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 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

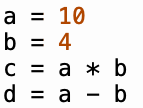
area of a rectangle

area\_of\_rectangle

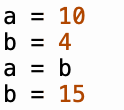
rectangle34

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?

