Problem 1: Four Fours

This problem's challenge is to create each numeric value from 0 to 9 using only four fours!

When you're finished, submit your code at the bottom of this page.

There is a long tradition of the four-fours puzzle. For example, it was described in the January 1964 issue of *Scientific American* in Martin Gardner's "Mathematical Games" column.

Try the following line of code in the trinket below:

```
print "Zero is", 4+4-4-
4
```

Make sure that you put the code on a new line in the trinket below.

Your output should look like this:

```
Zero is
0
```

Now, add nine more lines to your code similar to `print "Zero is", 4+4-4-4` in which you use arithmetic operations, `+`, `-`, `*`, `/`, parens `(`, `)`, and `**` (power) to compute the values 0 through 9 using only four fours. Make sure that your code doesn't use the digits 0, 1, 2, 3, 5, 6, 7, 8, and 9! You may also use `44`, counting as two fours, or `4.`, the floating-point value of four (pay attention to the period), though neither of these is required to succeed with 0 through 9. Here are what the results—but not the source code—will look like:

```
Zero is 0
One is 1
Two is 2
Three is
3
Four is 4
Five is 5
Six is 6
Seven is
7
Eight is
8
Nine is 9
```

You may find the four fours game addicting—or frustrating—or both!

Hint: We found the power operator really helpful!

By the way, if you feel it's unfair that you don't have factorial and square root, they're there, too. They're not necessary for any of the problems, but here's how to use them:

```
import math
print "4! is", math.factorial(4)
print "the square root of 4 is",
math.sqrt(4)
```

For this Homework 1, Problem 1 problem, all that's left is to submit your code.