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..... MONOGRAPH

TABLES OF FACTORS FOR ONE-SIDED TOLERANCE
LIMITS FOR A NORMAL DISTRIBUTION

by
Donald B. Owen

APRIL 1958

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Statistical Division

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ABSTRACT

This monograph presents tables of factors for a one-sided tolerance limit computed from a sample drawn from a normal distribution. The tables originate from four sources, and the accuracy of the tables from these sources is compared. The factors are percentage points of the noncentral t-distribution, and as such can be used in designing certain acceptance sampling plans.

TABLES OF FACTORS FOR ONE-SIDED TOLERANCE LIMITS FOR A NORMAL DISTRIBUTION

Tables are given here for applying a method for finding a one-sided interval such that at least a proportion, P , of a normal population is covered a certain proportion, γ , of the time when a sample of n measurements from the population is available. A value of k is given in the tables such that "at least a proportion, P , of the normal population is less than $\bar{x} + ks$ with confidence γ ," where a random sample $x_1, x_2, \dots, x_n$ from the population has been taken; and

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i ,$$

and

$$s^2 = \frac{1}{n-1} \sum_{i=1}^n (x_i - \bar{x})^2 .$$

The value $\bar{x} + ks$ is called an upper tolerance limit. For a lower tolerance limit, $\bar{x} - ks$ is used, and the statement is "at least a proportion, P , of the population is greater than $\bar{x} - ks$ with confidence γ ." When a statement based on a sample is said to be true with confidence γ , the meaning is that in the long run, over many, many samples, 100γ percent of the statements made will be true if the assumptions about the population and sample are correct. The method discussed here assumes the sample is chosen randomly from the population and the population is normally distributed; i. e., the probability that the random variable X is less than a constant, c , say, is given by

$$\frac{1}{\sqrt{2\pi} \sigma} \int_{-\infty}^c \exp \left[-\frac{1}{2} \frac{(x - \mu)^2}{\sigma^2} \right] dx ,$$

where μ and σ are constants associated with the population and are the population mean and the population standard deviation, respectively. It is assumed that the constants μ and σ are unknown. If either μ or σ or both were known, more efficient methods could be used than the one upon which the tables given here are based. If μ , or σ , or both are known, see Appendix C.

If a two-sided tolerance limit is required, the reader is referred to Chapter 2 of Reference 1. Another type of tolerance limit is also possible where the average coverage of the tolerance limits is the given percentage of the population P , i. e., does not involve a confidence coefficient γ . See Appendix D for a short discussion of this type of tolerance limit. If nothing is known about the population from which the sample is drawn except that it is continuous, the method reviewed in Reference 2 is recommended.

Four tables are given here. Tables I and II are based on tabulations of the underlying distribution function and as such should be considered the more accurate tables. Appendix A derives and discusses this distribution. Where Tables I and II overlap, the differences in their values of k are small. Hence, wherever possible, Tables I and II should be used to obtain the constant k . Table III is based on an approximation method widely used in applications and appears to underestimate k in many instances. Table IV is based on another approximate procedure which appears most often to overestimate k . Appendix B gives more details of this comparison of the accuracy of the tables.

To find a value of k from Tables I through IV, first choose P , the proportion of the population to be covered, and γ , the confidence required in the statement. If possible, the choices of P and γ should be made while consulting the Listing of Tables for Given Values of P and γ (on p 7) to determine which table(s) to use. Then check the sample sizes corresponding to the table or tables:

Table I has $n = 5(1)10, 17, 37, 145, \infty$.

Table II has $n = 3(1)25(5)50$ and ∞ for $\gamma = 0.75, 0.90$, and 0.95 and starts with $n = 6$ for $\gamma = 0.99$ and 0.995 .

Table III has $n = 2(1)200(5)400(25)1000$ and ∞ .

Table IV has $n = 2(1)102(2)180(5)300(10)400(25)750(50)1000$ and ∞ .

Note that some entries in Table III are preceded by a B. In some instances, these entries are satisfactory and B may be ignored. In other instances, the result is obviously not consistent with its neighbors and should be ignored. Some entries are replaced by A or -. In these cases, the approximation formula could not give a correct result. Appendix A gives the exact meaning of the symbols A, B, and -.

If more than one table has an entry for the γ , P , and n needed, the choice of the tables should follow this preference. If Table I or II is available, use either of them. If Table I or II is not available, Table III probably will give an underestimate of k for $\gamma \leq 0.95$ and an overestimate for $\gamma \geq 0.99$. Table IV will probably give an underestimate of k when $P = 0.875$ and give an overestimate of k for other P values.

In Table I, it is possible to interpolate for other values of P than those listed and for other values of n . Interpolation with respect to n is accomplished best by making the interpolation with respect to $1/(n-1)$. Interpolation with respect to P is accomplished best by interpolating with respect to the normal deviate corresponding to P (i.e., with respect to K_P as K_P is defined in Appendix A). In the other tables, interpolation with respect to n is possible directly. In Table II it is recommended that the corresponding normal deviate be used for interpolation with respect to P , as recommended for Table I. Interpolation with respect to γ is not recommended in Table II. Interpolation with respect to P and γ in Tables III and IV is not recommended. Rather, if an untabulated value is needed, it is better to use one of the methods of Appendix A to compute the result directly.

The tables given here may also be used for designing sampling acceptance plans with a one-sided criterion for rejection. For additional details of this application see pages 10-16 in Resnikoff and Lieberman's book (Reference 3).

Listing of Tables for Given Values of P and γ .

P	γ							
	0.700	0.750	0.800	0.900	0.950	0.990	0.995	0.999
0.7000	III		III	III	I, III	III		III
0.7500		II		II	I, II	II	II	
0.8000	III		III	III	I, III	III		III
0.8500		II		II	I, II	II	II	
0.8750		IV		IV	I, IV	IV		
0.9000	III	II	III	II, III	I, II, III	II, III	II	III
0.9350		II		II	I, II	II	II	
0.9500	III	IV	III	III, IV	I, III, IV	III, IV		III
0.9600		II		II	I, II	II	II	
0.9750		II, IV		II, IV	I, II, IV	II, IV	II	
0.9900	III	II	III	II, III	I, II, III	II, III	II	III
0.9950		IV		IV	I, IV	IV		
0.9960		II		II	I, II	II	II	
0.9975		II		II	I, II	II	II	
0.9990	III	II	III	II, III	I, II, III	II, III	II	III
0.9995		IV		IV	I, IV	IV		

TABLE I

Johnson and Welch's Table: $\gamma = 0.95$

n	P							
	0.7000	0.7500	0.8000	0.8500	0.8750	0.9000	0.9350	0.9500
5	1.861	2.150	2.485	2.890	3.131	3.412	3.920	4.212
6	1.637	1.895	2.191	2.547	2.759	3.008	3.455	3.711
7	1.494	1.733	2.006	2.333	2.528	2.756	3.167	3.400
8	1.393	1.618	1.875	2.183	2.367	2.582	2.968	3.188
9	1.317	1.532	1.779	2.074	2.249	2.454	2.822	3.032
10	1.257	1.465	1.703	1.988	2.157	2.355	2.709	2.911
17	1.035	1.220	1.431	1.681	1.829	2.002	2.311	2.486
37	0.845	1.014	1.205	1.430	1.563	1.717	1.993	2.149
145	0.677	0.834	1.011	1.219	1.340	1.481	1.732	1.874
∞	0.524	0.674	0.842	1.036	1.150	1.282	1.514	1.645

n	P							
	0.9600	0.9750	0.9900	0.9950	0.9960	0.9975	0.9990	0.9995
5	4.445	4.916	5.751	6.320	6.497	6.852	7.507	7.976
6	3.920	4.334	5.065	5.566	5.722	6.035	6.611	7.023
7	3.591	3.971	4.644	5.107	5.246	5.537	6.066	6.439
8	3.367	3.724	4.356	4.790	4.921	5.193	5.690	6.041
9	3.202	3.542	4.144	4.557	4.682	4.941	5.414	5.748
10	3.075	3.403	3.981	4.379	4.500	4.749	5.204	5.526
17	2.629	2.913	3.414	3.758	3.864	4.078	4.471	4.750
37	2.276	2.528	2.972	3.275	3.368	3.558	3.904	4.150
145	1.989	2.217	2.617	2.890	2.974	3.144	3.455	3.675
∞	1.751	1.960	2.326	2.576	2.652	2.807	3.090	3.291

TABLE II
Resnikoff and Lieberman's Tables

$$\gamma = 0.75$$

n	P									
	0.7500	0.8500	0.9000	0.9350	0.9600	0.9750	0.9900	0.9960	0.9975	0.9990
3	1.464	2.072	2.501	2.916	3.344	3.725	4.396	4.995	5.282	5.805
4	1.256	1.772	2.134	2.483	2.841	3.162	3.726	4.230	4.470	4.910
5	1.152	1.629	1.961	2.282	2.611	2.904	3.421	3.884	4.104	4.507
6	1.087	1.543	1.860	2.164	2.476	2.754	3.243	3.682	3.891	4.273
7	1.043	1.484	1.791	2.084	2.385	2.653	3.126	3.549	3.750	4.118
8	1.010	1.441	1.740	2.026	2.320	2.582	3.042	3.453	3.649	4.008
9	0.984	1.409	1.702	1.982	2.270	2.527	2.977	3.380	3.572	3.924
10	0.964	1.382	1.671	1.948	2.230	2.483	2.927	3.323	3.512	3.858
11	0.947	1.361	1.646	1.918	2.199	2.448	2.885	3.277	3.463	3.804
12	0.933	1.342	1.624	1.895	2.171	2.418	2.851	3.238	3.422	3.760
13	0.919	1.327	1.606	1.874	2.149	2.393	2.822	3.205	3.388	3.722
14	0.909	1.312	1.591	1.857	2.130	2.371	2.796	3.177	3.358	3.690
15	0.899	1.301	1.577	1.841	2.112	2.352	2.776	3.152	3.332	3.661
16	0.891	1.291	1.566	1.828	2.097	2.335	2.756	3.130	3.309	3.637
17	0.883	1.282	1.554	1.816	2.083	2.321	2.739	3.111	3.289	3.615
18	0.876	1.273	1.544	1.805	2.071	2.308	2.723	3.094	3.271	3.595
19	0.870	1.265	1.536	1.795	2.061	2.296	2.710	3.079	3.255	3.577
20	0.865	1.258	1.528	1.787	2.051	2.285	2.697	3.064	3.240	3.561
21	0.859	1.251	1.520	1.778	2.042	2.275	2.686	3.052	3.226	3.545
22	0.854	1.246	1.514	1.770	2.033	2.266	2.675	3.039	3.214	3.532
23	0.849	1.240	1.508	1.763	2.024	2.257	2.665	3.029	3.202	3.520
24	0.845	1.234	1.502	1.757	2.018	2.250	2.656	3.019	3.191	3.509
25	0.842	1.231	1.496	1.751	2.012	2.242	2.647	3.010	3.182	3.497
30	0.825	1.210	1.475	1.726	1.984	2.212	2.613	2.971	3.141	3.454
35	0.812	1.196	1.458	1.708	1.963	2.190	2.588	2.943	3.112	3.421
40	0.803	1.184	1.445	1.693	1.947	2.172	2.568	2.921	3.088	3.395
45	0.795	1.175	1.435	1.682	1.934	2.159	2.552	2.902	3.069	3.375
50	0.788	1.167	1.426	1.672	1.923	2.146	2.538	2.888	3.054	3.358
∞	0.674	1.036	1.282	1.514	1.751	1.960	2.326	2.652	2.807	3.090

TABLE II (Cont)

$\gamma = 0.90$

n	P									
	0.7500	0.8500	0.9000	0.9350	0.9600	0.9750	0.9900	0.9960	0.9975	0.9990
3	2.602	3.569	4.258	4.929	5.622	6.243	7.340	8.323	8.792	9.651
4	1.972	2.684	3.187	3.678	4.184	4.637	5.437	6.156	6.500	7.128
5	1.698	2.310	2.742	3.161	3.594	3.981	4.666	5.281	5.573	6.112
6	1.540	2.100	2.494	2.875	3.268	3.620	4.242	4.800	5.066	5.556
7	1.435	1.963	2.333	2.690	3.060	3.389	3.972	4.495	4.744	5.201
8	1.360	1.865	2.219	2.560	2.913	3.226	3.783	4.280	4.518	4.955
9	1.302	1.791	2.133	2.463	2.802	3.106	3.641	4.122	4.351	4.772
10	1.257	1.733	2.065	2.386	2.716	3.011	3.532	3.998	4.220	4.629
11	1.219	1.686	2.012	2.325	2.648	2.936	3.444	3.899	4.115	4.515
12	1.188	1.647	1.966	2.274	2.590	2.872	3.371	3.816	4.030	4.420
13	1.162	1.614	1.928	2.231	2.542	2.820	3.310	3.748	3.957	4.341
14	1.139	1.585	1.895	2.193	2.501	2.774	3.257	3.690	3.895	4.274
15	1.119	1.560	1.866	2.162	2.465	2.735	3.212	3.638	3.842	4.215
16	1.101	1.539	1.842	2.134	2.433	2.700	3.172	3.594	3.795	4.164
17	1.085	1.519	1.820	2.108	2.406	2.671	3.136	3.555	3.753	4.118
18	1.071	1.501	1.800	2.087	2.381	2.643	3.106	3.519	3.716	4.078
19	1.058	1.485	1.781	2.066	2.358	2.618	3.078	3.487	3.683	4.041
20	1.046	1.471	1.765	2.048	2.337	2.597	3.052	3.459	3.653	4.009
21	1.035	1.458	1.750	2.031	2.320	2.575	3.028	3.432	3.625	3.979
22	1.025	1.446	1.736	2.016	2.302	2.557	3.007	3.409	3.600	3.952
23	1.016	1.435	1.724	2.002	2.287	2.540	2.987	3.387	3.578	3.927
24	1.007	1.424	1.712	1.989	2.272	2.525	2.969	3.367	3.557	3.904
25	0.999	1.415	1.702	1.976	2.258	2.510	2.952	3.348	3.536	3.882
30	0.966	1.375	1.657	1.927	2.204	2.450	2.884	3.271	3.456	3.794
35	0.942	1.340	1.623	1.890	2.163	2.406	2.833	3.214	3.396	3.730
40	0.923	1.323	1.598	1.861	2.131	2.371	2.793	3.170	3.350	3.679
45	0.908	1.304	1.577	1.838	2.105	2.344	2.762	3.135	3.313	3.638
50	0.894	1.288	1.560	1.819	2.084	2.320	2.735	3.105	3.282	3.604
∞	0.674	1.036	1.282	1.514	1.751	1.960	2.326	2.652	2.807	3.090

TABLE II (Cont)

 $\gamma = 0.95$

n	P									
	0.7500	0.8500	0.9000	0.9350	0.9600	0.9750	0.9900	0.9960	0.9975	0.9990
3	3.804	5.174	6.158	7.110	8.100	8.986	10.552	11.957	12.628	13.857
4	2.619	3.520	4.163	4.788	5.436	6.015	7.042	7.962	8.407	9.215
5	2.149	2.885	3.407	3.914	4.437	4.908	5.741	6.488	6.847	7.501
6	1.895	2.547	3.006	3.452	3.915	4.330	5.062	5.719	6.034	6.612
7	1.732	2.333	2.755	3.165	3.589	3.969	4.641	5.245	5.534	6.061
8	1.617	2.184	2.582	2.968	3.367	3.723	4.353	4.920	5.192	5.686
9	1.532	2.073	2.454	2.822	3.202	3.542	4.143	4.683	4.941	5.414
10	1.465	1.987	2.355	2.709	3.075	3.402	3.981	4.501	4.748	5.203
11	1.411	1.919	2.275	2.619	2.974	3.291	3.852	4.355	4.596	5.036
12	1.366	1.862	2.210	2.546	2.891	3.201	3.747	4.237	4.471	4.900
13	1.329	1.816	2.155	2.484	2.822	3.125	3.659	4.138	4.367	4.787
14	1.296	1.775	2.108	2.431	2.764	3.060	3.585	4.054	4.279	4.690
15	1.268	1.740	2.068	2.385	2.713	3.005	3.520	3.982	4.202	4.607
16	1.242	1.708	2.032	2.346	2.668	2.956	3.463	3.918	4.136	4.534
17	1.220	1.681	2.001	2.311	2.629	2.913	3.415	3.863	4.078	4.471
18	1.200	1.656	1.974	2.279	2.594	2.875	3.370	3.814	4.026	4.415
19	1.183	1.634	1.949	2.251	2.563	2.840	3.331	3.770	3.980	4.364
20	1.167	1.615	1.926	2.226	2.534	2.809	3.295	3.729	3.938	4.319
21	1.152	1.597	1.905	2.203	2.509	2.781	3.262	3.694	3.900	4.276
22	1.138	1.580	1.887	2.182	2.486	2.756	3.233	3.661	3.865	4.238
23	1.126	1.565	1.869	2.162	2.464	2.732	3.206	3.630	3.833	4.204
24	1.114	1.551	1.853	2.144	2.443	2.711	3.181	3.603	3.803	4.171
25	1.103	1.537	1.838	2.127	2.425	2.691	3.158	3.576	3.776	4.143
30	1.059	1.484	1.778	2.060	2.350	2.608	3.064	3.472	3.666	4.022
35	1.025	1.443	1.732	2.010	2.295	2.548	2.994	3.393	3.585	3.934
40	0.999	1.412	1.697	1.971	2.251	2.501	2.941	3.334	3.522	3.866
45	0.978	1.387	1.669	1.939	2.217	2.463	2.897	3.286	3.472	3.811
50	0.961	1.366	1.646	1.914	2.188	2.432	2.863	3.247	3.430	3.766
∞	0.674	1.036	1.282	1.514	1.751	1.960	2.326	2.652	2.807	3.090

TABLE II (Cont)

$$\gamma = 0.99$$

n	P									
	0.7500	0.8500	0.9000	0.9350	0.9600	0.9750	0.9900	0.9960	0.9975	0.9990
6	2.849	3.760	4.408	5.044	5.705	6.287	7.334	8.277	8.718	9.540
7	2.490	3.293	3.856	4.413	4.988	5.499	6.411	7.233	7.622	8.348
8	2.252	2.982	3.496	3.999	4.522	4.906	5.811	6.558	6.911	7.566
9	2.085	2.762	3.242	3.705	4.189	4.620	5.389	6.081	6.411	7.014
10	1.954	2.597	3.048	3.489	3.943	4.352	5.075	5.724	6.034	6.603
11	1.854	2.465	2.897	3.318	3.752	4.143	4.828	5.448	5.745	6.284
12	1.771	2.359	2.773	3.179	3.599	3.969	4.633	5.229	5.512	6.032
13	1.702	2.275	2.677	3.067	3.471	3.834	4.472	5.044	5.320	5.826
14	1.645	2.202	2.592	2.973	3.365	3.714	4.336	4.894	5.161	5.651
15	1.596	2.139	2.521	2.892	3.274	3.615	4.224	4.767	5.029	5.507
16	1.553	2.086	2.458	2.822	3.195	3.530	4.124	4.656	4.908	5.374
17	1.514	2.037	2.405	2.759	3.128	3.457	4.038	4.560	4.807	5.268
18	1.481	1.996	2.357	2.708	3.067	3.388	3.961	4.474	4.717	5.167
19	1.450	1.958	2.315	2.659	3.014	3.329	3.893	4.396	4.639	5.078
20	1.424	1.925	2.275	2.614	2.965	3.279	3.832	4.330	4.565	5.003
21	1.397	1.893	2.241	2.576	2.923	3.231	3.776	4.268	4.500	4.932
22	1.376	1.867	2.208	2.540	2.882	3.188	3.727	4.211	4.441	4.866
23	1.355	1.841	2.170	2.508	2.845	3.146	3.680	4.160	4.387	4.806
24	1.336	1.817	2.154	2.478	2.813	3.110	3.638	4.115	4.339	4.755
25	1.319	1.796	2.129	2.449	2.781	3.077	3.601	4.069	4.295	4.706
30	1.249	1.708	2.029	2.340	2.659	2.944	3.446	3.898	4.113	4.508
35	1.195	1.645	1.957	2.260	2.569	2.845	3.334	3.772	3.982	4.364
40	1.154	1.597	1.902	2.197	2.501	2.771	3.250	3.677	3.881	4.255
45	1.122	1.556	1.857	2.148	2.446	2.712	3.181	3.599	3.801	4.168
50	1.096	1.524	1.821	2.107	2.402	2.663	3.124	3.538	3.735	4.096
∞	0.674	1.036	1.282	1.514	1.751	1.960	2.326	2.652	2.807	3.090

TABLE II (Cont)

$\gamma = 0.995$

n	P									
	0.7500	0.8500	0.9000	0.9350	0.9600	0.9750	0.9900	0.9960	0.9975	0.9990
6	3.332	4.382	5.135	5.859	6.618	7.303	8.535	9.608	10.133	11.091
7	2.858	3.764	4.413	5.027	5.694	6.272	7.284	8.240	8.680	9.490
8	2.554	3.367	3.941	4.490	5.083	5.597	6.525	7.343	7.734	8.465
9	2.341	3.082	3.611	4.123	4.655	5.138	5.987	6.741	7.102	7.778
10	2.175	2.875	3.368	3.842	4.337	4.791	5.581	6.294	6.641	7.257
11	2.050	2.710	3.177	3.632	4.100	4.529	5.276	5.947	6.277	6.865
12	1.947	2.579	3.024	3.465	3.916	4.317	5.026	5.671	5.984	6.542
13	1.864	2.474	2.908	3.322	3.757	4.151	4.832	5.452	5.753	6.293
14	1.794	2.386	2.805	3.209	3.629	4.007	4.674	5.263	5.552	6.083
15	1.735	2.314	2.717	3.112	3.519	3.880	4.531	5.111	5.385	5.893
16	1.682	2.244	2.640	3.025	3.424	3.776	4.406	4.977	5.249	5.741
17	1.639	2.191	2.576	2.953	3.340	3.687	4.302	4.860	5.122	5.605
18	1.597	2.138	2.522	2.886	3.266	3.608	4.213	4.753	5.015	5.491
19	1.560	2.093	2.468	2.831	3.206	3.540	4.130	4.665	4.915	5.385
20	1.530	2.054	2.424	2.778	3.147	3.478	4.058	4.581	4.832	5.296
21	1.500	2.018	2.383	2.733	3.095	3.421	3.994	4.510	4.758	5.205
22	1.473	1.984	2.341	2.691	3.047	3.366	3.934	4.445	4.683	5.129
23	1.450	1.952	2.310	2.650	3.003	3.320	3.881	4.383	4.625	5.064
24	1.426	1.927	2.278	2.618	2.968	3.279	3.830	4.324	4.566	4.999
25	1.408	1.902	2.247	2.585	2.931	3.238	3.788	4.273	4.513	4.942
30	1.323	1.800	2.131	2.455	2.784	3.080	3.603	4.069	4.299	4.708
35	1.264	1.725	2.047	2.360	2.679	2.967	3.473	3.925	4.144	4.539
40	1.217	1.668	1.984	2.289	2.599	2.878	3.371	3.812	4.027	4.410
45	1.178	1.622	1.932	2.230	2.536	2.809	3.293	3.726	3.932	4.312
50	1.148	1.586	1.890	2.184	2.485	2.755	3.229	3.653	3.857	4.228
∞	0.674	1.036	1.282	1.514	1.751	1.960	2.326	2.652	2.807	3.090

TABLE III
Factors from the Approximation Formula

$P = 0.700$

n	γ		
	0.700	0.800	0.900
2	1.06652	B1.69621	B6.34664
3	0.90986	1.23626	B2.00946
4	0.84267	1.08706	B1.56350
5	0.80209	1.00515	B1.36890
6	0.77401	0.95118	1.25369
7	0.75305	0.91208	1.17531
8	0.73661	0.88203	1.11753
9	0.72326	0.85801	1.07266
10	0.71214	0.83822	1.03652
11	0.70269	0.82155	1.00659
12	0.69453	0.80726	0.98129
13	0.68739	0.79483	0.95953
14	0.68108	0.78389	0.94057
15	0.67544	0.77417	0.92384
16	0.67037	0.76545	0.90895
17	0.66577	0.75757	0.89558
18	0.66158	0.75041	0.88349
19	0.65773	0.74387	0.87249
20	0.65419	0.73786	0.86243
21	0.65092	0.73231	0.85318
22	0.64788	0.72717	0.84463
23	0.64505	0.72238	0.83671
24	0.64240	0.71792	0.82934
25	0.63992	0.71374	0.82246
26	0.63759	0.70982	0.81602
27	0.63539	0.70613	0.80997
28	0.63332	0.70265	0.80427
29	0.63136	0.69936	0.79890
30	0.62950	0.69624	0.79382
31	0.62773	0.69329	0.78901
32	0.62605	0.69048	0.78445
33	0.62444	0.68780	0.78011
34	0.62291	0.68525	0.77597
35	0.62145	0.68281	0.77203
36	0.62005	0.68048	0.76826
37	0.61871	0.67825	0.76466
38	0.61742	0.67611	0.76121
39	0.61619	0.67405	0.75791
40	0.61500	0.67208	0.75473

TABLE III (Cont)

P = 0.700

n	Y		
	0.700	0.800	0.900
41	0.61386	0.67018	0.75168
42	0.61275	0.66836	0.74875
43	0.61169	0.66659	0.74592
44	0.61067	0.66490	0.74320
45	0.60968	0.66326	0.74058
46	0.60872	0.66167	0.73804
47	0.60780	0.66014	0.73559
48	0.60690	0.65866	0.73323
49	0.60603	0.65722	0.73094
50	0.60519	0.65583	0.72872
51	0.60438	0.65449	0.72657
52	0.60359	0.65318	0.72449
53	0.60282	0.65191	0.72247
54	0.60207	0.65068	0.72051
55	0.60134	0.64948	0.71860
56	0.60064	0.64831	0.71675
57	0.59995	0.64718	0.71495
58	0.59928	0.64608	0.71320
59	0.59863	0.64501	0.71149
60	0.59800	0.64396	0.70983
61	0.59738	0.64294	0.70822
62	0.59677	0.64195	0.70664
63	0.59619	0.64098	0.70510
64	0.59561	0.64003	0.70361
65	0.59505	0.63911	0.70214
66	0.59450	0.63820	0.70072
67	0.59396	0.63732	0.69932
68	0.59344	0.63646	0.69796
69	0.59293	0.63562	0.69663
70	0.59243	0.63479	0.69533
71	0.59194	0.63399	0.69405
72	0.59146	0.63320	0.69281
73	0.59099	0.63243	0.69159
74	0.59053	0.63167	0.69040
75	0.59008	0.63093	0.68923
76	0.58963	0.63021	0.68809
77	0.58920	0.62950	0.68697
78	0.58878	0.62880	0.68587
79	0.58836	0.62812	0.68479
80	0.58795	0.62745	0.68374

TABLE III (Cont)

P = 0.700

n	y		
	0.700	0.800	0.900
81	0.58755	0.62679	0.68270
82	0.58716	0.62615	0.68169
83	0.58677	0.62551	0.68069
84	0.58639	0.62489	0.67972
85	0.58602	0.62428	0.67876
86	0.58566	0.62368	0.67781
87	0.58530	0.62309	0.67689
88	0.58494	0.62251	0.67598
89	0.58460	0.62195	0.67509
90	0.58426	0.62139	0.67421
91	0.58392	0.62084	0.67334
92	0.58359	0.62030	0.67250
93	0.58327	0.61977	0.67166
94	0.58295	0.61924	0.67084
95	0.58263	0.61873	0.67004
96	0.58232	0.61822	0.66924
97	0.58202	0.61773	0.66846
98	0.58172	0.61724	0.66769
99	0.58143	0.61675	0.66694
100	0.58114	0.61628	0.66619
101	0.58085	0.61581	0.66546
102	0.58057	0.61535	0.66474
103	0.58029	0.61490	0.66402
104	0.58002	0.61445	0.66332
105	0.57975	0.61401	0.66263
106	0.57948	0.61357	0.66195
107	0.57922	0.61315	0.66128
108	0.57896	0.61272	0.66062
109	0.57871	0.61231	0.65997
110	0.57845	0.61190	0.65933
111	0.57821	0.61149	0.65869
112	0.57796	0.61109	0.65807
113	0.57772	0.61070	0.65745
114	0.57748	0.61031	0.65685
115	0.57725	0.60993	0.65625
116	0.57702	0.60955	0.65565
117	0.57679	0.60918	0.65507
118	0.57656	0.60881	0.65449
119	0.57634	0.60844	0.65393
120	0.57612	0.60808	0.65336

TABLE III (Cont)

P = 0.700

n	γ		
	0.700	0.800	0.900
121	0.57590	0.60773	0.65281
122	0.57569	0.60738	0.65226
123	0.57548	0.60703	0.65172
124	0.57527	0.60669	0.65119
125	0.57506	0.60635	0.65066
126	0.57486	0.60602	0.65014
127	0.57465	0.60569	0.64963
128	0.57446	0.60537	0.64912
129	0.57426	0.60504	0.64862
130	0.57406	0.60473	0.64812
131	0.57387	0.60441	0.64763
132	0.57368	0.60410	0.64715
133	0.57349	0.60380	0.64667
134	0.57331	0.60349	0.64620
135	0.57312	0.60319	0.64573
136	0.57294	0.60290	0.64527
137	0.57276	0.60260	0.64481
138	0.57258	0.60231	0.64436
139	0.57241	0.60203	0.64391
140	0.57223	0.60174	0.64347
141	0.57206	0.60146	0.64303
142	0.57189	0.60118	0.64260
143	0.57172	0.60091	0.64217
144	0.57156	0.60064	0.64175
145	0.57139	0.60037	0.64133
146	0.57123	0.60010	0.64091
147	0.57107	0.59984	0.64050
148	0.57091	0.59958	0.64010
149	0.57075	0.59932	0.63969
150	0.57059	0.59907	0.63930
151	0.57044	0.59881	0.63890
152	0.57028	0.59856	0.63851
153	0.57013	0.59832	0.63813
154	0.56998	0.59807	0.63775
155	0.56983	0.59783	0.63737
156	0.56968	0.59759	0.63699
157	0.56954	0.59735	0.63662
158	0.56939	0.59711	0.63626
159	0.56925	0.59688	0.63589
160	0.56911	0.59665	0.63553

TABLE III (Cont)

P = 0.700

n	γ		
	0.700	0.800	0.900
161	0.56897	0.59642	0.63518
162	0.56883	0.59619	0.63482
163	0.56869	0.59597	0.63447
164	0.56855	0.59574	0.63413
165	0.56842	0.59552	0.63378
166	0.56828	0.59531	0.63344
167	0.56815	0.59509	0.63311
168	0.56802	0.59487	0.63277
169	0.56789	0.59466	0.63244
170	0.56776	0.59445	0.63211
171	0.56763	0.59424	0.63179
172	0.56750	0.59403	0.63147
173	0.56737	0.59383	0.63115
174	0.56725	0.59362	0.63083
175	0.56713	0.59342	0.63052
176	0.56700	0.59322	0.63021
177	0.56688	0.59302	0.62990
178	0.56676	0.59283	0.62959
179	0.56664	0.59263	0.62929
180	0.56652	0.59244	0.62899
181	0.56640	0.59225	0.62869
182	0.56629	0.59206	0.62840
183	0.56617	0.59187	0.62810
184	0.56608	0.59168	0.62781
185	0.56594	0.59150	0.62753
186	0.56583	0.59131	0.62724
187	0.56572	0.59113	0.62696
188	0.56561	0.59095	0.62668
189	0.56549	0.59077	0.62640
190	0.56539	0.59059	0.62612
191	0.56528	0.59042	0.62585
192	0.56517	0.59024	0.62557
193	0.56506	0.59007	0.62530
194	0.56496	0.58989	0.62504
195	0.56485	0.58972	0.62477
196	0.56475	0.58955	0.62451
197	0.56464	0.58939	0.62425
198	0.56454	0.58922	0.62399
199	0.56444	0.58905	0.62373
200	0.56434	0.58889	0.62347

TABLE III (Cont)

P = 0.700

n	γ		
	0.700	0.800	0.900
205	0.56384	0.58808	0.62223
210	0.56336	0.58731	0.62102
215	0.56290	0.58656	0.61986
220	0.56246	0.58584	0.61874
225	0.56203	0.58514	0.61766
230	0.56161	0.58447	0.61662
235	0.56121	0.58381	0.61561
240	0.56082	0.58318	0.61463
245	0.56045	0.58257	0.61368
250	0.56008	0.58198	0.61276
255	0.55973	0.58140	0.61187
260	0.55938	0.58084	0.61100
265	0.55905	0.58030	0.61016
270	0.55872	0.57977	0.60935
275	0.55841	0.57926	0.60855
280	0.55810	0.57876	0.60778
285	0.55780	0.57827	0.60703
290	0.55751	0.57780	0.60630
295	0.55722	0.57734	0.60559
300	0.55695	0.57689	0.60489
305	0.55668	0.57645	0.60422
310	0.55641	0.57602	0.60356
315	0.55615	0.57561	0.60291
320	0.55590	0.57520	0.60228
325	0.55566	0.57480	0.60167
330	0.55542	0.57442	0.60107
335	0.55518	0.57404	0.60049
340	0.55496	0.57366	0.59991
345	0.55473	0.57330	0.59935
350	0.55451	0.57295	0.59880
355	0.55430	0.57260	0.59827
360	0.55409	0.57226	0.59774
365	0.55388	0.57193	0.59723
370	0.55368	0.57160	0.59673
375	0.55348	0.57128	0.59623
380	0.55329	0.57097	0.59575
385	0.55310	0.57066	0.59528
390	0.55291	0.57036	0.59481
395	0.55273	0.57006	0.59436
400	0.55255	0.56977	0.59391

TABLE III (Cont)

P = 0.700

n	γ		
	0.700	0.800	0.900
425	0.55171	0.56840	0.59180
450	0.55093	0.56715	0.58987
475	0.55022	0.56600	0.58809
500	0.54956	0.56493	0.58645
525	0.54895	0.56395	0.58493
550	0.54838	0.56303	0.58352
575	0.54785	0.56217	0.58220
600	0.54736	0.56137	0.58097
625	0.54689	0.56062	0.57981
650	0.54645	0.55991	0.57872
675	0.54604	0.55924	0.57769
700	0.54565	0.55860	0.57671
725	0.54527	0.55800	0.57579
750	0.54492	0.55743	0.57492
775	0.54459	0.55689	0.57409
800	0.54427	0.55638	0.57329
825	0.54396	0.55589	0.57254
850	0.54367	0.55542	0.57182
875	0.54339	0.55497	0.57113
900	0.54312	0.55453	0.57047
925	0.54287	0.55412	0.56983
950	0.54262	0.55373	0.56922
975	0.54239	0.55334	0.56864
1000	0.54216	0.55298	0.56808
∞	0.52440	0.52440	0.52440

TABLE III (Cont)

P = 0.700

n	γ		
	0.950	0.990	0.999
2	A	A	B7.36803
3	B3.75654	A	A
4	B2.23692	B11.64458	A
5	B1.80724	B3.88440	A
6	B1.58953	B2.77785	B24.47676
7	B1.45317	B2.30413	B6.02179
8	B1.35773	B2.03183	B4.01843
9	B1.28621	B1.85124	B3.20907
10	1.23008	B1.72089	B2.75897
11	1.18452	B1.62137	B2.46727
12	1.14661	B1.54231	B2.26036
13	1.11442	B1.47763	B2.10458
14	1.08665	B1.42347	B1.98224
15	1.06238	B1.37730	B1.88308
16	1.04094	B1.33735	B1.80074
17	1.02182	B1.30234	B1.73103
18	1.00463	B1.27135	B1.67107
19	0.98907	B1.24367	B1.61882
20	0.97489	1.21876	B1.57279
21	0.96191	1.19619	B1.53185
22	0.94997	1.17561	B1.49514
23	0.93894	1.15676	B1.46200
24	0.92870	1.13941	B1.43189
25	0.91917	1.12336	B1.40438
26	0.91027	1.10847	B1.37912
27	0.90193	1.09461	B1.35583
28	0.89410	1.08166	B1.33426
29	0.88673	1.06953	B1.31423
30	0.87977	1.05813	B1.29555
31	0.87319	1.04740	B1.27808
32	0.86696	1.03727	B1.26170
33	0.86104	1.02769	B1.24630
34	0.85541	1.01862	B1.23180
35	0.85005	1.01000	1.21810
36	0.84494	1.00181	1.20513
37	0.84006	0.99401	1.19284
38	0.83539	0.98657	1.18117
39	0.83091	0.97946	1.17006
40	0.82662	0.97266	1.15948

TABLE III (Cont)

P = 0.700

n	γ		
	0.950	0.990	0.999
41	0.82251	0.96615	1.14939
42	0.81855	0.95991	1.13975
43	0.81474	0.95391	1.13052
44	0.81108	0.94816	1.12168
45	0.80755	0.94262	1.11320
46	0.80414	0.93729	1.10506
47	0.80085	0.93215	1.09724
48	0.79767	0.92719	1.08972
49	0.79460	0.92241	1.08247
50	0.79163	0.91779	1.07549
51	0.78875	0.91332	1.06876
52	0.78596	0.90900	1.06225
53	0.78326	0.90481	1.05597
54	0.78063	0.90076	1.04990
55	0.77809	0.89683	1.04402
56	0.77562	0.89301	1.03833
57	0.77321	0.88931	1.03282
58	0.77088	0.88572	1.02747
59	0.76860	0.88222	1.02228
60	0.76639	0.87883	1.01725
61	0.76424	0.87553	1.01236
62	0.76214	0.87231	1.00761
63	0.76009	0.86918	1.00300
64	0.75810	0.86613	0.99850
65	0.75615	0.86315	0.99413
66	0.75425	0.86027	0.98987
67	0.75240	0.85744	0.98573
68	0.75059	0.85469	0.98169
69	0.74882	0.85199	0.97775
70	0.74709	0.84937	0.97391
71	0.74541	0.84680	0.97016
72	0.74375	0.84429	0.96650
73	0.74214	0.84184	0.96293
74	0.74056	0.83945	0.95944
75	0.73901	0.83710	0.95602
76	0.73749	0.83481	0.95269
77	0.73601	0.83256	0.94943
78	0.73456	0.83036	0.94624
79	0.73313	0.82821	0.94312
80	0.73173	0.82610	0.94007

TABLE III (Cont)

P = 0.700

n	γ		
	0.950	0.990	0.999
81	0.73036	0.82403	0.93708
82	0.72902	0.82201	0.93415
83	0.72770	0.82002	0.93128
84	0.72641	0.81808	0.92847
85	0.72514	0.81617	0.92572
86	0.72390	0.81429	0.92302
87	0.72267	0.81245	0.92037
88	0.72147	0.81065	0.91778
89	0.72029	0.80887	0.91523
90	0.71914	0.80713	0.91273
91	0.71800	0.80542	0.91027
92	0.71688	0.80375	0.90786
93	0.71578	0.80209	0.90550
94	0.71469	0.80047	0.90318
95	0.71363	0.79888	0.90089
96	0.71258	0.79731	0.89865
97	0.71155	0.79577	0.89645
98	0.71054	0.79425	0.89428
99	0.70954	0.79276	0.89215
100	0.70856	0.79129	0.89005
101	0.70759	0.78985	0.88799
102	0.70664	0.78843	0.88597
103	0.70571	0.78703	0.88397
104	0.70478	0.78565	0.88201
105	0.70387	0.78430	0.88008
106	0.70298	0.78296	0.87818
107	0.70210	0.78164	0.87631
108	0.70123	0.78035	0.87446
109	0.70037	0.77907	0.87265
110	0.69952	0.77781	0.87086
111	0.69869	0.77657	0.86910
112	0.69787	0.77535	0.86736
113	0.69706	0.77414	0.86565
114	0.69626	0.77295	0.86397
115	0.69547	0.77178	0.86231
116	0.69469	0.77063	0.86067
117	0.69393	0.76949	0.85906
118	0.69317	0.76836	0.85747
119	0.69242	0.76725	0.85590
120	0.69169	0.76616	0.85435

TABLE III (Cont)

P = 0.700

n	γ		
	0.950	0.990	0.999
121	0.69096	0.76508	0.85282
122	0.69024	0.76401	0.85131
123	0.68953	0.76296	0.84983
124	0.68881	0.76192	0.84836
125	0.68814	0.76089	0.84691
126	0.68745	0.75988	0.84548
127	0.68678	0.75888	0.84407
128	0.68611	0.75789	0.84268
129	0.68545	0.75692	0.84131
130	0.68480	0.75595	0.83995
131	0.68416	0.75500	0.83861
132	0.68353	0.75406	0.83728
133	0.68290	0.75313	0.83598
134	0.68228	0.75221	0.83468
135	0.68166	0.75131	0.83341
136	0.68106	0.75041	0.83215
137	0.68046	0.74952	0.83090
138	0.67986	0.74865	0.82967
139	0.67928	0.74778	0.82845
140	0.67870	0.74692	0.82725
141	0.67812	0.74608	0.82606
142	0.67756	0.74524	0.82489
143	0.67700	0.74441	0.82372
144	0.67644	0.74359	0.82257
145	0.67589	0.74278	0.82144
146	0.67535	0.74198	0.82032
147	0.67481	0.74119	0.81920
148	0.67428	0.74040	0.81811
149	0.67375	0.73963	0.81702
150	0.67323	0.73886	0.81594
151	0.67272	0.73810	0.81488
152	0.67221	0.73735	0.81383
153	0.67170	0.73660	0.81279
154	0.67120	0.73587	0.81176
155	0.67071	0.73514	0.81074
156	0.67022	0.73442	0.80973
157	0.66973	0.73370	0.80873
158	0.66925	0.73300	0.80774
159	0.66878	0.73230	0.80676
160	0.66831	0.73160	0.80579

TABLE III (Cont)

P = 0.700

n	γ		
	0.950	0.990	0.999
161	0.66784	0.73092	0.80484
162	0.66738	0.73024	0.80389
163	0.66692	0.72956	0.80295
164	0.66647	0.72890	0.80202
165	0.66602	0.72824	0.80109
166	0.66557	0.72758	0.80018
167	0.66513	0.72693	0.79928
168	0.66470	0.72629	0.79838
169	0.66426	0.72566	0.79750
170	0.66383	0.72503	0.79662
171	0.66341	0.72440	0.79575
172	0.66299	0.72378	0.79489
173	0.66257	0.72317	0.79403
174	0.66216	0.72256	0.79319
175	0.66175	0.72196	0.79235
176	0.66134	0.72136	0.79152
177	0.66094	0.72077	0.79069
178	0.66054	0.72019	0.78988
179	0.66014	0.71961	0.78907
180	0.65975	0.71903	0.78827
181	0.65936	0.71846	0.78748
182	0.65898	0.71789	0.78669
183	0.65859	0.71733	0.78591
184	0.65821	0.71678	0.78514
185	0.65784	0.71623	0.78437
186	0.65747	0.71568	0.78361
187	0.65710	0.71514	0.78286
188	0.65673	0.71460	0.78211
189	0.65636	0.71407	0.78137
190	0.65600	0.71354	0.78063
191	0.65565	0.71301	0.77990
192	0.65529	0.71249	0.77918
193	0.65494	0.71198	0.77847
194	0.65459	0.71146	0.77776
195	0.65424	0.71096	0.77705
196	0.65390	0.71045	0.77635
197	0.65356	0.70995	0.77566
198	0.65322	0.70946	0.77497
199	0.65288	0.70896	0.77429
200	0.65255	0.70848	0.77361

TABLE III (Cont)

P = 0.700

n	γ		
	0.950	0.990	0.999
205	0.65092	0.70609	0.77031
210	0.64935	0.70380	0.76713
215	0.64784	0.70159	0.76407
220	0.64638	0.69945	0.76112
225	0.64497	0.69740	0.75828
230	0.64361	0.69541	0.75553
235	0.64229	0.69349	0.75288
240	0.64101	0.69163	0.75031
245	0.63978	0.68983	0.74783
250	0.63858	0.68808	0.74543
255	0.63742	0.68639	0.74310
260	0.63629	0.68475	0.74084
265	0.63520	0.68316	0.73865
270	0.63414	0.68162	0.73652
275	0.63311	0.68012	0.73446
280	0.63210	0.67866	0.73245
285	0.63112	0.67724	0.73050
290	0.63017	0.67585	0.72861
295	0.62925	0.67451	0.72676
300	0.62834	0.67320	0.72496
305	0.62746	0.67192	0.72321
310	0.62661	0.67067	0.72150
315	0.62577	0.66946	0.71984
320	0.62495	0.66828	0.71821
325	0.62415	0.66712	0.71663
330	0.62338	0.66599	0.71508
335	0.62261	0.66489	0.71357
340	0.62187	0.66381	0.71209
345	0.62114	0.66275	0.71065
350	0.62043	0.66172	0.70924
355	0.61973	0.66071	0.70786
360	0.61905	0.65973	0.70651
365	0.61839	0.65876	0.70519
370	0.61773	0.65782	0.70390
375	0.61709	0.65689	0.70264
380	0.61647	0.65598	0.70140
385	0.61585	0.65509	0.70018
390	0.61525	0.65422	0.69899
395	0.61466	0.65337	0.69783
400	0.61408	0.65253	0.69668

TABLE III (Cont)

P = 0.700

n	γ		
	0.950	0.990	0.999
425	0.61134	0.64857	0.69128
450	0.60883	0.64495	0.68636
475	0.60653	0.64163	0.68184
500	0.60441	0.63857	0.67767
525	0.60244	0.63573	0.67382
550	0.60061	0.63310	0.67024
575	0.59890	0.63064	0.66690
600	0.59730	0.62834	0.66378
625	0.59580	0.62618	0.66086
650	0.59439	0.62415	0.65811
675	0.59306	0.62224	0.65552
700	0.59180	0.62043	0.65307
725	0.59061	0.61871	0.65075
750	0.58948	0.61709	0.64855
775	0.58840	0.61555	0.64646
800	0.58738	0.61408	0.64448
825	0.58640	0.61267	0.64258
850	0.58547	0.61134	0.64078
875	0.58457	0.61006	0.63905
900	0.58372	0.60883	0.63740
925	0.58290	0.60766	0.63581
950	0.58211	0.60653	0.63429
975	0.58136	0.60545	0.63283
1000	0.58063	0.60441	0.63143
∞	0.52440	0.52440	0.52440

TABLE III (Cont)

P = 0.800

n	γ		
	0.700	0.800	0.900
2	1.51462	2.37544	B9.48001
3	1.29692	1.70985	2.75682
4	1.21024	1.50952	2.12471
5	1.15980	1.40392	1.86127
6	1.12566	1.33609	1.70991
7	1.10054	1.28781	1.60907
8	1.08106	1.25119	1.53591
9	1.06537	1.22219	1.47979
10	1.05238	1.19849	1.43503
11	1.04140	1.17866	1.39827
12	1.03196	1.16175	1.36741
13	1.02372	1.14711	1.34102
14	1.01646	1.13427	1.31813
15	1.01000	1.12290	1.29804
16	1.00420	1.11274	1.28023
17	0.99895	1.10358	1.26429
18	0.99417	1.09528	1.24992
19	0.98980	1.08771	1.23689
20	0.98578	1.08076	1.22499
21	0.98207	1.07436	1.21408
22	0.97862	1.06844	1.20403
23	0.97542	1.06285	1.19473
24	0.97243	1.05782	1.18609
25	0.96963	1.05304	1.17804
26	0.96700	1.04855	1.17052
27	0.96452	1.04433	1.16346
28	0.96218	1.04035	1.15683
29	0.95998	1.03660	1.15058
30	0.95788	1.03305	1.14469
31	0.95589	1.02968	1.13911
32	0.95400	1.02648	1.13381
33	0.95220	1.02343	1.12879
34	0.95049	1.02053	1.12401
35	0.94885	1.01777	1.11945
36	0.94728	1.01512	1.11511
37	0.94578	1.01259	1.11096
38	0.94434	1.01017	1.10698
39	0.94295	1.00784	1.10318
40	0.94162	1.00561	1.09953

TABLE III (Cont)

P = 0.800

n	γ		
	0.700	0.800	0.900
41	0.94035	1.00346	1.09602
42	0.93911	1.00139	1.09265
43	0.93793	0.99940	1.08941
44	0.93678	0.99748	1.08629
45	0.93568	0.99563	1.08328
46	0.93461	0.99384	1.08037
47	0.93358	0.99212	1.07757
48	0.93258	0.99044	1.07486
49	0.93161	0.98883	1.07224
50	0.93067	0.98726	1.06971
51	0.92976	0.98574	1.06725
52	0.92888	0.98427	1.06487
53	0.92802	0.98284	1.06257
54	0.92719	0.98145	1.06033
55	0.92638	0.98011	1.05816
56	0.92560	0.97880	1.05605
57	0.92483	0.97752	1.05400
58	0.92409	0.97628	1.05200
59	0.92336	0.97508	1.05006
60	0.92266	0.97390	1.04817
61	0.92197	0.97276	1.04633
62	0.92130	0.97164	1.04454
63	0.92064	0.97055	1.04280
64	0.92000	0.96949	1.04109
65	0.91938	0.96846	1.03943
66	0.91877	0.96744	1.03781
67	0.91817	0.96646	1.03623
68	0.91759	0.96549	1.03468
69	0.91702	0.96455	1.03317
70	0.91647	0.96362	1.03170
71	0.91592	0.96272	1.03026
72	0.91539	0.96184	1.02885
73	0.91487	0.96097	1.02747
74	0.91436	0.96013	1.02612
75	0.91386	0.95930	1.02479
76	0.91337	0.95849	1.02350
77	0.91289	0.95769	1.02223
78	0.91242	0.95691	1.02099
79	0.91195	0.95615	1.01977
80	0.91150	0.95540	1.01858

TABLE III (Cont)

P = 0.800

n	γ		
	0.700	0.800	0.900
81	0.91106	0.95467	1.01741
82	0.91062	0.95395	1.01626
83	0.91019	0.95324	1.01513
84	0.90977	0.95254	1.01403
85	0.90936	0.95186	1.01295
86	0.90896	0.95119	1.01188
87	0.90856	0.95053	1.01084
88	0.90817	0.94989	1.00981
89	0.90778	0.94925	1.00880
90	0.90740	0.94863	1.00781
91	0.90703	0.94802	1.00684
92	0.90667	0.94741	1.00588
93	0.90631	0.94682	1.00494
94	0.90595	0.94624	1.00402
95	0.90561	0.94566	1.00311
96	0.90526	0.94510	1.00221
97	0.90493	0.94455	1.00133
98	0.90460	0.94400	1.00047
99	0.90427	0.94346	0.99962
100	0.90395	0.94293	0.99878
101	0.90363	0.94241	0.99795
102	0.90332	0.94190	0.99714
103	0.90301	0.94139	0.99634
104	0.90271	0.94089	0.99555
105	0.90241	0.94040	0.99477
106	0.90212	0.93992	0.99401
107	0.90183	0.93944	0.99325
108	0.90154	0.93897	0.99251
109	0.90126	0.93850	0.99178
110	0.90098	0.93805	0.99105
111	0.90071	0.93760	0.99034
112	0.90044	0.93715	0.98964
113	0.90017	0.93671	0.98895
114	0.89991	0.93628	0.98826
115	0.89965	0.93585	0.98759
116	0.89939	0.93543	0.98692
117	0.89914	0.93502	0.98627
118	0.89889	0.93461	0.98562
119	0.89864	0.93420	0.98498
120	0.89840	0.93380	0.98435

TABLE III (Cont)

P = 0.800

n	Y		
	0.700	0.800	0.900
121	0.89816	0.93341	0.98373
122	0.89792	0.93302	0.98312
123	0.89769	0.93263	0.98251
124	0.89746	0.93225	0.98191
125	0.89723	0.93188	0.98132
126	0.89701	0.93151	0.98074
127	0.89678	0.93114	0.98016
128	0.89656	0.93078	0.97959
129	0.89634	0.93042	0.97903
130	0.89613	0.93007	0.97847
131	0.89592	0.92972	0.97792
132	0.89571	0.92938	0.97738
133	0.89550	0.92904	0.97684
134	0.89529	0.92870	0.97631
135	0.89509	0.92836	0.97579
136	0.89489	0.92804	0.97527
137	0.89469	0.92771	0.97476
138	0.89449	0.92739	0.97425
139	0.89430	0.92707	0.97375
140	0.89411	0.92675	0.97325
141	0.89392	0.92644	0.97276
142	0.89373	0.92613	0.97228
143	0.89354	0.92583	0.97180
144	0.89336	0.92553	0.97132
145	0.89318	0.92523	0.97086
146	0.89300	0.92493	0.97039
147	0.89282	0.92464	0.96993
148	0.89264	0.92435	0.96948
149	0.89247	0.92406	0.96903
150	0.89230	0.92378	0.96858
151	0.89212	0.92350	0.96814
152	0.89195	0.92322	0.96771
153	0.89179	0.92295	0.96727
154	0.89162	0.92268	0.96685
155	0.89146	0.92241	0.96642
156	0.89129	0.92214	0.96601
157	0.89113	0.92188	0.96559
158	0.89097	0.92161	0.96518
159	0.89081	0.92135	0.96477
160	0.89066	0.92110	0.96437

TABLE III (Cont)

P = 0.800

n	γ		
	0.700	0.800	0.900
161	0.89050	0.92084	0.96397
162	0.89035	0.92059	0.96358
163	0.89020	0.92034	0.96319
164	0.89005	0.92010	0.96280
165	0.88990	0.91985	0.96242
166	0.88975	0.91961	0.96204
167	0.88960	0.91937	0.96166
168	0.88946	0.91913	0.96129
169	0.88931	0.91889	0.96092
170	0.88917	0.91866	0.96055
171	0.88903	0.91843	0.96019
172	0.88889	0.91820	0.95983
173	0.88875	0.91797	0.95947
174	0.88861	0.91775	0.95912
175	0.88847	0.91752	0.95877
176	0.88834	0.91730	0.95842
177	0.88820	0.91708	0.95807
178	0.88807	0.91686	0.95773
179	0.88794	0.91665	0.95739
180	0.88781	0.91643	0.95706
181	0.88768	0.91622	0.95673
182	0.88755	0.91601	0.95640
183	0.88742	0.91580	0.95607
184	0.88729	0.91559	0.95575
185	0.88717	0.91539	0.95542
186	0.88704	0.91518	0.95511
187	0.88692	0.91498	0.95479
188	0.88680	0.91478	0.95448
189	0.88668	0.91458	0.95417
190	0.88655	0.91438	0.95386
191	0.88643	0.91419	0.95355
192	0.88632	0.91400	0.95325
193	0.88620	0.91380	0.95295
194	0.88608	0.91361	0.95265
195	0.88597	0.91342	0.95235
196	0.88585	0.91323	0.95206
197	0.88574	0.91305	0.95177
198	0.88562	0.91286	0.95148
199	0.88551	0.91268	0.95119
200	0.88540	0.91250	0.95090

TABLE III (Cont)

P = 0.800

n	γ		
	0.700	0.800	0.900
205	0.88485	0.91161	0.94951
210	0.88433	0.91075	0.94817
215	0.88382	0.90992	0.94688
220	0.88333	0.90912	0.94563
225	0.88286	0.90835	0.94443
230	0.88240	0.90760	0.94326
235	0.88196	0.90688	0.94214
240	0.88153	0.90618	0.94105
245	0.88112	0.90550	0.93999
250	0.88071	0.90485	0.93897
255	0.88032	0.90421	0.93798
260	0.87994	0.90359	0.93702
265	0.87958	0.90299	0.93608
270	0.87922	0.90241	0.93518
275	0.87887	0.90184	0.93429
280	0.87853	0.90129	0.93344
285	0.87820	0.90076	0.93260
290	0.87788	0.90023	0.93179
295	0.87757	0.89973	0.93100
300	0.87726	0.89923	0.93023
305	0.87697	0.89875	0.92947
310	0.87668	0.89827	0.92874
315	0.87639	0.89781	0.92803
320	0.87612	0.89736	0.92733
325	0.87585	0.89693	0.92665
330	0.87559	0.89650	0.92598
335	0.87533	0.89608	0.92533
340	0.87508	0.89567	0.92470
345	0.87483	0.89527	0.92408
350	0.87459	0.89488	0.92347
355	0.87435	0.89449	0.92287
360	0.87412	0.89412	0.92229
365	0.87390	0.89375	0.92172
370	0.87368	0.89339	0.92116
375	0.87346	0.89304	0.92062
380	0.87325	0.89269	0.92008
385	0.87304	0.89236	0.91956
390	0.87283	0.89202	0.91904
395	0.87263	0.89170	0.91854
400	0.87244	0.89138	0.91804

TABLE III (Cont)

P = 0.800

n	γ		
	0.700	0.800	0.900
425	0.87151	0.88987	0.91570
450	0.87066	0.88849	0.91356
475	0.86988	0.88722	0.91160
500	0.86915	0.88605	0.90979
525	0.86848	0.88496	0.90811
550	0.86786	0.88395	0.90655
575	0.86728	0.88301	0.90509
600	0.86673	0.88212	0.90372
625	0.86622	0.88129	0.90244
650	0.86574	0.88051	0.90124
675	0.86529	0.87978	0.90010
700	0.86486	0.87908	0.89903
725	0.86445	0.87842	0.89801
750	0.86406	0.87780	0.89705
775	0.86370	0.87720	0.89613
800	0.86335	0.87663	0.89525
825	0.86301	0.87609	0.89442
850	0.86269	0.87558	0.89363
875	0.86239	0.87508	0.89286
900	0.86209	0.87461	0.89214
925	0.86181	0.87416	0.89144
950	0.86154	0.87372	0.89077
975	0.86129	0.87330	0.89012
1000	0.86104	0.87290	0.88950
∞	0.84162	0.84162	0.84162

TABLE III (Cont)

P = 0.800

n	γ		
	0.950	0.990	0.999
2	A	A	B9.39506
3	B5.31392	A	A
4	3.04649	B17.54766	A
5	2.43984	B5.41647	A
6	2.14289	B3.78036	B37.88440
7	1.96138	B3.10399	B8.61569
8	1.83665	2.72491	B5.56920
9	1.74453	2.47835	B4.37516
10	1.67305	2.30313	B3.72638
11	1.61561	2.17108	B3.31367
12	1.56818	2.06731	B3.02538
13	1.52820	1.98319	B2.81112
14	1.49392	1.91333	2.64470
15	1.46412	1.85419	2.51112
16	1.43791	1.80334	2.40114
17	1.41464	1.75903	2.30872
18	1.39379	1.72001	2.22978
19	1.37499	1.68531	2.16141
20	1.35792	1.65422	2.10151
21	1.34233	1.62615	2.04851
22	1.32802	1.60065	2.00121
23	1.31484	1.57737	1.95869
24	1.30263	1.55600	1.92021
25	1.29130	1.53630	1.88519
26	1.28073	1.51807	1.85314
27	1.27085	1.50114	1.82369
28	1.26158	1.48536	1.79650
29	1.25288	1.47060	1.77132
30	1.24467	1.45677	1.74790
31	1.23692	1.44378	1.72606
32	1.22959	1.43154	1.70563
33	1.22264	1.41998	1.68646
34	1.21604	1.40905	1.66845
35	1.20977	1.39869	1.65147
36	1.20378	1.38885	1.63544
37	1.19807	1.37949	1.62027
38	1.19262	1.37058	1.60588
39	1.18740	1.36208	1.59223
40	1.18240	1.35396	1.57924

TABLE III (Cont)

P = 0.800

n	γ		
	0.950	0.990	0.999
41	1.17761	1.34619	1.56686
42	1.17300	1.33875	1.55505
43	1.16858	1.33162	1.54377
44	1.16432	1.32478	1.53299
45	1.16023	1.31820	1.52265
46	1.15627	1.31187	1.51275
47	1.15246	1.30570	1.50324
48	1.14878	1.29991	1.49410
49	1.14523	1.29425	1.48532
50	1.14179	1.28879	1.47686
51	1.13846	1.28352	1.46871
52	1.13524	1.27841	1.46085
53	1.13212	1.27348	1.45326
54	1.12909	1.26870	1.44594
55	1.12616	1.26407	1.43885
56	1.12331	1.25959	1.43200
57	1.12054	1.25524	1.42537
58	1.11785	1.25102	1.41895
59	1.11524	1.24692	1.41272
60	1.11269	1.24293	1.40668
61	1.11021	1.23906	1.40082
62	1.10780	1.23529	1.39514
63	1.10545	1.23163	1.38961
64	1.10316	1.22806	1.38424
65	1.10093	1.22459	1.37901
66	1.09875	1.22120	1.37393
67	1.09663	1.21790	1.36898
68	1.09456	1.21468	1.36417
69	1.09253	1.21154	1.35947
70	1.09055	1.20848	1.35490
71	1.08862	1.20549	1.35044
72	1.08673	1.20256	1.34609
73	1.08488	1.19971	1.34184
74	1.08307	1.19692	1.33769
75	1.08130	1.19419	1.33365
76	1.07957	1.19152	1.32969
77	1.07788	1.18891	1.32583
78	1.07621	1.18636	1.32205
79	1.07459	1.18386	1.31835
80	1.07299	1.18141	1.31474

TABLE III (Cont)

P = 0.800

n	γ		
	0.950	0.990	0.999
81	1.07143	1.17901	1.31120
82	1.06990	1.17666	1.30774
83	1.06840	1.17436	1.30435
84	1.06692	1.17210	1.30103
85	1.06548	1.16988	1.29778
86	1.06406	1.16771	1.29460
87	1.06267	1.16558	1.29147
88	1.06130	1.16349	1.28841
89	1.05995	1.16144	1.28541
90	1.05864	1.15943	1.28246
91	1.05734	1.15745	1.27957
92	1.05607	1.15551	1.27674
93	1.05481	1.15360	1.27396
94	1.05358	1.15173	1.27122
95	1.05237	1.14989	1.26854
96	1.05118	1.14808	1.26590
97	1.05001	1.14630	1.26332
98	1.04886	1.14455	1.26077
99	1.04773	1.14283	1.25827
100	1.04662	1.14114	1.25581
101	1.04552	1.13947	1.25340
102	1.04444	1.13784	1.25102
103	1.04338	1.13622	1.24869
104	1.04233	1.13464	1.24639
105	1.04130	1.13307	1.24413
106	1.04028	1.13154	1.24190
107	1.03928	1.13002	1.23971
108	1.03829	1.12853	1.23756
109	1.03732	1.12706	1.23543
110	1.03636	1.12561	1.23334
111	1.03542	1.12419	1.23129
112	1.03449	1.12278	1.22926
113	1.03357	1.12140	1.22726
114	1.03267	1.12003	1.22529
115	1.03177	1.11868	1.22336
116	1.03089	1.11736	1.22145
117	1.03003	1.11605	1.21956
118	1.02917	1.11475	1.21771
119	1.02832	1.11348	1.21588
120	1.02749	1.11223	1.21407

TABLE III (Cont)

P = 0.800

n	γ		
	0.950	0.990	0.999
121	1.02667	1.11099	1.21229
122	1.02585	1.10976	1.21054
123	1.02505	1.10856	1.20881
124	1.02426	1.10737	1.20710
125	1.02348	1.10619	1.20541
126	1.02270	1.10503	1.20375
127	1.02194	1.10388	1.20211
128	1.02119	1.10275	1.20049
129	1.02044	1.10164	1.19889
130	1.01971	1.10053	1.19732
131	1.01898	1.09944	1.19576
132	1.01827	1.09837	1.19422
133	1.01756	1.09730	1.19270
134	1.01686	1.09625	1.19120
135	1.01616	1.09521	1.18972
136	1.01548	1.09419	1.18825
137	1.01480	1.09317	1.18681
138	1.01413	1.09217	1.18538
139	1.01347	1.09118	1.18397
140	1.01282	1.09020	1.18257
141	1.01217	1.08924	1.18120
142	1.01153	1.08828	1.17983
143	1.01090	1.08733	1.17849
144	1.01027	1.08640	1.17716
145	1.00965	1.08547	1.17584
146	1.00904	1.08456	1.17454
147	1.00844	1.08365	1.17325
148	1.00784	1.08276	1.17198
149	1.00724	1.08187	1.17072
150	1.00666	1.08100	1.16948
151	1.00608	1.08013	1.16825
152	1.00550	1.07927	1.16703
153	1.00493	1.07842	1.16583
154	1.00437	1.07758	1.16464
155	1.00381	1.07675	1.16346
156	1.00326	1.07593	1.16229
157	1.00271	1.07512	1.16114
158	1.00217	1.07431	1.15999
159	1.00164	1.07351	1.15886
160	1.00111	1.07272	1.15775

TABLE III (Cont)

P = 0.800

n	γ		
	0.950	0.990	0.999
161	1.00058	1.07194	1.15664
162	1.00006	1.07117	1.15554
163	0.99955	1.07040	1.15446
164	0.99904	1.06964	1.15338
165	0.99853	1.06889	1.15232
166	0.99803	1.06814	1.15127
167	0.99754	1.06740	1.15023
168	0.99704	1.06667	1.14919
169	0.99656	1.06595	1.14817
170	0.99608	1.06523	1.14716
171	0.99560	1.06452	1.14616
172	0.99512	1.06382	1.14516
173	0.99466	1.06312	1.14418
174	0.99419	1.06243	1.14320
175	0.99373	1.06175	1.14224
176	0.99327	1.06107	1.14128
177	0.99282	1.06040	1.14033
178	0.99237	1.05973	1.13939
179	0.99193	1.05907	1.13846
180	0.99149	1.05842	1.13754
181	0.99105	1.05777	1.13663
182	0.99062	1.05712	1.13572
183	0.99019	1.05649	1.13483
184	0.98976	1.05586	1.13394
185	0.98934	1.05523	1.13305
186	0.98892	1.05461	1.13218
187	0.98850	1.05399	1.13131
188	0.98809	1.05338	1.13045
189	0.98768	1.05278	1.12960
190	0.98728	1.05218	1.12876
191	0.98688	1.05158	1.12792
192	0.98648	1.05099	1.12709
193	0.98608	1.05040	1.12627
194	0.98569	1.04982	1.12545
195	0.98530	1.04925	1.12464
196	0.98491	1.04868	1.12384
197	0.98453	1.04811	1.12304
198	0.98415	1.04755	1.12225
199	0.98377	1.04699	1.12147
200	0.98340	1.04643	1.12069

TABLE III (Cont)

P = 0.800

n	γ		
	0.950	0.990	0.999
205	0.98157	1.04373	1.11690
210	0.97981	1.04113	1.11326
215	0.97812	1.03863	1.10975
220	0.97648	1.03621	1.10637
225	0.97490	1.03388	1.10312
230	0.97338	1.03163	1.09998
235	0.97190	1.02946	1.09694
240	0.97048	1.02736	1.09401
245	0.96909	1.02533	1.09117
250	0.96776	1.02336	1.08843
255	0.96646	1.02145	1.08577
260	0.96520	1.01960	1.08320
265	0.96398	1.01780	1.08070
270	0.96279	1.01606	1.07828
275	0.96164	1.01437	1.07592
280	0.96051	1.01272	1.07364
285	0.95942	1.01112	1.07142
290	0.95836	1.00956	1.06926
295	0.95733	1.00805	1.06716
300	0.95632	1.00657	1.06511
305	0.95534	1.00513	1.06312
310	0.95438	1.00373	1.06118
315	0.95345	1.00236	1.05929
320	0.95254	1.00103	1.05744
325	0.95165	0.99973	1.05564
330	0.95078	0.99846	1.05389
335	0.94993	0.99722	1.05217
340	0.94910	0.99601	1.05050
345	0.94829	0.99482	1.04886
350	0.94750	0.99367	1.04726
355	0.94672	0.99253	1.04570
360	0.94596	0.99143	1.04417
365	0.94522	0.99034	1.04268
370	0.94449	0.98928	1.04121
375	0.94378	0.98824	1.03978
380	0.94308	0.98722	1.03838
385	0.94240	0.98623	1.03701
390	0.94173	0.98525	1.03566
395	0.94107	0.98429	1.03434
400	0.94042	0.98335	1.03305

TABLE III (Cont)

P = 0.800

n	γ		
	0.950	0.990	0.999
425	0.93738	0.97891	1.02695
450	0.93459	0.97486	1.02138
475	0.93204	0.97115	1.01629
500	0.92968	0.96772	1.01159
525	0.92749	0.96455	1.00725
550	0.92546	0.96161	1.00322
575	0.92357	0.95886	0.99947
600	0.92180	0.95630	0.99597
625	0.92013	0.95389	0.99268
650	0.91857	0.95163	0.98959
675	0.91709	0.94949	0.98669
700	0.91570	0.94748	0.98394
725	0.91438	0.94557	0.98134
750	0.91313	0.94377	0.97888
775	0.91194	0.94205	0.97655
800	0.91080	0.94041	0.97432
825	0.90972	0.93885	0.97220
850	0.90869	0.93737	0.97018
875	0.90771	0.93594	0.96825
900	0.90676	0.93458	0.96640
925	0.90586	0.93328	0.96463
950	0.90499	0.93203	0.96294
975	0.90415	0.93083	0.96130
1000	0.90335	0.92967	0.95974
∞	0.84162	0.84162	0.84162

TABLE III (Cont)

P = 0.900

n	γ		
	0.700	0.800	0.900
2	2.16628	3.37821	14.00611
3	1.85431	2.40372	3.86840
4	1.73647	2.12396	2.95521
5	1.66996	1.98091	2.58586
6	1.62582	1.89091	2.37819
7	1.59379	1.82780	2.24209
8	1.56920	1.78048	2.14460
9	1.54955	1.74334	2.07058
10	1.53339	1.71321	2.01204
11	1.51979	1.68815	1.96431
12	1.50815	1.66689	1.92447
13	1.49804	1.64856	1.89060
14	1.48915	1.63256	1.86135
15	1.48125	1.61842	1.83578
16	1.47418	1.60583	1.81318
17	1.46780	1.59451	1.79303
18	1.46201	1.58427	1.77493
19	1.45672	1.57495	1.75855
20	1.45186	1.56642	1.74363
21	1.44737	1.55858	1.72998
22	1.44322	1.55134	1.71743
23	1.43936	1.54462	1.70584
24	1.43576	1.53837	1.69510
25	1.43240	1.53253	1.68510
26	1.42924	1.52707	1.67577
27	1.42627	1.52194	1.66704
28	1.42347	1.51711	1.65884
29	1.42082	1.51255	1.65113
30	1.41831	1.50825	1.64386
31	1.41594	1.50417	1.63698
32	1.41368	1.50030	1.63047
33	1.41153	1.49662	1.62429
34	1.40948	1.49311	1.61843
35	1.40752	1.48977	1.61284
36	1.40565	1.48658	1.60751
37	1.40386	1.48353	1.60243
38	1.40214	1.48061	1.59756
39	1.40050	1.47781	1.59291
40	1.39891	1.47512	1.58845

TABLE III (Cont)

 $P = 0.900$

<u>n</u>	<u>γ</u>		
	<u>0.700</u>	<u>0.800</u>	<u>0.900</u>
41	1.39739	1.47253	1.58417
42	1.39593	1.47005	1.58006
43	1.39452	1.46766	1.57611
44	1.39316	1.46535	1.57230
45	1.39184	1.46313	1.56864
46	1.39058	1.46099	1.56511
47	1.38935	1.45891	1.56170
48	1.38816	1.45691	1.55841
49	1.38702	1.45497	1.55522
50	1.38590	1.45310	1.55215
51	1.38483	1.45128	1.54917
52	1.38378	1.44952	1.54628
53	1.38276	1.44781	1.54349
54	1.38178	1.44615	1.54077
55	1.38082	1.44454	1.53814
56	1.37989	1.44297	1.53559
57	1.37898	1.44145	1.53311
58	1.37810	1.43997	1.53069
59	1.37725	1.43853	1.52835
60	1.37641	1.43712	1.52606
61	1.37560	1.43576	1.52384
62	1.37480	1.43442	1.52168
63	1.37403	1.43313	1.51957
64	1.37327	1.43186	1.51751
65	1.37253	1.43062	1.51551
66	1.37181	1.42942	1.51355
67	1.37111	1.42824	1.51165
68	1.37042	1.42709	1.50978
69	1.36975	1.42597	1.50796
70	1.36909	1.42487	1.50619
71	1.36845	1.42379	1.50445
72	1.36782	1.42274	1.50275
73	1.36720	1.42171	1.50109
74	1.36660	1.42071	1.49946
75	1.36601	1.41972	1.49787
76	1.36543	1.41875	1.49632
77	1.36487	1.41781	1.49479
78	1.36431	1.41688	1.49330
79	1.36377	1.41597	1.49184
80	1.36323	1.41508	1.49040

TABLE III (Cont)

P = 0.900

n	Y		
	0.700	0.800	0.900
81	1.36271	1.41421	1.48900
82	1.36219	1.41335	1.48762
83	1.36169	1.41251	1.48627
84	1.36119	1.41169	1.48494
85	1.36071	1.41088	1.48364
86	1.36023	1.41008	1.48236
87	1.35976	1.40930	1.48111
88	1.35930	1.40854	1.47988
89	1.35885	1.40778	1.47867
90	1.35840	1.40704	1.47748
91	1.35796	1.40632	1.47632
92	1.35753	1.40560	1.47517
93	1.35711	1.40490	1.47404
94	1.35669	1.40421	1.47294
95	1.35629	1.40353	1.47185
96	1.35588	1.40286	1.47078
97	1.35549	1.40220	1.46972
98	1.35510	1.40155	1.46869
99	1.35471	1.40091	1.46767
100	1.35433	1.40028	1.46666
101	1.35396	1.39967	1.46567
102	1.35359	1.39906	1.46470
103	1.35323	1.39846	1.46374
104	1.35288	1.39787	1.46280
105	1.35253	1.39729	1.46187
106	1.35218	1.39671	1.46096
107	1.35184	1.39615	1.46006
108	1.35150	1.39559	1.45917
109	1.35117	1.39504	1.45829
110	1.35085	1.39450	1.45743
111	1.35052	1.39397	1.45658
112	1.35021	1.39344	1.45574
113	1.34989	1.39292	1.45491
114	1.34958	1.39241	1.45410
115	1.34928	1.39191	1.45329
116	1.34898	1.39141	1.45250
117	1.34868	1.39092	1.45172
118	1.34839	1.39043	1.45094
119	1.34810	1.38995	1.45018
120	1.34781	1.38948	1.44943

TABLE III (Cont)

P = 0.900

n	γ		
	0.700	0.800	0.900
121	1.34753	1.38901	1.44869
122	1.34725	1.38855	1.44796
123	1.34698	1.38810	1.44723
124	1.34670	1.38765	1.44652
125	1.34644	1.38720	1.44581
126	1.34617	1.38677	1.44512
127	1.34591	1.38633	1.44443
128	1.34565	1.38591	1.44375
129	1.34539	1.38548	1.44308
130	1.34514	1.38507	1.44242
131	1.34489	1.38465	1.44176
132	1.34465	1.38425	1.44111
133	1.34440	1.38384	1.44048
134	1.34416	1.38344	1.43984
135	1.34392	1.38305	1.43922
136	1.34369	1.38266	1.43860
137	1.34345	1.38228	1.43799
138	1.34322	1.38190	1.43739
139	1.34299	1.38152	1.43679
140	1.34277	1.38115	1.43620
141	1.34255	1.38078	1.43562
142	1.34233	1.38042	1.43504
143	1.34211	1.38006	1.43447
144	1.34189	1.37970	1.43391
145	1.34168	1.37935	1.43335
146	1.34147	1.37900	1.43280
147	1.34126	1.37865	1.43225
148	1.34105	1.37831	1.43171
149	1.34084	1.37797	1.43117
150	1.34064	1.37764	1.43065
151	1.34044	1.37731	1.43012
152	1.34024	1.37698	1.42960
153	1.34005	1.37666	1.42909
154	1.33985	1.37634	1.42858
155	1.33966	1.37602	1.42808
156	1.33947	1.37570	1.42758
157	1.33928	1.37539	1.42709
158	1.33909	1.37508	1.42660
159	1.33890	1.37478	1.42612
160	1.33872	1.37447	1.42564

TABLE III (Cont)

P = 0.900

n	γ		
	0.700	0.800	0.900
161	1.33854	1.37418	1.42517
162	1.33836	1.37388	1.42470
163	1.33818	1.37358	1.42423
164	1.33800	1.37329	1.42377
165	1.33783	1.37300	1.42332
166	1.33765	1.37272	1.42286
167	1.33748	1.37244	1.42242
168	1.33731	1.37215	1.42197
169	1.33714	1.37188	1.42153
170	1.33697	1.37160	1.42110
171	1.33681	1.37133	1.42067
172	1.33664	1.37106	1.42024
173	1.33648	1.37079	1.41982
174	1.33632	1.37052	1.41940
175	1.33616	1.37026	1.41898
176	1.33600	1.37000	1.41857
177	1.33584	1.36974	1.41816
178	1.33569	1.36948	1.41776
179	1.33553	1.36923	1.41736
180	1.33538	1.36898	1.41696
181	1.33523	1.36872	1.41656
182	1.33508	1.36848	1.41617
183	1.33493	1.36823	1.41578
184	1.33478	1.36799	1.41540
185	1.33463	1.36774	1.41502
186	1.33448	1.36750	1.41464
187	1.33434	1.36727	1.41427
188	1.33420	1.36703	1.41389
189	1.33405	1.36680	1.41352
190	1.33391	1.36656	1.41316
191	1.33377	1.36633	1.41280
192	1.33363	1.36611	1.41244
193	1.33349	1.36588	1.41208
194	1.33336	1.36565	1.41173
195	1.33322	1.36543	1.41137
196	1.33309	1.36521	1.41103
197	1.33295	1.36499	1.41068
198	1.33282	1.36477	1.41034
199	1.33269	1.36456	1.41000
200	1.33256	1.36434	1.40966

TABLE III (Cont)

P = 0.900

n	γ		
	0.700	0.800	0.900
205	1.33192	1.36329	1.40801
210	1.33130	1.36228	1.40642
215	1.33071	1.36131	1.40489
220	1.33014	1.36037	1.40341
225	1.32958	1.35946	1.40199
230	1.32905	1.35858	1.40061
235	1.32853	1.35774	1.39928
240	1.32803	1.35691	1.39799
245	1.32755	1.35612	1.39674
250	1.32707	1.35535	1.39553
255	1.32662	1.35460	1.39436
260	1.32617	1.35387	1.39322
265	1.32574	1.35317	1.39212
270	1.32533	1.35248	1.39105
275	1.32492	1.35182	1.39001
280	1.32452	1.35117	1.38899
285	1.32414	1.35054	1.38801
290	1.32376	1.34993	1.38705
295	1.32340	1.34933	1.38612
300	1.32304	1.34875	1.38521
305	1.32270	1.34818	1.38432
310	1.32236	1.34763	1.38345
315	1.32203	1.34709	1.38261
320	1.32170	1.34656	1.38179
325	1.32139	1.34605	1.38098
330	1.32108	1.34555	1.38020
335	1.32078	1.34505	1.37943
340	1.32049	1.34457	1.37868
345	1.32020	1.34410	1.37795
350	1.31992	1.34365	1.37723
355	1.31964	1.34320	1.37653
360	1.31937	1.34276	1.37585
365	1.31911	1.34233	1.37518
370	1.31885	1.34190	1.37452
375	1.31860	1.34149	1.37388
380	1.31835	1.34109	1.37325
385	1.31811	1.34069	1.37263
390	1.31787	1.34030	1.37202
395	1.31763	1.33992	1.37143
400	1.31740	1.33955	1.37084

TABLE III (Cont)

P = 0.900

n	γ		
	0.700	0.800	0.900
425	1.31632	1.33778	1.36809
450	1.31533	1.33616	1.36558
475	1.31441	1.33467	1.36327
500	1.31357	1.33330	1.36113
525	1.31279	1.33203	1.35916
550	1.31206	1.33085	1.35732
575	1.31139	1.32975	1.35561
600	1.31075	1.32871	1.35401
625	1.31015	1.32774	1.35251
650	1.30959	1.32683	1.35109
675	1.30906	1.32597	1.34976
700	1.30856	1.32516	1.34850
725	1.30809	1.32439	1.34731
750	1.30764	1.32366	1.34618
775	1.30721	1.32296	1.34510
800	1.30680	1.32230	1.34408
825	1.30641	1.32167	1.34310
850	1.30604	1.32106	1.34217
875	1.30568	1.32049	1.34128
900	1.30534	1.31993	1.34042
925	1.30502	1.31940	1.33960
950	1.30470	1.31890	1.33882
975	1.30440	1.31841	1.33807
1000	1.30411	1.31794	1.33734
∞	1.28155	1.28155	1.28155

TABLE III (Cont)

P = 0.900

n	Y		
	0.950	0.990	0.999
2	A	A	B12.49304
3	7.61994	A	A
4	4.25451	26.03601	A
5	3.38066	7.69785	A
6	2.96240	5.28083	56.87932
7	2.71113	4.30043	12.44212
8	2.54084	3.75944	7.88382
9	2.41646	3.41213	6.12210
10	2.32087	3.16800	5.17671
11	2.24464	2.98573	4.58185
12	2.18214	2.84367	4.17030
13	2.12975	2.72933	3.86703
14	2.08508	2.63498	3.63327
15	2.04642	2.55556	3.44691
16	2.01256	2.48761	3.29441
17	1.98261	2.42868	3.16698
18	1.95588	2.37700	3.05869
19	1.93184	2.33123	2.96534
20	1.91007	2.29035	2.88391
21	1.89025	2.25357	2.81215
22	1.87210	2.22027	2.74834
23	1.85541	2.18994	2.69118
24	1.83999	2.16218	2.63962
25	1.82570	2.13665	2.59284
26	1.81240	2.11308	2.55016
27	1.79999	2.09123	2.51103
28	1.78837	2.07091	2.47501
29	1.77747	2.05196	2.44171
30	1.76721	2.03422	2.41082
31	1.75754	2.01758	2.38208
32	1.74839	2.00193	2.35525
33	1.73974	1.98718	2.33013
34	1.73153	1.97325	2.30656
35	1.72373	1.96007	2.28439
36	1.71630	1.94757	2.26349
37	1.70922	1.93569	2.24375
38	1.70246	1.92440	2.22506
39	1.69600	1.91364	2.20733
40	1.68982	1.90337	2.19050

TABLE III (Cont)

P = 0.900

n	γ		
	0.950	0.990	0.999
41	1.68390	1.89356	2.17449
42	1.67822	1.88418	2.15923
43	1.67276	1.87519	2.14468
44	1.66751	1.86657	2.13078
45	1.66246	1.85830	2.11748
46	1.65760	1.85035	2.10474
47	1.65291	1.84270	2.09253
48	1.64839	1.83534	2.08081
49	1.64402	1.82825	2.06955
50	1.63980	1.82140	2.05872
51	1.63572	1.81480	2.04830
52	1.63177	1.80842	2.03825
53	1.62795	1.80226	2.02857
54	1.62424	1.79629	2.01923
55	1.62065	1.79052	2.01020
56	1.61716	1.78493	2.00148
57	1.61378	1.77950	1.99304
58	1.61049	1.77425	1.98488
59	1.60730	1.76915	1.97697
60	1.60419	1.76419	1.96931
61	1.60117	1.75938	1.96188
62	1.59823	1.75470	1.95467
63	1.59536	1.75015	1.94767
64	1.59257	1.74572	1.94088
65	1.58985	1.74142	1.93427
66	1.58720	1.73722	1.92785
67	1.58461	1.73313	1.92150
68	1.58209	1.72915	1.91552
69	1.57963	1.72526	1.90960
70	1.57722	1.72147	1.90384
71	1.57487	1.71777	1.89822
72	1.57257	1.71416	1.89274
73	1.57033	1.71063	1.88740
74	1.56813	1.70719	1.88219
75	1.56599	1.70382	1.87710
76	1.56388	1.70053	1.87213
77	1.56183	1.69731	1.86728
78	1.55981	1.69416	1.86254
79	1.55784	1.69108	1.85790
80	1.55591	1.68806	1.85337

TABLE III (Cont)

P = 0.900

n	γ		
	0.950	0.990	0.999
81	1.55402	1.68511	1.84894
82	1.55216	1.68222	1.84461
83	1.55034	1.67939	1.84036
84	1.54856	1.67661	1.83621
85	1.54681	1.67389	1.83214
86	1.54509	1.67122	1.82816
87	1.54341	1.66860	1.82426
88	1.54175	1.66604	1.82043
89	1.54013	1.66352	1.81669
90	1.53853	1.66105	1.81301
91	1.53697	1.65862	1.80941
92	1.53543	1.65624	1.80587
93	1.53392	1.65390	1.80240
94	1.53243	1.65161	1.79900
95	1.53097	1.64935	1.79566
96	1.52953	1.64713	1.79238
97	1.52812	1.64495	1.78915
98	1.52673	1.64281	1.78599
99	1.52537	1.64071	1.78288
100	1.52402	1.63864	1.77982
101	1.52270	1.63660	1.77682
102	1.52140	1.63460	1.77387
103	1.52012	1.63263	1.77097
104	1.51885	1.63069	1.76811
105	1.51761	1.62878	1.76531
106	1.51639	1.62690	1.76255
107	1.51518	1.62505	1.75983
108	1.51400	1.62323	1.75716
109	1.51283	1.62143	1.75453
110	1.51167	1.61967	1.75194
111	1.51054	1.61793	1.74939
112	1.50942	1.61621	1.74688
113	1.50831	1.61452	1.74441
114	1.50722	1.61286	1.74197
115	1.50615	1.61122	1.73957
116	1.50509	1.60960	1.73721
117	1.50405	1.60800	1.73488
118	1.50302	1.60643	1.73259
119	1.50200	1.60488	1.73032
120	1.50100	1.60335	1.72810

TABLE III (Cont)

P = 0.900

n	γ		
	0.950	0.990	0.999
121	1.50001	1.60184	1.72590
122	1.49903	1.60035	1.72373
123	1.49807	1.59888	1.72159
124	1.49712	1.59743	1.71948
125	1.49618	1.59600	1.71741
126	1.49525	1.59459	1.71535
127	1.49434	1.59320	1.71333
128	1.49343	1.59182	1.71133
129	1.49254	1.59047	1.70936
130	1.49166	1.58912	1.70742
131	1.49079	1.58780	1.70550
132	1.48992	1.58649	1.70360
133	1.48907	1.58520	1.70173
134	1.48823	1.58392	1.69988
135	1.48740	1.58266	1.69806
136	1.48658	1.58142	1.69626
137	1.48577	1.58019	1.69448
138	1.48497	1.57897	1.69272
139	1.48418	1.57777	1.69099
140	1.48339	1.57658	1.68927
141	1.48262	1.57541	1.68758
142	1.48185	1.57425	1.68590
143	1.48109	1.57310	1.68425
144	1.48034	1.57197	1.68261
145	1.47960	1.57085	1.68099
146	1.47887	1.56974	1.67940
147	1.47814	1.56864	1.67782
148	1.47743	1.56756	1.67625
149	1.47672	1.56648	1.67471
150	1.47601	1.56542	1.67318
151	1.47532	1.56437	1.67167
152	1.47463	1.56333	1.67018
153	1.47395	1.56231	1.66870
154	1.47328	1.56129	1.66724
155	1.47261	1.56028	1.66580
156	1.47195	1.55929	1.66437
157	1.47130	1.55830	1.66295
158	1.47065	1.55733	1.66155
159	1.47001	1.55636	1.66017
160	1.46938	1.55541	1.65880

TABLE III (Cont)

P = 0.900

n	γ		
	0.950	0.990	0.999
161	1.46875	1.55446	1.65744
162	1.46813	1.55352	1.65610
163	1.46751	1.55260	1.65477
164	1.46690	1.55168	1.65346
165	1.46630	1.55077	1.65215
166	1.46570	1.54987	1.65087
167	1.46511	1.54898	1.64959
168	1.46452	1.54810	1.64833
169	1.46394	1.54722	1.64708
170	1.46336	1.54635	1.64584
171	1.46279	1.54550	1.64461
172	1.46223	1.54465	1.64340
173	1.46167	1.54381	1.64219
174	1.46111	1.54297	1.64100
175	1.46056	1.54214	1.63982
176	1.46002	1.54133	1.63865
177	1.45948	1.54051	1.63749
178	1.45894	1.53971	1.63635
179	1.45841	1.53891	1.63521
180	1.45788	1.53812	1.63408
181	1.45736	1.53734	1.63297
182	1.45684	1.53657	1.63186
183	1.45633	1.53580	1.63077
184	1.45582	1.53503	1.62968
185	1.45532	1.53428	1.62861
186	1.45482	1.53353	1.62754
187	1.45432	1.53279	1.62648
188	1.45383	1.53205	1.62543
189	1.45335	1.53132	1.62439
190	1.45286	1.53060	1.62337
191	1.45238	1.52988	1.62234
192	1.45191	1.52917	1.62133
193	1.45144	1.52846	1.62033
194	1.45097	1.52776	1.61933
195	1.45050	1.52707	1.61835
196	1.45004	1.52638	1.61737
197	1.44959	1.52570	1.61640
198	1.44913	1.52502	1.61544
199	1.44869	1.52435	1.61448
200	1.44824	1.52368	1.61354

TABLE III (Cont)

P = 0.900

n	γ		
	0.950	0.990	0.999
205	1.44606	1.52043	1.60892
210	1.44397	1.51730	1.60449
215	1.44195	1.51429	1.60022
220	1.44000	1.51138	1.59611
225	1.43812	1.50859	1.59216
230	1.43631	1.50588	1.58834
235	1.43455	1.50327	1.58466
240	1.43286	1.50075	1.58110
245	1.43121	1.49831	1.57767
250	1.42962	1.49595	1.57434
255	1.42808	1.49366	1.57112
260	1.42659	1.49144	1.56800
265	1.42514	1.48929	1.56498
270	1.42373	1.48720	1.56205
275	1.42236	1.48517	1.55920
280	1.42103	1.48320	1.55644
285	1.41973	1.48129	1.55375
290	1.41847	1.47943	1.55114
295	1.41725	1.47761	1.54861
300	1.41605	1.47585	1.54614
305	1.41489	1.47413	1.54373
310	1.41375	1.47245	1.54139
315	1.41265	1.47082	1.53911
320	1.41157	1.46923	1.53689
325	1.41051	1.46767	1.53472
330	1.40948	1.46616	1.53260
335	1.40848	1.46468	1.53054
340	1.40750	1.46323	1.52852
345	1.40654	1.46182	1.52655
350	1.40560	1.46043	1.52463
355	1.40468	1.45908	1.52275
360	1.40378	1.45776	1.52091
365	1.40290	1.45647	1.51911
370	1.40204	1.45520	1.51735
375	1.40120	1.45396	1.51563
380	1.40038	1.45275	1.51394
385	1.39957	1.45156	1.51229
390	1.39877	1.45040	1.51067
395	1.39800	1.44926	1.50909
400	1.39723	1.44814	1.50754

TABLE III (Cont)

P = 0.900

n	γ		
	0.950	0.990	0.999
425	1.39363	1.44286	1.50022
450	1.39034	1.43804	1.49355
475	1.38733	1.43362	1.48744
500	1.38454	1.42956	1.48182
525	1.38197	1.42579	1.47663
550	1.37957	1.42230	1.47182
575	1.37734	1.41904	1.46734
600	1.37525	1.41600	1.46316
625	1.37330	1.41315	1.45924
650	1.37145	1.41047	1.45556
675	1.36972	1.40795	1.45209
700	1.36808	1.40556	1.44882
725	1.36653	1.40331	1.44573
750	1.36505	1.40117	1.44280
775	1.36365	1.39914	1.44002
800	1.36232	1.39721	1.43738
825	1.36105	1.39536	1.43486
850	1.35984	1.39361	1.43246
875	1.35868	1.39193	1.43017
900	1.35757	1.39032	1.42798
925	1.35651	1.38878	1.42588
950	1.35549	1.38731	1.42386
975	1.35451	1.38589	1.42193
1000	1.35357	1.38453	1.42007
∞	1.28155	1.28155	1.28155

TABLE III (Cont)

P = 0.950

n	γ		
	0.700	0.800	0.900
2	2.71916	4.23376	17.80565
3	2.32567	2.99600	4.82208
4	2.18021	2.64696	3.66814
5	2.09926	2.47080	3.20679
6	2.04604	2.36103	2.94975
7	2.00770	2.28460	2.78252
8	1.97840	2.22761	2.66343
9	1.95510	2.18308	2.57345
10	1.93599	2.14709	2.50257
11	1.91996	2.11724	2.44498
12	1.90627	2.09199	2.39706
13	1.89440	2.07027	2.35641
14	1.88398	2.05134	2.32140
15	1.87475	2.03466	2.29086
16	1.86649	2.01981	2.26391
17	1.85904	2.00649	2.23993
18	1.85228	1.99446	2.21841
19	1.84612	1.98351	2.19897
20	1.84046	1.97351	2.18129
21	1.83525	1.96432	2.16513
22	1.83042	1.95583	2.15028
23	1.82594	1.94798	2.13659
24	1.82177	1.94067	2.12390
25	1.81786	1.93385	2.11211
26	1.81420	1.92747	2.10112
27	1.81076	1.92149	2.09084
28	1.80751	1.91586	2.08119
29	1.80445	1.91055	2.07212
30	1.80155	1.90553	2.06357
31	1.79880	1.90079	2.05550
32	1.79619	1.89628	2.04786
33	1.79371	1.89200	2.04062
34	1.79134	1.88793	2.03373
35	1.78908	1.88404	2.02719
36	1.78692	1.88034	2.02095
37	1.78485	1.87679	2.01499
38	1.78287	1.87340	2.00930
39	1.78097	1.87015	2.00386
40	1.77915	1.86703	1.99865

TABLE III (Cont)

P = 0.950

n	γ		
	0.700	0.800	0.900
41	1.77739	1.86403	1.99364
42	1.77570	1.86115	1.98884
43	1.77408	1.85838	1.98423
44	1.77251	1.85571	1.97978
45	1.77100	1.85314	1.97551
46	1.76953	1.85065	1.97139
47	1.76812	1.84825	1.96741
48	1.76676	1.84593	1.96357
49	1.76543	1.84369	1.95986
50	1.76415	1.84152	1.95627
51	1.76291	1.83941	1.95280
52	1.76171	1.83738	1.94944
53	1.76054	1.83540	1.94619
54	1.75941	1.83348	1.94303
55	1.75831	1.83162	1.93997
56	1.75724	1.82981	1.93699
57	1.75619	1.82805	1.93411
58	1.75518	1.82634	1.93130
59	1.75420	1.82467	1.92857
60	1.75323	1.82305	1.92592
61	1.75230	1.82148	1.92334
62	1.75139	1.81994	1.92082
63	1.75050	1.81844	1.91837
64	1.74963	1.81698	1.91598
65	1.74878	1.81555	1.91366
66	1.74795	1.81416	1.91139
67	1.74714	1.81280	1.90917
68	1.74635	1.81147	1.90701
69	1.74558	1.81018	1.90490
70	1.74483	1.80891	1.90283
71	1.74409	1.80767	1.90082
72	1.74337	1.80646	1.89885
73	1.74266	1.80527	1.89692
74	1.74197	1.80411	1.89504
75	1.74129	1.80297	1.89319
76	1.74063	1.80186	1.89139
77	1.73998	1.80077	1.88962
78	1.73934	1.79970	1.88789
79	1.73871	1.79866	1.88619
80	1.73810	1.79763	1.88453

TABLE III (Cont)

P = 0.950

n	γ		
	0.700	0.800	0.900
81	1.73750	1.79662	1.88290
82	1.73691	1.79564	1.88131
83	1.73633	1.79467	1.87974
84	1.73576	1.79372	1.87821
85	1.73521	1.79279	1.87670
86	1.73466	1.79187	1.87522
87	1.73412	1.79097	1.87377
88	1.73359	1.79009	1.87235
89	1.73307	1.78922	1.87095
90	1.73256	1.78837	1.86957
91	1.73206	1.78753	1.86822
92	1.73157	1.78671	1.86690
93	1.73108	1.78590	1.86559
94	1.73060	1.78510	1.86431
95	1.73014	1.78432	1.86305
96	1.72967	1.78355	1.86181
97	1.72922	1.78279	1.86059
98	1.72877	1.78205	1.85939
99	1.72833	1.78131	1.85821
100	1.72790	1.78059	1.85705
101	1.72747	1.77988	1.85591
102	1.72705	1.77918	1.85479
103	1.72664	1.77849	1.85368
104	1.72623	1.77781	1.85259
105	1.72583	1.77714	1.85152
106	1.72543	1.77648	1.85046
107	1.72504	1.77583	1.84942
108	1.72465	1.77519	1.84839
109	1.72428	1.77456	1.84738
110	1.72390	1.77394	1.84638
111	1.72353	1.77333	1.84540
112	1.72317	1.77272	1.84443
113	1.72281	1.77213	1.84348
114	1.72246	1.77154	1.84253
115	1.72211	1.77096	1.84161
116	1.72176	1.77039	1.84069
117	1.72142	1.76982	1.83979
118	1.72109	1.76926	1.83889
119	1.72075	1.76871	1.83801
120	1.72043	1.76817	1.83715

TABLE III (Cont)

P = 0.950

n	γ		
	0.700	0.800	0.900
121	1.72010	1.76763	1.83629
122	1.71979	1.76711	1.83544
123	1.71947	1.76658	1.83461
124	1.71916	1.76607	1.83379
125	1.71885	1.76556	1.83297
126	1.71855	1.76505	1.83217
127	1.71825	1.76456	1.83138
128	1.71795	1.76407	1.83059
129	1.71766	1.76358	1.82982
130	1.71737	1.76310	1.82905
131	1.71709	1.76263	1.82830
132	1.71680	1.76216	1.82755
133	1.71652	1.76170	1.82681
134	1.71625	1.76124	1.82608
135	1.71597	1.76079	1.82536
136	1.71570	1.76034	1.82465
137	1.71544	1.75990	1.82395
138	1.71517	1.75946	1.82325
139	1.71491	1.75903	1.82257
140	1.71466	1.75860	1.82189
141	1.71440	1.75818	1.82121
142	1.71415	1.75776	1.82055
143	1.71390	1.75735	1.81989
144	1.71365	1.75694	1.81924
145	1.71341	1.75654	1.81860
146	1.71316	1.75614	1.81796
147	1.71293	1.75574	1.81733
148	1.71269	1.75535	1.81671
149	1.71245	1.75496	1.81609
150	1.71222	1.75458	1.81548
151	1.71199	1.75420	1.81488
152	1.71176	1.75382	1.81428
153	1.71154	1.75345	1.81369
154	1.71132	1.75308	1.81310
155	1.71110	1.75272	1.81252
156	1.71088	1.75236	1.81195
157	1.71066	1.75200	1.81138
158	1.71045	1.75164	1.81082
159	1.71023	1.75129	1.81027
160	1.71002	1.75095	1.80971

TABLE III (Cont)

P = 0.950

n	γ		
	0.700	0.800	0.900
161	1.70982	1.75060	1.80917
162	1.70961	1.75026	1.80863
163	1.70941	1.74992	1.80809
164	1.70920	1.74959	1.80756
165	1.70900	1.74926	1.80704
166	1.70880	1.74893	1.80652
167	1.70861	1.74861	1.80600
168	1.70841	1.74828	1.80549
169	1.70822	1.74797	1.80499
170	1.70803	1.74765	1.80449
171	1.70784	1.74734	1.80399
172	1.70765	1.74703	1.80350
173	1.70746	1.74672	1.80301
174	1.70728	1.74641	1.80253
175	1.70710	1.74611	1.80205
176	1.70691	1.74581	1.80157
177	1.70673	1.74551	1.80110
178	1.70656	1.74522	1.80064
179	1.70638	1.74493	1.80018
180	1.70620	1.74464	1.79972
181	1.70603	1.74435	1.79926
182	1.70586	1.74407	1.79881
183	1.70569	1.74379	1.79837
184	1.70552	1.74351	1.79793
185	1.70535	1.74323	1.79749
186	1.70518	1.74295	1.79705
187	1.70501	1.74268	1.79662
188	1.70485	1.74241	1.79619
189	1.70469	1.74214	1.79577
190	1.70453	1.74188	1.79535
191	1.70437	1.74161	1.79493
192	1.70421	1.74135	1.79452
193	1.70405	1.74109	1.79411
194	1.70389	1.74083	1.79370
195	1.70374	1.74058	1.79329
196	1.70358	1.74032	1.79289
197	1.70343	1.74007	1.79250
198	1.70328	1.73982	1.79210
199	1.70313	1.73957	1.79171
200	1.70298	1.73933	1.79132

TABLE III (Cont)

P = 0.950.

n	γ		
	0.700	0.800	0.900
205	1.70225	1.73813	1.78942
210	1.70155	1.73697	1.78760
215	1.70087	1.73585	1.78584
220	1.70021	1.73478	1.78414
225	1.69958	1.73374	1.78250
230	1.69897	1.73273	1.78092
235	1.69838	1.73176	1.77939
240	1.69781	1.73082	1.77791
245	1.69725	1.72991	1.77648
250	1.69671	1.72903	1.77509
255	1.69619	1.72817	1.77374
260	1.69569	1.72734	1.77243
265	1.69519	1.72653	1.77117
270	1.69472	1.72575	1.76994
275	1.69425	1.72499	1.76874
280	1.69380	1.72425	1.76758
285	1.69336	1.72353	1.76645
290	1.69293	1.72283	1.76535
295	1.69252	1.72214	1.76427
300	1.69211	1.72148	1.76323
305	1.69171	1.72083	1.76221
310	1.69133	1.72019	1.76122
315	1.69095	1.71958	1.76025
320	1.69058	1.71897	1.75931
325	1.69022	1.71839	1.75839
330	1.68987	1.71781	1.75749
335	1.68953	1.71725	1.75661
340	1.68919	1.71670	1.75575
345	1.68886	1.71616	1.75491
350	1.68854	1.71564	1.75409
355	1.68823	1.71512	1.75328
360	1.68792	1.71462	1.75250
365	1.68762	1.71413	1.75173
370	1.68733	1.71365	1.75097
375	1.68704	1.71318	1.75024
380	1.68675	1.71271	1.74951
385	1.68648	1.71226	1.74880
390	1.68621	1.71182	1.74811
395	1.68594	1.71138	1.74743
400	1.68568	1.71095	1.74676

TABLE III (Cont)

P = 0.950

n	γ		
	0.700	0.800	0.900
425	1.68444	1.70893	1.74361
450	1.68331	1.70708	1.74072
475	1.68227	1.70539	1.73808
500	1.68131	1.70382	1.73564
525	1.68042	1.70237	1.73338
550	1.67959	1.70102	1.73128
575	1.67881	1.69976	1.72932
600	1.67809	1.69858	1.72749
625	1.67741	1.69747	1.72577
650	1.67677	1.69643	1.72415
675	1.67617	1.69545	1.72262
700	1.67559	1.69452	1.72118
725	1.67505	1.69364	1.71982
750	1.67454	1.69280	1.71853
775	1.67405	1.69201	1.71730
800	1.67359	1.69126	1.71612
825	1.67314	1.69053	1.71501
850	1.67272	1.68985	1.71394
875	1.67232	1.68919	1.71292
900	1.67193	1.68856	1.71195
925	1.67156	1.68795	1.71101
950	1.67120	1.68737	1.71012
975	1.67085	1.68682	1.70925
1000	1.67052	1.68628	1.70843
∞	1.64485	1.64485	1.64485

TABLE III (Cont)

P = 0.950

n	γ		
	0.950	0.990	0.999
2	A	A	B15.20987
3	9.58397	A	A
4	5.29317	33.14610	A
5	4.19030	9.64870	A
6	3.66698	6.57193	-
7	3.35485	5.33194	15.69119
8	3.14456	4.65168	9.86654
9	2.99175	4.21717	7.62497
10	2.87480	3.91313	6.42710
11	2.78189	3.68704	5.67632
12	2.70596	3.51145	5.15879
13	2.64250	3.37057	4.77868
14	2.58851	3.25465	4.48659
15	2.54190	3.15732	4.25438
16	2.50117	3.07425	4.06486
17	2.46520	3.00237	3.90689
18	2.43315	2.93945	3.77292
19	2.40437	2.88382	3.65769
20	2.37835	2.83423	3.55736
21	2.35468	2.78968	3.46910
22	2.33305	2.74941	3.39076
23	2.31317	2.71277	3.32069
24	2.29483	2.67929	3.25758
25	2.27784	2.64853	3.20040
26	2.26205	2.62016	3.14830
27	2.24733	2.59390	3.10060
28	2.23356	2.56950	3.05674
29	2.22065	2.54675	3.01624
30	2.20851	2.52549	2.97872
31	2.19707	2.50557	2.94383
32	2.18626	2.48684	2.91130
33	2.17604	2.46921	2.88088
34	2.16635	2.45257	2.85235
35	2.15714	2.43682	2.82554
36	2.14839	2.42191	2.80029
37	2.14005	2.40776	2.77645
38	2.13209	2.39430	2.75391
39	2.12449	2.38148	2.73255
40	2.11721	2.36927	2.71227

TABLE III (Cont)

P = 0.950

n	Y		
	0.950	0.990	0.999
41	2.11025	2.35760	2.69300
42	2.10357	2.34644	2.67465
43	2.09715	2.33576	2.65715
44	2.09099	2.32553	2.64045
45	2.08506	2.31571	2.62448
46	2.07936	2.30628	2.60920
47	2.07386	2.29722	2.59455
48	2.06855	2.28849	2.58050
49	2.06343	2.28009	2.56701
50	2.05849	2.27199	2.55405
51	2.05371	2.26417	2.54157
52	2.04908	2.25662	2.52956
53	2.04460	2.24933	2.51798
54	2.04026	2.24228	2.50681
55	2.03606	2.23545	2.49603
56	2.03198	2.22885	2.48562
57	2.02802	2.22244	2.47555
58	2.02418	2.21624	2.46581
59	2.02044	2.21022	2.45638
60	2.01681	2.20437	2.44725
61	2.01328	2.19869	2.43840
62	2.00984	2.19318	2.42981
63	2.00650	2.18781	2.42148
64	2.00324	2.18260	2.41339
65	2.00007	2.17752	2.40553
66	1.99697	2.17258	2.39789
67	1.99395	2.16777	2.39046
68	1.99101	2.16307	2.38323
69	1.98814	2.15850	2.37620
70	1.98533	2.15404	2.36935
71	1.98259	2.14969	2.36268
72	1.97991	2.14544	2.35617
73	1.97730	2.14130	2.34983
74	1.97474	2.13725	2.34364
75	1.97224	2.13329	2.33761
76	1.96979	2.12942	2.33172
77	1.96739	2.12564	2.32597
78	1.96505	2.12194	2.32035
79	1.96275	2.11833	2.31486
80	1.96050	2.11478	2.30949

TABLE III (Cont)

P = 0.950

n	γ		
	0.950	0.990	0.999
81	1.95830	2.11132	2.30424
82	1.95614	2.10793	2.29911
83	1.95402	2.10460	2.29408
84	1.95195	2.10134	2.28917
85	1.94991	2.09815	2.28436
86	1.94791	2.09502	2.27965
87	1.94596	2.09196	2.27503
88	1.94403	2.08895	2.27051
89	1.94214	2.08600	2.26608
90	1.94029	2.08310	2.26174
91	1.93847	2.08026	2.25748
92	1.93668	2.07747	2.25330
93	1.93493	2.07473	2.24920
94	1.93320	2.07205	2.24518
95	1.93150	2.06940	2.24124
96	1.92983	2.06681	2.23736
97	1.92819	2.06426	2.23356
98	1.92658	2.06175	2.22983
99	1.92500	2.05929	2.22616
100	1.92343	2.05687	2.22255
101	1.92190	2.05448	2.21901
102	1.92039	2.05214	2.21553
103	1.91890	2.04984	2.21211
104	1.91744	2.04757	2.20875
105	1.91599	2.04534	2.20544
106	1.91457	2.04314	2.20219
107	1.91318	2.04098	2.19899
108	1.91180	2.03885	2.19584
109	1.91044	2.03676	2.19274
110	1.90910	2.03469	2.18969
111	1.90779	2.03266	2.18669
112	1.90649	2.03066	2.18373
113	1.90521	2.02868	2.18082
114	1.90395	2.02674	2.17796
115	1.90270	2.02482	2.17514
116	1.90147	2.02293	2.17236
117	1.90026	2.02107	2.16962
118	1.89907	2.01923	2.16692
119	1.89789	2.01742	2.16426
120	1.89673	2.01564	2.16164

TABLE III (Cont)

P = 0.950

n	γ		
	0.950	0.990	0.999
121	1.89558	2.01388	2.15905
122	1.89445	2.01214	2.15650
123	1.89334	2.01043	2.15399
124	1.89223	2.00874	2.15152
125	1.89115	2.00707	2.14907
126	1.89007	2.00542	2.14666
127	1.88901	2.00380	2.14428
128	1.88797	2.00220	2.14194
129	1.88693	2.00061	2.13962
130	1.88591	1.99905	2.13734
131	1.88490	1.99751	2.13509
132	1.88390	1.99598	2.13286
133	1.88292	1.99448	2.13067
134	1.88195	1.99299	2.12850
135	1.88099	1.99152	2.12636
136	1.88004	1.99007	2.12424
137	1.87910	1.98864	2.12215
138	1.87817	1.98722	2.12009
139	1.87725	1.98582	2.11806
140	1.87635	1.98444	2.11604
141	1.87545	1.98307	2.11406
142	1.87456	1.98172	2.11209
143	1.87369	1.98038	2.11015
144	1.87282	1.97906	2.10823
145	1.87196	1.97776	2.10634
146	1.87111	1.97647	2.10447
147	1.87027	1.97519	2.10261
148	1.86944	1.97393	2.10078
149	1.86862	1.97268	2.09897
150	1.86781	1.97144	2.09719
151	1.86701	1.97022	2.09542
152	1.86621	1.96901	2.09367
153	1.86543	1.96782	2.09194
154	1.86465	1.96664	2.09023
155	1.86388	1.96547	2.08853
156	1.86311	1.96431	2.08686
157	1.86236	1.96316	2.08520
158	1.86161	1.96203	2.08356
159	1.86087	1.96091	2.08194
160	1.86014	1.95979	2.08034

TABLE III (Cont)

P = 0.950

n	γ		
	0.950	0.990	0.999
161	1.85941	1.95870	2.07875
162	1.85869	1.95761	2.07718
163	1.85798	1.95653	2.07563
164	1.85728	1.95546	2.07409
165	1.85658	1.95441	2.07256
166	1.85589	1.95336	2.07106
167	1.85521	1.95232	2.06956
168	1.85453	1.95130	2.06809
169	1.85386	1.95028	2.06662
170	1.85319	1.94927	2.06518
171	1.85253	1.94828	2.06374
172	1.85188	1.94729	2.06232
173	1.85123	1.94631	2.06091
174	1.85059	1.94534	2.05952
175	1.84996	1.94438	2.05814
176	1.84933	1.94343	2.05678
177	1.84870	1.94249	2.05542
178	1.84808	1.94156	2.05408
179	1.84747	1.94063	2.05275
180	1.84686	1.93971	2.05144
181	1.84626	1.93881	2.05013
182	1.84566	1.93790	2.04884
183	1.84507	1.93701	2.04756
184	1.84448	1.93613	2.04629
185	1.84390	1.93525	2.04503
186	1.84333	1.93438	2.04379
187	1.84275	1.93352	2.04255
188	1.84219	1.93266	2.04133
189	1.84162	1.93182	2.04012
190	1.84107	1.93098	2.03891
191	1.84051	1.93014	2.03772
192	1.83997	1.92932	2.03654
193	1.83942	1.92850	2.03537
194	1.83888	1.92769	2.03421
195	1.83835	1.92688	2.03306
196	1.83782	1.92608	2.03191
197	1.83729	1.92529	2.03078
198	1.83677	1.92451	2.02966
199	1.83625	1.92373	2.02855
200	1.83573	1.92295	2.02744

TABLE III (Cont)

P = 0.950

n	γ		
	0.950	0.990	0.999
205	1.83322	1.91918	2.02206
210	1.83081	1.91555	2.01688
215	1.82848	1.91206	2.01191
220	1.82623	1.90870	2.00712
225	1.82407	1.90545	2.00251
230	1.82198	1.90232	1.99807
235	1.81996	1.89930	1.99378
240	1.81800	1.89638	1.98964
245	1.81611	1.89355	1.98563
250	1.81428	1.89082	1.98176
255	1.81250	1.88817	1.97802
260	1.81078	1.88560	1.97439
265	1.80911	1.88312	1.97087
270	1.80749	1.88070	1.96746
275	1.80591	1.87835	1.96415
280	1.80438	1.87608	1.96094
285	1.80289	1.87386	1.95782
290	1.80144	1.87171	1.95479
295	1.80003	1.86961	1.95184
300	1.79865	1.86757	1.94897
305	1.79732	1.86559	1.94618
310	1.79601	1.86365	1.94346
315	1.79474	1.86176	1.94082
320	1.79350	1.85992	1.93823
325	1.79229	1.85813	1.93572
330	1.79110	1.85638	1.93326
335	1.78995	1.85467	1.93087
340	1.78882	1.85300	1.92853
345	1.78772	1.85137	1.92624
350	1.78664	1.84977	1.92401
355	1.78558	1.84821	1.92183
360	1.78455	1.84669	1.91970
365	1.78354	1.84520	1.91761
370	1.78255	1.84374	1.91558
375	1.78158	1.84231	1.91358
380	1.78063	1.84091	1.91163
385	1.77971	1.83954	1.90971
390	1.77879	1.83819	1.90784
395	1.77790	1.83688	1.90601
400	1.77703	1.83559	1.90421

TABLE III (Cont)

P = 0.950

n	γ		
	0.950	0.990	0.999
425	1.77289	1.82950	1.89573
450	1.76912	1.82395	1.88801
475	1.76565	1.81886	1.88095
500	1.76246	1.81418	1.87446
525	1.75951	1.80985	1.86846
550	1.75676	1.80583	1.86290
575	1.75420	1.80208	1.85773
600	1.75181	1.79858	1.85290
625	1.74956	1.79530	1.84838
650	1.74745	1.79222	1.84413
675	1.74547	1.78932	1.84013
700	1.74359	1.78658	1.83637
725	1.74181	1.78399	1.83280
750	1.74012	1.78153	1.82943
775	1.73852	1.77920	1.82622
800	1.73699	1.77698	1.82318
825	1.73554	1.77487	1.82028
850	1.73415	1.77285	1.81752
875	1.73283	1.77093	1.81488
900	1.73156	1.76908	1.81235
925	1.73034	1.76732	1.80993
950	1.72917	1.76562	1.80762
975	1.72805	1.76400	1.80539
1000	1.72697	1.76243	1.80325
∞	1.64485	1.64485	1.64485

TABLE III (Cont)

P = 0.990

n	γ		
	0.700	0.800	0.900
2	3.77410	5.87002	24.99270
3	3.22435	4.13159	6.65344
4	3.02503	3.64877	5.03994
5	2.91559	3.40803	4.40127
6	2.84433	3.25938	4.04842
7	2.79336	3.15662	3.82042
8	2.75462	3.08043	3.65897
9	2.72394	3.02117	3.53757
10	2.69888	2.97346	3.44234
11	2.67792	2.93403	3.36523
12	2.66006	2.90075	3.30126
13	2.64461	2.87220	3.24715
14	2.63108	2.84738	3.20066
15	2.61910	2.82553	3.16018
16	2.60840	2.80613	3.12454
17	2.59877	2.78875	3.09288
18	2.59004	2.77306	3.06451
19	2.58209	2.75882	3.03892
20	2.57479	2.74581	3.01568
21	2.56808	2.73388	2.99446
22	2.56187	2.72287	2.97500
23	2.55611	2.71269	2.95706
24	2.55074	2.70322	2.94046
25	2.54573	2.69440	2.92505
26	2.54103	2.68615	2.91069
27	2.53661	2.67842	2.89727
28	2.53246	2.67115	2.88469
29	2.52853	2.66430	2.87287
30	2.52482	2.65783	2.86174
31	2.52130	2.65171	2.85124
32	2.51796	2.64590	2.84130
33	2.51478	2.64039	2.83188
34	2.51175	2.63515	2.82294
35	2.50886	2.63015	2.81444
36	2.50610	2.62538	2.80635
37	2.50346	2.62082	2.79863
38	2.50093	2.61646	2.79125
39	2.49851	2.61229	2.78420
40	2.49618	2.60828	2.77745

TABLE III (Cont)

P = 0.990

n	γ		
	0.700	0.800	0.900
41	2.49394	2.60444	2.77097
42	2.49179	2.60074	2.76476
43	2.48971	2.59718	2.75879
44	2.48771	2.59376	2.75304
45	2.48578	2.59046	2.74752
46	2.48392	2.58727	2.74219
47	2.48212	2.58420	2.73705
48	2.48038	2.58122	2.73210
49	2.47870	2.57835	2.72731
50	2.47707	2.57557	2.72268
51	2.47549	2.57288	2.71820
52	2.47396	2.57027	2.71387
53	2.47247	2.56774	2.70967
54	2.47103	2.56528	2.70560
55	2.46963	2.56290	2.70166
56	2.46827	2.56059	2.69783
57	2.46694	2.55834	2.69411
58	2.46565	2.55615	2.69049
59	2.46440	2.55402	2.68698
60	2.46318	2.55195	2.68357
61	2.46199	2.54994	2.68024
62	2.46083	2.54797	2.67701
63	2.45970	2.54606	2.67386
64	2.45859	2.54419	2.67079
65	2.45752	2.54237	2.66780
66	2.45647	2.54059	2.66488
67	2.45544	2.53886	2.66203
68	2.45444	2.53716	2.65925
69	2.45346	2.53551	2.65654
70	2.45250	2.53389	2.65389
71	2.45156	2.53231	2.65130
72	2.45064	2.53076	2.64877
73	2.44975	2.52925	2.64630
74	2.44887	2.52777	2.64388
75	2.44801	2.52632	2.64151
76	2.44717	2.52490	2.63920
77	2.44634	2.52351	2.63693
78	2.44553	2.52215	2.63471
79	2.44474	2.52082	2.63253
80	2.44396	2.51951	2.63040

TABLE III (Cont)

P = 0.990

n	γ		
	0.700	0.800	0.900
81	2.44320	2.51823	2.62832
82	2.44245	2.51697	2.62627
83	2.44172	2.51574	2.62426
84	2.44100	2.51453	2.62230
85	2.44029	2.51334	2.62037
86	2.43959	2.51217	2.61847
87	2.43891	2.51103	2.61661
88	2.43824	2.50991	2.61479
89	2.43758	2.50880	2.61300
90	2.43694	2.50772	2.61124
91	2.43630	2.50665	2.60951
92	2.43568	2.50560	2.60781
93	2.43506	2.50457	2.60614
94	2.43446	2.50356	2.60450
95	2.43386	2.50256	2.60289
96	2.43328	2.50158	2.60130
97	2.43270	2.50062	2.59974
98	2.43213	2.49967	2.59821
99	2.43158	2.49874	2.59670
100	2.43103	2.49782	2.59522
101	2.43049	2.49692	2.59375
102	2.42995	2.49602	2.59232
103	2.42943	2.49515	2.59090
104	2.42891	2.49428	2.58951
105	2.42840	2.49343	2.58813
106	2.42790	2.49260	2.58678
107	2.42741	2.49177	2.58545
108	2.42692	2.49096	2.58414
109	2.42644	2.49015	2.58285
110	2.42597	2.48936	2.58157
111	2.42550	2.48858	2.58032
112	2.42504	2.48781	2.57908
113	2.42458	2.48706	2.57786
114	2.42414	2.48631	2.57665
115	2.42369	2.48557	2.57547
116	2.42326	2.48484	2.57430
117	2.42283	2.48413	2.57314
118	2.42240	2.48342	2.57201
119	2.42198	2.48272	2.57088
120	2.42157	2.48203	2.56977

TABLE III (Cont)

P = 0.990

n	γ		
	0.700	0.800	0.900
121	2.42116	2.48135	2.56868
122	2.42076	2.48068	2.56760
123	2.42036	2.48001	2.56654
124	2.41996	2.47936	2.56548
125	2.41957	2.47871	2.56444
126	2.41919	2.47807	2.56342
127	2.41881	2.47744	2.56241
128	2.41844	2.47682	2.56141
129	2.41807	2.47620	2.56042
130	2.41770	2.47559	2.55944
131	2.41734	2.47499	2.55848
132	2.41698	2.47440	2.55753
133	2.41663	2.47381	2.55659
134	2.41628	2.47323	2.55566
135	2.41593	2.47266	2.55474
136	2.41559	2.47209	2.55383
137	2.41526	2.47153	2.55293
138	2.41492	2.47097	2.55205
139	2.41459	2.47042	2.55117
140	2.41427	2.46988	2.55030
141	2.41394	2.46935	2.54944
142	2.41362	2.46882	2.54860
143	2.41331	2.46829	2.54776
144	2.41300	2.46777	2.54693
145	2.41269	2.46726	2.54611
146	2.41238	2.46675	2.54530
147	2.41208	2.46625	2.54449
148	2.41178	2.46575	2.54370
149	2.41148	2.46526	2.54291
150	2.41119	2.46477	2.54214
151	2.41090	2.46429	2.54137
152	2.41061	2.46382	2.54061
153	2.41033	2.46334	2.53985
154	2.41005	2.46288	2.53911
155	2.40977	2.46241	2.53837
156	2.40949	2.46196	2.53764
157	2.40922	2.46150	2.53692
158	2.40895	2.46105	2.53620
159	2.40868	2.46061	2.53549
160	2.40841	2.46017	2.53479

TABLE III (Cont)

P = 0.990

n	γ		
	0.700	0.800	0.900
161	2.40815	2.45973	2.53410
162	2.40789	2.45930	2.53341
163	2.40763	2.45887	2.53273
164	2.40737	2.45845	2.53205
165	2.40712	2.45803	2.53138
166	2.40687	2.45761	2.53072
167	2.40662	2.45720	2.53006
168	2.40637	2.45679	2.52941
169	2.40613	2.45639	2.52877
170	2.40589	2.45599	2.52813
171	2.40565	2.45559	2.52750
172	2.40541	2.45520	2.52687
173	2.40518	2.45481	2.52625
174	2.40494	2.45442	2.52564
175	2.40471	2.45404	2.52503
176	2.40448	2.45366	2.52443
177	2.40425	2.45328	2.52383
178	2.40403	2.45291	2.52323
179	2.40380	2.45254	2.52265
180	2.40358	2.45217	2.52206
181	2.40336	2.45181	2.52149
182	2.40315	2.45145	2.52091
183	2.40293	2.45109	2.52035
184	2.40271	2.45074	2.51978
185	2.40250	2.45039	2.51922
186	2.40229	2.45004	2.51867
187	2.40208	2.44969	2.51812
188	2.40187	2.44935	2.51758
189	2.40167	2.44901	2.51704
190	2.40147	2.44867	2.51650
191	2.40126	2.44834	2.51597
192	2.40106	2.44801	2.51545
193	2.40086	2.44768	2.51492
194	2.40067	2.44735	2.51440
195	2.40047	2.44703	2.51389
196	2.40027	2.44671	2.51338
197	2.40008	2.44639	2.51288
198	2.39989	2.44607	2.51237
199	2.39970	2.44576	2.51188
200	2.39951	2.44545	2.51138

TABLE III (Cont)

P = 0.990

n	γ		
	0.700	0.800	0.900
205	2.39859	2.44392	2.50897
210	2.39770	2.44246	2.50665
215	2.39685	2.44105	2.50441
220	2.39602	2.43968	2.50225
225	2.39522	2.43837	2.50017
230	2.39445	2.43710	2.49816
235	2.39370	2.43587	2.49622
240	2.39298	2.43468	2.49434
245	2.39228	2.43352	2.49252
250	2.39160	2.43241	2.49075
255	2.39094	2.43132	2.48904
260	2.39031	2.43027	2.48739
265	2.38969	2.42925	2.48578
270	2.38908	2.42826	2.48421
275	2.38850	2.42730	2.48270
280	2.38793	2.42636	2.48122
285	2.38737	2.42545	2.47979
290	2.38683	2.42456	2.47839
295	2.38631	2.42370	2.47703
300	2.38580	2.42286	2.47570
305	2.38530	2.42204	2.47441
310	2.38481	2.42124	2.47316
315	2.38433	2.42046	2.47193
320	2.38387	2.41969	2.47073
325	2.38342	2.41895	2.46956
330	2.38297	2.41822	2.46842
335	2.38254	2.41751	2.46731
340	2.38212	2.41682	2.46622
345	2.38170	2.41614	2.46515
350	2.38130	2.41548	2.46411
355	2.38090	2.41483	2.46309
360	2.38052	2.41419	2.46210
365	2.38014	2.41357	2.46112
370	2.37976	2.41296	2.46017
375	2.37940	2.41237	2.45923
380	2.37904	2.41178	2.45832
385	2.37869	2.41121	2.45742
390	2.37835	2.41065	2.45654
395	2.37801	2.41010	2.45568
400	2.37769	2.40956	2.45483

TABLE III (Cont)

P = 0.990

n	γ		
	0.700	0.800	0.900
425	2.37613	2.40701	2.45084
450	2.37470	2.40467	2.44719
475	2.37339	2.40253	2.44384
500	2.37218	2.40055	2.44075
525	2.37106	2.39872	2.43789
550	2.37001	2.39702	2.43523
575	2.36904	2.39543	2.43276
600	2.36813	2.39394	2.43044
625	2.36727	2.39254	2.42827
650	2.36647	2.39123	2.42622
675	2.36570	2.38999	2.42429
700	2.36499	2.38882	2.42247
725	2.36431	2.38771	2.42075
750	2.36366	2.38666	2.41911
775	2.36304	2.38566	2.41756
800	2.36246	2.38471	2.41608
825	2.36190	2.38380	2.41467
850	2.36137	2.38293	2.41333
875	2.36086	2.38210	2.41204
900	2.36037	2.38131	2.41081
925	2.35990	2.38055	2.40963
950	2.35945	2.37982	2.40849
975	2.35902	2.37912	2.40741
1000	2.35861	2.37844	2.40636
∞	2.32635	2.32635	2.32635

TABLE III (Cont)

P = 0.990

n	Y		
	0.950	0.990	0.999
2	A	A	20.51948
3	13.33195	A	A
4	7.29074	46.57893	A
5	5.75041	13.38170	A
6	5.02495	9.05527	-
7	4.59505	7.32052	21.87841
8	4.30704	6.37345	13.66513
9	4.09874	5.77123	10.51433
10	3.94000	5.35155	8.83612
11	3.81434	5.04060	7.78767
12	3.71197	4.79991	7.06716
13	3.62667	4.60738	6.53951
14	3.55428	4.44939	6.13513
15	3.49193	4.31708	5.81448
16	3.43756	4.20441	5.55339
17	3.38963	4.10713	5.33624
18	3.34700	4.02214	5.15249
19	3.30879	3.94714	4.99473
20	3.27429	3.88039	4.85762
21	3.24296	3.82052	4.73723
22	3.21435	3.76648	4.63054
23	3.18809	3.71739	4.53526
24	3.16390	3.67258	4.44957
25	3.14151	3.63147	4.37203
26	3.12073	3.59360	4.30147
27	3.10136	3.55858	4.23696
28	3.08327	3.52607	4.17771
29	3.06631	3.49580	4.12307
30	3.05038	3.46754	4.07249
31	3.03539	3.44107	4.02552
32	3.02123	3.41622	3.98176
33	3.00785	3.39284	3.94088
34	2.99517	3.37079	3.90258
35	2.98314	3.34995	3.86662
36	2.97170	3.33022	3.83277
37	2.96080	3.31150	3.80085
38	2.95042	3.29372	3.77069
39	2.94050	3.27680	3.74212
40	2.93102	3.26068	3.71503

TABLE III (Cont)

P = 0.990

n	γ		
	0.950	0.990	0.999
41	2.92194	3.24530	3.68930
42	2.91324	3.23060	3.66482
43	2.90489	3.21653	3.64149
44	2.89687	3.20306	3.61923
45	2.88916	3.19014	3.59796
46	2.88174	3.17774	3.57762
47	2.87459	3.16582	3.55814
48	2.86770	3.15436	3.53947
49	2.86105	3.14332	3.52154
50	2.85463	3.13269	3.50433
51	2.84842	3.12243	3.48777
52	2.84242	3.11253	3.47183
53	2.83661	3.10297	3.45648
54	2.83099	3.09373	3.44168
55	2.82554	3.08479	3.42740
56	2.82025	3.07614	3.41361
57	2.81513	3.06776	3.40029
58	2.81015	3.05964	3.38740
59	2.80531	3.05176	3.37493
60	2.80061	3.04412	3.36286
61	2.79604	3.03670	3.35116
62	2.79160	3.02949	3.33982
63	2.78727	3.02249	3.32882
64	2.78306	3.01568	3.31815
65	2.77896	3.00905	3.30778
66	2.77496	3.00260	3.29770
67	2.77106	2.99632	3.28791
68	2.76726	2.99020	3.27839
69	2.76354	2.98424	3.26912
70	2.75992	2.97842	3.26010
71	2.75639	2.97275	3.25131
72	2.75293	2.96722	3.24275
73	2.74955	2.96182	3.23441
74	2.74625	2.95654	3.22627
75	2.74303	2.95139	3.21834
76	2.73987	2.94636	3.21059
77	2.73678	2.94144	3.20303
78	2.73376	2.93663	3.19565
79	2.73080	2.93192	3.18844
80	2.72790	2.92732	3.18139

TABLE III (Cont)

P = 0.990

n	γ		
	0.950	0.990	0.999
81	2.72506	2.92281	3.17450
82	2.72228	2.91840	3.16776
83	2.71955	2.91408	3.16117
84	2.71688	2.90985	3.15473
85	2.71426	2.90570	3.14842
86	2.71169	2.90164	3.14224
87	2.70916	2.89766	3.13619
88	2.70669	2.89375	3.13027
89	2.70426	2.88992	3.12446
90	2.70187	2.88616	3.11877
91	2.69953	2.88248	3.11319
92	2.69723	2.87886	3.10772
93	2.69497	2.87531	3.10236
94	2.69275	2.87182	3.09710
95	2.69057	2.86839	3.09194
96	2.68843	2.86503	3.08687
97	2.68632	2.86172	3.08190
98	2.68425	2.85848	3.07701
99	2.68221	2.85528	3.07222
100	2.68020	2.85214	3.06751
101	2.67823	2.84906	3.06288
102	2.67629	2.84602	3.05833
103	2.67438	2.84304	3.05386
104	2.67249	2.84010	3.04947
105	2.67064	2.83722	3.04515
106	2.66882	2.83437	3.04090
107	2.66702	2.83157	3.03673
108	2.66526	2.82882	3.03262
109	2.66351	2.82611	3.02857
110	2.66180	2.82344	3.02460
111	2.66011	2.82081	3.02068
112	2.65844	2.81822	3.01683
113	2.65680	2.81567	3.01303
114	2.65518	2.81315	3.00930
115	2.65358	2.81068	3.00562
116	2.65201	2.80823	3.00199
117	2.65046	2.80583	2.99842
118	2.64893	2.80346	2.99491
119	2.64742	2.80112	2.99144
120	2.64593	2.79881	2.98803

TABLE III (Cont)

P = 0.990

n	γ		
	0.950	0.990	0.999
121	2.64446	2.79654	2.98466
122	2.64301	2.79429	2.98134
123	2.64158	2.79208	2.97807
124	2.64016	2.78990	2.97485
125	2.63877	2.78774	2.97167
126	2.63739	2.78562	2.96853
127	2.63603	2.78352	2.96544
128	2.63469	2.78145	2.96238
129	2.63337	2.77941	2.95937
130	2.63206	2.77739	2.95640
131	2.63077	2.77540	2.95347
132	2.62949	2.77343	2.95058
133	2.62823	2.77149	2.94772
134	2.62698	2.76957	2.94490
135	2.62575	2.76768	2.94212
136	2.62454	2.76580	2.93937
137	2.62333	2.76396	2.93666
138	2.62215	2.76213	2.93398
139	2.62097	2.76033	2.93133
140	2.61981	2.75854	2.92872
141	2.61866	2.75678	2.92614
142	2.61753	2.75504	2.92359
143	2.61641	2.75332	2.92107
144	2.61530	2.75162	2.91858
145	2.61420	2.74993	2.91611
146	2.61311	2.74827	2.91368
147	2.61204	2.74663	2.91128
148	2.61098	2.74500	2.90890
149	2.60993	2.74339	2.90655
150	2.60889	2.74180	2.90423
151	2.60786	2.74023	2.90194
152	2.60685	2.73867	2.89967
153	2.60584	2.73713	2.89742
154	2.60484	2.73561	2.89520
155	2.60386	2.73410	2.89301
156	2.60288	2.73261	2.89084
157	2.60192	2.73114	2.88869
158	2.60096	2.72968	2.88657
159	2.60002	2.72823	2.88446
160	2.59908	2.72680	2.88238

TABLE III (Cont)

P = 0.990

n	γ		
	0.950	0.990	0.999
161	2.59815	2.72539	2.88033
162	2.59723	2.72399	2.87829
163	2.59632	2.72260	2.87628
164	2.59542	2.72123	2.87428
165	2.59453	2.71987	2.87231
166	2.59365	2.71852	2.87036
167	2.59277	2.71719	2.86842
168	2.59191	2.71587	2.86651
169	2.59105	2.71456	2.86461
170	2.59020	2.71327	2.86274
171	2.58936	2.71199	2.86088
172	2.58852	2.71072	2.85904
173	2.58770	2.70946	2.85722
174	2.58688	2.70821	2.85542
175	2.58607	2.70698	2.85363
176	2.58526	2.70576	2.85186
177	2.58446	2.70455	2.85011
178	2.58367	2.70335	2.84837
179	2.58289	2.70216	2.84665
180	2.58212	2.70098	2.84495
181	2.58135	2.69981	2.84326
182	2.58058	2.69865	2.84159
183	2.57983	2.69751	2.83994
184	2.57908	2.69637	2.83830
185	2.57834	2.69524	2.83667
186	2.57760	2.69413	2.83506
187	2.57687	2.69302	2.83346
188	2.57615	2.69192	2.83188
189	2.57543	2.69083	2.83031
190	2.57472	2.68975	2.82875
191	2.57401	2.68868	2.82721
192	2.57331	2.68762	2.82569
193	2.57262	2.68657	2.82417
194	2.57193	2.68553	2.82267
195	2.57125	2.68450	2.82118
196	2.57057	2.68347	2.81971
197	2.56990	2.68245	2.81824
198	2.56923	2.68144	2.81679
199	2.56857	2.68044	2.81535
200	2.56791	2.67945	2.81393

TABLE III (Cont)

P = 0.990

n	γ		
	0.950	0.990	0.999
205	2.56471	2.67461	2.80697
210	2.56163	2.66995	2.80029
215	2.55866	2.66548	2.79387
220	2.55580	2.66116	2.78769
225	2.55303	2.65700	2.78174
230	2.55037	2.65299	2.77601
235	2.54779	2.64912	2.77048
240	2.54530	2.64538	2.76514
245	2.54289	2.64176	2.75999
250	2.54056	2.63826	2.75500
255	2.53830	2.63487	2.75017
260	2.53611	2.63158	2.74550
265	2.53398	2.62839	2.74097
270	2.53192	2.62530	2.73659
275	2.52991	2.62230	2.73233
280	2.52796	2.61939	2.72820
285	2.52607	2.61655	2.72419
290	2.52422	2.61380	2.72029
295	2.52243	2.61112	2.71650
300	2.52068	2.60851	2.71281
305	2.51898	2.60598	2.70922
310	2.51732	2.60350	2.70573
315	2.51570	2.60109	2.70233
320	2.51412	2.59874	2.69901
325	2.51258	2.59645	2.69578
330	2.51108	2.59421	2.69263
335	2.50961	2.59203	2.68955
340	2.50817	2.58990	2.68655
345	2.50677	2.58781	2.68362
350	2.50540	2.58578	2.68075
355	2.50406	2.58379	2.67796
360	2.50275	2.58184	2.67522
365	2.50147	2.57994	2.67255
370	2.50021	2.57807	2.66993
375	2.49898	2.57625	2.66737
380	2.49778	2.57446	2.66487
385	2.49660	2.57272	2.66242
390	2.49544	2.57100	2.66002
395	2.49431	2.56933	2.65767
400	2.49320	2.56768	2.65536

TABLE III (Cont)

P = 0.990

n	γ		
	0.950	0.990	0.999
425	2.48795	2.55992	2.64450
450	2.48316	2.55285	2.63463
475	2.47876	2.54637	2.62559
500	2.47472	2.54040	2.61729
525	2.47097	2.53489	2.60962
550	2.46749	2.52978	2.60252
575	2.46425	2.52501	2.59591
600	2.46121	2.52056	2.58974
625	2.45837	2.51639	2.58397
650	2.45570	2.51248	2.57855
675	2.45318	2.50879	2.57346
700	2.45080	2.50531	2.56865
725	2.44855	2.50202	2.56411
750	2.44642	2.49890	2.55981
775	2.44439	2.49594	2.55573
800	2.44246	2.49313	2.55185
825	2.44062	2.49044	2.54816
850	2.43886	2.48788	2.54464
875	2.43719	2.48544	2.54128
900	2.43558	2.48310	2.53806
925	2.43404	2.48086	2.53499
950	2.43257	2.47871	2.53204
975	2.43115	2.47665	2.52921
1000	2.42979	2.47467	2.52649
∞	2.32635	2.32635	2.32635

TABLE III (Cont)

P = 0.999

n	γ		
	0.700	0.800	0.900
2	4.97012	7.72710	33.08867
3	4.24328	5.42376	8.73802
4	3.98217	4.78846	6.60462
5	3.83977	4.47357	5.76405
6	3.74752	4.28003	5.30152
7	3.68178	4.14673	5.00368
8	3.63197	4.04019	4.79338
9	3.59261	3.97174	4.63565
10	3.56053	3.91032	4.51217
11	3.53374	3.85963	4.41238
12	3.51094	3.81694	4.32973
13	3.49125	3.78035	4.25992
14	3.47402	3.74857	4.20001
15	3.45878	3.72064	4.14791
16	3.44518	3.69585	4.10209
17	3.43294	3.67367	4.06142
18	3.42187	3.65367	4.02502
19	3.41177	3.63551	3.99219
20	3.40253	3.61895	3.96242
21	3.39402	3.60375	3.93525
22	3.38616	3.58975	3.91034
23	3.37887	3.57680	3.88740
24	3.37207	3.56477	3.86619
25	3.36573	3.55357	3.84650
26	3.35979	3.54309	3.82816
27	3.35421	3.53327	3.81103
28	3.34895	3.52405	3.79499
29	3.34399	3.51536	3.77992
30	3.33930	3.50716	3.76573
31	3.33486	3.49940	3.75234
32	3.33064	3.49204	3.73969
33	3.32663	3.48506	3.72770
34	3.32281	3.47841	3.71632
35	3.31916	3.47209	3.70550
36	3.31568	3.46605	3.69520
37	3.31235	3.46028	3.68538
38	3.30916	3.45477	3.67601
39	3.30610	3.44948	3.66704
40	3.30317	3.44441	3.65846

TABLE III (Cont)

P = 0.999

n	γ		
	0.700	0.800	0.900
41	3.30035	3.43955	3.65023
42	3.29763	3.43488	3.64234
43	3.29502	3.43038	3.63475
44	3.29250	3.42605	3.62746
45	3.29007	3.42188	3.62045
46	3.28773	3.41785	3.61369
47	3.28546	3.41397	3.60717
48	3.28327	3.41022	3.60088
49	3.28115	3.40659	3.59481
50	3.27910	3.40307	3.58894
51	3.27711	3.39967	3.58326
52	3.27519	3.39638	3.57777
53	3.27332	3.39319	3.57245
54	3.27150	3.39009	3.56729
55	3.26974	3.38708	3.56229
56	3.26802	3.38416	3.55744
57	3.26636	3.38132	3.55273
58	3.26474	3.37856	3.54815
59	3.26316	3.37588	3.54370
60	3.26162	3.37327	3.53938
61	3.26013	3.37073	3.53517
62	3.25867	3.36825	3.53107
63	3.25725	3.36583	3.52708
64	3.25586	3.36348	3.52320
65	3.25451	3.36118	3.51941
66	3.25318	3.35894	3.51572
67	3.25189	3.35676	3.51212
68	3.25063	3.35462	3.50860
69	3.24940	3.35254	3.50517
70	3.24820	3.35050	3.50182
71	3.24702	3.34851	3.49854
72	3.24587	3.34656	3.49535
73	3.24474	3.34465	3.49222
74	3.24364	3.34279	3.48916
75	3.24256	3.34096	3.48617
76	3.24150	3.33917	3.48324
77	3.24046	3.33742	3.48037
78	3.23944	3.33571	3.47757
79	3.23845	3.33403	3.47482
80	3.23747	3.33238	3.47213

TABLE III (Cont)

P = 0.999

n	γ		
	0.700	0.800	0.900
81	3.23651	3.33077	3.46949
82	3.23557	3.32919	3.46690
83	3.23465	3.32763	3.46437
84	3.23375	3.32611	3.46188
85	3.23286	3.32461	3.45945
86	3.23199	3.32315	3.45705
87	3.23113	3.32171	3.45470
88	3.23029	3.32029	3.45240
89	3.22946	3.31890	3.45014
90	3.22865	3.31754	3.44792
91	3.22785	3.31619	3.44573
92	3.22707	3.31487	3.44359
93	3.22630	3.31358	3.44148
94	3.22554	3.31230	3.43941
95	3.22479	3.31105	3.43737
96	3.22406	3.30982	3.43537
97	3.22333	3.30861	3.43341
98	3.22262	3.30741	3.43147
99	3.22192	3.30624	3.42957
100	3.22123	3.30508	3.42769
101	3.22055	3.30394	3.42585
102	3.21988	3.30282	3.42403
103	3.21923	3.30172	3.42225
104	3.21858	3.30064	3.42049
105	3.21794	3.29957	3.41876
106	3.21731	3.29851	3.41705
107	3.21669	3.29747	3.41537
108	3.21608	3.29645	3.41372
109	3.21547	3.29544	3.41209
110	3.21488	3.29445	3.41048
111	3.21429	3.29347	3.40890
112	3.21372	3.29250	3.40734
113	3.21315	3.29155	3.40580
114	3.21258	3.29061	3.40428
115	3.21203	3.28968	3.40278
116	3.21148	3.28877	3.40131
117	3.21094	3.28786	3.39985
118	3.21041	3.28697	3.39842
119	3.20988	3.28609	3.39700
120	3.20936	3.28523	3.39560

TABLE III (Cont)

P = 0.999

n	γ		
	0.700	0.800	0.900
121	3.20885	3.28437	3.39422
122	3.20835	3.28353	3.39286
123	3.20785	3.28269	3.39152
124	3.20735	3.28187	3.39020
125	3.20686	3.28106	3.38889
126	3.20638	3.28025	3.38759
127	3.20591	3.27946	3.38632
128	3.20544	3.27868	3.38506
129	3.20497	3.27790	3.38381
130	3.20451	3.27714	3.38258
131	3.20406	3.27638	3.38137
132	3.20361	3.27563	3.38017
133	3.20317	3.27490	3.37898
134	3.20273	3.27417	3.37781
135	3.20230	3.27345	3.37666
136	3.20187	3.27273	3.37551
137	3.20145	3.27203	3.37438
138	3.20103	3.27133	3.37326
139	3.20062	3.27064	3.37216
140	3.20021	3.26996	3.37107
141	3.19980	3.26929	3.36999
142	3.19940	3.26862	3.36892
143	3.19901	3.26796	3.36786
144	3.19861	3.26731	3.36682
145	3.19823	3.26667	3.36578
146	3.19784	3.26603	3.36476
147	3.19746	3.26540	3.36375
148	3.19709	3.26478	3.36275
149	3.19672	3.26416	3.36176
150	3.19635	3.26355	3.36078
151	3.19599	3.26294	3.35981
152	3.19563	3.26234	3.35886
153	3.19527	3.26175	3.35791
154	3.19492	3.26116	3.35697
155	3.19457	3.26058	3.35604
156	3.19422	3.26001	3.35512
157	3.19388	3.25944	3.35421
158	3.19354	3.25887	3.35331
159	3.19320	3.25832	3.35242
160	3.19287	3.25776	3.35153

TABLE III (Cont)

P = 0.999

n	γ		
	0.700	0.800	0.900
161	3.19254	3.25721	3.35066
162	3.19221	3.25667	3.34979
163	3.19189	3.25614	3.34893
164	3.19157	3.25560	3.34808
165	3.19125	3.25508	3.34724
166	3.19094	3.25455	3.34641
167	3.19062	3.25404	3.34558
168	3.19032	3.25353	3.34477
169	3.19001	3.25302	3.34396
170	3.18971	3.25251	3.34315
171	3.18941	3.25202	3.34236
172	3.18911	3.25152	3.34157
173	3.18881	3.25103	3.34079
174	3.18852	3.25055	3.34001
175	3.18823	3.25007	3.33925
176	3.18794	3.24959	3.33849
177	3.18766	3.24912	3.33774
178	3.18737	3.24865	3.33699
179	3.18709	3.24819	3.33625
180	3.18682	3.24773	3.33552
181	3.18654	3.24727	3.33479
182	3.18627	3.24682	3.33407
183	3.18600	3.24637	3.33335
184	3.18573	3.24592	3.33265
185	3.18546	3.24548	3.33194
186	3.18520	3.24504	3.33125
187	3.18494	3.24461	3.33056
188	3.18468	3.24418	3.32987
189	3.18442	3.24375	3.32919
190	3.18416	3.24333	3.32852
191	3.18391	3.24291	3.32785
192	3.18366	3.24249	3.32719
193	3.18341	3.24208	3.32653
194	3.18316	3.24167	3.32588
195	3.18292	3.24127	3.32523
196	3.18267	3.24086	3.32459
197	3.18243	3.24046	3.32396
198	3.18219	3.24007	3.32333
199	3.18195	3.23967	3.32270
200	3.18172	3.23928	3.32208

TABLE III (Cont)

P = 0.999

n	γ		
	0.700	0.800	0.900
205	3.18056	3.23737	3.31904
210	3.17945	3.23553	3.31612
215	3.17838	3.23376	3.31331
220	3.17734	3.23205	3.31060
225	3.17634	3.23040	3.30798
230	3.17538	3.22881	3.30545
235	3.17444	3.22726	3.30301
240	3.17354	3.22577	3.30065
245	3.17266	3.22432	3.29836
250	3.17181	3.22292	3.29614
255	3.17099	3.22157	3.29400
260	3.17019	3.22025	3.29191
265	3.16941	3.21897	3.28989
270	3.16866	3.21773	3.28793
275	3.16792	3.21652	3.28602
280	3.16721	3.21534	3.28417
285	3.16652	3.21420	3.28236
290	3.16584	3.21309	3.28061
295	3.16518	3.21201	3.27890
300	3.16454	3.21095	3.27724
305	3.16391	3.20992	3.27562
310	3.16330	3.20892	3.27404
315	3.16271	3.20794	3.27250
320	3.16213	3.20699	3.27099
325	3.16156	3.20605	3.26953
330	3.16101	3.20514	3.26809
335	3.16046	3.20425	3.26669
340	3.15994	3.20339	3.26530
345	3.15942	3.20254	3.26399
350	3.15891	3.20170	3.26268
355	3.15842	3.20089	3.26141
360	3.15793	3.20010	3.26016
365	3.15746	3.19932	3.25893
370	3.15699	3.19855	3.25773
375	3.15654	3.19781	3.25656
380	3.15609	3.19707	3.25541
385	3.15565	3.19636	3.25428
390	3.15522	3.19565	3.25318
395	3.15480	3.19496	3.25210
400	3.15439	3.19429	3.25104

TABLE III (Cont)

P = 0.999

n	γ		
	0.700	0.800	0.900
425	3.15244	3.19109	3.24602
450	3.15065	3.18817	3.24145
475	3.14901	3.18548	3.23725
500	3.14750	3.18301	3.23337
525	3.14610	3.18071	3.22979
550	3.14479	3.17858	3.22646
575	3.14357	3.17659	3.22335
600	3.14243	3.17473	3.22044
625	3.14136	3.17298	3.21772
650	3.14035	3.17134	3.21516
675	3.13940	3.16979	3.21274
700	3.13851	3.16832	3.21046
725	3.13765	3.16693	3.20830
750	3.13685	3.16562	3.20625
775	3.13608	3.16436	3.20430
800	3.13535	3.16317	3.20245
825	3.13465	3.16204	3.20068
850	3.13398	3.16095	3.19900
875	3.13334	3.15991	3.19739
900	3.13273	3.15892	3.19584
925	3.13215	3.15797	3.19437
950	3.13159	3.15705	3.19295
975	3.13105	3.15617	3.19158
1000	3.13053	3.15533	3.19027
∞	3.09023	3.09023	3.09023

TABLE III (Cont)

P = 0.999

n	γ		
	0.950	0.990	0.999
2	A	A	26.64479
3	17.57805	A	A
4	9.56695	61.69930	A
5	7.53143	17.61871	A
6	6.57604	11.88474	-
7	6.01165	9.59068	28.87788
8	5.63457	8.34101	17.98023
9	5.36251	7.54803	13.80511
10	5.15561	6.99647	11.58446
11	4.99214	6.58855	10.19911
12	4.85919	6.27331	9.24840
13	4.74857	6.02153	8.55311
14	4.65482	5.81521	8.02094
15	4.57418	5.64263	7.59947
16	4.50392	5.49585	7.25668
17	4.44206	5.36925	6.97189
18	4.38709	5.25876	6.73114
19	4.33786	5.16136	6.52464
20	4.29345	5.07475	6.34536
21	4.25314	4.99713	6.18806
22	4.21637	4.92711	6.04878
23	4.18264	4.86357	5.92449
24	4.15158	4.80559	5.81280
25	4.12286	4.75245	5.71180
26	4.09620	4.70352	5.61996
27	4.07138	4.65830	5.53604
28	4.04820	4.61635	5.45901
29	4.02649	4.57732	5.38802
30	4.00610	4.54088	5.32235
31	3.98691	4.50677	5.26139
32	3.96881	4.47477	5.20463
33	3.95170	4.44467	5.15162
34	3.93550	4.41629	5.10200
35	3.92013	4.38949	5.05542
36	3.90552	4.36412	5.01160
37	3.89161	4.34007	4.97029
38	3.87836	4.31723	4.93127
39	3.86570	4.29550	4.89433
40	3.85361	4.27480	4.85932

TABLE III (Cont)

P = 0.999

n	γ		
	0.950	0.990	0.999
41	3.84203	4.25505	4.82607
42	3.83094	4.23619	4.79445
43	3.82030	4.21815	4.76433
44	3.81008	4.20087	4.73560
45	3.80026	4.18431	4.70816
46	3.79081	4.16842	4.68192
47	3.78171	4.15315	4.65681
48	3.77293	4.13847	4.63273
49	3.76447	4.12434	4.60964
50	3.75630	4.11072	4.58745
51	3.74841	4.09760	4.56613
52	3.74077	4.08493	4.54561
53	3.73338	4.07270	4.52585
54	3.72623	4.06088	4.50681
55	3.71930	4.04945	4.48843
56	3.71259	4.03839	4.47070
57	3.70607	4.02768	4.45356
58	3.69974	4.01730	4.43700
59	3.69360	4.00724	4.42097
60	3.68763	3.99747	4.40546
61	3.68183	3.98800	4.39043
62	3.67618	3.97879	4.37586
63	3.67069	3.96985	4.36173
64	3.66534	3.96115	4.34802
65	3.66013	3.95269	4.33471
66	3.65506	3.94446	4.32178
67	3.65011	3.93645	4.30922
68	3.64528	3.92864	4.29700
69	3.64057	3.92104	4.28511
70	3.63598	3.91362	4.27354
71	3.63149	3.90639	4.26228
72	3.62711	3.89934	4.25130
73	3.62283	3.89245	4.24061
74	3.61864	3.88573	4.23018
75	3.61455	3.87916	4.22001
76	3.61055	3.87275	4.21009
77	3.60663	3.86648	4.20040
78	3.60280	3.86035	4.19095
79	3.59905	3.85435	4.18171
80	3.59538	3.84849	4.17269

TABLE III (Cont)

P = 0.999

n	γ		
	0.950	0.990	0.999
81	3.59178	3.84275	4.16387
82	3.58825	3.83714	4.15524
83	3.58480	3.83164	4.14681
84	3.58141	3.82625	4.13856
85	3.57809	3.82097	4.13049
86	3.57484	3.81580	4.12258
87	3.57164	3.81073	4.11485
88	3.56851	3.80576	4.10727
89	3.56543	3.80089	4.09984
90	3.56241	3.79611	4.09257
91	3.55945	3.79142	4.08544
92	3.55654	3.78682	4.07845
93	3.55368	3.78230	4.07159
94	3.55087	3.77787	4.06487
95	3.54811	3.77351	4.05827
96	3.54539	3.76923	4.05180
97	3.54273	3.76503	4.04544
98	3.54010	3.76090	4.03920
99	3.53752	3.75684	4.03308
100	3.53499	3.75286	4.02706
101	3.53249	3.74893	4.02115
102	3.53003	3.74508	4.01535
103	3.52762	3.74129	4.00964
104	3.52524	3.73756	4.00403
105	3.52290	3.73389	3.99852
106	3.52059	3.73028	3.99310
107	3.51832	3.72672	3.98776
108	3.51608	3.72322	3.98252
109	3.51388	3.71978	3.97736
110	3.51171	3.71639	3.97228
111	3.50957	3.71305	3.96729
112	3.50747	3.70976	3.96237
113	3.50539	3.70652	3.95753
114	3.50334	3.70333	3.95277
115	3.50133	3.70018	3.94808
116	3.49934	3.69709	3.94345
117	3.49738	3.69403	3.93890
118	3.49544	3.69102	3.93442
119	3.49353	3.68805	3.93000
120	3.49165	3.68512	3.92565

TABLE III (Cont)

P = 0.999

n	γ		
	0.950	0.990	0.999
121	3.48979	3.68224	3.92136
122	3.48796	3.67939	3.91713
123	3.48615	3.67658	3.91296
124	3.48437	3.67382	3.90885
125	3.48261	3.67108	3.90480
126	3.48087	3.66839	3.90080
127	3.47915	3.66573	3.89686
128	3.47746	3.66310	3.89297
129	3.47579	3.66051	3.88913
130	3.47413	3.65795	3.88535
131	3.47250	3.65543	3.88162
132	3.47089	3.65293	3.87793
133	3.46930	3.65047	3.87429
134	3.46772	3.64804	3.87070
135	3.46617	3.64564	3.86716
136	3.46463	3.64326	3.86366
137	3.46312	3.64092	3.86021
138	3.46161	3.63861	3.85680
139	3.46013	3.63632	3.85343
140	3.45867	3.63406	3.85010
141	3.45722	3.63182	3.84682
142	3.45579	3.62962	3.84357
143	3.45437	3.62744	3.84036
144	3.45297	3.62528	3.83719
145	3.45158	3.62315	3.83406
146	3.45022	3.62104	3.83097
147	3.44886	3.61896	3.82791
148	3.44752	3.61690	3.82489
149	3.44620	3.61480	3.82190
150	3.44488	3.61284	3.81895
151	3.44359	3.61085	3.81603
152	3.44230	3.60888	3.81314
153	3.44103	3.60693	3.81028
154	3.43978	3.60500	3.80746
155	3.43853	3.60309	3.80467
156	3.43730	3.60121	3.80191
157	3.43609	3.59934	3.79918
158	3.43488	3.59749	3.79648
159	3.43369	3.59566	3.79380
160	3.43250	3.59385	3.79116

TABLE III (Cont)

P = 0.999

n	γ		
	0.950	0.990	0.999
161	3.43134	3.59206	3.78854
162	3.43018	3.59028	3.78596
163	3.42903	3.58853	3.78340
164	3.42789	3.58679	3.78086
165	3.42677	3.58507	3.77835
166	3.42566	3.58337	3.77587
167	3.42455	3.58168	3.77341
168	3.42346	3.58001	3.77098
169	3.42238	3.57835	3.76857
170	3.42131	3.57672	3.76619
171	3.42024	3.57509	3.76383
172	3.41919	3.57349	3.76149
173	3.41815	3.57190	3.75918
174	3.41712	3.57032	3.75689
175	3.41609	3.56876	3.75462
176	3.41508	3.56721	3.75237
177	3.41408	3.56568	3.75015
178	3.41308	3.56416	3.74794
179	3.41209	3.56266	3.74576
180	3.41111	3.56116	3.74360
181	3.41014	3.55969	3.74145
182	3.40918	3.55822	3.73933
183	3.40823	3.55677	3.73723
184	3.40729	3.55533	3.73514
185	3.40635	3.55391	3.73308
186	3.40542	3.55250	3.73103
187	3.40450	3.55110	3.72900
188	3.40359	3.54971	3.72699
189	3.40268	3.54833	3.72500
190	3.40179	3.54697	3.72303
191	3.40090	3.54561	3.72107
192	3.40002	3.54427	3.71913
193	3.39914	3.54294	3.71721
194	3.39827	3.54162	3.71531
195	3.39741	3.54032	3.71342
196	3.39656	3.53902	3.71154
197	3.39571	3.53773	3.70969
198	3.39487	3.53646	3.70785
199	3.39404	3.53519	3.70602
200	3.39321	3.53394	3.70421

TABLE III (Cont)

P = 0.999

n	Y		
	0.950	0.990	0.999
205	3.38917	3.52782	3.69538
210	3.38529	3.52193	3.68691
215	3.38155	3.51627	3.67876
220	3.37795	3.51082	3.67093
225	3.37447	3.50557	3.66339
230	3.37112	3.50050	3.65612
235	3.36787	3.49561	3.64911
240	3.36474	3.49089	3.64235
245	3.36170	3.48631	3.63581
250	3.35877	3.48189	3.62949
255	3.35592	3.47761	3.62338
260	3.35316	3.47346	3.61746
265	3.35048	3.46944	3.61173
270	3.34789	3.46554	3.60618
275	3.34536	3.46175	3.60079
280	3.34291	3.45807	3.59556
285	3.34052	3.45450	3.59048
290	3.33820	3.45103	3.58554
295	3.33595	3.44765	3.58075
300	3.33375	3.44436	3.57608
305	3.33161	3.44115	3.57154
310	3.32952	3.43803	3.56712
315	3.32749	3.43499	3.56282
320	3.32550	3.43203	3.55863
325	3.32356	3.42914	3.55454
330	3.32167	3.42632	3.55055
335	3.31983	3.42357	3.54666
340	3.31802	3.42088	3.54287
345	3.31626	3.41825	3.53916
350	3.31454	3.41569	3.53554
355	3.31285	3.41318	3.53200
360	3.31121	3.41073	3.52855
365	3.30959	3.40833	3.52517
370	3.30801	3.40598	3.52187
375	3.30647	3.40368	3.51863
380	3.30495	3.40143	3.51547
385	3.30347	3.39923	3.51237
390	3.30202	3.39707	3.50934
395	3.30059	3.39496	3.50637
400	3.29920	3.39289	3.50346

TABLE III (Cont)

P = 0.999

n	Y		
	0.950	0.990	0.999
425	3.29260	3.38311	3.48975
450	3.28659	3.37420	3.47728
475	3.28107	3.36605	3.46587
500	3.27599	3.35854	3.45540
525	3.27128	3.35161	3.44573
550	3.26692	3.34517	3.43677
575	3.26284	3.33918	3.42844
600	3.25904	3.33358	3.42067
625	3.25547	3.32834	3.41339
650	3.25212	3.32342	3.40657
675	3.24896	3.31879	3.40015
700	3.24597	3.31441	3.39409
725	3.24315	3.31028	3.38837
750	3.24047	3.30636	3.38296
775	3.23793	3.30264	3.37782
800	3.23551	3.29910	3.37294
825	3.23320	3.29573	3.36829
850	3.23100	3.29251	3.36386
875	3.22890	3.28944	3.35963
900	3.22689	3.28651	3.35559
925	3.22496	3.28369	3.35172
950	3.22311	3.28100	3.34801
975	3.22133	3.27841	3.34445
1000	3.21962	3.27592	3.34103
∞	3.09023	3.09023	3.09023

TABLE IV

Table of Factors of 105 Percent of the Two-Sided Limit

$$\gamma = 0.75$$

n	P				
	0.875	0.95	0.975	0.995	0.9995
2	4.723	6.616	7.785	10.008	12.516
3	2.626	3.715	4.396	5.703	7.186
4	2.137	3.037	3.603	4.695	5.940
5	1.916	2.729	3.242	4.235	5.373
6	1.789	2.550	3.033	3.968	5.042
7	1.705	2.434	2.895	3.792	4.823
8	1.646	2.350	2.790	3.666	4.666
9	1.601	2.287	2.723	3.570	4.547
10	1.567	2.238	2.664	3.494	4.453
11	1.538	2.198	2.618	3.435	4.377
12	1.515	2.165	2.579	3.384	4.316
13	1.496	2.138	2.545	3.342	4.262
14	1.479	2.114	2.518	3.305	4.217
15	1.465	2.094	2.494	3.274	4.178
16	1.452	2.076	2.473	3.247	4.143
17	1.441	2.060	2.454	3.222	4.113
18	1.431	2.045	2.437	3.200	4.086
19	1.423	2.033	2.422	3.182	4.060
20	1.414	2.021	2.409	3.164	4.038
21	1.407	2.011	2.396	3.148	4.018
22	1.401	2.001	2.385	3.133	3.999
23	1.394	1.993	2.374	3.120	3.983
24	1.388	1.986	2.365	3.107	3.967
25	1.383	1.977	2.356	3.095	3.952
26	1.370	1.971	2.348	3.085	3.939
27	1.374	1.965	2.340	3.075	3.927
28	1.370	1.958	2.333	3.066	3.914
29	1.366	1.953	2.327	3.057	3.904
30	1.362	1.948	2.321	3.049	3.893
31	1.359	1.943	2.314	3.041	3.884
32	1.356	1.938	2.309	3.035	3.875
33	1.352	1.934	2.304	3.027	3.866
34	1.349	1.930	2.298	3.021	3.858
35	1.347	1.926	2.294	3.015	3.850
36	1.344	1.922	2.290	3.009	3.843
37	1.342	1.918	2.286	3.003	3.836
38	1.339	1.915	2.282	2.998	3.829
39	1.337	1.912	2.277	2.993	3.823
40	1.335	1.909	2.274	2.988	3.817
41	1.332	1.906	2.270	2.983	3.810
42	1.330	1.903	2.267	2.979	3.805
43	1.329	1.901	2.264	2.975	3.800
44	1.327	1.897	2.261	2.970	3.795
45	1.325	1.895	2.258	2.967	3.789
46	1.324	1.892	2.255	2.963	3.785
47	1.322	1.890	2.252	2.960	3.780
48	1.321	1.888	2.250	2.956	3.776
49	1.319	1.886	2.247	2.953	3.772
50	1.318	1.884	2.245	2.949	3.767

TABLE IV (Cont)

$$\gamma = 0.75$$

n	P				
	0.875	0.95	0.975	0.995	0.9995
51	1.316	1.882	2.242	2.946	3.763
52	1.315	1.880	2.240	2.943	3.760
53	1.314	1.878	2.238	2.941	3.756
54	1.313	1.876	2.235	2.938	3.753
55	1.311	1.874	2.233	2.935	3.750
56	1.309	1.873	2.231	2.933	3.745
57	1.308	1.871	2.229	2.930	3.742
58	1.307	1.870	2.228	2.927	3.739
59	1.306	1.868	2.226	2.925	3.736
60	1.305	1.867	2.224	2.923	3.734
61	1.304	1.865	2.223	2.920	3.731
62	1.303	1.864	2.221	2.918	3.728
63	1.302	1.863	2.219	2.916	3.725
64	1.302	1.861	2.218	2.914	3.722
65	1.301	1.860	2.216	2.912	3.720
66	1.300	1.859	2.214	2.910	3.717
67	1.299	1.857	2.213	2.909	3.715
68	1.298	1.856	2.211	2.906	3.713
69	1.297	1.854	2.210	2.904	3.710
70	1.297	1.853	2.209	2.902	3.708
71	1.296	1.852	2.207	2.901	3.705
72	1.295	1.851	2.206	2.899	3.703
73	1.295	1.850	2.205	2.898	3.701
74	1.294	1.849	2.204	2.896	3.699
75	1.293	1.848	2.203	2.895	3.697
76	1.292	1.847	2.201	2.893	3.695
77	1.292	1.846	2.200	2.892	3.693
78	1.290	1.846	2.199	2.890	3.692
79	1.290	1.845	2.198	2.889	3.690
80	1.289	1.844	2.197	2.886	3.688
81	1.288	1.843	2.196	2.885	3.686
82	1.288	1.842	2.195	2.884	3.684
83	1.287	1.841	2.193	2.883	3.682
84	1.287	1.841	2.192	2.881	3.681
85	1.286	1.840	2.191	2.880	3.679
86	1.286	1.839	2.190	2.879	3.678
87	1.285	1.838	2.190	2.878	3.676
88	1.285	1.836	2.189	2.877	3.675
89	1.284	1.836	2.188	2.875	3.673
90	1.284	1.835	2.187	2.874	3.672
91	1.283	1.834	2.186	2.873	3.670
92	1.283	1.834	2.185	2.872	3.669
93	1.282	1.833	2.185	2.871	3.668
94	1.282	1.832	2.184	2.870	3.666
95	1.281	1.832	2.183	2.869	3.665
96	1.281	1.831	2.182	2.868	3.663
97	1.280	1.830	2.181	2.867	3.662
98	1.280	1.830	2.181	2.865	3.660
99	1.280	1.829	2.180	2.864	3.659
100	1.279	1.829	2.179	2.863	3.658

TABLE IV (Cont)

$$\gamma = 0.75$$

n	P				
	0.875	0.95	0.975	0.995	0.9995
101	1.279	1.828	2.179	2.862	3.657
102	1.278	1.828	2.178	2.862	3.656
104	1.278	1.826	2.177	2.860	3.654
106	1.277	1.825	2.175	2.858	3.651
108	1.276	1.824	2.174	2.857	3.649
110	1.275	1.823	2.172	2.855	3.647
112	1.275	1.822	2.171	2.853	3.645
114	1.274	1.821	2.170	2.852	3.642
116	1.273	1.820	2.168	2.850	3.641
118	1.273	1.820	2.167	2.849	3.639
120	1.272	1.819	2.166	2.848	3.637
122	1.271	1.818	2.165	2.846	3.635
124	1.271	1.817	2.164	2.844	3.634
126	1.269	1.815	2.163	2.843	3.632
128	1.269	1.814	2.163	2.842	3.631
130	1.268	1.814	2.162	2.840	3.629
132	1.268	1.813	2.161	2.839	3.628
134	1.267	1.812	2.160	2.838	3.626
136	1.267	1.811	2.159	2.837	3.625
138	1.266	1.811	2.158	2.836	3.623
140	1.266	1.810	2.157	2.835	3.621
142	1.265	1.809	2.157	2.834	3.620
144	1.265	1.809	2.156	2.833	3.618
146	1.264	1.808	2.155	2.832	3.617
148	1.264	1.808	2.154	2.831	3.616
150	1.264	1.807	2.154	2.830	3.615
152	1.263	1.806	2.153	2.829	3.613
154	1.263	1.806	2.151	2.828	3.612
156	1.262	1.805	2.151	2.827	3.611
158	1.262	1.805	2.150	2.826	3.610
160	1.262	1.804	2.149	2.826	3.609
162	1.261	1.804	2.149	2.825	3.608
164	1.261	1.803	2.148	2.823	3.607
166	1.261	1.803	2.147	2.822	3.606
168	1.260	1.802	2.147	2.821	3.605
170	1.260	1.802	2.146	2.821	3.604
172	1.259	1.801	2.146	2.820	3.603
174	1.259	1.801	2.145	2.819	3.602
176	1.259	1.800	2.145	2.818	3.600
178	1.259	1.800	2.144	2.818	3.599
180	1.258	1.799	2.144	2.817	3.598
185	1.257	1.798	2.142	2.815	3.596
190	1.257	1.797	2.141	2.814	3.594
195	1.256	1.796	2.140	2.812	3.592
200	1.255	1.794	2.139	2.811	3.590
205	1.255	1.793	2.138	2.809	3.589
210	1.254	1.793	2.137	2.808	3.587
215	1.254	1.792	2.136	2.807	3.585
220	1.253	1.791	2.135	2.805	3.584

TABLE IV (Cont)

 $\gamma = 0.75$

n	P				
	0.875	0.95	0.975	0.995	0.9995
225	1.252	1.790	2.134	2.804	3.582
230	1.252	1.789	2.133	2.802	3.579
235	1.251	1.789	2.132	2.801	3.578
240	1.251	1.788	2.130	2.800	3.577
245	1.250	1.787	2.129	2.799	3.575
250	1.250	1.787	2.129	2.798	3.574
255	1.250	1.786	2.128	2.797	3.573
260	1.248	1.785	2.127	2.796	3.571
265	1.248	1.785	2.126	2.795	3.570
270	1.247	1.784	2.126	2.794	3.569
275	1.247	1.784	2.125	2.793	3.568
280	1.247	1.783	2.124	2.792	3.567
285	1.246	1.783	2.124	2.791	3.566
290	1.246	1.782	2.123	2.791	3.565
295	1.245	1.782	2.123	2.790	3.564
300	1.245	1.781	2.122	2.789	3.563
310	1.244	1.780	2.121	2.788	3.561
320	1.244	1.779	2.120	2.786	3.558
330	1.243	1.778	2.119	2.785	3.557
340	1.243	1.778	2.118	2.784	3.555
350	1.242	1.777	2.117	2.781	3.553
360	1.242	1.776	2.116	2.780	3.552
370	1.241	1.775	2.115	2.779	3.551
380	1.241	1.775	2.114	2.778	3.549
390	1.240	1.773	2.114	2.777	3.548
400	1.240	1.772	2.113	2.776	3.547
425	1.239	1.771	2.111	2.774	3.544
450	1.238	1.770	2.109	2.772	3.541
475	1.237	1.769	2.107	2.770	3.539
500	1.236	1.767	2.106	2.768	3.536
525	1.236	1.766	2.105	2.767	3.534
550	1.235	1.765	2.104	2.765	3.532
575	1.234	1.765	2.103	2.764	3.530
600	1.234	1.764	2.102	2.763	3.528
625	1.233	1.763	2.101	2.760	3.527
650	1.233	1.762	2.100	2.759	3.525
675	1.232	1.762	2.099	2.758	3.524
700	1.232	1.761	2.098	2.757	3.523
725	1.231	1.760	2.098	2.756	3.522
750	1.231	1.760	2.097	2.755	3.520
800	1.230	1.759	2.096	2.754	3.518
850	1.230	1.758	2.094	2.752	3.515
900	1.229	1.757	2.093	2.751	3.514
950	1.227	1.756	2.092	2.750	3.512
1000	1.227	1.755	2.092	2.748	3.511
∞	1.150	1.645	1.960	2.576	3.291

TABLE IV (Cont)

$$\gamma = 0.90$$

n	P				
	0.875	0.95	0.975	0.995	0.9995
2	11.977	16.777	19.740	25.375	31.738
3	4.339	6.139	7.265	9.423	11.874
4	3.079	4.374	5.190	6.762	8.556
5	2.577	3.669	4.360	5.694	7.223
6	2.306	3.288	3.909	5.114	6.497
7	2.136	3.047	3.625	4.747	6.038
8	2.017	2.880	3.427	4.492	5.718
9	1.931	2.757	3.281	4.303	5.481
10	1.864	2.662	3.169	4.157	5.298
11	1.810	2.586	3.080	4.041	5.151
12	1.767	2.524	3.006	3.946	5.032
13	1.730	2.473	2.945	3.866	4.932
14	1.700	2.430	2.894	3.799	4.846
15	1.674	2.392	2.849	3.740	4.772
16	1.651	2.358	2.810	3.690	4.708
17	1.630	2.330	2.775	3.645	4.652
18	1.612	2.304	2.745	3.605	4.601
19	1.596	2.281	2.717	3.569	4.556
20	1.581	2.260	2.692	3.536	4.515
21	1.568	2.242	2.670	3.507	4.477
22	1.556	2.224	2.650	3.481	4.444
23	1.545	2.208	2.631	3.457	4.413
24	1.535	2.193	2.613	3.434	4.385
25	1.526	2.181	2.598	3.414	4.359
26	1.516	2.168	2.583	3.394	4.333
27	1.509	2.157	2.569	3.376	4.311
28	1.502	2.146	2.557	3.359	4.289
29	1.494	2.136	2.545	3.343	4.269
30	1.488	2.126	2.534	3.329	4.251
31	1.482	2.118	2.523	3.315	4.234
32	1.475	2.109	2.513	3.302	4.217
33	1.470	2.101	2.504	3.290	4.201
34	1.465	2.094	2.495	3.278	4.186
35	1.460	2.087	2.486	3.268	4.173
36	1.455	2.080	2.479	3.257	4.159
37	1.450	2.074	2.471	3.247	4.146
38	1.446	2.067	2.463	3.237	4.135
39	1.443	2.062	2.457	3.229	4.123
40	1.439	2.057	2.451	3.219	4.113
41	1.434	2.052	2.444	3.212	4.102
42	1.431	2.046	2.438	3.204	4.092
43	1.428	2.041	2.432	3.196	4.082
44	1.425	2.037	2.427	3.189	4.073
45	1.422	2.032	2.421	3.182	4.065
46	1.419	2.028	2.416	3.175	4.056
47	1.415	2.023	2.412	3.169	4.048
48	1.412	2.020	2.407	3.163	4.039
49	1.410	2.016	2.402	3.156	4.032
50	1.407	2.012	2.398	3.151	4.025

TABLE IV (Cont)

$$\gamma = 0.90$$

n	P				
	0.875	0.95	0.975	0.995	0.9995
51	1.405	2.009	2.393	3.145	4.017
52	1.403	2.006	2.390	3.140	4.011
53	1.401	2.002	2.386	3.134	4.004
54	1.398	1.999	2.381	3.130	3.997
55	1.395	1.996	2.378	3.125	3.991
56	1.393	1.993	2.374	3.121	3.986
57	1.391	1.990	2.371	3.115	3.980
58	1.389	1.987	2.368	3.111	3.974
59	1.388	1.985	2.365	3.107	3.968
60	1.386	1.981	2.360	3.103	3.963
61	1.384	1.979	2.357	3.099	3.957
62	1.382	1.976	2.355	3.094	3.953
63	1.381	1.974	2.352	3.091	3.948
64	1.379	1.972	2.349	3.087	3.943
65	1.378	1.969	2.347	3.084	3.939
66	1.376	1.967	2.344	3.080	3.934
67	1.374	1.965	2.340	3.077	3.929
68	1.372	1.962	2.338	3.073	3.925
69	1.371	1.960	2.336	3.069	3.921
70	1.369	1.958	2.333	3.066	3.917
71	1.368	1.956	2.331	3.063	3.913
72	1.367	1.954	2.329	3.061	3.909
73	1.365	1.952	2.327	3.058	3.905
74	1.364	1.951	2.325	3.054	3.902
75	1.363	1.949	2.322	3.051	3.898
76	1.362	1.947	2.319	3.049	3.894
77	1.361	1.946	2.317	3.046	3.891
78	1.360	1.944	2.316	3.043	3.887
79	1.358	1.941	2.314	3.041	3.884
80	1.357	1.940	2.312	3.039	3.881
81	1.356	1.938	2.310	3.036	3.878
82	1.355	1.937	2.308	3.033	3.875
83	1.353	1.935	2.306	3.031	3.871
84	1.352	1.934	2.305	3.028	3.868
85	1.351	1.933	2.303	3.026	3.866
86	1.350	1.931	2.301	3.024	3.863
87	1.349	1.930	2.300	3.022	3.860
88	1.348	1.929	2.297	3.020	3.858
89	1.348	1.927	2.296	3.018	3.855
90	1.347	1.926	2.294	3.016	3.852
91	1.346	1.925	2.293	3.014	3.849
92	1.345	1.924	2.291	3.011	3.847
93	1.344	1.922	2.290	3.009	3.844
94	1.343	1.920	2.289	3.007	3.842
95	1.342	1.919	2.287	3.006	3.840
96	1.342	1.918	2.286	3.004	3.837
97	1.341	1.917	2.284	3.002	3.835
98	1.340	1.916	2.283	3.000	3.833
99	1.339	1.915	2.282	2.999	3.830
100	1.339	1.913	2.281	2.997	3.828

TABLE IV (Cont)

$$\gamma = 0.90$$

n	P				
	0.875	0.95	0.975	0.995	0.9995
101	1.338	1.912	2.279	2.995	3.826
102	1.337	1.911	2.277	2.994	3.824
104	1.336	1.909	2.275	2.990	3.820
106	1.334	1.907	2.272	2.987	3.816
108	1.332	1.906	2.270	2.984	3.812
110	1.331	1.904	2.268	2.981	3.807
112	1.330	1.902	2.266	2.978	3.804
114	1.328	1.899	2.264	2.975	3.800
116	1.327	1.898	2.262	2.973	3.797
118	1.326	1.896	2.260	2.969	3.794
120	1.325	1.894	2.258	2.967	3.791
122	1.324	1.893	2.255	2.964	3.787
124	1.323	1.891	2.254	2.962	3.784
126	1.322	1.890	2.252	2.960	3.781
128	1.321	1.889	2.250	2.957	3.778
130	1.320	1.887	2.248	2.955	3.775
132	1.319	1.886	2.247	2.953	3.772
134	1.318	1.885	2.245	2.951	3.770
136	1.317	1.883	2.244	2.948	3.766
138	1.316	1.882	2.242	2.946	3.764
140	1.315	1.881	2.241	2.944	3.761
142	1.315	1.880	2.239	2.942	3.759
144	1.314	1.877	2.238	2.941	3.757
146	1.313	1.876	2.237	2.939	3.754
148	1.311	1.875	2.234	2.937	3.752
150	1.310	1.874	2.233	2.935	3.750
152	1.310	1.873	2.232	2.934	3.747
154	1.309	1.872	2.231	2.932	3.745
156	1.308	1.871	2.229	2.931	3.743
158	1.308	1.870	2.228	2.928	3.741
160	1.307	1.869	2.227	2.926	3.739
162	1.306	1.868	2.226	2.925	3.737
164	1.306	1.867	2.225	2.924	3.735
166	1.305	1.866	2.224	2.922	3.733
168	1.304	1.865	2.223	2.921	3.731
170	1.304	1.864	2.222	2.919	3.730
172	1.303	1.864	2.221	2.918	3.728
174	1.302	1.863	2.220	2.917	3.725
176	1.302	1.862	2.219	2.915	3.724
178	1.301	1.861	2.218	2.914	3.722
180	1.301	1.860	2.217	2.913	3.720
185	1.299	1.857	2.213	2.910	3.716
190	1.298	1.855	2.211	2.906	3.713
195	1.297	1.854	2.209	2.903	3.709
200	1.296	1.852	2.207	2.900	3.705
205	1.295	1.850	2.205	2.898	3.702
210	1.293	1.849	2.203	2.895	3.698
215	1.292	1.847	2.201	2.893	3.695
220	1.290	1.846	2.200	2.891	3.692

TABLE IV (Cont)

$$\gamma = 0.90$$

n	P				
	0.875	0.95	0.975	0.995	0.9995
225	1.289	1.844	2.198	2.888	3.690
230	1.288	1.843	2.196	2.885	3.687
235	1.287	1.842	2.195	2.883	3.683
240	1.287	1.840	2.192	2.881	3.681
245	1.286	1.839	2.191	2.879	3.678
250	1.285	1.838	2.189	2.877	3.676
255	1.284	1.836	2.188	2.876	3.674
260	1.283	1.835	2.187	2.874	3.671
265	1.283	1.834	2.185	2.872	3.669
270	1.282	1.833	2.184	2.871	3.667
275	1.281	1.832	2.183	2.869	3.665
280	1.280	1.831	2.182	2.867	3.662
285	1.280	1.830	2.180	2.865	3.660
290	1.279	1.829	2.179	2.863	3.658
295	1.278	1.828	2.178	2.862	3.656
300	1.278	1.827	2.177	2.861	3.655
310	1.277	1.825	2.175	2.858	3.651
320	1.276	1.824	2.172	2.855	3.648
330	1.274	1.822	2.170	2.853	3.645
340	1.273	1.821	2.169	2.851	3.641
350	1.272	1.819	2.167	2.849	3.638
360	1.271	1.818	2.165	2.846	3.636
370	1.271	1.817	2.164	2.843	3.633
380	1.269	1.814	2.162	2.842	3.631
390	1.268	1.813	2.161	2.840	3.628
400	1.267	1.812	2.160	2.838	3.626
425	1.265	1.809	2.157	2.834	3.620
450	1.264	1.807	2.154	2.830	3.615
475	1.262	1.805	2.150	2.827	3.610
500	1.261	1.803	2.148	2.823	3.606
525	1.259	1.801	2.145	2.820	3.603
550	1.258	1.799	2.143	2.817	3.598
575	1.257	1.798	2.141	2.814	3.595
600	1.256	1.796	2.140	2.812	3.592
625	1.255	1.794	2.138	2.810	3.589
650	1.254	1.792	2.136	2.808	3.587
675	1.253	1.791	2.135	2.806	3.584
700	1.252	1.790	2.134	2.804	3.582
725	1.252	1.789	2.132	2.801	3.578
750	1.251	1.788	2.130	2.800	3.576
800	1.248	1.786	2.128	2.796	3.572
850	1.247	1.784	2.126	2.794	3.569
900	1.246	1.782	2.124	2.791	3.566
950	1.245	1.781	2.122	2.789	3.563
1000	1.244	1.780	2.120	2.787	3.560
∞	1.150	1.645	1.960	2.576	3.291

TABLE IV (Cont)

$\gamma = 0.95$

n	P				
	0.875	0.95	0.975	0.995	0.9995
2	24.001	33.620	39.558	50.852	63.602
3	6.218	8.799	10.412	13.504	17.018
4	3.968	5.637	6.689	8.714	11.027
5	3.152	4.489	5.333	6.966	8.836
6	2.734	3.898	4.635	6.064	7.704
7	2.479	3.537	4.207	5.510	7.010
8	2.307	3.293	3.919	5.136	6.537
9	2.182	3.115	3.709	4.863	6.194
10	2.086	2.981	3.548	4.655	5.931
11	2.012	2.874	3.422	4.491	5.725
12	1.951	2.788	3.320	4.358	5.556
13	1.901	2.716	3.235	4.246	5.416
14	1.859	2.655	3.163	4.153	5.297
15	1.822	2.604	3.102	4.072	5.196
16	1.790	2.559	3.048	4.003	5.108
17	1.763	2.520	3.001	3.942	5.031
18	1.738	2.484	2.960	3.887	4.961
19	1.717	2.454	2.923	3.839	4.900
20	1.697	2.426	2.890	3.796	4.845
21	1.679	2.400	2.859	3.756	4.795
22	1.663	2.377	2.832	3.720	4.749
23	1.649	2.356	2.807	3.688	4.708
24	1.635	2.336	2.784	3.657	4.669
25	1.622	2.318	2.763	3.630	4.634
26	1.611	2.303	2.743	3.604	4.601
27	1.599	2.287	2.725	3.579	4.571
28	1.590	2.272	2.708	3.557	4.542
29	1.580	2.260	2.692	3.536	4.516
30	1.572	2.247	2.676	3.518	4.492
31	1.563	2.235	2.663	3.499	4.469
32	1.555	2.224	2.650	3.482	4.447
33	1.549	2.213	2.638	3.465	4.426
34	1.541	2.204	2.626	3.450	4.407
35	1.535	2.195	2.615	3.436	4.388
36	1.528	2.185	2.603	3.421	4.369
37	1.523	2.177	2.594	3.408	4.353
38	1.518	2.171	2.587	3.399	4.341
39	1.513	2.163	2.578	3.387	4.326
40	1.507	2.155	2.567	3.374	4.309
41	1.502	2.147	2.559	3.362	4.295
42	1.497	2.141	2.550	3.352	4.281
43	1.493	2.135	2.543	3.342	4.268
44	1.489	2.128	2.536	3.332	4.256
45	1.485	2.122	2.528	3.323	4.244
46	1.481	2.117	2.522	3.314	4.233
47	1.476	2.112	2.516	3.305	4.222
48	1.473	2.106	2.510	3.297	4.212
49	1.469	2.101	2.503	3.290	4.202
50	1.466	2.096	2.498	3.282	4.193

TABLE IV (Cont)

$$\gamma = 0.95$$

n	P				
	0.875	0.95	0.975	0.995	0.9995
51	1.463	2.092	2.492	3.275	4.183
52	1.460	2.087	2.486	3.268	4.174
53	1.456	2.083	2.481	3.261	4.165
54	1.453	2.079	2.477	3.255	4.157
55	1.451	2.075	2.472	3.249	4.149
56	1.448	2.071	2.468	3.242	4.141
57	1.446	2.066	2.462	3.236	4.134
58	1.443	2.063	2.458	3.230	4.127
59	1.441	2.059	2.454	3.225	4.119
60	1.437	2.056	2.450	3.219	4.112
61	1.435	2.053	2.445	3.214	4.104
62	1.433	2.049	2.441	3.209	4.098
63	1.431	2.045	2.438	3.204	4.092
64	1.429	2.042	2.434	3.198	4.086
65	1.427	2.040	2.431	3.194	4.080
66	1.425	2.037	2.427	3.189	4.074
67	1.423	2.034	2.423	3.185	4.068
68	1.421	2.031	2.420	3.180	4.062
69	1.419	2.029	2.417	3.176	4.057
70	1.416	2.025	2.414	3.172	4.052
71	1.414	2.023	2.411	3.168	4.047
72	1.413	2.020	2.408	3.164	4.041
73	1.411	2.018	2.405	3.159	4.036
74	1.410	2.016	2.401	3.156	4.032
75	1.408	2.013	2.399	3.152	4.027
76	1.406	2.011	2.396	3.149	4.023
77	1.405	2.009	2.393	3.146	4.017
78	1.403	2.007	2.391	3.142	4.013
79	1.402	2.004	2.388	3.138	4.009
80	1.401	2.002	2.386	3.135	4.005
81	1.399	2.000	2.384	3.132	4.001
82	1.398	1.998	2.380	3.129	3.996
83	1.395	1.996	2.378	3.126	3.993
84	1.394	1.994	2.376	3.123	3.989
85	1.393	1.992	2.374	3.120	3.985
86	1.392	1.991	2.372	3.116	3.982
87	1.390	1.989	2.370	3.114	3.977
88	1.389	1.987	2.368	3.111	3.974
89	1.388	1.985	2.366	3.108	3.970
90	1.387	1.983	2.364	3.106	3.967
91	1.386	1.981	2.361	3.103	3.964
92	1.385	1.980	2.359	3.101	3.961
93	1.384	1.978	2.357	3.098	3.957
94	1.383	1.976	2.355	3.095	3.954
95	1.381	1.975	2.353	3.092	3.951
96	1.380	1.974	2.352	3.090	3.948
97	1.379	1.972	2.350	3.088	3.945
98	1.378	1.971	2.348	3.086	3.942
99	1.377	1.969	2.346	3.083	3.939
100	1.377	1.968	2.345	3.081	3.935

TABLE IV (Cont)

 $\gamma = 0.95$

n	P				
	0.875	0.95	0.975	0.995	0.9995
101	1.376	1.966	2.343	3.079	3.933
102	1.374	1.965	2.342	3.077	3.930
104	1.372	1.962	2.338	3.072	3.925
106	1.370	1.959	2.335	3.068	3.920
108	1.368	1.957	2.332	3.064	3.914
110	1.367	1.954	2.329	3.061	3.909
112	1.365	1.952	2.326	3.057	3.905
114	1.364	1.950	2.323	3.053	3.900
116	1.362	1.948	2.321	3.049	3.896
118	1.361	1.945	2.317	3.046	3.891
120	1.359	1.943	2.315	3.043	3.887
122	1.358	1.940	2.313	3.040	3.883
124	1.356	1.939	2.310	3.037	3.879
126	1.355	1.937	2.308	3.033	3.875
128	1.353	1.935	2.306	3.030	3.870
130	1.352	1.933	2.304	3.027	3.867
132	1.350	1.931	2.302	3.024	3.863
134	1.349	1.930	2.300	3.022	3.860
136	1.348	1.928	2.297	3.019	3.857
138	1.347	1.926	2.295	3.017	3.852
140	1.346	1.925	2.293	3.014	3.849
142	1.345	1.923	2.291	3.011	3.846
144	1.344	1.922	2.289	3.008	3.843
146	1.343	1.919	2.287	3.006	3.840
148	1.342	1.918	2.286	3.004	3.837
150	1.341	1.916	2.284	3.002	3.835
152	1.340	1.915	2.282	2.999	3.831
154	1.339	1.914	2.281	2.997	3.828
156	1.338	1.912	2.279	2.995	3.826
158	1.337	1.911	2.277	2.993	3.823
160	1.336	1.910	2.275	2.990	3.820
162	1.335	1.909	2.274	2.988	3.818
164	1.334	1.907	2.272	2.980	3.816
166	1.332	1.906	2.271	2.985	3.813
168	1.332	1.905	2.270	2.983	3.810
170	1.331	1.904	2.268	2.981	3.808
172	1.330	1.903	2.267	2.979	3.805
174	1.329	1.902	2.266	2.977	3.803
176	1.329	1.901	2.264	2.976	3.801
178	1.328	1.899	2.263	2.974	3.799
180	1.327	1.898	2.262	2.973	3.797
185	1.325	1.895	2.259	2.968	3.792
190	1.324	1.893	2.255	2.964	3.786
195	1.322	1.890	2.252	2.960	3.781
200	1.321	1.888	2.250	2.957	3.777
205	1.319	1.886	2.247	2.953	3.773
210	1.318	1.884	2.245	2.949	3.768
215	1.316	1.882	2.242	2.946	3.764
220	1.315	1.880	2.240	2.943	3.760

TABLE IV (Cont)

$$\gamma = 0.95$$

n	P				
	0.875	0.95	0.975	0.995	0.9995
225	1.314	1.877	2.238	2.940	3.756
230	1.311	1.876	2.235	2.938	3.753
235	1.310	1.874	2.233	2.935	3.750
240	1.309	1.872	2.231	2.932	3.745
245	1.308	1.871	2.229	2.930	3.742
250	1.307	1.869	2.227	2.927	3.739
255	1.306	1.868	2.225	2.924	3.736
260	1.305	1.866	2.224	2.922	3.733
265	1.304	1.865	2.222	2.920	3.730
270	1.303	1.863	2.220	2.918	3.728
275	1.302	1.862	2.219	2.916	3.724
280	1.301	1.861	2.217	2.914	3.721
285	1.300	1.860	2.216	2.912	3.719
290	1.299	1.857	2.213	2.910	3.717
295	1.299	1.856	2.212	2.907	3.714
300	1.298	1.855	2.211	2.905	3.712
310	1.296	1.853	2.208	2.902	3.708
320	1.295	1.851	2.205	2.898	3.702
330	1.293	1.849	2.203	2.895	3.698
340	1.292	1.847	2.201	2.892	3.695
350	1.290	1.845	2.199	2.890	3.691
360	1.289	1.843	2.197	2.886	3.688
370	1.288	1.842	2.195	2.883	3.683
380	1.286	1.840	2.192	2.881	3.680
390	1.285	1.839	2.190	2.879	3.677
400	1.284	1.836	2.188	2.876	3.674
425	1.282	1.833	2.184	2.871	3.667
450	1.280	1.830	2.181	2.865	3.660
475	1.278	1.827	2.177	2.861	3.655
500	1.276	1.824	2.174	2.857	3.649
525	1.274	1.822	2.170	2.853	3.645
550	1.273	1.820	2.168	2.849	3.639
575	1.271	1.818	2.165	2.846	3.635
600	1.269	1.815	2.163	2.842	3.631
625	1.268	1.813	2.161	2.839	3.628
650	1.267	1.811	2.159	2.837	3.624
675	1.265	1.810	2.157	2.834	3.620
700	1.264	1.808	2.155	2.832	3.617
725	1.263	1.807	2.153	2.829	3.614
750	1.262	1.805	2.151	2.827	3.611
800	1.261	1.803	2.148	2.822	3.606
850	1.259	1.800	2.145	2.819	3.602
900	1.258	1.798	2.142	2.816	3.597
950	1.256	1.796	2.140	2.813	3.593
1000	1.255	1.794	2.138	2.810	3.589
∞	1.150	1.645	1.960	2.576	3.291

TABLE IV (Cont)

$\gamma = 0.99$

n	P				
	0.875	0.95	0.975	0.995	0.9995
2	120.081	168.203	197.916	254.415	318.207
3	14.047	19.877	23.521	30.508	38.447
4	6.945	9.868	11.708	15.253	19.302
5	4.875	6.943	8.248	10.773	13.666
6	3.930	5.604	6.662	8.716	11.075
7	3.395	4.844	5.762	7.546	9.599
8	3.050	4.354	5.183	6.791	8.646
9	2.811	4.013	4.778	6.264	7.980
10	2.633	3.761	4.478	5.874	7.485
11	2.497	3.567	4.247	5.573	7.104
12	2.388	3.413	4.064	5.333	6.801
13	2.300	3.287	3.913	5.138	6.552
14	2.226	3.180	3.788	4.974	6.345
15	2.163	3.092	3.682	4.835	6.170
16	2.109	3.016	3.592	4.717	6.019
17	2.063	2.948	3.512	4.613	5.887
18	2.022	2.891	3.443	4.522	5.772
19	1.986	2.838	3.382	4.442	5.669
20	1.953	2.792	3.326	4.369	5.578
21	1.925	2.751	3.277	4.305	5.496
22	1.898	2.713	3.232	4.246	5.421
23	1.874	2.679	3.192	4.193	5.353
24	1.852	2.648	3.154	4.144	5.291
25	1.832	2.619	3.121	4.099	5.234
26	1.813	2.592	3.088	4.058	5.182
27	1.797	2.568	3.060	4.019	5.132
28	1.780	2.545	3.032	3.984	5.087
29	1.765	2.524	3.007	3.951	5.045
30	1.751	2.504	2.983	3.920	5.006
31	1.739	2.485	2.961	3.891	4.969
32	1.726	2.469	2.941	3.864	4.934
33	1.715	2.452	2.921	3.838	4.901
34	1.704	2.436	2.902	3.814	4.871
35	1.694	2.421	2.885	3.792	4.842
36	1.684	2.408	2.869	3.770	4.814
37	1.675	2.395	2.853	3.750	4.788
38	1.666	2.382	2.838	3.730	4.764
39	1.658	2.370	2.825	3.711	4.740
40	1.650	2.359	2.811	3.694	4.718
41	1.642	2.348	2.798	3.677	4.696
42	1.635	2.338	2.786	3.660	4.676
43	1.629	2.328	2.774	3.646	4.656
44	1.622	2.318	2.763	3.631	4.637
45	1.616	2.310	2.752	3.616	4.619
46	1.610	2.302	2.742	3.603	4.602
47	1.603	2.293	2.732	3.590	4.585
48	1.598	2.285	2.723	3.577	4.570
49	1.593	2.277	2.713	3.566	4.554
50	1.588	2.270	2.705	3.554	4.539

TABLE IV (Cont)

$$\gamma = 0.99$$

n	P				
	0.875	0.95	0.975	0.995	0.9995
51	1.582	2.263	2.696	3.543	4.526
52	1.578	2.255	2.688	3.532	4.512
53	1.573	2.249	2.680	3.522	4.498
54	1.569	2.243	2.672	3.511	4.486
55	1.565	2.237	2.665	3.502	4.473
56	1.560	2.230	2.658	3.492	4.461
57	1.556	2.225	2.650	3.484	4.450
58	1.552	2.219	2.644	3.474	4.438
59	1.548	2.213	2.638	3.466	4.427
60	1.545	2.208	2.631	3.458	4.416
61	1.540	2.203	2.625	3.449	4.406
62	1.537	2.198	2.619	3.442	4.396
63	1.534	2.193	2.613	3.435	4.387
64	1.531	2.188	2.607	3.427	4.377
65	1.528	2.184	2.602	3.420	4.368
66	1.525	2.180	2.597	3.413	4.360
67	1.521	2.175	2.591	3.406	4.350
68	1.518	2.170	2.586	3.399	4.342
69	1.515	2.166	2.582	3.393	4.333
70	1.512	2.163	2.577	3.386	4.326
71	1.510	2.159	2.573	3.380	4.318
72	1.507	2.155	2.567	3.375	4.310
73	1.505	2.151	2.563	3.368	4.303
74	1.502	2.147	2.559	3.363	4.296
75	1.499	2.144	2.555	3.357	4.288
76	1.497	2.141	2.550	3.352	4.282
77	1.494	2.137	2.546	3.346	4.275
78	1.492	2.134	2.542	3.341	4.268
79	1.490	2.130	2.539	3.336	4.262
80	1.488	2.127	2.535	3.332	4.256
81	1.486	2.124	2.532	3.326	4.249
82	1.484	2.121	2.527	3.321	4.243
83	1.482	2.118	2.524	3.317	4.237
84	1.479	2.115	2.520	3.313	4.232
85	1.477	2.113	2.517	3.308	4.225
86	1.475	2.109	2.514	3.303	4.220
87	1.473	2.107	2.511	3.299	4.215
88	1.472	2.104	2.507	3.295	4.209
89	1.470	2.101	2.504	3.291	4.204
90	1.468	2.099	2.501	3.287	4.199
91	1.466	2.097	2.498	3.283	4.194
92	1.465	2.094	2.495	3.279	4.188
93	1.463	2.092	2.492	3.275	4.184
94	1.462	2.090	2.490	3.272	4.179
95	1.460	2.086	2.486	3.268	4.175
96	1.457	2.084	2.484	3.264	4.170
97	1.456	2.082	2.481	3.260	4.165
98	1.454	2.080	2.478	3.257	4.161
99	1.453	2.078	2.476	3.254	4.156
100	1.452	2.076	2.473	3.251	4.152

TABLE IV (Cont)

$$\gamma = 0.99$$

n	P				
	0.875	0.95	0.975	0.995	0.9995
101	1.450	2.074	2.471	3.247	4.148
102	1.449	2.072	2.469	3.243	4.143
104	1.446	2.067	2.463	3.237	4.136
106	1.443	2.063	2.459	3.231	4.128
108	1.441	2.060	2.454	3.226	4.120
110	1.437	2.056	2.450	3.219	4.113
112	1.435	2.053	2.445	3.214	4.106
114	1.433	2.049	2.441	3.209	4.099
116	1.431	2.045	2.437	3.204	4.092
118	1.428	2.042	2.434	3.198	4.086
120	1.426	2.039	2.430	3.193	4.079
122	1.424	2.036	2.427	3.189	4.073
124	1.422	2.033	2.422	3.184	4.067
126	1.420	2.031	2.419	3.179	4.061
128	1.418	2.028	2.416	3.175	4.055
130	1.416	2.024	2.413	3.170	4.050
132	1.414	2.022	2.410	3.166	4.045
134	1.412	2.019	2.407	3.163	4.039
136	1.410	2.017	2.403	3.158	4.034
138	1.409	2.014	2.400	3.154	4.029
140	1.407	2.012	2.397	3.150	4.025
142	1.405	2.010	2.394	3.147	4.019
144	1.404	2.008	2.392	3.143	4.015
146	1.402	2.004	2.389	3.140	4.011
148	1.401	2.002	2.387	3.136	4.006
150	1.399	2.000	2.384	3.132	4.002
152	1.398	1.998	2.381	3.129	3.997
154	1.397	1.996	2.378	3.126	3.993
156	1.394	1.994	2.376	3.123	3.989
158	1.393	1.992	2.374	3.120	3.986
160	1.392	1.991	2.372	3.116	3.982
162	1.390	1.989	2.369	3.113	3.977
164	1.389	1.987	2.367	3.111	3.974
166	1.388	1.985	2.365	3.108	3.970
168	1.387	1.982	2.363	3.105	3.967
170	1.386	1.981	2.360	3.103	3.963
172	1.384	1.979	2.358	3.100	3.960
174	1.383	1.978	2.356	3.098	3.956
176	1.382	1.976	2.355	3.094	3.953
178	1.381	1.974	2.353	3.092	3.950
180	1.380	1.973	2.351	3.089	3.947
185	1.377	1.969	2.346	3.084	3.939
190	1.374	1.966	2.342	3.078	3.931
195	1.372	1.961	2.337	3.072	3.925
200	1.369	1.958	2.333	3.067	3.918
205	1.367	1.955	2.330	3.062	3.911
210	1.365	1.952	2.326	3.057	3.905
215	1.363	1.949	2.323	3.052	3.899
220	1.361	1.947	2.319	3.048	3.893

TABLE IV (Cont)

$$\gamma = 0.99$$

n	P				
	0.875	0.95	0.975	0.995	0.9995
225	1.359	1.944	2.315	3.043	3.888
230	1.358	1.940	2.312	3.039	3.882
235	1.356	1.938	2.309	3.035	3.877
240	1.353	1.935	2.307	3.031	3.872
245	1.352	1.933	2.304	3.027	3.867
250	1.350	1.931	2.301	3.024	3.862
255	1.348	1.929	2.298	3.020	3.858
260	1.347	1.927	2.295	3.017	3.854
265	1.346	1.925	2.293	3.014	3.849
270	1.344	1.923	2.290	3.010	3.845
275	1.343	1.920	2.288	3.007	3.841
280	1.342	1.918	2.286	3.004	3.838
285	1.340	1.916	2.284	3.001	3.834
290	1.339	1.914	2.282	2.998	3.829
295	1.338	1.913	2.279	2.996	3.826
300	1.337	1.911	2.277	2.993	3.823
310	1.335	1.908	2.273	2.987	3.816
320	1.331	1.905	2.269	2.982	3.809
330	1.329	1.902	2.266	2.978	3.804
340	1.328	1.898	2.262	2.973	3.798
350	1.326	1.895	2.259	2.968	3.793
360	1.324	1.893	2.255	2.964	3.787
370	1.322	1.891	2.253	2.961	3.782
380	1.321	1.888	2.250	2.957	3.778
390	1.319	1.886	2.247	2.954	3.773
400	1.318	1.884	2.245	2.949	3.768
425	1.314	1.878	2.239	2.942	3.758
450	1.310	1.874	2.233	2.935	3.749
475	1.307	1.870	2.228	2.927	3.740
500	1.305	1.866	2.223	2.922	3.733
525	1.302	1.862	2.219	2.916	3.725
550	1.300	1.859	2.214	2.911	3.718
575	1.298	1.855	2.211	2.905	3.712
600	1.296	1.852	2.207	2.901	3.707
625	1.294	1.850	2.204	2.897	3.701
650	1.292	1.847	2.201	2.893	3.696
675	1.290	1.845	2.199	2.890	3.691
700	1.288	1.843	2.196	2.885	3.687
725	1.287	1.841	2.193	2.882	3.682
750	1.286	1.839	2.190	2.879	3.678
800	1.283	1.834	2.186	2.873	3.670
850	1.281	1.831	2.182	2.868	3.663
900	1.279	1.828	2.179	2.862	3.657
950	1.277	1.825	2.175	2.858	3.651
1000	1.275	1.823	2.171	2.854	3.646
∞	1.150	1.645	1.960	2.576	3.291

APPENDIX A

MATHEMATICAL DERIVATIONS AND SUMMARY OF METHODS

Mathematically, the problem is to find a constant k such that

$$\Pr\left[\Pr(X \leq \bar{x} + ks) \geq P\right] = \gamma ,$$

where X has a normal distribution; $\bar{x}$ and s are the sample mean and sample standard deviation computed from a sample drawn from the normal distribution with population mean, μ , and population standard deviation, σ ; and where P and γ are specified probabilities. The above probability statement can be rewritten

$$\Pr\left[\left\{\frac{1}{\sigma\sqrt{2\pi}} \int_{-\infty}^{\bar{x} + ks} \exp\left[-\frac{1}{2} \frac{(x - \mu)^2}{\sigma^2}\right] dx\right\} \geq P\right] = \gamma .$$

Define K_P by:

$$\frac{1}{\sqrt{2\pi}} \int_{-\infty}^{K_P} \exp\left[-\frac{1}{2} x^2\right] dx = P .$$

Then, rewriting again, the statement becomes

$$\Pr\left[\frac{\bar{x} + ks - \mu}{\sigma} \geq K_P\right] = \gamma ; \tag{1}$$

and finally, this may be written

$$\Pr\left\{\frac{\frac{\bar{x} - \mu}{\sigma} \sqrt{n} - K_P \sqrt{n}}{\frac{s}{\sigma}} \geq -k\sqrt{n}\right\} = \gamma .$$

Hence, if δ = the noncentrality parameter of a noncentral t -distribution, this is equivalent to

$$\Pr\left[(\text{noncentral } t \text{ with } \delta = -K_P \sqrt{n}) \geq -k\sqrt{n}\right] = \gamma .$$

Johnson and Welch⁴ tabulated the noncentral t-distribution and gave a special table (Table V, page 386, in their article) from which k can be computed for the case $\gamma = 0.95$. These computations for various values of P are given in Table I. If other values of P are needed, the reader is referred to the original article. However, Johnson and Welch's tables are not easily used for values of γ other than $\gamma = 0.95$.

Another tabulation of the noncentral t-distribution was given by Resnikoff and Lieberman in Reference 3. In addition to other tables, they gave a table of certain percentage points of the noncentral t-distribution. The entries in their table were multiplied by $\sqrt{(n-1)/n}$ to give k values and are reproduced in Table II. The values given in Table II completely cover all of Resnikoff and Lieberman's table of percentage points. Lieberman (Reference 5) prepared a shorter table, similar to Table II given here. Other values of k for values of γ not in the table can be obtained from Resnikoff and Lieberman's table of the probability integral of the noncentral t-distribution. However, the values of P that they tabulate are restricted to $P = 0.7500, 0.8500, 0.9000, 0.9350, 0.9600, 0.9750, 0.9900, 0.9960, 0.9975$ and 0.9990 . Interpolation for intermediate values of P should be with respect to K_P and not P . Resnikoff and Lieberman state that they consider the approximation formula (given by Wallis on pages 19-20 of Reference 1) good for values of n beyond $n = 50$, where their tables stop.

Results of computations using the approximation formula are given in Table III. The approximation formula was given by Wallis on pages 19 and 20 of Reference 1. It may be derived as follows: Start with Equation 1 and subtract k times the expected value of s from both sides of the inner inequality and then multiply both sides by $\sqrt{n}$. The result is

$$\Pr \left\{ \frac{\bar{x} + ks - \mu - kE(s)}{\sigma} \sqrt{n} \geq K_P \sqrt{n} - \frac{kE(s)}{\sigma} \sqrt{n} \right\} = \gamma \quad (2)$$

Then the expected value of the left side of the inequality is given by

$$E \left[\frac{\bar{x} + ks - \mu - kE(s)}{\sigma} \sqrt{n} \right] = 0 ,$$

and the variance may be written

$$V \left[\frac{\bar{x} + ks - \mu - kE(s)}{\sigma} \sqrt{n} \right] = 1 + nk^2 \left[1 - \frac{2}{n-1} \left\{ \frac{\Gamma(\frac{n}{2})}{\Gamma(\frac{n-1}{2})} \right\}^2 \right] \cong 1 + \frac{nk^2}{2(n-1)} .$$

See Hald (Reference 6) for example (pages 299-300) for the formula for the variance of s and the approximation to the gamma functions used. The next step is to assume the random

variable on the left of the inequality inside the braces of Equation 2 is normally distributed with the above mean and variance. For the quantity inside the braces on the right of the inequality of Equation 2 assume further that $E(s) = \sigma$. Next, set

$$\frac{(K_P - k)\sqrt{n}}{\sqrt{1 + \frac{nk^2}{2(n-1)}}} = -K_Y$$

This equation is then solved for k and gives

$$k = \frac{K_P + \sqrt{K_P^2 - AB}}{A}$$

where

$$A = 1 - \frac{K_Y^2}{2(n-1)}$$

and

$$B = K_P^2 - \frac{K_Y^2}{n}$$

In Table III, A is printed if A is negative, and no numerical entry is given in the table since the result would then be negative and meaningless. B is printed when B is negative, and in many instances the results seem to be perfectly reasonable and are included. In other instances, however, when B is negative, the results are obviously wrong. A quick check of neighboring values of k will determine whether an entry should or should not be used when preceded by B . A dash is printed if $K_P^2 - AB$ is negative and no answer given since then the result is imaginary. Table III was reproduced directly from a print-out from the CRC-102A computer.

McClung (Reference 7) reproduces part of the table of two-sided tolerance limits given by Bowker (Reference 1). For a one-sided limit, McClung uses the same confidence coefficient γ as for the two-sided limits, but he replaces the proportion defective β for a two-sided limit by $P = \frac{1}{2}(1 + \beta)$ for the one-sided limit. He then gives the following rule, "... it is a conservative practice to add approximately 5 per cent to the values taken from the table (Bowker's) ... when a single tolerance is being computed." Table IV gives the result of applying this rule to all of Bowker's tables. In Appendix B, Table B-III shows that this estimate is not always conservative.

If Bowker's formula for the entries in his table are modified to fit the above procedure, the result is

$$k = (1.05)r \sqrt{\frac{n-1}{\chi_{\gamma}^2}},$$

where r is defined by

$$\frac{1}{\sqrt{2\pi}} \int_{\frac{1}{\sqrt{n}} - r}^{\frac{1}{\sqrt{n}} + r} \exp \left[-\frac{1}{2} t^2 \right] dt = 2P - 1,$$

and χ_{γ}^2 is an upper γ -percentage point of the chi-square distribution with $(n-1)$ degrees of freedom; i. e.,

$$\Pr \left\{ \chi^2 > \chi_{\gamma}^2 \right\} = \gamma.$$

An exact method of computing probabilities for a random variable, T_n , having the non-central t-distribution may be derived by repeated integration of the density function by parts. For n an even integer, the result is

$$\begin{aligned} \Pr(T_n \leq t) = & G\left(\frac{-\delta \sqrt{n-1}}{\sqrt{n-1+t^2}}\right) + 2T\left(\frac{\delta \sqrt{n-1}}{\sqrt{n-1+t^2}}, \frac{t}{\sqrt{n-1}}\right) \\ & + 2 \left[M_1 + \frac{1}{3} M_3 + \frac{1}{3 \cdot 5} M_5 + \dots + \frac{1}{3 \cdot 5 \cdot 7 \dots (n-3)} M_{(n-3)} \right]; \end{aligned}$$

for n an odd integer greater than 1, the result is

$$\begin{aligned} \Pr(T_n \leq t) = & G(-\delta) + \sqrt{2\pi} \left[M_0 + \frac{1}{1! \cdot 2} M_2 + \frac{1}{2! \cdot 2^2} M_4 \right. \\ & \left. + \dots + \frac{1}{\left(\frac{n-3}{2}\right)! 2^{(n-3)/2}} M_{(n-3)} \right]; \end{aligned}$$

where

$$M_{-1} = 0$$

$$M_0 = \frac{t}{\sqrt{n-1+t^2}} G' \left(\frac{\sqrt{n-1} \delta}{\sqrt{n-1+t^2}} \right) G \left(\frac{\delta t}{\sqrt{n-1+t^2}} \right) ,$$

$$M_1 = \frac{\delta t \sqrt{n-1}}{n-1+t^2} M_0 + \frac{t \sqrt{n-1}}{n-1+t^2} \cdot \frac{1}{\sqrt{2\pi}} G'(\delta) ,$$

$$\vdots$$

$$M_k = \frac{\delta t \sqrt{n-1}}{n-1+t^2} M_{k-1} + \frac{(k-1)(n-1)}{n-1+t^2} M_{k-2} ,$$

$$\vdots$$

and where

$$G(x) = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^x \exp \left(-\frac{1}{2} t^2 \right) dt ,$$

$$G'(x) = \frac{1}{\sqrt{2\pi}} \exp \left(-\frac{1}{2} x^2 \right) ,$$

$$T(h, a) = \frac{1}{2\pi} \int_0^a \frac{\exp \left[-\frac{1}{2} h^2 (1+x^2) \right]}{1+x^2} dx ;$$

and δ is the noncentrality parameter for the noncentral t-distribution. Reference 8 gives a table of $G(x)$, Reference 9 a table of $G'(x)$, and Reference 10 a table of $T(h, a)$. The above formulas could be used to check a value of k , but they are unhandy to use in obtaining k as $\delta = +K_p \sqrt{n}$, and $t = k \sqrt{n}$ must be substituted into the formula to make $\Pr(T_n \leq t) = \gamma$; that is, k must be juggled to make the probability come out to be exactly γ .

APPENDIX B

COMPARISON OF ENTRIES IN TABLES I, II, III, AND IV

Table B-I compares the entries from Table I (Johnson and Welch, Reference 4) with the entries in Table II (Resnikoff and Lieberman, Reference 3). In almost every instance, where the entries differ, Table II has the smaller entry. The biggest difference is 0.010. If n is greater than 8, Tables I and II can be considered equivalent.

Table B-II compares the entries from Table I with the entries in Table III (approximation formula). Table B-IV compares the entries in Table II with the entries in Table III. These comparisons indicate that Table III gives an underestimate of k for $\gamma = 0.90$, and for most entries when $\gamma = 0.95$, and gives an overestimate of k for almost all entries when $\gamma = 0.99$ for n less than or equal to 50.

Table B-III compares the entries from Table I with the entries in Table IV (105 percent of the two-sided limit). Table B-V compares the entries in Table II with the entries in Table IV. These comparisons indicate that Table IV probably gives an underestimate of k when $P = 0.875$ and gives an overestimate of k when $P = 0.95$ or more. Hence, adding 5 percent to the k for a two-sided limit is not always conservative in the sense of giving a larger value of k than necessary.

TABLE B-I

Comparison of Johnson and Welch's Table (Table I) with Resnikoff and
Lieberman's Table (Table II), when $\gamma = 0.95$

n	Table No.	P									
		0.7500	0.8500	0.9000	0.9350	0.9600	0.9750	0.9900	0.9960	0.9975	0.9990
5	I	2.150	2.890	3.412	3.920	4.445	4.916	5.751	6.497	6.852	7.507
	II	2.149	2.885	3.407	3.914	4.437	4.908	5.741	6.488	6.847	7.501
	Diff	0.001	0.005	0.005	0.006	0.008	0.008	0.010	0.009	0.005	0.006
6	I	1.895	2.547	3.008	3.455	3.920	4.334	5.065	5.722	6.035	6.611
	II	1.895	2.547	3.006	3.452	3.915	4.330	5.062	5.719	6.034	6.612
	Diff			0.002	0.003	0.005	0.004	0.003	0.003	0.001	-0.001
7	I	1.733	2.333	2.756	3.167	3.591	3.971	4.644	5.246	5.537	6.066
	II	1.732	2.333	2.755	3.165	3.589	3.969	4.641	5.245	5.534	6.061
	Diff	0.001		0.001	0.002	0.002	0.002	0.003	0.001	0.003	0.005
8	I	1.618	2.185	2.582	2.968	3.367	3.724	4.356	4.921	5.193	5.690
	II	1.617	2.184	2.582	2.968	3.367	3.723	4.353	4.920	5.192	5.686
	Diff	0.001	-0.001				0.001	0.003	0.001	0.001	0.004
9	I	1.532	2.074	2.454	2.822	3.202	3.542	4.144	4.682	4.941	5.414
	II	1.532	2.073	2.454	2.822	3.202	3.542	4.143	4.683	4.941	5.414
	Diff		0.001					0.001	-0.001		
10	I	1.465	1.988	2.355	2.709	3.075	3.403	3.981	4.500	4.749	5.204
	II	1.465	1.987	2.355	2.709	3.075	3.402	3.981	4.501	4.748	5.203
	Diff		0.001				0.001		-0.001	0.001	0.001
17	I	1.220	1.681	2.002	2.311	2.629	2.913	3.414	3.864	4.078	4.471
	II	1.220	1.681	2.001	2.311	2.629	2.913	3.415	3.863	4.078	4.471
	Diff			0.001				-0.001	0.001		

TABLE B-II

Comparison of Johnson and Welch's Table (Table I) with the
Approximation Table (Table III), when $\gamma = 0.95$

n	Table No.	P					
		0.70	0.80	0.90	0.95	0.99	0.999
5	I	1.861	2.485	3.412	4.212	5.751	7.507
	III	1.807	2.440	3.381	4.190	5.750	7.531
	Diff	0.054	0.045	0.031	0.022	0.001	-0.024
6	I	1.637	2.191	3.008	3.711	5.065	6.611
	III	1.590	2.143	2.962	3.667	5.025	6.576
	Diff	0.047	0.048	0.046	0.044	0.040	0.035
7	I	1.494	2.006	2.756	3.400	4.644	6.066
	III	1.453	1.961	2.711	3.355	4.595	6.012
	Diff	0.041	0.045	0.045	0.045	0.049	0.054
8	I	1.393	1.875	2.582	3.188	4.356	5.690
	III	1.358	1.837	2.541	3.145	4.307	5.635
	Diff	0.035	0.038	0.041	0.043	0.049	0.055
9	I	1.317	1.779	2.454	3.032	4.144	5.414
	III	1.286	1.745	2.416	2.992	4.099	5.363
	Diff	0.031	0.034	0.038	0.040	0.045	0.051
10	I	1.257	1.703	2.355	2.911	3.981	5.204
	III	1.230	1.673	2.321	2.875	3.940	5.156
	Diff	0.027	0.030	0.034	0.036	0.041	0.048
17	I	1.035	1.431	2.002	2.486	3.414	4.471
	III	1.022	1.415	1.983	2.465	3.390	4.442
	Diff	0.013	0.016	0.019	0.021	0.024	0.029
37	I	0.845	1.205	1.717	2.149	2.972	3.904
	III	0.840	1.198	1.709	2.140	2.961	3.892
	Diff	0.005	0.007	0.008	0.009	0.011	0.012
145	I	0.677	1.011	1.481	1.874	2.617	3.455
	III	0.676	1.010	1.480	1.872	2.614	3.452
	Diff	0.001	0.001	0.001	0.002	0.003	0.003

TABLE B-III

Comparison of Johnson and Welch's Table (Table I) with 105 Percent of
the Two-Sided Limit (Table IV), when $\gamma = 0.95$

n	Table No.	P				
		0.875	0.95	0.975	0.995	0.9995
5	I	3.131	4.212	4.916	6.320	7.976
	IV	3.152	4.489	5.333	6.966	8.836
	Diff	-0.021	-0.277	-0.417	-0.646	-0.860
6	I	2.759	3.711	4.334	5.566	7.023
	IV	2.734	3.898	4.635	6.064	7.704
	Diff	0.025	-0.187	-0.301	-0.498	-0.681
7	I	2.528	3.400	3.971	5.107	6.439
	IV	2.479	3.537	4.207	5.510	7.010
	Diff	0.049	-0.137	-0.236	-0.403	-0.571
8	I	2.367	3.188	3.724	4.790	6.041
	IV	2.307	3.293	3.919	5.136	6.537
	Diff	0.060	-0.105	-0.195	-0.346	-0.496
9	I	2.249	3.032	3.542	4.557	5.748
	IV	2.182	3.115	3.709	4.863	6.194
	Diff	0.067	-0.083	-0.167	-0.306	-0.401
10	I	2.157	2.911	3.403	4.379	5.526
	IV	2.086	2.981	3.548	4.655	5.931
	Diff	0.071	-0.070	-0.145	-0.276	-0.405
17	I	1.829	2.486	2.913	3.758	4.750
	IV	1.763	2.520	3.001	3.942	5.031
	Diff	0.066	-0.034	-0.088	-0.184	-0.281
37	I	1.563	2.149	2.528	3.275	4.150
	IV	1.523	2.177	2.594	3.408	4.353
	Diff	0.040	-0.028	-0.066	-0.133	-0.203
145	I	1.340	1.874	2.217	2.890	3.675
	IV	1.343	1.920	2.288	3.007	3.841
	Diff	-0.003	-0.046	-0.071	-0.117	-0.166

TABLE B-IV

Comparison of Resnikoff and Lieberman's Table (Table II) with the
Approximation Table (Table III)

n	Table No.	γ								
		0.90			0.95			0.99		
		P			P			P		
		0.90	0.99	0.999	0.90	0.99	0.999	0.90	0.99	0.999
3	II	4.258	7.340	9.651	6.158	10.552	13.857			
	III	3.868	6.653	8.738	7.620	13.332	17.578			
	Diff	0.390	0.687	0.913	-1.462	-2.780	-3.721			
4	II	3.187	5.437	7.128	4.163	7.042	9.215			
	III	2.955	5.040	6.605	4.255	7.291	9.567			
	Diff	0.232	0.397	0.523	-0.092	-0.249	-0.352			
5	II	2.742	4.666	6.112	3.407	5.741	7.501			
	III	2.586	4.401	5.764	3.381	5.750	7.531			
	Diff	0.156	0.265	0.348	0.028	-0.009	-0.030			
6	II	2.494	4.242	5.556	3.006	5.062	6.612	4.408	7.334	9.540
	III	2.378	4.048	5.302	2.962	5.025	6.576	5.281	9.055	11.885
	Diff	0.116	0.194	0.254	0.044	0.037	0.036	-0.873	-1.721	-2.345
7	II	2.333	3.972	5.201	2.755	4.641	6.061	3.856	6.411	8.348
	III	2.242	3.820	5.004	2.711	4.595	6.012	4.300	7.321	9.591
	Diff	0.091	0.152	0.197	0.044	0.046	0.049	-0.444	-0.910	-1.243
8	II	2.219	3.783	4.955	2.582	4.353	5.686	3.496	5.811	7.566
	III	2.145	3.659	4.793	2.541	4.307	5.635	3.759	6.373	8.341
	Diff	0.074	0.124	0.162	0.041	0.046	0.051	-0.263	-0.562	-0.775
9	II	2.133	3.641	4.772	2.454	4.143	5.414	3.242	5.389	7.014
	III	2.071	3.538	4.636	2.416	4.099	5.363	3.412	5.771	7.548
	Diff	0.062	0.103	0.136	0.038	0.044	0.051	-0.170	-0.382	-0.534
10	II	2.065	3.532	4.629	2.355	3.981	5.203	3.048	5.075	6.603
	III	2.012	3.442	4.512	2.321	3.940	5.156	3.168	5.352	6.996
	Diff	0.053	0.090	0.117	0.034	0.041	0.047	-0.120	-0.277	-0.393
17	II	1.820	3.136	4.118	2.001	3.415	4.471	2.405	4.038	5.268
	III	1.793	3.093	4.061	1.983	3.390	4.442	2.429	4.107	5.369
	Diff	0.027	0.043	0.057	0.018	0.025	0.029	-0.024	-0.069	-0.101
35	II	1.623	2.833	3.730	1.732	2.994	3.934	1.957	3.334	4.364
	III	1.613	2.814	3.706	1.724	2.983	3.920	1.960	3.350	4.389
	Diff	0.010	0.019	0.024	0.008	0.011	0.014	-0.003	-0.016	-0.025
50	II	1.560	2.735	3.604	1.646	2.863	3.766	1.821	3.124	4.096
	III	1.552	2.723	3.589	1.640	2.855	3.756	1.821	3.133	4.111
	Diff	0.008	0.012	0.015	0.006	0.008	0.010		-0.009	-0.015

TABLE B-V

Comparison of Resnikoff and Lieberman's Table (Table II) with
105 Percent of the Two-Sided Limit (Table IV),
when $P = 0.975$

n	Table No.	γ			
		0.75	0.90	0.95	0.99
3	II	3.725	6.243	8.986	
	IV	4.396	7.265	10.412	
	Diff	-0.671	-1.022	-1.426	
4	II	3.162	4.637	6.015	
	IV	3.603	5.190	6.689	
	Diff	-0.441	-0.553	-0.674	
5	II	2.904	3.981	4.908	
	IV	3.242	4.360	5.333	
	Diff	-0.338	-0.379	-0.425	
6	II	2.754	3.620	4.330	6.287
	IV	3.033	3.909	4.635	6.662
	Diff	-0.279	-0.289	-0.305	-0.375
7	II	2.653	3.389	3.969	5.499
	IV	2.895	3.625	4.207	5.762
	Diff	-0.242	-0.236	-0.238	-0.263
8	II	2.582	3.226	3.723	4.986
	IV	2.796	3.427	3.919	5.183
	Diff	-0.214	-0.201	-0.196	-0.197
9	II	2.527	3.106	3.542	4.620
	IV	2.723	3.281	3.709	4.778
	Diff	-0.196	-0.175	-0.167	-0.158
10	II	2.483	3.011	3.402	4.352
	IV	2.664	3.169	3.548	4.478
	Diff	-0.181	-0.158	-0.146	-0.126
17	II	2.321	2.671	2.913	3.457
	IV	2.454	2.775	3.001	3.512
	Diff	-0.133	-0.104	-0.088	-0.055
35	II	2.190	2.406	2.548	2.845
	IV	2.294	2.486	2.615	2.885
	Diff	-0.104	-0.080	-0.067	-0.040
50	II	2.146	2.320	2.432	2.663
	IV	2.245	2.398	2.498	2.705
	Diff	-0.099	-0.078	-0.066	-0.042

APPENDIX C

DERIVATION OF METHODS WHEN EITHER THE MEAN OR THE STANDARD DEVIATION OR BOTH ARE KNOWN

If the standard deviation σ is known, the tolerance limit $\bar{x} + k\sigma$ is used.

The problem is to find k such that

$$\Pr\left[\Pr(X \leq \bar{x} + k\sigma) \geq P\right] = \gamma .$$

If K_P is defined as on the first page of Appendix A, this probability is equivalent to

$$\Pr\left[\frac{\bar{x} - \mu}{\sigma} \sqrt{n} \geq (K_P - k) \sqrt{n}\right] = \gamma$$

and

$$(K_P - k) \sqrt{n} = K_\gamma$$

or

$$k = K_P - \frac{K_\gamma}{\sqrt{n}} .$$

Hence, when σ is known a factor k can be computed from tables of the univariate normal integral.

If the standard deviation σ and the mean μ are known, the tolerance limit $\mu + k\sigma$ is used and k is found such that

$$\Pr(X \leq \mu + k\sigma) \geq P ,$$

and $\gamma = 1$ for this case. Solving, the result is $k = K_P$; i. e., k may be directly read from tables of the univariate normal integral, as would be expected.

If μ is known but σ is unknown, the tolerance limit $\mu + ks$ is used and k is found such that

$$\Pr\left(\Pr(X \leq \mu + ks) \geq P\right) = \gamma ,$$

or

$$\Pr\left(\frac{ks}{\sigma} \geq K_P\right) = \gamma,$$

or

$$\Pr\left(\frac{(n-1)s^2}{\sigma^2} \geq \frac{(n-1)K_P^2}{k^2}\right) = \gamma.$$

Hence, if χ_γ^2 is defined as in Appendix A (page 118)

$$\frac{(n-1)K_P^2}{k^2} = \chi_\gamma^2$$

or

$$k = K_P \sqrt{\frac{n-1}{\chi_\gamma^2}}$$

In this case, k can be computed directly from tables of the chi-square distribution and the univariate normal distribution.

APPENDIX D

OUTLINE OF A METHOD FOR FINDING AN AVERAGE COVERAGE TOLERANCE LIMIT

This appendix presents a method for obtaining a constant k so that averaged over a large series of samples from a normal population, the proportion P is less than $\bar{x} + ks$. Another way of stating the requirement is to find k such that the expected value of $\bar{x} + ks$ is $\mu + K_P \sigma$.

Wilks (Reference 11) gave the result

$$k = t_P \sqrt{\frac{n+1}{n}},$$

where t_P is a percentage point of the Student t -distribution based on $(n - 1)$ degrees of freedom; i.e., $\Pr\{\text{Student } t \leq t_P\} = P$. Proschan (Reference 12) gave a proof of this result.

In addition, Proschan also gave the result

$$k = K_P \sqrt{\frac{n+1}{n}},$$

when μ is unknown and σ known, i.e., when an on-the-average tolerance limit $\bar{x} + k\sigma$ is used. Proschan also gave $k = t_P$ when μ is known, and σ unknown, i.e., when an on-the-average tolerance limit $\mu + ks$ is used.

Fraser and Guttman (Reference 13) gave tables of $t_P \sqrt{(n+1)/n}$ and $K_P \sqrt{(n+1)/n}$ in their Table 1, page 174, and Table 2, page 175, respectively. In entering their tables, compute first $\beta = 2P - 1$. The entries are for $P = 0.875, 0.95, 0.975, 0.9875, 0.995$, and 0.9975 and $n = 2(1)31(10)41(20)61(60)121, \infty$, for a one-sided tolerance limit. Proschan (Reference 12) gave a table of $t_P \sqrt{(n+1)/n}$ in Table 3, page 561, which duplicates some of the Fraser and Guttman entries, but also give results for $P = 0.75, 0.99$, and 0.9995 . Albert and Johnson (Reference 14) considered the minimum sample size necessary to effect a certain type of statistical control on the average coverage tolerance limit and gave a short table of such minimum sample sizes.

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