Standard Normal Probabilities (Z > 0)

|     |        |        |        |        | ()      |         |         |         |         |        |
|-----|--------|--------|--------|--------|---------|---------|---------|---------|---------|--------|
| Z   | 0.00   | 0.01   | 0.02   | 0.03   | 0.04    | 0.05    | 0.06    | 0.07    | 0.08    | 0.09   |
|     |        |        |        |        |         |         |         |         |         |        |
| 0.0 | 0.5000 | 0.5040 | 0.5080 | 0.5120 | 0.5160  | 0.5199  | 0.5239  | 0.5279  | 0.5319  | 0.5359 |
| 0.1 | 0.5398 | 0.5438 | 0.5478 | 0.5517 | 0.5557  | 0.5596  | 0.5636  | 0.5675  | 0.5714  | 0.5753 |
| 0.2 | 0.5793 | 0.5832 | 0.5871 | 0.5910 | 0.5948  | 0.5987  | 0.6026  | 0.6064  | 0.6103  | 0.6141 |
| 0.3 | 0.6179 | 0.6217 | 0.6255 | 0.6293 | 0.6331  | 0.6368  | 0.6406  | 0.6443  | 0.6480  | 0.6517 |
| 0.4 | 0.6554 | 0.6591 | 0.6628 | 0.6664 | 0.6700  | 0.6736  | 0.6772  | 0.6808  | 0.6844  | 0.6879 |
| 0.5 | 0.6915 | 0.6950 | 0.6985 | 0.7019 | 0.7054  | 0.7088  | 0.7123  | 0.7157  | 0.7190  | 0.7224 |
| 0.5 | 0.0313 | 0.0330 | 0.0303 | 0.7013 | 0.7054  | 0.7000  | 0.7 123 | 0.7 137 | 0.7 130 | 0.1224 |
| 0.6 | 0.7257 | 0.7291 | 0.7224 | 0.7357 | 0.7200  | 0.7422  | 0.7454  | 0.7486  | 0.7517  | 0.7540 |
| 0.6 |        |        | 0.7324 |        | 0.7389  |         | 0.7454  |         | 0.7517  | 0.7549 |
| 0.7 | 0.7580 | 0.7611 | 0.7642 | 0.7673 | 0.7704  | 0.7734  | 0.7764  | 0.7794  | 0.7823  | 0.7852 |
| 0.8 | 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 |
| 1.0 | 0.8413 | 0.8438 | 0.8461 | 0.8485 | 0.8508  | 0.8531  | 0.8554  | 0.8577  | 0.8599  | 0.8621 |
|     |        |        |        |        |         |         |         |         |         |        |
| 1.1 | 0.8643 | 0.8665 | 0.8686 | 0.8708 | 0.8729  | 0.8749  | 0.8770  | 0.8790  | 0.8810  | 0.8830 |
| 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 |
| 1.4 | 0.9192 | 0.9207 | 0.9222 | 0.9236 | 0.9251  | 0.9265  | 0.9279  | 0.9292  | 0.9306  | 0.9319 |
| 1.5 | 0.9332 | 0.9345 | 0.9357 | 0.9370 | 0.9382  | 0.9394  | 0.9406  | 0.9418  | 0.9429  | 0.9441 |
|     |        |        |        |        |         |         |         |         |         |        |
| 1.6 | 0.9452 | 0.9463 | 0.9474 | 0.9484 | 0.9495  | 0.9505  | 0.9515  | 0.9525  | 0.9535  | 0.9545 |
| 1.7 | 0.9554 | 0.9564 | 0.9573 | 0.9582 | 0.9591  | 0.9599  | 0.9608  | 0.9616  | 0.9625  | 0.9633 |
| 1.8 | 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 |
| 2.0 | 0.5772 | 0.5770 | 0.5705 | 0.5700 | 0.07 00 | 0.07.00 | 0.0000  | 0.0000  | 0.0012  | 0.5017 |
| 2.1 | 0.9821 | 0.9826 | 0.9830 | 0.9834 | 0.9838  | 0.9842  | 0.9846  | 0.9850  | 0.9854  | 0.9857 |
|     |        |        |        |        |         |         |         |         |         |        |
| 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 |
| 2.4 | 0.9918 | 0.9920 | 0.9922 | 0.9925 | 0.9927  | 0.9929  | 0.9931  | 0.9932  | 0.9934  | 0.9936 |
| 2.5 | 0.9938 | 0.9940 | 0.9941 | 0.9943 | 0.9945  | 0.9946  | 0.9948  | 0.9949  | 0.9951  | 0.9952 |
|     |        |        |        |        |         |         |         |         |         |        |
| 2.6 | 0.9953 | 0.9955 | 0.9956 | 0.9957 | 0.9959  | 0.9960  | 0.9961  | 0.9962  | 0.9963  | 0.9964 |
| 2.7 | 0.9965 | 0.9966 | 0.9967 | 0.9968 | 0.9969  | 0.9970  | 0.9971  | 0.9972  | 0.9973  | 0.9974 |
| 2.8 | 0.9974 | 0.9975 | 0.9976 | 0.9977 | 0.9977  | 0.9978  | 0.9979  | 0.9979  | 0.9980  | 0.9981 |
| 2.9 | 0.9981 | 0.9982 | 0.9982 | 0.9983 | 0.9984  | 0.9984  | 0.9985  | 0.9985  | 0.9986  | 0.9986 |
| 3.0 | 0.9987 | 0.9987 | 0.9987 | 0.9988 | 0.9988  | 0.9989  | 0.9989  | 0.9989  | 0.9990  | 0.9990 |
|     |        |        |        |        |         |         |         |         |         |        |
| 3.1 | 0.9990 | 0.9991 | 0.9991 | 0.9991 | 0.9992  | 0.9992  | 0.9992  | 0.9992  | 0.9993  | 0.9993 |
| 3.2 | 0.9993 | 0.9993 | 0.9994 | 0.9994 | 0.9994  | 0.9994  | 0.9994  | 0.9995  | 0.9995  | 0.9995 |
| 3.3 | 0.9995 | 0.9995 | 0.9995 | 0.9996 | 0.9996  | 0.9996  | 0.9996  | 0.9996  | 0.9996  | 0.9997 |
| 3.4 | 0.9997 | 0.9997 | 0.9997 | 0.9997 | 0.9997  | 0.9997  | 0.9997  | 0.9997  | 0.9997  | 0.9998 |
| 0.7 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001  | 0.0001  | 0.0001  | 0.0001  | 0.0001  | 0.0000 |
|     |        |        |        |        |         |         |         |         |         |        |

**Standard Normal Cumulative Probabilities (Z < 0)** 

| Standard Normal Cumulative Probabilities (2 < 0) |        |        |        |        |        |        |        |        |        |        |   |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---|
| Z  | 0.00   | 0.01   | 0.02   | 0.03   | 0.04   | 0.05   | 0.06   | 0.07   | 0.08   | 0.09   |   |
| -3.4   | 0.0003 | 0.0003 | 0.0003 | 0.0003 | 0.0003 | 0.0003 | 0.0003 | 0.0003 | 0.0003 | 0.0002 |   |
| -3.3   | 0.0005 | 0.0005 | 0.0005 | 0.0004 | 0.0004 | 0.0004 | 0.0004 | 0.0004 | 0.0004 | 0.0003 |   |
| -3.2   | 0.0007 | 0.0007 | 0.0006 | 0.0006 | 0.0006 | 0.0006 | 0.0006 | 0.0005 | 0.0005 | 0.0005 |   |
| -3.1   | 0.0010 | 0.0009 | 0.0009 | 0.0009 | 0.0008 | 0.0008 | 0.0008 | 0.0008 | 0.0007 | 0.0007 |   |
|  |        |        |        |        |        |        |        |        |        |        |   |
| -3.0   | 0.0013 | 0.0013 | 0.0013 | 0.0012 | 0.0012 | 0.0011 | 0.0011 | 0.0011 | 0.0010 | 0.0010 |   |
| -2.9   | 0.0019 | 0.0018 | 0.0018 | 0.0017 | 0.0016 | 0.0016 | 0.0015 | 0.0015 | 0.0014 | 0.0014 |   |
| -2.8   | 0.0026 | 0.0025 | 0.0024 | 0.0023 | 0.0023 | 0.0022 | 0.0021 | 0.0021 | 0.0020 | 0.0019 |   |
| -2.7   | 0.0035 | 0.0034 | 0.0033 | 0.0032 | 0.0031 | 0.0030 | 0.0029 | 0.0028 | 0.0027 | 0.0026 |   |
| -2.6   | 0.0047 | 0.0045 | 0.0044 | 0.0043 | 0.0041 | 0.0040 | 0.0039 | 0.0038 | 0.0037 | 0.0036 |   |
| -2.5   | 0.0062 | 0.0060 | 0.0059 | 0.0057 | 0.0055 | 0.0054 | 0.0052 | 0.0051 | 0.0049 | 0.0048 |   |
|  |        |        |        |        |        |        |        |        |        |        |   |
| -2.4   | 0.0082 | 0.0080 | 0.0078 | 0.0075 | 0.0073 | 0.0071 | 0.0069 | 0.0068 | 0.0066 | 0.0064 |   |
| -2.3   | 0.0107 | 0.0104 | 0.0102 | 0.0099 | 0.0096 | 0.0094 | 0.0091 | 0.0089 | 0.0087 | 0.0084 |   |
| -2.2   | 0.0139 | 0.0136 | 0.0132 | 0.0129 | 0.0125 | 0.0122 | 0.0119 | 0.0116 | 0.0113 | 0.0110 |   |
| -2.1   | 0.0179 | 0.0174 | 0.0170 | 0.0166 | 0.0162 | 0.0158 | 0.0154 | 0.0150 | 0.0146 | 0.0143 |   |
| -2.0   | 0.0228 | 0.0222 | 0.0217 | 0.0212 | 0.0207 | 0.0202 | 0.0197 | 0.0192 | 0.0188 | 0.0183 |   |
| _  |        |        |        |        |        |        |        |        |        |        |   |
| -1.9   | 0.0287 | 0.0281 | 0.0274 | 0.0268 | 0.0262 | 0.0256 | 0.0250 | 0.0244 | 0.0239 | 0.0233 |   |
| -1.8   | 0.0359 | 0.0351 | 0.0344 | 0.0336 | 0.0329 | 0.0322 | 0.0314 | 0.0307 | 0.0301 | 0.0294 |   |
| -1.7   | 0.0446 | 0.0436 | 0.0427 | 0.0418 | 0.0409 | 0.0401 | 0.0392 | 0.0384 | 0.0375 | 0.0367 |   |
| -1.6   | 0.0548 | 0.0537 | 0.0526 | 0.0516 | 0.0505 | 0.0495 | 0.0485 | 0.0475 | 0.0465 | 0.0455 |   |
| -1.5   | 0.0668 | 0.0655 | 0.0643 | 0.0630 | 0.0618 | 0.0606 | 0.0594 | 0.0582 | 0.0571 | 0.0559 | _ |
| _  |        |        |        |        |        |        |        |        |        |        |   |
| -1.4   | 0.0808 | 0.0793 | 0.0778 | 0.0764 | 0.0749 | 0.0735 | 0.0721 | 0.0708 | 0.0694 | 0.0681 |   |
| -1.3   | 0.0968 | 0.0951 | 0.0934 | 0.0918 | 0.0901 | 0.0885 | 0.0869 | 0.0853 | 0.0838 | 0.0823 | _ |
| -1.2   | 0.1151 | 0.1131 | 0.1112 | 0.1093 | 0.1075 | 0.1056 | 0.1038 | 0.1020 | 0.1003 | 0.0985 | _ |
| -1.1   | 0.1357 | 0.1335 | 0.1314 | 0.1292 | 0.1271 | 0.1251 | 0.1230 | 0.1210 | 0.1190 | 0.1170 | _ |
| -1.0   | 0.1587 | 0.1562 | 0.1539 | 0.1515 | 0.1492 | 0.1469 | 0.1446 | 0.1423 | 0.1401 | 0.1379 | _ |
|  |        |        |        |        |        |        |        |        |        |        |   |
| -0.9   | 0.1841 | 0.1814 | 0.1788 | 0.1762 | 0.1736 | 0.1711 | 0.1685 | 0.1660 | 0.1635 | 0.1611 | _ |
| -0.8   | 0.2119 | 0.2090 | 0.2061 | 0.2033 | 0.2005 | 0.1977 | 0.1949 | 0.1922 | 0.1894 | 0.1867 | _ |
| -0.7   | 0.2420 | 0.2389 | 0.2358 | 0.2327 | 0.2296 | 0.2266 | 0.2236 | 0.2206 | 0.2177 | 0.2148 |   |
| -0.6   | 0.2743 |        |        | 0.2643 | 0.2611 |        | 0.2546 |        |        | 0.2451 | _ |
| -0.5   | 0.3085 | 0.3050 | 0.3015 | 0.2981 | 0.2946 | 0.2912 | 0.2877 | 0.2843 | 0.2810 | 0.2776 |   |
|  |        |        |        |        |        |        |        |        |        |        |   |
| -0.4   | 0.3446 | 0.3409 | 0.3372 | 0.3336 | 0.3300 | 0.3264 | 0.3228 | 0.3192 | 0.3156 | 0.3121 |   |
| -0.3   | 0.3821 | 0.3783 | 0.3745 | 0.3707 | 0.3669 | 0.3632 | 0.3594 | 0.3557 | 0.3520 | 0.3483 |   |
| -0.2   | 0.4207 | 0.4168 | 0.4129 | 0.4090 | 0.4052 | 0.4013 | 0.3974 | 0.3936 | 0.3897 | 0.3859 |   |
| -0.1   | 0.4602 | 0.4562 | 0.4522 | 0.4483 | 0.4443 | 0.4404 | 0.4364 | 0.4325 | 0.4286 | 0.4247 |   |
| 0.0  | 0.5000 | 0.4960 | 0.4920 | 0.4880 | 0.4840 | 0.4801 | 0.4761 | 0.4721 | 0.4681 | 0.4641 |   |
|  |        |        |        |        |        |        |        |        |        |        |   |