HW 1 (10 pts)

**Name**: YourName

Write your solution after the question. Show your work (i.e., the relevant python code). An example question has already been filled out for you. **Submit this file to Moodle.**

1. [0 pt] Compute the sum of 8, 9, and 10.

>>> 8 + 9 + 10

27

1. [1/2 pt] Compute the number of seconds in 3 weeks.
2. [1/2 pt] Compute the number of inches in 4 miles.
3. [1 pt] Compute the number of 5 ft square tiles to cover the floor of a 20 by 15 ft room.
4. [1 pt] Compute the number of handshakes required for each person in a class of 16 to shake hands with all other classmates.
5. [1/2 pt] Compute 1/5 of 55.
6. [1 pt] The closest galaxy to us is the Canis Major Dwarf Galaxy, which is 25,000 light years away. There are $5.879 ⋅10^{12}$ miles per light year. How many miles away is the Canis Major Dwarf Galaxy?
7. [1 pt] How many days would it take to travel to the Canis Major Dwarf Galaxy at 100 miles per hour?
8. [1 pt] Compute the factorial of 12 (without using loops or function calls, only multiplication).
9. [1 pt] Each line contains a single potential variable name. Which of the following are legal variable names? Write your answer below.

\_rectangle2

\_3

area of a rectangle

area\_of\_rectangle

rectangle34

35rectangle

1. [1/2 pt] After all lines are evaluated, what are the values of a, b, c, and d? Label each variable name with its value.



1. [1 pt] What are the values of a and b after Python evaluates each of the following four statements?



1. [1 pt] What is the value of idx after Python evaluates all of the following statements?

