**Name: Session:**

**Programming I**

**Lab Exercise 9.8.2022**

Using Python, solve the following problems. Submit your documented source code. Your source code should have at minimum the following documentation:

#Name of program (i.e. Lab Exercise 9.6.2019 Problem 4)

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#Brief description of program

1. Write a program that creates two variables, one for your first name and one for your last name. Assign names to these variables. Using a single printstatement, print your first and last names together with a space in between.
2. Write a program that asks for the dimensions (in feet) of a rectangular room, and then calculates and displays the total amount of carpet needed to cover the room.
3. Write a program that does the same as in #2, but that also asks for the cost per square yard of carpet. Then have the program display these three things:

* the total amount of carpet, in square feet.
* the total amount of carpet, in square yards (1 square yard = 9 square feet).
* the total cost of the carpet.

1. Write a program that helps the user add up her change. The program should ask

* “How many quarters?”
* “How many dimes?”
* “How many nickels?”
* “How many pennies?”

Then it should give the total value of the change.

1. Write a program that asks the user how many cents you have (1 – 99). The program should report how many quarters, dimes, nickels, and pennies are required to make that change.
2. Pi can be approximated using the following two formulas:



Which of these is a closer approximation? Consider comparing to Math.PI.