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ภาคผนวก ก

ตารางที่ 1 Coefficients $\{ a_{n+1-i} \}$ of the W Test for Normality,

for n = 2(1)50

i \ n	2	3	4	5	6	7	8	9	10
1	0·7071	0·7071	0·6872	0·6646	0·6431	0·6233	0·6052	0·5888	0·5739
2	—	·0000	·1677	·2413	·2806	·3031	·3164	·3244	·3291
3	—	—	—	·0000	·0875	·1401	·1743	·1976	·2141
4	—	—	—	—	—	·0000	·0561	·0947	·1224
5	—	—	—	—	—	—	—	·0000	·0399

i \ n	11	12	13	14	15	16	17	18	19	20
1	0·5601	0·5475	0·5359	0·5251	0·5150	0·5056	0·4968	0·4886	0·4808	0·4734
2	·3315	·3325	·3325	·3318	·3306	·3290	·3273	·3253	·3232	·3211
3	·2260	·2347	·2412	·2460	·2495	·2521	·2540	·2553	·2561	·2565
4	·1429	·1586	·1707	·1802	·1878	·1939	·1988	·2027	·2059	·2085
5	·0695	·0922	·1099	·1240	·1353	·1447	·1524	·1587	·1641	·1686
6	0·0000	0·0303	0·0539	0·0727	0·0880	0·1005	0·1109	0·1197	0·1271	0·1334
7	—	—	·0000	·0240	·0433	·0593	·0725	·0837	·0932	·1013
8	—	—	—	—	·0000	·0196	·0359	·0496	·0612	·0711
9	—	—	—	—	—	—	·0000	·0163	·0303	·0422
10	—	—	—	—	—	—	—	—	·0000	·0140

i \ n	21	22	23	24	25	26	27	28	29	30
1	0·4643	0·4590	0·4542	0·4493	0·4450	0·4407	0·4366	0·4328	0·4291	0·4254
2	·3185	·3156	·3126	·3098	·3069	·3043	·3018	·2992	·2968	·2944
3	·2578	·2571	·2563	·2554	·2543	·2533	·2522	·2510	·2499	·2487
4	·2119	·2131	·2139	·2145	·2148	·2151	·2152	·2151	·2150	·2148
5	·1736	·1764	·1787	·1807	·1822	·1836	·1848	·1857	·1864	·1870
6	0·1399	0·1443	0·1480	0·1512	0·1539	0·1563	0·1584	0·1601	0·1616	0·1630
7	·1092	·1150	·1201	·1245	·1283	·1316	·1346	·1372	·1395	·1415
8	·0804	·0878	·0941	·0997	·1046	·1089	·1128	·1162	·1192	·1219
9	·0530	·0618	·0696	·0764	·0823	·0876	·0923	·0965	·1002	·1036
10	·0263	·0368	·0459	·0539	·0610	·0672	·0728	·0778	·0822	·0862
11	0·0000	0·0122	0·0228	0·0321	0·0403	0·0476	0·0540	0·0598	0·0650	0·0697
12	—	—	·0000	·0107	·0200	·0284	·0358	·0424	·0483	·0537
13	—	—	—	—	·0000	·0094	·0178	·0253	·0320	·0381
14	—	—	—	—	—	—	·0000	·0084	·0159	·0227
15	—	—	—	—	—	—	—	—	·0000	·0076

ตารางที่ 1 (ต่อ)

i \ n	31	32	33	34	35	36	37	38	39	40
1	0·4220	0·4188	0·4156	0·4127	0·4096	0·4068	0·4040	0·4015	0·3989	0·3964
2	·2921	·2898	·2876	·2854	·2834	·2813	·2794	·2774	·2755	·2737
3	·2475	·2463	·2451	·2439	·2427	·2415	·2403	·2391	·2380	·2368
4	·2145	·2141	·2137	·2132	·2127	·2121	·2116	·2110	·2104	·2098
5	·1874	·1878	·1880	·1882	·1883	·1883	·1883	·1881	·1880	·1878
6	0·1641	0·1651	0·1660	0·1667	0·1673	0·1678	0·1683	0·1686	0·1689	0·1691
7	·1433	·1449	·1463	·1475	·1487	·1496	·1505	·1513	·1520	·1526
8	·1243	·1265	·1284	·1301	·1317	·1331	·1344	·1356	·1366	·1376
9	·1066	·1093	·1118	·1140	·1160	·1179	·1196	·1211	·1225	·1237
10	·0899	·0931	·0961	·0988	·1013	·1036	·1056	·1075	·1092	·1108
11	0·0739	0·0777	0·0812	0·0844	0·0873	0·0900	0·0924	0·0947	0·0967	0·0986
12	·0585	·0629	·0669	·0706	·0739	·0770	·0793	·0824	·0848	·0870
13	·0435	·0485	·0530	·0572	·0610	·0645	·0677	·0706	·0733	·0759
14	·0289	·0344	·0395	·0441	·0484	·0523	·0559	·0592	·0622	·0651
15	·0144	·0206	·0262	·0314	·0361	·0404	·0444	·0481	·0515	·0546
16	0·0000	0·0068	0·0131	0·0187	0·0239	0·0287	0·0331	0·0372	0·0409	0·0444
17	—	—	·0000	·0062	·0119	·0172	·0220	·0264	·0305	·0343
18	—	—	—	—	·0000	·0057	·0110	·0158	·0203	·0244
19	—	—	—	—	—	—	·0000	·0053	·0101	·0146
20	—	—	—	—	—	—	—	—	·0000	·0049

i \ n	41	42	43	44	45	46	47	48	49	50
1	0·3940	0·3917	0·3894	0·3872	0·3850	0·3830	0·3808	0·3789	0·3770	0·3751
2	·2719	·2701	·2684	·2667	·2651	·2635	·2620	·2604	·2589	·2574
3	·2357	·2345	·2334	·2323	·2313	·2302	·2291	·2281	·2271	·2260
4	·2091	·2085	·2078	·2072	·2065	·2058	·2052	·2045	·2038	·2032
5	·1876	·1874	·1871	·1868	·1865	·1862	·1859	·1855	·1851	·1847
6	0·1693	0·1694	0·1695	0·1695	0·1695	0·1695	0·1695	0·1693	0·1692	0·1691
7	·1531	·1535	·1539	·1542	·1545	·1548	·1550	·1551	·1553	·1554
8	·1384	·1392	·1398	·1405	·1410	·1415	·1420	·1423	·1427	·1430
9	·1249	·1259	·1269	·1278	·1286	·1293	·1300	·1306	·1312	·1317
10	·1123	·1136	·1149	·1160	·1170	·1180	·1189	·1197	·1205	·1212
11	0·1004	0·1020	0·1035	0·1049	0·1062	0·1073	0·1085	0·1095	0·1105	0·1113
12	·0891	·0909	·0927	·0943	·0959	·0972	·0986	·0998	·1010	·1020
13	·0782	·0804	·0824	·0842	·0860	·0876	·0892	·0906	·0919	·0932
14	·0677	·0701	·0724	·0745	·0765	·0783	·0801	·0817	·0832	·0846
15	·0575	·0602	·0628	·0651	·0673	·0694	·0713	·0731	·0748	·0764
16	0·0476	0·0506	0·0534	0·0560	0·0584	0·0607	0·0628	0·0648	0·0667	0·0685
17	·0379	·0411	·0442	·0471	·0497	·0522	·0546	·0568	·0588	·0608
18	·0283	·0318	·0352	·0383	·0412	·0439	·0465	·0489	·0511	·0532
19	·0188	·0227	·0263	·0296	·0328	·0357	·0385	·0411	·0436	·0459
20	·0094	·0136	·0175	·0211	·0245	·0277	·0307	·0335	·0361	·0386
21	0·0000	0·0045	0·0087	0·0126	0·0163	0·0197	0·0229	0·0259	0·0288	0·0314
22		—	·0000	·0042	·0081	·0118	·0153	·0185	·0215	·0244
23	—	—	—	—	·0000	·0039	·0076	·0111	·0143	·0174
24	—	—	—	—	—	—	·0000	·0037	·0071	·0104
25	—	—	—	—	—	—	—	—	·0000	·0035

ตารางที่ 2 Percentage Points of the W Test* for n = 3(1)50

	Level								
n	0·01	0·02	0·05	0·10	0·50	0·90	0·95	0·98	0·99
3	0·753	0·756	0·767	0·789	0·959	0·998	0·999	1·000	1·000
4	·687	·707	·748	·792	·935	·987	·992	·996	·997
5	·686	·715	·762	·806	·927	·979	·986	·991	·993
6	0·713	0·743	0·788	0·826	0·927	0·974	0·981	0·986	0·989
7	·730	·760	·803	·838	·928	·972	·979	·985	·988
8	·749	·778	·818	·851	·932	·972	·978	·984	·987
9	·764	·791	·829	·859	·935	·972	·978	·984	·986
10	·781	·806	·842	·869	·938	·972	·978	·983	·986
11	0·792	0·817	0·850	0·876	0·940	0·973	0·979	0·984	0·986
12	·805	·828	·859	·883	·943	·973	·979	·984	·986
13	·814	·837	·866	·889	·945	·974	·979	·984	·986
14	·825	·846	·874	·895	·947	·975	·980	·984	·986
15	·835	·855	·881	·901	·950	·975	·980	·984	·987
16	0·844	0·863	0·887	0·906	0·952	0·976	0·981	0·985	0·987
17	·851	·869	·892	·910	·954	·977	·981	·985	·987
18	·858	·874	·897	·914	·956	·978	·982	·986	·988
19	·863	·879	·901	·917	·957	·978	·982	·986	·988
20	·868	·884	·905	·920	·959	·979	·983	·986	·988
21	0·873	0·888	0·908	0·923	0·960	0·980	0·983	0·987	0·989
22	·878	·892	·911	·926	·961	·980	·984	·987	·989
23	·881	·895	·914	·928	·962	·981	·984	·987	·989
24	·884	·898	·916	·930	·963	·981	·984	·987	·989
25	·888	·901	·918	·931	·964	·981	·985	·988	·989
26	0·891	0·904	0·920	0·933	0·965	0·982	0·985	0·988	0·989
27	·894	·906	·923	·935	·965	·982	·985	·988	·990
28	·896	·908	·924	·936	·966	·982	·985	·988	·990
29	·898	·910	·926	·937	·966	·982	·985	·988	·990
30	·900	·912	·927	·939	·967	·983	·985	·988	·900
31	0·902	0·914	0·929	0·940	0·967	0·983	0·986	0·988	0·990
32	·904	·915	·930	·941	·968	·983	·986	·988	·990
33	·906	·917	·931	·942	·968	·983	·986	·989	·990
34	·908	·919	·933	·943	·969	·983	·986	·989	·990
35	·910	·920	·934	·944	·969	·984	·986	·989	·990
36	0·912	0·922	0·935	0·945	0·970	0·984	0·986	0·989	0·990
37	·914	·924	·936	·946	·970	·984	·987	·989	·990
38	·916	·925	·938	·947	·971	·984	·987	·989	·990
39	·917	·927	·939	·948	·971	·984	·987	·989	·991
40	·919	·928	·940	·949	·972	·985	·987	·989	·991
41	0·920	0·929	0·941	0·950	0·972	0·985	0·987	0·989	0·991
42	·922	·930	·942	·951	·972	·985	·987	·989	·991
43	·923	·932	·943	·951	·973	·985	·987	·990	·991
44	·924	·933	·944	·952	·973	·985	·987	·990	·991
45	·926	·934	·945	·953	·973	·985	·988	·990	·991
46	0·927	0·935	0·945	0·953	0·974	0·985	0·988	0·990	0·991
47	·928	·936	·946	·954	·974	·985	·988	·990	·991
48	·929	·937	·947	·954	·974	·985	·988	·990	·991
49	·929	·937	·947	·955	·974	·985	·988	·990	·991
50	·930	·938	·947	·955	·974	·985	·988	·990	·991

* Based on fitted Johnson (1949) S_B approximation, see Shapiro & Wilk (1965*a*) for details.

ตารางที่ 3 Percentage Points of the Test for Normality,

μ and σ^2 unknown

Statistic T	Modified form T^*	Percentage Points for T^*				
		15.0	10.0	5.0	2.5	1.0
D	$D(\sqrt{n}-0.01+0.85/\sqrt{n})$	0.775	0.819	0.895	0.955	1.035
V	$V(\sqrt{n}+0.05+0.82/\sqrt{n})$	1.320	1.386	1.489	1.585	1.693
W^2	$W^2(1+0.5/n)$	0.091	0.104	0.126	0.148	0.178
U^2	$U^2(1+0.16/n)$	0.085	0.096	0.116	0.136	0.163
A^2	$A^2(1+4/n-25/n^2)$	0.576	0.656	0.787	0.918	1.092

ตารางที่ 4 Percentage Points of the D Test for Normality

Sample size (N)	.20	.15	.10	.05	.01
1	.900	.925	.950	.975	.995
2	.684	.726	.776	.842	.929
3	.565	.597	.642	.708	.828
4	.494	.525	.564	.624	.733
5	.446	.474	.510	.565	.669
6	.410	.436	.470	.521	.618
7	.381	.405	.438	.486	.577
8	.358	.381	.411	.457	.543
9	.339	.360	.388	.432	.514
10	.322	.342	.368	.410	.490
11	.307	.326	.352	.391	.468
12	.295	.313	.338	.375	.450
13	.284	.302	.325	.361	.433
14	.274	.292	.314	.349	.418
15	.266	.283	.304	.338	.404
16	.258	.274	.295	.328	.392
17	.250	.266	.286	.318	.381
18	.244	.259	.278	.309	.371
19	.237	.252	.272	.301	.363
20	.231	.246	.264	.294	.356
25	.21	.22	.24	.27	.32
30	.19	.20	.22	.24	.29
35	.18	.19	.21	.23	.27
Over 35	$\frac{1.07}{\sqrt{N}}$	$\frac{1.14}{\sqrt{N}}$	$\frac{1.22}{\sqrt{N}}$	$\frac{1.36}{\sqrt{N}}$	$\frac{1.63}{\sqrt{N}}$

ตารางที่ 5 Table for testing kurtosis

(Percentage points of the distribution of $b_2 = m_4/m_2^2$)*

Size of Sample n	Percentage Points				Size of Sample n	Percentage Points			
	Upper 1%	Upper 5%	Lower 5%	Lower 1%		Upper 1%	Upper 5%	Lower 5%	Lower 1%
50	4.88	3.99	2.15	1.95	600	3.54	3.34	2.70	2.60
75	4.59	3.87	2.27	2.08	650	3.52	3.33	2.71	2.61
100	4.39	3.77	2.35	2.18	700	3.50	3.31	2.72	2.62
125	4.24	3.71	2.40	2.24	750	3.48	3.30	2.73	2.64
150	4.13	3.65	2.45	2.29	800	3.46	3.29	2.74	2.65
					850	3.45	3.28	2.74	2.66
200	3.98	3.57	2.51	2.37	900	3.43	3.28	2.75	2.66
250	3.87	3.52	2.55	2.42	950	3.42	3.27	2.76	2.67
300	3.79	3.47	2.59	2.46	1000	3.41	3.26	2.76	2.68
350	3.72	3.44	2.62	2.50					
400	3.67	3.41	2.64	2.52	1200	3.37	3.24	2.78	2.71
450	3.63	3.39	2.66	2.55	1400	3.34	3.22	2.80	2.72
500	3.60	3.37	2.67	2.57	1600	3.32	3.21	2.81	2.74
550	3.57	3.35	2.69	2.58	1800	3.30	3.20	2.82	2.76
600	3.54	3.34	2.70	2.60	2000	3.28	3.18	2.83	2.77

* Reproduced from Table 34 C of *Tables for Statisticians and Biometricians*, by permission of Dr. E. S. Pearson and the *Biometrika* Trustees.

ตารางที่ 6 Table for test skewness

(One-tailed percentage points of the distribution of $\sqrt{b_1} = g_1 = m_3/m_2^{3/2}$)*

Size of Sample n	Percentage Points		Standard Deviation	Size of Sample n	Percentage Points		Standard Deviation
	5%	1%			5%	1%	
25	0.711	1.061	0.4354	100	0.389	0.567	0.2377
30	0.662	0.986	.4052	125	0.350	0.508	.2139
35	0.621	0.923	.3804	150	0.321	0.464	.1961
40	0.587	0.870	.3596	175	0.298	0.430	.1820
45	0.558	0.825	.3418	200	0.280	0.403	.1706
50	0.534	0.787	.3264				
				250	0.251	0.360	.1531
60	0.492	0.723	.3009	300	0.230	0.329	.1400
70	0.459	0.673	.2806	350	0.213	0.305	.1298
80	0.432	0.631	.2638	400	0.200	0.285	.1216
90	0.409	0.596	.2498	450	0.188	0.269	.1147
100	0.389	0.567	.2377	500	0.179	0.255	.1089

* Since the distribution of $\sqrt{b_1}$ is symmetrical about zero, the percentage points represent 10% and 2% two-tailed values. Reproduced from Table 34 B of *Tables for Statisticians and Biometricians*, Vol. 1, by permission of Dr. E. S. Pearson and the *Biometrika* Trustees.

ตารางที่ 7 Lambda Parameters for Given Values of Skewness(α_3) and Kurtosis(α_4) when $\mu = 0$ and $\sigma^2 = 1$

$\alpha_3 = 0.0$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
1.8	.0	.5774	1.0000	1.0000
2.0	.0	.4952	.5843	.5843
2.2	.0	.4197	.4092	.4092
2.4	.0	.3533	.3032	.3032
2.6	.0	.2949	.2303	.2303
2.8	.0	.2433	.1765	.1765
3.0	.0	.1974	.1349	.1349
3.2	.0	.1563	.1016	.1016
3.4	.0	.1191	.0742	.0742
3.6	.0	.0852	.0512	.0512
3.8	.0	.0545	.0317	.0317
4.0	.0	.0262	.0148	.0148
4.1	.0	.0128	.7140+	.7140+
4.2	.0	-.0659+	-.0363+	-.0363+
4.3	.0	-.0123	-.6706+	-.6706+
4.4	.0	-.0241	-.0130	-.0130
4.6	.0	-.0466	-.0246	-.0246
4.8	.0	-.0676	-.0350	-.0350
5.0	.0	-.0870	-.0443	-.0443
5.2	.0	-.1053	-.0528	-.0528
5.4	.0	-.1227	-.0606	-.0606
5.6	.0	-.1389	-.0677	-.0677
5.8	.0	-.1541	-.0742	-.0742
6.0	.0	-.1686	-.0802	-.0802
6.2	.0	-.1823	-.0858	-.0858
6.4	.0	-.1954	-.0910	-.0910
6.6	.0	-.2077	-.0958	-.0958
6.8	.0	-.2194	-.1003	-.1003
7.0	.0	-.2306	-.1045	-.1045
7.2	.0	-.2414	-.1085	-.1085
7.4	.0	-.2518	-.1123	-.1123
7.6	.0	-.2615	-.1158	-.1158
7.8	.0	-.2709	-.1191	-.1191
8.0	.0	-.2800	-.1223	-.1223
8.2	.0	-.2887	-.1253	-.1253
8.4	.0	-.2969	-.1281	-.1281
8.6	.0	-.3050	-.1308	-.1308
8.8	.0	-.3128	-.1334	-.1334
9.0	.0	-.3203	-.1359	-.1359

$\alpha_3 = 0.05$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
1.8	-1.703	.2861	.0000	.9502*
2.0	-1.229	.3122	.0505	.7603
2.2	-.802	.3314	.1128	.5802
2.4	-.375	.3328	.1876	.3941
2.6	-.143	.2924	.1973	.2605
2.8	-.083	.2429	.1625	.1903
3.0	-.059	.1975	.1276	.1425
3.2	-.046	.1565	.0974	.1061
3.4	-.038	.1194	.0718	.0770
3.6	-.033	.0856	.0499	.0530
3.8	-.027	.0548	.0311	.0327
4.0	-.026	.0264	.0146	.0153
4.1	-.024	.0132	.7184+	.7504+
4.2	-.024	.0704+	.0380+	.0397+
4.3	-.022	-.0120	-.6386+	-.6643+
4.4	-.022	-.0238	-.0126	-.0131
4.6	-.018	-.0462	-.0240	-.0248
4.8	-.019	-.0671	-.0342	-.0354
5.0	-.016	-.0867	-.0435	-.0448
5.2	-.016	-.1050	-.0519	-.0534
5.4	-.015	-.1222	-.0596	-.0612
5.6	-.014	-.1386	-.0667	-.0684
5.8	-.014	-.1538	-.0731	-.0750
6.0	-.013	-.1682	-.0791	-.0810
6.2	-.012	-.1820	-.0847	-.0866
6.4	-.012	-.1950	-.0899	-.0918
6.6	-.012	-.2074	-.0947	-.0967
6.8	-.011	-.2192	-.0992	-.1012
7.0	-.011	-.2303	-.1036	-.1054
7.2	-.010	-.2411	-.1074	-.1094
7.4	-.010	-.2515	-.1112	-.1132
7.6	-.979+	-.2613	-.1147	-.1167
7.8	-.999+	-.2707	-.1180	-.1201
8.0	-.928+	-.2797	-.1212	-.1232
8.2	-.906+	-.2884	-.1242	-.1262
8.4	-.931+	-.2968	-.1270	-.1291
8.6	-.912+	-.3048	-.1297	-.1318
8.8	-.852+	-.3125	-.1323	-.1343
9.0	-.837+	-.3201	-.1348	-.1368

$\alpha_3 = 0.10$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
1.8	-1.678	.2835	.0000*	.9071*
2.0	-1.271	.3028	.0412	.7373
2.2	-.872	.3177	.0941	.5700
2.4	-.515	.3164	.1477	.4116
2.6	-.269	.2863	.1678	.2831
2.8	-.164	.2417	.1486	.2033
3.0	-.117	.1977	.1205	.1503
3.2	-.092	.1572	.0936	.1111
3.4	-.076	.1203	.0698	.0803
3.6	-.065	.0866	.0490	.0552
3.8	-.057	.0558	.0308	.0342
4.0	-.049	.0276	.0149	.0163
4.1	-.048	.0142	.7606+	.8302+
4.2	-.046	.1440+	.0762+	.0828+
4.3	-.044	-.0109	-.5703+	-.6174+
4.4	-.041	-.0227	-.0118	-.0127
4.6	-.037	-.0452	-.0231	-.0247
4.8	-.036	-.0661	-.0332	-.0354
5.0	-.033	-.0857	-.0424	-.0450
5.2	-.032	-.1040	-.0507	-.0537
5.4	-.030	-.1213	-.0584	-.0616
5.6	-.028	-.1375	-.0654	-.0688
5.8	-.027	-.1530	-.0719	-.0755
6.0	-.027	-.1674	-.0778	-.0816
6.2	-.025	-.1811	-.0834	-.0872
6.4	-.024	-.1943	-.0886	-.0925
6.6	-.023	-.2066	-.0934	-.0973
6.8	-.023	-.2184	-.0979	-.1019
7.0	-.022	-.2297	-.1021	-.1062
7.2	-.021	-.2405	-.1061	-.1102
7.4	-.020	-.2507	-.1099	-.1139
7.6	-.020	-.2606	-.1134	-.1175
7.8	-.020	-.2699	-.1167	-.1208
8.0	-.019	-.2791	-.1199	-.1240
8.2	-.019	-.2878	-.1229	-.1270
8.4	-.018	-.2961	-.1258	-.1298
8.6	-.017	-.3041	-.1285	-.1325
8.8	-.017	-.3119	-.1311	-.1351
9.0	-.017	-.3193	-.1335	-.1376

$\alpha_3 = 0.15$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
1.8	-1.655	.2811	.0000*	.8700*
2.0	-1.323	.2934	.0314	.7204
2.2	-.940	.3056	.0782	.5623
2.4	-.617	.3031	.1215	.4194
2.6	-.376	.2791	.1435	.2994
2.8	-.244	.2397	.1350	.2156
3.0	-.177	.1980	.1135	.1586
3.2	-.138	.1584	.0901	.1167
3.4	-.114	.1219	.0682	.0843
3.6	-.098	.0884	.0485	.0581
3.8	-.086	.0577	.0310	.0363
4.0	-.076	.0294	.0155	.0178
4.1	-.073	.0160	.8378+	.9564+
4.2	-.069	.3217+	.1667+	.1890+
4.3	-.066	-.9113+	-.4680+	-.5278+
4.4	-.063	-.0210	-.0107	-.0120
4.6	-.056	-.0435	-.0218	-.0242
4.8	-.055	-.0644	-.0318	-.0351
5.0	-.051	-.0842	-.0410	-.0449
5.2	-.048	-.1025	-.0493	-.0537
5.4	-.045	-.1198	-.0569	-.0617
5.6	-.043	-.1361	-.0639	-.0690
5.8	-.042	-.1514	-.0703	-.0757
6.0	-.040	-.1660	-.0763	-.0819
6.2	-.038	-.1798	-.0819	-.0876
6.4	-.037	-.1928	-.0870	-.0929
6.6	-.035	-.2053	-.0919	-.0978
6.8	-.034	-.2172	-.0964	-.1024
7.0	-.033	-.2284	-.1006	-.1067
7.2	-.032	-.2392	-.1046	-.1107
7.4	-.031	-.2496	-.1084	-.1145
7.6	-.030	-.2593	-.1119	-.1180
7.8	-.029	-.2688	-.1153	-.1214
8.0	-.028	-.2780	-.1185	-.1246
8.2	-.028	-.2866	-.1215	-.1276
8.4	-.027	-.2948	-.1243	-.1304
8.6	-.027	-.3031	-.1271	-.1332
8.8	-.026	-.3108	-.1297	-.1357
9.0	-.025	-.3183	-.1322	-.1382

$\alpha_3 = 0.20$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
2.0	-1.387	.2841	.0212	.7090
2.2	-1.011	.2947	.0638	.5571
2.4	-.706	.2919	.1013	.4246
2.6	-.471	.2718	.1233	.3120
2.8	-.322	.2374	.1221	.2273
3.0	-.237	.1983	.1065	.1672
3.2	-.187	.1599	.0866	.1230
3.4	-.154	.1240	.0667	.0889
3.6	-.132	.0908	.0482	.0615
3.8	-.116	.0601	.0314	.0389
4.0	-.103	.0318	.0164	.0198
4.1	-.097	.0185	.9467+	.0113
4.2	-.093	.5707+	.2894+	.3429+
4.3	-.089	-.6641+	-.3342+	-.3929+
4.4	-.085	-.0185	-.9261+	-.0108
4.6	-.079	-.0410	-.0202	-.0233
4.8	-.074	-.0622	-.0302	-.0345
5.0	-.069	-.0818	-.0392	-.0444
5.2	-.065	-.1003	-.0475	-.0536
5.4	-.061	-.1176	-.0551	-.0615
5.6	-.058	-.1339	-.0621	-.0689
5.8	-.055	-.1494	-.0686	-.0757
6.0	-.053	-.1639	-.0745	-.0819
6.2	-.051	-.1778	-.0801	-.0877
6.4	-.049	-.1909	-.0853	-.0930
6.6	-.047	-.2034	-.0901	-.0980
6.8	-.045	-.2153	-.0947	-.1026
7.0	-.044	-.2265	-.0989	-.1069
7.2	-.043	-.2374	-.1029	-.1110
7.4	-.041	-.2477	-.1067	-.1148
7.6	-.040	-.2577	-.1103	-.1184
7.8	-.039	-.2671	-.1136	-.1218
8.0	-.038	-.2762	-.1168	-.1250
8.2	-.037	-.2850	-.1199	-.1280
8.4	-.036	-.2935	-.1228	-.1309
8.6	-.035	-.3016	-.1255	-.1336
8.8	-.035	-.3092	-.1281	-.1362
9.0	-.034	-.3168	-.1306	-.1387
9.2	-.034	-.3241	-.1330	-.1411

$\alpha_3 = 0.25$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
2.0	-1.465	.2748	.0105	.7034
2.2	-1.084	.2847	.0506	.5548
2.4	-.790	.2820	.0843	.4294
2.6	-.558	.2650	.1062	.3226
2.8	-.398	.2349	.1099	.2385
3.0	-.298	.1987	.0996	.1763
3.2	-.237	.1619	.0831	.1300
3.4	-.196	.1266	.0653	.0942
3.6	-.167	.0937	.0481	.0656
3.8	-.147	.0632	.0321	.0421
4.0	-.131	.0351	.0176	.0224
4.1	-.126	.0217	.0108	.0136
4.2	-.118	.8889+	.4408+	.5467+
4.3	-.113	-.3476+	-.1713+	-.2103+
4.4	-.108	-.0154	-.7540+	-.9175+
4.6	-.099	-.0380	-.0184	-.0220
4.8	-.094	-.0591	-.0282	-.0334
5.0	-.087	-.0790	-.0373	-.0436
5.2	-.082	-.0974	-.0455	-.0527
5.4	-.077	-.1149	-.0531	-.0610
5.6	-.073	-.1312	-.0601	-.0685
5.8	-.070	-.1467	-.0665	-.0754
6.0	-.067	-.1613	-.0725	-.0817
6.2	-.064	-.1753	-.0781	-.0876
6.4	-.062	-.1885	-.0833	-.0930
6.6	-.059	-.2010	-.0882	-.0980
6.8	-.058	-.2129	-.0927	-.1027
7.0	-.055	-.2242	-.0970	-.1070
7.2	-.054	-.2350	-.1010	-.1111
7.4	-.052	-.2455	-.1048	-.1150
7.6	-.051	-.2554	-.1084	-.1186
7.8	-.049	-.2649	-.1118	-.1220
8.0	-.048	-.2742	-.1151	-.1252
8.2	-.047	-.2829	-.1181	-.1283
8.4	-.046	-.2914	-.1210	-.1312
8.6	-.044	-.2995	-.1238	-.1339
8.8	-.044	-.3072	-.1264	-.1365
9.0	-.043	-.3147	-.1289	-.1390
9.2	-.042	-.3220	-.1313	-.1414

The parameter values given in this table are for a variate with zero mean and unit variance. The procedure for adjusting the parameters to reflect a different mean or variance is given in Section 3. A plus sign (+) next to a tabled value indicates that the value has two leading zeroes and should be multiplied by 10^{-2}. Similarly, a dollar sign ($) next to a tabled value indicates that the value should be multiplied by 10^{-4}. An asterisk (*) next to a tabled value of λ_j indicates that the difference between the calculated and specified values of α_j, i.e. $|\alpha_j(\lambda_3,\lambda_4) - \alpha_j|$, is somewhat greater than 0.01. See Section 4 for a discussion of the construction and accuracy of this table.

ตารางที่ 7 (ต่อ)

$\alpha_3 = 0.30$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
2.0	-1.550	.2660	.0000	.7020
2.2	-1.164	.2755	.0380	.5556
2.4	-.871	.2733	.0695	.4348
2.6	-.642	.2586	.0911	.3324
2.8	-.474	.2323	.0983	.2495
3.0	-.362	.1991	.0925	.1859
3.2	-.288	.1641	.0796	.1377
3.4	-.239	.1298	.0640	.1003
3.6	-.208	.0973	.0481	.0708
3.8	-.179	.0671	.0330	.0460
4.0	-.160	.0389	.0190	.0255
4.2	-.144	.0127	.6175+	.8035+
4.3	-.138	.0789+	.0380+	.0889+
4.4	-.131	-.0116	-.5558+	-.7057+
4.5	-.129	-.0231	-.0110	-.0139
4.6	-.121	-.0343	-.0163	-.0203
4.8	-.113	-.0554	-.0260	-.0319
5.0	-.105	-.0752	-.0350	-.0423
5.2	-.100	-.0939	-.0432	-.0517
5.4	-.094	-.1114	-.0508	-.0601
5.6	-.089	-.1279	-.0578	-.0678
5.8	-.085	-.1435	-.0643	-.0748
6.0	-.081	-.1582	-.0703	-.0812
6.2	-.078	-.1722	-.0759	-.0872
6.4	-.075	-.1854	-.0811	-.0927
6.6	-.072	-.1979	-.0860	-.0977
6.8	-.069	-.2100	-.0906	-.1025
7.0	-.067	-.2214	-.0949	-.1069
7.2	-.065	-.2325	-.0990	-.1111
7.4	-.063	-.2427	-.1028	-.1149
7.6	-.061	-.2528	-.1066	-.1186
7.8	-.060	-.2623	-.1098	-.1220
8.0	-.058	-.2716	-.1131	-.1253
8.2	-.056	-.2805	-.1162	-.1284
8.4	-.055	-.2889	-.1191	-.1313
8.6	-.054	-.2971	-.1219	-.1341
8.8	-.053	-.3050	-.1246	-.1367
9.0	-.052	-.3125	-.1271	-.1392
9.2	-.051	-.3197	-.1295	-.1416

$\alpha_3 = 0.35$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
2.0	-1.539	.2639	.0000+	.6836+
2.2	-1.252	.2668	.0256	.5599
2.4	-.955	.2653	.0559	.4615
2.6	-.726	.2528	.0775	.3823
2.8	-.550	.2298	.0873	.2606
3.0	-.427	.1996	.0858	.1961
3.2	-.343	.1665	.0758	.1462
3.4	-.285	.1333	.0625	.1072
3.6	-.243	.1014	.0482	.0760
3.8	-.213	.0714	.0340	.0505
4.0	-.191	.0434	.0206	.0293
4.2	-.172	.0173	.8158+	.0112
4.3	-.163	.4870+	.2293+	.3090+
4.4	-.156	-.7105+	-.3332+	-.4831+
4.5	-.151	-.0187	-.8723+	-.0115
4.6	-.142	-.0298	-.0139	-.0180
4.8	-.132	-.0511	-.0236	-.0300
5.0	-.124	-.0710	-.0325	-.0407
5.2	-.117	-.0898	-.0407	-.0503
5.4	-.110	-.1076	-.0483	-.0589
5.6	-.105	-.1240	-.0553	-.0668
5.8	-.100	-.1396	-.0618	-.0739
6.0	-.096	-.1545	-.0678	-.0805
6.2	-.091	-.1685	-.0735	-.0865
6.4	-.088	-.1818	-.0787	-.0921
6.6	-.085	-.1945	-.0836	-.0973
6.8	-.082	-.2067	-.0883	-.1021
7.0	-.079	-.2181	-.0926	-.1066
7.2	-.077	-.2291	-.0967	-.1108
7.4	-.074	-.2396	-.1006	-.1147
7.6	-.072	-.2496	-.1042	-.1184
7.8	-.070	-.2593	-.1077	-.1219
8.0	-.068	-.2685	-.1109	-.1252
8.2	-.066	-.2775	-.1141	-.1283
8.4	-.065	-.2860	-.1170	-.1313
8.6	-.064	-.2942	-.1198	-.1341
8.8	-.062	-.3020	-.1225	-.1367
9.0	-.060	-.3096	-.1251	-.1392
9.2	-.059	-.3172	-.1276	-.1417

$\alpha_3 = 0.40$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
2.2	-1.354	.2582	.0129	.5683
2.4	-1.063	.2580	.0430	.4500
2.6	-.808	.2473	.0648	.3527
2.8	-.627	.2273	.0767	.2720
3.0	-.494	.2000	.0782	.2069
3.2	-.400	.1690	.0718	.1555
3.4	-.333	.1371	.0609	.1169
3.6	-.288	.1060	.0482	.0826
3.8	-.248	.0764	.0351	.0558
4.0	-.222	.0485	.0223	.0337
4.2	-.200	.0228	.0103	.0189
4.3	-.190	.0100	.8597+	.6521+
4.4	-.182	-.0397+	-.0182+	-.0256+
4.5	-.174	-.0136	-.6206+	-.8533+
4.6	-.166	-.0268	-.0113	-.0153
4.8	-.155	-.0462	-.0209	-.0277
5.0	-.146	-.0662	-.0297	-.0387
5.2	-.136	-.0850	-.0379	-.0485
5.4	-.129	-.1027	-.0455	-.0576
5.6	-.122	-.1194	-.0525	-.0658
5.8	-.115	-.1352	-.0591	-.0727
6.0	-.111	-.1501	-.0651	-.0794
6.2	-.106	-.1643	-.0708	-.0856
6.4	-.102	-.1778	-.0761	-.0913
6.6	-.098	-.1906	-.0811	-.0966
6.8	-.094	-.2026	-.0857	-.1016
7.0	-.091	-.2142	-.0901	-.1060
7.2	-.089	-.2253	-.0942	-.1103
7.4	-.086	-.2359	-.0981	-.1143
7.6	-.083	-.2459	-.1018	-.1180
7.8	-.081	-.2558	-.1053	-.1216
8.0	-.079	-.2650	-.1086	-.1249
8.2	-.077	-.2741	-.1118	-.1281
8.4	-.075	-.2827	-.1148	-.1311
8.6	-.073	-.2908	-.1176	-.1339
8.8	-.072	-.2988	-.1203	-.1366
9.0	-.070	-.3064	-.1229	-.1391
9.2	-.069	-.3139	-.1254	-.1416
9.4	-.067	-.3210	-.1278	-.1439

$\alpha_3 = 0.45$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
2.2	-1.471	.2500	.0000	.5812
2.4	-1.138	.2511	.0305	.4608
2.6	-.894	.2424	.0520	.3641
2.8	-.707	.2248	.0663	.2840
3.0	-.565	.2003	.0707	.2184
3.2	-.460	.1716	.0674	.1657
3.4	-.388	.1412	.0590	.1236
3.6	-.329	.1110	.0480	.0897
3.8	-.287	.0818	.0361	.0619
4.0	-.255	.0542	.0241	.0388
4.2	-.230	.0282	.0126	.0193
4.3	-.221	.0158	.7045+	.0106
4.4	-.208	.4102+	.1833+	.2691+
4.5	-.200	-.7861+	-.3505+	-.5065+
4.6	-.192	-.0191	-.8511+	-.0121
4.8	-.178	-.0406	-.0180	-.0249
5.0	-.165	-.0607	-.0268	-.0362
5.2	-.157	-.0796	-.0349	-.0464
5.4	-.147	-.0975	-.0425	-.0555
5.6	-.140	-.1142	-.0495	-.0637
5.8	-.132	-.1302	-.0561	-.0712
6.0	-.127	-.1453	-.0622	-.0781
6.2	-.121	-.1595	-.0679	-.0844
6.4	-.116	-.1731	-.0733	-.0902
6.6	-.112	-.1860	-.0783	-.0956
6.8	-.108	-.1983	-.0830	-.1006
7.0	-.104	-.2098	-.0874	-.1052
7.2	-.101	-.2211	-.0916	-.1096
7.4	-.097	-.2316	-.0955	-.1136
7.6	-.095	-.2419	-.0992	-.1175
7.8	-.092	-.2518	-.1028	-.1211
8.0	-.090	-.2611	-.1061	-.1245
8.2	-.088	-.2702	-.1093	-.1277
8.4	-.085	-.2789	-.1124	-.1307
8.6	-.084	-.2871	-.1152	-.1336
8.8	-.081	-.2952	-.1180	-.1363
9.0	-.080	-.3029	-.1206	-.1389
9.2	-.078	-.3102	-.1231	-.1413
9.4	-.076	-.3176	-.1256	-.1437

$\alpha_3 = 0.50$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
2.4	-1.245	.2445	.0178	.4788
2.6	-.987	.2376	.0410	.3770
2.8	-.790	.2225	.0561	.2969
3.0	-.639	.2006	.0630	.2307
3.2	-.525	.1762	.0625	.1768
3.4	-.440	.1456	.0566	.1332
3.6	-.376	.1163	.0476	.0979
3.8	-.329	.0877	.0369	.0689
4.0	-.290	.0604	.0259	.0447
4.2	-.262	.0345	.0149	.0243
4.3	-.248	.0221	.9582+	.0152
4.4	-.238	.0101	.4383+	.6815+
4.5	-.228	-.1612+	-.0700+	-.1066+
4.6	-.219	-.0128	-.5570+	-.8334+
4.8	-.202	-.0344	-.0149	-.0216
5.0	-.188	-.0546	-.0236	-.0333
5.2	-.177	-.0737	-.0317	-.0438
5.4	-.167	-.0917	-.0393	-.0532
5.6	-.157	-.1087	-.0464	-.0617
5.8	-.150	-.1246	-.0529	-.0694
6.0	-.142	-.1398	-.0591	-.0764
6.2	-.137	-.1542	-.0648	-.0829
6.4	-.131	-.1679	-.0702	-.0889
6.6	-.126	-.1809	-.0753	-.0944
6.8	-.122	-.1933	-.0800	-.0995
7.0	-.117	-.2050	-.0845	-.1042
7.2	-.114	-.2163	-.0887	-.1087
7.4	-.110	-.2270	-.0927	-.1128
7.6	-.107	-.2374	-.0965	-.1167
7.8	-.104	-.2473	-.1001	-.1204
8.0	-.101	-.2567	-.1035	-.1238
8.2	-.098	-.2659	-.1067	-.1271
8.4	-.095	-.2745	-.1098	-.1301
8.6	-.094	-.2830	-.1127	-.1331
8.8	-.091	-.2910	-.1155	-.1358
9.0	-.089	-.2986	-.1181	-.1386
9.2	-.088	-.3060	-.1207	-.1410
9.4	-.086	-.3130	-.1231	-.1433
9.6	-.084	-.3206	-.1255	-.1456

$\alpha_3 = 0.55$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
2.8	-1.370	.2379	.8863+	.4931
2.6	-1.087	.2331	.0292	.3920
2.8	-.878	.2202	.0459	.3109
3.0	-.716	.2009	.0551	.2440
3.2	-.593	.1767	.0572	.1889
3.4	-.499	.1497	.0538	.1438
3.6	-.428	.1217	.0467	.1070
3.8	-.372	.0940	.0376	.0767
4.0	-.330	.0670	.0275	.0518
4.2	-.298	.0413	.0172	.0301
4.4	-.269	.0170	.7149+	.0118
4.5	-.257	.5355+	.2258+	.3684+
4.6	-.247	-.5954+	-.2515+	-.3975+
4.7	-.237	-.0169	-.7160+	-.0111
4.8	-.227	-.0276	-.0117	-.0178
5.0	-.213	-.0480	-.0203	-.0300
5.2	-.200	-.0671	-.0283	-.0408
5.4	-.187	-.0852	-.0359	-.0505
5.6	-.177	-.1024	-.0430	-.0593
5.8	-.169	-.1184	-.0495	-.0672
6.0	-.161	-.1338	-.0557	-.0745
6.2	-.153	-.1483	-.0615	-.0811
6.4	-.147	-.1620	-.0669	-.0872
6.6	-.141	-.1753	-.0721	-.0929
6.8	-.136	-.1878	-.0769	-.0981
7.0	-.131	-.1997	-.0814	-.1030
7.2	-.127	-.2111	-.0857	-.1075
7.4	-.123	-.2218	-.0897	-.1117
7.6	-.119	-.2322	-.0935	-.1157
7.8	-.115	-.2422	-.0972	-.1194
8.0	-.113	-.2519	-.1006	-.1230
8.2	-.110	-.2610	-.1039	-.1263
8.4	-.107	-.2698	-.1070	-.1294
8.6	-.104	-.2784	-.1100	-.1324
8.8	-.102	-.2864	-.1128	-.1352
9.0	-.100	-.2943	-.1155	-.1379
9.2	-.097	-.3019	-.1181	-.1404
9.4	-.095	-.3092	-.1206	-.1428
9.6	-.094	-.3164	-.1230	-.1452

ตารางที่ 7 (ต่อ)

$\alpha_3 = 0.60$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
2.4	-1.411	.2347	.0000+	.4951+
2.6	-1.198	.2286	.0171	.4098
2.8	-.972	.2180	.0355	.3265
3.0	-.800	.2009	.0467	.2583
3.2	-.665	.1791	.0514	.2020
3.4	-.562	.1539	.0504	.1554
3.6	-.482	.1273	.0454	.1171
3.8	-.420	.1005	.0379	.0854
4.0	-.372	.0740	.0289	.0589
4.2	-.335	.0486	.0194	.0366
4.4	-.302	.0244	.9911+	.0175
4.5	-.289	.0128	.5215+	.8965+
4.6	-.277	.1492+	.0611+	.1025+
4.7	-.266	-.9531+	-.3916+	-.6425+
4.8	-.256	-.0202	-.8326+	-.0134
5.0	-.238	-.0407	-.0168	-.0261
5.2	-.222	-.0600	-.0248	-.0373
5.4	-.209	-.0782	-.0323	-.0476
5.6	-.197	-.0956	-.0394	-.0565
5.8	-.187	-.1118	-.0460	-.0647
6.0	-.179	-.1273	-.0522	-.0722
6.2	-.171	-.1419	-.0580	-.0790
6.4	-.163	-.1559	-.0635	-.0853
6.6	-.157	-.1691	-.0686	-.0911
6.8	-.151	-.1818	-.0735	-.0965
7.0	-.146	-.1938	-.0781	-.1015
7.2	-.141	-.2052	-.0824	-.1061
7.4	-.137	-.2163	-.0865	-.1105
7.6	-.132	-.2267	-.0904	-.1145
7.8	-.128	-.2368	-.0941	-.1183
8.0	-.124	-.2465	-.0976	-.1219
8.2	-.121	-.2557	-.1009	-.1253
8.4	-.118	-.2647	-.1041	-.1285
8.6	-.115	-.2732	-.1071	-.1315
8.8	-.113	-.2815	-.1100	-.1344
9.0	-.110	-.2894	-.1127	-.1371
9.2	-.108	-.2970	-.1153	-.1397
9.4	-.105	-.3045	-.1179	-.1422
9.6	-.103	-.3116	-.1203	-.1445

$\alpha_3 = 0.65$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
2.6	-1.329	.2240	.3908+	.4318
2.8	-1.076	.2157	.0246	.3443
3.0	-.889	.2010	.0380	.2742
3.2	-.744	.1812	.0449	.2162
3.4	-.630	.1582	.0464	.1682
3.6	-.542	.1330	.0435	.1283
3.8	-.472	.1072	.0377	.0952
4.0	-.418	.0813	.0300	.0674
4.2	-.374	.0564	.0215	.0440
4.4	-.338	.0323	.0126	.0239
4.5	-.324	.0207	.8137+	.0150
4.6	-.310	.9399+	.3719+	.6660+
4.7	-.297	-.1593+	-.0634+	-.1106+
4.8	-.285	-.0123	-.4921+	-.8391+
5.0	-.265	-.0328	-.0132	-.0216
5.2	-.248	-.0526	-.0211	-.0338
5.4	-.231	-.0707	-.0286	-.0438
5.6	-.219	-.0880	-.0356	-.0532
5.8	-.209	-.1046	-.0422	-.0618
6.0	-.198	-.1201	-.0484	-.0695
6.2	-.189	-.1350	-.0543	-.0766
6.4	-.181	-.1491	-.0598	-.0831
6.6	-.174	-.1625	-.0650	-.0891
6.8	-.167	-.1753	-.0700	-.0946
7.0	-.161	-.1874	-.0746	-.0997
7.2	-.155	-.1991	-.0790	-.1045
7.4	-.150	-.2100	-.0831	-.1089
7.6	-.145	-.2208	-.0871	-.1131
7.8	-.141	-.2309	-.0908	-.1170
8.0	-.137	-.2407	-.0944	-.1207
8.2	-.134	-.2501	-.0977	-.1242
8.4	-.130	-.2591	-.1010	-.1274
8.6	-.127	-.2677	-.1040	-.1305
8.8	-.124	-.2761	-.1069	-.1335
9.0	-.121	-.2840	-.1097	-.1362
9.2	-.119	-.2919	-.1124	-.1389
9.4	-.116	-.2994	-.1150	-.1416
9.6	-.114	-.3065	-.1174	-.1438
9.8	-.112	-.3136	-.1198	-.1461

$\alpha_3 = 0.70$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
2.6	-1.368	.2217	.0000+	.4353+
2.8	-1.194	.2132	.0130	.3651
3.0	-.987	.2008	.0286	.2918
3.2	-.828	.1833	.0378	.2319
3.4	-.704	.1621	.0416	.1821
3.6	-.606	.1385	.0409	.1406
3.8	-.529	.1139	.0369	.1060
4.0	-.467	.0889	.0307	.0768
4.2	-.419	.0643	.0232	.0522
4.4	-.379	.0406	.0151	.0312
4.6	-.344	.0178	.6767+	.0130
4.7	-.331	.6799+	.2607+	.4872+
4.8	-.317	-.3917+	-.1512+	-.2750+
4.9	-.305	-.0144	-.5574+	-.9893+
5.0	-.294	-.0245	-.9565+	-.0166
5.2	-.276	-.0441	-.0173	-.0289
5.4	-.257	-.0626	-.0247	-.0398
5.6	-.243	-.0802	-.0317	-.0496
5.8	-.229	-.0967	-.0383	-.0584
6.0	-.216	-.1125	-.0445	-.0665
6.2	-.209	-.1275	-.0504	-.0738
6.4	-.199	-.1417	-.0560	-.0805
6.6	-.191	-.1554	-.0613	-.0867
6.8	-.184	-.1682	-.0662	-.0924
7.0	-.177	-.1805	-.0709	-.0977
7.2	-.170	-.1923	-.0754	-.1026
7.4	-.165	-.2036	-.0796	-.1072
7.6	-.160	-.2144	-.0836	-.1115
7.8	-.155	-.2246	-.0874	-.1155
8.0	-.151	-.2346	-.0910	-.1193
8.2	-.147	-.2439	-.0944	-.1228
8.4	-.143	-.2532	-.0977	-.1262
8.6	-.139	-.2618	-.1008	-.1293
8.8	-.136	-.2703	-.1038	-.1323
9.0	-.133	-.2784	-.1066	-.1352
9.2	-.130	-.2862	-.1093	-.1379
9.4	-.127	-.2937	-.1119	-.1404
9.6	-.125	-.3011	-.1144	-.1429
9.8	-.122	-.3081	-.1168	-.1452

$\alpha_3 = 0.75$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
2.8	-1.334	.2104	.0000	.3903
3.0	-1.097	.2003	.0183	.3119
3.2	-.921	.1850	.0299	.2492
3.4	-.785	.1658	.0360	.1974
3.6	-.677	.1440	.0375	.1542
3.8	-.590	.1206	.0355	.1179
4.0	-.521	.0966	.0309	.0873
4.2	-.466	.0726	.0246	.0614
4.4	-.419	.0492	.0174	.0392
4.6	-.384	.0266	.9663+	.0202
4.7	-.367	.0156	.5749+	.0116
4.8	-.352	.4940+	.1833+	.3583+
4.9	-.339	-.5509+	-.2061+	-.3916+
5.0	-.328	-.0157	-.5915+	-.0109
5.2	-.306	-.0353	-.0134	-.0238
5.4	-.286	-.0539	-.0207	-.0352
5.6	-.268	-.0716	-.0276	-.0454
5.8	-.254	-.0884	-.0342	-.0547
6.0	-.240	-.1044	-.0405	-.0630
6.2	-.229	-.1195	-.0464	-.0706
6.4	-.219	-.1339	-.0520	-.0776
6.6	-.209	-.1476	-.0573	-.0840
6.8	-.201	-.1607	-.0623	-.0899
7.0	-.194	-.1731	-.0670	-.0954
7.2	-.188	-.1851	-.0715	-.1005
7.4	-.181	-.1964	-.0758	-.1052
7.6	-.175	-.2074	-.0799	-.1096
7.8	-.170	-.2177	-.0837	-.1137
8.0	-.165	-.2278	-.0874	-.1176
8.2	-.160	-.2375	-.0909	-.1213
8.4	-.156	-.2466	-.0942	-.1247
8.6	-.152	-.2554	-.0974	-.1279
8.8	-.148	-.2640	-.1004	-.1310
9.0	-.145	-.2722	-.1033	-.1339
9.2	-.142	-.2802	-.1061	-.1367
9.4	-.138	-.2879	-.1088	-.1393
9.6	-.135	-.2952	-.1113	-.1418
9.8	-.133	-.3023	-.1137	-.1442
10.0	-.130	-.3093	-.1161	-.1465

$\alpha_3 = 0.80$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
3.0	-1.225	.1996	.6847+	.3356
3.2	-1.025	.1864	.0211	.2687
3.4	-.874	.1692	.0295	.2143
3.6	-.754	.1492	.0333	.1691
3.8	-.657	.1272	.0333	.1310
4.0	-.582	.1042	.0303	.0989
4.2	-.515	.0810	.0254	.0716
4.4	-.468	.0580	.0192	.0482
4.6	-.425	.0357	.0123	.0281
4.8	-.392	.0142	.5035+	.0107
4.9	-.375	.3770+	.1352+	.2770+
5.0	-.361	-.6291+	-.2278+	-.4531+
5.1	-.349	-.0164	-.5981+	-.0116
5.2	-.335	-.0261	-.9598+	-.0181
5.4	-.313	-.0449	-.0167	-.0301
5.6	-.295	-.0626	-.0235	-.0408
5.8	-.279	-.0795	-.0300	-.0504
6.0	-.264	-.0958	-.0363	-.0592
6.2	-.251	-.1110	-.0422	-.0671
6.4	-.240	-.1255	-.0478	-.0743
6.6	-.230	-.1394	-.0531	-.0810
6.8	-.220	-.1527	-.0582	-.0871
7.0	-.212	-.1653	-.0630	-.0928
7.2	-.204	-.1774	-.0676	-.0980
7.4	-.197	-.1889	-.0719	-.1029
7.6	-.191	-.2000	-.0760	-.1075
7.8	-.185	-.2104	-.0799	-.1117
8.0	-.180	-.2205	-.0836	-.1157
8.2	-.174	-.2304	-.0872	-.1195
8.4	-.169	-.2397	-.0906	-.1230
8.6	-.166	-.2488	-.0938	-.1264
8.8	-.161	-.2574	-.0969	-.1295
9.0	-.157	-.2658	-.0999	-.1325
9.2	-.154	-.2737	-.1027	-.1353
9.4	-.150	-.2815	-.1054	-.1380
9.6	-.147	-.2890	-.1080	-.1406
9.8	-.144	-.2962	-.1105	-.1430
10.0	-.141	-.3033	-.1129	-.1454
10.2	-.139	-.3100	-.1152	-.1476

$\alpha_3 = 0.85$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
3.0	-1.303	.1985	.0000+	.3488
3.2	-1.145	.1875	.0110	.2912
3.4	-.973	.1723	.0220	.2332
3.6	-.838	.1541	.0281	.1855
3.8	-.732	.1336	.0301	.1455
4.0	-.645	.1119	.0291	.1117
4.2	-.577	.0895	.0256	.0829
4.4	-.519	.0671	.0206	.0582
4.6	-.472	.0451	.0146	.0370
4.8	-.430	.0238	.8001+	.0185
4.9	-.413	.0134	.4581+	.0102
5.0	-.398	.3503+	.1211+	.2612+
5.1	-.383	-.6701+	-.2345+	-.4896+
5.2	-.370	-.0165	-.5808+	-.0118
5.4	-.344	-.0353	-.0127	-.0244
5.6	-.320	-.0531	-.0193	-.0356
5.8	-.305	-.0703	-.0258	-.0457
6.0	-.290	-.0864	-.0319	-.0548
6.2	-.275	-.1019	-.0378	-.0631
6.4	-.262	-.1168	-.0435	-.0707
6.6	-.251	-.1307	-.0488	-.0776
6.8	-.241	-.1442	-.0539	-.0840
7.0	-.231	-.1570	-.0588	-.0899
7.2	-.223	-.1692	-.0634	-.0953
7.4	-.215	-.1809	-.0678	-.1004
7.6	-.207	-.1921	-.0720	-.1051
7.8	-.201	-.2028	-.0759	-.1095
8.0	-.195	-.2130	-.0797	-.1136
8.2	-.190	-.2229	-.0833	-.1175
8.4	-.184	-.2324	-.0868	-.1211
8.6	-.179	-.2416	-.0901	-.1246
8.8	-.175	-.2503	-.0932	-.1278
9.0	-.171	-.2587	-.0962	-.1309
9.2	-.167	-.2669	-.0991	-.1338
9.4	-.163	-.2748	-.1019	-.1366
9.6	-.159	-.2823	-.1045	-.1392
9.8	-.156	-.2897	-.1071	-.1417
10.0	-.153	-.2967	-.1095	-.1441
10.2	-.150	-.3037	-.1119	-.1464

ตารางที่ 7 (ต่อ)

$\alpha_3 = 0.90$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
3.2	-1.277	.1880	.0000	.3160
3.4	-1.085	.1751	.0133	.2548
3.6	-.933	.1586	.0218	.2039
3.8	-.814	.1397	.0260	.1615
4.0	-.717	.1193	.0269	.1258
4.2	-.635	.0979	.0251	.0953
4.4	-.575	.0762	.0214	.0693
4.6	-.522	.0547	.0164	.0468
4.8	-.478	.0337	.0106	.0273
5.0	-.439	.0132	.4328+	.0102
5.1	-.422	.3339+	.1111+	.2526+
5.2	-.407	-.6388+	-.2158+	-.4735+
5.3	-.394	-.0159	-.5428+	-.0116
5.4	-.379	-.0252	-.8694+	-.0180
5.6	-.353	-.0432	-.0152	-.0298+
5.8	-.334	-.0605	-.0215	-.0405
6.0	-.317	-.0768	-.0275	-.0500
6.2	-.301	-.0924	-.0334	-.0587
6.4	-.287	-.1073	-.0390	-.0666
6.6	-.273	-.1215	-.0444	-.0738
6.8	-.262	-.1352	-.0495	-.0805
7.0	-.252	-.1481	-.0544	-.0866
7.2	-.242	-.1606	-.0591	-.0923
7.4	-.233	-.1723	-.0635	-.0975
7.6	-.225	-.1838	-.0678	-.1024
7.8	-.218	-.1947	-.0718	-.1070
8.0	-.212	-.2051	-.0756	-.1113
8.2	-.205	-.2151	-.0793	-.1153
8.4	-.199	-.2246	-.0828	-.1190
8.6	-.194	-.2340	-.0862	-.1226
8.8	-.189	-.2428	-.0894	-.1259
9.0	-.185	-.2514	-.0924	-.1291
9.2	-.180	-.2597	-.0954	-.1321
9.4	-.176	-.2676	-.0982	-.1349
9.6	-.172	-.2753	-.1009	-.1376
9.8	-.168	-.2827	-.1035	-.1402
10.0	-.165	-.2900	-.1060	-.1427
10.2	-.162	-.2969	-.1084	-.1450
10.4	-.159	-.3035	-.1107	-.1472

$\alpha_3 = 1.00$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
3.4	-1.253	.1772	.0000+	.2854+
3.6	-1.169	.1664	.4828+	.2490
3.8	-1.010	.1509	.0181	.1996
4.0	-.886	.1333	.0193	.1588
4.2	-.787	.1142	.0212	.1244
4.4	-.706	.0943	.0206	.0950
4.6	-.638	.0741	.0182	.0697
4.8	-.581	.0539	.0144	.0477
5.0	-.533	.0340	.9695+	.0285
5.2	-.492	.0146	.4383+	.0117
5.3	-.474	.5192+	.1584+	.4061+
5.4	-.445	-.0317+	-.0101+	-.0242+
5.5	-.442	-.0132	-.4176+	-.9946+
5.6	-.429	-.0222	-.7097+	-.0164
5.8	-.403	-.0395	-.0129	-.0282+
6.0	-.379	-.0562	-.0187	-.0388
6.2	-.358	-.0721	-.0244	-.0488
6.4	-.341	-.0873	-.0299	-.0571
6.6	-.325	-.1019	-.0352	-.0651
6.8	-.309	-.1158	-.0404	-.0723
7.0	-.297	-.1291	-.0453	-.0790
7.2	-.285	-.1419	-.0500	-.0852
7.4	-.275	-.1540	-.0545	-.0909
7.6	-.265	-.1658	-.0589	-.0962
7.8	-.256	-.1769	-.0630	-.1011
8.0	-.248	-.1878	-.0670	-.1058
8.2	-.241	-.1980	-.0707	-.1101
8.4	-.233	-.2079	-.0744	-.1141
8.6	-.227	-.2174	-.0778	-.1179
8.8	-.220	-.2267	-.0812	-.1215
9.0	-.215	-.2356	-.0844	-.1249
9.2	-.210	-.2440	-.0874	-.1281
9.4	-.204	-.2522	-.0904	-.1311
9.6	-.200	-.2602	-.0932	-.1340
9.8	-.195	-.2678	-.0959	-.1367
10.0	-.191	-.2752	-.0985	-.1393
10.2	-.187	-.2824	-.1010	-.1418
10.4	-.184	-.2893	-.1034	-.1442
10.6	-.180	-.2959	-.1057	-.1464

$\alpha_3 = 1.10$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
3.8	-1.215	.1582	.0000+	.2379
4.0	-1.108	.1459	.6035+	.2013
4.2	-.978	.1294	.0125	.1607
4.4	-.869	.1117	.0157	.1267
4.6	-.781	.0932	.0165	.0977
4.8	-.708	.0743	.0154	.0727
5.0	-.647	.0552	.0128	.0508
5.2	-.596	.0365	.9168+	.0318
5.4	-.552	.0181	.4839+	.0150
5.5	-.532	.9038+	.2484+	.7342+
5.6	-.517	.0997+	.0279+	.0795+
5.7	-.497	-.8629+	-.2479+	-.6726+
5.8	-.481	-.0173	-.5066+	-.0132
6.0	-.451	-.0340	-.0103	-.0251
6.2	-.427	-.0501	-.0155	-.0358
6.4	-.403	-.0656	-.0208	-.0455
6.6	-.384	-.0805	-.0259	-.0544
6.8	-.366	-.0947	-.0309	-.0624
7.0	-.350	-.1084	-.0358	-.0698
7.2	-.335	-.1214	-.0405	-.0766
7.4	-.322	-.1341	-.0451	-.0829
7.6	-.311	-.1460	-.0494	-.0887
7.8	-.299	-.1577	-.0537	-.0941
8.0	-.289	-.1687	-.0577	-.0991
8.2	-.280	-.1794	-.0616	-.1038
8.4	-.271	-.1896	-.0653	-.1082
8.6	-.263	-.1994	-.0689	-.1123
8.8	-.256	-.2090	-.0724	-.1162
9.0	-.249	-.2180	-.0757	-.1198
9.2	-.242	-.2267	-.0788	-.1232
9.4	-.236	-.2353	-.0819	-.1265
9.6	-.231	-.2435	-.0848	-.1296
9.8	-.226	-.2513	-.0876	-.1325
10.0	-.221	-.2590	-.0903	-.1353
10.2	-.216	-.2664	-.0930	-.1379
10.4	-.211	-.2735	-.0955	-.1404
10.6	-.207	-.2804	-.0979	-.1428
10.8	-.203	-.2870	-.1002	-.1451
11.0	-.199	-.2936	-.1025	-.1473

$\alpha_3 = 1.20$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
4.2	-1.183	.1407	.0000+	.1997
4.4	-1.083	.1278	.5096+	.1675
4.6	-.965	.1113	.9968+	.1329
4.8	-.870	.0941	.0122	.1036
5.0	-.792	.0768	.0124	.0788
5.2	-.723	.0586	.0112	.0565
5.4	-.668	.0408	.8705+	.0372
5.6	-.615	.0233	.5411+	.0202
5.7	-.597	.0146	.3525+	.0128
5.8	-.577	.6088+	.1515+	.5050+
5.9	-.558	-.2319+	-.0594+	-.1888+
6.0	-.542	-.0962+	-.0289+	-.0788+
6.2	-.508	-.0268	-.7343+	-.0206
6.4	-.481	-.0424	-.0120	-.0315
6.6	-.456	-.0575	-.0168	-.0418
6.8	-.432	-.0719	-.0215	-.0504
7.0	-.412	-.0860	-.0262	-.0587
7.2	-.394	-.0993	-.0308	-.0662
7.4	-.378	-.1123	-.0353	-.0732
7.6	-.362	-.1247	-.0397	-.0796
7.8	-.349	-.1366	-.0439	-.0856
8.0	-.337	-.1480	-.0480	-.0911
8.2	-.325	-.1589	-.0519	-.0962
8.4	-.314	-.1695	-.0558	-.1010
8.6	-.305	-.1796	-.0594	-.1055
8.8	-.296	-.1896	-.0630	-.1098
9.0	-.287	-.1990	-.0664	-.1137
9.2	-.280	-.2082	-.0697	-.1175
9.4	-.273	-.2168	-.0728	-.1210
9.6	-.265	-.2253	-.0759	-.1243
9.8	-.259	-.2335	-.0788	-.1275
10.0	-.254	-.2414	-.0816	-.1305
10.2	-.248	-.2490	-.0843	-.1333
10.4	-.242	-.2564	-.0870	-.1360
10.6	-.237	-.2636	-.0895	-.1386
10.8	-.233	-.2704	-.0919	-.1410
11.0	-.228	-.2772	-.0943	-.1434
11.2	-.224	-.2837	-.0966	-.1456
11.4	-.220	-.2901	-.0988	-.1478

$\alpha_3 = 1.30$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
4.6	-1.156	.1248	.0000+	.1679
4.8	-1.088	.1129	.3178+	.1435
5.0	-.975	.0968	.7225+	.1130
5.2	-.886	.0802	.9035+	.0870
5.4	-.812	.0634	.9148+	.0645
5.6	-.749	.0466	.7959+	.0447
5.8	-.695	.0300	.5783+	.0273
6.0	-.648	.0286+	.6619+	.0239+
6.1	-.617	.0446+	.0100+	.0375+
6.2	-.616	-.0526+	-.0118+	-.0442+
6.3	-.585	-.0104	-.2450+	-.0504+
6.4	-.572	-.0182	-.4339+	-.0146
6.6	-.539	-.0333	-.8469+	-.0258
6.8	-.510	-.0480	-.0127	-.0360
7.0	-.485	-.0622	-.0170	-.0453
7.2	-.463	-.0758	-.0213	-.0538
7.4	-.442	-.0890	-.0256	-.0616
7.6	-.424	-.1017	-.0298	-.0688
7.8	-.407	-.1140	-.0340	-.0754
8.0	-.392	-.1258	-.0380	-.0816
8.2	-.378	-.1372	-.0420	-.0873
8.4	-.365	-.1484	-.0458	-.0926
8.6	-.353	-.1584	-.0495	-.0975
8.8	-.342	-.1687	-.0531	-.1022
9.0	-.332	-.1784	-.0566	-.1065
9.2	-.322	-.1878	-.0600	-.1106
9.4	-.314	-.1969	-.0632	-.1145
9.6	-.305	-.2057	-.0664	-.1181
9.8	-.298	-.2141	-.0694	-.1215
10.0	-.291	-.2223	-.0723	-.1248
10.2	-.284	-.2304	-.0752	-.1279
10.4	-.277	-.2379	-.0779	-.1308
10.6	-.272	-.2453	-.0805	-.1336
10.8	-.266	-.2525	-.0831	-.1362
11.0	-.261	-.2595	-.0855	-.1388+
11.2	-.256	-.2662	-.0879	-.1412
11.4	-.251	-.2728	-.0902	-.1435
11.6	-.246	-.2792	-.0925	-.1457
11.8	-.242	-.2852	-.0946	-.1478

$\alpha_3 = 1.40$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
5.0	-1.132	.1092	.0000+	.1411
5.2	-1.106	.1011	.0787+	.1268
5.4	-1.001	.0855	.4546+	.0991
5.6	-.916	.0697	.6296+	.0756
5.8	-.848	.0538	.6530+	.0567
6.0	-.782	.0379	.5603+	.0365
6.2	-.729	.0222	.3785+	.0204
6.3	-.706	.0145	.2611+	-.0130
6.4	-.683	.6822+	.1292+	.5987+
6.5	-.660	-.1226+	-.0288+	-.1052+
6.6	-.683	-.8266+	-.1702+	-.0968+
6.8	-.607	-.0230	-.5060+	-.0187
7.0	-.575	-.0373	-.8670+	-.0293
7.2	-.587	-.0510	-.0126	-.0389
7.4	-.521	-.0645	-.0163	-.0478
7.6	-.498	-.0775	-.0202	-.0559
7.8	-.475	-.0900	-.0242	-.0633+
8.0	-.455	-.1020	-.0280	-.0702
8.2	-.440	-.1137	-.0319	-.0766
8.4	-.423	-.1250	-.0357	-.0825+
8.6	-.410	-.1358	-.0393	-.0881+
8.8	-.395	-.1463	-.0430	-.0932
9.0	-.383	-.1564	-.0465	-.0980
9.2	-.372	-.1662	-.0499	-.1026
9.4	-.361	-.1756	-.0532	-.1068
9.6	-.351	-.1846	-.0564	-.1108
9.8	-.342	-.1935	-.0595	-.1146
10.0	-.333	-.2018	-.0625	-.1181
10.2	-.325	-.2102	-.0655	-.1215
10.4	-.317	-.2181	-.0683	-.1247
10.6	-.310	-.2257	-.0710	-.1277
10.8	-.303	-.2332	-.0737	-.1306
11.0	-.297	-.2405	-.0762	-.1334+
11.2	-.291	-.2475	-.0787	-.1360
11.4	-.285	-.2542	-.0811	-.1385+
11.6	-.279	-.2609	-.0835	-.1409
11.8	-.274	-.2671	-.0857	-.1431
12.0	-.269	-.2734	-.0879	-.1453
12.2	-.265	-.2794	-.0900	-.1474

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$\alpha_3 = 1.50$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
5.4	-1.112	.0951	.0000*	.1182
5.6	-1.103	.0886	.0000*	.1083
5.8	-1.042	.0773	.1949*	.0899
6.0	-.957	.0622	.3907*	.0677
6.2	-.885	.0471	.4441*	.0483
6.4	-.824	.0321	.3885*	.0313
6.6	-.688	.0566*	.0104**	.0494**
6.7	-.767	.9962*	.1538*	.9059*
6.8	-.714	-.0290*	-.48978	-.0256*
6.9	-.704	-.4446*	-.0768*	-.3882*
7.0	-.684	-.0115	-.2088*	-.9875*
7.2	-.647	-.0254	-.4989*	-.0210
7.4	-.615	-.0390	-.8156*	-.0312
7.6	-.585	-.0520	-.0115	-.0404
7.8	-.558	-.0648	-.0150	-.0489
8.0	-.536	-.0767	-.0184	-.0565
8.2	-.514	-.0891	-.0221	-.0640
8.4	-.494	-.1007	-.0257	-.0707
8.6	-.476	-.1118	-.0292	-.0769
8.8	-.459	-.1225	-.0327	-.0826
9.0	-.443	-.1330	-.0362	-.0880
9.2	-.429	-.1431	-.0396	-.0931
9.4	-.416	-.1528	-.0429	-.0978
9.6	-.404	-.1622	-.0461	-.1022
9.8	-.392	-.1713	-.0493	-.1064
10.0	-.382	-.1803	-.0524	-.1104
10.2	-.372	-.1887	-.0553	-.1141
10.4	-.363	-.1969	-.0582	-.1176
10.6	-.354	-.2049	-.0611	-.1209
10.8	-.346	-.2127	-.0638	-.1241
11.0	-.338	-.2202	-.0665	-.1271
11.2	-.331	-.2273	-.0690	-.1299
11.4	-.325	-.2339	-.0713	-.1325
11.6	-.317	-.2414	-.0740	-.1353
11.8	-.311	-.2478	-.0763	-.1377
12.0	-.305	-.2544	-.0786	-.1401
12.2	-.300	-.2607	-.0808	-.1424
12.4	-.295	-.2662	-.0827	-.1446
12.6	-.289	-.2726	-.0851	-.1466

$\alpha_3 = 1.60$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
6.0	-1.086	.0757	.0000*	.0896
6.2	-1.078	.0698	.0000	.0814
6.4	-1.011	.0573	.1699*	.0634
6.6	-.937	.0430	.2684*	.0449
6.8	-.875	.0287	.2597*	.0285
7.0	-.746	.0422*	.63565*	.0378**
7.1	-.796	.77738*	.0969*	.7177*
7.2	-.771	-.0341*	-.46348	-.0309*
7.3	-.751	-.5924*	-.0858*	-.5279*
7.4	-.731	-.0127	-.1942*	-.0111
7.6	-.693	-.0258	-.4383*	-.0218
7.8	-.659	-.0386	-.7111*	-.0316
8.0	-.630	-.0511	-.0100	-.0406
8.2	-.602	-.0633	-.0131	-.0489
8.4	-.577	-.0752	-.0163	-.0566*
8.6	-.553	-.0866	-.0196	-.0636
8.8	-.534	-.0972	-.0227	-.0699
9.0	-.515	-.1084	-.0261	-.0763
9.2	-.496	-.1187	-.0294	-.0819
9.4	-.480	-.1288	-.0326	-.0872
9.6	-.465	-.1385	-.0358	-.0922
9.8	-.452	-.1480	-.0389	-.0969
10.0	-.438	-.1572	-.0420	-.1013
10.2	-.426	-.1659	-.0450	-.1054
10.4	-.415	-.1745	-.0479	-.1093
10.6	-.404	-.1828	-.0508	-.1130
10.8	-.394	-.1908	-.0536	-.1165
11.0	-.385	-.1986	-.0563	-.1198
11.2	-.377	-.2062	-.0589	-.1230
11.4	-.368	-.2135	-.0615	-.1260
11.6	-.360	-.2206	-.0640	-.1288
11.8	-.352	-.2275	-.0665	-.1315
12.0	-.346	-.2341	-.0688	-.1341
12.2	-.339	-.2407	-.0711	-.1366
12.4	-.333	-.2471	-.0734	-.1390
12.6	-.328	-.2527	-.0753	-.1411
12.8	-.321	-.2592	-.0777	-.1434
13.0	-.316	-.2650	-.0797	-.1455
13.2	-.311	-.2706	-.0817	-.1475

$\alpha_3 = 1.70$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
6.6	-1.064	.0580	.0000*	.0657
6.8	-1.057	.0525	.0000	.0588
7.0	-1.001	.0412	.1027*	.0441
7.2	-.935	.0275	.1513*	.0280
7.4	-.878	.0142	.1142*	.0138
7.5	-.852	.7546*	.0696*	.7179*
7.6	-.825	-.0250*	-.26018	-.0232**
7.7	-.806	-.5469*	-.0619*	-.5000*
7.8	-.784	-.0119	-.1463*	-.0107
8.0	-.745	-.0245	-.3423*	-.0212
8.2	-.709	-.0367	-.5705*	-.0308
8.4	-.678	-.0487	-.8225*	-.0397
8.6	-.650	-.0603	-.0109	-.0478
8.8	-.622	-.0717	-.0138	-.0553*
9.0	-.598	-.0827	-.0167	-.0623
9.2	-.578	-.0933	-.0196	-.0688
9.4	-.557	-.1036	-.0226	-.0748
9.6	-.538	-.1136	-.0256	-.0804
9.8	-.521	-.1233	-.0286	-.0857
10.0	-.505	-.1329	-.0316	-.0907
10.2	-.485	-.1420	-.0346	-.0953
10.4	-.476	-.1509	-.0375	-.0997
10.6	-.463	-.1594	-.0403	-.1038
10.8	-.451	-.1677	-.0431	-.1077
11.0	-.440	-.1758	-.0458	-.1114
11.2	-.429	-.1837	-.0485	-.1149
11.4	-.419	-.1913	-.0511	-.1182
11.6	-.410	-.1988	-.0537	-.1214
11.8	-.401	-.2059	-.0562	-.1244
12.0	-.392	-.2128	-.0586	-.1272
12.2	-.384	-.2195	-.0610	-.1299
12.4	-.377	-.2261	-.0633	-.1325
12.6	-.369	-.2326	-.0656	-.1350
12.8	-.362	-.2388	-.0678	-.1374
13.0	-.356	-.2450	-.0700	-.1397
13.2	-.350	-.2508	-.0720	-.1419
13.4	-.344	-.2566	-.0741	-.1440
13.6	-.338	-.2622	-.0761	-.1460
13.8	-.333	-.2675	-.0780	-.1479*

$\alpha_3 = 1.80$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
7.2	-1.045	.0417	.0000*	.0456
7.4	-1.039	.0367	.0000*	.0396
7.6	-1.007	.0284	.0378*	.0298
7.8	-.945	.0155	.0646*	.0155
7.9	-.916	.9177*	.0498*	.9006*
8.0	-.892	.2914*	.0193*	.2801*
8.1	-.868	-.3291*	-.0254*	-.3102*
8.2	-.846	-.9427*	-.0826*	-.8721*
8.4	-.804	-.0215	-.2289*	-.0192
8.6	-.767	-.0333	-.4103*	-.0288
8.8	-.733	-.0448	-.6190*	-.0376
9.0	-.702	-.0559	-.8489*	-.0456
9.2	-.675	-.0668	-.0109	-.0531
9.4	-.649	-.0774	-.0135	-.0601
9.6	-.625	-.0877	-.0162	-.0665
9.8	-.604	-.0978	-.0189	-.0726
10.0	-.583	-.1075	-.0217	-.0782
10.2	-.565	-.1169	-.0244	-.0835
10.4	-.548	-.1260	-.0272	-.0884
10.6	-.532	-.1349	-.0299	-.0931
10.8	-.517	-.1436	-.0327	-.0975
11.0	-.503	-.1520	-.0354	-.1016
11.2	-.490	-.1600	-.0380	-.1055
11.4	-.478	-.1679	-.0406	-.1092
11.6	-.467	-.1757	-.0432	-.1128
11.8	-.456	-.1831	-.0457	-.1161
12.0	-.445	-.1904	-.0482	-.1193
12.2	-.436	-.1974	-.0506	-.1223
12.4	-.427	-.2043	-.0530	-.1252
12.6	-.418	-.2109	-.0553	-.1279
12.8	-.410	-.2175	-.0576	-.1306
13.0	-.402	-.2238	-.0598	-.1331
13.2	-.395	-.2299	-.0619	-.1355
13.4	-.388	-.2359	-.0640	-.1378
13.6	-.381	-.2417	-.0661	-.1400
13.8	-.374	-.2473	-.0681	-.1421
14.0	-.368	-.2530	-.0701	-.1442
14.2	-.362	-.2583	-.0720	-.1461
14.4	-.357	-.2632	-.0737	-.1479

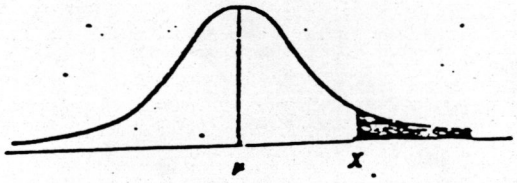
$\alpha_3 = 1.90$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
8.0	-1.023	.0220	.0000*	.0230
8.2	-1.018	.0175	.0000	.0181
8.4	-.968	.6847*	.0150*	.6431*
8.5	-.946	.1239*	.41208	.1215*
8.6	-.917	-.5444*	-.0257*	-.5220*
8.7	-.893	-.0113	-.0657*	-.0106
8.8	-.871	-.0171	-.1167*	-.0158
9.0	-.831	-.0284	-.2475*	-.0254
9.2	-.794	-.0395	-.4100*	-.0343
9.4	-.761	-.0503	-.5975*	-.0424
9.6	-.731	-.0609	-.8046*	-.0500
9.8	-.703	-.0712	-.0103	-.0570
10.0	-.679	-.0811	-.0126	-.0635
10.2	-.656	-.0907	-.0150	-.0695
10.4	-.634	-.1002	-.0175	-.0752
10.6	-.614	-.1093	-.0200	-.0805
10.8	-.595	-.1183	-.0226	-.0855
11.0	-.578	-.1269	-.0251	-.0902
11.2	-.562	-.1355	-.0277	-.0947
11.4	-.547	-.1437	-.0302	-.0989
11.6	-.533	-.1515	-.0327	-.1028
11.8	-.520	-.1594	-.0352	-.1066
12.0	-.508	-.1665	-.0375	-.1100
12.2	-.495	-.1742	-.0401	-.1135
12.4	-.485	-.1811	-.0423	-.1166
12.6	-.474	-.1883	-.0448	-.1198
12.8	-.464	-.1950	-.0471	-.1227
13.0	-.455	-.2015	-.0493	-.1255
13.2	-.446	-.2080	-.0515	-.1282*
13.4	-.437	-.2142	-.0537	-.1307
13.6	-.429	-.2203	-.0558	-.1332
13.8	-.421	-.2262	-.0579	-.1355
14.0	-.414	-.2320	-.0599	-.1378
14.2	-.407	-.2376	-.0619	-.1399
14.4	-.400	-.2431	-.0638	-.1420
14.6	-.394	-.2485	-.0657	-.1440
14.8	-.388	-.2537	-.0676	-.1459
15.0	-.382	-.2589	-.0694	-.1478
15.2	-.376	-.2636	-.0711	-.1495

$\alpha_3 = 2.00$

α_4	LAM 1	LAM 2	LAM 3	LAM 4
8.6	-1.009	.8397*	.0000*	.8581*
8.8	-1.004	.6147*	.0000*	.4182*
8.9	-1.002	.2061*	.00018*	.2070*
9.0	-.993	-.1081*	-.04078	-.1076*
9.1	-.974	-.5675*	-.70758	-.5567*
9.2	-.950	-.0113	-.0272*	-.0109
9.4	-.905	-.0222	-.1012*	-.0207
9.6	-.865	-.0331	-.2125*	-.0298
9.8	-.828	-.0435	-.3537*	-.0381
10.0	-.796	-.0538	-.5187*	-.0458
10.2	-.766	-.0637	-.7027*	-.0529
10.4	-.738	-.0734	-.9216*	-.0595
10.6	-.713	-.0829	-.0111	-.0657
10.8	-.690	-.0920	-.0133	-.0714
11.0	-.670	-.1005	-.0154	-.0766
11.2	-.647	-.1097	-.0179	-.0819
11.4	-.629	-.1181	-.0202	-.0867
11.6	-.611	-.1264	-.0226	-.0912
11.8	-.595	-.1345	-.0249	-.0955
12.0	-.579	-.1423	-.0273	-.0995
12.2	-.565	-.1498	-.0296	-.1033
12.4	-.557	-.1555	-.0312	-.1062
12.6	-.539	-.1648	-.0342	-.1104
12.8	-.527	-.1715	-.0365	-.1137
13.0	-.515	-.1784	-.0388	-.1168
13.2	-.504	-.1851	-.0410	-.1198
13.4	-.495	-.1916	-.0431	-.1226
13.6	-.485	-.1979	-.0453	-.1254
13.8	-.475	-.2041	-.0474	-.1280
14.0	-.466	-.2101	-.0495	-.1305
14.2	-.458	-.2160	-.0515	-.1329
14.4	-.450	-.2216	-.0535	-.1351*
14.6	-.443	-.2271	-.0554	-.1373
14.8	-.436	-.2321	-.0571	-.1393
15.0	-.428	-.2380	-.0592	-.1415
15.2	-.422	-.2432	-.0610	-.1435*
15.4	-.415	-.2481	-.0628	-.1453*
15.6	-.409	-.2532	-.0646	-.1472
15.8	-.403	-.2580	-.0663	-.1489*

ตารางที่ 8 Area Under the Normal Curve



Example

$$z = \frac{X - \mu}{\sigma}$$

$P[z > 1] = .1587$

$P[z > 1.96] = .0250$

Normal Deviate z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
0.0	.5000	.4960	.4920	.4880	.4840	.4801	.4761	.4721	.4681	.4641
0.1	.4602	.4562	.4522	.4483	.4443	.4404	.4364	.4325	.4286	.4247
0.2	.4207	.4168	.4129	.4090	.4052	.4013	.3974	.3936	.3897	.3859
0.3	.3821	.3783	.3745	.3707	.3669	.3632	.3594	.3557	.3520	.3483
0.4	.3446	.3409	.3372	.3336	.3300	.3264	.3228	.3192	.3156	.3121
0.5	.3085	.3050	.3015	.2981	.2946	.2912	.2877	.2843	.2010	.2776
0.6	.2743	.2709	.2676	.2643	.2611	.2578	.2546	.2514	.2483	.2451
0.7	.2420	.2389	.2358	.2327	.2296	.2266	.2236	.2206	.2177	.2148
0.8	.2119	.2090	.2061	.2033	.2005	.1977	.1949	.1922	.1894	.1867
0.9	.1841	.1814	.1788	.1762	.1736	.1711	.1685	.1660	.1635	.1611
1.0	.1587	.1562	.1539	.1515	.1492	.1469	.1446	.1423	.1401	.1379
1.1	.1357	.1335	.1314	.1292	.1271	.1251	.1230	.1210	.1190	.1170
1.2	.1151	.1131	.1112	.1093	.1075	.1056	.1038	.1020	.1003	.0985
1.3	.0968	.0951	.0934	.0918	.0901	.0885	.0869	.0853	.0838	.0823
1.4	.0808	.0793	.0778	.0764	.0749	.0735	.0721	.0708	.0694	.0681
1.5	.0668	.0655	.0643	.0630	.0618	.0606	.0594	.0582	.0571	.0559
1.6	.0548	.0537	.0526	.0516	.0505	.0495	.0485	.0475	.0465	.0455
1.7	.0446	.0436	.0427	.0418	.0409	.0401	.0392	.0384	.0375	.0367
1.8	.0359	.0351	.0344	.0336	.0329	.0322	.0314	.0307	.0301	.0294
1.9	.0287	.0281	.0274	.0268	.0262	.0256	.0250	.0244	.0239	.0233
2.0	.0228	.0222	.0217	.0212	.0207	.0202	.0197	.0192	.0188	.0183
2.1	.0179	.0174	.0170	.0166	.0162	.0158	.0154	.0150	.0146	.0143
2.2	.0139	.0136	.0132	.0129	.0125	.0122	.0119	.0116	.0113	.0110
2.3	.0107	.0104	.0102	.0099	.0096	.0094	.0091	.0089	.0087	.0084
2.4	.0082	.0080	.0078	.0075	.0073	.0071	.0069	.0068	.0066	.0064
2.5	.0062	.0060	.0059	.0057	.0055	.0054	.0052	.0051	.0049	.0048
2.6	.0047	.0045	.0044	.0043	.0041	.0040	.0039	.0038	.0037	.0036
2.7	.0035	.0034	.0033	.0032	.0031	.0030	.0029	.0028	.0027	.0026
2.8	.0026	.0025	.0024	.0023	.0023	.0022	.0021	.0021	.0020	.0019
2.9	.0019	.0018	.0018	.0017	.0016	.0016	.0015	.0015	.0014	.0014
3.0	.0013	.0013	.0013	.0012	.0012	.0011	0011	.0011	.0010	.0010

ภาคผนวก ข

```
C*************************************************************************
C*                          PROGRAM TO COMPUTE                           *
C*          PROBABILITY OF TYPE I ERROR AND POWER OF THE TEST            *
C*************************************************************************
C*                       DESCRIPTION SOME VARIABLE                       *
C*     N     =   NUMBER OF OBSERVE                                        *
C*     SM    =   SUM OF OBSERVE                                           *
C*     XMEAN =   MEAN OF OBSERVE                                          *
C*     VX    =   VARIANCE  OF OBSERVE                                     *
C*************************************************************************
C*                  DESCRIPTION FUNCTION AND SUBROUTINE                  *
C*  FUNCTION NORMAL IS USED FOR GENERATING NORMAL DISTRIBUTION            *
C*  FUNCTION SKEWED IS USED FOR GENERATING SKEWED DISTRIBUTION            *
C*  SUBROUTINE CDFZ IS USED FOR COMPUTE CUMULATIVE NORMAL DISTRIBUTION*
C*  SUBROUTINE RANDUM IS USED FOR GENERATING RANDOM NUMBER                *
C*************************************************************************
C*                           MAIN PROGRAM                                *
C*************************************************************************
      DIMENSION  X(100), Y(100), Z(100), AZ(101), DP(100), DM(100)
     *, SN(100), SP(100), C(102), SUB(100), SK(42), KU(42), RLM1(42)
     *, RLM2(42), RLM(42), RLM(42), G(101), A(50), AAZ(101)
      REAL NORMAL, KU, PW01, PW05, PW10, PWS01, PWS05, PWS10, PV01
     *, PV05, PV10, PU01, PU05, PU10, PA01, PA05, PA10, PD01, PD05
     *, PD10
      DO 700 L=1,42
         READ(5,43) SK(L), KU(L), RLM1(L), RLM2(L), RLM3(L), RLM4(L)
  43     FORMAT(2X,F3.2,1X,F2.1,1X,F6.4,1X,F6.4,1X,F6.4,1X,F6.4)
 700     CONTINUE
C------------------SET COEFFICIENT OF SHAPIRO-WILK-------------------
      A(26)=0.0035
      A(27)=0.0104
      A(28)=0.0174
      A(29)=0.0244
```

```
      A(30)=0.0314
      A(31)=0.0386
      A(32)=0.0459
      A(33)=0.0532
      A(34)=0.0608
      A(35)=0.0685
      A(36)=0.0764
      A(37)=0.0846
      A(38)=0.0932
      A(39)=0.1020
      A(40)=0.1113
      A(41)=0.1212
      A(42)=0.1317
      A(43)=0.1430
      A(44)=0.1554
      A(45)=0.1691
      A(46)=0.1847
      A(47)=0.2032
      A(48)=0.2260
      A(49)=0.2574
      A(50)=0.3751
C-------------------------SET INITIAL VALUE--------------------------
      DATA EX,STD/100.,10./
      N=50
      IX=16807
C=========================================================================
      DO 1010 KN=1,42
C-----------------------SET INITIAL COUNTER--------------------------
      W01=0.
      W05=0.
      W10=0.
      WS01=0.
      WS05=0.
```

```
      WS10=0.
      V01=0.
      V05=0.
      V10=0.
      U01=0.
      U05=0.
      U10=0.
      A01=0.
      A05=0.
      A10=0.
      D01=0.
      D05=0.
      D10=0.
C-----------------------------------------------------------------------
      DO 800 I=1,100
         X(I) = SKEWED(KN,RLM1,RLM2,RLM3,RLM4,EX,STD)
 800     CONTINUE
C***********************************************************************
         DO 1005 KR=1,1000
            DO 900 I=1,N
               X(I) = SKEWED(KN,RLM1,RLM2,RLM3,RLM4,EX,STD)
 900           CONTINUE
C----------------------------SORT X(I)------------------------------
         L = N-1
         DO 10 J=1,L
            M = N-J
            DO 10 K=1,M
               IF (X(K).LE.X(K+1)) GOTO 10
               SAVE = X(K)
               X(K) = X(K+1)
               X(K+1) = SAVE
  10           CONTINUE
```

```
C--------------------COMPUTE MEAN AND SD OF X(I)----------------------
      XN = N
      SM = 0.
      V1 = 0.
      DO 20 I=1,N
 20     SM = SM+X(I)
      XMEAN = SM/XN
      DO 30 I=1,N
        QQ = (X(I)-XMEAN)**2
 30     V1 = V1+QQ
      VX = V1/(XN-1)
      SD = SQRT(VX)
C----------------------------COMPUTE Z(I)-----------------------------
      DO 40 I=1,N
 40     Z(I) = (X(I)-XMEAN)/SD
      CALL CDFZ(Z,N,AZ)
      DO 45 I=1,N
        AAZ(I) = 1.0-AZ(N+1-I)
          IF (AZ(I).LE.0.) GOTO 1005
          IF (AAZ(I).LE.0.) GOTO 1005
 45       CONTINUE
C-----------------------------------------------------------------------
C                  SHAPIRO-WILK STATISTIC (W)
C-----------------------------------------------------------------------
      B = 0.
      KK = N/2
      DO 50 I=1,KK
        NN = N-I+1
 50     B = B+A(NN)*(X(NN)-X(I))
      W = (B**2)/V1
      IF (W.LT.0.930) W01=W01+1.
      IF (W.LT.0.947) W05=W05+1.
      IF (W.LT.0.955) W10=W10+1.
```

```
C-----------------------------------------------------------------------
C                  CRAMER-VON MISES STATISTIC (WSQR)
C-----------------------------------------------------------------------
      SSM = 0.
      DO 60 I=1,N
         TA = FLOAT((2*I-1))/(2.*XN)
         SUM = (AZ(I)-TA)**2
   60    SSM  = SSM+SUM
      TB = 1.0/(12.0*XN)
      WSQR = SSM+TB
      WSQRN = WSQR*(1.0+(0.5/XN))
      IF (WSQRN.GT.0.178) WS01=WS01+1.
      IF (WSQRN.GT.0.126) WS05=WS05+1.
      IF (WSQRN.GT.0.104) WS10=WS10+1.
C-----------------------------------------------------------------------
C                       KUIPER STATISTIC (V)
C-----------------------------------------------------------------------
      DO 70 J=1,N
         DP(J) = (FLOAT(J)/XN)-AZ(J)
   70    DM(J) = AZ(J)-(FLOAT(J-1)/XN)
      DPMAX = DP(1)
      DO 80 J=2,N
         IF (DPMAX-DP(J)) 75,80,80
   75    DPMAX = DP(J)
   80    CONTINUE
      DO 90 J=2,N
         IF (DMMAX-DM(J)) 85,90,90
   85    DMMAX = DM(J)
   90    CONTINUE
      V = DPMAX+DMMAX
      VN = V*(SQRT(XN)+.05+(.82/SQRT(XN)))
```

```
      IF (VN.GT.1.693) V01=V01+1.
      IF (VN.GT.1.489) V05=V05+1.
      IF (VN.GT.1.386) V10=V10+1.
C-----------------------------------------------------------------------
C                      WATSON STATISTIC (USQR)
C-----------------------------------------------------------------------
      SUMM = 0.
      DO 100 I=1,N
100      SUMM = SUMM+AZ(I)
      ZBAR = SUMM/XN
      USQR = WSQR-(XN*((ZBAR-(1.0/2.0))**2))
      USQRN = USQR*(1.+(.5/XN))
      IF (USQRN.GT.0.163) U01=U01+1.
      IF (USQRN.GT.0.116) U05=U05+1.
      IF (USQRN.GT.0.096) U10=U10+1.
C-----------------------------------------------------------------------
C                  ANDERSON-DARLING STATISTIC (ASQR)
C-----------------------------------------------------------------------
      SMM = 0.
      DO 110 J=1,N
         ALN = ALOG(AZ(J))
         BLN = ALOG(1.0-AZ(N+1-J))
         SLN = ALN+BLN
         SP(J) = FLOAT((2*J)_1)*SLN
110      SMM = SMM+SP(J)
      ASQR = ((-1.)*SMM/XN)-XN
      ASQRN = ASQR*(1.+(4./XN)-(25./(XN**2)))
      IF (ASQRN.GT.1.092) A01=A01+1.
      IF (ASQRN.GT.0.787) A05=A05+1.
      IF (ASQRN.GT.0.656) A10=A10+1.
```

```
C-----------------------------------------------------------------------
C                        DURBIN STATISTIC (D)
C-----------------------------------------------------------------------
      TOTAL = 0.
      LL = N+1
      AZ(LL) = 1.0
      DO 120 I=2,LL
120      C(I) = AZ(I)-AZ(I-1)
      C(1) = AZ(1)
      DO 130 J=1,N
         MM=LL-J
         DO 130 K=1,MM
            IF (C(K).LE.C(K+1)) GOTO 130
            TAKE = C(K)
            C(K) = C(K+1)
            C(K+1) = TAKE
130         CONTINUE
      DO 135 I=1,N
         II = I+1
135      G(I) = FLOAT(N+2-I)*(C(II)-C(I))
      DO 150 I=1,N
         DO 140 J=1,I
140         TOTAL = TOTAL+G(J)
         SUB(I) = (FLOAT(I)/XN)-TOTAL
150      TOTAL = 0.
      D = SUB(1)
      DO 160 J=2,N
         IF (D-SUB(J)) 155,160,160
155      D = SUB(J)
160      CONTINUE
      IF (D.GT.0.146) D01=D01+1.
      IF (D.GT.0.125) D05=D05+1.
      IF (D.GT.0.114) D10=D10+1.
```

```
 1005 CONTINUE
C*************************************************************************
C-------------------------------------------------------------------------
C               CALCULATE PROBABILITY OF REJECTION
C-------------------------------------------------------------------------
      PW01=W01/1000.
      PW05=W05/1000.
      PW10=W10/1000.
      PWS01=WS01/1000.
      PWS05=WS05/1000.
      PWS10=WS10/1000.
      PV01=V01/1000.
      PV05=V05/1000.
      PV10=V10/1000.
      PU01=U01/1000.
      PU05=U05/1000.
      PU10=U10/1000.
      PA01=A01/1000.
      PA05=A05/1000.
      PA10=A10/1000.
      PD01=D01/1000.
      PD05=D05/1000.
      PD10=D10/1000.
C--------------------------PRINT OUTPUT-------------------------------
      WRITE(6,48) KN
   48 FORMAT(/,22X,'TABLE ',I2)
      WRITE(6,25)
   25 FORMAT(16X,'SKEWED DISTRIBUTION')
      WRITE(6,46) SK(KN)
   46 FORMAT(19X,'SKEWNESS =',F4.2)
      WRITE(6,47) KU(KN)
   47 FORMAT(19X,'KURTOSIS =',F4.2)
      WRITE(6,27) N
```

```
 27  FORMAT(22X,'N = ',I3)
     WRITE(6,29)
 29  FORMAT(15X,'PROBABILITY OF REJECTION',/)
     WRITE(6,31)
 31  FORMAT(3X,'-----------------------------------')
     WRITE(6,32)
 32  FORMAT(30X,'SIG-LEVEL')
     WRITE(6,33)
 33  FORMAT(22X,'.01',6X,'.05',6X,'.10',/)
     WRITE(6,34) PW01,PW05,PW10
 34  FORMAT(3X,'WILK(W)',10X,F6.3,4X,F6.3,4X,F6.3)
     WRITE(6,36) PWS01,PWS05,PWS10
 36  FORMAT(3X,'CRAMER(WSQR)',5X,F6.3,4X,F6.3,4X,F6.3)
     WRITE(6,37) PV01,PV05,PV10
 37  FORMAT(3X,'KUIPER(V)',8X,F6.3,4X,F6.3,4X,F6.3)
     WRITE(6,38) PU01,PU05,PU10
 38  FORMAT(3X,'WATSON(USQR)',5X,F6.3,4X,F6.3,4X,F6.3)
     WRITE(6,39) PA01,PA05,PA10
 39  FORMAT(3X,'ANDERSON(ASQR)',3X,F6.3,4X,F6.3,4X,F6.3)
     WRITE(6,41) PD01,PD05,PD10
 41  FORMAT(3X,'DURBIN(D)',8X,F6.3,4X,F6.3,4X,F6.3)
     WRITE(6,42
 42  FORMAT(3X,'-----------------------------------------------')
1010 CONTINUE
C=====================================================================
     STOP
     END
```

```
C-----------------------------------------------------------------------
C                      GENERATE RANDOM NUMBER
C-----------------------------------------------------------------------
      SUBROUTINE RANDUM(IX,IY,RN)
      IY = IX*16807
      IF (IY) 3,4,4
    3    IY = IY+2147483647+1
    4    RN = IY
      RN = RN*0.4656613E-9
      IX = IY
      RETURN
      END
C-----------------------------------------------------------------------
C                      GENERATE NORMAL DISTRIBUTION
C-----------------------------------------------------------------------
      FUNCTION NORMAL(EX,STD)
      REAL NORMAL
      DATA K/0/,PI/3.14159/,IX/16807/
      IF (K.EQ.1) GOTO 10
          CALL RANDUM(IX,IY,RN)
              RONE = RN
          CALL RANDUM(IX,IY,RN)
              RTWO = RN
      ZONE = SQRT(-2.*ALOG(RONE))*COS(2.*PI*RTWO)
      ZTWO = SQRT(-2.*ALOG(RONE))*SIN(2.*PI*RTWO)
          NORMAL = ZONE*STD+EX
      K = 1
      RETURN
   10     NORMAL = ZTWO*STD+EX
      K = 0
      RETURN
      END
```

```
C-----------------------------------------------------------------------
C                    CUMULATIVE NORMAL DISTRIBUTION
C-----------------------------------------------------------------------
      SUBROUTINE CDFZ(Z,N,AZ)
      DIMENSION A(6),Z(100),AZ(100),F(100)
        A(1)=0.070523078
        A(2)=0.042282012
        A(3)=0.009270527
        A(4)=0.000152014
        A(5)=0.000276567
        A(6)=0.000043064
      DO 5 K=1,N
         B = 1.0
         DO 3 J=1,6
3           B = B+(A(J)*(ABS(Z(K))/SQRT(2.0))**J)
            F(K) = B**(-16)
                IF (Z(K).GT.0.0) THEN
                   AZ(K) = 1.0-F(K)/2.0
                      ELSE
                         AZ(K) = F(K)/2.0
                      END IF
5     CONTINUE
      RETURN
      END
```

```
C-----------------------------------------------------------------------
C                    GENERATE SKEWED DISTRIBUTION
C-----------------------------------------------------------------------
      FUNCTION SKEWED(KN,RLM1,RLM2,RLM3,RLM4,EX,STD)
      DIMENSION RLM1(42), RLM2(42), RLM3(42), RLM4(42)
      DATA IX/16807/
         CALL RANDUM(IX,IY,RN)
      R1 = RLM3(KN)*ALOG(RN)
      R2 = RLM4(KN)*ALOG(1-RN)
           RX1 = EXP(R1)
           RX2 = EXP(R2)
      X1 = RLM1(KN)+(RX1-RX2)/RLM2(KN)
           SKEWED = EX+STD*X1
      RETURN
      END
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ประวัติผู้เขียน

นางสาวเกตุจันทร์ พัชรินทร์ศักดิ์ เกิดวันที่ 6 ตุลาคม พ.ศ. 2509 จังหวัดนครราชสีมา ได้รับปริญญาวิทยาศาสตร์บัณฑิต (สถิติ) มหาวิทยาลัยเกษตรศาสตร์ ปีการศึกษา 2530 และได้เข้าศึกษาต่อในสาขาวิชาสถิติ ภาควิชาสถิติ บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย เมื่อปีการศึกษา 2531 โดยได้รับทุนอุดหนุนการศึกษาจากโครงการผลิตและพัฒนาอาจารย์ ทบวงมหาวิทยาลัย(U.D.C) ตามความต้องการของภาควิชาสถิติ คณะวิทยาศาสตร์ มหาวิทยาลัยนเรศวร จังหวัดพิษณุโลก