1. Translate each of the expressions into Python code. Execute each expression in the shell, using reasonable input values where necessary. Make a session record of your interactions with the shell (save the interaction to a file) and submit it as your answer.

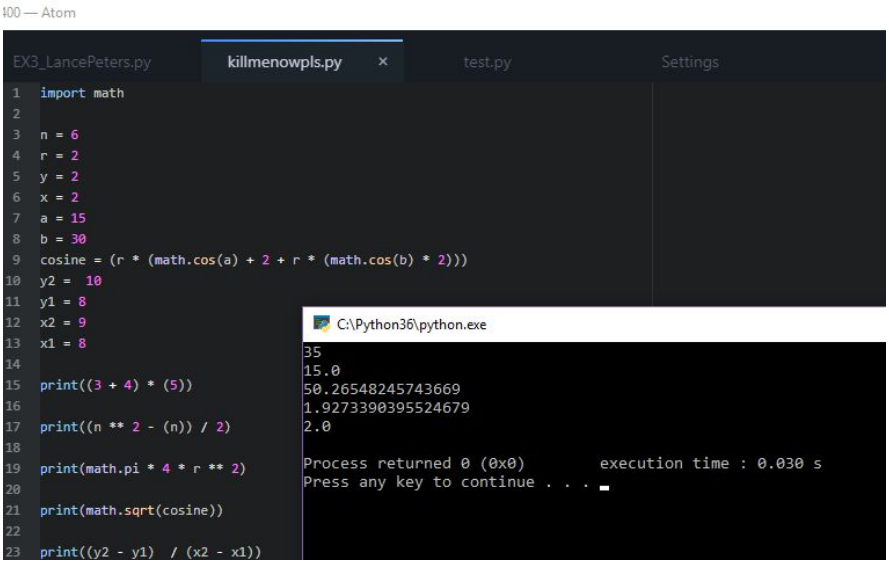
a) (3+4)(5)

b) n(n-1)/2

c) $4*\pi r^2$

d) $\sqrt{r(\cos a)^2 + r(\cos b)^2}$

e) (y2-y1)/(x2-x1)




2. What do you think will happen when operands to integer division or remainder are negative? Write your hypothesis. Consider each of the 5 expressions below and predict the result. Then, try each one out to see if your prediction is correct.

a) -10//3 = -4 Prediction 3.3R

b) -10 % 3 = 2 Prediction -0.3

c) 10 // -3 = -4 Prediction -3.3R

d) 10 % -3 = -2 Prediction -2.9

e) -10 // -3 = 3 Prediction 3.3

3. Write a program to calculate the cost/sq. inch of a circular pizza given the diameter and total price. Submit the code and your results for 8" personal and 23" monster pizzas.