

Instance variables are more powerful when you can guarantee a rigidity to the data the object is holding

the self keyword refers to the object and not the class being called

In Circle's constructor, set the instance variable self.radius to equal half the diameter that gets passed in.

class Circle:

pi = 3.14

#create the class

class variable

def __init__(self, diameter):

#create the object with 2 arguments

print("Creating circle with diameter {d}".format(d=diameter))

Add assignment for self.radius here:

self.radius = diameter / 2

Define a new method .circumference() for your circle object that takes only one argument, self,

and returns the circumference of a circle with the given radius by this formula:

def circumference(self):

create method with single argument

circumference = 2 * self.pi * self.radius

note the reference to self

return circumference

Define three Circles with three different diameters.

A medium pizza, medium_pizza, that is 12 inches across.

Your teaching table, teaching_table, which is 36 inches across.

The Round Room auditorium, round_room, which is 11,460 inches across.

medium_pizza = Circle(12)

teaching_table = Circle(36)

round_room = Circle(11460)

Print out the circumferences of medium_pizza, teaching_table, and round_room

print(medium_pizza.circumference())

print(teaching_table.circumference())

print(round_room.circumference())