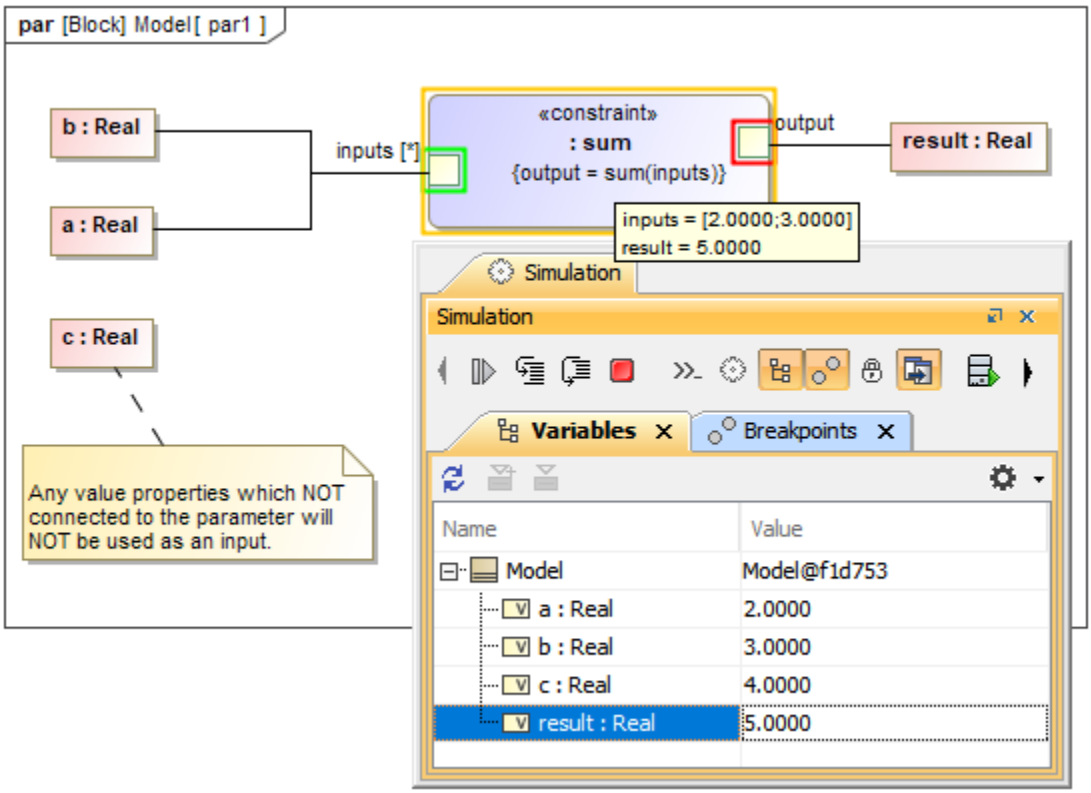
Many-to-one binding calculations

Constraint Blocks in Cameo Simulation Toolkit support many value properties connected to a constraint parameter with multiplicity [*] to perform a specification without updating values back to those properties. Any value properties which are not connected to the constraint parameter will not be used as an input. The constraint parameter [*] shows a list of the connected value properties in the **Variables** pane, **Console** pane (Info), and during debugging. The result from the specification of the constraint Block is calculated from the list of value properties. For example:

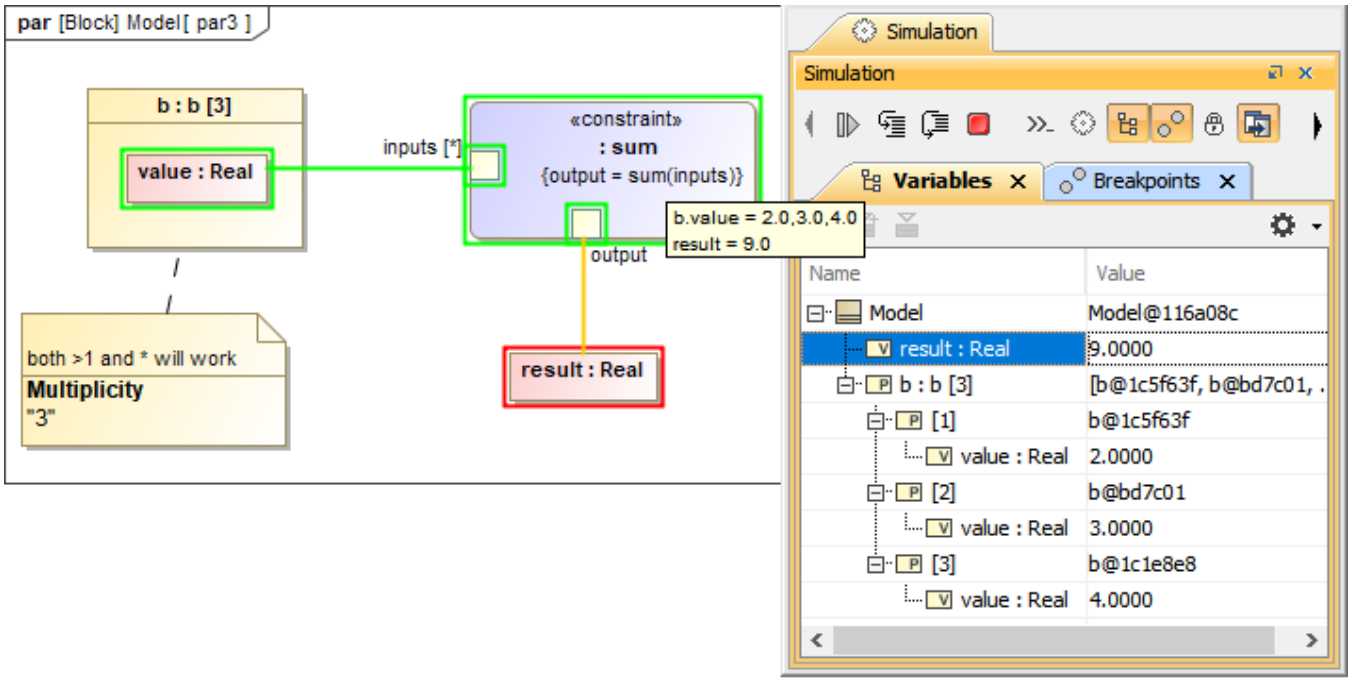
```
inputs [*] = [2.0;3.0;4.0];
output = sum(inputs);
output = 9.0;
```

You can also use Add/Remove values with the parameter [*] in the **Variables** pane as shown in the following figure.



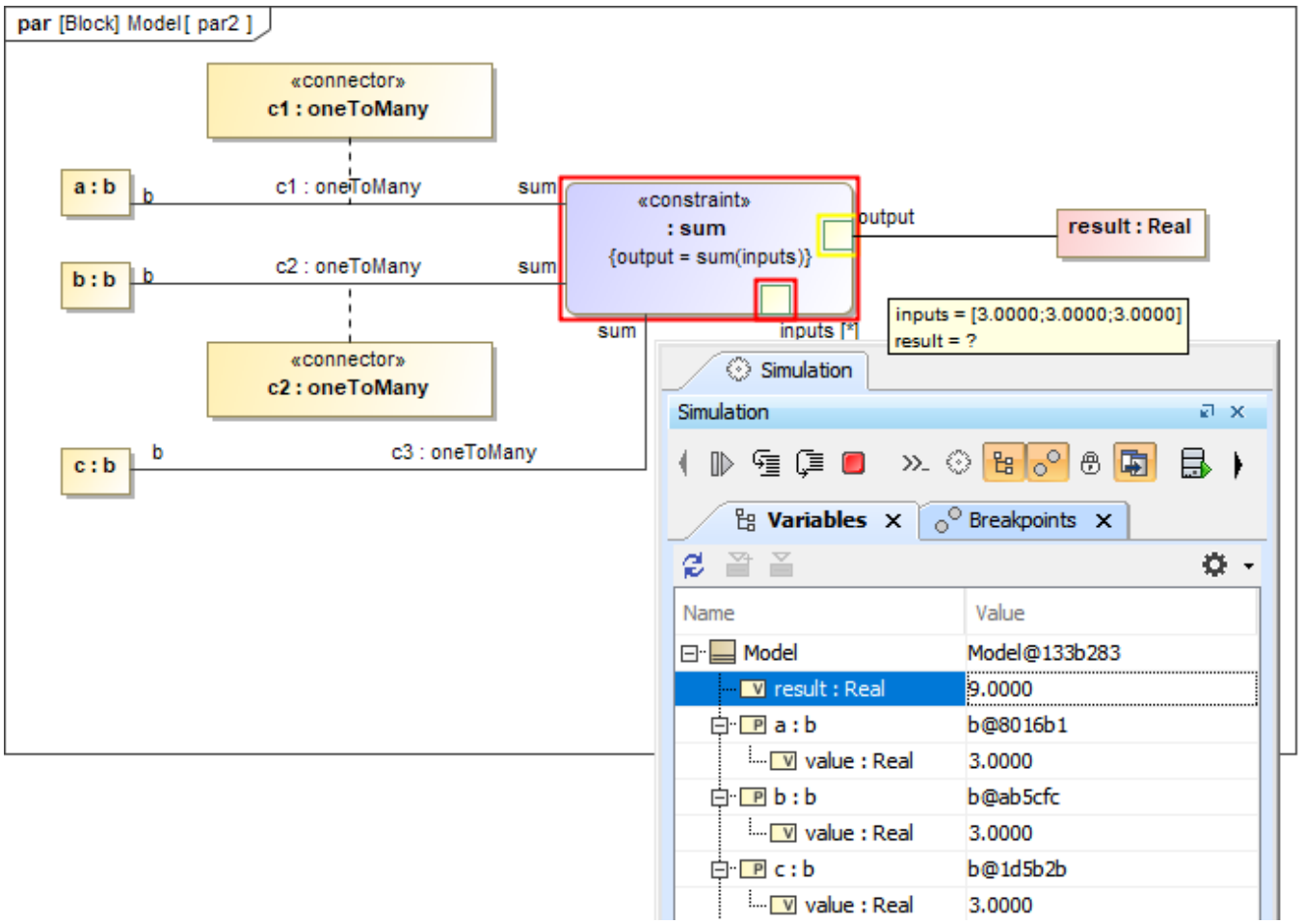
Many-to-one binding supported by constraint Blocks through many value properties.

A constraint Block supports many multiplicities of Part property connected to a constraint parameter with multiplicity [*] to perform a specification as in the figure below.



Many-to-one binding supported by constraint Blocks through multiplicities of Part property.

A constraint Block supports many multiplicities of Participant property of an association Block connected to a constraint parameter with multiplicity [*] to perform a specification. The Connector must be set type as the association Block in order to be a member of the input. Also, **{end=...}** must be specified for each Participant. Any participant properties of a Connector property will be synchronized with both the constraint parameter [*] and value properties as shown in the figure below.



Many-to-one binding supported by constraint Blocks through multiplicities of Participant property.