NPV

Net Present Value function. This function lets you calculate the present value of a future value. The "a" parameter denotes the interest rate, and the "b" parameter contains the number of periods between the present time and the time when the future value is cashed in (or out). If you use this function with the same interest rate, many places in a model, you can create an "interest rate" node with this interest value as output value, and insert a reference to this node in the "a" fields. If you want to change the interest rate in the model, this is done by changing the "interest rate" node. This setup also allows you to attach uncertainty to the interest rate throughout a model.

Note that by using negative "b" values you can use the NPV function to calculate the future value of a present value as well.

Default parameter values:

a = 0.1, b = 1

Example 1:

a = 0.05, b = 7

Input = 4.2   =>   Output = 2.9848616

Input = 7.9   =>   Output = 5.6143825

Example 2:

a = 0.05, b = -7

Input = 2.9848616   =>   Output = 4.2

Input = 5.6143825   =>   Output = 7.9