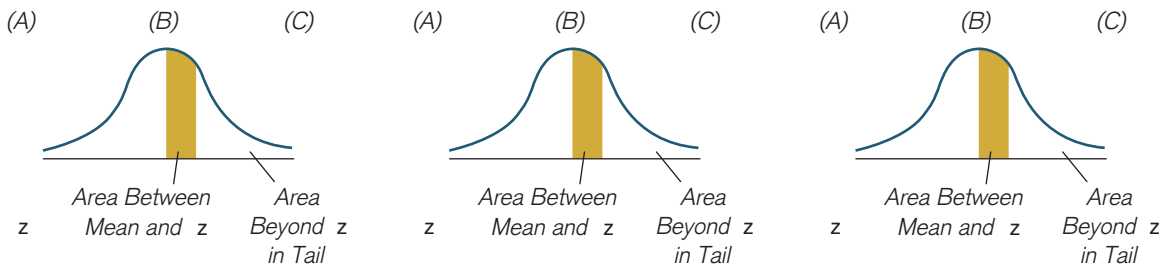


# Appendix C

## Statistical Tables

**TABLE C.1** The Unit Normal Table

Column (A) lists z-score values. Column (B) lists the proportion of the area between the mean and the z-score value. Column (C) lists the proportion of the area beyond the z score in the tail of the distribution. (Note: Because the normal distribution is symmetrical, areas for negative z scores are the same as those for positive z scores.)



(A) z	(B) Area Between Mean and z	(C) Area Beyond z in Tail	(A) z	(B) Area Between Mean and z	(C) Area Beyond z in Tail	(A) z	(B) Area Between Mean and z	(C) Area Beyond z in Tail
0.00	.0000	.5000	0.15	.0596	.4404	0.30	.1179	.3821
0.01	.0040	.4960	0.16	.0636	.4364	0.31	.1217	.3783
0.02	.0080	.4920	0.17	.0675	.4325	0.32	.1255	.3745
0.03	.0120	.4880	0.18	.0714	.4286	0.33	.1293	.3707
0.04	.0160	.4840	0.19	.0753	.4247	0.34	.1331	.3669
0.05	.0199	.4801	0.20	.0793	.4207	0.35	.1368	.3632
0.06	.0239	.4761	0.21	.0832	.4168	0.36	.1406	.3594
0.07	.0279	.4721	0.22	.0871	.4129	0.37	.1443	.3557
0.08	.0319	.4681	0.23	.0910	.4090	0.38	.1480	.3520
0.09	.0359	.4641	0.24	.0948	.4052	0.39	.1517	.3483
0.10	.0398	.4602	0.25	.0987	.4013	0.40	.1554	.3446
0.11	.0438	.4562	0.26	.1026	.3974	0.41	.1591	.3409
0.12	.0478	.4522	0.27	.1064	.3936	0.42	.1628	.3372
0.13	.0517	.4483	0.28	.1103	.3897	0.43	.1664	.3336
0.14	.0557	.4443	0.29	.1141	.3859	0.44	.1700	.3300

(Continued)

**TABLE C.1** (Continued)

(A) z	(B) Area Between Mean and z	(C) Area Beyond z in Tail	(A) z	(B) Area Between Mean and z	(C) Area Beyond z in Tail	(A) z	(B) Area Between Mean and z	(C) Area Beyond z in Tail
0.45	.1736	.3264	0.78	.2823	.2177	1.11	.3665	.1335
0.46	.1772	.3228	0.79	.2852	.2148	1.12	.3686	.1314
0.47	.1808	.3192	0.80	.2881	.2119	1.13	.3708	.1292
0.48	.1844	.3156	0.81	.2910	.2090	1.14	.3729	.1271
0.49	.1879	.3121	0.82	.2939	.2061	1.15	.3749	.1251
0.50	.1915	.3085	0.83	.2967	.2033	1.16	.3770	.1230
0.51	.1950	.3050	0.84	.2995	.2005	1.17	.3790	.1210
0.52	.1985	.3015	0.85	.3023	.1977	1.18	.3810	.1190
0.53	.2019	.2981	0.86	.3051	.1949	1.19	.3830	.1170
0.54	.2054	.2946	0.87	.3078	.1922	1.20	.3849	.1151
0.55	.2088	.2912	0.88	.3106	.1894	1.21	.3869	.1131
0.56	.2123	.2877	0.89	.3133	.1867	1.22	.3888	.1112
0.57	.2157	.2843	0.90	.3159	.1841	1.23	.3907	.1093
0.58	.2190	.2810	0.91	.3186	.1814	1.24	.3925	.1075
0.59	.2224	.2776	0.92	.3212	.1788	1.25	.3944	.1056
0.60	.2257	.2743	0.93	.3238	.1762	1.26	.3962	.1038
0.61	.2391	.2709	0.94	.3264	.1736	1.27	.3980	.1020
0.62	.2324	.2676	0.95	.3289	.1711	1.28	.3997	.1003
0.63	.2357	.2643	0.96	.3315	.1685	1.29	.4015	.0985
0.64	.2389	.2611	0.97	.3340	.1660	1.30	.4032	.0968
0.65	.2422	.2578	0.98	.3365	.1635	1.31	.4049	.0951
0.66	.2454	.2546	0.99	.3389	.1611	1.32	.4066	.0934
0.67	.2486	.2514	1.00	.3413	.1587	1.33	.4082	.0918
0.68	.2517	.2483	1.01	.3438	.1562	1.34	.4099	.0901
0.69	.2549	.2451	1.02	.3461	.1539	1.35	.4115	.0885
0.70	.2580	.2420	1.03	.3485	.1515	1.36	.4131	.0869
0.71	.2611	.2389	1.04	.3508	.1492	1.37	.4147	.0853
0.72	.2642	.2358	1.05	.3531	.1469	1.38	.4162	.0838
0.73	.2673	.2327	1.06	.3554	.1446	1.39	.4177	.0823
0.74	.2704	.2296	1.07	.3577	.1423	1.40	.4192	.0808
0.75	.2734	.2266	1.08	.3599	.1401	1.41	.4207	.0793
0.76	.2764	.2236	1.09	.3621	.1379	1.42	.4222	.0778
0.77	.2794	.2206	1.10	.3643	.1357	1.43	.4236	.0764

(A) z	(B) Area Between Mean and z	(C) Area Beyond z in Tail	(A) z	(B) Area Between Mean and z	(C) Area Beyond z in Tail	(A) z	(B) Area Between Mean and z	(C) Area Beyond z in Tail
1.44	.4251	.0749	1.77	.4616	.0384	2.10	.4821	.0179
1.45	.4265	.0735	1.78	.4625	.0375	2.11	.4826	.0174
1.46	.4279	.0721	1.79	.4633	.0367	2.12	.4830	.0170
1.47	.4292	.0708	1.80	.4641	.0359	2.13	.4834	.0166
1.48	.4306	.0694	1.81	.4649	.0351	2.14	.4838	.0162
1.49	.4319	.0681	1.82	.4656	.0344	2.15	.4842	.0158
1.50	.4332	.0668	1.83	.4664	.0336	2.16	.4846	.0154
1.51	.4345	.0655	1.84	.4671	.0329	2.17	.4850	.0150
1.52	.4357	.0643	1.85	.4678	.0322	2.18	.4854	.0146
1.53	.4370	.0630	1.86	.4686	.0314	2.19	.4857	.0143
1.54	.4382	.0618	1.87	.4693	.0307	2.20	.4861	.0139
1.55	.4394	.0606	1.88	.4699	.0301	2.21	.4864	.0136
1.56	.4406	.0594	1.89	.4706	.0294	2.22	.4868	.0132
1.57	.4418	.0582	1.90	.4713	.0287	2.23	.4871	.0129
1.58	.4429	.0571	1.91	.4719	.0281	2.24	.4875	.0125
1.59	.4441	.0559	1.92	.4726	.0274	2.25	.4878	.0122
1.60	.4452	.0548	1.93	.4732	.0268	2.26	.4881	.0119
1.61	.4463	.0537	1.94	.4738	.0262	2.27	.4884	.0116
1.62	.4474	.0526	1.95	.4744	.0256	2.28	.4887	.0113
1.63	.4484	.0516	1.96	.4750	.0250	2.29	.4890	.0110
1.64	.4495	.0505	1.97	.4756	.0244	2.30	.4893	.0107
1.65	.4505	.0495	1.98	.4761	.0239	2.31	.4896	.0104
1.66	.4515	.0485	1.99	.4767	.0233	2.32	.4898	.0102
1.67	.4525	.0475	2.00	.4772	.0228	2.33	.4901	.0099
1.68	.4535	.0465	2.01	.4778	.0222	2.34	.4904	.0096
1.69	.4545	.0455	2.02	.4783	.0217	2.35	.4906	.0094
1.70	.4554	.0446	2.03	.4788	.0212	2.36	.4909	.0091
1.71	.4564	.0436	2.04	.4793	.0207	2.37	.4911	.0089
1.72	.4573	.0427	2.05	.4798	.0202	2.38	.4913	.0087
1.73	.4582	.0418	2.06	.4803	.0197	2.39	.4916	.0084
1.74	.4591	.0409	2.07	.4808	.0192	2.40	.4918	.0082
1.75	.4599	.0401	2.08	.4812	.0188	2.41	.4920	.0080
1.76	.4608	.0392	2.09	.4817	.0183	2.42	.4922	.0078

(Continued)

**TABLE C.1** (Continued)

(A) z	(B) Area Between Mean and z	(C) Area Beyond z in Tail	(A) z	(B) Area Between Mean and z	(C) Area Beyond z in Tail	(A) z	(B) Area Between Mean and z	(C) Area Beyond z in Tail
2.43	.4925	.0075	2.74	.4969	.0031	3.05	.4989	.0011
2.44	.4927	.0073	2.75	.4970	.0030	3.06	.4989	.0011
2.45	.4929	.0071	2.76	.4971	.0029	3.07	.4989	.0011
2.46	.4931	.0069	2.77	.4972	.0028	3.08	.4990	.0010
2.47	.4932	.0068	2.78	.4973	.0027	3.09	.4990	.0010
2.48	.4934	.0066	2.79	.4974	.0026	3.10	.4990	.0010
2.49	.4936	.0064	2.80	.4974	.0026	3.11	.4991	.0009
2.50	.4938	.0062	2.81	.4975	.0025	3.12	.4991	.0009
2.51	.4940	.0060	2.82	.4976	.0024	3.13	.4991	.0009
2.52	.4941	.0059	2.83	.4977	.0023	3.14	.4992	.0008
2.53	.4943	.0057	2.84	.4977	.0023	3.15	.4992	.0008
2.54	.4945	.0055	2.85	.4978	.0022	3.16	.4992	.0008
2.55	.4946	.0054	2.86	.4979	.0021	3.17	.4992	.0008
2.56	.4948	.0052	2.87	.4979	.0021	3.18	.4993	.0007
2.57	.4949	.0051	2.88	.4980	.0020	3.19	.4993	.0007
2.58	.4951	.0049	2.89	.4981	.0019	3.20	.4993	.0007
2.59	.4952	.0048	2.90	.4981	.0019	3.21	.4993	.0007
2.60	.4953	.0047	2.91	.4982	.0018	3.22	.4994	.0006
2.61	.4955	.0045	2.92	.4982	.0018	3.23	.4994	.0006
2.62	.4956	.0044	2.93	.4983	.0017	3.24	.4994	.0006
2.63	.4957	.0043	2.94	.4984	.0016	3.25	.4994	.0006
2.64	.4959	.0041	2.95	.4984	.0016	3.30	.4995	.0005
2.65	.4960	.0040	2.96	.4985	.0015	3.35	.4996	.0004
2.66	.4961	.0039	2.97	.4985	.0015	3.40	.4997	.0003
2.67	.4962	.0038	2.98	.4986	.0014	3.45	.4997	.0003
2.68	.4963	.0037	2.99	.4986	.0014	3.50	.4998	.0002
2.69	.4964	.0036	3.00	.4987	.0013	3.60	.4998	.0002
2.70	.4965	.0035	3.01	.4987	.0013	3.70	.4999	.0001
2.71	.4966	.0034	3.02	.4987	.0013	3.80	.4999	.0001
2.72	.4967	.0033	3.03	.4988	.0012	3.90	.49995	.00005
2.73	.4968	.0032	3.04	.4988	.0012	4.00	.49997	.00003

Source: Based on Freund, J. E. (2004). *Modern elementary statistics* (11th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.