1. **Import package**

As a data scientist, some notions of geometry never hurt. Let's refresh some of the basics.

For a fancy clustering algorithm, you want to find the circumference, CC, and area, AA, of a circle. When the radius of the circle is r, you can calculate CCand AA as:

C=2πrC=2πr

A=πr2A=πr2

To use the constant pi, you'll need the math package. A variable r is already coded in the script. Fill in the code to calculate C and A and see how the [**print()**](https://docs.python.org/3/library/functions.html#print) functions create some nice printouts.

* mport the math package. Now you can access the constant pi with math.pi.
* Calculate the circumference of the circle and store it in C.
* Calculate the area of the circle and store it in A.

# Selective import

General imports, like import math, make **all** functionality from the mathpackage available to you. However, if you decide to only use a specific part of a package, you can always make your import more selective:

from math import pi

Let's say the Moon's orbit around planet Earth is a perfect circle, with a radius r (in km) that is defined in the script.

* Perform a selective import from the math package where you only import the radians function.
* Calculate the distance travelled by the Moon over 12 degrees of its orbit. Assign the result to dist. You can calculate this as r \* phi, where ris the radius and phi is the angle in radians. To convert an angle in degrees to an angle in radians, use the [**radians()**](https://docs.python.org/3/library/math.html#math.radians) function, which you just imported.
* Print out dist.

# Different ways of importing

There are several ways to import packages and modules into Python. Depending on the import call, you'll have to use different Python code.

Suppose you want to use the function [**inv()**](http://docs.scipy.org/doc/numpy-1.10.0/reference/generated/numpy.linalg.inv.html), which is in the linalg subpackage of the scipypackage. You want to be able to use this function as follows:

my\_inv([[1,2], [3,4]])

Which import statement will you need in order to run the above code without an error?

**Answer is** from scipy.linalg import inv as my\_inv