

R47v0 Ref page : Formulas

Nr	Label	Fullname	Description	Image	Formula
10	$\Delta\%$	Delta percent	Delta percentage from Y to X, keeping Y on stack	Formula_DELTAPC.png	$\Delta\% = 100 * \frac{X - Y}{Y}$
20	$\Delta\%\bar{x}_1$	Delta percentage to mean	Delta percentage from $\bar{x}$ to x using statistics matrix (STATS)	Formula_DPCMEAN.png	$\Delta\%\bar{x} = 100 * \frac{X - \bar{x}}{\bar{x}}$
30	$i\Pi_n$	Integer product (RPN)	Integer product using RPN program selected with __ TamLblOnly menu ; $i\Pi_n$ (from Z to Y in steps of X) ; interrupt by [EXIT]	Formula_iPiIn.png	$i\Pi_n = \prod_{n=Z, \text{ step } X}^Y F(n)$
40	$i\Sigma_n$	Integer sum (RPN)	Integer sum using RPN program selected with __ TamLblOnly menu ; $i\Sigma_n$ (from Z to Y in steps of X) ; interrupt by [EXIT]	Formula_iSIGMAIn.png	$i\Sigma_n = \sum_{n=Z, \text{ step } X}^Y F(n)$
50	%	Percent	X Percent of Y, keeping Y on stack	Formula_PC.png	$\% = \frac{X}{100} * Y$
60	%MRR	Mean rate of return	Mean rate of return in percentage per period : %MRR = $100 * (x/y - 1) ^ (1/z)$	Formula_PCMRR.png	$\%MRR = 100 * \sqrt[z]{\frac{X - Y}{Y}}$
70	%+MG	Sales price having margin	Find sales price having margin of X percent over cost Y : %+MG = $Y / (1 - X/100)$	Formula_PCPMG.png	$\%+MG = \frac{Y}{1 - \frac{X}{100}}$
80	%Σ	Percentage of sum	Percentage of x to Σx : %Σ = $100 * x / \Sigma x$	Formula_PCSIGMA.png	$\%\Sigma = \frac{100 * X}{\Sigma X}$
90	%T	Percentage of total	Percentage of total, keeping Y on stack	Formula_PCT.png	$\%T = 100 * \frac{X}{Y}$
100	Π_n	Real product (RPN)	Real product using RPN program selected with __ TamLblOnly menu ; Π_n (from Z to Y in steps of X) ; interrupt by [EXIT]	Formula_PIn.png	$\ln(\epsilon_p) = \sqrt{\frac{n-1}{n}} \ln(\epsilon)$
110	ϵ	Scattering factor for a lognormal sample	Scattering factor for a lognormal sample	Formula_SCATTFACT.png	$\ln(\epsilon_x) = \sqrt{\frac{\sum_{i=1}^n \ln^2(x_i) - 2n \ln(\bar{x}_G)}{n - 1}}$
120	ϵ_m	Scattering factor of the geometric mean	Scattering factor of the geometric mean	Formula_SCATTFACTm.png	$\epsilon_m = \epsilon^{\frac{1}{\sqrt{n}}}$
130	ϵ_p	Scattering factor for a lognormal population	Scattering factor for a lognormal population	Formula_SCATTFACTp.png	$\ln(\epsilon_p) = \sqrt{\frac{n-1}{n}} \ln(\epsilon)$
140	Σ_n	Real sum (RPN)	Real sum using RPN program selected with __ TamLblOnly menu ; Σ_n (from Z to Y in steps of X) ; interrupt by [EXIT]	Formula_SIGMAIn.png	$\Sigma_n = \sum_{n=Z, \text{ step } X}^Y F(n)$

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150	s_m	Standard error of the mean	Standard error of the mean	Formula_SM.png	$s_m = \frac{s_x}{\sqrt{n}}$
160	s_{mw}	Standard error of the weighted mean	Standard error of the weighted mean	Formula_SMW.png	$s_{mw} = \frac{1}{\sum_{i=1}^n y_i} \sqrt{\frac{\sum_{i=1}^n y_i \sum_{i=1}^n x_i^2 y_i - (\sum_{i=1}^n x_i y_i)^2}{\sum_{i=1}^n y_i - 1}}$
170	σ	Population standard deviation	Population standard deviation	Formula_STDDEV.png	$\sigma_x = \sqrt{\frac{1}{n} \sum_{i=1}^n (x_i - \bar{x})^2}$
180	σ_w	Weighted population standard deviation	Weighted population standard deviation	Formula_STDDEVPOP.png	$\sigma_w = \sqrt{\frac{\sum_{i=1}^n y_i (x_i - \bar{x}_w)^2}{\sum_{i=1}^n y_i}}$
190	s	Sample standard deviation	Sample standard deviation	Formula_STDDEVWEIGHTED.png	$s_x = \sqrt{\frac{1}{n-1} \sum_{i=1}^n (x_i - \bar{x})^2}$
200	s_w	Weighted population standard deviation	Weighted population standard deviation	Formula_SW.png	$s_w = \sqrt{\frac{\sum_{i=1}^n y_i \sum_{i=1}^n x_i^2 y_i - (\sum_{i=1}^n x_i y_i)^2}{\sum_{i=1}^n y_i (\sum_{i=1}^n y_i - 1)}}$
210	$\bar{x}$	Arithmetic means	Arithmetic means, x and y	Formula_XBAR.png	$\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i$
220	$\bar{x}_G$	Geometric mean	Data evaluation of geometric mean	Formula_XG.png	$\bar{x}_G = \sqrt[n]{\prod_{i=1}^n x_i}$
230	$\bar{x}_H$	Harmonic mean	Data evaluation of harmonic mean	Formula_XH.png	$\bar{x}_H = \frac{n}{\sum_{i=1}^n \frac{1}{x_i}}$
240	$\bar{x}_{RMS}$	Quadratic mean	Data evaluation of quadratic mean	Formula_XRMS.png	$\bar{x}_{RMS} = \sqrt{\frac{1}{n} \sum_{i=1}^n x_i^2}$
250	$\bar{x}_w$	Weighted mean	Data evaluation of weighted mean	Formula_XW.png	$\bar{x}_w = \frac{\sum_{i=1}^n x_i y_i}{\sum_{i=1}^n y_i}$
260	EFF→I/a	Nominal TVM annual rate	Calculate Nominal TVM annual rate from the Effective TVM annual rate in X and copy value to I/a (variable I%/a)	Formula_EFFTOL.png	$I/a = 100 \cdot cp/a \cdot \left(\sqrt[n]{\frac{EFF/a}{100}} + 1 - 1 \right)$
270	I→EFF/a	Effective TVM annual rate	Calculate Effective TVM annual rate from the TVM annual interest rate in I/a (variable I%/a)	Formula_IT0EFF.png	$EFF/a = 100 \cdot \left[\left(\frac{I/a}{100 \cdot cp/a} + 1 \right)^{cp/a} - 1 \right]$