MAP 4C   Measurement Review   Name: _____

1. Convert each measurement as indicated. Show your work in the second column.

a. 9 feet = _____ inches	
b. 50 pints = _____ gallons	
c. 25 pounds = _____ ounces	
d. 4 metres = _____ yards	
e. 3 sq ft = _____ cm^2	
f. 1 m^3 = _____ cm^3	
g. 11 gallons = _____ litres	
h. 100 miles = _____ kilometres	
i. 15 kilograms = _____ pounds	
j. 3 litres = _____ fluid ounces	
k. 2.5 tons = _____ tonnes	

2. Find the perimeter of the right triangle with hypotenuse length 15" and one side which measures 4". Round your answer to the nearest tenth of an inch.

3. Find the area of the figure. Round your answer to the nearest tenth.
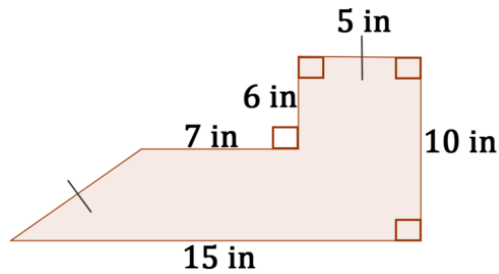
4. Find the volume of the following figure:
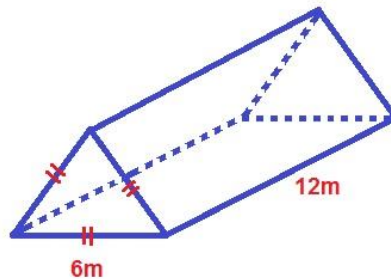
5. A 4 foot-wide deck is to be constructed around a circular swimming pool. The diameter of the pool is 5 metres.
   a. Find the circumference of the outside edge of the deck, in feet.
   b. Find the amount of wood that will be required for the deck, in square feet.

6. A cylindrical storage building has a height of 11 m and a diameter of 13 m.
   c. Determine the surface area, not including the bottom.
   d. Find the volume of the container.

7. A pentagonal prism has a volume of 45 cm³ and a base area of 12 cm². Find the height of the prism to the nearest cm.

8. A camp counsellor is fencing off a rectangular play area for the younger campers.
   e. If she has 16 m of fencing, how should she arrange the fencing to provide the greatest possible play area?
   f. How should she alter her design if she can use the dining hall as one of her boundaries?

9. A tissue box, in the shape of a square-based prism, is to have a volume of 2500 cm³. Determine the dimensions of the tissue box with minimum surface area.

10. Charlie's Chick Peas come in a can that has a diameter of 8 cm and a height of 18 cm.
    g. Determine the volume of one can.
    h. Could Charlie save money on packaging materials by altering the design of his can? Explain.
    i. Find the minimum amount of packaging required for the can, without altering the volume.