

t Table

| cum. prob one-tail two-tails | $t_{.50}$ 0.50 | $t_{.75}$ 0.25 | $t_{.80}$ 0.20 | $t_{.85}$ 0.15 | $t_{.90}$ 0.10 | $t_{.95}$ 0.05 | $t_{.975}$ 0.025 | $t_{.99}$ 0.01 | $t_{.995}$ 0.005 | $t_{.999}$ 0.001 | $t_{.9995}$ 0.0005 |
|------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|--------------------------|----------------------------|----------------------------|------------------------------|
| df | 1.00 | 0.50 | 0.40 | 0.30 | 0.20 | 0.10 | 0.05 | 0.02 | 0.01 | 0.002 | 0.001 |
| 1 | 0.000 | 1.000 | 1.376 | 1.963 | 3.078 | 6.314 | 12.71 | 31.82 | 63.66 | 318.31 | 636.62 |
| 2 | 0.000 | 0.816 | 1.061 | 1.386 | 1.886 | 2.920 | 4.303 | 6.965 | 9.925 | 22.327 | 31.599 |
| 3 | 0.000 | 0.765 | 0.978 | 1.250 | 1.638 | 2.353 | 3.182 | 4.541 | 5.841 | 10.215 | 12.924 |
| 4 | 0.000 | 0.741 | 0.941 | 1.190 | 1.533 | 2.132 | 2.776 | 3.747 | 4.604 | 7.173 | 8.610 |
| 5 | 0.000 | 0.727 | 0.920 | 1.156 | 1.476 | 2.015 | 2.571 | 3.365 | 4.032 | 5.893 | 6.869 |
| 6 | 0.000 | 0.718 | 0.906 | 1.134 | 1.440 | 1.943 | 2.447 | 3.143 | 3.707 | 5.208 | 5.959 |
| 7 | 0.000 | 0.711 | 0.896 | 1.119 | 1.415 | 1.895 | 2.365 | 2.998 | 3.499 | 4.785 | 5.408 |
| 8 | 0.000 | 0.706 | 0.889 | 1.108 | 1.397 | 1.860 | 2.306 | 2.896 | 3.355 | 4.501 | 5.041 |
| 9 | 0.000 | 0.703 | 0.883 | 1.100 | 1.383 | 1.833 | 2.262 | 2.821 | 3.250 | 4.297 | 4.781 |
| 10 | 0.000 | 0.700 | 0.879 | 1.093 | 1.372 | 1.812 | 2.228 | 2.764 | 3.169 | 4.144 | 4.587 |
| 11 | 0.000 | 0.697 | 0.876 | 1.088 | 1.363 | 1.796 | 2.201 | 2.718 | 3.106 | 4.025 | 4.437 |
| 12 | 0.000 | 0.695 | 0.873 | 1.083 | 1.356 | 1.782 | 2.179 | 2.681 | 3.055 | 3.930 | 4.318 |
| 13 | 0.000 | 0.694 | 0.870 | 1.079 | 1.350 | 1.771 | 2.160 | 2.650 | 3.012 | 3.852 | 4.221 |
| 14 | 0.000 | 0.692 | 0.868 | 1.076 | 1.345 | 1.761 | 2.145 | 2.624 | 2.977 | 3.787 | 4.140 |
| 15 | 0.000 | 0.691 | 0.866 | 1.074 | 1.341 | 1.753 | 2.131 | 2.602 | 2.947 | 3.733 | 4.073 |
| 16 | 0.000 | 0.690 | 0.865 | 1.071 | 1.337 | 1.746 | 2.120 | 2.583 | 2.921 | 3.686 | 4.015 |
| 17 | 0.000 | 0.689 | 0.863 | 1.069 | 1.333 | 1.740 | 2.110 | 2.567 | 2.898 | 3.646 | 3.965 |
| 18 | 0.000 | 0.688 | 0.862 | 1.067 | 1.330 | 1.734 | 2.101 | 2.552 | 2.878 | 3.610 | 3.922 |
| 19 | 0.000 | 0.688 | 0.861 | 1.066 | 1.328 | 1.729 | 2.093 | 2.539 | 2.861 | 3.579 | 3.883 |
| 20 | 0.000 | 0.687 | 0.860 | 1.064 | 1.325 | 1.725 | 2.086 | 2.528 | 2.845 | 3.552 | 3.850 |
| 21 | 0.000 | 0.686 | 0.859 | 1.063 | 1.323 | 1.721 | 2.080 | 2.518 | 2.831 | 3.527 | 3.819 |
| 22 | 0.000 | 0.686 | 0.858 | 1.061 | 1.321 | 1.717 | 2.074 | 2.508 | 2.819 | 3.505 | 3.792 |
| 23 | 0.000 | 0.685 | 0.858 | 1.060 | 1.319 | 1.714 | 2.069 | 2.500 | 2.807 | 3.485 | 3.768 |
| 24 | 0.000 | 0.685 | 0.857 | 1.059 | 1.318 | 1.711 | 2.064 | 2.492 | 2.797 | 3.467 | 3.745 |
| 25 | 0.000 | 0.684 | 0.856 | 1.058 | 1.316 | 1.708 | 2.060 | 2.485 | 2.787 | 3.450 | 3.725 |
| 26 | 0.000 | 0.684 | 0.856 | 1.058 | 1.315 | 1.706 | 2.056 | 2.479 | 2.779 | 3.435 | 3.707 |
| 27 | 0.000 | 0.684 | 0.855 | 1.057 | 1.314 | 1.703 | 2.052 | 2.473 | 2.771 | 3.421 | 3.690 |
| 28 | 0.000 | 0.683 | 0.855 | 1.056 | 1.313 | 1.701 | 2.048 | 2.467 | 2.763 | 3.408 | 3.674 |
| 29 | 0.000 | 0.683 | 0.854 | 1.055 | 1.311 | 1.699 | 2.045 | 2.462 | 2.756 | 3.396 | 3.659 |
| 30 | 0.000 | 0.683 | 0.854 | 1.055 | 1.310 | 1.697 | 2.042 | 2.457 | 2.750 | 3.385 | 3.646 |
| 40 | 0.000 | 0.681 | 0.851 | 1.050 | 1.303 | 1.684 | 2.021 | 2.423 | 2.704 | 3.307 | 3.551 |
| 60 | 0.000 | 0.679 | 0.848 | 1.045 | 1.296 | 1.671 | 2.000 | 2.390 | 2.660 | 3.232 | 3.460 |
| 80 | 0.000 | 0.678 | 0.846 | 1.043 | 1.292 | 1.664 | 1.990 | 2.374 | 2.639 | 3.195 | 3.416 |
| 100 | 0.000 | 0.677 | 0.845 | 1.042 | 1.290 | 1.660 | 1.984 | 2.364 | 2.626 | 3.174 | 3.390 |
| 1000 | 0.000 | 0.675 | 0.842 | 1.037 | 1.282 | 1.646 | 1.962 | 2.330 | 2.581 | 3.098 | 3.300 |

Función de Distribución de la variable F, percentiles 95

| | | Grados de libertad del numerador | | | | | | | | | | | | | | | | | | | | Grados de libertad del denominador | |
|--------|--------|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|-------|--------|-------|--------|--------|--------|--|------------------------------------|--|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 15 | 20 | 24 | 30 | 40 | 60 | 120 | 100000 | | | |
| 1 | 161.45 | 199.5 | 215.71 | 224.58 | 230.16 | 233.99 | 236.77 | 238.88 | 240.54 | 241.88 | 243.9 | 245.95 | 248.02 | 249.05 | 250.1 | 251.14 | 252.2 | 253.25 | 254.32 | | | | |
| 2 | 18.51 | 19 | 19.16 | 19.25 | 19.3 | 19.33 | 19.35 | 19.37 | 19.38 | 19.4 | 19.41 | 19.43 | 19.45 | 19.45 | 19.46 | 19.47 | 19.47 | 19.48 | 19.49 | 19.5 | | | |
| 3 | 10.13 | 9.55 | 9.28 | 9.12 | 9.01 | 8.94 | 8.89 | 8.85 | 8.81 | 8.79 | 8.74 | 8.7 | 8.66 | 8.64 | 8.62 | 8.59 | 8.57 | 8.55 | 8.53 | | | | |
| 4 | 7.71 | 6.94 | 6.59 | 6.39 | 6.26 | 6.16 | 6.09 | 6.04 | 6 | 5.96 | 5.91 | 5.86 | 5.8 | 5.77 | 5.75 | 5.72 | 5.69 | 5.66 | 5.63 | | | | |
| 5 | 6.61 | 5.79 | 5.41 | 5.19 | 5.05 | 4.95 | 4.88 | 4.82 | 4.77 | 4.74 | 4.68 | 4.62 | 4.56 | 4.53 | 4.5 | 4.46 | 4.43 | 4.4 | 4.37 | | | | |
| 6 | 5.99 | 5.14 | 4.76 | 4.53 | 4.39 | 4.28 | 4.21 | 4.15 | 4.1 | 4.06 | 4 | 3.94 | 3.87 | 3.84 | 3.81 | 3.77 | 3.74 | 3.7 | 3.67 | | | | |
| 7 | 5.59 | 4.74 | 4.35 | 4.12 | 3.97 | 3.87 | 3.79 | 3.73 | 3.68 | 3.64 | 3.57 | 3.51 | 3.44 | 3.41 | 3.38 | 3.34 | 3.3 | 3.27 | 3.23 | | | | |
| 8 | 5.32 | 4.46 | 4.07 | 3.84 | 3.69 | 3.58 | 3.5 | 3.44 | 3.39 | 3.35 | 3.28 | 3.22 | 3.15 | 3.12 | 3.08 | 3.04 | 3.01 | 2.97 | 2.93 | | | | |
| 9 | 5.12 | 4.26 | 3.86 | 3.63 | 3.48 | 3.37 | 3.29 | 3.23 | 3.18 | 3.14 | 3.07 | 3.01 | 2.94 | 2.9 | 2.86 | 2.83 | 2.79 | 2.75 | 2.71 | | | | |
| 10 | 4.96 | 4.1 | 3.71 | 3.48 | 3.33 | 3.22 | 3.14 | 3.07 | 3.02 | 2.98 | 2.91 | 2.85 | 2.77 | 2.74 | 2.7 | 2.66 | 2.62 | 2.58 | 2.54 | | | | |
| 11 | 4.84 | 3.98 | 3.59 | 3.36 | 3.2 | 3.09 | 3.01 | 2.95 | 2.9 | 2.85 | 2.79 | 2.72 | 2.65 | 2.61 | 2.57 | 2.53 | 2.49 | 2.45 | 2.4 | | | | |
| 12 | 4.75 | 3.89 | 3.49 | 3.26 | 3.11 | 3 | 2.91 | 2.85 | 2.8 | 2.75 | 2.69 | 2.62 | 2.54 | 2.51 | 2.47 | 2.43 | 2.38 | 2.34 | 2.3 | | | | |
| 13 | 4.67 | 3.81 | 3.41 | 3.18 | 3.03 | 2.92 | 2.83 | 2.77 | 2.71 | 2.67 | 2.6 | 2.53 | 2.46 | 2.42 | 2.38 | 2.34 | 2.3 | 2.25 | 2.21 | | | | |
| 14 | 4.6 | 3.74 | 3.34 | 3.11 | 2.96 | 2.85 | 2.76 | 2.7 | 2.65 | 2.6 | 2.53 | 2.46 | 2.39 | 2.35 | 2.31 | 2.27 | 2.22 | 2.18 | 2.13 | | | | |
| 15 | 4.54 | 3.68 | 3.29 | 3.06 | 2.9 | 2.79 | 2.71 | 2.64 | 2.59 | 2.54 | 2.48 | 2.4 | 2.33 | 2.29 | 2.25 | 2.2 | 2.16 | 2.11 | 2.07 | | | | |
| 16 | 4.49 | 3.63 | 3.24 | 3.01 | 2.85 | 2.74 | 2.66 | 2.59 | 2.54 | 2.49 | 2.42 | 2.35 | 2.28 | 2.24 | 2.19 | 2.15 | 2.1 | 2.06 | 2.01 | | | | |
| 17 | 4.45 | 3.59 | 3.2 | 2.96 | 2.81 | 2.7 | 2.61 | 2.55 | 2.49 | 2.45 | 2.38 | 2.31 | 2.23 | 2.19 | 2.15 | 2.1 | 2.06 | 2.02 | 1.97 | | | | |
| 18 | 4.41 | 3.55 | 3.16 | 2.93 | 2.77 | 2.66 | 2.58 | 2.51 | 2.46 | 2.41 | 2.34 | 2.27 | 2.19 | 2.15 | 2.11 | 2.06 | 2.02 | 1.97 | 1.92 | | | | |
| 19 | 4.38 | 3.52 | 3.13 | 2.9 | 2.74 | 2.63 | 2.54 | 2.48 | 2.42 | 2.38 | 2.31 | 2.23 | 2.16 | 2.11 | 2.07 | 2.03 | 1.98 | 1.93 | 1.88 | | | | |
| 20 | 4.35 | 3.49 | 3.1 | 2.87 | 2.71 | 2.6 | 2.51 | 2.45 | 2.39 | 2.35 | 2.28 | 2.2 | 2.12 | 2.08 | 2.04 | 1.99 | 1.95 | 1.9 | 1.84 | | | | |
| 21 | 4.32 | 3.47 | 3.07 | 2.84 | 2.68 | 2.57 | 2.49 | 2.42 | 2.37 | 2.32 | 2.25 | 2.18 | 2.1 | 2.05 | 2.01 | 1.96 | 1.92 | 1.87 | 1.81 | | | | |
| 22 | 4.3 | 3.44 | 3.05 | 2.82 | 2.66 | 2.55 | 2.46 | 2.4 | 2.34 | 2.3 | 2.23 | 2.15 | 2.07 | 2.03 | 1.98 | 1.94 | 1.89 | 1.84 | 1.78 | | | | |
| 23 | 4.28 | 3.42 | 3.03 | 2.8 | 2.64 | 2.53 | 2.44 | 2.37 | 2.32 | 2.27 | 2.2 | 2.13 | 2.05 | 2.01 | 1.96 | 1.91 | 1.86 | 1.81 | 1.76 | | | | |
| 24 | 4.26 | 3.4 | 3.01 | 2.78 | 2.62 | 2.51 | 2.42 | 2.36 | 2.3 | 2.25 | 2.18 | 2.11 | 2.03 | 1.98 | 1.94 | 1.89 | 1.84 | 1.79 | 1.73 | | | | |
| 25 | 4.24 | 3.39 | 2.99 | 2.76 | 2.6 | 2.49 | 2.4 | 2.34 | 2.28 | 2.24 | 2.16 | 2.09 | 2.01 | 1.96 | 1.92 | 1.87 | 1.82 | 1.77 | 1.71 | | | | |
| 30 | 4.17 | 3.32 | 2.92 | 2.69 | 2.53 | 2.42 | 2.33 | 2.27 | 2.21 | 2.16 | 2.09 | 2.01 | 1.93 | 1.89 | 1.84 | 1.79 | 1.74 | 1.68 | 1.62 | | | | |
| 40 | 4.08 | 3.23 | 2.84 | 2.61 | 2.45 | 2.34 | 2.25 | 2.18 | 2.12 | 2.08 | 2 | 1.92 | 1.84 | 1.79 | 1.74 | 1.69 | 1.64 | 1.58 | 1.51 | | | | |
| 60 | 4 | 3.15 | 2.76 | 2.53 | 2.37 | 2.25 | 2.17 | 2.1 | 2.04 | 1.99 | 1.92 | 1.84 | 1.75 | 1.7 | 1.65 | 1.59 | 1.53 | 1.47 | 1.39 | | | | |
| 120 | 3.92 | 3.07 | 2.68 | 2.45 | 2.29 | 2.18 | 2.09 | 2.02 | 1.96 | 1.91 | 1.83 | 1.75 | 1.66 | 1.61 | 1.55 | 1.5 | 1.43 | 1.35 | 1.25 | | | | |
| 100000 | 3.84 | 3 | 2.6 | 2.37 | 2.21 | 2.1 | 2.01 | 1.94 | 1.88 | 1.83 | 1.75 | 1.67 | 1.57 | 1.52 | 1.46 | 1.39 | 1.32 | 1.22 | 1.01 | | | | |

TABLE C: Chi-Square distributions

| cum probability | 0.025 | 0.80 | 0.90 | 0.95 | 0.975 | 0.99 | 0.995 | 0.999 | 0.9995 |
|-----------------|---------|-------|-------|-------|-------|-------|-------|-------|--------|
| right tail | 0.975 | 0.2 | 0.1 | 0.05 | 0.025 | 0.01 | 0.005 | 0.001 | 0.0005 |
| df | | | | | | | | | |
| 1 | 0.00098 | 1.64 | 2.71 | 3.84 | 5.02 | 6.63 | 7.88 | 10.83 | 12.12 |
| 2 | 0.051 | 3.22 | 4.61 | 5.99 | 7.38 | 9.21 | 10.60 | 13.82 | 15.20 |
| 3 | 0.216 | 4.64 | 6.25 | 7.81 | 9.35 | 11.34 | 12.84 | 16.27 | 17.73 |
| 4 | 0.48 | 5.99 | 7.78 | 9.49 | 11.14 | 13.28 | 14.86 | 18.47 | 20.00 |
| 5 | 0.83 | 7.29 | 9.24 | 11.07 | 12.83 | 15.09 | 16.75 | 20.51 | 22.11 |
| 6 | 1.24 | 8.56 | 10.64 | 12.59 | 14.45 | 16.81 | 18.55 | 22.46 | 24.10 |
| 7 | 1.69 | 9.80 | 12.02 | 14.07 | 16.01 | 18.48 | 20.28 | 24.32 | 26.02 |
| 8 | 2.18 | 11.03 | 13.36 | 15.51 | 17.53 | 20.09 | 21.95 | 26.12 | 27.87 |
| 9 | 2.70 | 12.24 | 14.68 | 16.92 | 19.02 | 21.67 | 23.59 | 27.88 | 29.67 |
| 10 | 3.25 | 13.44 | 15.99 | 18.31 | 20.48 | 23.21 | 25.19 | 29.59 | 31.42 |
| 11 | 3.82 | 14.63 | 17.28 | 19.68 | 21.92 | 24.73 | 26.76 | 31.26 | 33.14 |
| 12 | 4.40 | 15.81 | 18.55 | 21.03 | 23.34 | 26.22 | 28.30 | 32.91 | 34.82 |
| 13 | 5.01 | 16.98 | 19.81 | 22.36 | 24.74 | 27.69 | 29.82 | 34.53 | 36.48 |
| 14 | 5.63 | 18.15 | 21.06 | 23.68 | 26.12 | 29.14 | 31.32 | 36.12 | 38.11 |
| 15 | 6.26 | 19.31 | 22.31 | 25.00 | 27.49 | 30.58 | 32.80 | 37.70 | 39.72 |
| 16 | 6.91 | 20.47 | 23.54 | 26.30 | 28.85 | 32.00 | 34.27 | 39.25 | 41.31 |
| 17 | 7.56 | 21.61 | 24.77 | 27.59 | 30.19 | 33.41 | 35.72 | 40.79 | 42.88 |
| 18 | 8.23 | 22.76 | 25.99 | 28.87 | 31.53 | 34.81 | 37.16 | 42.31 | 44.43 |
| 19 | 8.91 | 23.90 | 27.20 | 30.14 | 32.85 | 36.19 | 38.58 | 43.82 | 45.97 |
| 20 | 9.59 | 25.04 | 28.41 | 31.41 | 34.17 | 37.57 | 40.00 | 45.31 | 47.50 |
| 21 | 10.28 | 26.17 | 29.62 | 32.67 | 35.48 | 38.93 | 41.40 | 46.80 | 49.01 |
| 22 | 10.98 | 27.30 | 30.81 | 33.92 | 36.78 | 40.29 | 42.80 | 48.27 | 50.51 |
| 23 | 11.69 | 28.43 | 32.01 | 35.17 | 38.08 | 41.64 | 44.18 | 49.73 | 52.00 |
| 24 | 12.40 | 29.55 | 33.20 | 36.42 | 39.36 | 42.98 | 45.56 | 51.18 | 53.48 |
| 25 | 13.12 | 30.68 | 34.38 | 37.65 | 40.65 | 44.31 | 46.93 | 52.62 | 54.95 |
| 30 | 16.79 | 36.25 | 40.26 | 43.77 | 46.98 | 50.89 | 53.67 | 59.70 | 62.16 |
| 40 | 24.43 | 47.27 | 51.81 | 55.76 | 59.34 | 63.69 | 66.77 | 73.40 | 76.10 |
| 50 | 32.36 | 58.16 | 63.17 | 67.50 | 71.42 | 76.15 | 79.49 | 86.66 | 89.56 |
| 60 | 40.48 | 68.97 | 74.40 | 79.08 | 83.30 | 88.38 | 91.95 | 99.61 | 102.7 |
| 80 | 57.15 | 90.41 | 96.58 | 101.9 | 106.6 | 112.3 | 116.3 | 124.8 | 128.3 |
| 100 | 74.22 | 111.7 | 118.5 | 124.3 | 129.6 | 135.8 | 140.2 | 149.4 | 153.2 |