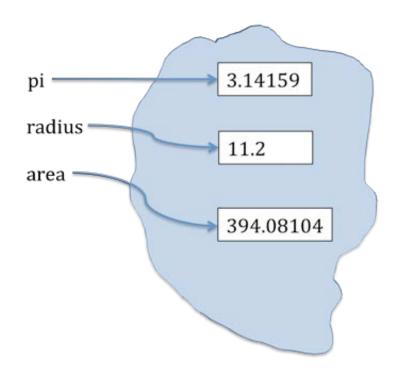
## Simple means of abstraction

- While we can write arbitrary expressions, it is useful to give names to values of expressions, and to be able to reuse those names in place of values
- pi = 3.14159
- radius = 11.2
- area = pi \* (radius\*\*2)

## Binding variables and values

- The statement pi = 3.14159
  assigns the name pi to the
  value of the expression to the
  right of the =
- Think of each assignment statement as creating a binding between a name and a value stored somewhere in the computer
- We can retrieve the value associated with a name or variable by simply invoking that name, e.g., pi



## Changing bindings

- Variable names can be rebound, by invoking new assignments statements.
- For example, if we now execute:
  - radius = 11.2
- we get the diagram shown here.
- Note that this doesn't change the value associated with area

