

This element performs allows to solve equations of the form $y=x+a$.
It will automatically generate all necessary attributes(output attributes will be marked as ReadOnly).

Element also support multiple equations, then equations should be separated by “;” symbol.

Formula attribute: in this field use has to enter formula in the form $y=f(x)$

You can use left and right parenthesis, but the count left and right parenthesis has to be the same.

Real numbers should use dot(.) exm: 1.2334

The following operators are implemented:

Basic:

- + - plus two variables or numbers (before any number or variables will be ignored)
- - minus two variables or numbers(before any number or variables will make as negative)
- * - multiply two variables or numbers
- / - division two variables or numbers
- \ - integer division two variables or numbers
- mod - the remainder of the division of two variables or numbers
- ^ - raising left expression to the power of right expression

Boolean:

- < - determine whether one expression is smaller then another
- > - determine whether one expression is larger then another
- <= - determine whether one expression is smaller then or equal to another
- >= - determine whether one expression is larger then or equal to another
- == - determine whether one expression is equal to another
- <> - determine whether one expression is not equal to another
- and - logical comparison of two boolean expression
- nand - logical negation of logical comparison of two boolean expression(Not(a And b))
- or - logical Or of two boolean expression
- nor - logical negation of logical Or of two boolean expression(Not(a Or b))
- xor - logical Xor of two boolean expression
- not - logical negation of a boolean expression

The following functions are implemented:

Basic:

- abs - absolute value of number of argument
- round - the passed argument value rounded to the nearest whole number
- rnd - random value between two arguments(rnd(1,10) – random value between 1 and 10)
- sqr - the square value of argument
- sqrt - the square root value of argument

Trigonometry:

sin - the sine of the argument
cos - the cosine of the argument
tan - the tangent of the argument

Logarithmy:

log - the logarithm of the first argument based on second argument ($\text{Log}_A(b)$ – where A is base)
log10 - the 10-based logarithm of the argument
ln - the natural logarithm of the argument
exp - exponentiate value of the argument
pow - the first argument value to the power of second argument

Bitwise:

bitnot - the one's complement of the argument
bitor - bitwise Or on two arguments
bitnor - the one's complement of bitwise Or on two arguments ($\text{bitnot}(\text{bitor}(a,b))$)
bitand - bitwise And on two arguments
bitnand- the one's complement of bitwise And on two arguments ($\text{bitnot}(\text{bitand}(a,b))$)

All functions have to use one left and one right parenthesis.

if some function contains two or more arguments then all of them have to be separated by “,” symbol. for example:

`y=rnd(1,30)`

`y=log(100, 10)`