

# Variables

Professor Doug Blank  
[cs.brynmawr.edu/~dblank](http://cs.brynmawr.edu/~dblank)  
[dblank@cs.brynmawr.edu](mailto:dblank@cs.brynmawr.edu)

# Why use variables?

- Abstracts away gory details  
temperature = 9.0/5.0 \* celsius + freezeTemp
- Allows you to set it once, use many times  
x = 3465346.22435  
y = x / 6  
z = x \* x + y
- Allows you to name particular values so you know what they mean

# Four ways to create Variables

- Assignment

```
x = "Hello"
```

- Define a function name

```
def sayName():  
    speak("Hello")
```

- Define a function, inside parentheses

```
def doSomething(thing1, thing2):  
    speak(thing1)  
    beep(1, thing2)
```

- Use a for-loop

# Variables inside the Parens

Define a function, inside parentheses:

```
def doSomething(thing1, thing2):  
    speak(thing1)  
    beep(1, thing2)
```

Call it:

```
doSomething("I'm sorry, Dave, I can't do that.", 400)
```

# Variables inside the Parens

Define a function, inside parentheses:

```
def doSomething(thing1, thing2):  
    speak(thing1)  
    beep(1, thing2)
```

parameters

Call it:

```
doSomething("I'm sorry, Dave, I can't do that.", 400)
```

arguments