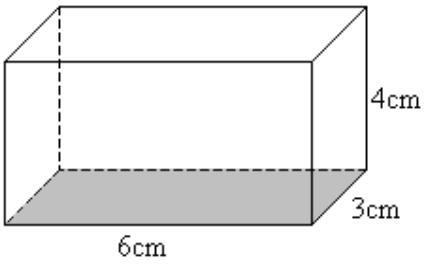
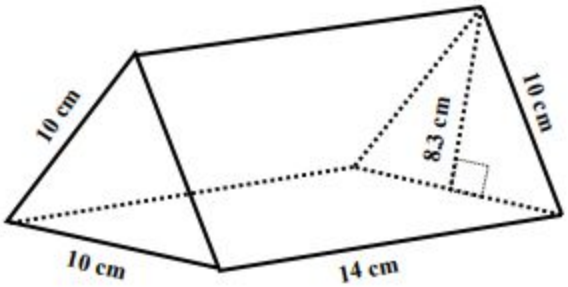
Name_____ Date_____

Covering and Surrounding Study Guide

1. Find the surface area and volume of the following prisms.





Volume_____ Volume_____

Surface Area_____ Surface Area_____

2. Mariam decides she wants to build a pool in her backyard, . She wants the area of the rectangle to be 100 square ft.

a. What dimensions would give her the smallest perimeter (whole numbers only)?

b. What dimensions would give her the biggest perimeter (whole numbers only)?

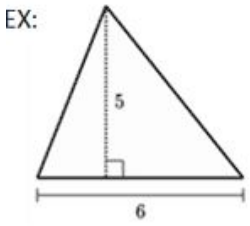
c. Use your answer from part a. If the tiles to build the edges of the pool costs $6.24 per foot, how much would the pool tiles cost?

3.Find the area and perimeter of each below.

a.

$area = \frac{1}{2} b \times h$

EX:



$area = \frac{1}{2} \times 6 \times 5 = 15$

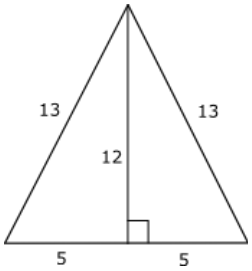
Area_____

b.

Area_____

Perimeter_____

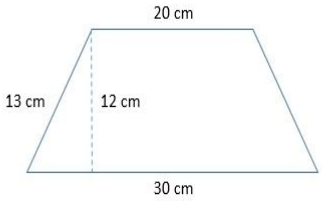
c.



Area_____

Perimeter_____

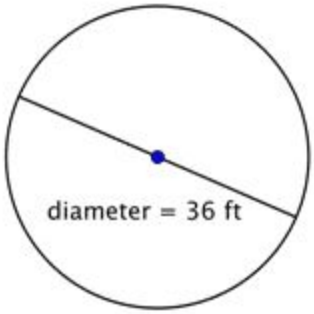
d.



Area_____

Perimeter_____

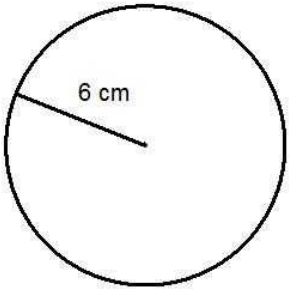
e.



Area_____

Circumference_____

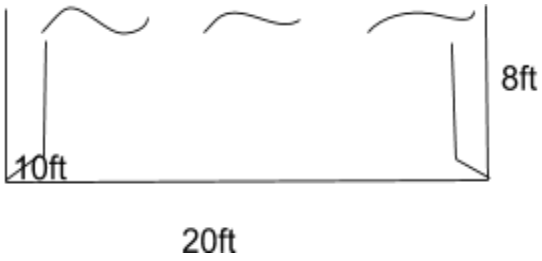
f.



Area_____

Circumference_____

4. Mariam is planning on painting the inside of her pool blue. Below is a rough sketch of her pool.

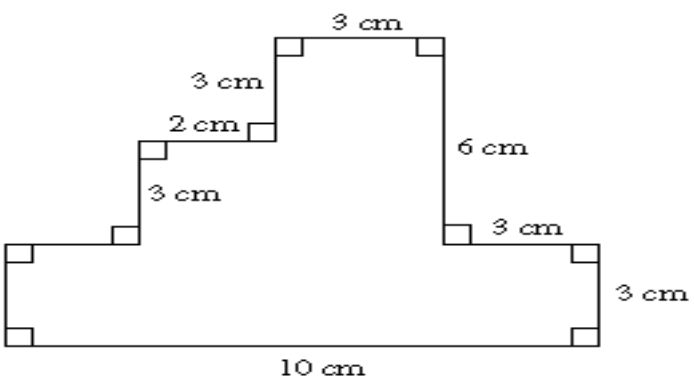


a. Mariam first needs to drain her pool. If her pool is filled to the top, how many cubic feet of water will she drain?

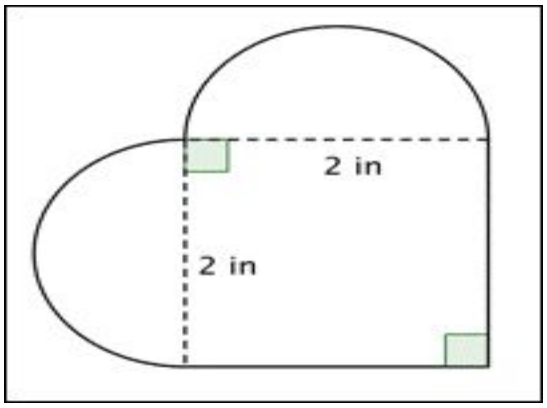
b. Mariam needs to buy paint. How many square feet will she need to cover with paint (4 walls and one floor).

c. Mariam decides to buy a cover that perfectly fits in the pool. What is the area of the cover?

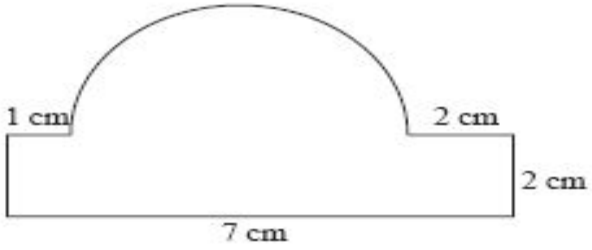
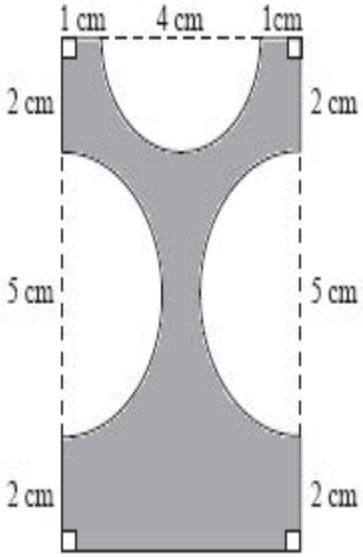
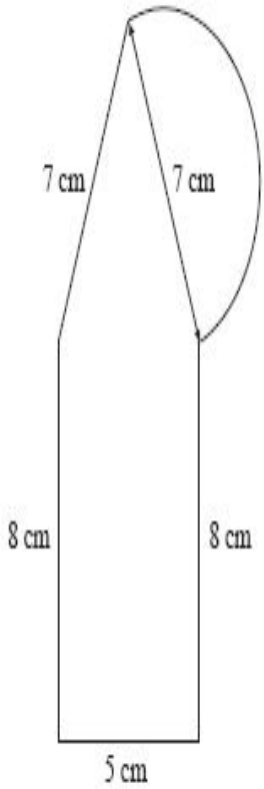
5. Find the area of the compound shapes below. (4 points)



6. Find area and perimeter of the shape below.



7. Find area and Perimeter of the shape below.



8. Find area of each (shaded region for the one on the left)