72 1.67 1.63 1.59 1.57 1.55 1.53 1.50 1.48 1.46 1.43 1.40 1.38 1.33 25 0.500 $0.71\,0.81\,0.86\,0.89\,0.92\,0.93\,0.94\,0.96\,0.97\,0.98\,0.99\,1.00\,1.01\,1.03$ 0.600 0.667 0.750 $1.47\,1.46\,1.44\,1.42\,1.41\,1.40\,1.39\,1.37\,1.36\,1.34\,1.33\,1.31\,1.29\,1.25$ 0.800 1.72 1.66 1.62 1.59 1.56 1.54 1.52 1.49 1.47 1.45 1.42 1.39 1.37 1.32 26 0.500 $0.71\,0.81\,0.86\,0.89\,0.91\,0.93\,0.94\,0.96\,0.97\,0.98\,0.99\,1.00\,1.01\,1.03$ 0.600 0.667 0.750 $1.46\,1.45\,1.44\,1.42\,1.41\,1.39\,1.38\,1.37\,1.35\,1.34\,1.32\,1.30\,1.28\,1.25$ 0.800 1.71 1.66 1.62 1.58 1.56 1.53 1.52 1.49 1.47 1.44 1.42 1.39 1.36 1.31 27 0.500 0.71 0.81 0.86 0.89 0.91 0.93 0.94 0.96 0.97 0.ga 0.99 1.00 1.01 1.03 0.600 0.667 1.141.191.201.211.211.211.201.201.201.191.191.181.171.160.750 $1.46\,1.45\,1.43\,1.42\,1.40\,1.39\,1.38\,1.36\,1.35\,1.33\,1.32\,1.30\,1.28\,1.24$ 0.800 1.71 1.66 1.61 1.58 1.55 1.53 1.51 1.48 1.46 1.44 1.41 1.3a 1.35 1.30 0.500 $0.71\,0.81\,0.86\,0.89\,0.91\,0.93\,0.94\,0.96\,0.97\,0.98\,0.99\,1.00\,1.01\,1.02$ 28 0.600 0.667 1.141.181.201.201.201.201.201.201.201.201.191.191.181.171.150.750 $1.46\,1.45\,1.43\,1.41\,1.40\,1.39\,1.38\,1.36\,1.34\,1.33\,1.31\,1.29\,1.27\,1.24$ 0.800 1.71 1.65 1.61 1.57 1.55 1.52 1.51 1.48 1.46 1.43 1.41 1.37 1.35 1.30

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               1.14\,1.18\,1.20\,1.20\,1.20\,1.20\,1.20\,1.20\,1.19\,1.19\,1.18\,1.17\,1.17\,1.15
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               1.45 1.45 1.43 1.41 1.40 1.38 1.37 1.35 1.34 1.32 1.31 1.29 1.27 1.23
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      0.500
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               1.70\,1.64\,1.60\,1.57\,1.54\,1.52\,1.50\,1.47\,1.45\,1.42\,1.39\,1.36\,1.34\,1.28
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      0.500
               0.70\,0.80\,0.85\,0.88\,0.90\,0.92\,0.93\,0.94\,0.96\,0.97\,0.98\,0.99\,1.00\,1.01
       0.600
               0.93\,1.00\,1.03\,1.04\,1.05\,1.06\,1.06\,1.07\,1.07\,1.07\,1.07\,1.07\,1.07\,1.06
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               0.750
               1.42\,1.41\,1.38\,1.37\,1.35\,1.33\,1.32\,1.30\,1.29\,1.27\,1.25\,1.22\,1.20\,1.15
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               0.70\,0.80\,0.85\,0.88\,0.90\,0.91\,0.93\,0.94\,0.95\,0.96\,0.97\,0.99\,1.00\,1.01
       0.600
               0.93\,0.99\,1.02\,1.04\,1.05\,1.06\,1.06\,1.06\,1.07\,1.07\,1.07\,1.06\,1.06\,1.05
       0.667
               1.11\,1.15\,1.16\,1.17\,1.17\,1.16\,1.16\,1.16\,1.15\,1.14\,1.13\,1.12\,1.11\,1.08
       0.750
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               1.64 1.58 1.53 1.50 1.47 1.44 1.42 1.39 1.37 1.34 1.31 1.27 1.23 1.16
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      0.500
               0.70\,0.79\,0.84\,0.88\,0.90\,0.91\,0.92\,0.94\,0.95\,0.96\,0.97\,0.98\,0.99\,1.01
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               0.70\,0.79\,0.84\,0.88\,0.90\,0.91\,0.92\,0.94\,0.95\,0.96\,0.97\,0.98\,0.99\,1.01
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      0.500
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               1.40\,1.39\,1.37\,1.35\,1.33\,1.31\,1.30\,1.28\,1.26\,1.24\,1.22\,1.19\,1.16\,1.10
       0.800
               1.63 1.57 1.52 1.48 1.45 1.43 1.41 1.37 1.35 1.32 1.29 1.25 1.21 1.12
      0.500
               0.69\,0.79\,0.84\,0.87\,0.89\,0.91\,0.92\,0.93\,0.95\,0.96\,0.97\,0.98\,0.99\,1.00
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               1.39\,1.37\,1.35\,1.33\,1.31\,1.29\,1.28\,1.25\,1.24\,1.22\,1.19\,1.16\,1.13\,1.00
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4.47 4.24 4.07 3.95 3.85 3.72 3.62 3.52 3.42 3.31 3.22 3.08 0.990 7.56 6.55 5.99 5.64 5.39 5.20 5.06 4.85 4.71 4.56 4.41 4.25 4.11 3.91 0.999 14.9 12.6 11.3 10.5 9.93 9.52 9.20 8.75 8.45 8.13 7.80 7.47 7.19 6.76 11 0.900 $2.86\, 2.66\, 2.54\, 2.45\, 2.39\, 2.34\, 2.30\, 2.25\, 2.21\, 2.17\, 2.12\, 2.08\, 2.04\, 1.97$ 0.950 3.98 3.59 3.36 3.20 3.09 3.01 2.95 2.85 2.79 2.72 2.65 2.57 2.51 2.40 0.975 5.26 4.63 4.28 4.04 3.88 3.76 3.66 3.53 3.43 3.33 3.23 3.12 3.03 2.88 0.990 7.21 6.22 5.67 5.32 5.07 4.89 4.74 4.54 4.40 4.25 4.10 3.94 3.81 3.60 0.999 13.8 11.6 10.3 9.58 9.05 8.66 8.35 7.92 7.63 7.32 7.01 6.68 6.42 6.00 12 0.900 2.81 2.61 2.48 2.39 2.33 2.28 2.24 2.19 2.15 2.10 2.06 2.01 1.97 1.90 3.89 3.49 3.26 3.11 3.00 2.91 2.85 2.75 2.69 2.62 2.54 2.47 2.40 2.30 0.950 0.975 5.104.474.123.893.733.613.513.373.283.183.072.962.872.720.990 $6.93\,5.95\,5.41\,5.06\,4.82\,4.64\,4.50\,4.30\,4.16\,4.01\,3.86\,3.70\,3.57\,3.36$ 0.999 13.0 10.8 9.63 8.89 8.38 8.00 7.71 7.29 7.00 6.71 6.40 6.09 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               4.27\,3.67\,3.33\,3.10\,2.94\,2.82\,2.73\,2.59\,2.49\,2.39\,2.28\,2.16\,2.05\,1.88
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               4.243.653.313.082.922.802.712.572.472.362.252.132.031.85
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               9.027.276.335.735.315.004.764.414.173.923.663.383.142.75
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       0.990
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               3.09\, 2.70\, 2.46\, 2.31\, 2.19\, 2.10\, 2.03\, 1.93\, 1.85\, 1.77\, 1.68\, 1.57\, 1.48\, 1.28
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               3.83\,3.25\,2.92\,2.70\,2.54\,2.42\,2.32\,2.18\,2.08\,1.97\,1.85\,1.71\,1.59\,1.35
       0.990
               4.82\,3.98\,3.51\,3.21\,2.99\,2.82\,2.69\,2.50\,2.37\,2.22\,2.07\,1.89\,1.74\,1.43
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               7.32 5.78 4.95 4.42 4.04 3.77 3.55 3.24 3.02 2.78 2.53 2.26 2.02 1.54
      0.900
               2.30 2.08 1.94 1.85 1.77 1.72 1.67 1.60 1.55 1.49 1.42 1.34 1.26 1.00
       0.950
               3.00 2.60 2.37 2.21 2.10 2.01 1.94 1.83 1.75 1.67 1.57 1.46 1.35 1.00
       0.975
               3.69 3.12 2.79 2.57 2.41 2.29 2.19 2.05 1.94 1.83 1.71 1.57 1.43 1.00
       0.990
               4.61 3.78 3.32 3.02 2.80 2.64 2.51 2.32 2.18 2.04 1.88 1.70 1.52 1.00
       0.999
               6.91 5.42 4.62 4.10 3.74 3.47 3.27 2.96 2.74 2.51 2.27 1.99 1.73 1.00
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5 Kolmogorov-Smirnoff one-sided test

 $q_{1-\alpha}=$ table values, such that $\mathrm{P}(D_n>q_{1-\alpha})=\alpha$

$n \backslash \alpha$	0.20	0.10	0.05	0.01	0.005
1	0.9000	0.9500	0.9750	0.9900	0.9950
2	0.6838	0.7764	0.8419	0.9000	0.9293
3	0.5648	0.6360	0.7076	0.7846	0.8290
4	0.4927	0.5652	0.6239	0.6889	0.7342
5	0.4470	0.5094	0.5633	0.6272	0.6685
6	0.4104	0.4680	0.5193	0.5774	0.6166
7	0.3815	0.4361	0.4834	0.5384	0.5758
8	0.3583	0.4096	0.4543	0.5065	0.5418
9	0.3391	0.3875	0.4300	0.4796	0.5133
10	0.3226	0.3687	0.4092	0.4566	0.4889
11	0.3083	0.3524	0.3912	0.4367	0.4677
12	0.2958	0.3382	0.3754	0.4192	0.4490
13	0.2847	0.3255	0.3614	0.4036	0.4325
14	0.2748	0.3142	0.3489	0.3897	0.4176
15	0.2659	0.3040	0.3376	0.3771	0.4042
16	0.2578	0.2947	0.3273	0.3657	0.3920
17	0.2504	0.2863	0.3180	0.3553	0.3809
18	0.2436	0.2785	0.3094	0.3457	0.3706
19	0.2373	0.2714	0.3014	0.3369	0.3612
20	0.2316	0.2647	0.2941	0.3287	0.3524
21	0.2262	0.2586	0.2872	0.3210	0.3443
22	0.2212	0.2528	0.2809	0.3139	0.3367
23	0.2165	0.2475	0.2749	0.3073	0.3295
24	0.2120	0.2424	0.2693	0.3010	0.3229
25	0.2079	0.2377	0.2640	0.2952	0.3166
26	0.2040	0.2332	0.2591	0.2896	0.3106
27	0.2003	0.2290	0.2544	0.2844	0.3050
28	0.1968	0.2250	0.2499	0.2794	0.2997
29	0.1935	0.2212	0.2457	0.2747	0.2947
30	0.1903	0.2176	0.2417	0.2702	0.2899
31	0.1873	0.2141	0.2379	0.2660	0.2853
32	0.1844	0.2108	0.2342	0.2619	0.2809
33	0.1817	0.2077	0.2308	0.2580	0.2768
34	0.1791	0.2047	0.2274	0.2543	0.2728
35	0.1766	0.2018	0.2242	0.2507	0.2690
36	0.1742	0.1991	0.2212	0.2473	0.2653
37	0.1719	0.1965	0.2183	0.2440	0.2618
38	0.1697	0.1939	0.2154	0.2409	0.2584
39	0.1675	0.1915	0.2127	0.2379	0.2552
40	0.1655	0.1891	0.2101	0.2349	0.2521
> 40	$1.07/\sqrt{n}$	$1.22/\sqrt{n}$	$1.36/\sqrt{n}$	$1.52/\sqrt{n}$	$1.63/\sqrt{n}$

6 Kendall's test statistic (quantiles)

$n \backslash \alpha$	90.0%	95.0%	97.5%	99.0%	99.5%
4	4	4	6	6	6
5	6	6	8	8	10
6	7	9	11	11	13
7	9	1	113	15	17
8	10	14	16	18	20
9	12	16	18	22	24
10	15	19	21	25	27
11	17	21	25	29	31
12	18	24	28	34	36
13	22	26	32	38	42
14	23	31	35	41	45
15	27	33	39	47	51
16	28	36	44	50	56
17	32	40	48	56	62
18	35	43	51	61	67
19	37	47	55	65	73
20	40	50	60	70	78
21	42	54	64	76	84
22	45	59	69	81	89
23	49	63	73	87	97
24	52	66	78	92	102
25	56	70	84	988	108
26	59	75	89	105	115
27	61	79	93	111	123
28	66	84	98	116	128
29	68	88	104	124	136
30	73	93	109	129	143
31	75	97	115	135	149
32	80	102	120	142	158
33	84	106	126	150	164
34	87	111	131	155	173
35	91	115	137	163	179

$n \backslash \alpha$	90.0%	95.0%	97.5%	99.0%	99.5%
36	94	120	144	170	188
37	98	126	150	176	196
38	103	131	155	183	203
39	107	137	161	191	211
40	110	142	168	198	220
41	114	146	174	206	228
42	119	151	181	213	235
43	123	157	187	221	245
44	128	162	194	228	252
45	132	168	200	236	262
46	135	173	207	245	271
47	141	179	213	253	279
48	144	186	220	260	288
49	150	190	228	268	296
50	153	197	233	277	305
51	159	203	241	285	315
52	162	208	248	294	324
53	168	214	256	302	334
54	173	221	263	311	343
55	177	227	269	319	353
56	182	232	276	328	362
57	186	240	284	336	372
58	191	245	291	345	381

7 Mann-Whitney test statistic (quantiles)

$w_p = m(m+n+1) - w_{1-p}$ $n > 20 \lor m > 20 \Longrightarrow w_p \simeq \frac{m(m+n+1)}{2} + z_p \sqrt{\frac{mn(m+n+1)}{12}}$																				
m	p	n=2		4	5	6	7	v 8	9	10	11	12	13	14	15	16	17	18	19	20
2	0.001 0.005 0.010 0.025 0.050 0.100	3 3 3 3 3 3	3 3 3 3 4	3 3 3 3 4	3 3 3 4 5	3 3 3 4 5	3 3 3 4 5	3 3 4 5 6	3 3 4 5 6	3 3 4 5 7	3 3 5 5 7	3 3 5 6 8	3 3 4 5 6 8	3 3 4 5 7 8	3 3 4 5 7 9	3 3 4 5 7 9	3 4 6 7 10	3 3 4 6 8 10	3 4 5 6 8 11	3 4 5 6 8 11
3	0.001 0.005 0.010 0.025 0.050 0.100	6 6 6 6 7	6 6 6 7	6 6 6 6 7 8	6 6 6 7 8 9	6 6 8 9 10	6 6 7 8 9 11	6 7 9 10 12	6 7 8 9 11 12	6 7 8 10 11 13	6 7 8 10 12 14	6 8 9 11 12 15	6 8 9 11 13 16	6 8 9 12 14 17	6 9 10 12 14 17	6 9 10 13 15 18	7 9 11 13 16 19	7 9 11 14 16 20	7 10 11 14 17 21	7 10 12 15 18 22
4	0.001 0.005 0.010 0.025 0.050 0.100	10 10 10 10	10 10 10 11	10 10 10 11 12 14	10 11 12 13	11 12 13 14	11 12 14 15	12 13 15 16	12 14 15 17	11 13 14 16 18 21	11 13 15 17 19 22	11 14 16 18 20 23	12 14 16 19 21 24	12 15 17 20 22 26	12 16 18 21 23 27	13 16 18 22 25 28	13 17 19 22 26 29	14 17 20 23 27 31	14 18 20 24 28 32	14 19 21 25 29 33
5	0.001 0.005 0.010 0.025 0.050 0.100	15 15 15 15 16 17	15 15 16 17	15 16 17	16 17 18 20	17 18 19 21	21 22	18 20 22 24	19 21 23 25	17 20 22 24 27 29	18 21 23 25 28 31	18 22 24 27 29 33	19 23 25 28 31 34	19 23 26 29 32 36	20 24 27 30 34 38	21 25 28 31 35 39	21 26 29 33 36 41	22 27 30 34 38 43	23 28 31 35 39 44	23 29 32 36 41 46
6	0.001 0.005 0.010 0.025 0.050 0.100	22	23 24		25 27	25 27 29	28 30	26 28 30 32	32 34	25 28 30 33 36 39	26 29 31 35 38 41	26 31 33 36 39 43	27 32 34 38 41 45	28 33 35 39 43 47	29 34 37 41 45 49	30 35 38 43 47 51	31 37 40 44 48 53	32 38 41 46 50 56	52	34 40 44 49 54 60
7	0.001 0.005 0.010 0.025 0.050 0.100	28 28 28 29	28 29 30 31	28 29 30 32 33 35	30 32 34 35	32 33 35 37	33 35 37 40	35 36 39 42	36 38 41 44	34 39 40 43 46 50	35 39 41 45 48 52	36 41 43 47 50 55	37 42 45 49 53 57	38 44 46 51 55 60	39 45 48 53 57 62	40 47 50 55 59 65	42 48 52 57 62 67	43 50 53 59 64 70	51 55 61 66	45 53 57 63 68 75

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