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   Critical Values
- Table F  $\chi^2$  Distribution Critical Values

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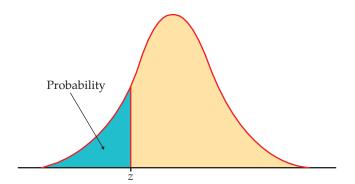


Table entry for z is the area under the standard Normal curve to the left of z.

z         .00         .01         .02         .03         .04         .05         .06         .07         .08         .09           -3.4         .0003         .0004         .0004         .0004         .0004         .0004         .0004         .0004         .0004         .0004         .0004         .0005         .0005         .0005         .0005         .0005         .0005         .0007         .0007         .0007         .0007         .0007         .0007         .0007         .0007         .0007         .0001         .0011         .0011         .0011         .0011         .0011         .0011         .0011         .0011         .0011         .0014         .0041         .0042         .0023         .0022         .0021         .0021         .0021         .0019         .0014         .0014         .0042         .0024	TABLE	A Stand	lard Norma	al probabil	ities						
-3.3         .0005         .0005         .0005         .0004         .0004         .0004         .0004         .0004         .0004         .0004         .0004         .0004         .0004         .0004         .0003         -3.2         .0007         .0007         .0009         .0009         .0009         .0009         .0008         .0008         .0008         .0008         .0008         .0008         .0007         .0007           -3.0         .0013         .0013         .0012         .0011         .0011         .0011         .0011         .0011         .0011         .0011         .0011         .0011         .0011         .0014         .0014         .0014         .0014         .0014         .0014         .0014         .0014         .0014         .0014         .0014         .0014         .0015         .0015         .0012         .0011         .0014         .0014         .0014         .0014         .0014         .0014         .0014         .0014         .0014         .0014         .0014         .0014         .0014         .0014         .0014         .0014         .0031         .0031         .0039         .0038         .0037         .0036         .0028         .0022         .0027         .0026         .0044<	z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
-3.2         .0007         .0006         .0006         .0006         .0006         .0005         .0005         .0005           -3.1         .0010         .0009         .0009         .0008         .0001         .0011         .0011         .0011         .0011         .0011         .0014         .0014         .0014         .0014         .0014         .0016         .0015         .0015         .0014         .0014         .0014         .0016         .0015         .0021         .0021         .0020         .0019           -2.7         .0035         .0034         .0033         .0032         .0031         .0030         .0029         .0028         .0027         .0026           -2.6         .0047         .0045         .0055         .0055         .0054         .0055         .0051         .0068         .0066         .0064	-3.4	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0002
-3.1         .0010         .0009         .0009         .0008         .0008         .0008         .0008         .0007         .0007           -3.0         .0013         .0013         .0013         .0013         .0013         .0016         .0016         .0011         .0011         .0014         .0014           -2.9         .0019         .0018         .0018         .0017         .0016         .0016         .0015         .0014         .0014           -2.8         .0026         .0025         .0024         .0023         .0022         .0021         .0021         .0020         .0019           -2.7         .0035         .0034         .0033         .0032         .0031         .0030         .0029         .0028         .0027         .0026           -2.6         .0047         .0045         .0044         .0043         .0041         .0040         .0039         .0038         .0037         .0036           -2.5         .0062         .0060         .0059         .0057         .0055         .0054         .0052         .0051         .0049         .0049         .0049         .0049         .0049         .0068         .0066         .0064         -2.2         .0139         .0136 <td>-3.3</td> <td>.0005</td> <td>.0005</td> <td>.0005</td> <td>.0004</td> <td>.0004</td> <td>.0004</td> <td>.0004</td> <td>.0004</td> <td>.0004</td> <td>.0003</td>	-3.3	.0005	.0005	.0005	.0004	.0004	.0004	.0004	.0004	.0004	.0003
-3.0         .0013         .0013         .0013         .0012         .0012         .0011         .0011         .0011         .0010         .0010           -2.9         .0019         .0018         .0018         .0017         .0016         .0015         .0015         .0014         .0014           -2.8         .0026         .0025         .0024         .0023         .0023         .0022         .0021         .0020         .0019           -2.7         .0035         .0034         .0033         .0032         .0031         .0030         .0029         .0028         .0027         .0026           -2.6         .0047         .0045         .0044         .0043         .0041         .0040         .0039         .0038         .0037         .0036           -2.5         .0062         .0060         .0059         .0055         .0054         .0052         .0051         .0049         .0049           -2.4         .0082         .0080         .0078         .0075         .0073         .0071         .0069         .0068         .0066         .0064           -2.3         .0139         .0136         .0132         .0129         .0125         .0122         .0119         .0116	-3.2	.0007	.0007	.0006	.0006	.0006	.0006	.0006	.0005	.0005	.0005
-2.9         .0019         .0018         .0018         .0017         .0016         .0016         .0015         .0015         .0014         .0014           -2.8         .0026         .0025         .0024         .0023         .0023         .0021         .0021         .0021         .0020         .0019           -2.7         .0035         .0034         .0033         .0032         .0031         .0030         .0029         .0028         .0027         .0026           -2.6         .0047         .0045         .0044         .0043         .0041         .0040         .0039         .0038         .0037         .0036           -2.5         .0062         .0060         .0059         .0057         .0055         .0054         .0052         .0051         .0049         .0048           -2.4         .0082         .0080         .0078         .0075         .0073         .0071         .0069         .0068         .0066         .0064           -2.3         .0107         .0104         .0102         .0099         .0096         .0094         .0091         .0089         .0087         .0084           -2.2         .0139         .0136         .0132         .0129         .0125	-3.1	.0010	.0009	.0009	.0009	.0008	.0008	.0008	.0008	.0007	.0007
-2.8         .0026         .0025         .0024         .0023         .0023         .0022         .0021         .0021         .0020         .0019           -2.7         .0035         .0034         .0033         .0032         .0031         .0030         .0029         .0028         .0027         .0026           -2.6         .0047         .0045         .0044         .0043         .0041         .0040         .0039         .0038         .0037         .0036           -2.5         .0062         .0060         .0059         .0057         .0055         .0054         .0052         .0051         .0049         .0048           -2.4         .0082         .0080         .0078         .0075         .0073         .0071         .0069         .0068         .0066         .0064           -2.3         .0107         .0104         .0102         .0099         .0096         .0094         .0091         .0089         .0087         .0084           -2.2         .0139         .0136         .0152         .0129         .0115         .0116         .0113         .0110           -2.1         .0179         .0174         .0170         .0166         .0162         .0158         .0154	-3.0	.0013	.0013	.0013	.0012	.0012	.0011	.0011	.0011	.0010	.0010
-2.7         .0035         .0034         .0033         .0032         .0031         .0030         .0029         .0028         .0027         .0026           -2.6         .0047         .0045         .0044         .0043         .0041         .0040         .0039         .0038         .0037         .0036           -2.5         .0062         .0060         .0059         .0057         .0055         .0054         .0052         .0051         .0049         .0048           -2.4         .0082         .0080         .0078         .0075         .0073         .0071         .0069         .0068         .0066         .0064           -2.3         .0107         .0104         .0102         .0099         .0096         .0094         .0091         .0089         .0087         .0084           -2.2         .0139         .0136         .0132         .0129         .0125         .0122         .0119         .0116         .0113         .0110           -2.1         .0179         .0174         .0166         .0162         .0158         .0154         .0150         .0146         .0143           -1.9         .02281         .02274         .0268         .0262         .0256         .0250	-2.9	.0019	.0018	.0018	.0017	.0016	.0016	.0015	.0015	.0014	.0014
-2.6         .0047         .0045         .0044         .0043         .0041         .0040         .0039         .0038         .0037         .0036           -2.5         .0062         .0060         .0059         .0057         .0055         .0054         .0052         .0051         .0049         .0048           -2.4         .0082         .0080         .0078         .0075         .0073         .0071         .0069         .0068         .0066         .0064           -2.3         .0107         .0104         .0102         .0099         .0096         .0094         .0091         .0089         .0087         .0084           -2.2         .0139         .0136         .0132         .0129         .0122         .0119         .0116         .0113         .0110           -2.1         .0179         .0174         .0170         .0166         .0162         .0158         .0154         .0150         .0146         .0143           -2.0         .02228         .0222         .0217         .0212         .0207         .0202         .0197         .0192         .0188         .0183           -1.8         .0359         .0351         .0344         .0336         .0329         .0322	-2.8	.0026	.0025	.0024	.0023	.0023	.0022	.0021	.0021	.0020	.0019
-2.5         .0062         .0060         .0059         .0057         .0055         .0054         .0052         .0051         .0049         .0048           -2.4         .0082         .0080         .0078         .0075         .0073         .0071         .0069         .0068         .0066         .0064           -2.3         .0107         .0104         .0102         .0099         .0096         .0094         .0091         .0089         .0087         .0084           -2.2         .0139         .0136         .0132         .0129         .0125         .0122         .0119         .0116         .0113         .0110           -2.1         .0179         .0174         .0170         .0166         .0162         .0158         .0150         .0146         .0143           -2.0         .0228         .0222         .0217         .0212         .0207         .0202         .0197         .0192         .0188         .0183           -1.9         .0287         .0281         .0274         .0268         .0262         .0256         .0250         .0244         .0239         .0233           -1.7         .0446         .0436         .0427         .0418         .0409         .0401	-2.7	.0035	.0034	.0033	.0032	.0031	.0030	.0029	.0028	.0027	.0026
-2.4         .0082         .0080         .0078         .0075         .0073         .0071         .0069         .0068         .0066         .0064           -2.3         .0107         .0104         .0102         .0099         .0096         .0094         .0091         .0089         .0087         .0084           -2.2         .0139         .0136         .0132         .0129         .0122         .0119         .0116         .0113         .0110           -2.1         .0179         .0174         .0170         .0166         .0162         .0158         .0154         .0150         .0146         .0143           -2.0         .0228         .0222         .0217         .0212         .0207         .0202         .0197         .0192         .0188         .0183           -1.9         .0287         .0281         .0274         .0268         .0262         .0256         .0250         .0244         .0239         .0233           -1.8         .0359         .0351         .0344         .0336         .0329         .0322         .0314         .0307         .0301         .0294           -1.7         .0446         .0436         .0427         .0418         .0409         .0401	-2.6	.0047	.0045	.0044	.0043	.0041	.0040	.0039	.0038	.0037	.0036
-2.3         .0107         .0104         .0102         .0099         .0096         .0094         .0091         .0089         .0087         .0084           -2.2         .0139         .0136         .0132         .0129         .0125         .0122         .0119         .0116         .0113         .0110           -2.1         .0179         .0174         .0170         .0166         .0162         .0158         .0154         .0150         .0146         .0143           -2.0         .0228         .0222         .0217         .0212         .0207         .0202         .0197         .0188         .0183           -1.9         .0287         .0281         .0274         .0268         .0262         .0256         .0250         .0244         .0239         .0233           -1.8         .0359         .0351         .0344         .0336         .0329         .0322         .0314         .0307         .0301         .0294           -1.7         .0446         .0436         .0427         .0418         .0409         .0401         .0392         .0384         .0375         .0367           -1.6         .0548         .0537         .0526         .0516         .0505         .0495	-2.5	.0062	.0060	.0059	.0057	.0055	.0054	.0052	.0051	.0049	.0048
-2.2         .0139         .0136         .0132         .0129         .0125         .0122         .0119         .0116         .0113         .0110           -2.1         .0179         .0174         .0170         .0166         .0162         .0158         .0154         .0150         .0146         .0143           -2.0         .0228         .0222         .0217         .0212         .0207         .0202         .0197         .0192         .0188         .0183           -1.9         .0287         .0281         .0274         .0268         .0262         .0256         .0250         .0244         .0239         .0233           -1.8         .03359         .0351         .0344         .0336         .0329         .0322         .0314         .0307         .0301         .0294           -1.7         .0446         .0436         .0427         .0418         .0409         .0401         .0392         .0384         .0375         .0367           -1.6         .05548         .0537         .0526         .0516         .0505         .0495         .0485         .0475         .0465           -1.5         .0668         .0655         .0643         .0630         .0618         .0606	-2.4	.0082	.0080	.0078	.0075	.0073	.0071	.0069	.0068	.0066	.0064
-2.1         .0179         .0174         .0170         .0166         .0162         .0158         .0154         .0150         .0146         .0143           -2.0         .0228         .0222         .0217         .0212         .0207         .0202         .0197         .0192         .0188         .0183           -1.9         .0287         .0281         .0274         .0268         .0262         .0256         .0250         .0244         .0239         .0233           -1.8         .0359         .0351         .0344         .0336         .0329         .0322         .0314         .0307         .0301         .0294           -1.7         .0446         .0436         .0427         .0418         .0409         .0401         .0392         .0384         .0375         .0367           -1.6         .0548         .0537         .0526         .0516         .0505         .0495         .0485         .0475         .0465         .0455           -1.5         .0668         .0655         .0643         .0630         .0618         .0606         .0594         .0582         .0571         .0559           -1.4         .0808         .0793         .0778         .0764         .0749	-2.3	.0107	.0104	.0102	.0099	.0096	.0094	.0091	.0089	.0087	.0084
-2.0         .0228         .0222         .0217         .0212         .0207         .0202         .0197         .0192         .0188         .0183           -1.9         .0287         .0281         .0274         .0268         .0262         .0256         .0250         .0244         .0239         .0233           -1.8         .0359         .0351         .0344         .0336         .0329         .0322         .0314         .0307         .0301         .0294           -1.7         .0446         .0436         .0427         .0418         .0409         .0401         .0392         .0384         .0375         .0367           -1.6         .0548         .0537         .0526         .0516         .0505         .0495         .0485         .0475         .0465         .0455           -1.5         .0668         .0655         .0643         .0630         .0618         .0606         .0594         .0582         .0571         .0559           -1.4         .0808         .0793         .0778         .0764         .0749         .0735         .0721         .0708         .0694         .0681           -1.3         .0968         .0951         .0934         .0918         .0901	-2.2	.0139	.0136	.0132	.0129	.0125	.0122	.0119	.0116	.0113	.0110
-1.9         .0287         .0281         .0274         .0268         .0262         .0256         .0250         .0244         .0239         .0233           -1.8         .0359         .0351         .0344         .0336         .0329         .0322         .0314         .0307         .0301         .0294           -1.7         .0446         .0436         .0427         .0418         .0409         .0401         .0392         .0384         .0375         .0367           -1.6         .0548         .0537         .0526         .0516         .0505         .0495         .0485         .0475         .0465         .0455           -1.5         .0668         .0655         .0643         .0630         .0618         .0606         .0594         .0582         .0571         .0559           -1.4         .0808         .0793         .0778         .0764         .0749         .0735         .0721         .0708         .0694         .0681           -1.3         .0968         .0951         .0934         .0918         .0901         .0885         .0869         .0853         .0838         .0823           -1.2         .1151         .1131         .1112         .1093         .1075	-2.1	.0179	.0174	.0170	.0166	.0162	.0158	.0154	.0150	.0146	.0143
-1.8         .0359         .0351         .0344         .0336         .0329         .0322         .0314         .0307         .0301         .0294           -1.7         .0446         .0436         .0427         .0418         .0409         .0401         .0392         .0384         .0375         .0367           -1.6         .0548         .0537         .0526         .0516         .0505         .0495         .0485         .0475         .0465         .0455           -1.5         .0668         .0655         .0643         .0630         .0618         .0606         .0594         .0582         .0571         .0559           -1.4         .0808         .0793         .0778         .0764         .0749         .0735         .0721         .0708         .0694         .0681           -1.3         .0968         .0951         .0934         .0918         .0901         .0885         .0869         .0853         .0838         .0823           -1.2         .1151         .1131         .1112         .1093         .1075         .1056         .1038         .1020         .1003         .0985           -1.1         .1357         .1335         .1314         .1292         .1271	-2.0	.0228	.0222	.0217	.0212	.0207	.0202	.0197	.0192	.0188	.0183
-1.7         .0446         .0436         .0427         .0418         .0409         .0401         .0392         .0384         .0375         .0367           -1.6         .0548         .0537         .0526         .0516         .0505         .0495         .0485         .0475         .0465         .0455           -1.5         .0668         .0655         .0643         .0630         .0618         .0606         .0594         .0582         .0571         .0559           -1.4         .0808         .0793         .0778         .0764         .0749         .0735         .0721         .0708         .0694         .0681           -1.3         .0968         .0951         .0934         .0918         .0901         .0885         .0869         .0853         .0838         .0823           -1.2         .1151         .1131         .1112         .1093         .1075         .1056         .1038         .1020         .1003         .0985           -1.1         .1357         .1335         .1314         .1292         .1271         .1251         .1230         .1210         .1190         .1170           -1.0         .1587         .1562         .1539         .1515         .1492	-1.9	.0287	.0281	.0274	.0268	.0262	.0256	.0250	.0244	.0239	.0233
-1.6         .0548         .0537         .0526         .0516         .0505         .0495         .0485         .0475         .0465         .0455           -1.5         .0668         .0655         .0643         .0630         .0618         .0606         .0594         .0582         .0571         .0559           -1.4         .0808         .0793         .0778         .0764         .0749         .0735         .0721         .0708         .0694         .0681           -1.3         .0968         .0951         .0934         .0918         .0901         .0885         .0869         .0853         .0838         .0823           -1.2         .1151         .1131         .1112         .1093         .1075         .1056         .1038         .1020         .1003         .0985           -1.1         .1357         .1335         .1314         .1292         .1271         .1251         .1230         .1210         .1190         .1170           -1.0         .1587         .1562         .1539         .1515         .1492         .1469         .1446         .1423         .1401         .1379           -0.9         .1841         .1814         .1788         .1762         .1736	-1.8	.0359	.0351	.0344	.0336	.0329	.0322	.0314	.0307	.0301	.0294
-1.5         .0668         .0655         .0643         .0630         .0618         .0606         .0594         .0582         .0571         .0559           -1.4         .0808         .0793         .0778         .0764         .0749         .0735         .0721         .0708         .0694         .0681           -1.3         .0968         .0951         .0934         .0918         .0901         .0885         .0869         .0853         .0838         .0823           -1.2         .1151         .1131         .1112         .1093         .1075         .1056         .1038         .1020         .1003         .0985           -1.1         .1357         .1335         .1314         .1292         .1271         .1251         .1230         .1210         .1190         .1170           -1.0         .1587         .1562         .1539         .1515         .1492         .1469         .1446         .1423         .1401         .1379           -0.9         .1841         .1814         .1788         .1762         .1736         .1711         .1685         .1660         .1635         .1611           -0.8         .2119         .2090         .2061         .2033         .2005	-1.7	.0446	.0436	.0427	.0418	.0409	.0401	.0392	.0384	.0375	.0367
-1.4         .0808         .0793         .0778         .0764         .0749         .0735         .0721         .0708         .0694         .0681           -1.3         .0968         .0951         .0934         .0918         .0901         .0885         .0869         .0853         .0838         .0823           -1.2         .1151         .1131         .1112         .1093         .1075         .1056         .1038         .1020         .1003         .0985           -1.1         .1357         .1335         .1314         .1292         .1271         .1251         .1230         .1210         .1190         .1170           -1.0         .1587         .1562         .1539         .1515         .1492         .1469         .1446         .1423         .1401         .1379           -0.9         .1841         .1814         .1788         .1762         .1736         .1711         .1685         .1660         .1635         .1611           -0.8         .2119         .2090         .2061         .2033         .2005         .1977         .1949         .1922         .1894         .1867           -0.7         .2420         .2389         .2358         .2327         .2296	-1.6	.0548	.0537	.0526	.0516	.0505	.0495	.0485	.0475	.0465	.0455
-1.3         .0968         .0951         .0934         .0918         .0901         .0885         .0869         .0853         .0838         .0823           -1.2         .1151         .1131         .1112         .1093         .1075         .1056         .1038         .1020         .1003         .0985           -1.1         .1357         .1335         .1314         .1292         .1271         .1251         .1230         .1210         .1190         .1170           -1.0         .1587         .1562         .1539         .1515         .1492         .1469         .1446         .1423         .1401         .1379           -0.9         .1841         .1814         .1788         .1762         .1736         .1711         .1685         .1660         .1635         .1611           -0.8         .2119         .2090         .2061         .2033         .2005         .1977         .1949         .1922         .1894         .1867           -0.7         .2420         .2389         .2358         .2327         .2296         .2266         .2236         .2206         .2177         .2148           -0.6         .2743         .2709         .2676         .2643         .2611	-1.5	.0668	.0655	.0643	.0630	.0618	.0606	.0594	.0582	.0571	.0559
-1.2       .1151       .1131       .1112       .1093       .1075       .1056       .1038       .1020       .1003       .0985         -1.1       .1357       .1335       .1314       .1292       .1271       .1251       .1230       .1210       .1190       .1170         -1.0       .1587       .1562       .1539       .1515       .1492       .1469       .1446       .1423       .1401       .1379         -0.9       .1841       .1814       .1788       .1762       .1736       .1711       .1685       .1660       .1635       .1611         -0.8       .2119       .2090       .2061       .2033       .2005       .1977       .1949       .1922       .1894       .1867         -0.7       .2420       .2389       .2358       .2327       .2296       .2266       .2236       .2206       .2177       .2148         -0.6       .2743       .2709       .2676       .2643       .2611       .2578       .2546       .2514       .2483       .2451         -0.5       .3085       .3050       .3015       .2981       .2946       .2912       .2877       .2843       .2810       .2776         -0.4       .34	-1.4	.0808	.0793	.0778	.0764	.0749	.0735	.0721	.0708	.0694	.0681
-1.1       .1357       .1335       .1314       .1292       .1271       .1251       .1230       .1210       .1190       .1170         -1.0       .1587       .1562       .1539       .1515       .1492       .1469       .1446       .1423       .1401       .1379         -0.9       .1841       .1814       .1788       .1762       .1736       .1711       .1685       .1660       .1635       .1611         -0.8       .2119       .2090       .2061       .2033       .2005       .1977       .1949       .1922       .1894       .1867         -0.7       .2420       .2389       .2358       .2327       .2296       .2266       .2236       .2206       .2177       .2148         -0.6       .2743       .2709       .2676       .2643       .2611       .2578       .2546       .2514       .2483       .2451         -0.5       .3085       .3050       .3015       .2981       .2946       .2912       .2877       .2843       .2810       .2776         -0.4       .3446       .3409       .3372       .3336       .3300       .3264       .3228       .3192       .3156       .3121         -0.3       .38	-1.3	.0968	.0951	.0934	.0918	.0901	.0885	.0869	.0853	.0838	.0823
-1.0       .1587       .1562       .1539       .1515       .1492       .1469       .1446       .1423       .1401       .1379         -0.9       .1841       .1814       .1788       .1762       .1736       .1711       .1685       .1660       .1635       .1611         -0.8       .2119       .2090       .2061       .2033       .2005       .1977       .1949       .1922       .1894       .1867         -0.7       .2420       .2389       .2358       .2327       .2296       .2266       .2236       .2206       .2177       .2148         -0.6       .2743       .2709       .2676       .2643       .2611       .2578       .2546       .2514       .2483       .2451         -0.5       .3085       .3050       .3015       .2981       .2946       .2912       .2877       .2843       .2810       .2776         -0.4       .3446       .3409       .3372       .3336       .3300       .3264       .3228       .3192       .3156       .3121         -0.3       .3821       .3783       .3745       .3707       .3669       .3632       .3594       .3557       .3520       .3483         -0.2       .42	-1.2	.1151	.1131	.1112	.1093	.1075	.1056	.1038	.1020	.1003	.0985
-0.9       .1841       .1814       .1788       .1762       .1736       .1711       .1685       .1660       .1635       .1611         -0.8       .2119       .2090       .2061       .2033       .2005       .1977       .1949       .1922       .1894       .1867         -0.7       .2420       .2389       .2358       .2327       .2296       .2266       .2236       .2206       .2177       .2148         -0.6       .2743       .2709       .2676       .2643       .2611       .2578       .2546       .2514       .2483       .2451         -0.5       .3085       .3050       .3015       .2981       .2946       .2912       .2877       .2843       .2810       .2776         -0.4       .3446       .3409       .3372       .3336       .3300       .3264       .3228       .3192       .3156       .3121         -0.3       .3821       .3783       .3745       .3707       .3669       .3632       .3594       .3557       .3520       .3483         -0.2       .4207       .4168       .4129       .4090       .4052       .4013       .3974       .3936       .3897       .3859         -0.1       .46	-1.1	.1357	.1335	.1314	.1292	.1271	.1251	.1230	.1210	.1190	.1170
-0.8       .2119       .2090       .2061       .2033       .2005       .1977       .1949       .1922       .1894       .1867         -0.7       .2420       .2389       .2358       .2327       .2296       .2266       .2236       .2206       .2177       .2148         -0.6       .2743       .2709       .2676       .2643       .2611       .2578       .2546       .2514       .2483       .2451         -0.5       .3085       .3050       .3015       .2981       .2946       .2912       .2877       .2843       .2810       .2776         -0.4       .3446       .3409       .3372       .3336       .3300       .3264       .3228       .3192       .3156       .3121         -0.3       .3821       .3783       .3745       .3707       .3669       .3632       .3594       .3557       .3520       .3483         -0.2       .4207       .4168       .4129       .4090       .4052       .4013       .3974       .3936       .3897       .3859         -0.1       .4602       .4562       .4522       .4483       .4443       .4404       .4364       .4325       .4286       .4247	-1.0	.1587	.1562	.1539	.1515	.1492	.1469	.1446	.1423	.1401	.1379
-0.7       .2420       .2389       .2358       .2327       .2296       .2266       .2236       .2206       .2177       .2148         -0.6       .2743       .2709       .2676       .2643       .2611       .2578       .2546       .2514       .2483       .2451         -0.5       .3085       .3050       .3015       .2981       .2946       .2912       .2877       .2843       .2810       .2776         -0.4       .3446       .3409       .3372       .3336       .3300       .3264       .3228       .3192       .3156       .3121         -0.3       .3821       .3783       .3745       .3707       .3669       .3632       .3594       .3557       .3520       .3483         -0.2       .4207       .4168       .4129       .4090       .4052       .4013       .3974       .3936       .3897       .3859         -0.1       .4602       .4562       .4522       .4483       .4443       .4404       .4364       .4325       .4286       .4247	-0.9	.1841	.1814	.1788	.1762	.1736	.1711	.1685	.1660	.1635	.1611
-0.6       .2743       .2709       .2676       .2643       .2611       .2578       .2546       .2514       .2483       .2451         -0.5       .3085       .3050       .3015       .2981       .2946       .2912       .2877       .2843       .2810       .2776         -0.4       .3446       .3409       .3372       .3336       .3300       .3264       .3228       .3192       .3156       .3121         -0.3       .3821       .3783       .3745       .3707       .3669       .3632       .3594       .3557       .3520       .3483         -0.2       .4207       .4168       .4129       .4090       .4052       .4013       .3974       .3936       .3897       .3859         -0.1       .4602       .4562       .4522       .4483       .4443       .4404       .4364       .4325       .4286       .4247	-0.8	.2119	.2090	.2061	.2033	.2005	.1977	.1949	.1922	.1894	.1867
-0.5       .3085       .3050       .3015       .2981       .2946       .2912       .2877       .2843       .2810       .2776         -0.4       .3446       .3409       .3372       .3336       .3300       .3264       .3228       .3192       .3156       .3121         -0.3       .3821       .3783       .3745       .3707       .3669       .3632       .3594       .3557       .3520       .3483         -0.2       .4207       .4168       .4129       .4090       .4052       .4013       .3974       .3936       .3897       .3859         -0.1       .4602       .4562       .4522       .4483       .4443       .4404       .4364       .4325       .4286       .4247	-0.7	.2420	.2389	.2358	.2327	.2296	.2266	.2236	.2206	.2177	.2148
-0.4       .3446       .3409       .3372       .3336       .3300       .3264       .3228       .3192       .3156       .3121         -0.3       .3821       .3783       .3745       .3707       .3669       .3632       .3594       .3557       .3520       .3483         -0.2       .4207       .4168       .4129       .4090       .4052       .4013       .3974       .3936       .3897       .3859         -0.1       .4602       .4562       .4522       .4483       .4443       .4404       .4364       .4325       .4286       .4247	-0.6	.2743	.2709	.2676	.2643	.2611	.2578	.2546	.2514	.2483	.2451
-0.3       .3821       .3783       .3745       .3707       .3669       .3632       .3594       .3557       .3520       .3483         -0.2       .4207       .4168       .4129       .4090       .4052       .4013       .3974       .3936       .3897       .3859         -0.1       .4602       .4562       .4522       .4483       .4443       .4404       .4364       .4325       .4286       .4247	-0.5	.3085	.3050	.3015	.2981	.2946	.2912	.2877	.2843	.2810	.2776
-0.2       .4207       .4168       .4129       .4090       .4052       .4013       .3974       .3936       .3897       .3859         -0.1       .4602       .4562       .4522       .4483       .4443       .4404       .4364       .4325       .4286       .4247	-0.4	.3446	.3409	.3372	.3336	.3300	.3264	.3228	.3192	.3156	.3121
-0.1     .4602     .4562     .4522     .4483     .4443     .4404     .4364     .4325     .4286     .4247	-0.3	.3821	.3783	.3745	.3707	.3669	.3632	.3594	.3557	.3520	.3483
	-0.2	.4207	.4168	.4129	.4090	.4052	.4013	.3974	.3936	.3897	.3859
-0.0   .5000   .4960   .4920   .4880   .4840   .4801   .4761   .4721   .4681   .4641	-0.1	.4602	.4562	.4522	.4483	.4443	.4404	.4364	.4325	.4286	.4247
	-0.0	.5000	.4960	.4920	.4880	.4840	.4801	.4761	.4721	.4681	.4641

Tables T-3

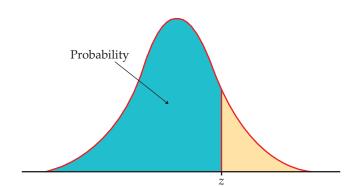


Table entry for z is the area under the standard Normal curve to the left of z.

TABLE	A Stand	ard Norma	al probabil	ities (cont	inued)					
z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
0.0	.5000	.5040	.5080	.5120	.5160	.5199	.5239	.5279	.5319	.5359
0.1	.5398	.5438	.5478	.5517	.5557	.5596	.5636	.5675	.5714	.5753
0.2	.5793	.5832	.5871	.5910	.5948	.5987	.6026	.6064	.6103	.6141
0.3	.6179	.6217	.6255	.6293	.6331	.6368	.6406	.6443	.6480	.6517
0.4	.6554	.6591	.6628	.6664	.6700	.6736	.6772	.6808	.6844	.6879
0.5	.6915	.6950	.6985	.7019	.7054	.7088	.7123	.7157	.7190	.7224
0.6	.7257	.7291	.7324	.7357	.7389	.7422	.7454	.7486	.7517	.7549
0.7	.7580	.7611	.7642	.7673	.7704	.7734	.7764	.7794	.7823	.7852
0.8	.7881	.7910	.7939	.7967	.7995	.8023	.8051	.8078	.8106	.8133
0.9	.8159	.8186	.8212	.8238	.8264	.8289	.8315	.8340	.8365	.8389
1.0	.8413	.8438	.8461	.8485	.8508	.8531	.8554	.8577	.8599	.8621
1.1	.8643	.8665	.8686	.8708	.8729	.8749	.8770	.8790	.8810	.8830
1.2	.8849	.8869	.8888	.8907	.8925	.8944	.8962	.8980	.8997	.9015
1.3	.9032	.9049	.9066	.9082	.9099	.9115	.9131	.9147	.9162	.9177
1.4	.9192	.9207	.9222	.9236	.9251	.9265	.9279	.9292	.9306	.9319
1.5	.9332	.9345	.9357	.9370	.9382	.9394	.9406	.9418	.9429	.9441
1.6	.9452	.9463	.9474	.9484	.9495	.9505	.9515	.9525	.9535	.9545
1.7	.9554	.9564	.9573	.9582	.9591	.9599	.9608	.9616	.9625	.9633
1.8	.9641	.9649	.9656	.9664	.9671	.9678	.9686	.9693	.9699	.9706
1.9	.9713	.9719	.9726	.9732	.9738	.9744	.9750	.9756	.9761	.9767
2.0	.9772	.9778	.9783	.9788	.9793	.9798	.9803	.9808	.9812	.9817
2.1	.9821	.9826	.9830	.9834	.9838	.9842	.9846	.9850	.9854	.9857
2.2	.9861	.9864	.9868	.9871	.9875	.9878	.9881	.9884	.9887	.9890
2.3	.9893	.9896	.9898	.9901	.9904	.9906	.9909	.9911	.9913	.9916
2.4	.9918	.9920	.9922	.9925	.9927	.9929	.9931	.9932	.9934	.9936
2.5	.9938	.9940	.9941	.9943	.9945	.9946	.9948	.9949	.9951	.9952
2.6	.9953	.9955	.9956	.9957	.9959	.9960	.9961	.9962	.9963	.9964
2.7	.9965	.9966	.9967	.9968	.9969	.9970	.9971	.9972	.9973	.9974
2.8	.9974	.9975	.9976	.9977	.9977	.9978	.9979	.9979	.9980	.9981
2.9	.9981	.9982	.9982	.9983	.9984	.9984	.9985	.9985	.9986	.9986
3.0	.9987	.9987	.9987	.9988	.9988	.9989	.9989	.9989	.9990	.9990
3.1	.9990	.9991	.9991	.9991	.9992	.9992	.9992	.9992	.9993	.9993
3.2	.9993	.9993	.9994	.9994	.9994	.9994	.9994	.9995	.9995	.9995
3.3	.9995	.9995	.9995	.9996	.9996	.9996	.9996	.9996	.9996	.9997
3.4	.9997	.9997	.9997	.9997	.9997	.9997	.9997	.9997	.9997	.9998

T-4 Tables

TABLE	B Random	digits						
Line								
101	19223	95034	05756	28713	96409	12531	42544	82853
102	73676	47150	99400	01927	27754	42648	82425	36290
103	45467	71709	77558	00095	32863	29485	82226	90056
104	52711	38889	93074	60227	40011	85848	48767	52573
105	95592	94007	69971	91481	60779	53791	17297	59335
106	68417	35013	15529	72765	85089	57067	50211	47487
107	82739	57890	20807	47511	81676	55300	94383	14893
108	60940	72024	17868	24943	61790	90656	87964	18883
109	36009	19365	15412	39638	85453	46816	83485	41979
110	38448	48789	18338	24697	39364	42006	76688	08708
111	81486	69487	60513	09297	00412	71238	27649	39950
112	59636	88804	04634	71197	19352	73089	84898	45785
113	62568	70206	40325	03699	71080	22553	11486	11776
114	45149	32992	75730	66280	03819	56202	02938	70915
115	61041	77684	94322	24709	73698	14526	31893	32592
116	14459	26056	31424	80371	65103	62253	50490	61181
117	38167	98532	62183	70632	23417	26185	41448	75532
118	73190	32533	04470	29669	84407	90785	65956	86382
119	95857	07118	87664	92099	58806	66979	98624	84826
120	35476	55972	39421	65850	04266	35435	43742	11937
121	71487	09984	29077	14863	61683	47052	62224	51025
121	13873	81598	95052	90908	73592	75186	87136	95761
123	54580	81507	27102	56027	55892	33063	41842	81868
123	71035	09001	43367	49497	72719	96758	27611	91596
124								
125	96746 96927	12149 19931	37823 36089	71868 74192	18442 77567	35119 88741	62103 48409	39244 41903
127	43909	99477	25330	64359	40085	16925	85117	36071
128	15689	14227	06565	14374	13352	49367	81982	87209
129	36759	58984	68288	22913	18638	54303	00795	08727
130	69051	64817	87174	09517	84534	06489	87201	97245
131	05007	16632	81194	14873	04197	85576	45195	96565
132	68732	55259	84292	08796	43165	93739	31685	97150
133	45740	41807	65561	33302	07051	93623	18132	09547
134	27816	78416	18329	21337	35213	37741	04312	68508
135	66925	55658	39100	78458	11206	19876	87151	31260
136	08421	44753	77377	28744	75592	08563	79140	92454
137	53645	66812	61421	47836	12609	15373	98481	14592
138	66831	68908	40772	21558	47781	33586	79177	06928
139	55588	99404	70708	41098	43563	56934	48394	51719
140	12975	13258	13048	45144	72321	81940	00360	02428
141	96767	35964	23822	96012	94591	65194	50842	53372
142	72829	50232	97892	63408	77919	44575	24870	04178
143	88565	42628	17797	49376	61762	16953	88604	12724
144	62964	88145	83083	69453	46109	59505	69680	00900
145	19687	12633	57857	95806	09931	02150	43163	58636
146	37609	59057	66967	83401	60705	02384	90597	93600
147	54973	86278	88737	74351	47500	84552	19909	67181
148	00694	05977	19664	65441	20903	62371	22725	53340
149	71546	05233	53946	68743	72460	27601	45403	88692
150	07511	88915	41267	16853	84569	79367	32337	03316

Tables T-5

TABLE	Random	digits (contin	ued)					
Line		<del>\</del>	/					
151	03802	29341	29264	80198	12371	13121	54969	43912
152	77320	35030	77519	41109	98296	18984	60869	12349
153	07886	56866	39648	69290	03600	05376	58958	22720
154	87065	74133	21117	70595	22791	67306	28420	52067
155	42090	09628	54035	93879	98441	04606	27381	82637
156	55494	67690	88131	81800	11188	28552	25752	21953
157	16698	30406	96587	65985	07165	50148	16201	86792
157	16297	07626	68683	45335	34377	72941	41764	77038
159	22897	17467	17638	70043	36243	13008	83993	22869
160	98163	45944	34210	64158	76971	27689	82926	75957
161	43400	25831	06283	22138	16043	15706	73345	26238
162	97341	46254	88153	62336	21112	35574	99271	45297
163	64578	67197	28310	90341	37531	63890	52630	76315
164	11022	79124	49525	63078	17229	32165	01343	21394
165	81232	43939	23840	05995	84589	06788	76358	26622
166	36843	84798	51167	44728	20554	55538	27647	32708
167	84329	80081	69516	78934	14293	92478	16479	26974
168	27788	85789	41592	74472	96773	27090	24954	41474
169	99224	00850	43737	75202	44753	63236	14260	73686
170	38075	73239	52555	46342	13365	02182	30443	53229
171	87368	49451	55771	48343	51236	18522	73670	23212
172	40512	00681	44282	47178	08139	78693	34715	75606
173	81636	57578	54286	27216	58758	80358	84115	84568
174	26411	94292	06340	97762	37033	85968	94165	46514
175	80011	09937	57195	33906	94831	10056	42211	65491
176	92813	87503	63494	71379	76550	45984	05481	50830
177	70348	72871	63419	57363	29685	43090	18763	31714
178	24005	52114	26224	39078	80798	15220	43186	00976
179	85063	55810	10470	08029	30025	29734	61181	72090
180	11532	73186	92541	06915	72954	10167	12142	26492
181	59618	03914	05208	84088	20426	39004	84582	87317
182	92965	50837	39921	84661	82514	81899	24565	60874
183	85116	27684	14597	85747	01596	25889	41998	15635
184	15106	10411	90221	49377	44369	28185	80959	76355
185	03638	31589	07871	25792	85823	55400	56026	12193
186	97971	48932	45792	63993	95635	28753	46069	84635
187	49345	18305	76213	82390	77412	97401	50650	71755
188	87370	88099	89695	87633	76987	85503	26257	51736
189	88296	95670	74932	65317	93848	43988	47597	83044
190	79485	92200	99401	54473	34336	82786	05457	60343
191	40830	24979	23333	37619	56227	95941	59494	86539
192	32006	76302	81221	00693	95197	75044	46596	11628
193	37569	85187	44692	50706	53161	69027	88389	60313
194	56680	79003	23361	67094	15019	63261	24543	52884
195	05172	08100	22316	54495	60005	29532	18433	18057
196	74782	27005	03894	98038	20627	40307	47317	92759
197	85288	93264	61409	03404	09649	55937	60843	66167
198	68309	12060	14762	58002	03716	81968	57934	32624
199	26461	88346	52430	60906	74216	96263	69296	90107
200	42672	67680	42376	95023	82744	03971	96560	55148
200	12012	01000	12310	75025	02144	03711	70300	33140

T-6 Tables

k 0 1 2 0 1 2 3 0 1 2 3 4	.01 .9801 .0198 .0001 .9703 .0294 .0003	.02 .9604 .0392 .0004 .9412 .0576 .0012	.03 .9409 .0582 .0009 .9127 .0847 .0026	.04 .9216 .0768 .0016 .8847 .1106 .0046	<i>p</i> .05 .9025 .0950 .0025 .8574 .1354 .0071 .0001	.06 .8836 .1128 .0036 .8306 .1590 .0102	.07 .8649 .1302 .0049 .8044 .1816	.08 .8464 .1472 .0064 .7787 .2031	.09 .8281 .1638 .0081 .7536 .2236
0 1 2 0 1 2 3 0 1 2 3	.9801 .0198 .0001 .9703 .0294 .0003	.9604 .0392 .0004 .9412 .0576 .0012	.9409 .0582 .0009 .9127 .0847 .0026	.9216 .0768 .0016 .8847 .1106 .0046	.9025 .0950 .0025 .8574 .1354 .0071	.8836 .1128 .0036 .8306 .1590	.8649 .1302 .0049 .8044 .1816	.8464 .1472 .0064 .7787 .2031	.8281 .1638 .0081 .7536
1 2 0 1 2 3 0 1 2 3	.0198 .0001 .9703 .0294 .0003	.0392 .0004 .9412 .0576 .0012	.0582 .0009 .9127 .0847 .0026	.0768 .0016 .8847 .1106 .0046	.0950 .0025 .8574 .1354 .0071	.1128 .0036 .8306 .1590	.1302 .0049 .8044 .1816	.1472 .0064 .7787 .2031	.1638 .0081 .7536 .2236
2 0 1 2 3 0 1 2 3	.0001 .9703 .0294 .0003 .9606 .0388	.0004 .9412 .0576 .0012	.0009 .9127 .0847 .0026	.0016 .8847 .1106 .0046	.0025 .8574 .1354 .0071	.0036 .8306 .1590	.8044 .1816	.0064 .7787 .2031	.7536 .2236
0 1 2 3 0 1 2 3	.9703 .0294 .0003	.9412 .0576 .0012	.9127 .0847 .0026	.8847 .1106 .0046	.8574 .1354 .0071	.8306 .1590	.8044 .1816	.7787 .2031	.7536 .2236
1 2 3 0 1 2 3	.0294 .0003 .9606 .0388	.0576 .0012	.0847 .0026	.1106 .0046	.1354 .0071	.1590	.1816	.2031	.2236
2 3 0 1 2 3	.9606 .0388	.9224	.0026	.0046	.0071				
3 0 1 2 3	.9606 .0388	.9224				.0102	0127		
3 0 1 2 3	.0388		9952	.0001	0001		.0137	.0177	.022
1 2 3	.0388		2052		.0001	.0002	.0003	.0005	.000
2 3		0753	.0033	.8493	.8145	.7807	.7481	.7164	.685
3	.0006	.0133	.1095	.1416	.1715	.1993	.2252	.2492	.271
		.0023	.0051	.0088	.0135	.0191	.0254	.0325	.040
4			.0001	.0002	.0005	.0008	.0013	.0019	.002
									.000
0	.9510	.9039	.8587	.8154	.7738	.7339	.6957	.6591	.624
1	.0480	.0922	.1328	.1699	.2036	.2342	.2618	.2866	.308
2	.0010	.0038	.0082	.0142	.0214	.0299	.0394	.0498	.061
		.0001	.0003	.0006	.0011	.0019	.0030	.0043	.006
						.0001	.0001	.0002	.000
5									
0	.9415	.8858	.8330	.7828	.7351	.6899	.6470	.6064	.567
1	.0571	.1085	.1546	.1957	.2321	.2642	.2922	.3164	.337
2	.0014	.0055	.0120	.0204	.0305	.0422	.0550	.0688	.083
3		.0002	.0005	.0011	.0021	.0036	.0055	.0080	.011
4					.0001	.0002	.0003	.0005	.000
5									
6									
									.516
									.357
	.0020								.106
3		.0003	.0008						.017
				.0001	.0002	.0004	.0007		.001
								.0001	.000
6 7									
	0227	9509	7927	7214	((24	(00)	FFO.	F122	470
									.470
									.372 .128
									.025
	.0001	.0004							
			.0001	.0002	.0004	.0007			.003
							.0001	.0001	.000
	0 1 2 3 4 5 0 1 2 3 4 5 6 0 1 2 3 4 5 6 0 1 2 3 6	0 .9510 1 .0480 2 .0010 3 .4 5	0       .9510       .9039         1       .0480       .0922         2       .0010       .0038         3       .0001         4       .0001         5       .0014       .0055         2       .0014       .0055         3       .0002         4       .0059       .1240         2       .0020       .0076         3       .0003         4       .0003         5       .0026       .0099         3       .0001       .0004         4       .0001       .0004	0       .9510       .9039       .8587         1       .0480       .0922       .1328         2       .0010       .0038       .0082         3       .0001       .0003         4       .0001       .0003         5       .0001       .0003         0       .9415       .8858       .8330         1       .0571       .1085       .1546         2       .0014       .0055       .0120         3       .0002       .0005         4       .0659       .1240       .1749         2       .0020       .0076       .0162         3       .0003       .0008         4       .0003       .0008         5       6       .0003       .0008         6       .0003       .0008       .0008	0       .9510       .9039       .8587       .8154         1       .0480       .0922       .1328       .1699         2       .0010       .0038       .0082       .0142         3       .0001       .0003       .0006         4       .0001       .0003       .0006         0       .9415       .8858       .8330       .7828         1       .0571       .1085       .1546       .1957         2       .0014       .0055       .0120       .0204         3       .0002       .0005       .0011         4       .0659       .1240       .1749       .2192         2       .0020       .0076       .0162       .0274         3       .0003       .0008       .0019         4       .0001       .0001         5       .0026       .0099       .0210       .0351         3       .0001       .0004       .0013       .0029         4       .0001       .0002	0       .9510       .9039       .8587       .8154       .7738         1       .0480       .0922       .1328       .1699       .2036         2       .0010       .0038       .0082       .0142       .0214         3       .0001       .0003       .0006       .0011         4       .0001       .0003       .0006       .0011         5       .0014       .0055       .1546       .1957       .2321         2       .0014       .0055       .0120       .0204       .0305         3       .0002       .0005       .0011       .0021         4       .0001       .0005       .0011       .0021         5       .0020       .0076       .0162       .0274       .0406         3       .0003       .0008       .0019       .0036         4       .0001       .0002       .0001       .0002         5       .0001       .0002       .0001       .0002         6       .0001       .0002       .0001       .0002         9227       .8508       .7837       .7214       .6634         1       .0746       .1389       .1939       .2405<	0       .9510       .9039       .8587       .8154       .7738       .7339         1       .0480       .0922       .1328       .1699       .2036       .2342         2       .0010       .0038       .0082       .0142       .0214       .0299         3       .0001       .0003       .0006       .0011       .0019         4       .0001       .0001       .0001       .0001         5       .0415       .8858       .8330       .7828       .7351       .6899         1       .0571       .1085       .1546       .1957       .2321       .2642         2       .0014       .0055       .0120       .0204       .0305       .0422         3       .0002       .0005       .0011       .0021       .0036         4       .0055       .0120       .0204       .0305       .0422         3       .0001       .0001       .0002       .0001       .0002         5       .0020       .0076       .0162       .0274       .0406       .0555         3       .0003       .0008       .0019       .0036       .0059         4       .0746       .1389       <	0         .9510         .9039         .8587         .8154         .7738         .7339         .6957           1         .0480         .0922         .1328         .1699         .2036         .2342         .2618           2         .0010         .0038         .0082         .0142         .0214         .0299         .0394           3         .0001         .0003         .0006         .0011         .0019         .0030           4         .0001         .0003         .0006         .0011         .0019         .0030           5         .0014         .0057         .1085         .1546         .1957         .2321         .2642         .2922           2         .0014         .0055         .0120         .0204         .0305         .0422         .0550           3         .0002         .0005         .0011         .0021         .0036         .0055           4         .0057         .1240         .1749         .2192         .2573         .2897         .3170           2         .0020         .0076         .0162         .0274         .0406         .0555         .0716           3         .0020         .0076         .0162	0         .9510         .9039         .8587         .8154         .7738         .7339         .6957         .6591           1         .0480         .0922         .1328         .1699         .2036         .2342         .2618         .2866           2         .0010         .0038         .0082         .0142         .0214         .0299         .0394         .0498           3         .0001         .0003         .0006         .0011         .0019         .0030         .0043           4         .0001         .0001         .0001         .0001         .0001         .0002           5         .0001         .0001         .0001         .0001         .0002           6         .02415         .8858         .8330         .7828         .7351         .6899         .6470         .6064           1         .0571         .1085         .1546         .1957         .2321         .2642         .2922         .3164           2         .0014         .0055         .0120         .0204         .0305         .0422         .0550         .0688           3         .0002         .0003         .0001         .0002         .0003         .0005         .0000

Tables T-7

					Entry is $P(X)$	$=k)=\binom{n}{k}$	$p^k(1-p)^{n-k}$			
						<i>p</i>				
n	k	.10	.15	.20	.25	.30	.35	.40	.45	.50
2	0	.8100	.7225	.6400	.5625	.4900	.4225	.3600	.3025	.2500
_	1	.1800	.2550	.3200	.3750	.4200	.4550	.4800	.4950	.5000
	2	.0100	.0225	.0400	.0625	.0900	.1225	.1600	.2025	.2500
3	0	.7290	.6141	.5120	.4219	.3430	.2746	.2160	.1664	.125
9	1	.2430	.3251	.3840	.4219	.4410	.4436	.4320	.4084	.375
	2	.0270	.0574	.0960	.1406	.1890	.2389	.2880	.3341	.375
	3	.0010	.0034	.0080	.0156	.0270	.0429	.0640	.0911	.125
4	0	.6561	.5220	.4096	.3164	.2401	.1785	.1296	.0915	.062
+		.2916	.3685	.4096	.4219	.4116	.3845	.3456	.2995	
	1 2	.0486	.3685	.1536	.4219	.4116	.3105	.3456	.3675	.250
	3			.0256		.0756				
	3 4	.0036 .0001	.0115 .0005	.0256	.0469 .0039	.0756	.1115 .0150	.1536 .0256	.2005 .0410	.250
5	0	.5905	.4437	.3277	.2373	.1681	.1160	.0778	.0503	.031
	1	.3280	.3915	.4096	.3955	.3602	.3124	.2592	.2059	.156
	2	.0729	.1382	.2048	.2637	.3087	.3364	.3456	.3369	.312.
	3	.0081	.0244	.0512	.0879	.1323	.1811	.2304	.2757	.312
	4	.0004	.0022	.0064	.0146	.0284	.0488	.0768	.1128	.156
	5		.0001	.0003	.0010	.0024	.0053	.0102	.0185	.031
6	0	.5314	.3771	.2621	.1780	.1176	.0754	.0467	.0277	.015
	1	.3543	.3993	.3932	.3560	.3025	.2437	.1866	.1359	.093
	2	.0984	.1762	.2458	.2966	.3241	.3280	.3110	.2780	.234
	3	.0146	.0415	.0819	.1318	.1852	.2355	.2765	.3032	.312
	4	.0012	.0055	.0154	.0330	.0595	.0951	.1382	.1861	.234
	5	.0001	.0004	.0015	.0044	.0102	.0205	.0369	.0609	.093
	6	.0001		.0001	.0002	.0007	.0018	.0041	.0083	.015
7	0	.4783	.3206	.2097	.1335	.0824	.0490	.0280	.0152	.007
1	1	.3720	.3260	.3670	.3115	.2471	.1848	.1306	.0132	.054
	2	.1240	.2097	.2753	.3115	.3177	.2985	.2613	.2140	.164
	3	.0230	.0617	.1147	.1730	.2269	.2679	.2903	.2918	.273
		.0026	.0109	.0287	.0577				.2388	.273
	4	.0020		.0287		.0972	.1442	.1935		
	5 6	.0002	.0012 .0001	.0043	.0115 .0013	.0250 .0036	.0466 .0084	.0774 .0172	.1172 .0320	.164 .054
	7		.0001	.0004	.0013	.0030	.0004	.0016	.0320	.007
,	0	4205	2525	1/70	1001	0.554	0210	01/0	0004	002
8	0	.4305	.2725	.1678	.1001	.0576	.0319	.0168	.0084	.003
	1	.3826	.3847	.3355	.2670	.1977	.1373	.0896	.0548	.031
	2	.1488	.2376	.2936	.3115	.2965	.2587	.2090	.1569	.109
	3	.0331	.0839	.1468	.2076	.2541	.2786	.2787	.2568	.218
	4	.0046	.0185	.0459	.0865	.1361	.1875	.2322	.2627	.273
	5	.0004	.0026	.0092	.0231	.0467	.0808	.1239	.1719	.218
	6		.0002	.0011	.0038	.0100	.0217	.0413	.0703	.109
	7			.0001	.0004	.0012	.0033	.0079	.0164	.031
	8					.0001	.0002	.0007	.0017	.003

T-8 Tables

					/ \				
				Entry is $P(X)$	$=k)=\binom{n}{k}$	$p^k(1-p)^{n-k}$			
					р				
k	.01	.02	.03	.04	.05	.06	.07	.08	.09
0	.9135	.8337	.7602	.6925	.6302	.5730	.5204	.4722	.4279
									.3809
2									.1507
	.0001	.0006							.0348
5			.0001	.0003	.0000				.0005
						.0001	.0002	.0003	.000.
7									
8									
9									
0	.9044	.8171	.7374	.6648	.5987	.5386	.4840	.4344	.3894
									.385
									.1714
3	.0001	.0008	.0026	.0058	.0105	.0168	.0248	.0343	.0452
4			.0001	.0004	.0010	.0019	.0033	.0052	.007
					.0001	.0001	.0003	.0005	.000
									.000
10									
0	.8864	.7847	.6938	.6127	.5404	.4759	.4186	.3677	.322
1									.382
2									.208
	.0002								.068
4		.0001	.0003						.015
5				.0001	.0002	.0004			.002
7							.0001	.0001	.000
11									
12									
0	.8601	.7386	.6333	.5421	.4633	.3953	.3367	.2863	.2430
1									.360
2	.0092	.0323	.0636	.0988	.1348	.1691	.2003	.2273	.249
	.0004					.0468	.0653		.107
		.0002							.031
			.0001	.0002	.0006				.006
6						.0001	.0003		.001
								.0001	.000
14									
15									
	0 1 2 3 4 5 6 7 8 9 10 1 2 3 4 5 6 7 8 9 10 11 12 3 4 5 6 7 8 9 10 11 11 12 12 13 14 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	0 .9135 1 .0830 2 .0034 3 .0001 4 5 .6 6 .7 8 .9 9 .0044 1 .0914 2 .0042 3 .0001 4 .5 6 .7 8 .9 10 0 .8864 1 .1074 2 .0060 3 .0002 4 .5 6 .7 8 .9 10 11 .1303 2 .0092 3 .0004 4 .5 6 .7 8 .9 10 11 .1303 2 .0092 3 .0004	0	0       .9135       .8337       .7602         1       .0830       .1531       .2116         2       .0034       .0125       .0262         3       .0001       .0006       .0019         4       .0001       .0006       .0019         6       .0001       .0001       .0001         5       .0042       .0153       .0317         3       .0001       .0008       .0026         4       .0001       .0001         0       .8864       .7847       .6938         1       .1074       .1922       .2575         2       .0060       .0216       .0438         3       .0002       .0015       .0045         4       .0001       .0003         5       .0045       .0001         6       .0001       .0003         7       .0001       .0003         10       .0002       .00323       .0636         3       .0004       .0029       .0085         4       .0002       .0008         5       .0001       .0001	0	0	0	0	0

Tables T-9

					Entry is $P(X)$	$=k)=\binom{n}{k}k$	$p^k(1-p)^{n-k}$			
						$\frac{p}{p}$				
!	k	.10	.15	.20	.25	.30	.35	.40	.45	.50
9	0	.3874	.2316	.1342	.0751	.0404	.0207	.0101	.0046	.0020
	1	.3874	.3679	.3020	.2253	.1556	.1004	.0605	.0339	.0176
	2	.1722	.2597	.3020	.3003	.2668	.2162	.1612	.1110	.0703
	3	.0446	.1069	.1762	.2336	.2668	.2716	.2508	.2119	.164
	4	.0074	.0283	.0661	.1168	.1715	.2194	.2508	.2600	.246
	5	.0008	.0050	.0165	.0389	.0735	.1181	.1672	.2128	.246
	6	.0001	.0006	.0028	.0087	.0210	.0424	.0743	.1160	.164
	7			.0003	.0012	.0039	.0098	.0212	.0407	.070
	8				.0001	.0004	.0013	.0035	.0083	.017
	9						.0001	.0003	.0008	.002
0	0	.3487	.1969	.1074	.0563	.0282	.0135	.0060	.0025	.001
	1	.3874	.3474	.2684	.1877	.1211	.0725	.0403	.0207	.009
	2	.1937	.2759	.3020	.2816	.2335	.1757	.1209	.0763	.043
	3	.0574	.1298	.2013	.2503	.2668	.2522	.2150	.1665	.117
	4	.0112	.0401	.0881	.1460	.2001	.2377	.2508	.2384	.205
	5	.0015	.0085	.0264	.0584	.1029	.1536	.2007	.2340	.246
	6	.0001	.0012	.0055	.0162	.0368	.0689	.1115	.1596	.205
	7		.0001	.0008	.0031	.0090	.0212	.0425	.0746	.117
	8			.0001	.0004	.0014	.0043	.0106	.0229	.043
	9					.0001	.0005	.0016	.0042	.009
	10							.0001	.0003	.001
2	0	.2824	.1422	.0687	.0317	.0138	.0057	.0022	.0008	.000
	1	.3766	.3012	.2062	.1267	.0712	.0368	.0174	.0075	.002
	2	.2301	.2924	.2835	.2323	.1678	.1088	.0639	.0339	.016
	3	.0852	.1720	.2362	.2581	.2397	.1954	.1419	.0923	.053
	4	.0213	.0683	.1329	.1936	.2311	.2367	.2128	.1700	.120
	5	.0038	.0193	.0532	.1032	.1585	.2039	.2270	.2225	.193
	6	.0005	.0040	.0155	.0401	.0792	.1281	.1766	.2124	.225
	7		.0006	.0033	.0115	.0291	.0591	.1009	.1489	.193
	8 9		.0001	.0005	.0024	.0078	.0199	.0420	.0762 .0277	.120
	10			.0001	.0004	.0015 .0002	.0048 .0008	.0125 .0025	.0068	.053 .016
	11					.0002	.0008	.0023	.0010	.002
	12						.0001	.0003	.0010	.002
5	0	2050	0974	0252	0124	.0047	.0016	.0005	.0001	000
J	0 1	.2059 .3432	.0874 .2312	.0352 .1319	.0134 .0668	.0305	.0016	.0005	.0001	.000
	2	.3432 .2669	.2312	.1319	.1559	.0305	.0126	.0047	.0016	.003
	3	.1285	.2184	.2509	.2252	.1700	.1110	.0634	.0318	.003
	4	.0428	.1156	.1876	.2252	.2186	.1792	.1268	.0780	.013
	5	.0105	.0449	.1032	.1651	.2061	.2123	.1859	.1404	.091
	6	.0019	.0132	.0430	.0917	.1472	.1906	.2066	.1914	.152
	7	.0003	.0030	.0138	.0393	.0811	.1319	.1771	.2013	.196
	8		.0005	.0035	.0131	.0348	.0710	.1181	.1647	.196
	9		.0001	.0007	.0034	.0116	.0298	.0612	.1048	.152
	10			.0001	.0007	.0030	.0096	.0245	.0515	.091
	11				.0001	.0006	.0024	.0074	.0191	.041
	12					.0001	.0004	.0016	.0052	.013
	13						.0001	.0003	.0010	.003
	14								.0001	.000
	15									

T-10 Tables

			,	,		р				
n	k	.01	.02	.03	.04	.05	.06	.07	.08	.09
20	0	.8179	.6676	.5438	.4420	.3585	.2901	.2342	.1887	.1516
	1	.1652	.2725	.3364	.3683	.3774	.3703	.3526	.3282	.3000
	2	.0159	.0528	.0988	.1458	.1887	.2246	.2521	.2711	.2818
	3	.0010	.0065	.0183	.0364	.0596	.0860	.1139	.1414	.1672
	4		.0006	.0024	.0065	.0133	.0233	.0364	.0523	.0703
	5			.0002	.0009	.0022	.0048	.0088	.0145	.0222
	6				.0001	.0003	.0008	.0017	.0032	.0055
	7						.0001	.0002	.0005	.0011
	8								.0001	.0002
	9									
	10									
	11									
	12									
	13									
	14									
	15									
	16									
	17									
	18									
	19									
	20									

						p				
n	k	.10	.15	.20	.25	.30	.35	.40	.45	.50
20	0	.1216	.0388	.0115	.0032	.0008	.0002	.0000	.0000	.0000
	1	.2702	.1368	.0576	.0211	.0068	.0020	.0005	.0001	.0000
	2	.2852	.2293	.1369	.0669	.0278	.0100	.0031	.0008	.0002
	3	.1901	.2428	.2054	.1339	.0716	.0323	.0123	.0040	.0011
	4	.0898	.1821	.2182	.1897	.1304	.0738	.0350	.0139	.0046
	5	.0319	.1028	.1746	.2023	.1789	.1272	.0746	.0365	.0148
	6	.0089	.0454	.1091	.1686	.1916	.1712	.1244	.0746	.0370
	7	.0020	.0160	.0545	.1124	.1643	.1844	.1659	.1221	.0739
	8	.0004	.0046	.0222	.0609	.1144	.1614	.1797	.1623	.1201
	9	.0001	.0011	.0074	.0271	.0654	.1158	.1597	.1771	.1602
	10		.0002	.0020	.0099	.0308	.0686	.1171	.1593	.1762
	11			.0005	.0030	.0120	.0336	.0710	.1185	.1602
	12			.0001	.0008	.0039	.0136	.0355	.0727	.1201
	13				.0002	.0010	.0045	.0146	.0366	.0739
	14					.0002	.0012	.0049	.0150	.0370
	15						.0003	.0013	.0049	.0148
	16							.0003	.0013	.0046
	17								.0002	.0011
	18									.0002
	19									
	20									

Tables T-11

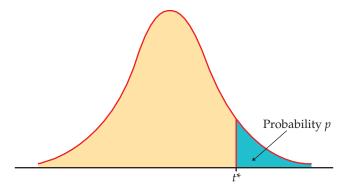


Table entry for p and C is the critical value  $t^*$  with probability p lying to its right and probability C lying between  $-t^*$  and  $t^*$ .

<b>TABLE</b>	D $t$ di	stributio	n critical	values								
					U	pper-tail	probabilit	y p				
df	.25	.20	.15	.10	.05	.025	.02	.01	.005	.0025	.001	.0005
1	1.000	1.376	1.963	3.078	6.314	12.71	15.89	31.82	63.66	127.3	318.3	636.6
2	0.816	1.061	1.386	1.886	2.920	4.303	4.849	6.965	9.925	14.09	22.33	31.60
3	0.765	0.978	1.250	1.638	2.353	3.182	3.482	4.541	5.841	7.453	10.21	12.92
4	0.741	0.941	1.190	1.533	2.132	2.776	2.999	3.747	4.604	5.598	7.173	8.610
5	0.727	0.920	1.156	1.476	2.015	2.571	2.757	3.365	4.032	4.773	5.893	6.869
6	0.718	0.906	1.134	1.440	1.943	2.447	2.612	3.143	3.707	4.317	5.208	5.959
7	0.711	0.896	1.119	1.415	1.895	2.365	2.517	2.998	3.499	4.029	4.785	5.408
8	0.706	0.889	1.108	1.397	1.860	2.306	2.449	2.896	3.355	3.833	4.501	5.041
9	0.703	0.883	1.100	1.383	1.833	2.262	2.398	2.821	3.250	3.690	4.297	4.781
10	0.700	0.879	1.093	1.372	1.812	2.228	2.359	2.764	3.169	3.581	4.144	4.587
11	0.697	0.876	1.088	1.363	1.796	2.201	2.328	2.718	3.106	3.497	4.025	4.437
12	0.695	0.873	1.083	1.356	1.782	2.179	2.303	2.681	3.055	3.428	3.930	4.318
13	0.694	0.870	1.079	1.350	1.771	2.160	2.282	2.650	3.012	3.372	3.852	4.221
14	0.692	0.868	1.076	1.345	1.761	2.145	2.264	2.624	2.977	3.326	3.787	4.140
15	0.691	0.866	1.074	1.341	1.753	2.131	2.249	2.602	2.947	3.286	3.733	4.073
16	0.690	0.865	1.071	1.337	1.746	2.120	2.235	2.583	2.921	3.252	3.686	4.015
17	0.689	0.863	1.069	1.333	1.740	2.110	2.224	2.567	2.898	3.222	3.646	3.965
18	0.688	0.862	1.067	1.330	1.734	2.101	2.214	2.552	2.878	3.197	3.611	3.922
19	0.688	0.861	1.066	1.328	1.729	2.093	2.205	2.539	2.861	3.174	3.579	3.883
20	0.687	0.860	1.064	1.325	1.725	2.086	2.197	2.528	2.845	3.153	3.552	3.850
21	0.686	0.859	1.063	1.323	1.721	2.080	2.189	2.518	2.831	3.135	3.527	3.819
22	0.686	0.858	1.061	1.321	1.717	2.074	2.183	2.508	2.819	3.119	3.505	3.792
23	0.685	0.858	1.060	1.319	1.714	2.069	2.177	2.500	2.807	3.104	3.485	3.768
24	0.685	0.857	1.059	1.318	1.711	2.064	2.172	2.492	2.797	3.091	3.467	3.745
25	0.684	0.856	1.058	1.316	1.708	2.060	2.167	2.485	2.787	3.078	3.450	3.725
26	0.684	0.856	1.058	1.315	1.706	2.056	2.162	2.479	2.779	3.067	3.435	3.707
27	0.684	0.855	1.057	1.314	1.703	2.052	2.158	2.473	2.771	3.057	3.421	3.690
28	0.683	0.855	1.056	1.313	1.701	2.048	2.154	2.467	2.763	3.047	3.408	3.674
29	0.683	0.854	1.055	1.311	1.699	2.045	2.150	2.462	2.756	3.038	3.396	3.659
30	0.683	0.854	1.055	1.310	1.697	2.042	2.147	2.457	2.750	3.030	3.385	3.646
40	0.681	0.851	1.050	1.303	1.684	2.021	2.123	2.423	2.704	2.971	3.307	3.551
50	0.679	0.849	1.047	1.299	1.676	2.009	2.109	2.403	2.678	2.937	3.261	3.496
60	0.679	0.848	1.045	1.296	1.671	2.000	2.099	2.390	2.660	2.915	3.232	3.460
80	0.678	0.846	1.043	1.292	1.664	1.990	2.088	2.374	2.639	2.887	3.195	3.416
100	0.677	0.845	1.042	1.290	1.660	1.984	2.081	2.364	2.626	2.871	3.174	3.390
1000	0.675	0.842	1.037	1.282	1.646	1.962	2.056	2.330	2.581	2.813	3.098	3.300
z*	0.674	0.841	1.036	1.282	1.645	1.960	2.054	2.326	2.576	2.807	3.091	3.291
	50%	60%	70%	80%	90%	95%	96%	98%	99%	99.5%	99.8%	99.9%
						Confide	nce level C					

T-12 Tables

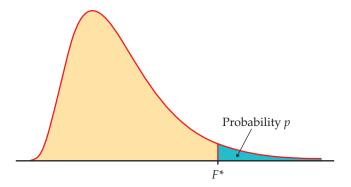


Table entry for p is the critical value  $F^*$  with probability p lying to its right.

710	LE E	7 6116	ical values		D	C C 1	• .1				
							om in the nu				
		p	1	2	3	4	5	6	7	8	9
		.100	39.86	49.50	53.59	55.83	57.24	58.20	58.91	59.44	59.8
		.050	161.45	199.50	215.71	224.58	230.16	233.99	236.77	238.88	240.5
	1	.025	647.79	799.50	864.16	899.58	921.85	937.11	948.22	956.66	963.2
		.010	4052.2	4999.5	5403.4	5624.6	5763.6	5859.0	5928.4	5981.1	6022.5
		.001	405284	500000	540379	562500	576405	585937	592873	598144	60228
		.100	8.53	9.00	9.16	9.24	9.29	9.33	9.35	9.37	9
		.050	18.51	19.00	19.16	19.25	19.30	19.33	19.35	19.37	19.
	2	.025	38.51	39.00	39.17	39.25	39.30	39.33	39.36	39.37	39.
	_	.010	98.50	99.00	99.17	99.25	99.30	99.33	99.36	99.37	99.
		.001	998.50	999.00	999.17	999.25	999.30	999.33	999.36	999.37	999.
		.100	5.54	5.46	5.39	5.34	5.31	5.28	5.27	5.25	5.
Ör		.050		9.55	9.28		9.01	8.94	8.89		
atc	2		10.13			9.12				8.85	8.
Ħ	3	.025	17.44	16.04	15.44	15.10	14.88	14.73	14.62	14.54	14.
Ĕ		.010	34.12	30.82	29.46	28.71	28.24	27.91	27.67	27.49	27.
lenc		.001	167.03	148.50	141.11	137.10	134.58	132.85	131.58	130.62	129.
he c		.100	4.54	4.32	4.19	4.11	4.05	4.01	3.98	3.95	3.
J L		.050	7.71	6.94	6.59	6.39	6.26	6.16	6.09	6.04	6.
=	4	.025	12.22	10.65	9.98	9.60	9.36	9.20	9.07	8.98	8.
on		.010	21.20	18.00	16.69	15.98	15.52	15.21	14.98	14.80	14.
eed .eed		.001	74.14	61.25	56.18	53.44	51.71	50.53	49.66	49.00	48.
Degrees of freedom in the denominator		.100	4.06	3.78	3.62	3.52	3.45	3.40	3.37	3.34	3.
S		.050	6.61	5.79	5.41	5.19	5.05	4.95	4.88	4.82	4.
ree	5	.025	10.01	8.43	7.76	7.39	7.15	6.98	6.85	6.76	6.
90 20	Ü	.010	16.26	13.27	12.06	11.39	10.97	10.67	10.46	10.29	10.
<u>م</u>		.001	47.18	37.12	33.20	31.09	29.75	28.83	28.16	27.65	27.
		.100	3.78	3.46	3.29	3.18	3.11	3.05	3.01	2.98	2
		.050	5.99	5.14	4.76	4.53	4.39	4.28	4.21	4.15	4
	6	.025	8.81	7.26	6.60	6.23	5.99	5.82	5.70	5.60	5.
	U	.010	13.75	10.92	9.78	9.15	8.75	8.47	8.26	8.10	7
		.001	35.51	27.00	23.70	21.92	20.80	20.03	19.46	19.03	18
		100	2.50	2.2/	2.07	2.07	2.00	2.02	2.70	2.75	2
		.100	3.59	3.26	3.07	2.96	2.88	2.83	2.78	2.75	2
	_	.050	5.59	4.74	4.35	4.12	3.97	3.87	3.79	3.73	3
	7	.025	8.07	6.54	5.89	5.52	5.29	5.12	4.99	4.90	4
		.010	12.25	9.55	8.45	7.85	7.46	7.19	6.99	6.84	6.
		.001	29.25	21.69	18.77	17.20	16.21	15.52	15.02	14.63	14.

Tables T-13

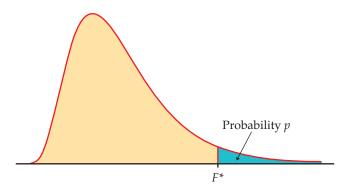


Table entry for p is the critical value  $F^*$  with probability p lying to its right.

TABLE F	F critical	l values i	(continued)
	1 CHICLE	values	(Continued)

			Ι	Degrees of f	reedom in t	he numerat	tor			
10	12	15	20	25	30	40	50	60	120	1000
60.19	60.71	61.22	61.74	62.05	62.26	62.53	62.69	62.79	63.06	63.30
241.88	243.91	245.95	248.01	249.26	250.10	251.14	251.77	252.20	253.25	254.19
968.63	976.71	984.87	993.10	998.08	1001.4	1005.6	1008.1	1009.8	1014.0	1017.7
6055.8	6106.3	6157.3	6208.7	6239.8	6260.6	6286.8	6302.5	6313.0	6339.4	6362.7
605621	610668	615764	620908	624017	626099	628712	630285	631337	633972	636301
9.39	9.41	9.42	9.44	9.45	9.46	9.47	9.47	9.47	9.48	9.49
19.40	19.41	19.43	19.45	19.46	19.46	19.47	19.48	19.48	19.49	19.49
39.40	39.41	39.43	39.45	39.46	39.46	39.47	39.48	39.48	39.49	39.50
99.40	99.42	99.43	99.45	99.46	99.47	99.47	99.48	99.48	99.49	99.50
999.40	999.42	999.43	999.45	999.46	999.47	999.47	999.48	999.48	999.49	999.50
5.23	5.22	5.20	5.18	5.17	5.17	5.16	5.15	5.15	5.14	5.13
8.79	8.74	8.70	8.66	8.63	8.62	8.59	8.58	8.57	8.55	8.53
14.42	14.34	14.25	14.17	14.12	14.08	14.04	14.01	13.99	13.95	13.91
27.23	27.05	26.87	26.69	26.58	26.50	26.41	26.35	26.32	26.22	26.14
129.25	128.32	127.37	126.42	125.84	125.45	124.96	124.66	124.47	123.97	123.53
3.92	3.90	3.87	3.84	3.83	3.82	3.80	3.80	3.79	3.78	3.76
5.96	5.91	5.86	5.80	5.77	5.75	5.72	5.70	5.69	5.66	5.63
8.84	8.75	8.66	8.56	8.50	8.46	8.41	8.38	8.36	8.31	8.26
14.55	14.37	14.20	14.02	13.91	13.84	13.75	13.69	13.65	13.56	13.47
48.05	47.41	46.76	46.10	45.70	45.43	45.09	44.88	44.75	44.40	44.09
3.30	3.27	3.24	3.21	3.19	3.17	3.16	3.15	3.14	3.12	3.11
4.74	4.68	4.62	4.56	4.52	4.50	4.46	4.44	4.43	4.40	4.37
6.62	6.52	6.43	6.33	6.27	6.23	6.18	6.14	6.12	6.07	6.02
10.05	9.89	9.72	9.55	9.45	9.38	9.29	9.24	9.20	9.11	9.03
26.92	26.42	25.91	25.39	25.08	24.87	24.60	24.44	24.33	24.06	23.82
2.94	2.90	2.87	2.84	2.81	2.80	2.78	2.77	2.76	2.74	2.72
4.06	4.00	3.94	3.87	3.83	3.81	3.77	3.75	3.74	3.70	3.67
5.46	5.37	5.27	5.17	5.11	5.07	5.01	4.98	4.96	4.90	4.86
7.87	7.72	7.56	7.40	7.30	7.23	7.14	7.09	7.06	6.97	6.89
18.41	17.99	17.56	17.12	16.85	16.67	16.44	16.31	16.21	15.98	15.77
2.70	2.67	2.63	2.59	2.57	2.56	2.54	2.52	2.51	2.49	2.47
3.64	3.57	3.51	3.44	3.40	3.38	3.34	3.32	3.30	3.27	3.23
4.76	4.67	4.57	4.47	4.40	4.36	4.31	4.28	4.25	4.20	4.15
6.62	6.47	6.31	6.16	6.06	5.99	5.91	5.86	5.82	5.74	5.66
14.08	13.71	13.32	12.93	12.69	12.53	12.33	12.20	12.12	11.91	11.72

T-14 Tables

				Ι	Degrees of fr	eedom in th	ne numerato	or		
	p	1	2	3	4	5	6	7	8	9
	.100	3.46	3.11	2.92	2.81	2.73	2.67	2.62	2.59	2.56
	.050	5.32	4.46	4.07	3.84	3.69	3.58	3.50	3.44	3.39
8	.025	7.57	6.06	5.42	5.05	4.82	4.65	4.53	4.43	4.36
	.010	11.26	8.65	7.59	7.01	6.63	6.37	6.18	6.03	5.91
	.001	25.41	18.49	15.83	14.39	13.48	12.86	12.40	12.05	11.77
	.100	3.36	3.01	2.81	2.69	2.61	2.55	2.51	2.47	2.44
	.050	5.12	4.26	3.86	3.63	3.48	3.37	3.29	3.23	3.18
9	.025	7.21	5.71	5.08	4.72	4.48	4.32	4.20	4.10	4.03
	.010	10.56	8.02	6.99	6.42	6.06	5.80	5.61	5.47	5.35
	.001	22.86	16.39	13.90	12.56	11.71	11.13	10.70	10.37	10.11
	.100	3.29	2.92	2.73	2.61	2.52	2.46	2.41	2.38	2.35
	.050	4.96	4.10	3.71	3.48	3.33	3.22	3.14	3.07	3.02
10	.025	6.94	5.46	4.83	4.47	4.24	4.07	3.95	3.85	3.78
	.010	10.04	7.56	6.55	5.99	5.64	5.39	5.20	5.06	4.94
	.001	21.04	14.91	12.55	11.28	10.48	9.93	9.52	9.20	8.96
	.100	3.23	2.86	2.66	2.54	2.45	2.39	2.34	2.30	2.27
	.050	4.84	3.98	3.59	3.36	3.20	3.09	3.01	2.95	2.90
11	.025	6.72	5.26	4.63	4.28	4.04	3.88	3.76	3.66	3.59
	.010	9.65	7.21	6.22	5.67	5.32	5.07	4.89	4.74	4.63
	.001	19.69	13.81	11.56	10.35	9.58	9.05	8.66	8.35	8.12
	.100	3.18	2.81	2.61	2.48	2.39	2.33	2.28	2.24	2.21
	.050	4.75	3.89	3.49	3.26	3.11	3.00	2.91	2.85	2.80
12	.025	6.55	5.10	4.47	4.12	3.89	3.73	3.61	3.51	3.44
	.010	9.33	6.93	5.95	5.41	5.06	4.82	4.64	4.50	4.39
	.001	18.64	12.97	10.80	9.63	8.89	8.38	8.00	7.71	7.48
	.100	3.14	2.76	2.56	2.43	2.35	2.28	2.23	2.20	2.16
	.050	4.67	3.81	3.41	3.18	3.03	2.92	2.83	2.77	2.71
13	.025	6.41	4.97	4.35	4.00	3.77	3.60	3.48	3.39	3.31
	.010	9.07	6.70	5.74	5.21	4.86	4.62	4.44	4.30	4.19
	.001	17.82	12.31	10.21	9.07	8.35	7.86	7.49	7.21	6.98
	.100	3.10	2.73	2.52	2.39	2.31	2.24	2.19	2.15	2.12
	.050	4.60	3.74	3.34	3.11	2.96	2.85	2.76	2.70	2.65
14	.025	6.30	4.86	4.24	3.89	3.66	3.50	3.38	3.29	3.21
	.010	8.86	6.51	5.56	5.04	4.69	4.46	4.28	4.14	4.03
	.001	17.14	11.78	9.73	8.62	7.92	7.44	7.08	6.80	6.58
	.100	3.07	2.70	2.49	2.36	2.27	2.21	2.16	2.12	2.09
	.050	4.54	3.68	3.29	3.06	2.90	2.79	2.71	2.64	2.59
15	.025	6.20	4.77	4.15	3.80	3.58	3.41	3.29	3.20	3.12
	.010	8.68	6.36	5.42	4.89	4.56	4.32	4.14	4.00	3.89
	.001	16.59	11.34	9.34	8.25	7.57	7.09	6.74	6.47	6.26
	.100	3.05	2.67	2.46	2.33	2.24	2.18	2.13	2.09	2.06
	.050	4.49	3.63	3.24	3.01	2.85	2.74	2.66	2.59	2.54
16	.025	6.12	4.69	4.08	3.73	3.50	3.34	3.22	3.12	3.05
	.010	8.53	6.23	5.29	4.77	4.44	4.20	4.03	3.89	3.78
	.001	16.12	10.97	9.01	7.94	7.27	6.80	6.46	6.19	5.98
	.100	3.03	2.64	2.44	2.31	2.22	2.15	2.10	2.06	2.03
	.050	4.45	3.59	3.20	2.96	2.81	2.70	2.61	2.55	2.49
17	.025	6.04	4.62	4.01	3.66	3.44	3.28	3.16	3.06	2.98
	.010	8.40	6.11	5.19	4.67	4.34	4.10	3.93	3.79	3.68
	.001	15.72	10.66	8.73	7.68	7.02	6.56	6.22	5.96	5.75

Tables T-15

Degrees of freedom in the numerator											
10	12	15	20	25	30	40	50	60	120	1000	
2.54	2.50	2.46	2.42	2.40	2.38	2.36	2.35	2.34	2.32	2.30	
3.35	3.28	3.22	3.15	3.11	3.08	3.04	3.02	3.01	2.97	2.93	
4.30	4.20	4.10	4.00	3.94	3.89	3.84	3.81	3.78	3.73	3.68	
5.81	5.67	5.52	5.36	5.26	5.20	5.12	5.07	5.03	4.95	4.87	
11.54	11.19	10.84	10.48	10.26	10.11	9.92	9.80	9.73	9.53	9.36	
2.42	2.38	2.34	2.30	2.27	2.25	2.23	2.22	2.21	2.18	2.16	
3.14	3.07	3.01	2.94	2.89	2.86	2.83	2.80	2.79	2.75	2.71	
3.96	3.87	3.77	3.67	3.60	3.56	3.51	3.47	3.45	3.39	3.34	
5.26	5.11	4.96	4.81	4.71	4.65	4.57	4.52	4.48	4.40	4.32	
9.89	9.57	9.24	8.90	8.69	8.55	8.37	8.26	8.19	8.00	7.84	
2.32	2.28	2.24	2.20	2.17	2.16	2.13	2.12	2.11	2.08	2.06	
2.98	2.91	2.85	2.77	2.73	2.70	2.66	2.64	2.62	2.58	2.54	
3.72	3.62	3.52	3.42	3.35	3.31	3.26	3.22	3.20	3.14	3.09	
4.85	4.71	4.56	4.41	4.31	4.25	4.17	4.12	4.08	4.00	3.92	
8.75	8.45	8.13	7.80	7.60	7.47	7.30	7.12	7.12	6.94	6.78	
									2.00		
2.25	2.21	2.17	2.12	2.10	2.08	2.05	2.04	2.03	2.00	1.98	
2.85	2.79	2.72	2.65	2.60	2.57	2.53	2.51	2.49	2.45	2.41	
3.53	3.43	3.33	3.23	3.16	3.12	3.06	3.03	3.00	2.94	2.89	
4.54	4.40	4.25	4.10	4.01	3.94	3.86	3.81	3.78	3.69	3.61	
7.92	7.63	7.32	7.01	6.81	6.68	6.52	6.42	6.35	6.18	6.02	
2.19	2.15	2.10	2.06	2.03	2.01	1.99	1.97	1.96	1.93	1.91	
2.75	2.69	2.62	2.54	2.50	2.47	2.43	2.40	2.38	2.34	2.30	
3.37	3.28	3.18	3.07	3.01	2.96	2.91	2.87	2.85	2.79	2.73	
4.30	4.16	4.01	3.86	3.76	3.70	3.62	3.57	3.54	3.45	3.37	
7.29	7.00	6.71	6.40	6.22	6.09	5.93	5.83	5.76	5.59	5.44	
2.14	2.10	2.05	2.01	1.98	1.96	1.93	1.92	1.90	1.88	1.85	
2.67	2.60	2.53	2.46	2.41	2.38	2.34	2.31	2.30	2.25	2.21	
3.25	3.15	3.05	2.95	2.88	2.84	2.78	2.74	2.72	2.66	2.60	
4.10	3.96	3.82	3.66	3.57	3.51	3.43	3.38	3.34	3.25	3.18	
6.80	6.52	6.23	5.93	5.75	5.63	5.47	5.37	5.30	5.14	4.99	
2.10	2.05	2.01	1.96	1.93	1.91	1.89	1.87	1.86	1.83	1.80	
2.60	2.53	2.46	2.39	2.34	2.31	2.27	2.24	2.22	2.18	2.14	
3.15	3.05	2.95	2.84	2.78	2.73	2.67	2.64	2.61	2.55	2.50	
3.94	3.80	3.66	3.51	3.41	3.35	3.27	3.22	3.18	3.09	3.02	
6.40	6.13	5.85	5.56	5.38	5.25	5.10	5.00	4.94	4.77	4.62	
2.06	2.02	1.97	1.92	1.89	1.87	1.85	1 02	1.82	1.70	1.76	
2.54	2.02	2.40	2.33	2.28	2.25	2.20	1.83	2.16	1.79 2.11	2.07	
							2.18				
3.06	2.96	2.86	2.76	2.69	2.64	2.59	2.55	2.52	2.46	2.40	
3.80	3.67	3.52	3.37	3.28	3.21	3.13	3.08	3.05	2.96	2.88	
6.08	5.81	5.54	5.25	5.07	4.95	4.80	4.70	4.64	4.47	4.33	
2.03	1.99	1.94	1.89	1.86	1.84	1.81	1.79	1.78	1.75	1.72	
2.49	2.42	2.35	2.28	2.23	2.19	2.15	2.12	2.11	2.06	2.02	
2.99	2.89	2.79	2.68	2.61	2.57	2.51	2.47	2.45	2.38	2.32	
3.69	3.55	3.41	3.26	3.16	3.10	3.02	2.97	2.93	2.84	2.76	
5.81	5.55	5.27	4.99	4.82	4.70	4.54	4.45	4.39	4.23	4.08	
2.00	1.96	1.91	1.86	1.83	1.81	1.78	1.76	1.75	1.72	1.69	
2.45	2.38	2.31	2.23	2.18	2.15	2.10	2.08	2.06	2.01	1.97	
2.92	2.82	2.72	2.62	2.55	2.50	2.44	2.41	2.38	2.32	2.26	
3.59	3.46	3.31	3.16	3.07	3.00	2.92	2.87	2.83	2.75	2.66	
5.58	5.32	5.05	4.78	4.60	4.48	4.33	4.24	4.18	4.02	3.87	

T-16 Tables

					D	egrees of fre	eedom in th	e numerato	r		
		p	1	2	3	4	5	6	7	8	9
		.100	3.01	2.62	2.42	2.29	2.20	2.13	2.08	2.04	2.00
		.050	4.41	3.55	3.16	2.93	2.77	2.66	2.58	2.51	2.46
1	18	.025	5.98	4.56	3.95	3.61	3.38	3.22	3.10	3.01	2.93
		.010	8.29	6.01	5.09	4.58	4.25	4.01	3.84	3.71	3.60
		.001	15.38	10.39	8.49	7.46	6.81	6.35	6.02	5.76	5.56
		.100	2.99	2.61	2.40	2.27	2.18	2.11	2.06	2.02	1.98
		.050	4.38	3.52	3.13	2.90	2.74	2.63	2.54	2.48	2.42
1	19	.025	5.92	4.51	3.90	3.56	3.33	3.17	3.05	2.96	2.88
-		.010	8.18	5.93	5.01	4.50	4.17	3.94	3.77	3.63	3.52
		.001	15.08	10.16	8.28	7.27	6.62	6.18	5.85	5.59	5.39
		.100	2.97	2.59	2.38	2.25	2.16	2.09	2.04	2.00	1.96
										2.00	
_	20	.050	4.35	3.49	3.10	2.87	2.71	2.60	2.51	2.45	2.39
	20	.025	5.87	4.46	3.86	3.51	3.29	3.13	3.01	2.91	2.84
		.010 .001	8.10 14.82	5.85 9.95	4.94 8.10	4.43 7.10	4.10 6.46	3.87 6.02	3.70 5.69	3.56 5.44	3.46 5.24
		.100	2.96	2.57	2.36	2.23	2.14	2.08	2.02	1.98	1.95
		.050	4.32	3.47	3.07	2.84	2.68	2.57	2.49	2.42	2.37
2	21	.025	5.83	4.42	3.82	3.48	3.25	3.09	2.97	2.87	2.80
		.010	8.02	5.78	4.87	4.37	4.04	3.81	3.64	3.51	3.40
		.001	14.59	9.77	7.94	6.95	6.32	5.88	5.56	5.31	5.11
		.100	2.95	2.56	2.35	2.22	2.13	2.06	2.01	1.97	1.93
		.050	4.30	3.44	3.05	2.82	2.66	2.55	2.46	2.40	2.34
2	22	.025	5.79	4.38	3.78	3.44	3.22	3.05	2.93	2.84	2.76
		.010	7.95	5.72	4.82	4.31	3.99	3.76	3.59	3.45	3.35
		.001	14.38	9.61	7.80	6.81	6.19	5.76	5.44	5.19	4.99
		.100	2.94	2.55	2.34	2.21	2.11	2.05	1.99	1.95	1.92
		.050	4.28	3.42	3.03	2.80	2.64	2.53	2.44	2.37	2.32
-	23	.025	5.75	4.35	3.75	3.41	3.18	3.02	2.90	2.81	2.73
	23	.010	7.88	5.66	4.76	4.26	3.16	3.71	3.54	3.41	3.30
		.001	14.20	9.47	7.67	6.70	6.08	5.65	5.33	5.09	4.89
		.100	2.93	2.54	2.33	2.19	2.10	2.04	1.98	1.94	1.91
_		.050	4.26	3.40	3.01	2.78	2.62	2.51	2.42	2.36	2.30
2	24	.025	5.72	4.32	3.72	3.38	3.15	2.99	2.87	2.78	2.70
		.010	7.82	5.61	4.72	4.22	3.90	3.67	3.50	3.36	3.26
		.001	14.03	9.34	7.55	6.59	5.98	5.55	5.23	4.99	4.80
		.100	2.92	2.53	2.32	2.18	2.09	2.02	1.97	1.93	1.89
		.050	4.24	3.39	2.99	2.76	2.60	2.49	2.40	2.34	2.28
2	25	.025	5.69	4.29	3.69	3.35	3.13	2.97	2.85	2.75	2.68
		.010	7.77	5.57	4.68	4.18	3.85	3.63	3.46	3.32	3.22
		.001	13.88	9.22	7.45	6.49	5.89	5.46	5.15	4.91	4.71
		.100	2.91	2.52	2.31	2.17	2.08	2.01	1.96	1.92	1.88
		.050	4.23	3.37	2.98	2.74	2.59	2.47	2.39	2.32	2.27
2	26	.025	5.66	4.27	3.67	3.33	3.10	2.94	2.82	2.73	2.65
_	-	.010	7.72	5.53	4.64	4.14	3.82	3.59	3.42	3.29	3.18
		.001	13.74	9.12	7.36	6.41	5.80	5.38	5.07	4.83	4.64
		.100	2.90	2.51	2.30	2.17	2.07	2.00	1.95	1.91	1.87
		.050	4.21	3.35	2.96	2.73	2.57	2.46	2.37	2.31	2.25
_	27	.025	5.63	4.24	3.65	3.31	3.08	2.40	2.80	2.31	2.63
	<u>- 1</u>	.025	7.68	5.49	4.60	4.11	3.78	3.56	3.39	3.26	3.15

Tables T-17

TABLE	F crit	ical values	(continued	d)						
				Degrees of fi	reedom in t	he numerat	or			
10	12	15	20	25	30	40	50	60	120	1000
1.98	1.93	1.89	1.84	1.80	1.78	1.75	1.74	1.72	1.69	1.66
2.41	2.34	2.27	2.19	2.14	2.11	2.06	2.04	2.02	1.97	1.92
2.87	2.77	2.67	2.56	2.49	2.44	2.38	2.35	2.32	2.26	2.20
3.51	3.37	3.23	3.08	2.98	2.92	2.84	2.78	2.75	2.66	2.58
5.39	5.13	4.87	4.59	4.42	4.30	4.15	4.06	4.00	3.84	3.69
1.96	1.91	1.86	1.81	1.78	1.76	1.73	1.71	1.70	1.67	1.64
2.38	2.31	2.23	2.16	2.11	2.07	2.03	2.00	1.98	1.93	1.88
2.82	2.72	2.62	2.51	2.44	2.39	2.33	2.30	2.27	2.20	2.14
3.43	3.30	3.15	3.00	2.91	2.84	2.76	2.71	2.67	2.58	2.50
5.22	4.97	4.70	4.43	4.26	4.14	3.99	3.90	3.84	3.68	3.53
1.94	1.89	1.84	1.79	1.76	1.74	1.71	1.69	1.68	1.64	1.61
2.35	2.28	2.20	2.12	2.07	2.04	1.99	1.97	1.95	1.90	1.85
2.77	2.68	2.57	2.46	2.40	2.35	2.29	2.25	2.22	2.16	2.09
3.37	3.23	3.09	2.94	2.84	2.78	2.69	2.64	2.61	2.52	2.43
5.08	4.82	4.56	4.29	4.12	4.00	3.86	3.77	3.70	3.54	3.40
1.92	1.87	1.83	1.78	1.74	1.72	1.69	1.67	1.66	1.62	1.59
2.32	2.25	2.18	2.10	2.05	2.01	1.96	1.94	1.92	1.87	1.82
2.73	2.64	2.53	2.42	2.36	2.31	2.25	2.21	2.18	2.11	2.05
3.31	3.17	3.03	2.88	2.79	2.72	2.64	2.58	2.55	2.46	2.37
4.95	4.70	4.44	4.17	4.00	3.88	3.74	3.64	3.58	3.42	3.28
1.90	1.86	1.81	1.76	1.73	1.70	1.67	1.65	1.64	1.60	1.57
2.30	2.23	2.15	2.07	2.02	1.98	1.94	1.91	1.89	1.84	1.79
2.70	2.60	2.50	2.39	2.32	2.27	2.21	2.17	2.14	2.08	2.01
3.26	3.12	2.98	2.83	2.73	2.67	2.58	2.53	2.50	2.40	2.32
4.83	4.58	4.33	4.06	3.89	3.78	3.63	3.54	3.48	3.32	3.17
1.89	1.84	1.80	1.74	1.71	1.69	1.66	1.64	1.62	1.59	1.55
2.27	2.20	2.13	2.05	2.00	1.96	1.91	1.88	1.86	1.81	1.76
2.67	2.57	2.47	2.36	2.29	2.24	2.18	2.14	2.11	2.04	1.98
3.21	3.07	2.93	2.78	2.69	2.62	2.54	2.48	2.45	2.35	2.27
4.73	4.48	4.23	3.96	3.79	3.68	3.53	3.44	3.38	3.22	3.08
1.88	1.83	1.78	1.73	1.70	1.67	1.64	1.62	1.61	1.57	1.54
2.25	2.18	2.11	2.03	1.97	1.94	1.89	1.86	1.84	1.79	1.74
2.64	2.54	2.44	2.33	2.26	2.21	2.15	2.11	2.08	2.01	1.94
3.17	3.03	2.89	2.74	2.64	2.58	2.49	2.44	2.40	2.31	2.22
4.64	4.39	4.14	3.87	3.71	3.59	3.45	3.36	3.29	3.14	2.99
1.87	1.82	1.77	1.72	1.68	1.66	1.63	1.61	1.59	1.56	1.52
2.24	2.16	2.09	2.01	1.96	1.92	1.87	1.84	1.82	1.77	1.72
2.61	2.51	2.41	2.30	2.23	2.18	2.12	2.08	2.05	1.98	1.91
3.13	2.99	2.85	2.70	2.60	2.54	2.45	2.40	2.36	2.27	2.18
4.56	4.31	4.06	3.79	3.63	3.52	3.37	3.28	3.22	3.06	2.91
1.86	1.81	1.76	1.71	1.67	1.65	1.61	1.59	1.58	1.54	1.51
2.22	2.15	2.07	1.71	1.94	1.90	1.85	1.82	1.80	1.75	1.70
2.59	2.13	2.39	2.28	2.21	2.16	2.09	2.05	2.03	1.73	1.70
3.09	2.49	2.81	2.66	2.57	2.10	2.42	2.36	2.33	2.23	2.14
4.48	4.24	3.99	3.72	3.56	3.44	3.30	3.21	3.15	2.99	2.84
1.85	1.80	1.75	1.70	1.66	1.64	1.60	1.58	1.57	1.53	1.50
2.20	2.13	2.06	1.70	1.92	1.88	1.84	1.58	1.79	1.53	1.50
2.57	2.13	2.36	2.25	2.18	2.13	2.07	2.03	2.00	1.73	1.86
3.06	2.93	2.78	2.63	2.16	2.13	2.38	2.33	2.29	2.20	2.11
4.41	4.17	3.92	3.66	3.49	3.38	3.23	3.14	3.08	2.92	2.78
1.11	1.11	5.72	5.00	5.77	5.50	5.25	5.17	5.00	2.72	2.10

T-18 Tables

				D	egrees of fr	eedom in th	e numerato	r		
	p	1	2	3	4	5	6	7	8	9
	.100	2.89	2.50	2.29	2.16	2.06	2.00	1.94	1.90	1.87
	.050	4.20	3.34	2.95	2.71	2.56	2.45	2.36	2.29	2.24
28	.025	5.61	4.22	3.63	3.29	3.06	2.90	2.78	2.69	2.6
	.010	7.64	5.45	4.57	4.07	3.75	3.53	3.36	3.23	3.12
	.001	13.50	8.93	7.19	6.25	5.66	5.24	4.93	4.69	4.50
	.100	2.89	2.50	2.28	2.15	2.06	1.99	1.93	1.89	1.8
	.050	4.18	3.33	2.93	2.70	2.55	2.43	2.35	2.28	2.2
29	.025	5.59	4.20	3.61	3.27	3.04	2.88	2.76	2.67	2.59
	.010	7.60	5.42	4.54	4.04	3.73	3.50	3.33	3.20	3.09
	.001	13.39	8.85	7.12	6.19	5.59	5.18	4.87	4.64	4.4
	.100	2.88	2.49	2.28	2.14	2.05	1.98	1.93	1.88	1.8.
	.050	4.17	3.32	2.92	2.69	2.53	2.42	2.33	2.27	2.2
30	.025	5.57	4.18	3.59	3.25	3.03	2.87	2.75	2.65	2.5
	.010	7.56	5.39	4.51	4.02	3.70	3.47	3.30	3.17	3.0
	.001	13.29	8.77	7.05	6.12	5.53	5.12	4.82	4.58	4.39
_	.100	2.84	2.44	2.23	2.09	2.00	1.93	1.87	1.83	1.7
3	.050	4.08	3.23	2.84	2.61	2.45	2.34	2.25	2.18	2.1
40	.025	5.42	4.05	3.46	3.13	2.90	2.74	2.62	2.53	2.4
70	.010	7.31	5.18	4.31	3.83	3.51	3.29	3.12	2.99	2.8
	.001	12.61	8.25	6.59	5.70	5.13	4.73	4.44	4.21	4.0
50										
	.100	2.81	2.41	2.20	2.06	1.97	1.90	1.84	1.80	1.70
	.050	4.03	3.18	2.79	2.56	2.40	2.29	2.20	2.13	2.0
50	.025	5.34	3.97	3.39	3.05	2.83	2.67	2.55	2.46	2.3
	.010	7.17	5.06	4.20	3.72	3.41	3.19	3.02	2.89	2.7
3	.001	12.22	7.96	6.34	5.46	4.90	4.51	4.22	4.00	3.82
3	.100	2.79	2.39	2.18	2.04	1.95	1.87	1.82	1.77	1.7
,	.050	4.00	3.15	2.76	2.53	2.37	2.25	2.17	2.10	2.0
60	.025	5.29	3.93	3.34	3.01	2.79	2.63	2.51	2.41	2.3
Ď	.010	7.08	4.98	4.13	3.65	3.34	3.12	2.95	2.82	2.7
7	.001	11.97	7.77	6.17	5.31	4.76	4.37	4.09	3.86	3.69
	.100	2.76	2.36	2.14	2.00	1.91	1.83	1.78	1.73	1.6
	.050	3.94	3.09	2.70	2.46	2.31	2.19	2.10	2.03	1.9
100	.025	5.18	3.83	3.25	2.92	2.70	2.54	2.42	2.32	2.2
100	.023									2.5
		6.90	4.82	3.98	3.51	3.21	2.99	2.82	2.69	
	.001	11.50	7.41	5.86	5.02	4.48	4.11	3.83	3.61	3.4
	.100	2.73	2.33	2.11	1.97	1.88	1.80	1.75	1.70	1.6
	.050	3.89	3.04	2.65	2.42	2.26	2.14	2.06	1.98	1.9
200	.025	5.10	3.76	3.18	2.85	2.63	2.47	2.35	2.26	2.1
	.010	6.76	4.71	3.88	3.41	3.11	2.89	2.73	2.60	2.5
	.001	11.15	7.15	5.63	4.81	4.29	3.92	3.65	3.43	3.2
	.100	2.71	2.31	2.09	1.95	1.85	1.78	1.72	1.68	1.6
	.050	3.85	3.00	2.61	2.38	2.22	2.11	2.02	1.95	1.89
1000	.025	5.04	3.70	3.13	2.80	2.58	2.42	2.30	2.20	2.1.
1000	.025									
		6.66	4.63	3.80	3.34	3.04	2.82	2.66	2.53	2.43 3.13
	.001	10.89	6.96	5.46	4.65	4.14	3.78	3.51	3.30	3

Tables T-19

TABLE	F crit	ical values	(continued	d)						
			I	Degrees of fi	reedom in t	he numerat	or			
10	12	15	20	25	30	40	50	60	120	1000
1.84	1.79	1.74	1.69	1.65	1.63	1.59	1.57	1.56	1.52	1.48
2.19	2.12	2.04	1.96	1.91	1.87	1.82	1.79	1.77	1.71	1.66
2.55	2.45	2.34	2.23	2.16	2.11	2.05	2.01	1.98	1.91	1.84
3.03	2.90	2.75	2.60	2.51	2.44	2.35	2.30	2.26	2.17	2.08
4.35	4.11	3.86	3.60	3.43	3.32	3.18	3.09	3.02	2.86	2.72
1.83	1.78	1.73	1.68	1.64	1.62	1.58	1.56	1.55	1.51	1.47
2.18	2.10	2.03	1.94	1.89	1.85	1.81	1.77	1.75	1.70	1.65
2.53	2.43	2.32	2.21	2.14	2.09	2.03	1.99	1.96	1.89	1.82
3.00	2.87	2.73	2.57	2.48	2.41	2.33	2.27	2.23	2.14	2.05
4.29	4.05	3.80	3.54	3.38	3.27	3.12	3.03	2.97	2.81	2.66
1.82	1.77	1.72	1.67	1.63	1.61	1.57	1.55	1.54	1.50	1.46
2.16	2.09	2.01	1.93	1.88	1.84	1.79	1.76	1.74	1.68	1.63
2.51	2.41	2.31	2.20	2.12	2.07	2.01	1.97	1.94	1.87	1.80
2.98	2.84	2.70	2.55	2.45	2.39	2.30	2.25	2.21	2.11	2.02
4.24	4.00	3.75	3.49	3.33	3.22	3.07	2.98	2.92	2.76	2.61
1.76	1.71	1.66	1.61	1.57	1.54	1.51	1.48	1.47	1.42	1.38
2.08	2.00	1.92	1.84	1.78	1.74	1.69	1.66	1.64	1.58	1.52
2.39	2.29	2.18	2.07	1.99	1.94	1.88	1.83	1.80	1.72	1.65
2.80	2.66	2.52	2.37	2.27	2.20	2.11	2.06	2.02	1.92	1.82
3.87	3.64	3.40	3.14	2.98	2.87	2.73	2.64	2.57	2.41	2.25
1.73	1.68	1.63	1.57	1.53	1.50	1.46	1.44	1.42	1.38	1.33
2.03	1.95	1.87	1.78	1.73	1.69	1.63	1.60	1.58	1.51	1.45
2.32	2.22	2.11	1.99	1.92	1.87	1.80	1.75	1.72	1.64	1.56
2.70	2.56	2.42	2.27	2.17	2.10	2.01	1.95	1.91	1.80	1.70
3.67	3.44	3.20	2.95	2.79	2.68	2.53	2.44	2.38	2.21	2.05
1.71	1.66	1.60	1.54	1.50	1.48	1.44	1.41	1.40	1.35	1.30
1.99	1.92	1.84	1.75	1.69	1.65	1.59	1.56	1.53	1.47	1.40
2.27	2.17	2.06	1.94	1.87	1.82	1.74	1.70	1.67	1.58	1.49
2.63	2.50	2.35	2.20	2.10	2.03	1.94	1.88	1.84	1.73	1.62
3.54	3.32	3.08	2.83	2.67	2.55	2.41	2.32	2.25	2.08	1.92
1.66	1.61	1.56	1.49	1.45	1.42	1.38	1.35	1.34	1.28	1.22
1.93	1.85	1.77	1.68	1.62	1.57	1.52	1.48	1.45	1.38	1.30
2.18	2.08	1.97	1.85	1.77	1.71	1.64	1.59	1.56	1.46	1.36
2.50	2.37	2.22	2.07	1.97	1.89	1.80	1.74	1.69	1.57	1.45
3.30	3.07	2.84	2.59	2.43	2.32	2.17	2.08	2.01	1.83	1.64
1.63	1.58	1.52	1.46	1.41	1.38	1.34	1.31	1.29	1.23	1.16
1.88	1.80	1.72	1.62	1.56	1.52	1.46	1.41	1.39	1.30	1.21
2.11	2.01	1.90	1.78	1.70	1.64	1.56	1.51	1.47	1.37	1.25
2.41	2.27	2.13	1.97	1.87	1.79	1.69	1.63	1.58	1.45	1.30
3.12	2.90	2.67	2.42	2.26	2.15	2.00	1.90	1.83	1.64	1.43
1.61	1.55	1.49	1.43	1.38	1.35	1.30	1.27	1.25	1.18	1.08
1.84	1.76	1.68	1.58	1.52	1.47	1.41	1.36	1.33	1.24	1.11
2.06	1.96	1.85	1.72	1.64	1.58	1.50	1.45	1.41	1.29	1.13
2.34	2.20	2.06	1.90	1.79	1.72	1.61	1.54	1.50	1.35	1.16
2.99	2.77	2.54	2.30	2.14	2.02	1.87	1.77	1.69	1.49	1.22

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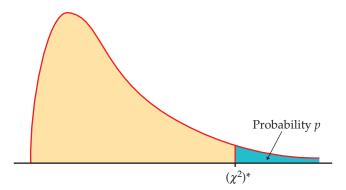


Table entry for p is the critical value  $(\chi^2)^*$  with probability p lying to its right.

TABL	EF $\chi^2$	distribu	tion criti	cal values	S							
						Tail prol	pability <i>p</i>					
df	.25	.20	.15	.10	.05	.025	.02	.01	.005	.0025	.001	.0005
1	1.32	1.64	2.07	2.71	3.84	5.02	5.41	6.63	7.88	9.14	10.83	12.12
2	2.77	3.22	3.79	4.61	5.99	7.38	7.82	9.21	10.60	11.98	13.82	15.20
3	4.11	4.64	5.32	6.25	7.81	9.35	9.84	11.34	12.84	14.32	16.27	17.73
4	5.39	5.99	6.74	7.78	9.49	11.14	11.67	13.28	14.86	16.42	18.47	20.00
5	6.63	7.29	8.12	9.24	11.07	12.83	13.39	15.09	16.75	18.39	20.51	22.11
6	7.84	8.56	9.45	10.64	12.59	14.45	15.03	16.81	18.55	20.25	22.46	24.10
7	9.04	9.80	10.75	12.02	14.07	16.01	16.62	18.48	20.28	22.04	24.32	26.02
8	10.22	11.03	12.03	13.36	15.51	17.53	18.17	20.09	21.95	23.77	26.12	27.87
9	11.39	12.24	13.29	14.68	16.92	19.02	19.68	21.67	23.59	25.46	27.88	29.67
10	12.55	13.44	14.53	15.99	18.31	20.48	21.16	23.21	25.19	27.11	29.59	31.42
11	13.70	14.63	15.77	17.28	19.68	21.92	22.62	24.72	26.76	28.73	31.26	33.14
12	14.85	15.81	16.99	18.55	21.03	23.34	24.05	26.22	28.30	30.32	32.91	34.82
13	15.98	16.98	18.20	19.81	22.36	24.74	25.47	27.69	29.82	31.88	34.53	36.48
14	17.12	18.15	19.41	21.06	23.68	26.12	26.87	29.14	31.32	33.43	36.12	38.11
15	18.25	19.31	20.60	22.31	25.00	27.49	28.26	30.58	32.80	34.95	37.70	39.72
16	19.37	20.47	21.79	23.54	26.30	28.85	29.63	32.00	34.27	36.46	39.25	41.31
17	20.49	21.61	22.98	24.77	27.59	30.19	31.00	33.41	35.72	37.95	40.79	42.88
18	21.60	22.76	24.16	25.99	28.87	31.53	32.35	34.81	37.16	39.42	42.31	44.43
19	22.72	23.90	25.33	27.20	30.14	32.85	33.69	36.19	38.58	40.88	43.82	45.97
20	23.83	25.04	26.50	28.41	31.41	34.17	35.02	37.57	40.00	42.34	45.31	47.50
21	24.93	26.17	27.66	29.62	32.67	35.48	36.34	38.93	41.40	43.78	46.80	49.01
22	26.04	27.30	28.82	30.81	33.92	36.78	37.66	40.29	42.80	45.20	48.27	50.51
23	27.14	28.43	29.98	32.01	35.17	38.08	38.97	41.64	44.18	46.62	49.73	52.00
24	28.24	29.55	31.13	33.20	36.42	39.36	40.27	42.98	45.56	48.03	51.18	53.48
25	29.34	30.68	32.28	34.38	37.65	40.65	41.57	44.31	46.93	49.44	52.62	54.95
26	30.43	31.79	33.43	35.56	38.89	41.92	42.86	45.64	48.29	50.83	54.05	56.41
27	31.53	32.91	34.57	36.74	40.11	43.19	44.14	46.96	49.64	52.22	55.48	57.86
28	32.62	34.03	35.71	37.92	41.34	44.46	45.42	48.28	50.99	53.59	56.89	59.30
29	33.71	35.14	36.85	39.09	42.56	45.72	46.69	49.59	52.34	54.97	58.30	60.73
30	34.80	36.25	37.99	40.26	43.77	46.98	47.96	50.89	53.67	56.33	59.70	62.16
40	45.62	47.27	49.24	51.81	55.76	59.34	60.44	63.69	66.77	69.70	73.40	76.09
50	56.33	58.16	60.35	63.17	67.50	71.42	72.61	76.15	79.49	82.66	86.66	89.56
60	66.98	68.97	71.34	74.40	79.08	83.30	84.58	88.38	91.95	95.34	99.61	102.7
80	88.13	90.41	93.11	96.58	101.9	106.6	108.1	112.3	116.3	120.1	124.8	128.3
100	109.1	111.7	114.7	118.5	124.3	129.6	131.1	135.8	140.2	144.3	149.4	153.2