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**ORDERING INFORMATION (PLEASE PRINT OUT)
PRODUCT : CURVEPLOTS (3D PLOTTER 32-BIT)**

Price guaranteed through January, 1998.
Please Contact Author For Other Arrangements and Current Prices
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 or
 qho@west.pima.edu

Send To:
CurvePlots
3751 W. Meadow Briar Dr.
Tucson AZ, 85741

Please Make Checks Payable To Quyen Ho (Only U.S. Currency)

Cost \$15 each = _____
Arizona residents add 7% sales tax + _____

(Please Print All Information)
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Name(No Longer Then 20 Characters):

Company:

Address:

City, State, Zip:

Country:

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What feature would you like in the next release of CurvePlots? :

Other Comments or Suggestions :

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-WRITTEN BY QUYEN H. HO

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INSTALLATION

- a. Unzip CrPlt20.zip to an empty Folder
- b. Read Readme File for up to date information
- c. YOU MUST AGREE TO THE LICENSE AGREEMENT TO USE THIS PRODUCT
- d. Run the Setup Program and follow Directions.
- e. You may delete the setup files when done.
- f. Icons should be created for you in the start menu.
(default group is under the CurvePlots folder; click it and run the program.)

UNINSTALLING

- a. Click Start Menu/Settings/Control Panel
- b. Double Click Add/Remove Programs Icon
- c. Choose CurvePlots and click Add/Remove button.
- d. Registered user may have Additional files in your setup folder.
Restart and remove folder.

LIST OF FORMULA VARIABLES

Note: One Argument Functions do not require parenthesis but a space if not used.

F1
F1.X()
F1.X.Y(,)
F1.X.Z(,)
F1.Y()
F1.Y.X(,)
F1.Y.Z(,)
F1.Z()
F1.Z.X(,)
F1.Z.Y(,)
F2
F2.X()
F2.X.Y(,)
F2.X.Z(,)
F2.Y()
F2.Y.X(,)
F2.Y.Z(,)
F2.Z()
F2.Z.X(,)
F2.Z.Y(,)
F3
F3.X()
F3.X.Y(,)
F3.X.Z(,)
F3.Y()
F3.Y.X(,)
F3.Y.Z(,)
F3.Z()
F3.Z.X(,)
F3.Z.Y(,)
F4
F4.X()
F4.X.Y(,)
F4.X.Z(,)
F4.Y()
F4.Y.X(,)
F4.Y.Z(,)
F4.Z()
F4.Z.X(,)
F4.Z.Y(,)
F5
F5.X()
F5.X.Y(,)
F5.X.Z(,)
F5.Y()
F5.Y.X(,)
F5.Y.Z(,)
F5.Z()
F5.Z.X(,)
F5.Z.Y(,)
F6
F6.X()
F6.X.Y(,)

F6.X.Z(,)
F6.Y()
F6.Y.X(,)
F6.Y.Z(,)
F6.Z()
F6.Z.X(,)
F6.Z.Y(,)

F1, F2, F3, F4, F5, F6

The Formula Variables act like a real variable but evaluates the formula that it reference.

See Also :

[Fn.X\(\)](#), [Fn.X.Y\(,\)](#), [Fn.X.Z\(,\)](#), [Fn.Y\(\)](#), [Fn.Y.X\(,\)](#),
[Fn.Y.Z\(,\)](#), [Fn.Z\(\)](#), [Fn.Z.X\(,\)](#), [Fn.Z.Y\(,\)](#)

F1.X(ARG1), F2.X(ARG1), F3.X(ARG1), F4.X(ARG1), F5.X(ARG1), F6.X(ARG1)

The Formula Variables act like a real variable but evaluates the formula that it reference.

Arg1 : Floating point value; it substitute the 'X' variable in the formula

See Also :

[Fn](#), [Fn.X.Y\(,\)](#), [Fn.X.Z\(,\)](#), [Fn.Y\(,\)](#), [Fn.Y.X\(,\)](#),
[Fn.Y.Z\(,\)](#), [Fn.Z\(,\)](#), [Fn.Z.X\(,\)](#), [Fn.Z.Y\(,\)](#)

F1.Y(ARG1), F2.Y(ARG1), F3.Y(ARG1), F4.Y(ARG1), F5.Y(ARG1), F6.Y(ARG1)

The Formula Variables act like a real variable but evaluates the formula that it reference.

Arg1 : Floating point value; it substitute the 'Y' variable in the formula

See Also :

[Fn](#), [Fn.X\(\)](#), [Fn.X.Y\(,\)](#), [Fn.X.Z\(,\)](#), [Fn.Y.X\(,\)](#),
[Fn.Y.Z\(,\)](#), [Fn.Z\(\)](#), [Fn.Z.X\(,\)](#), [Fn.Z.Y\(,\)](#)

F1.Z(ARG1), F2.Z(ARG1), F3.Z(ARG1), F4.Z(ARG1), F5.Z(ARG1), F6.Z(ARG1)

The Formula Variables act like a real variable but evaluates the formula that it reference.

Arg1 : Floating point value; it substitute the 'Z' variable in the formula

See Also :

[Fn](#), [Fn.X\(\)](#), [Fn.X.Y\(,\)](#), [Fn.X.Z\(,\)](#), [Fn.Y\(\)](#),
[Fn.Y.X\(,\)](#), [Fn.Y.Z\(,\)](#), [Fn.Z.X\(,\)](#), [Fn.Z.Y\(,\)](#)

**F1.X.Y(ARG1, ARG2), F2.X.Y(ARG1, ARG2), F3.X.Y(ARG1, ARG2),
F4.X.Y(ARG1, ARG2), F5.X.Y(ARG1, ARG2), F6.X.Y(ARG1, ARG2)**

The Formula Variables act like a real variable but evaluates the formula that it reference.

Arg1 : Floating point value; it substitute the 'X' variable in the formula

Arg2 : Floating point value; it substitute the 'Y' variable in the formula

See Also :

[Fn](#), [Fn.X\(\)](#), [Fn.X.Z\(,\)](#), [Fn.Y\(\)](#), [Fn.Y.X\(,\)](#),
[Fn.Y.Z\(,\)](#), [Fn.Z\(\)](#), [Fn.Z.X\(,\)](#), [Fn.Z.Y\(,\)](#)

**F1.X.Z(ARG1, ARG2), F2.X.Z(ARG1, ARG2), F3.X.Z(ARG1, ARG2),
F4.X.Z(ARG1, ARG2), F5.X.Z(ARG1, ARG2), F6.X.Z(ARG1, ARG2)**

The Formula Variables act like a real variable but evaluates the formula that it reference.

Arg1 : Floating point value; it substitute the 'X' variable in the formula

Arg2 : Floating point value; it substitute the 'Z' variable in the formula

See Also :

[Fn](#), [Fn.X\(\)](#), [Fn.X.Y\(,\)](#), [Fn.Y\(\)](#), [Fn.Y.X\(,\)](#),
[Fn.Y.Z\(,\)](#), [Fn.Z\(\)](#), [Fn.Z.X\(,\)](#), [Fn.Z.Y\(,\)](#)

**F1.Z.Y(ARG1, ARG2), F2.Z.Y(ARG1, ARG2), F3.Z.Y(ARG1, ARG2),
F4.Z.Y(ARG1, ARG2), F5.Z.Y(ARG1, ARG2), F6.Z.Y(ARG1, ARG2)**

The Formula Variables act like a real variable but evaluates the formula that it reference.

Arg1 : Floating point value; it substitute the 'Z' variable in the formula

Arg2 : Floating point value; it substitute the 'Y' variable in the formula

See Also :

[Fn](#), [Fn.X\(\)](#), [Fn.X.Y\(,\)](#), [Fn.X.Z\(,\)](#), [Fn.Y\(\)](#),
[Fn.Y.X\(,\)](#), [Fn.Y.Z\(,\)](#), [Fn.Z\(\)](#), [Fn.Z.X\(,\)](#)

**F1.Z.X(ARG1, ARG2), F2.Z.X(ARG1, ARG2), F3.Z.X(ARG1, ARG2),
F4.Z.X(ARG1, ARG2), F5.Z.X(ARG1, ARG2), F6.Z.X(ARG1, ARG2)**

The Formula Variables act like a real variable but evaluates the formula that it reference.

Arg1 : Floating point value; it substitute the 'Z' variable in the formula

Arg2 : Floating point value; it substitute the 'X' variable in the formula

See Also :

[Fn](#), [Fn.X\(\)](#), [Fn.X.Y\(,\)](#), [Fn.X.Z\(,\)](#), [Fn.Y\(\)](#),
[Fn.Y.X\(,\)](#), [Fn.Y.Z\(,\)](#), [Fn.Z\(\)](#), [Fn.Z.Y\(,\)](#)

**F1.Y.X(ARG1, ARG2), F2.Y.X(ARG1, ARG2), F3.Y.X(ARG1, ARG2),
F4.Y.X(ARG1, ARG2), F5.Y.X(ARG1, ARG2), F6.Y.X(ARG1, ARG2)**

The Formula Variables act like a real variable but evaluates the formula that it reference.

Arg1 : Floating point value; it substitute the 'Y' variable in the formula

Arg2 : Floating point value; it substitute the 'X' variable in the formula

See Also :

[Fn](#), [Fn.X\(\)](#), [Fn.X.Y\(,\)](#), [Fn.X.Z\(,\)](#), [Fn.Y\(\)](#),
[Fn.Y.Z\(,\)](#), [Fn.Z\(\)](#), [Fn.Z.X\(,\)](#), [Fn.Z.Y\(,\)](#)

**F1.Y.Z(ARG1, ARG2), F2.Y.Z(ARG1, ARG2), F3.Y.Z(ARG1, ARG2),
F4.Y.Z(ARG1, ARG2), F5.Y.Z(ARG1, ARG2), F6.Y.Z(ARG1, ARG2)**

The Formula Variables act like a real variable but evaluates the formula that it reference.

Arg1 : Floating point value; it substitute the 'Y' variable in the formula

Arg2 : Floating point value; it substitute the 'Z' variable in the formula

See Also :

[Fn](#), [Fn.X\(\)](#), [Fn.X.Y\(,\)](#), [Fn.X.Z\(,\)](#), [Fn.Y\(\)](#),
[Fn.Y.X\(,\)](#), [Fn.Z\(\)](#), [Fn.Z.X\(,\)](#), [Fn.Z.Y\(,\)](#)

LIST OF ALL AVAILABLE FUNCTIONS AND OPERATORS

Note: One Argument Functions do not require parenthesis but a space if not used.

I()
%()
*
=
/
^
=
::
+
<=
<
<<
<=
<>
==
>=
>
>=
>>
ABS()
AND
ARCCOS()
ARCSIN()
ARCTAN()
COS()
COSH()
COT()
CSC()
CUBE()
CUBERT()
DEC()
DEG()
DERIV(, ,)
DERIVX(, , ,)
DIV
EXP()
F1
F1.X()
F1.X.Y(,)
F1.X.Z(,)
F1.Y()
F1.Y.X(,)
F1.Y.Z(,)
F1.Z()
F1.Z.X(,)
F1.Z.Y(,)
F2
F2.X()
F2.X.Y(,)
F2.X.Z(,)
F2.Y()
F2.Y.X(,)
F2.Y.Z(,)
F2.Z()
F2.Z.X(,)

F2.Z.Y(,)

F3

F3.X()

F3.X.Y(,)

F3.X.Z(,)

F3.Y()

F3.Y.X(,)

F3.Y.Z(,)

F3.Z()

F3.Z.X(,)

F3.Z.Y(,)

F4

F4.X()

F4.X.Y(,)

F4.X.Z(,)

F4.Y()

F4.Y.X(,)

F4.Y.Z(,)

F4.Z()

F4.Z.X(,)

F4.Z.Y(,)

F5

F5.X()

F5.X.Y(,)

F5.X.Z(,)

F5.Y()

F5.Y.X(,)

F5.Y.Z(,)

F5.Z()

F5.Z.X(,)

F5.Z.Y(,)

F6

F6.X()

F6.X.Y(,)

F6.X.Z(,)

F6.Y()

F6.Y.X(,)

F6.Y.Z(,)

F6.Z()

F6.Z.X(,)

F6.Z.Y(,)

FPART()

INC()

INT()

INTEG(,,,)

INTEGX(,,,,)

INV()

IPART()

LN()

LOG()

LOGX(,)

LRAM(,,,)

LRAMX(,,,,)

MAX(,)

MIN(,)

MOD

MRAM(,,,)
MRAMX(,,,,)
NEG()
NOT()
OR
PERCENT()
POWER()
RAD()
RAND()
ROOT()
ROUND()
ROUNDX(,)
RRAM(,,,)
RRAMX(,,,,)
SEC()
SIMP(,,,)
SIMPX(,,,,)
SIN()
SINH()
SQR()
SQRT()
TAN()
TANH()
TRAP(,,,)
TRAPX(,,,,)
XOR

LIST OF FUNCTIONS

Note: One Argument Functions do not require parenthesis but a space if not used.

!()
%()
ABS()
ARCCOS()
ARCSIN()
ARCTAN()
COS()
COSH()
COT()
CSC()
CUBE()
CUBERT()
DEC()
DEG()
DERIV(, ,)
DERIVX(, , ,)
EXP()
FPART()
INC()
INT()
INTEG(, , ,)
INTEGX(, , , ,)
INV()
IPART()
LN()
LOG()
LOGX(,)
LRAM(, , ,)
LRAMX(, , , ,)
MAX(,)
MIN(,)
MRAM(, , ,)
MRAMX(, , , ,)
NEG()
NOT()
PERCENT()
POWER()
RAD()
RAND()
ROOT()
ROUND()
ROUNDX(,)
RRAM(, , ,)
RRAMX(, , , ,)
SEC()
SIMP(, , ,)
SIMPX(, , , ,)
SIN()
SINH()
SQR()
SQRT()
TAN()
TANH()

TRAP(.....)
TRAPX(.....)

LIST OF OPERATORS

*
=
/
>
=
-
+
<=
<
<<
=
>
>>
>
>=
>>
>>
AND
DIV
MOD
OR
XOR

LIST OF BOOLEAN FUNCTIONS AND OPERATORS

Note: One Argument Functions do not require parenthesis but a space if not used.

<|

<

<<

<=

<>

=

>|

>

>=

>>

AND

MAX(,)

MIN(,)

NOT()

OR

XOR

INTEG(ARG1, ARG2, ARG3, ARG4) OR SIMP(ARG1, ARG2, ARG3, ARG4)

The Functions return the Approximate Area of Arg1 in respect to Arg2, using Simpson's rule. Limit is from Arg3 to Arg4 with N=50

Arg1 : Formula Variable or Formula Literal
Arg2 : Variable use as independent variable of Formula
Arg3 : Lower Limit
Arg4 : Higher Limit

Example:

Integ(3*x^2, x, 0, 4) := 64
Integx(3*x^2, x, 0, 4, 50) := 64

See Also :

[TRAP\(,,,\)](#), [TRAPX\(,,,,\)](#), [SIMPX\(,,,,\)](#), [MRAM\(,,,\)](#), [MRAMX\(,,,,\)](#),
[LRAM\(,,,\)](#), [LRAMX\(,,,,\)](#), [RRAM\(,,,\)](#), [RRAMX\(,,,,\)](#), [INTEGX\(,,,,\)](#)

INTEGX(ARG1, ARG2, ARG3, ARG4, ARG5) OR SIMPX(ARG1, ARG2, ARG3, ARG4, ARG5)

The Functions return the Approximate Area of Arg1 in respect to Arg2, using Simpson's rule. Limit is from Arg3 to Arg4

Arg1 : Formula Variable or Formula Literal
Arg2 : Variable use as independent variable of Formula
Arg3 : Lower Limit
Arg4 : Higher Limit
Arg5 : N value; the amount of segment for area.

Example:

`Integx(3*x^2, x, 0, 4, 50) := 64`

`Integ(3*x^2, x, 0, 4) := 64`

See Also :

[TRAP\(,,,,\), TRAPX\(,,,,\), SIMP\(,,,,\), MRAM\(,,,,\), MRAMX\(,,,,\), LRAM\(,,,,\), LRAMX\(,,,,\), RRAM\(,,,,\), RRAMX\(,,,,\), INTEG\(,,,,\)](#)

LRAM(ARG1, ARG2, ARG3, ARG4)

The Functions return the Approximate Area of Arg1 in respect to Arg2, using Left Riemann Sum. Limit is from Arg3 to Arg4 with N=50

Arg1 : Formula Variable or Formula Literal
Arg2 : Variable use as independent variable of Formula
Arg3 : Lower Limit
Arg4 : Higher Limit

Example:

Lram($3*x^2$, x, 0, 2) := 7.76160000000001
LramX($3*x^2$, x, 0, 2, 50) := 7.76160000000001

See Also :

[TRAP\(,,,\)](#), [TRAPX\(,,,,\)](#), [SIMP\(,,,\)](#), [SIMPX\(,,,,\)](#), [MRAM\(,,,\)](#), [MRAMX\(,,,,\)](#),
[LRAMX\(,,,,\)](#), [RRAM\(,,,\)](#), [RRAMX\(,,,,\)](#), [INTEG\(,,,\)](#), [INTEGX\(,,,,\)](#)

LRAMX(ARG1, ARG2, ARG3, ARG4, ARG5)

The Functions return the Approximate Area of Arg1 in respect to Arg2, using Left Riemann Sum. Limit is from Arg3 to Arg4

Arg1 : Formula Variable or Formula Literal
Arg2 : Variable use as independent variable of Formula
Arg3 : Lower Limit
Arg4 : Higher Limit
Arg5 : N value; the amount of segment for area.

Example:

LramX(3*x^2, x, 0, 2, 50) := 7.76160000000001

Lram(3*x^2, x, 0, 2) := 7.76160000000001

See Also :

[TRAP\(,,,\)](#), [TRAPX\(,,,,\)](#), [SIMP\(,,,\)](#), [SIMPX\(,,,,\)](#), [MRAM\(,,,\)](#), [MRAMX\(,,,,\)](#),
[LRAM\(,,,\)](#), [RRAM\(,,,\)](#), [RRAMX\(,,,,\)](#), [INTEG\(,,,\)](#), [INTEGX\(,,,,\)](#)

RRAM(ARG1, ARG2, ARG3, ARG4)

The Functions return the Approximate Area of Arg1 in respect to Arg2, using Right Riemann Sum. Limit is from Arg3 to Arg4 with N=50

Arg1 : Formula Variable or Formula Literal
Arg2 : Variable use as independent variable of Formula
Arg3 : Lower Limit
Arg4 : Higher Limit

Example:

RRam($3*x^2$, x, 0, 2) := 8.24160000000001
RRamX($3*x^2$, x, 0, 2, 50) := 8.24160000000001

See Also :

[TRAP\(,,,\)](#), [TRAPX\(,,,,\)](#), [SIMP\(,,,\)](#), [SIMPX\(,,,,\)](#), [MRAM\(,,,\)](#), [MRAMX\(,,,,\)](#),
[LRAM\(,,,\)](#), [LRAMX\(,,,,\)](#), [RRAMX\(,,,,\)](#), [INTEG\(,,,\)](#), [INTEGX\(,,,,\)](#)

RRAMX(ARG1, ARG2, ARG3, ARG4, ARG5)

The Functions return the Approximate Area of Arg1 in respect to Arg2, using Right Riemann Sum. Limit is from Arg3 to Arg4

Arg1 : Formula Variable or Formula Literal
Arg2 : Variable use as independent variable of Formula
Arg3 : Lower Limit
Arg4 : Higher Limit
Arg5 : N value; the amount of segment for area.

Example:

RRamX(3*x^2, x, 0, 2, 50) := 8.24160000000001

RRam(3*x^2, x, 0, 2) := 8.24160000000001

See Also :

[TRAP\(,,,\)](#), [TRAPX\(,,,,\)](#), [SIMP\(,,,\)](#), [SIMPX\(,,,,\)](#), [MRAM\(,,,\)](#), [MRAMX\(,,,,\)](#),
[LRAM\(,,,\)](#), [LRAMX\(,,,,\)](#), [RRAM\(,,,\)](#), [INTEG\(,,,\)](#), [INTEGX\(,,,,\)](#)

MRAM(ARG1, ARG2, ARG3, ARG4)

The Functions return the Approximate Area of Arg1 in respect to Arg2, using Middle Riemann Sum. Limit is from Arg3 to Arg4 with N=50

Arg1 : Formula Variable or Formula Literal
Arg2 : Variable use as independent variable of Formula
Arg3 : Lower Limit
Arg4 : Higher Limit

Example:

MRam($3*x^2$, x, 0, 2) := 7.99920000000001
MRamX($3*x^2$, x, 0, 2, 50) := 7.99920000000001

See Also :

[TRAP\(,,,,\)](#), [TRAPX\(,,,,\)](#), [SIMP\(,,,,\)](#), [SIMPX\(,,,,\)](#), [MRAMX\(,,,,\)](#), [LRAM\(,,,,\)](#),
[LRAMX\(,,,,\)](#), [RRAM\(,,,,\)](#), [RRAMX\(,,,,\)](#), [INTEG\(,,,,\)](#), [INTEGX\(,,,,\)](#)

MRAMX(ARG1, ARG2, ARG3, ARG4, ARG5)

The Functions return the Approximate Area of Arg1 in respect to Arg2, using Middle Riemann Sum. Limit is from Arg3 to Arg4

Arg1 : Formula Variable or Formula Literal
Arg2 : Variable use as independent variable of Formula
Arg3 : Lower Limit
Arg4 : Higher Limit
Arg5 : N value; the amount of segment for area.

Example:

MRamX(3*x^2, x, 0, 2, 50) := 7.99920000000001

MRam(3*x^2, x, 0, 2) := 7.99920000000001

See Also :

[TRAP\(,,,,\)](#), [TRAPX\(,,,,\)](#), [SIMP\(,,,,\)](#), [SIMPX\(,,,,\)](#), [MRAM\(,,,,\)](#), [LRAM\(,,,,\)](#),
[LRAMX\(,,,,\)](#), [RRAM\(,,,,\)](#), [RRAMX\(,,,,\)](#), [INTEG\(,,,,\)](#), [INTEGX\(,,,,\)](#)

TRAP(ARG1, ARG2, ARG3, ARG4)

The Functions return the Approximate Area of Arg1 in respect to Arg2, using Trapezoid Rule. Limit is from Arg3 to Arg4 with N=50

Arg1 : Formula Variable or Formula Literal
Arg2 : Variable use as independent variable of Formula
Arg3 : Lower Limit
Arg4 : Higher Limit

Example:

Trap($3*x^2$, x, 0, 2) := 8.00160000000001

TrapX($3*x^2$, x, 0, 2, 50) := 8.00160000000001

See Also :

[TRAPX\(,,,,\)](#), [SIMP\(,,\)](#), [SIMPX\(,,,,\)](#), [MRAM\(,,\)](#), [MRAMX\(,,,,\)](#), [LRAM\(,,\)](#),
[LRAMX\(,,,,\)](#), [RRAM\(,,\)](#), [RRAMX\(,,,,\)](#), [INTEG\(,,\)](#), [INTEGX\(,,,,\)](#)

TRAPX(ARG1, ARG2, ARG3, ARG4, ARG5)

The Functions return the Approximate Area of Arg1 in respect to Arg2, using Trapezoid Rule. Limit is from Arg3 to Arg4

Arg1 : Formula Variable or Formula Literal
Arg2 : Variable use as independent variable of Formula
Arg3 : Lower Limit
Arg4 : Higher Limit
Arg5 : N value; the amount of segment for area.

Example:

TrapX(3*x^2, x, 0, 2, 50) := 8.00160000000001

Trap(3*x^2, x, 0, 2) := 8.00160000000001

See Also :

[TRAP\(,,,,\)](#), [SIMP\(,,,,\)](#), [SIMPX\(,,,,\)](#), [MRAM\(,,,,\)](#), [MRAMX\(,,,,\)](#), [LRAM\(,,,,\)](#),
[LRAMX\(,,,,\)](#), [RRAM\(,,,,\)](#), [RRAMX\(,,,,\)](#), [INTEG\(,,,,\)](#), [INTEGX\(,,,,\)](#)

DERIV(ARG1, ARG2, ARG3)

The Functions return the derivative of Arg1 in respect to Arg2.

Arg1 : Formula Variable or Formula Literal

Arg2 : Variable use as independent variable of Formula

Arg3 : Floating point value use to evaluate answer

Example:

Deriv(2*x, x, 2) := 1.99999999999929

See Also :

[DERIVX\(,,,\)](#)

DERIVX(ARG1, ARG2, ARG3, ARG4)

The Functions return the derivative of Arg1 in respect to Arg2.

Arg1 : Formula Variable or Formula Literal

Arg2 : Variable use as independent variable of Formula

Arg3 : Floating point value use to evaluate answer

Arg4 : derivative detail

Example:

Derivx(2*x, x, 2,.00045) := 1.99999999999929

See Also :

[DERIV\(,,\)](#)

!(ARG1)

The Functions return the factorial of Arg1.

Arg1 : Integer value

Example:

!(6) := 720

PERCENT(ARG1) OR %(ARG1)

The Functions return one-hundredth of Arg1.

Arg1 : Floating point value

Example:

Percent(30) := 0.3

%150 := 1.5

ARG1 ^ ARG2

The Function Returns Arg1 to the Power of Arg2; It is exactly the Same as [POWER\(\)](#) Function

Arg1 : Floating point value

Arg2 : Integer value or fractional value

Example :

8 := 2 ^ 3

2 := 4 ^ .5

See Also :

[ROOT\(\)](#), [POWER\(\)](#), [SQR\(\)](#), [CUBE\(\)](#)

POWER(ARG1, ARG2)

The Function Returns Arg1 to the Power of Arg2; It is exactly the Same as Operator $\hat{=}$

Arg1 : Floating point value

Arg2 : Integer value or fractional value

Example :

8 := Power(2, 3)

2 := Power(4, 1/2)

See Also :

[ROOT\(\)](#), $\hat{=}$, [SQR\(\)](#), [CUBE\(\)](#)

ROOT(ARG1, ARG2)

The Function Returns Arg2 as a Root of Arg1

Arg1 : Integer value or fractional value

Arg2 : Floating point value

Example :

2 := Root(2, 4)

8 := Root(1/3, 2)

3 := Root(3, 27)

See Also :

[POWER\(\)](#), [^](#), [SQRT\(\)](#), [CUBERT\(\)](#)

MAX(ARG1, ARG2)

The Function Returns the Greater of the Two Arguments

Arg1 : Floating point value

Arg2 : Floating point value

Example :

78.9 := Max(78.9, 6.8)

34 := Max(7.8, 34)

See Also :

[MIN\(,\)](#), [≤](#), [≤=](#), [≤!](#), [≥](#), [≥=](#), [≥!](#)

MIN(ARG1, ARG2)

The Function Returns the Lowest Value of the Two Arguments

Arg1 : Floating point value

Arg2 : Floating point value

Example :

6.8 := Min(78.9, 6.8)

7.8 := Min(7.8, 34)

See Also :

[MAX\(.,.\)](#), [>](#), [>=](#), [>!](#), [<](#), [<!](#), [<=](#)

ROUNDX(ARG1, ARG2)

The Function Returns Arg1 Rounded To The Precision of Arg2

Arg1 : Floating point value

Arg2 : Integer Value in Range [0..9] ;

If Argument is a floating Point Then it will be truncated

Example :

34.567 := RoundX(34.5673789, 3)

34 := RoundX(34.5673789, 0)

See Also :

[ROUND\(\)](#)

LOGX(ARG1, ARG2)

The Function Returns Log of Arg1 to Base Arg2; $\text{LogX}(\text{Arg1}, 10)$ is exactly the same as [LOG\(Arg1\)](#)

Arg1 : Floating point value

Arg2 : Floating point value

See Also :

[LOG\(\)](#)

ARG1 <! ARG2

The Operator Returns The Smaller Value of The Two Arguments; If Arg1 is a Variable then the Answer is stored into it.

Arg1 : Floating point value; Usually a Variable
Arg2 : Floating point value

Example :

6 := 6 <! (5+3)

8 := 6 <! 5 + 3

If AA = 31 then

10 := AA <! (AA-21)

66 := AA + 56

See Also :

[<=>](#), [<=](#), [>=](#), [>!](#), [>>](#), [>](#), [>=](#), [MIN\(,\)](#), [MAX\(,\)](#)

ARG1 >! ARG2

The Operator Returns The Greatest Value of The Two Arguments; If Arg1 is a Variable then the Answer is stored into it.

Arg1 : Floating point value; Usually a Variable
Arg2 : Floating point value

Example :

8 := 6 >! (5+3)

9 := 6 >! 5 + 3

If AA = 31 then

40 := AA >! (AA+9)

96 := AA + 56

See Also :

[>>](#), [>](#), [>=](#), [<!](#), [<<](#), [<](#), [<=](#), [MAX\(,\)](#), [MIN\(,\)](#)

ARG1 << ARG2

The Operator Redirect Arg2 to Arg1

Arg1 : Floating point value; Usually a Variable
Arg2 : Floating point value

Example :

```
8 := 6 << (5+3);  
8 := 6 << 5 + 3;  
If AA = 6 then  
    8 := AA << (5+3);  
    Now AA := 8  
If AA = 6 then  
    8 := AA << 5 + 3;  
    Now AA := 5
```

See Also :

<!, >>, >!

ARG1 >> ARG2

The Operator Redirect Arg1 to Arg2

Arg1 : Floating point value

Arg2 : Floating point value; Usually a Variable

Example :

```
8 := (5 + 3) >> 6;
```

```
8 := 5 + 3 >> 6;
```

```
If AA = 6 then
```

```
    8 := (5+3) >> AA;
```

```
    Now AA := 8
```

```
If AA = 6 then
```

```
    8 := 5 + 3 >> AA;
```

```
    Now AA := 3
```

See Also :

>!, <<, <!

ARG1 * ARG2

The Operator multiply Arg1 to Arg2

Arg1 : Floating point value

Arg2 : Floating point value

See Also :

/, MOD, DIV

ARG1 / ARG2

The Operator Divide Arg1 by Arg2

Arg1 : Floating point value

Arg2 : Floating point value; Not Zero

See Also :

[*](#), [MOD](#), [DIV](#)

ARG1 DIV ARG2

The Operator Divide Arg1 by Arg2 and returns An Integer Value that represents the Amount Arg2 divides into Arg1

Arg1 : Floating point value

Arg2 : Floating point value; Not Zero

See Also :

[/](#), [*](#), [MOD](#)

ARG1 MOD ARG2

The Operator Divide Arg1 by Arg2 and returns An Integer Value that represents the Remainder; The Answer takes the Sign of Arg1

Arg1 : Floating point value

Arg2 : Floating point value; Not Zero

See Also :

[/](#), [*](#), [DIV](#)

ARG1 + ARG2

The Operator Adds Arg1 to Arg2;

Arg1 : Floating point value

Arg2 : Floating point value

See Also :

[=](#)

ARG1 - ARG2

The Operator Subtract Arg1 by Arg2; Multiple Minus Signs changes the Signs of the Arguments

Arg1 : Floating point value

Arg2 : Floating point value

Example :

11 := 5 - -6

-1 := 5 - --6

See Also :

[NEG\(\)](#), [+](#)

ARG1 < ARG2

This Boolean Operation Returns 1 if Arg1 is Less then Arg2, else 0 is return

Arg1 : Floating point value

Arg2 : Floating point value

See Also :

[<=](#), [>](#), [>=](#), [>!](#), [<!](#), [MIN\(,\)](#), [MAX\(,\)](#)

ARG1 <= ARG2

This Boolean Operation Returns 1 if Arg1 is Less or equal to Arg2, else 0 is return

Arg1 : Floating point value

Arg2 : Floating point value

See Also :

<, >, >=, >!, <!, MIN(,), MAX(,), =, NOT()

ARG1 > ARG2

This Boolean Operation Returns 1 if Arg1 is Greater then Arg2, else 0 is return

Arg1 : Floating point value

Arg2 : Floating point value

See Also :

[>=](#), [≤](#), [<=](#), [≥!](#), [≤!](#), [MIN\(,\)](#), [MAX\(,\)](#)

ARG1 >= ARG2

This Boolean Operation Returns 1 if Arg1 is Greater or equal to Arg2, else 0 is return

Arg1 : Floating point value

Arg2 : Floating point value

See Also :

[>](#), [<](#), [<=](#), [>=](#), [<!](#), [>!](#), [MIN\(,\)](#), [MAX\(,\)](#), [=](#), [NOT\(\)](#)

ARG1 = ARG2

This Boolean Operation Returns 1 if Arg1 is equal to Arg2, else 0 is return

Arg1 : Floating point value

Arg2 : Floating point value

See Also :

<>, NOT(), <=, >=

ARG1 <> ARG2

This Boolean Operation Returns 1 if Arg1 is Not equal to Arg2, else 0 is return

Arg1 : Floating point value

Arg2 : Floating point value

See Also :

[NOT\(\)](#), [=](#), [<=](#), [>=](#)

ARG1 AND ARG2

This is a Bit-Wise Operator; Arg1 and Arg2 gets truncated to integer if they are Floats;
Operation is done at the Bit Level;

Arg1 : Floating point value
Arg2 : Floating point value

sample :

4 := 5 And 6

See Also :

[NOT\(\)](#), [OR](#), [XOR](#)

ARG1 OR ARG2

This is a Bit-Wise Operator; Arg1 and Arg2 gets truncated to integer if they are Floats
Operation is done at the Bit Level;

Arg1 : Floating point value
Arg2 : Floating point value

sample:

7 := 5 Or 6

See Also :

[NOT\(\)](#), [AND](#), [XOR](#)

ARG1 XOR ARG2

This is a Bit-Wise Operator; Arg1 and Arg2 gets truncated to integer if they are Floats
Operation is done at the Bit Level;

Arg1 : Floating point value
Arg2 : Floating point value

sample:

3 := 5 Xor 6

See Also :

[NOT\(\)](#), [AND](#), [OR](#)

INC(ARG1)

The Function adds 1 to Arg1; If Arg1 is a Variable, answer is Stored into Arg1;

Arg1 : Floating point value

Example :

7 := Inc(6)

If AA = 7 then

8 := Inc(AA)

Now AA := 8

See Also :

[DEC\(\)](#), [<<](#), [<!](#), [>>](#), [>!](#)

DEC(ARG1)

The Function Subtract 1 from Arg1; If Arg1 is a Variable, answer is Stored into Arg1;

Arg1 : Floating point value

Example :

5 := Dec(6)

If AA = 7 then

6 := Dec(AA)

Now AA := 6

See Also :

[INC\(\)](#), [<<](#), [<!](#), [>>](#), [>!](#)

NOT(ARG1)

This is a Bit-Wise Function; Arg1 gets truncated to an integer if it is a Floats
Operation is done at the Bit Level;

Arg1 : Floating point value

sample :

-10 := Not(9)

9 = Not(-10)

See Also

[AND](#), [OR](#), [XOR](#), [<>](#)

INV(ARG1)

The Function return the inverse of Arg1; Same as : $1/\text{Arg1}$

Arg1 : Floating point value

Example :

$0.25 := \text{Inv}(4)$

See Also

[/](#), [DIV](#)

DEG(ARG1)

The Function return the Degree representation of Arg1; Same as : $\text{Arg1} * 180 / \text{Pi}$

Arg1 : Floating point value

Example :

360 := Deg(2*pi)

See Also

[RAD\(\)](#)

RAD(ARG1)

The Function return the Radian representation of Arg1; Same as : $\text{Arg1} * \text{Pi} / 180$

Arg1 : Floating point value

Example :

3.14159265358979 := Rad(180)

See Also

[DEG\(\)](#)

SQR(ARG1)

The Function return the Square of Arg1

Arg1 : Floating point value

Example :

25 := Sqr(5)

See Also

[SQRT\(\)](#), [POWER\(\)](#), [^](#)

SQRT(ARG1)

The Function return the Square-Root of Arg1

Arg1 : Floating point value

Example :

4 := Sqrt(16)

See Also

[SQR\(\)](#), [ROOT\(\)](#), [^](#)

CUBE(ARG1)

The Function return Arg1 to the third Power

Arg1 : Floating point value

Example :

8 := Cube(2)

See Also

[CUBERT\(\)](#), [POWER\(\)](#), [^](#)

CUBERT(ARG1)

The Function return the Cube-Root of Arg1

Arg1 : Floating point value

Example :

2 := Cubert(8)

See Also

[CUBE\(\)](#), [ROOT\(\)](#), [^](#)

LOG(ARG1)

The Function return the Log base 10 of Arg1

Arg1 : Floating point value

Example :

0.903089986991944 := Log(8)

See Also

[LOGX\(,\)](#), [LN\(,\)](#), [EXP\(,\)](#)

LN(ARG1)

The Function return the Natural Log of Arg1

Arg1 : Floating point value

Example :

$103 := \text{Ln}(\text{Exp}(103))$

See Also

[LOG\(\)](#), [LOGX\(,\)](#), [EXP\(\)](#)

EXP(ARG1)

The Function return the Exponent of Arg1

Arg1 : Floating point value

Example :

103 := Exp(Ln(103))

See Also

[LN\(\)](#), [LOG\(\)](#), [LOGX\(\)](#)

SIN(ARG1)

The Function returns Sine of Arg1; Answer Depends if current Mode is Set to Radian or Degree

Arg1 : Floating point value

See Also

[COS\(\)](#), [TAN\(\)](#), [CSC\(\)](#), [SEC\(\)](#), [COT\(\)](#), [ARCSIN\(\)](#)

COS(ARG1)

The Function returns Cosine of Arg1; Answer Depends if current Mode is Set to Radian or Degree

Arg1 : Floating point value

See Also

[SIN\(\)](#), [TAN\(\)](#), [CSC\(\)](#), [SEC\(\)](#), [COT\(\)](#), [ARCCOS\(\)](#)

TAN(ARG1)

The Function returns Tangent of Arg1; Answer Depends if current Mode is Set to Radian or Degree

Arg1 : Floating point value

See Also

[SIN\(\)](#), [COS\(\)](#), [CSC\(\)](#), [SEC\(\)](#), [COT\(\)](#), [ARCTAN\(\)](#)

CSC(ARG1)

The Function returns Cosecant of Arg1; Answer Depends if current Mode is Set to Radian or Degree

Arg1 : Floating point value

See Also

[SIN\(\)](#), [COS\(\)](#), [TAN\(\)](#), [SEC\(\)](#), [COT\(\)](#)

SEC(ARG1)

The Function returns Secant of Arg1; Answer Depends if current Mode is Set to Radian or Degree

Arg1 : Floating point value

See Also

[SIN\(\)](#), [COS\(\)](#), [TAN\(\)](#), [CSC\(\)](#), [COT\(\)](#)

COT(ARG1)

The Function returns Cotangent of Arg1; Answer Depends if current Mode is Set to Radian or Degree

Arg1 : Floating point value

See Also

[SIN\(\)](#), [COS\(\)](#), [TAN\(\)](#), [CSC\(\)](#), [SEC\(\)](#)

ARCSIN(ARG1)

The Function returns The Inverse-Sine of Arg1; Answer Depends if current Mode is Set to Radian or Degree

Arg1 : Floating point value

See Also

[SIN\(\)](#), [ARCCOS\(\)](#), [ARCTAN\(\)](#)

ARCCOS(ARG1)

The Function returns The Inverse-Cosine of Arg1; Answer Depends if current Mode is Set to Radian or Degree

Arg1 : Floating point value

See Also

[COS\(\)](#), [ARCSIN\(\)](#), [ARCTAN\(\)](#)

ARCTAN(ARG1)

The Function returns The Inverse-Tangent of Arg1; Answer Depends if current Mode is Set to Radian or Degree

Arg1 : Floating point value

See Also

[TAN\(\)](#), [ARCSIN\(\)](#), [ARCCOS\(\)](#)

SINH(ARG1)

The Function returns The Hyperbolic-Sine of Arg1

Arg1 : Floating point value

See Also

[COSH\(\)](#), [TANH\(\)](#)

COSH(ARG1)

The Function returns The Hyperbolic-Cosine of Arg1

Arg1 : Floating point value

See Also

[SINH\(\)](#), [TANH\(\)](#)

TANH(ARG1)

The Function returns The Hyperbolic-Tangent of Arg1

Arg1 : Floating point value

See Also

[SINH\(\)](#), [COSH\(\)](#)

ROUND(ARG1)

The Function round Arg1 to nearest Whole Number

Arg1 : Floating point value

See Also

[ROUNDX\(,\)](#)

INT(ARG1)

The Function returns the Integer Part of Arg1

Arg1 : Floating point value

See Also

[IPART\(\)](#), [FPART\(\)](#)

IPART(ARG1)

The Function returns the Integer Part of Arg1

Arg1 : Floating point value

See Also

[INT\(\)](#), [FPART\(\)](#)

FPART(ARG1)

The Function returns the Fractional Part of Arg1

Arg1 : Floating point value

See Also

[INT\(\)](#), [IPART\(\)](#)

ABS(ARG1)

The Function returns the Absolute value of Arg1

Arg1 : Floating point value

See Also

[NEG\(\)](#)

NEG(ARG1)

The Function Negates Arg1

Arg1 : Floating point value

Example :

-5 := Neg(-5)

-5 := Neg(5)

See Also

[ABS\(\)](#)

RAND(ARG1)

The Function returns a Random Number in the Range of [0..(Arg1-1)]

Arg1 : Floating point value

