

$$\text{Distribución } \chi^2 \quad P[X \leq x] = \int_{-\infty}^x \frac{1}{2^{\theta/2} \Gamma(\theta/2)} \cdot u^{-\frac{1}{2}} e^{-\frac{u}{2}} du$$

|    |        |        |        |          |        |        |        |        |        |        |        |        |        |        |        |
|----|--------|--------|--------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1  | 0.005  | 0.01   | 0.025  | 0.05     | 0.075  | 0.1    | 0.125  | 0.15   | 0.175  | 0.2    | 0.25   | 0.3    | 0.35   | 0.4    | 0.45   |
| 2  | 0.000  | 0.000  | 0.001  | 0.004    | 0.009  | 0.016  | 0.025  | 0.036  | 0.049  | 0.064  | 0.082  | 0.103  | 0.125  | 0.150  | 0.175  |
| 3  | 0.010  | 0.020  | 0.051  | 0.103    | 0.156  | 0.211  | 0.267  | 0.325  | 0.385  | 0.446  | 0.507  | 0.571  | 0.636  | 0.702  | 0.769  |
| 4  | 0.072  | 0.115  | 0.166  | 0.216    | 0.262  | 0.304  | 0.343  | 0.381  | 0.417  | 0.451  | 0.483  | 0.514  | 0.544  | 0.573  | 0.601  |
| 5  | 0.207  | 0.297  | 0.384  | 0.464    | 0.537  | 0.604  | 0.664  | 0.719  | 0.770  | 0.818  | 0.863  | 0.905  | 0.945  | 0.983  | 1.019  |
| 6  | 0.412  | 0.554  | 0.691  | 0.814    | 0.921  | 1.011  | 1.086  | 1.156  | 1.221  | 1.281  | 1.337  | 1.390  | 1.440  | 1.488  | 1.534  |
| 7  | 0.676  | 0.872  | 1.037  | 1.171    | 1.281  | 1.367  | 1.440  | 1.500  | 1.557  | 1.611  | 1.662  | 1.711  | 1.758  | 1.803  | 1.846  |
| 8  | 0.989  | 1.239  | 1.436  | 1.591    | 1.711  | 1.803  | 1.877  | 1.943  | 2.001  | 2.051  | 2.100  | 2.148  | 2.194  | 2.238  | 2.281  |
| 9  | 1.335  | 1.634  | 1.831  | 1.986    | 2.106  | 2.198  | 2.272  | 2.338  | 2.396  | 2.447  | 2.495  | 2.541  | 2.585  | 2.628  | 2.670  |
| 10 | 1.735  | 2.088  | 2.270  | 2.325    | 2.375  | 2.418  | 2.455  | 2.487  | 2.515  | 2.540  | 2.563  | 2.584  | 2.603  | 2.621  | 2.638  |
| 11 | 2.156  | 2.558  | 2.646  | 2.691    | 2.728  | 2.757  | 2.781  | 2.801  | 2.818  | 2.832  | 2.845  | 2.857  | 2.868  | 2.878  | 2.887  |
| 12 | 2.603  | 3.053  | 3.041  | 3.076    | 3.104  | 3.124  | 3.140  | 3.153  | 3.164  | 3.174  | 3.183  | 3.191  | 3.198  | 3.205  | 3.211  |
| 13 | 3.074  | 3.571  | 3.509  | 3.534    | 3.551  | 3.561  | 3.569  | 3.575  | 3.580  | 3.584  | 3.587  | 3.590  | 3.592  | 3.594  | 3.596  |
| 14 | 3.565  | 4.107  | 4.004  | 4.019    | 4.027  | 4.030  | 4.032  | 4.034  | 4.035  | 4.036  | 4.037  | 4.038  | 4.038  | 4.039  | 4.039  |
| 15 | 4.075  | 4.660  | 4.529  | 4.534    | 4.536  | 4.537  | 4.538  | 4.538  | 4.538  | 4.538  | 4.538  | 4.538  | 4.538  | 4.538  | 4.538  |
| 16 | 4.601  | 5.229  | 5.068  | 5.061    | 5.061  | 5.061  | 5.061  | 5.061  | 5.061  | 5.061  | 5.061  | 5.061  | 5.061  | 5.061  | 5.061  |
| 17 | 5.142  | 5.812  | 5.626  | 5.615    | 5.613  | 5.612  | 5.611  | 5.610  | 5.609  | 5.608  | 5.607  | 5.606  | 5.605  | 5.604  | 5.603  |
| 18 | 5.697  | 6.408  | 6.204  | 6.188    | 6.181  | 6.179  | 6.177  | 6.175  | 6.173  | 6.171  | 6.170  | 6.168  | 6.166  | 6.164  | 6.162  |
| 19 | 6.265  | 7.015  | 6.794  | 6.773    | 6.761  | 6.756  | 6.751  | 6.746  | 6.741  | 6.736  | 6.731  | 6.726  | 6.721  | 6.716  | 6.711  |
| 20 | 6.844  | 7.633  | 7.404  | 7.378    | 7.359  | 7.344  | 7.336  | 7.328  | 7.320  | 7.312  | 7.304  | 7.296  | 7.288  | 7.280  | 7.272  |
| 21 | 7.434  | 8.260  | 7.928  | 7.897    | 7.871  | 7.851  | 7.836  | 7.824  | 7.813  | 7.802  | 7.791  | 7.780  | 7.769  | 7.758  | 7.747  |
| 22 | 8.034  | 8.897  | 8.564  | 8.528    | 8.497  | 8.471  | 8.449  | 8.431  | 8.414  | 8.397  | 8.380  | 8.363  | 8.346  | 8.329  | 8.312  |
| 23 | 8.643  | 9.542  | 9.209  | 9.168    | 9.127  | 9.091  | 9.058  | 9.029  | 9.000  | 8.971  | 8.942  | 8.913  | 8.884  | 8.855  | 8.826  |
| 24 | 9.260  | 10.196 | 9.864  | 9.818    | 9.772  | 9.730  | 9.691  | 9.653  | 9.616  | 9.578  | 9.540  | 9.502  | 9.464  | 9.426  | 9.388  |
| 25 | 9.886  | 10.856 | 10.520 | 10.469   | 10.418 | 10.371 | 10.326 | 10.283 | 10.241 | 10.199 | 10.157 | 10.115 | 10.073 | 10.031 | 9.989  |
| 26 | 10.520 | 11.524 | 11.188 | 11.132   | 11.076 | 11.023 | 10.971 | 10.920 | 10.870 | 10.820 | 10.770 | 10.720 | 10.670 | 10.620 | 10.570 |
| 27 | 11.160 | 12.198 | 11.864 | 11.803   | 11.742 | 11.683 | 11.626 | 11.570 | 11.515 | 11.460 | 11.405 | 11.350 | 11.295 | 11.240 | 11.185 |
| 28 | 11.808 | 12.879 | 12.546 | 12.480   | 12.414 | 12.351 | 12.290 | 12.230 | 12.171 | 12.113 | 12.055 | 11.997 | 11.940 | 11.882 | 11.825 |
| 29 | 12.461 | 13.565 | 13.234 | 13.163   | 13.092 | 13.023 | 12.956 | 12.890 | 12.825 | 12.760 | 12.695 | 12.630 | 12.565 | 12.500 | 12.435 |
| 30 | 13.121 | 14.256 | 13.927 | 13.851   | 13.775 | 13.701 | 13.628 | 13.556 | 13.484 | 13.413 | 13.342 | 13.271 | 13.200 | 13.129 | 13.058 |
| 31 | 13.787 | 14.953 | 14.628 | 14.548   | 14.468 | 14.389 | 14.312 | 14.236 | 14.160 | 14.085 | 14.010 | 13.935 | 13.860 | 13.785 | 13.710 |
| 32 | 14.458 | 15.655 | 15.334 | 15.250   | 15.166 | 15.083 | 15.002 | 14.921 | 14.841 | 14.761 | 14.681 | 14.601 | 14.521 | 14.441 | 14.361 |
| 33 | 15.101 | 16.362 | 16.044 | 15.956   | 15.868 | 15.782 | 15.698 | 15.615 | 15.533 | 15.451 | 15.369 | 15.287 | 15.205 | 15.123 | 15.041 |
| 34 | 15.719 | 17.074 | 16.760 | 16.668   | 16.576 | 16.486 | 16.397 | 16.309 | 16.222 | 16.135 | 16.048 | 15.961 | 15.874 | 15.787 | 15.700 |
| 35 | 16.312 | 17.789 | 17.480 | 17.384   | 17.287 | 17.192 | 17.099 | 17.007 | 16.916 | 16.825 | 16.734 | 16.643 | 16.552 | 16.461 | 16.370 |
| 36 | 16.886 | 18.509 | 18.205 | 18.105   | 18.003 | 17.903 | 17.804 | 17.706 | 17.608 | 17.511 | 17.414 | 17.317 | 17.220 | 17.123 | 17.026 |
| 37 | 17.445 | 19.234 | 18.936 | 18.832   | 18.727 | 18.624 | 18.522 | 18.421 | 18.321 | 18.221 | 18.121 | 18.021 | 17.921 | 17.821 | 17.721 |
| 38 | 17.996 | 19.964 | 19.672 | 19.565   | 19.457 | 19.351 | 19.246 | 19.142 | 19.039 | 18.936 | 18.833 | 18.730 | 18.627 | 18.524 | 18.421 |
| 39 | 18.541 | 20.698 | 20.413 | 20.303   | 20.192 | 20.083 | 19.976 | 19.870 | 19.765 | 19.661 | 19.557 | 19.453 | 19.349 | 19.245 | 19.141 |
| 40 | 19.081 | 21.436 | 21.158 | 21.044   | 20.929 | 20.816 | 20.705 | 20.595 | 20.486 | 20.377 | 20.268 | 20.159 | 20.050 | 19.941 | 19.832 |
| 41 | 19.616 | 22.178 | 21.907 | 21.790   | 21.672 | 21.556 | 21.442 | 21.329 | 21.217 | 21.106 | 20.995 | 20.884 | 20.773 | 20.662 | 20.551 |
| 42 | 20.147 | 22.924 | 22.660 | 22.540   | 22.419 | 22.299 | 22.181 | 22.064 | 21.948 | 21.833 | 21.718 | 21.603 | 21.488 | 21.373 | 21.258 |
| 43 | 20.674 | 23.674 | 23.418 | 23.295   | 23.172 | 23.051 | 22.932 | 22.814 | 22.697 | 22.581 | 22.465 | 22.349 | 22.233 | 22.117 | 22.001 |
| 44 | 21.197 | 24.428 | 24.180 | 24.054   | 23.927 | 23.802 | 23.678 | 23.555 | 23.433 | 23.311 | 23.189 | 23.067 | 22.945 | 22.823 | 22.701 |
| 45 | 21.717 | 25.186 | 24.946 | 24.818   | 24.689 | 24.562 | 24.436 | 24.311 | 24.186 | 24.061 | 23.936 | 23.811 | 23.686 | 23.561 | 23.436 |
| 46 | 22.234 | 25.948 | 25.716 | 25.585   | 25.453 | 25.322 | 25.192 | 25.063 | 24.934 | 24.805 | 24.676 | 24.547 | 24.418 | 24.289 | 24.160 |
| 47 | 22.748 | 26.714 | 26.490 | 26.357   | 26.223 | 26.090 | 25.958 | 25.826 | 25.694 | 25.562 | 25.430 | 25.298 | 25.166 | 25.034 | 24.902 |
| 48 | 23.259 | 27.484 | 27.269 | 27.134   | 26.998 | 26.863 | 26.728 | 26.593 | 26.458 | 26.323 | 26.188 | 26.053 | 25.918 | 25.783 | 25.648 |
| 49 | 23.767 | 28.258 | 28.052 | 27.915   | 27.777 | 27.640 | 27.503 | 27.366 | 27.229 | 27.092 | 26.955 | 26.818 | 26.681 | 26.544 | 26.407 |
| 50 | 24.272 | 29.036 | 28.839 | 28.700   | 28.560 | 28.420 | 28.280 | 28.140 | 28.000 | 27.860 | 27.720 | 27.580 | 27.440 | 27.300 | 27.160 |
| 51 | 24.775 | 29.818 | 29.631 | 29.490   | 29.348 | 29.206 | 29.064 | 28.922 | 28.780 | 28.638 | 28.496 | 28.354 | 28.212 | 28.070 | 27.928 |
| 52 | 25.276 | 30.604 | 30.426 | 30.283   | 30.139 | 29.994 | 29.849 | 29.704 | 29.559 | 29.414 | 29.269 | 29.124 | 28.979 | 28.834 | 28.689 |
| 53 | 25.775 | 31.394 | 31.225 | 31.080   | 30.934 | 30.787 | 30.640 | 30.493 | 30.346 | 30.199 | 30.052 | 29.905 | 29.758 | 29.611 | 29.464 |
| 54 | 26.272 | 32.188 | 32.029 | 31.882   | 31.734 | 31.585 | 31.436 | 31.287 | 31.138 | 30.989 | 30.840 | 30.691 | 30.542 | 30.393 | 30.244 |
| 55 | 26.767 | 32.986 | 32.837 | 32.688   | 32.538 | 32.387 | 32.236 | 32.085 | 31.934 | 31.783 | 31.632 | 31.481 | 31.330 | 31.179 | 31.028 |
| 56 | 27.260 | 33.788 | 33.640 | 33.489   | 33.337 | 33.184 | 33.031 | 32.878 | 32.725 | 32.572 | 32.419 | 32.266 | 32.113 | 31.960 | 31.807 |
| 57 | 27.751 | 34.594 | 34.456 | 34.303   | 34.149 | 33.994 | 33.839 | 33.684 | 33.529 | 33.374 | 33.219 | 33.064 | 32.909 | 32.754 | 32.600 |
| 58 | 28.240 | 35.404 | 35.276 | 35.121   | 34.965 | 34.808 | 34.651 | 34.494 | 34.337 | 34.180 | 34.023 | 33.866 | 33.709 | 33.552 | 33.395 |
| 59 | 28.728 | 36.218 | 36.099 | 35.942   | 35.784 | 35.625 | 35.466 | 35.307 | 35.148 | 34.989 | 34.830 | 34.671 | 34.512 | 34.353 | 34.194 |
| 60 | 29.215 | 37.036 | 36.927 | 36.768   | 36.608 | 36.447 | 36.286 | 36.125 | 35.964 | 35.803 | 35.642 | 35.481 | 35.320 | 35.159 | 35.000 |
| 61 | 29.701 | 37.858 | 37.759 | 37.598   | 37.437 | 37.275 | 37.113 | 36.951 | 36.788 | 36.626 | 36.463 | 36.301 | 36.138 | 35.975 | 35.812 |
| 62 | 30.186 | 38.684 | 38.595 | 38.433   | 38.270 | 38.106 | 37.942 | 37.778 | 37.614 | 37.450 | 37.286 | 37.122 | 36.957 | 36.793 | 36.628 |
| 63 | 30.670 | 39.514 | 39.435 | 39.271   | 39.107 | 38.942 | 38.777 | 38.612 | 38.447 | 38.282 | 38.117 | 37.952 | 37.787 | 37.622 | 37.457 |
| 64 | 31.153 | 40.348 | 40.279 | 40.114   | 39.948 | 39.781 | 39.614 | 39.447 | 39.280 | 39.113 | 38.946 | 38.779 | 38.612 | 38.445 | 38.278 |
| 65 | 31.635 | 41.186 | 41.127 | 40.960   | 40.792 | 40.624 | 40.456 | 40.288 | 40.120 | 39.952 | 39.784 | 39.616 | 39.448 | 39.280 | 39.112 |
| 66 | 32.116 | 42.028 | 41.979 | 41.810   | 41.641 | 41.471 | 41.301 | 41.131 | 40.961 | 40.791 | 40.621 | 40.451 | 40.281 | 40.111 | 39.941 |
| 67 | 32.596 | 42.874 | 42.835 | 42.664   | 42.493 | 42.321 | 42.149 | 41.977 | 41.805 | 41.633 | 41.461 | 41.289 | 41.117 | 40.945 | 40.773 |
| 68 | 33.075 | 43.724 | 43.695 | 43.522   | 43.349 | 43.175 | 43.001 | 42.827 | 42.652 | 42.477 | 42.302 | 42.127 | 41.952 | 41.777 | 41.602 |
| 69 | 33.553 | 44.578 | 44.559 | 44.384   | 44.209 | 44.033 | 43.857 | 43.680 | 43.503 | 43.326 | 43.149 | 42.972 | 42.795 | 42.618 | 42.441 |
| 70 | 34.031 | 45.436 | 45.427 | 45.250   | 45.073 | 44.895 | 44.717 | 44.538 | 44.359 | 44.180 | 44.001 | 43.822 | 43.643 | 43.464 | 43.285 |
| 71 | 34.508 | 46.298 | 46.299 | 46.119   | 45.940 | 45.759 | 45.577 | 45.394 | 45.211 | 45.028 | 44.845 | 44.662 | 44.479 | 44.296 | 44.113 |
| 72 | 34.984 | 47.164 | 47.175 | 46.992</ |        |        |        |        |        |        |        |        |        |        |        |

$$\text{Distribución } \chi^2 \quad P[X \leq x] = \int_{-\infty}^x \frac{1}{2^{p/2} \Gamma(p/2)} \cdot u^{-p/2} \cdot e^{-u/2} du$$

|     | 0.5     | 0.55    | 0.6     | 0.65    | 0.7     | 0.75    | 0.8     | 0.85    | 0.875   | 0.9     | 0.925   | 0.95    | 0.975   | 0.99    | 0.995   |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1   | 0.455   | 0.571   | 0.708   | 0.873   | 1.074   | 1.323   | 1.642   | 2.072   | 2.354   | 2.706   | 3.170   | 3.841   | 5.024   | 6.635   | 7.879   |
| 2   | 1.386   | 1.597   | 1.833   | 2.100   | 2.408   | 2.774   | 3.219   | 3.794   | 4.159   | 4.605   | 5.181   | 5.991   | 7.378   | 9.215   | 10.597  |
| 3   | 2.366   | 2.643   | 2.946   | 3.283   | 3.665   | 4.108   | 4.642   | 5.317   | 5.739   | 6.251   | 6.905   | 7.815   | 9.348   | 11.345  | 12.838  |
| 4   | 3.357   | 3.687   | 4.045   | 4.438   | 4.878   | 5.385   | 5.989   | 6.745   | 7.214   | 7.779   | 8.496   | 9.488   | 11.143  | 13.277  | 14.860  |
| 5   | 4.351   | 4.728   | 5.132   | 5.573   | 6.064   | 6.626   | 7.289   | 8.115   | 8.625   | 9.236   | 10.008  | 11.070  | 12.833  | 15.086  | 16.750  |
| 6   | 5.348   | 5.765   | 6.211   | 6.695   | 7.231   | 7.841   | 8.558   | 9.446   | 9.992   | 10.645  | 11.449  | 12.502  | 14.449  | 16.812  | 18.548  |
| 7   | 6.346   | 6.800   | 7.283   | 7.806   | 8.383   | 9.037   | 9.803   | 10.748  | 11.326  | 12.017  | 12.883  | 14.067  | 16.013  | 18.475  | 20.278  |
| 8   | 7.344   | 7.833   | 8.351   | 8.909   | 9.524   | 10.219  | 11.030  | 12.027  | 12.636  | 13.362  | 14.270  | 15.507  | 17.535  | 20.079  | 21.955  |
| 9   | 8.342   | 8.863   | 9.414   | 10.006  | 10.656  | 11.389  | 12.184  | 13.288  | 13.926  | 14.684  | 15.631  | 16.919  | 19.023  | 21.666  | 23.589  |
| 10  | 9.342   | 9.892   | 10.473  | 11.097  | 11.781  | 12.549  | 13.442  | 14.534  | 15.198  | 15.987  | 16.971  | 18.307  | 20.483  | 23.209  | 25.188  |
| 11  | 10.341  | 10.920  | 11.530  | 12.184  | 12.899  | 13.701  | 14.631  | 15.767  | 16.457  | 17.275  | 18.294  | 19.675  | 21.920  | 24.725  | 26.750  |
| 12  | 11.340  | 11.946  | 12.584  | 13.266  | 14.011  | 14.845  | 15.812  | 16.989  | 17.703  | 18.549  | 19.602  | 21.026  | 23.337  | 26.217  | 28.300  |
| 13  | 12.340  | 12.972  | 13.636  | 14.345  | 15.119  | 15.984  | 16.985  | 18.202  | 18.939  | 19.812  | 20.897  | 22.362  | 24.736  | 27.688  | 29.819  |
| 14  | 13.339  | 13.996  | 14.685  | 15.421  | 16.222  | 17.117  | 18.151  | 19.406  | 20.166  | 21.064  | 22.180  | 23.685  | 26.119  | 29.141  | 31.319  |
| 15  | 14.339  | 15.020  | 15.733  | 16.494  | 17.322  | 18.245  | 19.311  | 20.603  | 21.384  | 22.307  | 23.452  | 24.996  | 27.488  | 30.578  | 32.801  |
| 16  | 15.338  | 16.042  | 16.780  | 17.565  | 18.418  | 19.369  | 20.465  | 21.793  | 22.595  | 23.542  | 24.716  | 26.296  | 28.845  | 32.000  | 34.267  |
| 17  | 16.338  | 17.065  | 17.824  | 18.633  | 19.511  | 20.489  | 21.615  | 23.027  | 23.799  | 24.769  | 25.970  | 27.587  | 30.191  | 33.409  | 35.718  |
| 18  | 17.338  | 18.086  | 18.868  | 19.699  | 20.601  | 21.605  | 22.760  | 24.155  | 24.997  | 25.989  | 27.218  | 28.669  | 31.526  | 34.805  | 37.156  |
| 19  | 18.337  | 19.107  | 19.910  | 20.764  | 21.689  | 22.718  | 23.920  | 25.329  | 26.197  | 27.204  | 28.458  | 30.144  | 32.852  | 36.191  | 38.582  |
| 20  | 19.337  | 20.127  | 20.951  | 21.826  | 22.775  | 23.828  | 25.038  | 26.498  | 27.376  | 28.412  | 29.692  | 31.410  | 34.170  | 37.566  | 39.997  |
| 21  | 20.337  | 21.147  | 21.991  | 22.888  | 23.858  | 24.935  | 26.301  | 27.662  | 28.559  | 29.615  | 30.920  | 32.671  | 35.479  | 38.932  | 41.401  |
| 22  | 21.337  | 22.166  | 23.031  | 23.947  | 24.939  | 26.039  | 27.301  | 28.822  | 29.737  | 30.813  | 32.142  | 33.924  | 36.781  | 39.871  | 42.796  |
| 23  | 22.337  | 23.185  | 24.069  | 25.006  | 26.018  | 26.718  | 28.429  | 29.979  | 30.911  | 32.007  | 33.360  | 35.172  | 38.076  | 41.638  | 44.181  |
| 24  | 23.337  | 24.204  | 25.106  | 26.063  | 27.096  | 28.241  | 29.553  | 31.132  | 32.081  | 33.196  | 34.572  | 36.415  | 39.364  | 42.980  | 45.559  |
| 25  | 24.336  | 25.222  | 26.143  | 27.118  | 28.172  | 29.399  | 30.779  | 32.322  | 33.247  | 34.382  | 35.780  | 37.652  | 40.646  | 44.314  | 46.928  |
| 26  | 25.336  | 26.240  | 27.179  | 28.173  | 29.246  | 30.435  | 31.795  | 32.829  | 34.410  | 35.563  | 36.984  | 38.885  | 41.923  | 45.642  | 48.290  |
| 27  | 26.336  | 27.257  | 28.214  | 29.227  | 30.319  | 31.528  | 32.912  | 34.574  | 35.574  | 36.741  | 38.184  | 40.113  | 43.195  | 46.963  | 49.645  |
| 28  | 27.336  | 28.274  | 29.249  | 30.279  | 31.391  | 32.620  | 34.027  | 35.715  | 36.727  | 37.916  | 39.380  | 41.337  | 44.461  | 48.278  | 50.993  |
| 29  | 28.336  | 29.291  | 30.283  | 31.331  | 32.461  | 33.711  | 35.159  | 36.854  | 37.808  | 39.087  | 40.573  | 42.557  | 45.722  | 49.588  | 52.336  |
| 30  | 29.336  | 30.307  | 31.316  | 32.382  | 33.530  | 34.800  | 36.530  | 37.990  | 38.033  | 40.256  | 41.762  | 43.773  | 46.979  | 50.892  | 53.672  |
| 31  | 30.336  | 31.323  | 32.349  | 33.431  | 34.598  | 35.887  | 37.359  | 39.124  | 40.181  | 41.222  | 42.948  | 44.985  | 48.232  | 52.191  | 55.003  |
| 32  | 31.336  | 32.339  | 33.381  | 34.480  | 35.665  | 36.973  | 38.466  | 40.256  | 41.328  | 42.585  | 44.131  | 46.194  | 49.480  | 53.486  | 56.328  |
| 33  | 32.336  | 33.355  | 34.413  | 35.529  | 36.731  | 38.058  | 39.572  | 41.386  | 42.472  | 43.745  | 45.311  | 47.400  | 50.725  | 54.776  | 57.648  |
| 34  | 33.336  | 34.371  | 35.444  | 36.576  | 37.795  | 39.141  | 40.676  | 42.514  | 44.903  | 46.059  | 47.663  | 48.688  | 51.966  | 56.061  | 58.964  |
| 35  | 34.336  | 35.386  | 36.475  | 37.623  | 38.859  | 40.223  | 41.778  | 43.640  | 44.753  | 46.059  | 47.835  | 49.802  | 53.203  | 57.342  | 60.275  |
| 36  | 35.336  | 36.401  | 37.505  | 38.669  | 39.922  | 41.304  | 42.879  | 44.764  | 45.891  | 47.212  | 48.835  | 50.998  | 54.437  | 58.619  | 61.581  |
| 37  | 36.336  | 37.416  | 38.535  | 39.715  | 40.984  | 42.383  | 43.978  | 45.886  | 47.027  | 48.363  | 50.005  | 52.192  | 55.668  | 59.893  | 62.883  |
| 38  | 37.335  | 38.430  | 39.564  | 40.760  | 42.045  | 43.462  | 45.076  | 47.007  | 48.161  | 49.513  | 51.173  | 53.384  | 56.896  | 61.162  | 64.181  |
| 39  | 38.335  | 39.445  | 40.593  | 41.804  | 43.105  | 44.539  | 46.173  | 48.126  | 49.293  | 50.660  | 52.338  | 54.572  | 58.120  | 62.428  | 65.476  |
| 40  | 39.335  | 40.459  | 41.622  | 42.848  | 44.165  | 45.616  | 47.269  | 49.244  | 50.424  | 51.805  | 53.501  | 55.758  | 59.342  | 63.691  | 66.766  |
| 41  | 40.335  | 41.473  | 43.651  | 43.891  | 45.224  | 46.692  | 48.363  | 50.360  | 51.552  | 52.949  | 54.662  | 56.942  | 60.561  | 64.950  | 68.053  |
| 42  | 41.335  | 42.487  | 44.679  | 44.934  | 46.282  | 47.766  | 49.456  | 51.475  | 52.680  | 54.090  | 55.821  | 58.124  | 61.777  | 66.206  | 69.336  |
| 43  | 42.335  | 43.501  | 45.734  | 45.976  | 47.339  | 48.840  | 50.548  | 52.588  | 53.805  | 55.230  | 56.978  | 59.304  | 62.990  | 67.459  | 70.616  |
| 44  | 43.335  | 44.514  | 46.784  | 47.017  | 48.396  | 49.913  | 51.639  | 53.700  | 54.930  | 56.369  | 58.134  | 60.481  | 64.201  | 68.710  | 71.893  |
| 45  | 44.335  | 45.527  | 47.877  | 48.058  | 49.452  | 50.985  | 52.739  | 54.810  | 56.052  | 57.505  | 59.287  | 61.656  | 65.410  | 69.957  | 73.166  |
| 46  | 45.335  | 46.541  | 48.947  | 49.099  | 50.507  | 52.056  | 53.818  | 55.920  | 57.174  | 58.641  | 60.439  | 62.830  | 66.617  | 71.201  | 74.437  |
| 47  | 46.335  | 47.554  | 49.814  | 50.139  | 51.562  | 53.127  | 54.906  | 57.028  | 58.294  | 59.774  | 61.589  | 64.001  | 67.821  | 72.443  | 75.704  |
| 48  | 47.335  | 48.567  | 49.840  | 51.179  | 52.616  | 54.196  | 55.993  | 58.135  | 60.530  | 60.907  | 62.738  | 65.171  | 69.023  | 73.683  | 76.969  |
| 49  | 48.335  | 49.580  | 50.866  | 52.219  | 53.670  | 55.265  | 57.079  | 59.241  | 60.530  | 62.038  | 63.885  | 66.339  | 70.222  | 74.919  | 78.231  |
| 50  | 49.335  | 50.592  | 51.892  | 53.258  | 54.723  | 56.334  | 58.164  | 60.346  | 61.647  | 63.167  | 65.030  | 67.505  | 71.420  | 76.154  | 79.490  |
| 60  | 59.335  | 60.713  | 62.135  | 63.628  | 65.227  | 66.981  | 68.972  | 71.341  | 73.751  | 74.397  | 76.411  | 79.082  | 83.298  | 88.379  | 91.952  |
| 70  | 69.334  | 70.824  | 72.358  | 73.968  | 75.689  | 77.577  | 79.715  | 82.255  | 83.765  | 85.527  | 87.680  | 90.531  | 95.023  | 100.425 | 104.215 |
| 80  | 79.334  | 80.927  | 82.566  | 84.284  | 86.120  | 88.130  | 90.405  | 93.004  | 94.709  | 96.578  | 98.861  | 101.879 | 106.629 | 112.329 | 116.321 |
| 90  | 89.334  | 91.023  | 92.761  | 94.581  | 96.524  | 98.650  | 101.045 | 103.906 | 105.595 | 107.565 | 109.969 | 113.145 | 118.336 | 124.116 | 128.299 |
| 100 | 99.334  | 101.115 | 102.946 | 104.862 | 106.906 | 109.141 | 111.667 | 114.659 | 116.433 | 118.438 | 121.017 | 124.342 | 129.561 | 135.807 | 140.169 |
| 110 | 109.334 | 111.202 | 113.121 | 115.128 | 117.269 | 119.608 | 122.220 | 125.376 | 127.229 | 129.385 | 132.013 | 135.480 | 140.917 | 147.414 | 151.948 |
| 120 | 119.334 | 121.285 | 123.289 | 125.383 | 127.616 | 130.055 | 132.806 | 136.062 | 137.990 | 140.233 | 142.965 | 146.567 | 152.211 | 158.950 | 163.648 |
| 130 | 129.334 | 131.365 | 133.450 | 135.628 | 137.949 | 140.482 | 143.340 | 146.719 | 148.710 | 151.045 | 153.877 | 157.610 | 163.453 | 170.423 | 175.278 |
| 140 | 139.334 | 141.441 | 143.604 | 145.863 | 148.269 | 150.894 | 153.854 | 157.352 | 159.421 | 161.827 | 164.755 | 168.613 | 174.648 | 181.840 | 186.847 |
| 150 | 149.334 | 151.515 | 153.753 | 156.090 | 158.577 | 161.291 | 164.340 | 167.962 | 170.098 | 172.581 | 175.602 | 179.581 | 185.800 | 193.208 | 198.360 |
| 160 | 159.334 | 161.587 | 163.898 | 166.309 | 168.876 | 171.675 | 174.828 | 178.552 | 180.753 | 183.311 | 186.422 | 190.516 | 196.915 | 204.530 | 209.824 |
| 170 | 169.334 | 171.656 | 174.037 | 176.522 | 179.165 | 182.047 | 185.293 | 188.912 | 191.388 | 194.017 | 197.215 | 201.423 | 207.995 | 215.812 | 221.242 |
| 180 | 179.334 | 181.789 | 184.173 | 186.728 | 189.446 | 192.409 | 195.743 | 199.679 | 202.004 | 204.704 | 207.986 | 212.304 | 219.044 | 227.056 | 232.620 |
| 190 | 189.334 | 191.789 | 194.305 | 196.929 | 199.719 | 202.760 | 206.182 | 210.218 | 212.603 | 215.371 | 218.736 | 223.160 | 230.064 | 238.266 | 243.959 |
| 200 | 199.334 | 201.853 | 204.434 | 207.124 | 209.985 | 213.102 | 216.609 | 220.744 | 223.186 | 226.021 | 229.466 | 233.994 | 241.058 | 249.445 | 255.264 |