



Appendixes

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J. Data Sets and Computer-Based Data Analysis

K. Some of the More Common Formulas Used in the Text

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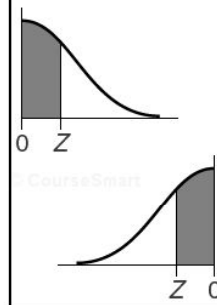
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Appendix A

Table of Areas Under the Normal Curve (Distribution of Z)

Z	Area Between Mean and Z	Z	Area Between Mean and Z	Z	Area Between Mean and Z	Z	Area Between Mean and Z
0.00	0.0000	0.50	0.1915	1.00	0.3413	1.50	0.4332
0.01	0.0040	0.51	0.1950	1.01	0.3438	1.51	0.4345
0.02	0.0080	0.52	0.1985	1.02	0.3461	1.52	0.4357
0.03	0.0120	0.53	0.2019	1.03	0.3485	1.53	0.4370
0.04	0.0160	0.54	0.2054	1.04	0.3508	1.54	0.4382
0.05	0.0199	0.55	0.2088	1.05	0.3531	1.55	0.4394
0.06	0.0239	0.56	0.2123	1.06	0.3554	1.56	0.4406
0.07	0.0279	0.57	0.2157	1.07	0.3577	1.57	0.4418
0.08	0.0319	0.58	0.2190	1.08	0.3599	1.58	0.4429
0.09	0.0359	0.59	0.2224	1.09	0.3621	1.59	0.4441
0.10	0.0398	0.60	0.2257	1.10	0.3643	1.60	0.4452
0.11	0.0438	0.61	0.2291	1.11	0.3665	1.61	0.4463
0.12	0.0478	0.62	0.2324	1.12	0.3686	1.62	0.4474
0.13	0.0517	0.63	0.2357	1.13	0.3708	1.63	0.4484
0.14	0.0557	0.64	0.2389	1.14	0.3729	1.64	0.4495
0.15	0.0596	0.65	0.2422	1.15	0.3749	1.65	0.4505
0.16	0.0636	0.66	0.2454	1.16	0.3770	1.66	0.4515
0.17	0.0675	0.67	0.2486	1.17	0.3790	1.67	0.4525
0.18	0.0714	0.68	0.2517	1.18	0.3810	1.68	0.4535
0.19	0.0753	0.69	0.2549	1.19	0.3830	1.69	0.4545
0.20	0.0793	0.70	0.2580	1.20	0.3849	1.70	0.4554
0.21	0.0832	0.71	0.2611	1.21	0.3869	1.71	0.4564
0.22	0.0871	0.72	0.2642	1.22	0.3888	1.72	0.4573
0.23	0.0910	0.73	0.2673	1.23	0.3907	1.73	0.4582
0.24	0.0948	0.74	0.2704	1.24	0.3925	1.74	0.4591
0.25	0.0987	0.75	0.2734	1.25	0.3944	1.75	0.4599
0.26	0.1026	0.76	0.2764	1.26	0.3962	1.76	0.4608
0.27	0.1064	0.77	0.2794	1.27	0.3980	1.77	0.4616
0.28	0.1103	0.78	0.2823	1.28	0.3997	1.78	0.4625
0.29	0.1141	0.79	0.2852	1.29	0.4015	1.79	0.4633
0.30	0.1179	0.80	0.2881	1.30	0.4032	1.80	0.4641
0.31	0.1217	0.81	0.2910	1.31	0.4049	1.81	0.4649
0.32	0.1255	0.82	0.2939	1.32	0.4066	1.82	0.4656
0.33	0.1293	0.83	0.2967	1.33	0.4082	1.83	0.4664
0.34	0.1331	0.84	0.2995	1.34	0.4099	1.84	0.4671
0.35	0.1368	0.85	0.3023	1.35	0.4115	1.85	0.4678
0.36	0.1406	0.86	0.3051	1.36	0.4131	1.86	0.4686
0.37	0.1443	0.87	0.3078	1.37	0.4147	1.87	0.4693
0.38	0.1480	0.88	0.3106	1.38	0.4162	1.88	0.4699
0.39	0.1517	0.89	0.3133	1.39	0.4177	1.89	0.4706
0.40	0.1554	0.90	0.3159	1.40	0.4192	1.90	0.4713
0.41	0.1591	0.91	0.3186	1.41	0.4207	1.91	0.4719
0.42	0.1628	0.92	0.3212	1.42	0.4222	1.92	0.4726
0.43	0.1664	0.93	0.3238	1.43	0.4236	1.93	0.4732
0.44	0.1700	0.94	0.3264	1.44	0.4251	1.94	0.4738
0.45	0.1736	0.95	0.3289	1.45	0.4265	1.95	0.4744
0.46	0.1772	0.96	0.3315	1.46	0.4279	1.96	0.4750
0.47	0.1808	0.97	0.3340	1.47	0.4292	1.97	0.4756
0.48	0.1844	0.98	0.3365	1.48	0.4306	1.98	0.4761
0.49	0.1879	0.99	0.3389	1.49	0.4319	1.99	0.4767

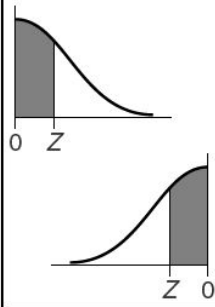
Table shows area between the mean and Z.



(continued)

2.06	0.4803	2.56	0.4948	3.06	0.4989
2.07	0.4808	2.57	0.4949	3.07	0.4989
2.08	0.4812	2.58	0.4951	3.08	0.4990
2.09	0.4817	2.59	0.4952	3.09	0.4990
2.10	0.4821	2.60	0.4953	3.10	0.4990
2.11	0.4826	2.61	0.4955	3.11	0.4991
2.12	0.4830	2.62	0.4956	3.12	0.4991
2.13	0.4834	2.63	0.4957	3.13	0.4991
2.14	0.4838	2.64	0.4959	3.14	0.4992
2.15	0.4842	2.65	0.4960	3.15	0.4992
2.16	0.4846	2.66	0.4961	3.16	0.4992
2.17	0.4850	2.67	0.4962	3.17	0.4992
2.18	0.4854	2.68	0.4963	3.18	0.4993
2.19	0.4857	2.69	0.4964	3.19	0.4993
2.20	0.4861	2.70	0.4965	3.20	0.4993
2.21	0.4864	2.71	0.4966	3.21	0.4993
2.22	0.4868	2.72	0.4967	3.22	0.4994
2.23	0.4871	2.73	0.4968	3.23	0.4994
2.24	0.4875	2.74	0.4969	3.24	0.4994
2.25	0.4878	2.75	0.4970	3.25	0.4994
2.26	0.4881	2.76	0.4971	3.26	0.4994
2.27	0.4884	2.77	0.4972	3.27	0.4995
2.28	0.4887	2.78	0.4973	3.28	0.4995
2.29	0.4890	2.79	0.4974	3.29	0.4995
2.30	0.4893	2.80	0.4974	3.30	0.4995
2.31	0.4896	2.81	0.4975	3.31	0.4995
2.32	0.4898	2.82	0.4976	3.32	0.4995
2.33	0.4901	2.83	0.4977	3.33	0.4996
2.34	0.4904	2.84	0.4977	3.34	0.4996
2.35	0.4906	2.85	0.4978	3.35	0.4996
2.36	0.4909	2.86	0.4979	3.36	0.4996
2.37	0.4911	2.87	0.4979	3.37	0.4996
2.38	0.4913	2.88	0.4980	3.38	0.4996
2.39	0.4916	2.89	0.4981	3.39	0.4997
2.40	0.4918	2.90	0.4981	3.40	0.4997
2.41	0.4920	2.91	0.4982	3.41	0.4997
2.42	0.4922	2.92	0.4982	3.42	0.4997
2.43	0.4925	2.93	0.4983	3.43	0.4997
2.44	0.4927	2.94	0.4984	3.44	0.4997
2.45	0.4929	2.95	0.4984	3.45	0.4997
2.46	0.4931	2.96	0.4985	3.46	0.4997
2.47	0.4932	2.97	0.4985	3.47	0.4997
2.48	0.4934	2.98	0.4986	3.48	0.4997
2.49	0.4936	2.99	0.4986	3.49	0.4998

between the mean
and Z .



Source: Adapted from tables constructed by Victor Bissonnette, Berry College, retrieved from <http://facultyweb.berry.edu/vbissonette/tables/tables.html>. Used with permission.

Appendix B

Family of *t* Distributions (Two-Tailed Test)

Degrees of Freedom (df)	LEVEL OF SIGNIFICANCE					
	.20	.10	.05	.02	.01	.001
5	1.476	2.015	2.571	3.365	4.032	6.869
6	1.440	1.943	2.447	3.143	3.707	5.959
7	1.415	1.895	2.365	2.998	3.499	5.408
8	1.397	1.860	2.306	2.896	3.355	5.041
9	1.383	1.833	2.262	2.821	3.250	4.781
10	1.372	1.812	2.228	2.764	3.169	4.587
11	1.363	1.796	2.201	2.718	3.106	4.437
12	1.356	1.782	2.179	2.681	3.055	4.318
13	1.350	1.771	2.160	2.650	3.012	4.221
14	1.345	1.761	2.145	2.624	2.977	4.140
15	1.341	1.753	2.131	2.602	2.947	4.073
16	1.337	1.746	2.120	2.583	2.921	4.015
17	1.333	1.740	2.110	2.567	2.898	3.965
18	1.330	1.734	2.101	2.552	2.878	3.922
19	1.328	1.729	2.093	2.539	2.861	3.883
20	1.325	1.725	2.086	2.528	2.845	3.850
21	1.323	1.721	2.080	2.518	2.831	3.819
22	1.321	1.717	2.074	2.508	2.819	3.792
23	1.319	1.714	2.069	2.500	2.807	3.768
24	1.318	1.711	2.064	2.492	2.797	3.745
25	1.316	1.708	2.060	2.485	2.787	3.725
26	1.315	1.706	2.056	2.479	2.779	3.707
27	1.314	1.703	2.052	2.473	2.771	3.690
28	1.313	1.701	2.048	2.467	2.763	3.674
29	1.311	1.699	2.045	2.462	2.756	3.659
30	1.310	1.697	2.042	2.457	2.750	3.646
40	1.303	1.684	2.021	2.423	2.704	3.551
50	1.299	1.676	2.009	2.403	2.678	3.496
60	1.296	1.671	2.000	2.390	2.660	3.460
80	1.292	1.664	1.990	2.374	2.639	3.416
100	1.290	1.660	1.984	2.364	2.626	3.390
120	1.289	1.658	1.980	2.358	2.617	3.373
∞	1.282	1.645	1.960	2.327	2.576	3.291

Note: If looking for a certain number of degrees of freedom (*df*) that does not appear in the table (for example, *df* = 75), use the next lower entry (for example, use *df* = 60).

Source: Adapted from tables constructed by Victor Bissonnette, Berry College, retrieved from <http://facultyweb.berry.edu/vbissonette/tables/tables.html>. Used with permission.

Appendix C

Family of *t* Distributions (One-Tailed Test)

Degrees of Freedom (df)	LEVEL OF SIGNIFICANCE					
	.10	.05	.025	.01	.005	.0005
5	1.476	2.015	2.571	3.365	4.032	6.869
6	1.440	1.943	2.447	3.143	3.707	5.959
7	1.415	1.895	2.365	2.998	3.499	5.408
8	1.397	1.860	2.306	2.896	3.355	5.041
9	1.383	1.833	2.262	2.821	3.250	4.781
10	1.372	1.812	2.228	2.764	3.169	4.587
11	1.363	1.796	2.201	2.718	3.106	4.437
12	1.356	1.782	2.179	2.681	3.055	4.318
13	1.350	1.771	2.160	2.650	3.012	4.221
14	1.345	1.761	2.145	2.624	2.977	4.140
15	1.341	1.753	2.131	2.602	2.947	4.073
16	1.337	1.746	2.120	2.583	2.921	4.015
17	1.333	1.740	2.110	2.567	2.898	3.965
18	1.330	1.734	2.101	2.552	2.878	3.922
19	1.328	1.729	2.093	2.539	2.861	3.883
20	1.325	1.725	2.086	2.528	2.845	3.850
21	1.323	1.721	2.080	2.518	2.831	3.819
22	1.321	1.717	2.074	2.508	2.819	3.792
23	1.319	1.714	2.069	2.500	2.807	3.768
24	1.318	1.711	2.064	2.492	2.797	3.745
25	1.316	1.708	2.060	2.485	2.787	3.725
26	1.315	1.706	2.056	2.479	2.779	3.707
27	1.314	1.703	2.052	2.473	2.771	3.690
28	1.313	1.701	2.048	2.467	2.763	3.674
29	1.311	1.699	2.045	2.462	2.756	3.659
30	1.310	1.697	2.042	2.457	2.750	3.646
40	1.303	1.684	2.021	2.423	2.704	3.551
50	1.299	1.676	2.009	2.403	2.678	3.496
60	1.296	1.671	2.000	2.390	2.660	3.460
80	1.292	1.664	1.990	2.374	2.639	3.416
100	1.290	1.660	1.984	2.364	2.626	3.390
120	1.289	1.658	1.980	2.358	2.617	3.373
∞	1.282	1.645	1.960	2.327	2.576	3.291

Source: Adapted from tables constructed by Victor Bissonnette, Berry College, retrieved from <http://facultyweb.berry.edu/vbissonette/tables/tables.html>. Used with permission.

Appendix D

Distribution of F (.05 Level of Significance)

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df_w	df_B									
	1	2	3	4	5	6	7	8	12	
5	6.61	5.79	5.41	5.19	5.05	4.95	4.88	4.82	4.68	
6	5.99	5.14	4.76	4.53	4.39	4.28	4.21	4.15	4.00	
7	5.59	4.74	4.35	4.12	3.97	3.87	3.79	3.73	3.57	
8	5.32	4.46	4.07	3.84	3.69	3.58	3.50	3.44	3.28	
9	5.12	4.26	3.86	3.63	3.48	3.37	3.29	3.23	3.07	
10	4.96	4.10	3.71	3.48	3.33	3.22	3.14	3.07	2.91	
11	4.84	3.98	3.59	3.36	3.20	3.09	3.01	2.95	2.79	
12	4.75	3.89	3.49	3.26	3.11	3.00	2.91	2.85	2.69	
13	4.67	3.81	3.41	3.18	3.03	2.92	2.83	2.77	2.60	
14	4.60	3.74	3.34	3.11	2.96	2.85	2.76	2.70	2.53	
15	4.54	3.68	3.29	3.06	2.90	2.79	2.71	2.64	2.48	
16	4.49	3.63	3.24	3.01	2.85	2.74	2.66	2.59	2.42	
17	4.45	3.59	3.20	2.96	2.81	2.70	2.61	2.55	2.38	
18	4.41	3.55	3.16	2.93	2.77	2.66	2.58	2.51	2.34	
19	4.38	3.52	3.13	2.90	2.74	2.63	2.54	2.48	2.31	
20	4.35	3.49	3.10	2.87	2.71	2.60	2.51	2.45	2.28	
21	4.32	3.47	3.07	2.84	2.68	2.57	2.49	2.42	2.25	
22	4.30	3.44	3.05	2.82	2.66	2.55	2.46	2.40	2.23	
23	4.28	3.42	3.03	2.80	2.64	2.53	2.44	2.37	2.20	
24	4.26	3.40	3.01	2.78	2.62	2.51	2.42	2.36	2.18	
25	4.24	3.39	2.99	2.76	2.60	2.49	2.40	2.34	2.16	
26	4.23	3.37	2.98	2.74	2.59	2.47	2.39	2.32	2.15	
27	4.21	3.35	2.96	2.73	2.57	2.46	2.37	2.31	2.13	
28	4.20	3.34	2.95	2.71	2.56	2.45	2.36	2.29	2.12	
29	4.18	3.33	2.93	2.70	2.55	2.43	2.35	2.28	2.10	
30	4.17	3.32	2.92	2.69	2.53	2.42	2.33	2.27	2.09	
40	4.08	3.23	2.84	2.61	2.45	2.34	2.25	2.18	2.00	
60	4.00	3.15	2.76	2.53	2.37	2.25	2.17	2.10	1.92	
80	3.96	3.11	2.72	2.49	2.33	2.21	2.13	2.06	1.88	
100	3.94	3.09	2.70	2.46	2.31	2.19	2.10	2.03	1.85	
120	3.92	3.07	2.68	2.45	2.29	2.18	2.09	2.02	1.83	
∞	3.84	3.00	2.61	2.37	2.22	2.10	2.01	1.94	1.75	

Source: Adapted from tables constructed by Victor Bissonnette, Berry College, retrieved from <http://facultyweb.berry.edu/vbissonette/tables/tables.html>. Used with permission.

Appendix E

Distribution of F (.01 Level of Significance)

df_w	df_B								
	1	2	3	4	5	6	7	8	12
5	16.26	13.27	12.06	11.39	10.97	10.67	10.46	10.29	9.89
6	13.75	10.92	9.78	9.15	8.75	8.47	8.26	8.10	7.72
7	12.25	9.55	8.45	7.85	7.46	7.19	6.99	6.84	6.47
8	11.26	8.65	7.59	7.01	6.63	6.37	6.18	6.03	5.67
9	10.56	8.02	6.99	6.42	6.06	5.80	5.61	5.47	5.11
10	10.04	7.56	6.55	5.99	5.64	5.39	5.20	5.06	4.71
11	9.65	7.21	6.22	5.67	5.32	5.07	4.89	4.74	4.40
12	9.33	6.93	5.95	5.41	5.06	4.82	4.64	4.50	4.16
13	9.07	6.70	5.74	5.21	4.86	4.62	4.44	4.30	3.96
14	8.86	6.51	5.56	5.04	4.69	4.46	4.28	4.14	3.80
15	8.68	6.36	5.42	4.89	4.56	4.32	4.14	4.00	3.67
16	8.53	6.23	5.29	4.77	4.44	4.20	4.03	3.89	3.55
17	8.40	6.11	5.18	4.67	4.34	4.10	3.93	3.79	3.46
18	8.29	6.01	5.09	4.58	4.25	4.01	3.84	3.71	3.37
19	8.18	5.93	5.01	4.50	4.17	3.94	3.77	3.63	3.30
20	8.10	5.85	4.94	4.43	4.10	3.87	3.70	3.56	3.23
21	8.02	5.78	4.87	4.37	4.04	3.81	3.64	3.51	3.17
22	7.95	5.72	4.82	4.31	3.99	3.76	3.59	3.45	3.12
23	7.88	5.66	4.76	4.26	3.94	3.71	3.54	3.41	3.07
24	7.82	5.61	4.72	4.22	3.90	3.67	3.50	3.36	3.03
25	7.77	5.57	4.68	4.18	3.85	3.63	3.46	3.32	2.99
26	7.72	5.53	4.64	4.14	3.82	3.59	3.42	3.29	2.96
27	7.68	5.49	4.60	4.11	3.78	3.56	3.39	3.26	2.93
28	7.64	5.45	4.57	4.07	3.75	3.53	3.36	3.23	2.90
29	7.60	5.42	4.54	4.04	3.73	3.50	3.33	3.20	2.87
30	7.56	5.39	4.51	4.02	3.70	3.47	3.30	3.17	2.84
40	7.31	5.18	4.31	3.83	3.51	3.29	3.12	2.99	2.66
60	7.08	4.98	4.13	3.65	3.34	3.12	2.95	2.82	2.50
80	6.96	4.88	4.04	3.56	3.26	3.04	2.87	2.74	2.42
100	6.90	4.82	3.98	3.51	3.21	2.99	2.82	2.69	2.37
120	6.85	4.79	3.95	3.48	3.17	2.96	2.79	2.66	2.34
∞	6.64	4.61	3.78	3.32	3.02	2.80	2.64	2.51	2.19

Source: Adapted from tables constructed by Victor Bissonnette, Berry College, retrieved from <http://facultyweb.berry.edu/vbissonnette/tables/tables.html>. Used with permission.

Appendix F

Distribution of Q (.05 Level of Significance)

df_w	k (number of groups)							
	3	4	5	6	7	8	9	10
5	4.60	5.22	5.67	6.03	6.33	6.58	6.80	6.99
6	4.34	4.90	5.30	5.63	5.90	6.12	6.32	6.49
7	4.16	4.68	5.06	5.36	5.61	5.82	6.00	6.16
8	4.04	4.53	4.89	5.17	5.40	5.60	5.77	5.92
9	3.95	4.41	4.76	5.02	5.24	5.43	5.59	5.74
10	3.88	4.33	4.65	4.91	5.12	5.30	5.46	5.60
11	3.82	4.26	4.57	4.82	5.03	5.20	5.35	5.49
12	3.77	4.20	4.51	4.75	4.95	5.12	5.27	5.39
13	3.73	4.15	4.45	4.69	4.88	5.05	5.19	5.32
14	3.70	4.11	4.41	4.64	4.83	4.99	5.13	5.25
15	3.67	4.08	4.37	4.59	4.78	4.94	5.08	5.20
16	3.65	4.05	4.33	4.56	4.74	4.90	5.03	5.15
17	3.63	4.02	4.30	4.52	4.70	4.86	4.99	5.11
18	3.61	4.00	4.28	4.49	4.67	4.82	4.96	5.07
19	3.59	3.98	4.25	4.47	4.65	4.79	4.92	5.04
20	3.58	3.96	4.23	4.45	4.62	4.77	4.90	5.01
24	3.53	3.90	4.17	4.37	4.54	4.68	4.81	4.92
30	3.49	3.85	4.10	4.30	4.46	4.60	4.72	4.82
40	3.44	3.79	4.04	4.23	4.39	4.52	4.63	4.73
60	3.40	3.74	3.98	4.16	4.31	4.44	4.55	4.65
120	3.36	3.68	3.92	4.10	4.24	4.36	4.47	4.56
∞	3.31	3.63	3.86	4.03	4.17	4.29	4.39	4.47

Source: Adapted from Table VIII in Jay Devore and Roxy Peck, *Statistics: The Exploration and Analysis of Data* (4th ed.), Brooks/Cole, 2001.

Appendix G

© Course Distribution of Q (.01 Level of Significance)

df_w	k (number of groups)							
	3	4	5	6	7	8	9	10
5	4.60	5.22	5.67	6.03	6.33	6.58	6.80	6.99
6	6.33	7.03	7.56	7.97	8.32	8.61	8.87	9.10
7	5.92	6.54	7.01	7.37	7.68	7.94	8.17	8.37
8	5.64	6.20	6.62	6.96	7.24	7.47	7.68	7.86
9	5.43	5.96	6.35	6.66	6.91	7.13	7.33	7.49
10	5.27	5.77	6.14	6.43	6.67	6.87	7.05	7.21
11	5.15	5.62	5.97	6.25	6.48	6.67	6.84	6.99
12	5.05	5.50	5.84	6.10	6.32	6.51	6.67	6.81
13	4.96	5.40	5.73	5.98	6.19	6.37	6.53	6.67
14	4.89	5.32	5.63	5.88	6.08	6.26	6.41	6.54
15	4.84	5.25	5.56	5.80	5.99	6.16	6.31	6.44
16	4.79	5.19	5.49	5.72	5.92	6.08	6.22	6.35
17	4.74	5.14	5.43	5.66	5.85	6.01	6.15	6.27
18	4.70	5.09	5.38	5.60	5.79	5.94	6.08	6.20
19	4.67	5.05	5.33	5.55	5.73	5.89	6.02	6.14
20	4.64	5.02	5.29	5.51	5.69	5.84	5.97	6.09
24	4.55	4.91	5.17	5.37	5.54	5.69	5.81	5.92
30	4.45	4.80	5.05	5.24	5.40	5.54	5.65	5.76
40	4.37	4.70	4.93	5.11	5.26	5.39	5.50	5.60
60	4.28	4.59	4.82	4.99	5.13	5.25	5.36	5.45
120	4.20	4.50	4.71	4.87	5.01	5.12	5.21	5.30
∞	4.12	4.40	4.60	4.76	4.88	4.99	5.08	5.16

Source: Adapted from Table VIII in Jay Devore and Roxy Peck, *Statistics: The Exploration and Analysis of Data* (4th ed.), Brooks/Cole, 2001.

Appendix H

Critical Values for Chi-Square (χ^2)

Degrees of Freedom (df)	LEVEL OF SIGNIFICANCE		
	.10	.05	.01
1	2.706	3.841	6.635
2	4.605	5.991	9.210
3	6.251	7.815	11.345
4	7.779	9.488	13.277
5	9.236	11.070	15.086
6	10.645	12.592	16.812
7	12.017	14.067	18.475
8	13.362	15.507	20.090
9	14.684	16.919	21.666
10	15.987	18.307	23.209
11	17.275	19.675	24.725
12	18.549	21.026	26.217
13	19.812	22.362	27.688
14	21.064	23.685	29.141
15	22.307	24.996	30.578
16	23.542	26.296	32.000
17	24.769	27.587	33.409
18	25.989	28.869	34.805
19	27.204	30.144	36.191
20	28.412	31.410	37.566
21	29.615	32.671	38.932
22	30.813	33.924	40.289
23	32.007	35.172	41.638
24	33.196	36.415	42.980
25	34.382	37.652	44.314

Source: Adapted from tables constructed by Victor Bissonette, Berry College, retrieved from <http://facultyweb.berry.edu/vbissonette/tables/tables.html>. Used with permission.

Appendix I

Critical Values of r (Correlation Coefficient)

Degrees of Freedom (df)	LEVEL OF SIGNIFICANCE				
	0.20	0.10	0.05	0.01	0.001
3	0.687	0.805	0.878	0.959	0.991
4	0.608	0.729	0.811	0.917	0.974
5	0.551	0.669	0.754	0.875	0.951
6	0.507	0.621	0.707	0.834	0.925
7	0.472	0.582	0.666	0.798	0.898
8	0.443	0.549	0.632	0.765	0.872
9	0.419	0.521	0.602	0.735	0.847
10	0.398	0.497	0.576	0.708	0.823
11	0.380	0.476	0.553	0.684	0.801
12	0.365	0.458	0.532	0.661	0.780
13	0.351	0.441	0.514	0.641	0.760
14	0.338	0.426	0.497	0.623	0.742
15	0.327	0.412	0.482	0.606	0.725
16	0.317	0.400	0.468	0.590	0.708
17	0.308	0.389	0.456	0.575	0.693
18	0.299	0.378	0.444	0.561	0.679
19	0.291	0.369	0.433	0.549	0.665
20	0.284	0.360	0.423	0.537	0.652
21	0.277	0.352	0.413	0.526	0.640
22	0.271	0.344	0.404	0.515	0.629
23	0.265	0.337	0.396	0.505	0.618
24	0.260	0.330	0.388	0.496	0.607
25	0.255	0.323	0.381	0.487	0.597
26	0.250	0.317	0.374	0.479	0.588
27	0.245	0.311	0.367	0.471	0.579
28	0.241	0.306	0.361	0.463	0.570
29	0.237	0.301	0.355	0.456	0.562
30	0.233	0.296	0.349	0.449	0.554
35	0.216	0.275	0.325	0.418	0.519
40	0.202	0.257	0.304	0.393	0.490
45	0.190	0.243	0.288	0.372	0.465
50	0.181	0.231	0.273	0.354	0.443
60	0.165	0.211	0.250	0.325	0.408
70	0.153	0.195	0.232	0.302	0.380
80	0.143	0.183	0.217	0.283	0.357
90	0.135	0.173	0.205	0.267	0.338

Source: Adapted from tables constructed by Victor Bissonnette, Berry College, retrieved from <http://facultyweb.berry.edu/vbissonette/tables/tables.html>. Used with permission.