

### Poly3

Second order extended polynomial function. This function lets you calculate a second order polynomial transformation of the input value, where the polynomial is extended with a second constant term. The "a" parameter is the "regular" constant term, the "b" parameter is the coefficient of the first order term, and the "c" parameter is the coefficient of the second order term. The second constant term is the product of the "d" and the "e" parameters. If you specify numbers for all the parameters, you probably do not need the "d" and "e" parameters. In such cases the second constant term can be eliminated simply by adding it to the first constant term, and you may just as well use the simpler Poly2 function instead. In situations where some of the parameters are references to nodes, however, the extra constant term provides a little bit more flexibility.

Default parameter values:

$$a = 0, b = 1, c = 0, d = 0, e = 0$$

Example:

$$a = 3, b = 2, c = 1.5, d = 0.5, e = 0.8$$

$$\text{Input} = 4.2 \Rightarrow \text{Output} = 38.26$$

$$\text{Input} = 8.5 \Rightarrow \text{Output} = 128.775$$