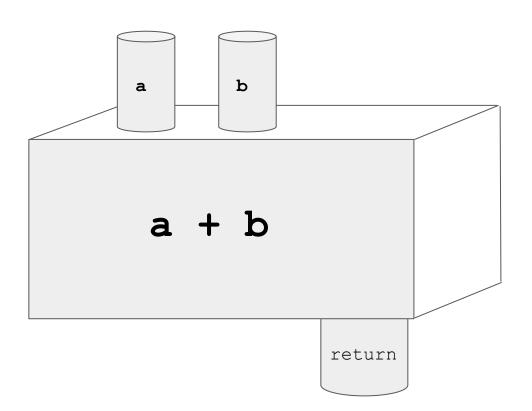
A **function** is a block of code designed to perform a particular task.

A function first must be defined:

```
function add(a, b) {
  var sum = a + b;
  return sum;
}
```

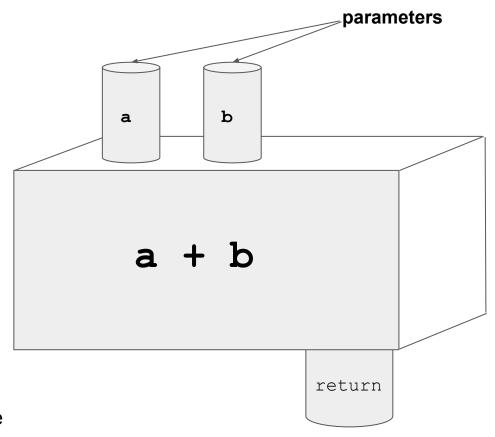


Functions can take input and produce output. The function receives input through parameters.

**Parameters** hold the inputted values while the function executes.

```
function add(a, b) {
  var sum = a + b;
  return sum;
}
```

Functions **return** output. The return statement can also be used to stop the function and return back to the call location.

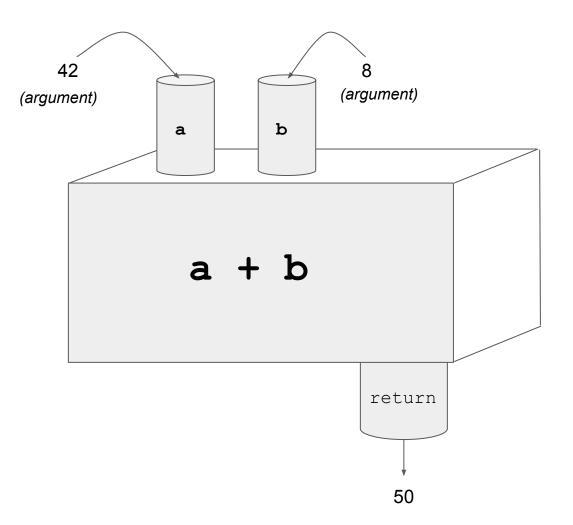


A function is used (aka "executed") with a **call** statement:

add(42, 8)

Values **passed** into function parameters are called **arguments**.

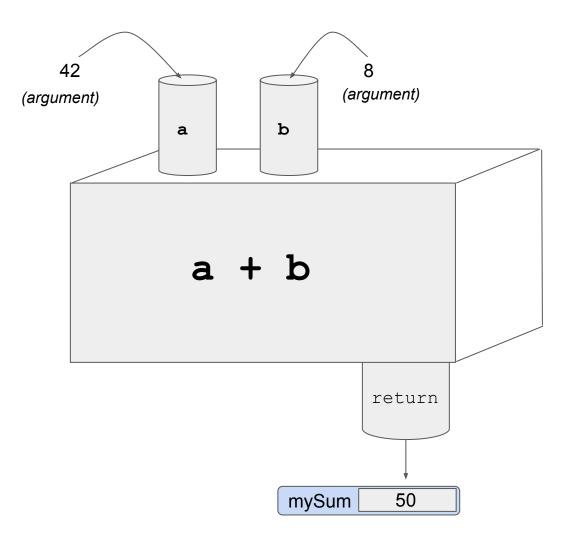
When we pass an argument into a function parameter, we are assigning the argument's value to a variable named like the parameter.



Values returned from a function are then used at the calling location

$$var mySum = add(42, 8)$$

In this case, the add function returns a value that is assigned to mySum.





Variables can be used to hand their value to the parameter.

```
var mySum = add(42, 8);
var yourSum = add(mySum, 7);
```

