



**TABLE A.3**  
**Values of  $t$**

| df  | Probability of a numerically larger value of $t$  |       |       |       |       |        |        |        |         |
|---|--|-------|-------|-------|-------|--------|--------|--------|---------|
|   | .5   | .4    | .3    | .2    | .1    | .05    | .02    | .01    | .001    |
| 1   | 1.000  | 1.376 | 1.963 | 3.078 | 6.314 | 12.706 | 31.821 | 63.657 | 636.619 |
| 2   | 0.816  | 1.061 | 1.386 | 1.886 | 2.920 | 4.303  | 6.965  | 9.925  | 31.598  |
| 3   | 0.765  | 0.978 | 1.250 | 1.638 | 2.353 | 3.182  | 4.541  | 5.841  | 12.941  |
| 4   | 0.741  | 0.941 | 1.190 | 1.533 | 2.132 | 2.776  | 3.747  | 4.604  | 8.610   |
| 5   | 0.727  | 0.920 | 1.156 | 1.476 | 2.015 | 2.571  | 3.365  | 4.032  | 6.859   |
| 6   | 0.718  | 0.906 | 1.134 | 1.440 | 1.943 | 2.447  | 3.143  | 3.707  | 5.959   |
| 7   | 0.711  | 0.896 | 1.119 | 1.415 | 1.895 | 2.365  | 2.998  | 3.499  | 5.405   |
| 8   | 0.706  | 0.889 | 1.108 | 1.397 | 1.860 | 2.306  | 2.896  | 3.355  | 5.041   |
| 9   | 0.703  | 0.883 | 1.100 | 1.383 | 1.833 | 2.262  | 2.821  | 3.250  | 4.781   |
| 10  | 0.700  | 0.879 | 1.093 | 1.372 | 1.812 | 2.228  | 2.764  | 3.169  | 4.587   |
| 11  | 0.697  | 0.876 | 1.088 | 1.363 | 1.796 | 2.201  | 2.718  | 3.106  | 4.437   |
| 12  | 0.695  | 0.873 | 1.083 | 1.356 | 1.782 | 2.179  | 2.681  | 3.055  | 4.318   |
| 13  | 0.694  | 0.870 | 1.079 | 1.350 | 1.771 | 2.160  | 2.650  | 3.012  | 4.221   |
| 14  | 0.692  | 0.868 | 1.076 | 1.345 | 1.761 | 2.145  | 2.624  | 2.977  | 4.140   |
| 15  | 0.691  | 0.866 | 1.074 | 1.341 | 1.753 | 2.131  | 2.602  | 2.947  | 4.073   |
| 16  | 0.690  | 0.865 | 1.071 | 1.337 | 1.746 | 2.120  | 2.583  | 2.921  | 4.015   |
| 17  | 0.689  | 0.863 | 1.069 | 1.333 | 1.740 | 2.110  | 2.567  | 2.898  | 3.965   |
| 18  | 0.688  | 0.862 | 1.067 | 1.330 | 1.734 | 2.101  | 2.552  | 2.878  | 3.922   |
| 19  | 0.688  | 0.861 | 1.066 | 1.328 | 1.729 | 2.093  | 2.539  | 2.861  | 3.883   |
| 20  | 0.687  | 0.860 | 1.064 | 1.325 | 1.725 | 2.086  | 2.528  | 2.845  | 3.850   |
| 21  | 0.686  | 0.859 | 1.063 | 1.323 | 1.721 | 2.080  | 2.518  | 2.831  | 3.819   |
| 22  | 0.686  | 0.858 | 1.061 | 1.321 | 1.717 | 2.074  | 2.508  | 2.819  | 3.792   |
| 23  | 0.685  | 0.858 | 1.060 | 1.319 | 1.714 | 2.069  | 2.500  | 2.807  | 3.767   |
| 24  | 0.685  | 0.857 | 1.059 | 1.318 | 1.711 | 2.064  | 2.492  | 2.797  | 3.745   |
| 25  | 0.684  | 0.856 | 1.058 | 1.316 | 1.708 | 2.060  | 2.485  | 2.787  | 3.725   |
| 26  | 0.684  | 0.856 | 1.058 | 1.315 | 1.706 | 2.056  | 2.479  | 2.779  | 3.707   |
| 27  | 0.684  | 0.855 | 1.057 | 1.314 | 1.703 | 2.052  | 2.473  | 2.771  | 3.690   |
| 28  | 0.683  | 0.855 | 1.056 | 1.313 | 1.701 | 2.048  | 2.467  | 2.763  | 3.674   |
| 29  | 0.683  | 0.854 | 1.055 | 1.311 | 1.699 | 2.045  | 2.462  | 2.756  | 3.659   |
| 30  | 0.683  | 0.854 | 1.055 | 1.310 | 1.697 | 2.042  | 2.457  | 2.750  | 3.646   |
| 40  | 0.681  | 0.851 | 1.050 | 1.303 | 1.684 | 2.021  | 2.423  | 2.704  | 3.551   |
| 60  | 0.679  | 0.848 | 1.046 | 1.296 | 1.671 | 2.000  | 2.390  | 2.660  | 3.460   |
| 120   | 0.677  | 0.845 | 1.041 | 1.289 | 1.658 | 1.980  | 2.358  | 2.617  | 3.373   |
| $\infty$  | 0.674  | 0.842 | 1.036 | 1.282 | 1.645 | 1.960  | 2.326  | 2.576  | 3.291   |
| df  | .25  | .2    | .15   | .1    | .05   | .025   | .01    | .005   | .0005   |
| Probability of a larger positive value of $t$  |  |       |       |       |       |        |        |        |         |

Source: This table is abridged from Table III of Fisher and Yates, *Statistical Tables for Biological, Agricultural, and Medical Research*, published by Oliver and Boyd Ltd., Edinburgh, 1949, by permission of the authors and publishers.