

APPENDIX 1: STATISTICAL TABLES

Probability Distributions Tables

Table A1.1 Normal Curve Areas

[Insert Graphic]		[FILENAME]								
z	.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	.2517	.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	.3820
1.2	.3849	.3869	.3888	.3907	.3925	.3944	.3962	.3980	.3997	.4015
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 .4982 .4983 .4984 .4984 .4985 .4985 .4986 .4986
 3.0 .4987 .4987 .4987 .4988 .4988 .4989 .4989 .4989 .4990 .4990

Table A1.2 T-Distribution

[Insert Graphic] [FILENAME]

d/f α	.10.10	.05	.025	.01	.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
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

Source: Paul G. Hoel, *Elementary Statistics*, Third Ed. (John Wiley & Sons, New York, 1971).

Table A1.3 Uniform Random Numbers

	1	2	3	4	5	6	7	8	9	10	11
1	10480	15011	01536	02011	81647	91646	69179	14194	62590	36207	20969
2	22368	46573	25595	85393	30995	89198	27982	53402	93965	34095	52666
3	24130	48360	22527	97265	76393	64809	15179	24830	49340	32081	30680
4	42167	93093	06243	61680	07856	16376	39440	53537	71341	57004	00849
5	37570	39975	81837	16656	06121	91782	60468	81305	49684	60672	14110
6	77921	06907	11008	42751	27756	53498	18602	70659	90655	15033	21916
7	99562	72905	56420	69994	98872	31016	71194	18738	44013	44840	63213
8	96301	91977	05463	07972	18876	20922	94595	56869	69014	60045	18425
9	89579	14342	63661	10281	17453	18103	57740	84378	25331	12566	58678
10	85475	36857	53342	53988	53060	59533	38867	62300	08158	17893	16439
11	28918	69578	88231	33276	70997	79936	56865	05859	90106	31595	91547
12	63553	40961	48235	03427	49626	69445	18663	72695	52180	20847	12234
13	09429	93969	52636	92737	88974	33488	36320	17617	30015	07272	84115
14	10365	61129	87529	85689	48237	52267	67689	93394	01511	26358	85104
15	07119	97336	71048	08178	77233	13916	47564	81056	97735	85977	29372
16	51085	12765	51821	51259	77452	16308	60756	92144	49442	53900	70960
17	02368	21382	52404	60268	89368	19885	55322	44819	01188	65255	64835
18	01011	54092	33362	94904	31273	04146	18594	29852	71585	85030	51132
19	52162	53916	46369	58586	23216	14513	83149	98736	23495	64350	94738
20	07056	97628	33787	09998	42698	06691	76988	13602	51851	46104	88916
21	48663	91245	85828	14346	09172	30168	90229	04734	59193	22178	30421
22	54164	58492	22421	74103	47070	25306	76468	26384	58151	06646	21524
23	32639	32363	05597	24200	13363	38005	94342	28728	35806	06912	17012
24	29334	27001	87637	87308	58731	00256	45834	15398	46557	41135	10367
25	02488	33062	28834	07351	19731	92420	60952	61280	50001	67658	32586
26	81525	72295	04839	96423	25878	82651	66566	14778	76797	14780	13300
27	29676	20591	68086	26432	46901	20849	80768	81536	86645	12659	92259
28	00742	57392	39064	66432	84673	40027	32832	61362	98947	96067	64760
29	05366	04213	25669	26422	44407	44048	37937	63904	45766	66134	75470
30	91921	26418	64117	94305	26766	25940	39972	22209	71500	64568	91402
31	00582	04711	87917	77341	42206	35126	74087	99547	81817	42607	43808
32	00725	69884	62797	56170	86324	88072	76222	36086	84637	93161	76038
33	69011	65795	95876	55293	18988	27354	26575	08625	40801	59920	29841
34	25976	57948	29888	88604	67917	48708	18912	82271	65424	69774	33611
35	09763	83473	73577	12908	30883	10317	28290	35797	05998	41688	34952
36	91567	42595	27958	30134	04024	86385	29880	99730	55536	84855	29080
37	17955	56349	90999	49127	20044	59931	06115	20542	18059	02008	73708
38	46503	18584	18845	49618	02304	51038	20655	58727	28168	15475	56942

39 92157 89634 94824 78171 84610 82834 09922 25417 44137 48413 25555
40 14577 62765 35605 81263 39667 47358 56873 56307 61607 49518 89565

Source: Francis F. Martin, *Computer Modeling and Simulation* (John Wiley & Sons, 1968, p. 288). Reprinted by permission.