

CSC108-Introduction to Computer Programming, winter2011

Quiz 4 (15 minutes)

Name: _____

Student ID: _____

Mark: ____/10

(a) [5 marks] Define a `Circle` class. It should contain a float value called `radius`. Your class should contain an `init` method and methods to compute the `circumference` ($2\pi r$) and `area` (πr^2) of the circle. (The constant π is `math.pi`, if you import the `math` module). Please make sure that the indentation of your written solution is clear.

Answer:

(b) [2 marks] What method would you add to your `Circle` class such that, if `C` is a `Circle` object with radius 1.5, then typing `print C` gives the following output:

Circle with radius 1.5

Answer:

- (c) [3 marks] Given your `Circle` class, write a fragment of Python code to do the following:
- create a new `Circle` object with radius of 2.5 and assign to variable `C1`;
 - print the circumference of `C1`;
 - print the area of `C1`;
 - create another `Circle` object with radius 3.5 and assign to variable `C2`;
 - print the Boolean result indicating whether ten plus the area of `C1` is greater than the area of `C2`.

Answer:

