

GEOG 200, CSULB -- Dr. C.M. Rodrigue
Critical Values for the t and Z Distributions, by Alpha and Number of Tails

Significance (prob-value of alpha)

		0.15	0.10	0.075	0.05	0.025	0.01	0.005	0.001	0.0005	0.0001	
1 Tail												
2 Tails		0.30	0.20	0.150	0.10	0.050	0.02	0.010	0.002	0.0010	0.0002	DF
Degrees of Freedom	1	1.963	3.078	4.165	6.314	12.706	31.821	63.657	318.309	636.619	3183.099	1
	2	1.386	1.886	2.282	2.920	4.303	6.965	9.925	22.327	31.599	70.700	2
	3	1.250	1.638	1.924	2.353	3.182	4.541	5.841	10.215	12.924	22.204	3
	4	1.190	1.533	1.778	2.132	2.776	3.747	4.604	7.173	8.610	13.034	4
	5	1.156	1.476	1.699	2.015	2.571	3.365	4.032	5.893	6.869	9.678	5
	6	1.134	1.440	1.650	1.943	2.447	3.143	3.707	5.208	5.959	8.025	6
	7	1.119	1.415	1.617	1.895	2.365	2.998	3.499	4.785	5.408	7.063	7
	8	1.108	1.397	1.592	1.860	2.306	2.896	3.355	4.501	5.041	6.442	8
	9	1.100	1.383	1.574	1.833	2.262	2.821	3.250	4.297	4.781	6.010	9
	10	1.093	1.372	1.559	1.812	2.228	2.764	3.169	4.144	4.587	5.694	10
	11	1.088	1.363	1.548	1.796	2.201	2.718	3.106	4.025	4.437	5.453	11
	12	1.083	1.356	1.538	1.782	2.179	2.681	3.055	3.930	4.318	5.263	12
	13	1.079	1.350	1.530	1.771	2.160	2.650	3.012	3.852	4.221	5.111	13
	14	1.076	1.345	1.523	1.761	2.145	2.624	2.977	3.787	4.140	4.985	14
	15	1.074	1.341	1.517	1.753	2.131	2.602	2.947	3.733	4.073	4.880	15
	16	1.071	1.337	1.512	1.746	2.120	2.583	2.921	3.686	4.015	4.791	16
	17	1.069	1.333	1.508	1.740	2.110	2.567	2.898	3.646	3.965	4.714	17
	18	1.067	1.330	1.504	1.734	2.101	2.552	2.878	3.610	3.922	4.648	18
	19	1.066	1.328	1.500	1.729	2.093	2.539	2.861	3.579	3.883	4.590	19
	20	1.064	1.325	1.497	1.725	2.086	2.528	2.845	3.552	3.850	4.539	20
	21	1.063	1.323	1.494	1.721	2.080	2.518	2.831	3.527	3.819	4.493	21
	22	1.061	1.321	1.492	1.717	2.074	2.508	2.819	3.505	3.792	4.452	22
	23	1.060	1.319	1.489	1.714	2.069	2.500	2.807	3.485	3.768	4.415	23
	24	1.059	1.318	1.487	1.711	2.064	2.492	2.797	3.467	3.745	4.382	24
	25	1.058	1.316	1.485	1.708	2.060	2.485	2.787	3.450	3.725	4.352	25
	26	1.058	1.315	1.483	1.706	2.056	2.479	2.779	3.435	3.707	4.324	26
	27	1.057	1.314	1.482	1.703	2.052	2.473	2.771	3.421	3.690	4.299	27
	28	1.056	1.313	1.480	1.701	2.048	2.467	2.763	3.408	3.674	4.275	28
	29	1.055	1.311	1.479	1.699	2.045	2.462	2.756	3.396	3.659	4.254	29
	30	1.055	1.310	1.477	1.697	2.042	2.457	2.750	3.385	3.646	4.234	30
	31	1.054	1.309	1.476	1.696	2.040	2.453	2.744	3.375	3.633	4.216	31
	32	1.054	1.309	1.475	1.694	2.037	2.449	2.738	3.365	3.622	4.198	32
	33	1.053	1.308	1.474	1.692	2.035	2.445	2.733	3.356	3.611	4.182	33
	34	1.052	1.307	1.473	1.691	2.032	2.441	2.728	3.348	3.601	4.167	34
	35	1.052	1.306	1.472	1.690	2.030	2.438	2.724	3.340	3.591	4.153	35
	36	1.052	1.306	1.471	1.688	2.028	2.434	2.719	3.333	3.582	4.140	36
	37	1.051	1.305	1.470	1.687	2.026	2.431	2.715	3.326	3.574	4.127	37
	38	1.051	1.304	1.469	1.686	2.024	2.429	2.712	3.319	3.566	4.116	38
	39	1.050	1.304	1.468	1.685	2.023	2.426	2.708	3.313	3.558	4.105	39
	40	1.050	1.303	1.468	1.684	2.021	2.423	2.704	3.307	3.551	4.094	40
	41	1.050	1.303	1.467	1.683	2.020	2.421	2.701	3.301	3.544	4.084	41
	42	1.049	1.302	1.466	1.682	2.018	2.418	2.698	3.296	3.538	4.075	42
	43	1.049	1.302	1.466	1.681	2.017	2.416	2.695	3.291	3.532	4.066	43
	44	1.049	1.301	1.465	1.680	2.015	2.414	2.692	3.286	3.526	4.057	44
	45	1.049	1.301	1.465	1.679	2.014	2.412	2.690	3.281	3.520	4.049	45

Significance (prob-value of alpha)

	1 Tail	0.15	0.10	0.075	0.05	0.025	0.01	0.005	0.001	0.0005	0.0001	
	2 Tails	0.30	0.20	0.150	0.10	0.050	0.02	0.010	0.002	0.0010	0.0002	DF
46	1.048	1.300	1.464	1.679	2.013	2.410	2.687	3.277	3.515	4.042	46	
47	1.048	1.300	1.463	1.678	2.012	2.408	2.685	3.273	3.510	4.034	47	
48	1.048	1.299	1.463	1.677	2.011	2.407	2.682	3.269	3.505	4.027	48	
49	1.048	1.299	1.462	1.677	2.010	2.405	2.680	3.265	3.500	4.020	49	
50	1.047	1.299	1.462	1.676	2.009	2.403	2.678	3.261	3.496	4.014	50	
51	1.047	1.298	1.462	1.675	2.008	2.402	2.676	3.258	3.492	4.008	51	
52	1.047	1.298	1.461	1.675	2.007	2.400	2.674	3.255	3.488	4.002	52	
53	1.047	1.298	1.461	1.674	2.006	2.399	2.672	3.251	3.484	3.996	53	
54	1.046	1.297	1.460	1.674	2.005	2.397	2.670	3.248	3.480	3.991	54	
55	1.046	1.297	1.460	1.673	2.004	2.396	2.668	3.245	3.476	3.986	55	
56	1.046	1.297	1.460	1.673	2.003	2.395	2.667	3.242	3.473	3.981	56	
57	1.046	1.297	1.459	1.672	2.002	2.394	2.665	3.239	3.470	3.976	57	
58	1.046	1.296	1.459	1.672	2.002	2.392	2.663	3.237	3.466	3.971	58	
59	1.046	1.296	1.459	1.671	2.001	2.391	2.662	3.234	3.463	3.966	59	
60	1.045	1.296	1.458	1.671	2.000	2.390	2.660	3.232	3.460	3.962	60	
61	1.045	1.296	1.458	1.670	2.000	2.389	2.659	3.229	3.457	3.958	61	
62	1.045	1.295	1.458	1.670	1.999	2.388	2.657	3.227	3.454	3.954	62	
63	1.045	1.295	1.457	1.669	1.998	2.387	2.656	3.225	3.452	3.950	63	
64	1.045	1.295	1.457	1.669	1.998	2.386	2.655	3.223	3.449	3.946	64	
65	1.045	1.295	1.457	1.669	1.997	2.385	2.654	3.220	3.447	3.942	65	
66	1.045	1.295	1.456	1.668	1.997	2.384	2.652	3.218	3.444	3.939	66	
67	1.045	1.294	1.456	1.668	1.996	2.383	2.651	3.216	3.442	3.935	67	
68	1.044	1.294	1.456	1.668	1.995	2.382	2.650	3.214	3.439	3.932	68	
69	1.044	1.294	1.456	1.667	1.995	2.382	2.649	3.213	3.437	3.929	69	
70	1.044	1.294	1.456	1.667	1.994	2.381	2.648	3.211	3.435	3.926	70	
71	1.044	1.294	1.455	1.667	1.994	2.380	2.647	3.209	3.433	3.923	71	
72	1.044	1.293	1.455	1.666	1.993	2.379	2.646	3.207	3.431	3.920	72	
73	1.044	1.293	1.455	1.666	1.993	2.379	2.645	3.206	3.429	3.917	73	
74	1.044	1.293	1.455	1.666	1.993	2.378	2.644	3.204	3.427	3.914	74	
75	1.044	1.293	1.454	1.665	1.992	2.377	2.643	3.202	3.425	3.911	75	
76	1.044	1.293	1.454	1.665	1.992	2.376	2.642	3.201	3.423	3.909	76	
77	1.043	1.293	1.454	1.665	1.991	2.376	2.641	3.199	3.421	3.906	77	
78	1.043	1.292	1.454	1.665	1.991	2.375	2.640	3.198	3.420	3.904	78	
79	1.043	1.292	1.454	1.664	1.990	2.374	2.640	3.197	3.418	3.901	79	
80	1.043	1.292	1.453	1.664	1.990	2.374	2.639	3.195	3.416	3.899	80	
81	1.043	1.292	1.453	1.664	1.990	2.373	2.638	3.194	3.415	3.896	81	
82	1.043	1.292	1.453	1.664	1.989	2.373	2.637	3.193	3.413	3.894	82	
83	1.043	1.292	1.453	1.663	1.989	2.372	2.636	3.191	3.412	3.892	83	
84	1.043	1.292	1.453	1.663	1.989	2.372	2.636	3.190	3.410	3.890	84	
85	1.043	1.292	1.453	1.663	1.988	2.371	2.635	3.189	3.409	3.888	85	
86	1.043	1.291	1.453	1.663	1.988	2.370	2.634	3.188	3.407	3.886	86	
87	1.043	1.291	1.452	1.663	1.988	2.370	2.634	3.187	3.406	3.884	87	
88	1.043	1.291	1.452	1.662	1.987	2.369	2.633	3.185	3.405	3.882	88	
89	1.043	1.291	1.452	1.662	1.987	2.369	2.632	3.184	3.403	3.880	89	
90	1.042	1.291	1.452	1.662	1.987	2.368	2.632	3.183	3.402	3.878	90	

Significance (prob-value of alpha)

1 Tail	0.15	0.10	0.075	0.05	0.025	0.01	0.005	0.001	0.0005	0.0001	
2 Tails	0.30	0.20	0.150	0.10	0.050	0.02	0.010	0.002	0.0010	0.0002	DF
91	1.042	1.291	1.452	1.662	1.986	2.368	2.631	3.182	3.401	3.876	91
92	1.042	1.291	1.452	1.662	1.986	2.368	2.630	3.181	3.399	3.874	92
93	1.042	1.291	1.452	1.661	1.986	2.367	2.630	3.180	3.398	3.873	93
94	1.042	1.291	1.451	1.661	1.986	2.367	2.629	3.179	3.397	3.871	94
95	1.042	1.291	1.451	1.661	1.985	2.366	2.629	3.178	3.396	3.869	95
96	1.042	1.290	1.451	1.661	1.985	2.366	2.628	3.177	3.395	3.868	96
97	1.042	1.290	1.451	1.661	1.985	2.365	2.627	3.176	3.394	3.866	97
98	1.042	1.290	1.451	1.661	1.984	2.365	2.627	3.175	3.393	3.865	98
99	1.042	1.290	1.451	1.660	1.984	2.365	2.626	3.175	3.392	3.863	99
100	1.042	1.290	1.451	1.660	1.984	2.364	2.626	3.174	3.390	3.862	100
101	1.042	1.290	1.451	1.660	1.984	2.364	2.625	3.173	3.389	3.860	101
102	1.042	1.290	1.450	1.660	1.983	2.363	2.625	3.172	3.388	3.859	102
103	1.042	1.290	1.450	1.660	1.983	2.363	2.624	3.171	3.388	3.857	103
104	1.042	1.290	1.450	1.660	1.983	2.363	2.624	3.170	3.387	3.856	104
105	1.042	1.290	1.450	1.659	1.983	2.362	2.623	3.170	3.386	3.855	105
106	1.042	1.290	1.450	1.659	1.983	2.362	2.623	3.169	3.385	3.853	106
107	1.041	1.290	1.450	1.659	1.982	2.362	2.623	3.168	3.384	3.852	107
108	1.041	1.289	1.450	1.659	1.982	2.361	2.622	3.167	3.383	3.851	108
109	1.041	1.289	1.450	1.659	1.982	2.361	2.622	3.167	3.382	3.849	109
110	1.041	1.289	1.450	1.659	1.982	2.361	2.621	3.166	3.381	3.848	110
111	1.041	1.289	1.450	1.659	1.982	2.360	2.621	3.165	3.380	3.847	111
112	1.041	1.289	1.449	1.659	1.981	2.360	2.620	3.165	3.380	3.846	112
113	1.041	1.289	1.449	1.658	1.981	2.360	2.620	3.164	3.379	3.845	113
114	1.041	1.289	1.449	1.658	1.981	2.360	2.620	3.163	3.378	3.844	114
115	1.041	1.289	1.449	1.658	1.981	2.359	2.619	3.163	3.377	3.842	115
116	1.041	1.289	1.449	1.658	1.981	2.359	2.619	3.162	3.376	3.841	116
117	1.041	1.289	1.449	1.658	1.980	2.359	2.619	3.161	3.376	3.840	117
118	1.041	1.289	1.449	1.658	1.980	2.358	2.618	3.161	3.375	3.839	118
119	1.041	1.289	1.449	1.658	1.980	2.358	2.618	3.160	3.374	3.838	119
120	1.041	1.289	1.449	1.658	1.980	2.358	2.617	3.160	3.373	3.837	120
121	1.041	1.289	1.449	1.658	1.980	2.358	2.617	3.159	3.373	3.836	121
122	1.041	1.289	1.449	1.657	1.980	2.357	2.617	3.158	3.372	3.835	122
123	1.041	1.288	1.449	1.657	1.979	2.357	2.616	3.158	3.371	3.834	123
124	1.041	1.288	1.449	1.657	1.979	2.357	2.616	3.157	3.371	3.833	124
125	1.041	1.288	1.448	1.657	1.979	2.357	2.616	3.157	3.370	3.832	125
126	1.041	1.288	1.448	1.657	1.979	2.356	2.615	3.156	3.369	3.831	126
127	1.041	1.288	1.448	1.657	1.979	2.356	2.615	3.156	3.369	3.830	127
128	1.041	1.288	1.448	1.657	1.979	2.356	2.615	3.155	3.368	3.830	128
129	1.041	1.288	1.448	1.657	1.979	2.356	2.614	3.155	3.368	3.829	129
130	1.041	1.288	1.448	1.657	1.978	2.355	2.614	3.154	3.367	3.828	130
131	1.041	1.288	1.448	1.657	1.978	2.355	2.614	3.154	3.366	3.827	131
132	1.041	1.288	1.448	1.656	1.978	2.355	2.614	3.153	3.366	3.826	132
133	1.040	1.288	1.448	1.656	1.978	2.355	2.613	3.153	3.365	3.825	133
134	1.040	1.288	1.448	1.656	1.978	2.354	2.613	3.152	3.365	3.825	134

Significance (prob-value of alpha)

1 Tail	0.15	0.10	0.075	0.05	0.025	0.01	0.005	0.001	0.0005	0.0001	
2 Tails	0.30	0.20	0.150	0.10	0.050	0.02	0.010	0.002	0.0010	0.0002	DF
135	1.040	1.288	1.448	1.656	1.978	2.354	2.613	3.152	3.364	3.824	135
136	1.040	1.288	1.448	1.656	1.978	2.354	2.612	3.151	3.364	3.823	136
137	1.040	1.288	1.448	1.656	1.977	2.354	2.612	3.151	3.363	3.822	137
138	1.040	1.288	1.448	1.656	1.977	2.354	2.612	3.150	3.362	3.821	138
139	1.040	1.288	1.448	1.656	1.977	2.353	2.612	3.150	3.362	3.821	139
140	1.040	1.288	1.447	1.656	1.977	2.353	2.611	3.149	3.361	3.820	140
141	1.040	1.288	1.447	1.656	1.977	2.353	2.611	3.149	3.361	3.819	141
142	1.040	1.288	1.447	1.656	1.977	2.353	2.611	3.149	3.360	3.818	142
143	1.040	1.287	1.447	1.656	1.977	2.353	2.611	3.148	3.360	3.818	143
144	1.040	1.287	1.447	1.656	1.977	2.353	2.610	3.148	3.359	3.817	144
145	1.040	1.287	1.447	1.655	1.976	2.352	2.610	3.147	3.359	3.816	145
146	1.040	1.287	1.447	1.655	1.976	2.352	2.610	3.147	3.358	3.816	146
147	1.040	1.287	1.447	1.655	1.976	2.352	2.610	3.147	3.358	3.815	147
148	1.040	1.287	1.447	1.655	1.976	2.352	2.609	3.146	3.357	3.814	148
149	1.040	1.287	1.447	1.655	1.976	2.352	2.609	3.146	3.357	3.814	149
150	1.040	1.287	1.447	1.655	1.976	2.351	2.609	3.145	3.357	3.813	150
151	1.040	1.287	1.447	1.655	1.976	2.351	2.609	3.145	3.356	3.812	151
152	1.040	1.287	1.447	1.655	1.976	2.351	2.609	3.145	3.356	3.812	152
153	1.040	1.287	1.447	1.655	1.976	2.351	2.608	3.144	3.355	3.811	153
154	1.040	1.287	1.447	1.655	1.975	2.351	2.608	3.144	3.355	3.811	154
155	1.040	1.287	1.447	1.655	1.975	2.351	2.608	3.144	3.354	3.810	155
156	1.040	1.287	1.447	1.655	1.975	2.350	2.608	3.143	3.354	3.809	156
157	1.040	1.287	1.447	1.655	1.975	2.350	2.608	3.143	3.354	3.809	157
158	1.040	1.287	1.447	1.655	1.975	2.350	2.607	3.143	3.353	3.808	158
159	1.040	1.287	1.447	1.654	1.975	2.350	2.607	3.142	3.353	3.808	159
160	1.040	1.287	1.446	1.654	1.975	2.350	2.607	3.142	3.352	3.807	160
161	1.040	1.287	1.446	1.654	1.975	2.350	2.607	3.142	3.352	3.806	161
162	1.040	1.287	1.446	1.654	1.975	2.350	2.607	3.141	3.352	3.806	162
163	1.040	1.287	1.446	1.654	1.975	2.349	2.606	3.141	3.351	3.805	163
164	1.040	1.287	1.446	1.654	1.975	2.349	2.606	3.141	3.351	3.805	164
165	1.040	1.287	1.446	1.654	1.974	2.349	2.606	3.140	3.350	3.804	165
166	1.040	1.287	1.446	1.654	1.974	2.349	2.606	3.140	3.350	3.804	166
167	1.040	1.287	1.446	1.654	1.974	2.349	2.606	3.140	3.350	3.803	167
168	1.040	1.287	1.446	1.654	1.974	2.349	2.605	3.139	3.349	3.803	168
169	1.040	1.287	1.446	1.654	1.974	2.349	2.605	3.139	3.349	3.802	169
170	1.040	1.287	1.446	1.654	1.974	2.348	2.605	3.139	3.349	3.802	170
171	1.040	1.287	1.446	1.654	1.974	2.348	2.605	3.139	3.348	3.801	171
172	1.040	1.286	1.446	1.654	1.974	2.348	2.605	3.138	3.348	3.801	172
173	1.040	1.286	1.446	1.654	1.974	2.348	2.605	3.138	3.348	3.800	173
174	1.040	1.286	1.446	1.654	1.974	2.348	2.604	3.138	3.347	3.800	174
175	1.040	1.286	1.446	1.654	1.974	2.348	2.604	3.137	3.347	3.799	175
176	1.039	1.286	1.446	1.654	1.974	2.348	2.604	3.137	3.347	3.799	176
177	1.039	1.286	1.446	1.654	1.973	2.348	2.604	3.137	3.346	3.798	177
178	1.039	1.286	1.446	1.653	1.973	2.347	2.604	3.137	3.346	3.798	178
179	1.039	1.286	1.446	1.653	1.973	2.347	2.604	3.136	3.346	3.797	179
180	1.039	1.286	1.446	1.653	1.973	2.347	2.603	3.136	3.345	3.797	180

Significance (prob-value of alpha)

	1 Tail	0.15	0.10	0.075	0.05	0.025	0.01	0.005	0.001	0.0005	0.0001	
	2 Tails	0.30	0.20	0.150	0.10	0.050	0.02	0.010	0.002	0.0010	0.0002	DF
181	1.039	1.286	1.446	1.653	1.973	2.347	2.603	3.136	3.345	3.797	181	
182	1.039	1.286	1.446	1.653	1.973	2.347	2.603	3.136	3.345	3.796	182	
183	1.039	1.286	1.446	1.653	1.973	2.347	2.603	3.135	3.344	3.796	183	
184	1.039	1.286	1.446	1.653	1.973	2.347	2.603	3.135	3.344	3.795	184	
185	1.039	1.286	1.446	1.653	1.973	2.347	2.603	3.135	3.344	3.795	185	
186	1.039	1.286	1.446	1.653	1.973	2.347	2.603	3.135	3.344	3.794	186	
187	1.039	1.286	1.445	1.653	1.973	2.346	2.602	3.134	3.343	3.794	187	
188	1.039	1.286	1.445	1.653	1.973	2.346	2.602	3.134	3.343	3.794	188	
189	1.039	1.286	1.445	1.653	1.973	2.346	2.602	3.134	3.343	3.793	189	
190	1.039	1.286	1.445	1.653	1.973	2.346	2.602	3.134	3.342	3.793	190	
191	1.039	1.286	1.445	1.653	1.972	2.346	2.602	3.133	3.342	3.792	191	
192	1.039	1.286	1.445	1.653	1.972	2.346	2.602	3.133	3.342	3.792	192	
193	1.039	1.286	1.445	1.653	1.972	2.346	2.602	3.133	3.342	3.792	193	
194	1.039	1.286	1.445	1.653	1.972	2.346	2.601	3.133	3.341	3.791	194	
195	1.039	1.286	1.445	1.653	1.972	2.346	2.601	3.133	3.341	3.791	195	
196	1.039	1.286	1.445	1.653	1.972	2.346	2.601	3.132	3.341	3.791	196	
197	1.039	1.286	1.445	1.653	1.972	2.345	2.601	3.132	3.341	3.790	197	
198	1.039	1.286	1.445	1.653	1.972	2.345	2.601	3.132	3.340	3.790	198	
199	1.039	1.286	1.445	1.653	1.972	2.345	2.601	3.132	3.340	3.789	199	
200	1.039	1.286	1.445	1.653	1.972	2.345	2.601	3.131	3.340	3.789	200	
201	1.039	1.286	1.445	1.652	1.972	2.345	2.601	3.131	3.340	3.789	201	
202	1.039	1.286	1.445	1.652	1.972	2.345	2.600	3.131	3.339	3.788	202	
203	1.039	1.286	1.445	1.652	1.972	2.345	2.600	3.131	3.339	3.788	203	
204	1.039	1.286	1.445	1.652	1.972	2.345	2.600	3.131	3.339	3.788	204	
205	1.039	1.286	1.445	1.652	1.972	2.345	2.600	3.130	3.339	3.787	205	
206	1.039	1.286	1.445	1.652	1.972	2.345	2.600	3.130	3.338	3.787	206	
207	1.039	1.286	1.445	1.652	1.971	2.344	2.600	3.130	3.338	3.787	207	
208	1.039	1.286	1.445	1.652	1.971	2.344	2.600	3.130	3.338	3.786	208	
209	1.039	1.286	1.445	1.652	1.971	2.344	2.600	3.130	3.338	3.786	209	
210	1.039	1.286	1.445	1.652	1.971	2.344	2.599	3.129	3.337	3.786	210	
211	1.039	1.286	1.445	1.652	1.971	2.344	2.599	3.129	3.337	3.785	211	
212	1.039	1.286	1.445	1.652	1.971	2.344	2.599	3.129	3.337	3.785	212	
213	1.039	1.286	1.445	1.652	1.971	2.344	2.599	3.129	3.337	3.785	213	
214	1.039	1.286	1.445	1.652	1.971	2.344	2.599	3.129	3.337	3.784	214	
215	1.039	1.286	1.445	1.652	1.971	2.344	2.599	3.129	3.336	3.784	215	
216	1.039	1.285	1.445	1.652	1.971	2.344	2.599	3.128	3.336	3.784	216	
217	1.039	1.285	1.445	1.652	1.971	2.344	2.599	3.128	3.336	3.784	217	
218	1.039	1.285	1.445	1.652	1.971	2.344	2.599	3.128	3.336	3.783	218	
219	1.039	1.285	1.445	1.652	1.971	2.343	2.598	3.128	3.336	3.783	219	
220	1.039	1.285	1.445	1.652	1.971	2.343	2.598	3.128	3.335	3.783	220	
221	1.039	1.285	1.445	1.652	1.971	2.343	2.598	3.128	3.335	3.782	221	
222	1.039	1.285	1.445	1.652	1.971	2.343	2.598	3.127	3.335	3.782	222	
223	1.039	1.285	1.445	1.652	1.971	2.343	2.598	3.127	3.335	3.782	223	
224	1.039	1.285	1.444	1.652	1.971	2.343	2.598	3.127	3.334	3.781	224	
225	1.039	1.285	1.444	1.652	1.971	2.343	2.598	3.127	3.334	3.781	225	

Significance (prob-value of alpha)

1 Tail	0.15	0.10	0.075	0.05	0.025	0.01	0.005	0.001	0.0005	0.0001	
2 Tails	0.30	0.20	0.150	0.10	0.050	0.02	0.010	0.002	0.0010	0.0002	DF
226	1.039	1.285	1.444	1.652	1.971	2.343	2.598	3.127	3.334	3.781	226
227	1.039	1.285	1.444	1.652	1.970	2.343	2.598	3.127	3.334	3.781	227
228	1.039	1.285	1.444	1.652	1.970	2.343	2.598	3.126	3.334	3.780	228
229	1.039	1.285	1.444	1.652	1.970	2.343	2.597	3.126	3.334	3.780	229
230	1.039	1.285	1.444	1.652	1.970	2.343	2.597	3.126	3.333	3.780	230
231	1.039	1.285	1.444	1.651	1.970	2.343	2.597	3.126	3.333	3.780	231
232	1.039	1.285	1.444	1.651	1.970	2.343	2.597	3.126	3.333	3.779	232
233	1.039	1.285	1.444	1.651	1.970	2.342	2.597	3.126	3.333	3.779	233
234	1.039	1.285	1.444	1.651	1.970	2.342	2.597	3.125	3.333	3.779	234
235	1.039	1.285	1.444	1.651	1.970	2.342	2.597	3.125	3.332	3.779	235
236	1.039	1.285	1.444	1.651	1.970	2.342	2.597	3.125	3.332	3.778	236
237	1.039	1.285	1.444	1.651	1.970	2.342	2.597	3.125	3.332	3.778	237
238	1.039	1.285	1.444	1.651	1.970	2.342	2.597	3.125	3.332	3.778	238
239	1.039	1.285	1.444	1.651	1.970	2.342	2.597	3.125	3.332	3.778	239
240	1.039	1.285	1.444	1.651	1.970	2.342	2.596	3.125	3.332	3.777	240
241	1.039	1.285	1.444	1.651	1.970	2.342	2.596	3.124	3.331	3.777	241
242	1.039	1.285	1.444	1.651	1.970	2.342	2.596	3.124	3.331	3.777	242
243	1.039	1.285	1.444	1.651	1.970	2.342	2.596	3.124	3.331	3.777	243
244	1.039	1.285	1.444	1.651	1.970	2.342	2.596	3.124	3.331	3.776	244
245	1.039	1.285	1.444	1.651	1.970	2.342	2.596	3.124	3.331	3.776	245
246	1.039	1.285	1.444	1.651	1.970	2.342	2.596	3.124	3.331	3.776	246
247	1.039	1.285	1.444	1.651	1.970	2.342	2.596	3.124	3.330	3.776	247
248	1.039	1.285	1.444	1.651	1.970	2.341	2.596	3.123	3.330	3.775	248
249	1.039	1.285	1.444	1.651	1.970	2.341	2.596	3.123	3.330	3.775	249
250	1.039	1.285	1.444	1.651	1.969	2.341	2.596	3.123	3.330	3.775	250
251	1.039	1.285	1.444	1.651	1.969	2.341	2.596	3.123	3.330	3.775	251
252	1.039	1.285	1.444	1.651	1.969	2.341	2.595	3.123	3.330	3.774	252
253	1.039	1.285	1.444	1.651	1.969	2.341	2.595	3.123	3.329	3.774	253
254	1.039	1.285	1.444	1.651	1.969	2.341	2.595	3.123	3.329	3.774	254
255	1.039	1.285	1.444	1.651	1.969	2.341	2.595	3.122	3.329	3.774	255
256	1.039	1.285	1.444	1.651	1.969	2.341	2.595	3.122	3.329	3.774	256
257	1.039	1.285	1.444	1.651	1.969	2.341	2.595	3.122	3.329	3.773	257
258	1.039	1.285	1.444	1.651	1.969	2.341	2.595	3.122	3.329	3.773	258
259	1.039	1.285	1.444	1.651	1.969	2.341	2.595	3.122	3.328	3.773	259
260	1.039	1.285	1.444	1.651	1.969	2.341	2.595	3.122	3.328	3.773	260
261	1.038	1.285	1.444	1.651	1.969	2.341	2.595	3.122	3.328	3.773	261
262	1.038	1.285	1.444	1.651	1.969	2.341	2.595	3.122	3.328	3.772	262
263	1.038	1.285	1.444	1.651	1.969	2.341	2.595	3.122	3.328	3.772	263
264	1.038	1.285	1.444	1.651	1.969	2.341	2.595	3.121	3.328	3.772	264
265	1.038	1.285	1.444	1.651	1.969	2.341	2.595	3.121	3.328	3.772	265
266	1.038	1.285	1.444	1.651	1.969	2.340	2.594	3.121	3.327	3.772	266
267	1.038	1.285	1.444	1.651	1.969	2.340	2.594	3.121	3.327	3.771	267
268	1.038	1.285	1.444	1.651	1.969	2.340	2.594	3.121	3.327	3.771	268
269	1.038	1.285	1.444	1.651	1.969	2.340	2.594	3.121	3.327	3.771	269

Significance (prob-value of alpha)

	0.15	0.10	0.075	0.05	0.025	0.01	0.005	0.001	0.0005	0.0001	
1 Tail											
2 Tails	0.30	0.20	0.150	0.10	0.050	0.02	0.010	0.002	0.0010	0.0002	DF
270	1.038	1.285	1.444	1.651	1.969	2.340	2.594	3.121	3.327	3.771	270
271	1.038	1.285	1.444	1.650	1.969	2.340	2.594	3.121	3.327	3.771	271
272	1.038	1.285	1.444	1.650	1.969	2.340	2.594	3.120	3.327	3.770	272
273	1.038	1.285	1.444	1.650	1.969	2.340	2.594	3.120	3.327	3.770	273
274	1.038	1.285	1.444	1.650	1.969	2.340	2.594	3.120	3.326	3.770	274
275	1.038	1.285	1.444	1.650	1.969	2.340	2.594	3.120	3.326	3.770	275
276	1.038	1.285	1.444	1.650	1.969	2.340	2.594	3.120	3.326	3.770	276
277	1.038	1.285	1.444	1.650	1.969	2.340	2.594	3.120	3.326	3.769	277
278	1.038	1.285	1.444	1.650	1.969	2.340	2.594	3.120	3.326	3.769	278
279	1.038	1.285	1.444	1.650	1.969	2.340	2.594	3.120	3.326	3.769	279
280	1.038	1.285	1.443	1.650	1.968	2.340	2.594	3.120	3.326	3.769	280
281	1.038	1.285	1.443	1.650	1.968	2.340	2.593	3.119	3.325	3.769	281
282	1.038	1.285	1.443	1.650	1.968	2.340	2.593	3.119	3.325	3.768	282
283	1.038	1.285	1.443	1.650	1.968	2.340	2.593	3.119	3.325	3.768	283
284	1.038	1.285	1.443	1.650	1.968	2.340	2.593	3.119	3.325	3.768	284
285	1.038	1.285	1.443	1.650	1.968	2.340	2.593	3.119	3.325	3.768	285
286	1.038	1.285	1.443	1.650	1.968	2.339	2.593	3.119	3.325	3.768	286
287	1.038	1.285	1.443	1.650	1.968	2.339	2.593	3.119	3.325	3.768	287
288	1.038	1.284	1.443	1.650	1.968	2.339	2.593	3.119	3.325	3.767	288
289	1.038	1.284	1.443	1.650	1.968	2.339	2.593	3.119	3.325	3.767	289
290	1.038	1.284	1.443	1.650	1.968	2.339	2.593	3.119	3.324	3.767	290
291	1.038	1.284	1.443	1.650	1.968	2.339	2.593	3.118	3.324	3.767	291
292	1.038	1.284	1.443	1.650	1.968	2.339	2.593	3.118	3.324	3.767	292
293	1.038	1.284	1.443	1.650	1.968	2.339	2.593	3.118	3.324	3.767	293
294	1.038	1.284	1.443	1.650	1.968	2.339	2.593	3.118	3.324	3.766	294
295	1.038	1.284	1.443	1.650	1.968	2.339	2.593	3.118	3.324	3.766	295
296	1.038	1.284	1.443	1.650	1.968	2.339	2.593	3.118	3.324	3.766	296
297	1.038	1.284	1.443	1.650	1.968	2.339	2.592	3.118	3.324	3.766	297
298	1.038	1.284	1.443	1.650	1.968	2.339	2.592	3.118	3.323	3.766	298
299	1.038	1.284	1.443	1.650	1.968	2.339	2.592	3.118	3.323	3.766	299
300	1.038	1.284	1.443	1.650	1.968	2.339	2.592	3.118	3.323	3.765	300
Z ∞	1.036	1.282	1.440	1.645	1.960	2.326	2.576	3.090	3.291	3.719	∞