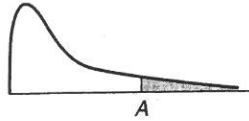


TABLE B-5 F Distribution



For example, the F scale value for $\delta_1 = 3$, $\delta_2 = 10$ corresponding to area .01 in right tail is 6.55.

F value corresponding to area .05 in right tail in lightface type.

F value corresponding to area .01 in right tail in boldface type.

δ_2 , Denominator Degrees of Freedom	δ_1 , Numerator Degrees of Freedom									
	1	2	3	4	5	6	7	8	9	10
1	161 4,052	200 4,999	216 5,403	225 5,625	230 5,764	234 5,859	237 5,928	239 5,981	241 6,022	242 6,056
2	18.51 98.49	19.00 99.00	19.16 99.17	19.25 99.25	19.30 99.30	19.33 99.33	19.36 99.36	19.37 99.37	19.38 99.39	19.39 99.40
3	10.13 34.12	9.55 30.82	9.28 29.46	9.12 28.71	9.01 28.24	8.94 27.91	8.88 27.67	8.84 27.49	8.81 27.34	8.78 27.23
4	7.71 21.20	6.94 18.00	6.59 16.69	6.39 15.98	6.26 15.52	6.16 15.21	6.09 14.98	6.04 14.80	6.00 14.66	5.96 14.54
5	6.61 16.26	5.79 13.27	5.41 12.06	5.19 11.39	5.05 10.97	4.95 10.67	4.88 10.45	4.82 10.29	4.78 10.15	4.74 10.05
6	5.99 13.74	5.14 10.92	4.76 9.78	4.53 9.15	4.39 8.75	4.28 8.47	4.21 8.26	4.15 8.10	4.10 7.98	4.06 7.87
7	5.59 12.25	4.74 9.55	4.35 8.45	4.12 7.85	3.97 7.46	3.87 7.19	3.79 7.00	3.73 6.84	3.68 6.71	3.63 6.62
8	5.32 11.26	4.46 8.65	4.07 7.59	3.84 7.01	3.69 6.63	3.58 6.37	3.50 6.19	3.44 6.03	3.39 5.91	3.34 5.82
9	5.12 10.56	4.26 8.02	3.86 6.99	3.63 6.42	3.48 6.06	3.37 5.80	3.29 5.62	3.23 5.47	3.18 5.35	3.13 5.26
10	4.96 10.04	4.10 7.56	3.71 6.55	3.48 5.99	3.33 5.64	3.22 5.39	3.14 5.21	3.07 5.06	3.02 4.95	2.97 4.85
11	4.84 9.65	3.98 7.20	3.59 6.22	3.36 5.67	3.20 5.32	3.09 5.07	3.01 4.88	2.95 4.74	2.90 4.63	2.86 4.54
12	4.75 9.33	3.88 6.93	3.49 5.95	3.26 5.41	3.11 5.06	3.00 4.82	2.92 4.65	2.85 4.50	2.80 4.39	2.76 4.30
13	4.67 9.07	3.80 6.70	3.41 5.74	3.18 5.20	3.02 4.86	2.92 4.62	2.84 4.44	2.77 4.30	2.72 4.19	2.67 4.10
14	4.60 8.86	3.74 6.51	3.34 5.56	3.11 5.03	2.96 4.69	2.85 4.46	2.77 4.28	2.70 4.14	2.65 4.03	2.60 3.94
15	4.54 8.68	3.68 6.36	3.29 5.42	3.06 4.89	2.90 4.56	2.79 4.32	2.70 4.14	2.64 4.00	2.59 3.89	2.55 3.80
16	4.49 8.53	3.36 6.23	3.24 5.29	3.01 4.77	2.85 4.44	2.74 4.20	2.66 4.03	2.59 3.89	2.54 3.78	2.49 3.69
17	4.45 8.40	3.59 6.11	3.20 5.18	2.96 4.67	2.81 4.34	2.70 4.10	2.62 3.93	2.55 3.79	2.50 3.68	2.45 3.59
18	4.41 8.28	3.55 6.01	3.16 5.09	2.93 4.58	2.77 4.25	2.66 4.01	2.58 3.85	2.51 3.71	2.46 3.60	2.41 3.51

TABLE B-5 (Continued)

δ_2 , Denominator Degrees of Freedom	δ_1 , Numerator Degrees of Freedom									
	1	2	3	4	5	6	7	8	9	10
19	4.38 8.18	3.52 5.93	3.13 5.01	2.90 4.50	2.74 4.17	2.63 3.94	2.55 3.77	2.48 3.63	2.43 3.52	2.38 3.43
20	4.35 8.10	3.49 5.85	3.10 4.94	2.87 4.43	2.71 4.10	2.60 3.87	2.52 3.71	2.45 3.56	2.40 3.45	2.35 3.37
21	4.32 8.02	3.47 5.78	3.07 4.87	2.84 4.37	2.68 4.04	2.57 3.81	2.49 3.65	2.42 3.51	2.37 3.40	2.32 3.31
22	4.30 7.94	3.44 5.72	3.05 4.82	2.82 4.31	2.66 3.99	2.55 3.76	2.47 3.59	2.40 3.45	2.35 3.35	2.30 3.26
23	4.28 7.88	3.42 5.66	3.03 4.76	2.80 4.26	2.64 3.94	2.53 3.71	2.45 3.54	2.38 3.41	2.32 3.30	2.28 3.21
24	4.26 7.82	3.40 5.61	3.01 4.72	2.78 4.22	2.62 3.90	2.51 3.67	2.43 3.50	2.36 3.36	2.30 3.25	2.26 3.17
25	4.24 7.77	3.38 5.57	2.99 4.68	2.76 4.18	2.60 3.86	2.49 3.63	2.41 3.46	2.34 3.32	2.28 3.21	2.24 3.13

Source: Abridged by permission from *Statistical Methods*, 7th ed., by George W. Snedecor and William G. Cochran. Copyright © 1980 by the Iowa State University Press, Ames, Iowa.

TABLE B-6 Durbin-Watson Test Bounds

n	Level of Significance $\alpha = .05$									
	k = 1		k = 2		k = 3		k = 4		k = 5	
	d_L	d_U	d_L	d_U	d_L	d_U	d_L	d_U	d_L	d_U
15	1.08	1.36	0.95	1.54	0.82	1.75	0.69	1.97	0.56	2.21
16	1.10	1.37	0.98	1.54	0.86	1.73	0.74	1.93	0.62	2.15
17	1.13	1.38	1.02	1.54	0.90	1.71	0.78	1.90	0.67	2.10
18	1.16	1.39	1.05	1.53	0.93	1.69	0.82	1.87	0.71	2.06
19	1.18	1.40	1.08	1.53	0.97	1.68	0.86	1.85	0.75	2.02
20	1.20	1.41	1.10	1.54	1.00	1.68	0.90	1.83	0.79	1.99
21	1.22	1.42	1.13	1.54	1.03	1.67	0.93	1.81	0.83	1.96
22	1.24	1.43	1.15	1.54	1.05	1.66	0.96	1.80	0.86	1.94
23	1.26	1.44	1.17	1.54	1.08	1.66	0.99	1.79	0.90	1.92
24	1.27	1.45	1.19	1.55	1.10	1.66	1.01	1.78	0.93	1.90
25	1.29	1.45	1.21	1.55	1.12	1.66	1.04	1.77	0.95	1.89
26	1.30	1.46	1.22	1.55	1.14	1.65	1.06	1.76	0.98	1.88
27	1.32	1.47	1.24	1.56	1.16	1.65	1.08	1.76	1.01	1.86
28	1.33	1.48	1.26	1.56	1.18	1.65	1.10	1.75	1.03	1.85
29	1.34	1.48	1.27	1.56	1.20	1.65	1.12	1.74	1.05	1.84
30	1.35	1.49	1.28	1.57	1.21	1.65	1.14	1.74	1.07	1.83
31	1.36	1.50	1.30	1.57	1.23	1.65	1.16	1.74	1.09	1.83
32	1.37	1.50	1.31	1.57	1.24	1.65	1.18	1.73	1.11	1.82
33	1.38	1.51	1.32	1.58	1.26	1.65	1.19	1.73	1.13	1.81
34	1.39	1.51	1.33	1.58	1.27	1.65	1.21	1.73	1.15	1.81
35	1.40	1.52	1.34	1.58	1.28	1.65	1.22	1.73	1.16	1.80
36	1.41	1.52	1.35	1.59	1.29	1.65	1.24	1.73	1.18	1.80
37	1.42	1.53	1.36	1.59	1.31	1.66	1.25	1.72	1.19	1.80
38	1.43	1.54	1.37	1.59	1.32	1.66	1.26	1.72	1.21	1.79

TABLE B-6 (Continued)

n	Level of Significance $\alpha = .05$									
	k = 1		k = 2		k = 3		k = 4		k = 5	
	d_L	d_U	d_L	d_U	d_L	d_U	d_L	d_U	d_L	d_U
39	1.43	1.54	1.38	1.60	1.33	1.66	1.27	1.72	1.22	1.79
40	1.44	1.54	1.39	1.60	1.34	1.66	1.29	1.72	1.23	1.79
45	1.48	1.57	1.43	1.62	1.38	1.67	1.34	1.72	1.29	1.78
50	1.50	1.59	1.46	1.63	1.42	1.67	1.38	1.72	1.34	1.77
55	1.53	1.60	1.49	1.64	1.45	1.68	1.41	1.72	1.38	1.77
60	1.55	1.62	1.51	1.65	1.48	1.69	1.44	1.73	1.41	1.77
65	1.57	1.63	1.54	1.66	1.50	1.70	1.47	1.73	1.44	1.77
70	1.58	1.64	1.55	1.67	1.52	1.70	1.49	1.74	1.46	1.77
75	1.60	1.65	1.57	1.68	1.54	1.71	1.51	1.74	1.49	1.77
80	1.61	1.66	1.59	1.69	1.56	1.72	1.53	1.74	1.51	1.77
85	1.62	1.67	1.60	1.70	1.57	1.72	1.55	1.75	1.52	1.77
90	1.63	1.68	1.61	1.70	1.59	1.73	1.57	1.75	1.54	1.78
95	1.64	1.69	1.62	1.71	1.60	1.73	1.58	1.75	1.56	1.78
100	1.65	1.69	1.63	1.72	1.61	1.74	1.59	1.76	1.57	1.78
n	Level of Significance $\alpha = .01$									
	k = 1		k = 2		k = 3		k = 4		k = 5	
	d_L	d_U	d_L	d_U	d_L	d_U	d_L	d_U	d_L	d_U
15	0.81	1.07	0.70	1.25	0.59	1.46	0.49	1.70	0.39	1.96
16	0.84	1.09	0.74	1.25	0.63	1.44	0.53	1.66	0.44	1.90
17	0.87	1.10	0.77	1.25	0.67	1.43	0.57	1.63	0.48	1.85
18	0.90	1.12	0.80	1.26	0.71	1.42	0.61	1.60	0.52	1.80
19	0.93	1.13	0.83	1.26	0.74	1.41	0.65	1.58	0.56	1.77
20	0.95	1.15	0.86	1.27	0.77	1.41	0.68	1.57	0.60	1.74
21	0.97	1.16	0.89	1.27	0.80	1.41	0.72	1.55	0.63	1.71
22	1.00	1.17	0.91	1.28	0.83	1.40	0.75	1.54	0.66	1.69
23	1.02	1.19	0.94	1.29	0.86	1.40	0.77	1.53	0.70	1.67
24	1.04	1.20	0.96	1.30	0.88	1.41	0.80	1.53	0.72	1.66
25	1.05	1.21	0.98	1.30	0.90	1.41	0.83	1.52	0.75	1.65
26	1.07	1.22	1.00	1.31	0.93	1.41	0.85	1.52	0.78	1.64
27	1.09	1.23	1.02	1.32	0.95	1.41	0.88	1.51	0.81	1.63
28	1.10	1.24	1.04	1.32	0.97	1.41	0.90	1.51	0.83	1.62
29	1.12	1.25	1.05	1.33	0.99	1.42	0.92	1.51	0.85	1.61
30	1.13	1.26	1.07	1.34	1.01	1.42	0.94	1.51	0.88	1.61
31	1.15	1.27	1.08	1.34	1.02	1.42	0.96	1.51	0.90	1.60
32	1.16	1.28	1.10	1.35	1.04	1.43	0.98	1.51	0.92	1.60
33	1.17	1.29	1.11	1.36	1.05	1.43	1.00	1.51	0.94	1.59
34	1.18	1.30	1.13	1.36	1.07	1.43	1.01	1.51	0.95	1.59
35	1.19	1.31	1.14	1.37	1.08	1.44	1.03	1.51	0.97	1.59
36	1.21	1.32	1.15	1.38	1.10	1.44	1.04	1.51	0.99	1.59
37	1.22	1.32	1.16	1.38	1.11	1.45	1.06	1.51	1.00	1.59
38	1.23	1.33	1.18	1.39	1.12	1.45	1.07	1.52	1.02	1.58
39	1.24	1.34	1.19	1.39	1.14	1.45	1.09	1.52	1.03	1.58
40	1.25	1.34	1.20	1.40	1.15	1.46	1.10	1.52	1.05	1.58

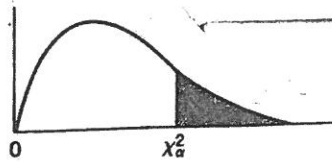
TABLE B-6 (Continued)

<i>n</i>	<i>Level of Significance $\alpha = .01$</i>									
	<i>k = 1</i>		<i>k = 2</i>		<i>k = 3</i>		<i>k = 4</i>		<i>k = 5</i>	
	<i>d_L</i>	<i>d_U</i>	<i>d_L</i>	<i>d_U</i>	<i>d_L</i>	<i>d_U</i>	<i>d_L</i>	<i>d_U</i>	<i>d_L</i>	<i>d_U</i>
45	1.29	1.38	1.24	1.42	1.20	1.48	1.16	1.53	1.11	1.58
50	1.32	1.40	1.28	1.45	1.24	1.49	1.20	1.54	1.16	1.59
55	1.36	1.43	1.32	1.47	1.28	1.51	1.25	1.55	1.21	1.59
60	1.38	1.45	1.35	1.48	1.32	1.52	1.28	1.56	1.25	1.60
65	1.41	1.47	1.38	1.50	1.35	1.53	1.31	1.57	1.28	1.61
70	1.43	1.49	1.40	1.52	1.37	1.55	1.34	1.58	1.31	1.61
75	1.45	1.50	1.42	1.53	1.39	1.56	1.37	1.59	1.34	1.62
80	1.47	1.52	1.44	1.54	1.42	1.57	1.39	1.60	1.36	1.62
85	1.48	1.53	1.46	1.55	1.43	1.58	1.41	1.60	1.39	1.63
90	1.50	1.54	1.47	1.56	1.45	1.59	1.43	1.61	1.41	1.64
95	1.51	1.55	1.49	1.57	1.47	1.60	1.45	1.62	1.42	1.64
100	1.52	1.56	1.50	1.58	1.48	1.60	1.46	1.63	1.44	1.65

k = Number of independent variables.

Source: Reprinted, with permission, from J. Durbin and G. S. Watson, "Testing for Serial Correlation in Least Squares Regression—II," *Biometrika*, vol. 38 (1951), pp. 159–178.

TABLE B-4 Critical Values of Chi-Square



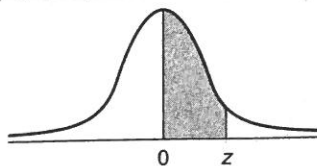
<i>df</i>	$\chi^2_{.995}$	$\chi^2_{.990}$	$\chi^2_{.975}$	$\chi^2_{.950}$	$\chi^2_{.900}$
1	0.0000393	0.0001571	0.0009821	0.0039321	0.0157908
2	0.0100251	0.0201007	0.0506356	0.102587	0.210720
3	0.0717212	0.114832	0.215795	0.351846	0.584375
4	0.206990	0.297110	0.484419	0.710721	1.063623
5	0.411740	0.554300	0.831211	1.145476	1.61031
6	0.675727	0.872085	1.237347	1.63539	2.20413
7	0.989265	1.239043	1.68987	2.16735	2.83311
8	1.344419	1.646482	2.17973	2.73264	3.48954
9	1.734926	2.087912	2.70039	3.32511	4.168216
10	2.15585	2.55821	3.24697	3.94030	4.86518
11	2.60321	3.05347	3.81575	4.57481	5.57779
12	3.07382	3.57056	4.40379	5.22603	6.30380
13	3.56503	4.10691	5.00874	5.89186	7.04150
14	4.07468	4.66043	5.62872	6.57063	7.78953
15	4.60094	5.22935	6.26214	7.26094	8.54675
16	5.14224	5.81221	6.90766	7.96164	9.31223
17	5.69724	6.40776	7.56418	8.67176	10.0852
18	6.26481	7.01491	8.23075	9.39046	10.8649
19	6.84398	7.63273	8.90655	10.1170	11.6509
20	7.43386	8.26040	9.59083	10.8508	12.4426
21	8.03366	8.89720	10.28293	11.5913	13.2396
22	8.64272	9.54249	10.9823	12.3380	14.0415
23	9.26042	10.19567	11.6885	13.0905	14.8479
24	9.88623	10.8564	12.4011	13.8484	15.6587
25	10.5197	11.5240	13.1197	14.6114	16.4734
26	11.1603	12.1981	13.8439	15.3791	17.2919
27	11.8076	12.8786	14.5733	16.1513	18.1138
28	12.4613	13.5648	15.3079	16.9279	18.9302
29	13.1211	14.2565	16.0471	17.7083	19.7677
30	13.7867	14.9535	16.7908	18.4926	20.5992
40	20.7065	22.1643	24.4331	26.5093	29.0505
50	27.9907	29.7067	32.3574	34.7642	37.6886
60	35.5347	37.4848	40.4817	43.1879	46.4589
70	43.2752	45.4418	48.7576	51.7393	55.3290
80	51.1720	53.5400	57.1532	60.3915	64.2778
90	59.1963	61.7541	65.6466	69.1260	73.2912
100	67.3276	70.0648	74.2219	77.9295	82.3581

TABLE B-4 (Continued)

<i>df</i>	$\chi^2_{.100}$	$\chi^2_{.050}$	$\chi^2_{.025}$	$\chi^2_{.010}$	$\chi^2_{.005}$
1	2.70554	3.84146	5.02389	6.63490	7.87944
2	4.60517	5.99147	7.37776	9.21034	10.5966
3	6.25139	7.81473	9.34840	11.3449	12.8381
4	7.77944	9.48773	11.1433	13.2767	14.8602
5	9.23635	11.0705	12.8325	15.0863	16.7496
6	10.6446	12.5916	14.4494	16.8119	18.5476
7	12.0170	14.0671	16.0128	18.4753	20.2777
8	13.3616	15.5073	17.5346	20.0902	21.9550
9	14.6837	16.9190	19.0228	21.6660	23.5893
10	15.9871	18.3070	20.4831	23.2093	25.1882
11	17.2750	19.6751	21.9200	24.7250	26.7569
12	18.5494	21.0261	23.3367	26.2170	28.2995
13	19.8119	22.3621	24.7356	27.6883	29.8194
14	21.0642	23.6848	26.1190	29.1413	31.3193
15	22.3072	24.9958	27.4884	30.5779	32.8013
16	23.5418	26.2962	28.8454	31.9999	34.2672
17	24.7690	27.5871	30.1910	33.4087	35.7185
18	25.9894	28.8693	31.5264	34.8053	37.1564
19	27.2036	30.1435	32.8523	36.1908	38.5822
20	28.4120	31.4104	34.1696	37.5662	39.9968
21	29.6151	32.6705	35.4789	38.9321	41.4010
22	30.8133	33.9244	36.7807	40.2894	42.7956
23	32.0069	35.1725	38.0757	41.6384	44.1813
24	33.1963	36.4151	39.3641	42.9798	45.5585
25	34.3816	37.6525	40.6465	44.3141	46.9278
26	35.5631	38.8852	41.9232	45.6417	48.2899
27	36.7412	40.1133	43.1944	46.9630	49.6449
28	37.9159	41.3372	44.4607	48.2782	50.9933
29	39.0875	42.5569	45.7222	49.5879	52.3356
30	40.2560	43.7729	46.9792	50.8922	53.6720
40	51.8050	55.7585	59.3417	63.6907	66.7659
50	63.1671	67.5048	71.4202	76.1539	79.4900
60	74.3970	79.0819	83.2976	88.3794	91.9517
70	85.5271	90.5312	95.0231	100.425	104.215
80	96.5782	101.879	106.629	112.329	116.321
90	107.565	113.145	118.136	124.116	128.299
100	118.498	124.342	129.561	135.807	140.169

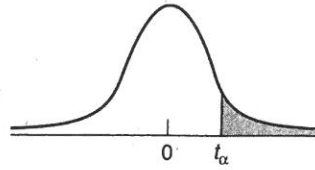
Source: "Tables of the Percentage Points of the χ^2 -Distribution," *Biometrika*, vol. 32 (1941), pp. 188-189, by Catherine M. Thompson. Reproduced by permission of Professor D. V. Lindley.

TABLE B-2 Areas for Standard Normal Probability Distribution



For $z = 1.93$, shaded area is .4732 out of total area of 1.

[illegible]

TABLE B-3 Critical Values of t 

df	$t_{.100}$	$t_{.050}$	$t_{.025}$	$t_{.010}$	$t_{.005}$
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	2.529	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
inf.	1.282	1.645	1.960	2.326	2.576

Source: "Table of Percentage Points of the t -Distribution."
 Computed by Maxine Merrington, *Biometrika*, vol. 32 (1941),
 p. 300. Reproduced by permission of Professor D. V. Lindley.

Critical t-values		$\alpha =$	0.45
Degrees of Freedom	t value	Degrees of Freedom	t value
1	0.1584	41	0.1264
2	0.1421	42	0.1264
3	0.1366	43	0.1264
4	0.1338	44	0.1264
5	0.1322	45	0.1264
6	0.1311	46	0.1264
7	0.1303	47	0.1263
8	0.1297	48	0.1263
9	0.1293	49	0.1263
10	0.1289	50	0.1263
11	0.1286	51	0.1263
12	0.1283	52	0.1263
13	0.1281	53	0.1263
14	0.1280	54	0.1263
15	0.1278	55	0.1262
16	0.1277	56	0.1262
17	0.1276	57	0.1262
18	0.1274	58	0.1262
19	0.1274	59	0.1262
20	0.1273	60	0.1262
21	0.1272	61	0.1262
22	0.1271	62	0.1262
23	0.1271	63	0.1262
24	0.1270	64	0.1262
25	0.1269	65	0.1262
26	0.1269	66	0.1261
27	0.1268	67	0.1261
28	0.1268	68	0.1261
29	0.1268	69	0.1261
30	0.1267	70	0.1261
31	0.1267	71	0.1261
32	0.1267	72	0.1261
33	0.1266	73	0.1261
34	0.1266	74	0.1261
35	0.1266	75	0.1261
36	0.1266	76	0.1261
37	0.1265	77	0.1261
38	0.1265	78	0.1261
39	0.1265	79	0.1261
40	0.1265	80	0.1261

Critical t-values		$\alpha =$	0.45
Degrees of Freedom	t value	Degrees of Freedom	t value
81	0.1261	121	0.1259
82	0.1261	122	0.1259
83	0.1260	123	0.1259
84	0.1260	124	0.1259
85	0.1260	125	0.1259
86	0.1260	126	0.1259
87	0.1260	127	0.1259
88	0.1260	128	0.1259
89	0.1260	129	0.1259
90	0.1260	130	0.1259
91	0.1260	131	0.1259
92	0.1260	132	0.1259
93	0.1260	133	0.1259
94	0.1260	134	0.1259
95	0.1260	135	0.1259
96	0.1260	136	0.1259
97	0.1260	137	0.1259
98	0.1260	138	0.1259
99	0.1260	139	0.1259
100	0.1260	140	0.1259
101	0.1260	141	0.1259
102	0.1260	142	0.1259
103	0.1260	143	0.1259
104	0.1260	144	0.1259
105	0.1260	145	0.1259
106	0.1260	146	0.1259
107	0.1260	147	0.1259
108	0.1260	148	0.1259
109	0.1260	149	0.1259
110	0.1260	150	0.1259
111	0.1259	151	0.1259
112	0.1259	152	0.1259
113	0.1259	153	0.1259
114	0.1259	154	0.1259
115	0.1259	155	0.1259
116	0.1259	156	0.1259
117	0.1259	157	0.1259
118	0.1259	158	0.1259
119	0.1259	159	0.1259
120	0.1259	160	0.1259

Critical t-values		$\alpha =$	0.40
Degrees of Freedom	t value	Degrees of Freedom	t value
1	0.3249	41	0.2550
2	0.2887	42	0.2550
3	0.2767	43	0.2549
4	0.2707	44	0.2549
5	0.2672	45	0.2549
6	0.2648	46	0.2548
7	0.2632	47	0.2548
8	0.2619	48	0.2548
9	0.2610	49	0.2547
10	0.2602	50	0.2547
11	0.2596	51	0.2547
12	0.2590	52	0.2546
13	0.2586	53	0.2546
14	0.2582	54	0.2546
15	0.2579	55	0.2546
16	0.2576	56	0.2546
17	0.2573	57	0.2545
18	0.2571	58	0.2545
19	0.2569	59	0.2545
20	0.2567	60	0.2545
21	0.2566	61	0.2545
22	0.2564	62	0.2544
23	0.2563	63	0.2544
24	0.2562	64	0.2544
25	0.2561	65	0.2544
26	0.2560	66	0.2544
27	0.2559	67	0.2544
28	0.2558	68	0.2543
29	0.2557	69	0.2543
30	0.2556	70	0.2543
31	0.2555	71	0.2543
32	0.2555	72	0.2543
33	0.2554	73	0.2543
34	0.2553	74	0.2543
35	0.2553	75	0.2542
36	0.2552	76	0.2542
37	0.2552	77	0.2542
38	0.2551	78	0.2542
39	0.2551	79	0.2542
40	0.2550	80	0.2542

Critical t-values		$\alpha =$	0.40
Degrees of Freedom	t value	Degrees of Freedom	t value
81	0.2542	121	0.2539
82	0.2542	122	0.2539
83	0.2542	123	0.2539
84	0.2542	124	0.2539
85	0.2541	125	0.2539
86	0.2541	126	0.2539
87	0.2541	127	0.2539
88	0.2541	128	0.2539
89	0.2541	129	0.2539
90	0.2541	130	0.2539
91	0.2541	131	0.2539
92	0.2541	132	0.2539
93	0.2541	133	0.2539
94	0.2541	134	0.2539
95	0.2541	135	0.2538
96	0.2541	136	0.2538
97	0.2540	137	0.2538
98	0.2540	138	0.2538
99	0.2540	139	0.2538
100	0.2540	140	0.2538
101	0.2540	141	0.2538
102	0.2540	142	0.2538
103	0.2540	143	0.2538
104	0.2540	144	0.2538
105	0.2540	145	0.2538
106	0.2540	146	0.2538
107	0.2540	147	0.2538
108	0.2540	148	0.2538
109	0.2540	149	0.2538
110	0.2540	150	0.2538
111	0.2540	151	0.2538
112	0.2539	152	0.2538
113	0.2539	153	0.2538
114	0.2539	154	0.2538
115	0.2539	155	0.2538
116	0.2539	156	0.2538
117	0.2539	157	0.2538
118	0.2539	158	0.2538
119	0.2539	159	0.2538
120	0.2539	160	0.2538

Critical t-values		$\alpha =$	0.35
Degrees of Freedom	t value	Degrees of Freedom	t value
1	0.5095	41	0.3880
2	0.4447	42	0.3880
3	0.4242	43	0.3879
4	0.4142	44	0.3878
5	0.4082	45	0.3878
6	0.4043	46	0.3877
7	0.4015	47	0.3877
8	0.3995	48	0.3876
9	0.3979	49	0.3876
10	0.3966	50	0.3875
11	0.3956	51	0.3875
12	0.3947	52	0.3875
13	0.3940	53	0.3874
14	0.3933	54	0.3874
15	0.3928	55	0.3873
16	0.3923	56	0.3873
17	0.3919	57	0.3873
18	0.3915	58	0.3872
19	0.3912	59	0.3872
20	0.3909	60	0.3872
21	0.3906	61	0.3871
22	0.3904	62	0.3871
23	0.3902	63	0.3871
24	0.3900	64	0.3871
25	0.3898	65	0.3870
26	0.3896	66	0.3870
27	0.3894	67	0.3870
28	0.3893	68	0.3870
29	0.3892	69	0.3869
30	0.3890	70	0.3869
31	0.3889	71	0.3869
32	0.3888	72	0.3869
33	0.3887	73	0.3868
34	0.3886	74	0.3868
35	0.3885	75	0.3868
36	0.3884	76	0.3868
37	0.3883	77	0.3868
38	0.3882	78	0.3867
39	0.3882	79	0.3867
40	0.3881	80	0.3867

Critical t-values		$\alpha =$	0.35
Degrees of Freedom	t value	Degrees of Freedom	t value
81	0.3867	121	0.3862
82	0.3867	122	0.3862
83	0.3867	123	0.3862
84	0.3866	124	0.3862
85	0.3866	125	0.3862
86	0.3866	126	0.3862
87	0.3866	127	0.3862
88	0.3866	128	0.3862
89	0.3866	129	0.3862
90	0.3866	130	0.3862
91	0.3865	131	0.3862
92	0.3865	132	0.3862
93	0.3865	133	0.3862
94	0.3865	134	0.3861
95	0.3865	135	0.3861
96	0.3865	136	0.3861
97	0.3865	137	0.3861
98	0.3865	138	0.3861
99	0.3864	139	0.3861
100	0.3864	140	0.3861
101	0.3864	141	0.3861
102	0.3864	142	0.3861
103	0.3864	143	0.3861
104	0.3864	144	0.3861
105	0.3864	145	0.3861
106	0.3864	146	0.3861
107	0.3864	147	0.3861
108	0.3863	148	0.3861
109	0.3863	149	0.3861
110	0.3863	150	0.3861
111	0.3863	151	0.3861
112	0.3863	152	0.3860
113	0.3863	153	0.3860
114	0.3863	154	0.3860
115	0.3863	155	0.3860
116	0.3863	156	0.3860
117	0.3863	157	0.3860
118	0.3863	158	0.3860
119	0.3863	159	0.3860
120	0.3862	160	0.3860

Critical t-values		$\alpha =$	0.30
Degrees of Freedom	t value	Degrees of Freedom	t value
1	0.7265	41	0.5285
2	0.6172	42	0.5284
3	0.5844	43	0.5283
4	0.5686	44	0.5282
5	0.5594	45	0.5281
6	0.5534	46	0.5281
7	0.5491	47	0.5280
8	0.5459	48	0.5279
9	0.5435	49	0.5278
10	0.5415	50	0.5278
11	0.5399	51	0.5277
12	0.5386	52	0.5276
13	0.5375	53	0.5276
14	0.5366	54	0.5275
15	0.5357	55	0.5275
16	0.5350	56	0.5274
17	0.5344	57	0.5273
18	0.5338	58	0.5273
19	0.5333	59	0.5272
20	0.5329	60	0.5272
21	0.5325	61	0.5272
22	0.5321	62	0.5271
23	0.5317	63	0.5271
24	0.5314	64	0.5270
25	0.5312	65	0.5270
26	0.5309	66	0.5269
27	0.5306	67	0.5269
28	0.5304	68	0.5269
29	0.5302	69	0.5268
30	0.5300	70	0.5268
31	0.5298	71	0.5268
32	0.5297	72	0.5267
33	0.5295	73	0.5267
34	0.5294	74	0.5267
35	0.5292	75	0.5266
36	0.5291	76	0.5266
37	0.5289	77	0.5266
38	0.5288	78	0.5266
39	0.5287	79	0.5265
40	0.5286	80	0.5265

Critical t-values		$\alpha =$	0.30
Degrees of Freedom	t value	Degrees of Freedom	t value
81	0.5265	121	0.5258
82	0.5264	122	0.5258
83	0.5264	123	0.5258
84	0.5264	124	0.5258
85	0.5264	125	0.5257
86	0.5263	126	0.5257
87	0.5263	127	0.5257
88	0.5263	128	0.5257
89	0.5263	129	0.5257
90	0.5263	130	0.5257
91	0.5262	131	0.5257
92	0.5262	132	0.5257
93	0.5262	133	0.5257
94	0.5262	134	0.5257
95	0.5262	135	0.5256
96	0.5261	136	0.5256
97	0.5261	137	0.5256
98	0.5261	138	0.5256
99	0.5261	139	0.5256
100	0.5261	140	0.5256
101	0.5261	141	0.5256
102	0.5260	142	0.5256
103	0.5260	143	0.5256
104	0.5260	144	0.5256
105	0.5260	145	0.5256
106	0.5260	146	0.5255
107	0.5260	147	0.5255
108	0.5260	148	0.5255
109	0.5259	149	0.5255
110	0.5259	150	0.5255
111	0.5259	151	0.5255
112	0.5259	152	0.5255
113	0.5259	153	0.5255
114	0.5259	154	0.5255
115	0.5259	155	0.5255
116	0.5258	156	0.5255
117	0.5258	157	0.5255
118	0.5258	158	0.5255
119	0.5258	159	0.5255
120	0.5258	160	0.5254

Critical t-values		$\alpha =$	0.25
Degrees of Freedom	t value	Degrees of Freedom	t value
1	1.0000	41	0.6805
2	0.8165	42	0.6804
3	0.7649	43	0.6802
4	0.7407	44	0.6801
5	0.7267	45	0.6800
6	0.7176	46	0.6799
7	0.7111	47	0.6797
8	0.7064	48	0.6796
9	0.7027	49	0.6795
10	0.6998	50	0.6794
11	0.6974	51	0.6793
12	0.6955	52	0.6792
13	0.6938	53	0.6791
14	0.6924	54	0.6791
15	0.6912	55	0.6790
16	0.6901	56	0.6789
17	0.6892	57	0.6788
18	0.6884	58	0.6787
19	0.6876	59	0.6787
20	0.6870	60	0.6786
21	0.6864	61	0.6785
22	0.6858	62	0.6785
23	0.6853	63	0.6784
24	0.6848	64	0.6783
25	0.6844	65	0.6783
26	0.6840	66	0.6782
27	0.6837	67	0.6782
28	0.6834	68	0.6781
29	0.6830	69	0.6781
30	0.6828	70	0.6780
31	0.6825	71	0.6780
32	0.6822	72	0.6779
33	0.6820	73	0.6779
34	0.6818	74	0.6778
35	0.6816	75	0.6778
36	0.6814	76	0.6777
37	0.6812	77	0.6777
38	0.6810	78	0.6776
39	0.6808	79	0.6776
40	0.6807	80	0.6776

Critical t-values		$\alpha =$	0.25
Degrees of Freedom	t value	Degrees of Freedom	t value
81	0.6775	121	0.6765
82	0.6775	122	0.6765
83	0.6775	123	0.6765
84	0.6774	124	0.6765
85	0.6774	125	0.6765
86	0.6774	126	0.6764
87	0.6773	127	0.6764
88	0.6773	128	0.6764
89	0.6773	129	0.6764
90	0.6772	130	0.6764
91	0.6772	131	0.6764
92	0.6772	132	0.6764
93	0.6771	133	0.6763
94	0.6771	134	0.6763
95	0.6771	135	0.6763
96	0.6771	136	0.6763
97	0.6770	137	0.6763
98	0.6770	138	0.6763
99	0.6770	139	0.6763
100	0.6770	140	0.6762
101	0.6769	141	0.6762
102	0.6769	142	0.6762
103	0.6769	143	0.6762
104	0.6769	144	0.6762
105	0.6768	145	0.6762
106	0.6768	146	0.6762
107	0.6768	147	0.6762
108	0.6768	148	0.6762
109	0.6767	149	0.6761
110	0.6767	150	0.6761
111	0.6767	151	0.6761
112	0.6767	152	0.6761
113	0.6767	153	0.6761
114	0.6766	154	0.6761
115	0.6766	155	0.6761
116	0.6766	156	0.6761
117	0.6766	157	0.6761
118	0.6766	158	0.6760
119	0.6766	159	0.6760
120	0.6765	160	0.6760

Critical t-values		$\alpha =$	0.20
Degrees of Freedom	t value	Degrees of Freedom	t value
1	1.3764	41	0.8505
2	1.0607	42	0.8503
3	0.9785	43	0.8501
4	0.9410	44	0.8499
5	0.9195	45	0.8497
6	0.9057	46	0.8495
7	0.8960	47	0.8493
8	0.8889	48	0.8492
9	0.8834	49	0.8490
10	0.8791	50	0.8489
11	0.8755	51	0.8487
12	0.8726	52	0.8486
13	0.8702	53	0.8485
14	0.8681	54	0.8483
15	0.8662	55	0.8482
16	0.8647	56	0.8481
17	0.8633	57	0.8480
18	0.8620	58	0.8479
19	0.8610	59	0.8478
20	0.8600	60	0.8477
21	0.8591	61	0.8476
22	0.8583	62	0.8475
23	0.8575	63	0.8474
24	0.8569	64	0.8473
25	0.8562	65	0.8472
26	0.8557	66	0.8471
27	0.8551	67	0.8470
28	0.8546	68	0.8469
29	0.8542	69	0.8469
30	0.8538	70	0.8468
31	0.8534	71	0.8467
32	0.8530	72	0.8466
33	0.8526	73	0.8466
34	0.8523	74	0.8465
35	0.8520	75	0.8464
36	0.8517	76	0.8464
37	0.8514	77	0.8463
38	0.8512	78	0.8463
39	0.8509	79	0.8462
40	0.8507	80	0.8461

Critical t-values		$\alpha =$	0.20
Degrees of Freedom	t value	Degrees of Freedom	t value
81	0.8461	121	0.8446
82	0.8460	122	0.8446
83	0.8460	123	0.8446
84	0.8459	124	0.8445
85	0.8459	125	0.8445
86	0.8458	126	0.8445
87	0.8458	127	0.8445
88	0.8457	128	0.8444
89	0.8457	129	0.8444
90	0.8456	130	0.8444
91	0.8456	131	0.8444
92	0.8455	132	0.8444
93	0.8455	133	0.8443
94	0.8455	134	0.8443
95	0.8454	135	0.8443
96	0.8454	136	0.8443
97	0.8453	137	0.8443
98	0.8453	138	0.8442
99	0.8453	139	0.8442
100	0.8452	140	0.8442
101	0.8452	141	0.8442
102	0.8452	142	0.8442
103	0.8451	143	0.8441
104	0.8451	144	0.8441
105	0.8451	145	0.8441
106	0.8450	146	0.8441
107	0.8450	147	0.8441
108	0.8450	148	0.8441
109	0.8449	149	0.8440
110	0.8449	150	0.8440
111	0.8449	151	0.8440
112	0.8448	152	0.8440
113	0.8448	153	0.8440
114	0.8448	154	0.8440
115	0.8448	155	0.8439
116	0.8447	156	0.8439
117	0.8447	157	0.8439
118	0.8447	158	0.8439
119	0.8447	159	0.8439
120	0.8446	160	0.8439

Critical t-values		$\alpha =$	0.15
Degrees of Freedom	t value	Degrees of Freedom	t value
1	1.9626	41	1.0497
2	1.3862	42	1.0494
3	1.2498	43	1.0491
4	1.1896	44	1.0488
5	1.1558	45	1.0485
6	1.1342	46	1.0483
7	1.1192	47	1.0480
8	1.1081	48	1.0478
9	1.0997	49	1.0475
10	1.0931	50	1.0473
11	1.0877	51	1.0471
12	1.0832	52	1.0469
13	1.0795	53	1.0467
14	1.0763	54	1.0465
15	1.0735	55	1.0463
16	1.0711	56	1.0461
17	1.0690	57	1.0459
18	1.0672	58	1.0458
19	1.0655	59	1.0456
20	1.0640	60	1.0455
21	1.0627	61	1.0453
22	1.0614	62	1.0452
23	1.0603	63	1.0450
24	1.0593	64	1.0449
25	1.0584	65	1.0448
26	1.0575	66	1.0446
27	1.0567	67	1.0445
28	1.0560	68	1.0444
29	1.0553	69	1.0443
30	1.0547	70	1.0442
31	1.0541	71	1.0441
32	1.0535	72	1.0440
33	1.0530	73	1.0438
34	1.0525	74	1.0437
35	1.0520	75	1.0436
36	1.0516	76	1.0436
37	1.0512	77	1.0435
38	1.0508	78	1.0434
39	1.0504	79	1.0433
40	1.0500	80	1.0432

Critical t-values		$\alpha =$	0.15
Degrees of Freedom	t value	Degrees of Freedom	t value
81	1.0431	121	1.0409
82	1.0430	122	1.0409
83	1.0429	123	1.0408
84	1.0429	124	1.0408
85	1.0428	125	1.0408
86	1.0427	126	1.0407
87	1.0426	127	1.0407
88	1.0426	128	1.0406
89	1.0425	129	1.0406
90	1.0424	130	1.0406
91	1.0424	131	1.0406
92	1.0423	132	1.0405
93	1.0422	133	1.0405
94	1.0422	134	1.0405
95	1.0421	135	1.0404
96	1.0421	136	1.0404
97	1.0420	137	1.0404
98	1.0419	138	1.0403
99	1.0419	139	1.0403
100	1.0418	140	1.0403
101	1.0418	141	1.0403
102	1.0417	142	1.0402
103	1.0417	143	1.0402
104	1.0416	144	1.0402
105	1.0416	145	1.0402
106	1.0415	146	1.0401
107	1.0415	147	1.0401
108	1.0414	148	1.0401
109	1.0414	149	1.0401
110	1.0413	150	1.0400
111	1.0413	151	1.0400
112	1.0413	152	1.0400
113	1.0412	153	1.0400
114	1.0412	154	1.0399
115	1.0411	155	1.0399
116	1.0411	156	1.0399
117	1.0410	157	1.0399
118	1.0410	158	1.0398
119	1.0410	159	1.0398
120	1.0409	160	1.0398

Critical t-values		$\alpha =$	0.10
Degrees of Freedom	t value	Degrees of Freedom	t value
1	3.0777	41	1.3025
2	1.8856	42	1.3020
3	1.6377	43	1.3016
4	1.5332	44	1.3011
5	1.4759	45	1.3006
6	1.4398	46	1.3002
7	1.4149	47	1.2998
8	1.3968	48	1.2994
9	1.3830	49	1.2991
10	1.3722	50	1.2987
11	1.3634	51	1.2984
12	1.3562	52	1.2980
13	1.3502	53	1.2977
14	1.3450	54	1.2974
15	1.3406	55	1.2971
16	1.3368	56	1.2969
17	1.3334	57	1.2966
18	1.3304	58	1.2963
19	1.3277	59	1.2961
20	1.3253	60	1.2958
21	1.3232	61	1.2956
22	1.3212	62	1.2954
23	1.3195	63	1.2951
24	1.3178	64	1.2949
25	1.3163	65	1.2947
26	1.3150	66	1.2945
27	1.3137	67	1.2943
28	1.3125	68	1.2941
29	1.3114	69	1.2939
30	1.3104	70	1.2938
31	1.3095	71	1.2936
32	1.3086	72	1.2934
33	1.3077	73	1.2933
34	1.3070	74	1.2931
35	1.3062	75	1.2929
36	1.3055	76	1.2928
37	1.3049	77	1.2926
38	1.3042	78	1.2925
39	1.3036	79	1.2924
40	1.3031	80	1.2922

Critical t-values		$\alpha =$	0.10
Degrees of Freedom	t value	Degrees of Freedom	t value
81	1.2921	121	1.2886
82	1.2920	122	1.2885
83	1.2918	123	1.2885
84	1.2917	124	1.2884
85	1.2916	125	1.2884
86	1.2915	126	1.2883
87	1.2914	127	1.2883
88	1.2912	128	1.2882
89	1.2911	129	1.2881
90	1.2910	130	1.2881
91	1.2909	131	1.2880
92	1.2908	132	1.2880
93	1.2907	133	1.2879
94	1.2906	134	1.2879
95	1.2905	135	1.2879
96	1.2904	136	1.2878
97	1.2903	137	1.2878
98	1.2902	138	1.2877
99	1.2902	139	1.2877
100	1.2901	140	1.2876
101	1.2900	141	1.2876
102	1.2899	142	1.2875
103	1.2898	143	1.2875
104	1.2897	144	1.2875
105	1.2897	145	1.2874
106	1.2896	146	1.2874
107	1.2895	147	1.2873
108	1.2894	148	1.2873
109	1.2894	149	1.2873
110	1.2893	150	1.2872
111	1.2892	151	1.2872
112	1.2892	152	1.2871
113	1.2891	153	1.2871
114	1.2890	154	1.2871
115	1.2890	155	1.2870
116	1.2889	156	1.2870
117	1.2888	157	1.2870
118	1.2888	158	1.2869
119	1.2887	159	1.2869
120	1.2886	160	1.2869

Critical t-values		$\alpha =$	0.05
Degrees of Freedom	t value	Degrees of Freedom	t value
1	6.3138	41	1.6829
2	2.9200	42	1.6820
3	2.3534	43	1.6811
4	2.1318	44	1.6802
5	2.0150	45	1.6794
6	1.9432	46	1.6787
7	1.8946	47	1.6779
8	1.8595	48	1.6772
9	1.8331	49	1.6766
10	1.8125	50	1.6759
11	1.7959	51	1.6753
12	1.7823	52	1.6747
13	1.7709	53	1.6741
14	1.7613	54	1.6736
15	1.7531	55	1.6730
16	1.7459	56	1.6725
17	1.7396	57	1.6720
18	1.7341	58	1.6716
19	1.7291	59	1.6711
20	1.7247	60	1.6706
21	1.7207	61	1.6702
22	1.7171	62	1.6698
23	1.7139	63	1.6694
24	1.7109	64	1.6690
25	1.7081	65	1.6686
26	1.7056	66	1.6683
27	1.7033	67	1.6679
28	1.7011	68	1.6676
29	1.6991	69	1.6672
30	1.6973	70	1.6669
31	1.6955	71	1.6666
32	1.6939	72	1.6663
33	1.6924	73	1.6660
34	1.6909	74	1.6657
35	1.6896	75	1.6654
36	1.6883	76	1.6652
37	1.6871	77	1.6649
38	1.6860	78	1.6646
39	1.6849	79	1.6644
40	1.6839	80	1.6641

Critical t-values		$\alpha =$	0.050
Degrees of Freedom	t value	Degrees of Freedom	t value
81	1.6639	121	1.6575
82	1.6636	122	1.6574
83	1.6634	123	1.6573
84	1.6632	124	1.6572
85	1.6630	125	1.6571
86	1.6628	126	1.6570
87	1.6626	127	1.6569
88	1.6624	128	1.6568
89	1.6622	129	1.6568
90	1.6620	130	1.6567
91	1.6618	131	1.6566
92	1.6616	132	1.6565
93	1.6614	133	1.6564
94	1.6612	134	1.6563
95	1.6611	135	1.6562
96	1.6609	136	1.6561
97	1.6607	137	1.6561
98	1.6606	138	1.6560
99	1.6604	139	1.6559
100	1.6602	140	1.6558
101	1.6601	141	1.6557
102	1.6599	142	1.6557
103	1.6598	143	1.6556
104	1.6596	144	1.6555
105	1.6595	145	1.6554
106	1.6594	146	1.6554
107	1.6592	147	1.6553
108	1.6591	148	1.6552
109	1.6590	149	1.6551
110	1.6588	150	1.6551
111	1.6587	151	1.6550
112	1.6586	152	1.6549
113	1.6585	153	1.6549
114	1.6583	154	1.6548
115	1.6582	155	1.6547
116	1.6581	156	1.6547
117	1.6580	157	1.6546
118	1.6579	158	1.6546
119	1.6578	159	1.6545
120	1.6577	160	1.6544

Critical t-values		$\alpha =$	0.025
Degrees of Freedom	t value	Degrees of Freedom	t value
1	12.7062	41	2.0195
2	4.3027	42	2.0181
3	3.1824	43	2.0167
4	2.7764	44	2.0154
5	2.5706	45	2.0141
6	2.4469	46	2.0129
7	2.3646	47	2.0117
8	2.3060	48	2.0106
9	2.2622	49	2.0096
10	2.2281	50	2.0086
11	2.2010	51	2.0076
12	2.1788	52	2.0066
13	2.1604	53	2.0057
14	2.1448	54	2.0049
15	2.1314	55	2.0040
16	2.1199	56	2.0032
17	2.1098	57	2.0025
18	2.1009	58	2.0017
19	2.0930	59	2.0010
20	2.0860	60	2.0003
21	2.0796	61	1.9996
22	2.0739	62	1.9990
23	2.0687	63	1.9983
24	2.0639	64	1.9977
25	2.0595	65	1.9971
26	2.0555	66	1.9966
27	2.0518	67	1.9960
28	2.0484	68	1.9955
29	2.0452	69	1.9949
30	2.0423	70	1.9944
31	2.0395	71	1.9939
32	2.0369	72	1.9935
33	2.0345	73	1.9930
34	2.0322	74	1.9925
35	2.0301	75	1.9921
36	2.0281	76	1.9917
37	2.0262	77	1.9913
38	2.0244	78	1.9908
39	2.0227	79	1.9905
40	2.0211	80	1.9901

Critical t-values		$\alpha = 0.025$	
Degrees of Freedom	t value	Degrees of Freedom	t value
81	1.9897	121	1.9798
82	1.9893	122	1.9796
83	1.9890	123	1.9794
84	1.9886	124	1.9793
85	1.9883	125	1.9791
86	1.9879	126	1.9790
87	1.9876	127	1.9788
88	1.9873	128	1.9787
89	1.9870	129	1.9785
90	1.9867	130	1.9784
91	1.9864	131	1.9782
92	1.9861	132	1.9781
93	1.9858	133	1.9780
94	1.9855	134	1.9778
95	1.9853	135	1.9777
96	1.9850	136	1.9776
97	1.9847	137	1.9774
98	1.9845	138	1.9773
99	1.9842	139	1.9772
100	1.9840	140	1.9771
101	1.9837	141	1.9769
102	1.9835	142	1.9768
103	1.9833	143	1.9767
104	1.9830	144	1.9766
105	1.9828	145	1.9765
106	1.9826	146	1.9763
107	1.9824	147	1.9762
108	1.9822	148	1.9761
109	1.9820	149	1.9760
110	1.9818	150	1.9759
111	1.9816	151	1.9758
112	1.9814	152	1.9757
113	1.9812	153	1.9756
114	1.9810	154	1.9755
115	1.9808	155	1.9754
116	1.9806	156	1.9753
117	1.9804	157	1.9752
118	1.9803	158	1.9751
119	1.9801	159	1.9750
120	1.9799	160	1.9749

Critical t-values		$\alpha =$	0.01
Degrees of Freedom	t value	Degrees of Freedom	t value
1	31.8205	41	2.4208
2	6.9646	42	2.4185
3	4.5407	43	2.4163
4	3.7469	44	2.4141
5	3.3649	45	2.4121
6	3.1427	46	2.4102
7	2.9980	47	2.4083
8	2.8965	48	2.4066
9	2.8214	49	2.4049
10	2.7638	50	2.4033
11	2.7181	51	2.4017
12	2.6810	52	2.4002
13	2.6503	53	2.3988
14	2.6245	54	2.3974
15	2.6025	55	2.3961
16	2.5835	56	2.3948
17	2.5669	57	2.3936
18	2.5524	58	2.3924
19	2.5395	59	2.3912
20	2.5280	60	2.3901
21	2.5176	61	2.3890
22	2.5083	62	2.3880
23	2.4999	63	2.3870
24	2.4922	64	2.3860
25	2.4851	65	2.3851
26	2.4786	66	2.3842
27	2.4727	67	2.3833
28	2.4671	68	2.3824
29	2.4620	69	2.3816
30	2.4573	70	2.3808
31	2.4528	71	2.3800
32	2.4487	72	2.3793
33	2.4448	73	2.3785
34	2.4411	74	2.3778
35	2.4377	75	2.3771
36	2.4345	76	2.3764
37	2.4314	77	2.3758
38	2.4286	78	2.3751
39	2.4258	79	2.3745
40	2.4233	80	2.3739

Critical t-values		$\alpha =$	0.01
Degrees of Freedom	t value	Degrees of Freedom	t value
81	2.3733	121	2.3576
82	2.3727	122	2.3573
83	2.3721	123	2.3570
84	2.3716	124	2.3568
85	2.3710	125	2.3565
86	2.3705	126	2.3563
87	2.3700	127	2.3561
88	2.3695	128	2.3558
89	2.3690	129	2.3556
90	2.3685	130	2.3554
91	2.3680	131	2.3552
92	2.3676	132	2.3549
93	2.3671	133	2.3547
94	2.3667	134	2.3545
95	2.3662	135	2.3543
96	2.3658	136	2.3541
97	2.3654	137	2.3539
98	2.3650	138	2.3537
99	2.3646	139	2.3535
100	2.3642	140	2.3533
101	2.3638	141	2.3531
102	2.3635	142	2.3529
103	2.3631	143	2.3527
104	2.3627	144	2.3525
105	2.3624	145	2.3523
106	2.3620	146	2.3522
107	2.3617	147	2.3520
108	2.3614	148	2.3518
109	2.3610	149	2.3516
110	2.3607	150	2.3515
111	2.3604	151	2.3513
112	2.3601	152	2.3511
113	2.3598	153	2.3510
114	2.3595	154	2.3508
115	2.3592	155	2.3506
116	2.3589	156	2.3505
117	2.3586	157	2.3503
118	2.3584	158	2.3502
119	2.3581	159	2.3500
120	2.3578	160	2.3499

Critical t-values		$\alpha = 0.005$	
Degrees of Freedom	t value	Degrees of Freedom	t value
1	63.6567	41	2.7012
2	9.9248	42	2.6981
3	5.8409	43	2.6951
4	4.6041	44	2.6923
5	4.0321	45	2.6896
6	3.7074	46	2.6870
7	3.4995	47	2.6846
8	3.3554	48	2.6822
9	3.2498	49	2.6800
10	3.1693	50	2.6778
11	3.1058	51	2.6757
12	3.0545	52	2.6737
13	3.0123	53	2.6718
14	2.9768	54	2.6700
15	2.9467	55	2.6682
16	2.9208	56	2.6665
17	2.8982	57	2.6649
18	2.8784	58	2.6633
19	2.8609	59	2.6618
20	2.8453	60	2.6603
21	2.8314	61	2.6589
22	2.8188	62	2.6575
23	2.8073	63	2.6561
24	2.7969	64	2.6549
25	2.7874	65	2.6536
26	2.7787	66	2.6524
27	2.7707	67	2.6512
28	2.7633	68	2.6501
29	2.7564	69	2.6490
30	2.7500	70	2.6479
31	2.7440	71	2.6469
32	2.7385	72	2.6459
33	2.7333	73	2.6449
34	2.7284	74	2.6439
35	2.7238	75	2.6430
36	2.7195	76	2.6421
37	2.7154	77	2.6412
38	2.7116	78	2.6403
39	2.7079	79	2.6395
40	2.7045	80	2.6387

Critical t-values		$\alpha =$	0.005
Degrees of Freedom	t value	Degrees of Freedom	t value
81	2.6379	121	2.6171
82	2.6371	122	2.6167
83	2.6364	123	2.6164
84	2.6356	124	2.6161
85	2.6349	125	2.6157
86	2.6342	126	2.6154
87	2.6335	127	2.6151
88	2.6329	128	2.6148
89	2.6322	129	2.6145
90	2.6316	130	2.6142
91	2.6309	131	2.6139
92	2.6303	132	2.6136
93	2.6297	133	2.6133
94	2.6291	134	2.6130
95	2.6286	135	2.6127
96	2.6280	136	2.6125
97	2.6275	137	2.6122
98	2.6269	138	2.6119
99	2.6264	139	2.6117
100	2.6259	140	2.6114
101	2.6254	141	2.6111
102	2.6249	142	2.6109
103	2.6244	143	2.6106
104	2.6239	144	2.6104
105	2.6235	145	2.6102
106	2.6230	146	2.6099
107	2.6226	147	2.6097
108	2.6221	148	2.6095
109	2.6217	149	2.6092
110	2.6213	150	2.6090
111	2.6208	151	2.6088
112	2.6204	152	2.6086
113	2.6200	153	2.6083
114	2.6196	154	2.6081
115	2.6193	155	2.6079
116	2.6189	156	2.6077
117	2.6185	157	2.6075
118	2.6181	158	2.6073
119	2.6178	159	2.6071
120	2.6174	160	2.6069