

APPENDIX B

Critical Values of t

df	One-Tailed Tests			Two-Tailed Tests		
	.10	.05	.01	.10	.05	.01
1	3.078	6.314	31.821	6.314	12.706	63.657
2	1.886	2.920	6.965	2.920	4.303	9.925
3	1.638	2.353	4.541	2.353	3.182	5.841
4	1.533	2.132	3.747	2.132	2.776	4.604
5	1.476	2.015	3.365	2.015	2.571	4.032
6	1.440	1.943	3.143	1.943	2.447	3.708
7	1.415	1.895	2.998	1.895	2.365	3.500
8	1.397	1.860	2.897	1.860	2.306	3.356
9	1.383	1.833	2.822	1.833	2.262	3.250
10	1.372	1.813	2.764	1.813	2.228	3.170
11	1.364	1.796	2.718	1.796	2.201	3.106
12	1.356	1.783	2.681	1.783	2.179	3.055
13	1.350	1.771	2.651	1.771	2.161	3.013
14	1.345	1.762	2.625	1.762	2.145	2.977
15	1.341	1.753	2.603	1.753	2.132	2.947
16	1.337	1.746	2.584	1.746	2.120	2.921
17	1.334	1.740	2.567	1.740	2.110	2.898
18	1.331	1.734	2.553	1.734	2.101	2.879
19	1.328	1.729	2.540	1.729	2.093	2.861
20	1.326	1.725	2.528	1.725	2.086	2.846
21	1.323	1.721	2.518	1.721	2.080	2.832
22	1.321	1.717	2.509	1.717	2.074	2.819
23	1.320	1.714	2.500	1.714	2.069	2.808
24	1.318	1.711	2.492	1.711	2.064	2.797
25	1.317	1.708	2.485	1.708	2.060	2.788
26	1.315	1.706	2.479	1.706	2.056	2.779
27	1.314	1.704	2.473	1.704	2.052	2.771
28	1.313	1.701	2.467	1.701	2.049	2.764
29	1.312	1.699	2.462	1.699	2.045	2.757

(Continued)

Appendix B • Critical Values of t 191

30	1.311	1.698	2.458	1.698	2.043	2.750
35	1.306	1.690	2.438	1.690	2.030	2.724
40	1.303	1.684	2.424	1.684	2.021	2.705
45	1.301	1.680	2.412	1.680	2.014	2.690
50	1.299	1.676	2.404	1.676	2.009	2.678
55	1.297	1.673	2.396	1.673	2.004	2.668
60	1.296	1.671	2.390	1.671	2.001	2.661
65	1.295	1.669	2.385	1.669	1.997	2.654
70	1.294	1.667	2.381	1.667	1.995	2.648
75	1.293	1.666	2.377	1.666	1.992	2.643
80	1.292	1.664	2.374	1.664	1.990	2.639
85	1.292	1.663	2.371	1.663	1.989	2.635
90	1.291	1.662	2.369	1.662	1.987	2.632
95	1.291	1.661	2.366	1.661	1.986	2.629
100	1.290	1.660	2.364	1.660	1.984	2.626
∞	1.282	1.645	2.327	1.645	1.960	2.576