

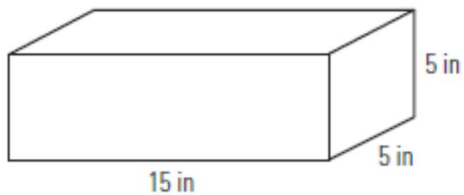
ASSIGNMENT: Surface Area of Rectangular and Triangular Prisms

Name: _____

Date: _____

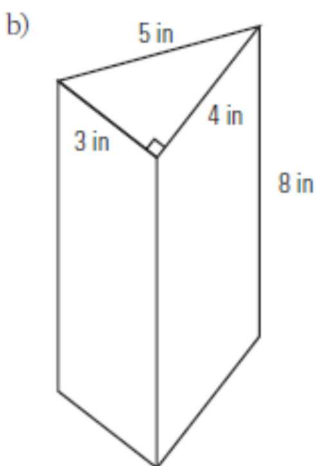
Find the surface area of the following shapes. Show all work!

1.



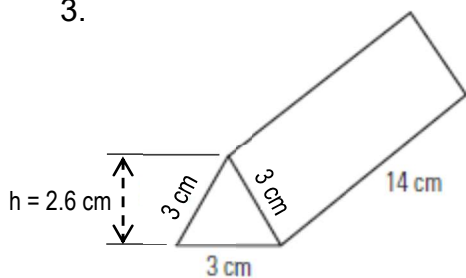
surface area = _____

2.



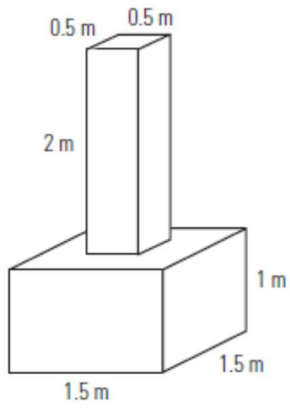
surface area = _____

3.



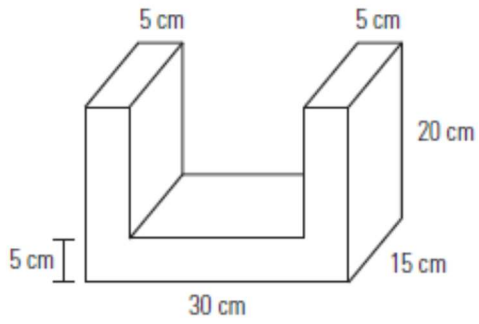
surface area = _____

4.



surface area = _____

5.



surface area = _____

6. Bob is planning to paint his living room. The length of the living room is 32 feet long by 20 feet wide and 8 feet high. Bob is going to paint all 4 walls and the ceiling the same colour.

a) What surface area must Bob paint?

b) If a gallon of paint covers 80 ft^2 , how many gallons does Bob need to buy?
Note: Bob will need to apply 2 coats of paint.

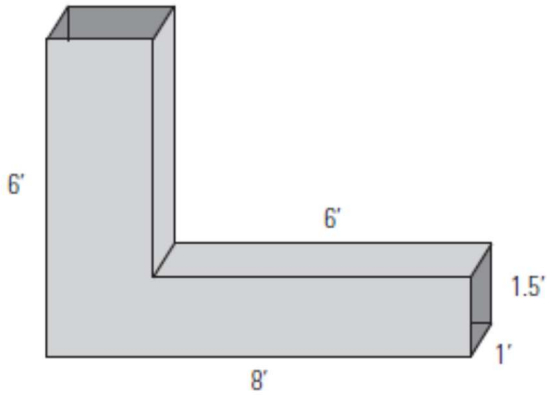
c) If paint costs \$45 per gallon, how much will it cost Bob?

7. Aamir is building a storage chest in the shape of a rectangular prism. The chest will be 90 cm long, 70 cm deep, and 60 cm high.

a) What will be the outer surface area of the box?

b) Aamir needs to buy 20% more wood than the surface area, to account for wastage during cutting. What area of wood will he need to buy?

8. Shar is installing an L-shaped heating duct in a house. If the duct has the measurements shown in the diagram below, what will be the total surface area of the duct? The ends of the duct are open.



1. 350 in² 2. 108 in² 3. 133.8 cm² 4. 14.5 m² 5. 2550 cm²
 6. a) 1472 ft² b) 37 gallons c) \$1665
 7. a) 31 800 cm² b) 38 160 cm²
 8. 66.5 ft²