

Applied Math 30S

Name: _____

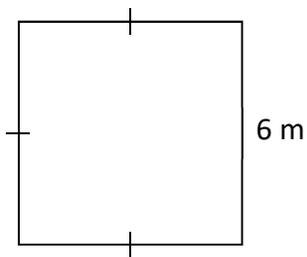
Measurement Hand-In Assignment 2

2D Shapes: Perim., Circ., and Area (L2 to L4)

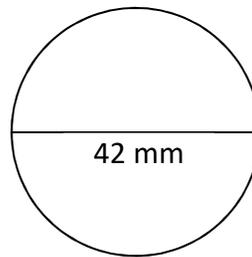
Complete the following questions and hand in this assignment when you are finished. Round all answers to **2 decimal places**, unless instructed otherwise.

1. Find the **perimeter** (or **circumference**) of each of the following figures:

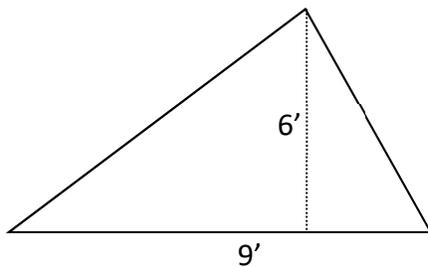
a)



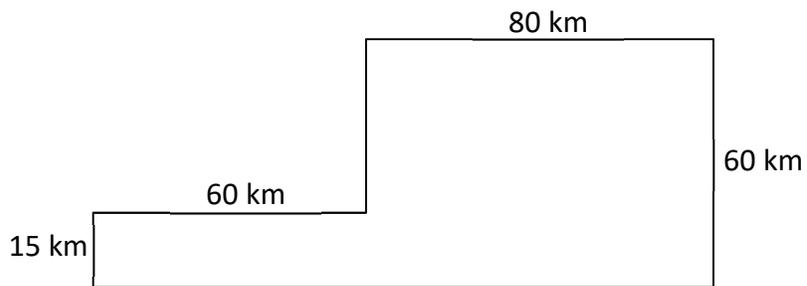
b)



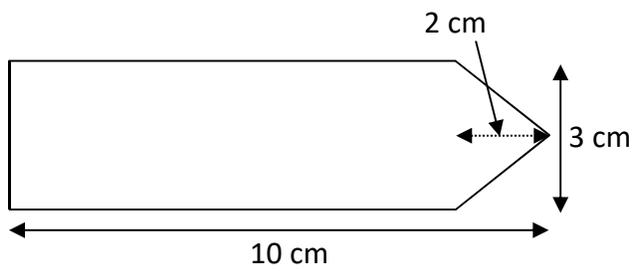
2. Find the **area** of the following triangle:



3. Find the *perimeter* AND the *area* of the following figure. (**Hint:** Determine the length of the missing sides **FIRST.**)

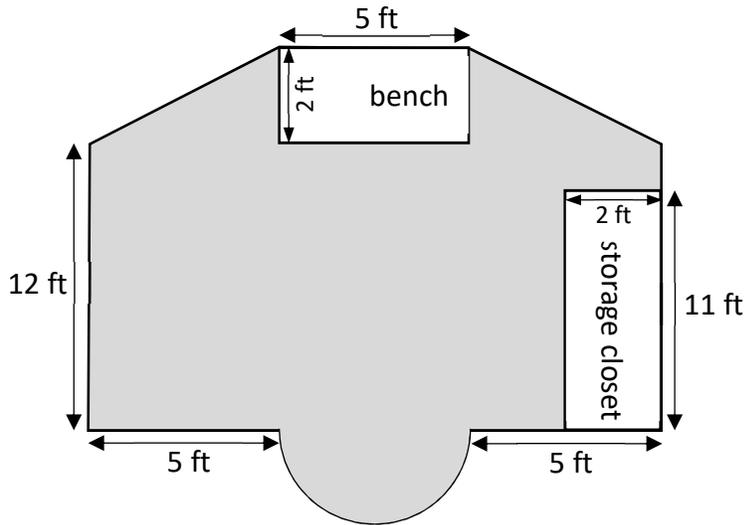


4. Find the *area* of the following compound shape.



5. You just got a part-time job at a home improvement centre – they need your math skills! Your job will be helping customers determine how many tiles they need to purchase to finish their home improvement jobs.

Your first customer wants to put tiles down in a room that they will use as a painting studio. The room has an irregular shape, as shown in the floor plan:



- a) The customer does not need tiles under the built-in bench or storage closet. She requires tiles everywhere else (shaded in the floor plan). Calculate the shaded area of the floor plan.
- b) The tiles the customer has chosen are square, and measure 2 ft. on each side. If the customer wants to purchase an extra 10% for waste, determine the number of tiles the customer requires for this project (in whole tiles).
- c) The tiles are sold in boxes that contain 8 tiles each (the tiles are not sold individually). Determine the cost of tiles for this project, if each box costs \$13.99 plus tax.