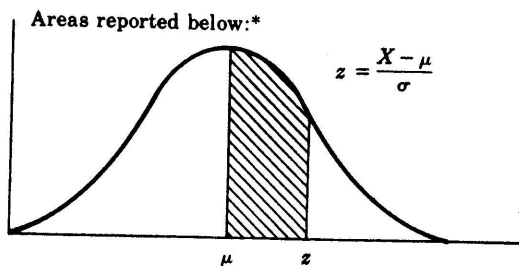


# Appendix 3

**Proportions of Area  
for the  
Standard Normal Distribution**

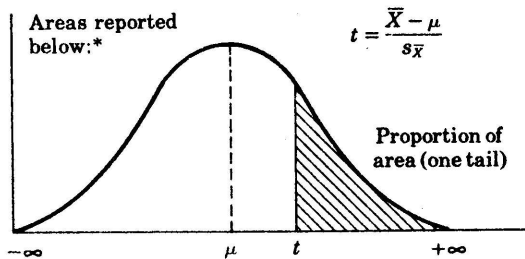


| <i>z</i> | .00   | .01   | .02   | .03   | .04   | .05   | .06   | .07   | .08   | .09   |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.0      | .0000 | .0040 | .0080 | .0120 | .0160 | .0199 | .0239 | .0279 | .0319 | .0359 |
| 0.1      | .0398 | .0438 | .0478 | .0517 | .0557 | .0596 | .0636 | .0675 | .0714 | .0753 |
| 0.2      | .0793 | .0832 | .0871 | .0910 | .0948 | .0987 | .1026 | .1064 | .1103 | .1141 |
| 0.3      | .1179 | .1217 | .1255 | .1293 | .1331 | .1368 | .1406 | .1443 | .1480 | .1517 |
| 0.4      | .1554 | .1591 | .1628 | .1664 | .1700 | .1736 | .1772 | .1808 | .1844 | .1879 |
| 0.5      | .1915 | .1950 | .1985 | .2019 | .2054 | .2088 | .2123 | .2157 | .2190 | .2224 |
| 0.6      | .2257 | .2291 | .2324 | .2357 | .2389 | .2422 | .2454 | .2486 | .2518 | .2549 |
| 0.7      | .2580 | .2612 | .2642 | .2673 | .2704 | .2734 | .2764 | .2794 | .2823 | .2852 |
| 0.8      | .2881 | .2910 | .2939 | .2967 | .2995 | .3023 | .3051 | .3078 | .3106 | .3133 |
| 0.9      | .3159 | .3186 | .3212 | .3238 | .3264 | .3289 | .3315 | .3340 | .3365 | .3389 |
| 1.0      | .3413 | .3438 | .3461 | .3485 | .3508 | .3531 | .3554 | .3577 | .3599 | .3621 |
| 1.1      | .3643 | .3665 | .3686 | .3708 | .3729 | .3749 | .3770 | .3790 | .3810 | .3830 |
| 1.2      | .3849 | .3869 | .3888 | .3907 | .3925 | .3944 | .3962 | .3980 | .3997 | .4014 |
| 1.3      | .4032 | .4049 | .4066 | .4082 | .4099 | .4115 | .4131 | .4147 | .4162 | .4177 |
| 1.4      | .4192 | .4207 | .4222 | .4236 | .4251 | .4265 | .4279 | .4292 | .4306 | .4319 |
| 1.5      | .4332 | .4345 | .4357 | .4370 | .4382 | .4394 | .4406 | .4418 | .4429 | .4441 |
| 1.6      | .4452 | .4463 | .4474 | .4484 | .4495 | .4505 | .4515 | .4525 | .4535 | .4545 |
| 1.7      | .4554 | .4564 | .4573 | .4582 | .4591 | .4599 | .4608 | .4616 | .4625 | .4633 |
| 1.8      | .4641 | .4649 | .4656 | .4664 | .4671 | .4678 | .4686 | .4693 | .4699 | .4706 |
| 1.9      | .4713 | .4719 | .4726 | .4732 | .4738 | .4744 | .4750 | .4756 | .4761 | .4767 |
| 2.0      | .4772 | .4778 | .4783 | .4788 | .4793 | .4798 | .4803 | .4808 | .4812 | .4817 |
| 2.1      | .4821 | .4826 | .4830 | .4834 | .4838 | .4842 | .4846 | .4850 | .4854 | .4857 |
| 2.2      | .4861 | .4864 | .4868 | .4871 | .4875 | .4878 | .4881 | .4884 | .4887 | .4890 |
| 2.3      | .4893 | .4896 | .4898 | .4901 | .4904 | .4906 | .4909 | .4911 | .4913 | .4916 |
| 2.4      | .4918 | .4920 | .4922 | .4925 | .4927 | .4929 | .4931 | .4932 | .4934 | .4936 |
| 2.5      | .4938 | .4940 | .4941 | .4943 | .4945 | .4946 | .4948 | .4949 | .4951 | .4952 |
| 2.6      | .4953 | .4955 | .4956 | .4957 | .4959 | .4960 | .4961 | .4962 | .4963 | .4964 |
| 2.7      | .4965 | .4966 | .4967 | .4968 | .4969 | .4970 | .4971 | .4972 | .4973 | .4974 |
| 2.8      | .4974 | .4975 | .4976 | .4977 | .4977 | .4978 | .4979 | .4979 | .4980 | .4981 |
| 2.9      | .4981 | .4982 | .4983 | .4983 | .4984 | .4984 | .4985 | .4985 | .4986 | .4986 |
| 3.0      | .4987 |       |       |       |       |       |       |       |       |       |
| 3.5      | .4997 |       |       |       |       |       |       |       |       |       |
| 4.0      | .4999 |       |       |       |       |       |       |       |       |       |

\*Example: For  $z = 1.96$ , shaded area is 0.4750 out of the total area of 1.0000.

# Appendix 5

## Proportions of Area for the *t* Distributions



| df | 0.10  | 0.05  | 0.025  | 0.01   | 0.005  |
|----|-------|-------|--------|--------|--------|
| 1  | 3.078 | 6.314 | 12.706 | 31.821 | 63.657 |
| 2  | 1.886 | 2.920 | 4.303  | 6.965  | 9.925  |
| 3  | 1.638 | 2.353 | 3.182  | 4.541  | 5.841  |
| 4  | 1.533 | 2.132 | 2.776  | 3.747  | 4.604  |
| 5  | 1.476 | 2.015 | 2.571  | 3.365  | 4.032  |
| 6  | 1.440 | 1.943 | 2.447  | 3.143  | 3.707  |
| 7  | 1.415 | 1.895 | 2.365  | 2.998  | 3.499  |
| 8  | 1.397 | 1.860 | 2.306  | 2.896  | 3.355  |
| 9  | 1.383 | 1.833 | 2.262  | 2.821  | 3.250  |
| 10 | 1.372 | 1.812 | 2.228  | 2.764  | 3.169  |
| 11 | 1.363 | 1.796 | 2.201  | 2.718  | 3.106  |
| 12 | 1.356 | 1.782 | 2.179  | 2.681  | 3.055  |
| 13 | 1.350 | 1.771 | 2.160  | 2.650  | 3.012  |
| 14 | 1.345 | 1.761 | 2.145  | 2.624  | 2.977  |
| 15 | 1.341 | 1.753 | 2.131  | 2.602  | 2.947  |
| 16 | 1.337 | 1.746 | 2.120  | 2.583  | 2.921  |
| 17 | 1.333 | 1.740 | 2.110  | 2.567  | 2.898  |

| df  | 0.10  | 0.05  | 0.025 | 0.01  | 0.005 |
|-----|-------|-------|-------|-------|-------|
| 18  | 1.330 | 1.734 | 2.101 | 2.552 | 2.878 |
| 19  | 1.328 | 1.729 | 2.093 | 2.539 | 2.861 |
| 20  | 1.325 | 1.725 | 2.086 | 2.528 | 2.845 |
| 21  | 1.323 | 1.721 | 2.080 | 2.518 | 2.831 |
| 22  | 1.321 | 1.717 | 2.074 | 2.508 | 2.819 |
| 23  | 1.319 | 1.714 | 2.069 | 2.500 | 2.807 |
| 24  | 1.318 | 1.711 | 2.064 | 2.492 | 2.797 |
| 25  | 1.316 | 1.708 | 2.060 | 2.485 | 2.787 |
| 26  | 1.315 | 1.706 | 2.056 | 2.479 | 2.779 |
| 27  | 1.314 | 1.703 | 2.052 | 2.473 | 2.771 |
| 28  | 1.313 | 1.701 | 2.048 | 2.467 | 2.763 |
| 29  | 1.311 | 1.699 | 2.045 | 2.462 | 2.756 |
| 30  | 1.310 | 1.697 | 2.042 | 2.457 | 2.750 |
| 40  | 1.303 | 1.684 | 2.021 | 2.423 | 2.704 |
| 60  | 1.296 | 1.671 | 2.000 | 2.390 | 2.660 |
| 120 | 1.289 | 1.658 | 1.980 | 2.358 | 2.617 |
| ∞   | 1.282 | 1.645 | 1.960 | 2.326 | 2.576 |

\*Example: For the shaded area to represent 0.05 of the total area of 1.0, value of *t* with 10 degrees of freedom is 1.812.

Source: From Table III of Fisher and Yates, *Statistical Tables for Biological, Agricultural and Medical Research*, 6th ed., 1974, published by Longman Group Ltd., London (previously published by Oliver & Boyd, Edinburgh), by permission of the authors and publishers.