Math Functions for LabVIEW Formula Strings (partial list)

pi(1) =π, pi(2) = 2π, pi(.5) = π/2, etc. 2pi or 2(pi) will return an error

Exponentiation ^

The LabVIEW formula interpreter supports the standard mathematical operators (" + ", " - " , " * ", " / ") and the following mathematical functions.

- **abs(x)** - Returns the absolute value of x.
- **acos(x)** - Computes the inverse cosine of x in radians.
- **acosh(x)** - Computes the inverse hyperbolic cosine of x.
- **asin(x)** - Computes the inverse sine of x in radians.
- **asinh(x)** - Computes the inverse hyperbolic sine of x.
- **atan(x)** - Computes the inverse tangent of x in radians.
- **atanh(x)** - Computes the inverse hyperbolic tangent of x.
- **ciel(x)** - Rounds x to the next higher integer
- **cos(x)** - Computes the cosine of x, where x is in radians.
- **cosh(x)** - Computes the hyperbolic cosine of x.
- **cot(x)** - Computes the cotangent of x (1/tan(x)), where x is in radians.
- **csc(x)** - Computes the cosecant of x (1/sin(x)), where x is in radians.
- **exp(x)** - Computes the value of e raised to the x power.
- **expm1(x)** - Computes one less than the value of e raised to the x power ((e^x) − 1).
- **floor(x)** - Truncates x to the next lower integer.
- **getexp(x)** - Returns the exponent of x.
- **getman(x)** - Returns the mantissa of x.
- **int(x)** - Rounds x to the nearest integer.
- **intrz(x)** - Rounds x to the nearest integer between x and zero.
- **ln(x)** - Computes the natural logarithm of x (to the base of e).
- **lnp1(x)** - Computes the natural logarithm of (x + 1).
- **log(x)** - Computes the logarithm of x (to the base of 10).
- **log2(x)** - Computes the logarithm of x (to the base of 2).
- **rand(x)** - Produces a floating-point number between 0 and 1 exclusively.
- **sec(x)** - Computes the secant of x, where x is in radians (1/cos(x)).
- **sign(x)** - Returns 1 if x is greater than 0, returns 0 if x is equal to 0, and returns −1 if x is less than 0.
- **sin(x)** - Computes the sine of x, where x is in radians.
- **sinc(x)** - Computes the sine of x divided by x (sin(x)/x), where x is in radians.
- **sinh(x)** - Computes the hyperbolic sine of x.
- **sqrt(x)** - Computes the square root of x.
- **tan(x)** - Computes the tangent of x, where x is in radians.
- **tanh(x)** - Computes the hyperbolic tangent of x.
- **gamma(x)** - Evaluates the gamma function for x.
- **pi(x)** - Computes pi * x
- **ci(x)** - Evaluates the cosine integral for any real nonnegative number x.
- **si(x)** - Evaluates the sine integral for any real number x.
- **spike(x)** - Generates the spike function for any real number x.
    $\mathbf{spike(x)} = 1$, if $0 \le \mathbf{x} < 1$ and 0 elsewhere
- **square(x)** - Generates the square function for any real number x.
    $\mathbf{square(x)} = 1$, if $2n \le \mathbf{x} < 2n + 1$ and 0 elsewhere,
- **step(x)** - Generates the step function for any real number x.
    $\mathbf{step(x)} = 0$ if $\mathbf{x} < 0$ and 1 elsewhere