

Symbols and functions that can be used in *Stats Calculator*

1) Arithmetic operators

`+, -, *, /, ^`

2) Mathematical functions

`abs, sign, sqrt, ceiling, floor, trunc, cummax, cummin, cumprod, cumsum, log, log10, log2, log1p, acos, acosh, asin, asinh, atan, atanh, exp, expm1, cos, cosh, cospi, sin, sinh, sinpi, tan, tanh, tanpi, gamma, lgamma, digamma, trigamma, round, signif`

Note:

Radicals	
<code>sqrt(x)</code>	\sqrt{x}
<code>sqrt(x, y)</code>	$\sqrt[y]{x}$

3) Summary functions

`max, min, range, prod, sum, any, all`

4) Statistical functions

`c(1,2,3)` # define multiple values for a variable

Basic stats functions

- `mean(x), weighted.mean(x), median(x), min(x), max(x), var(x), sd(x)`

Sampling

- `sample()` # Random samples & permutations

Distributions

- `qf(.95, df1=5, df2=2)` # F distribution
- `qt(.975), df=2)` # Student t distribution
- `qchisq(.95, df=7)` # Chi-Squared distribution

Define complex operations

- e.g. `sd(c(1,10,20,40))`

More details about these functions can be found at <http://cran.r-project.org/doc/manuals/r-release/R-intro.html#Function-and-variable-index>