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| Circle Language Spec: Parameters |

## Parameters & Arguments

### Concept

A command contains parameters. *Arguments* are what is filled in into the parameters. Basically arguments are the sources or targets of assignments, that have a parameter as a source or target. When the other side of the assignment, that is not the parameter, is outside the command, then that is the argument.

A parameter can be assigned a value. The source object of the value is then called the argument. Also, the value itself could be callled the argument, in contrast to the *source* of the value. A parameter can also be pointing to an external object. The object pointed to is the argument. Sometimes a parameter is not filled in at all, but is a created object by default anyway. In that case, the parameter is its own argument. When a parameter is pointed *at* from the outside, the pointer to the parameter is the argument. When a value assignment sources a parameter and yields over the value to another object, then the other object is the argument.

So an argument is what is filled in as the parameter, what is pointing to the parameter, or the object on an external end of an assignment, the other end of which is the parameter.

Since an argument can be a pointer to a parameter, and a parameter can be pointed to multiple times, a single parameter can have multiple arguments.

### In a Diagram

The article *Parameters & Arguments* conceptually explained the usage of the term argument in relation to parameters. The current article gives examples of the diagrammatic expression of parameters and their arguments.

