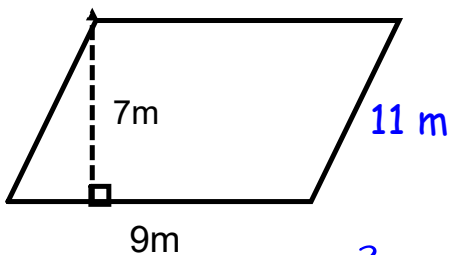


Find area and perimeter.

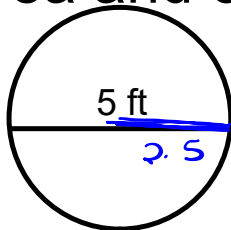
back of p 11



$$A = 9(7) = 63m^2$$

$$P = 9 + 9 + 11 + 11 = 40m$$

Find area and circumference.

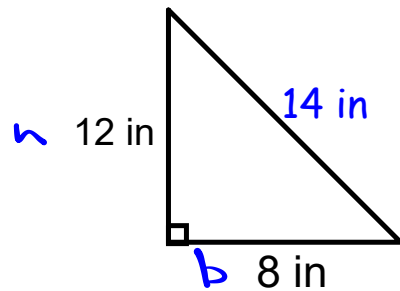


$$A = \pi r^2$$

$$3.14(2.5)^2 = 19.625ft^2$$

$$C = \pi d \rightarrow 3.14(5) = 15.7ft$$

$$C = 2\pi r$$



$$A = \frac{1}{2}(8)(12)$$

$$48in^2$$

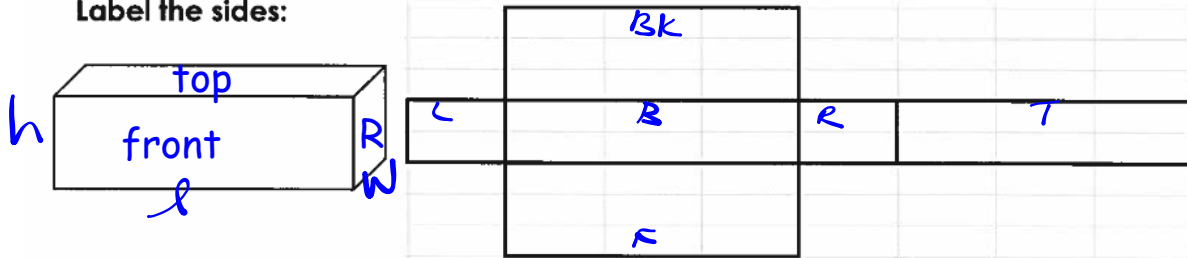
$$P = 12 + 8 + 14$$

$$34in$$

# Surface Area

A rectangular prism has 6 sides (faces).

Label the sides:



Find the area of each rectangle:



Area:

Top: 6 Bottom: 6  
 Left: 2 Right: 2  
 Front: 9 Back: 9  
 Total area: 34

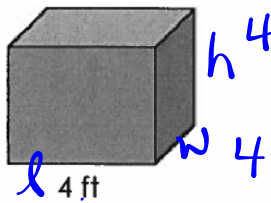
top bottom left right front back

**Formula**  $l \cdot w + l \cdot w + l \cdot w + l \cdot w + l \cdot w + l \cdot w =$

**Actual formula**  $2lw + 2lh + 2wh$

When you find the surface area of rectangular prism make sure you label the sides with length (l), width (w), and height (h). The units are units<sup>2</sup> (because is area)

**Rectangular Prism 1**



S.A. = \_\_\_\_\_  
 S.A. = 96ft<sup>2</sup>

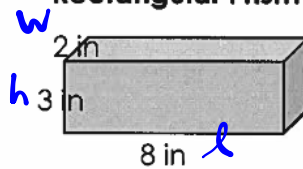
$$2(4)(4) + 2(4)(4) + 2(4)(4)$$

$$2(16)$$

$$32 + 32 + 32$$

$$96$$

**Rectangular Prism 2**



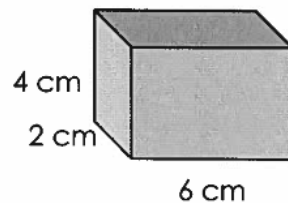
S.A. = 92 in<sup>2</sup>  
 S.A. = \_\_\_\_\_

$$2(8)(2) + 2(8)(3) + 2(2)(3)$$

$$2(16) \quad 2(24) \quad 2(6)$$

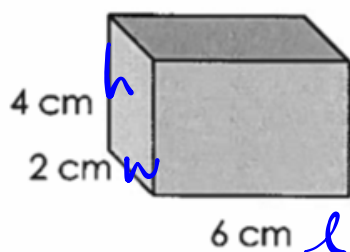
$$32 + 48 + 12$$

**Rectangular Prism 3**



S.A. = \_\_\_\_\_  
 S.A. = \_\_\_\_\_

Rectangular Prism 3



$$\text{S.A.} = \underline{\hspace{2cm}}$$
$$\text{S.A.} = \underline{88\text{cm}^2}$$

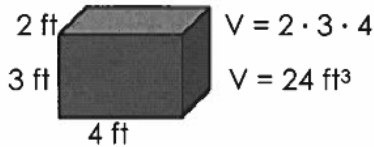
$$2lw + 2lh + 2wh$$

$$2(6)(2) + 2(6)(4) + 2(2)(4)$$
$$24 + 48 + 16$$

Volume is the amount of space inside of a three dimensional figure. It gives the number of 1 unit<sup>3</sup> that can fit inside of the figure.

**Formula**  $lwh$

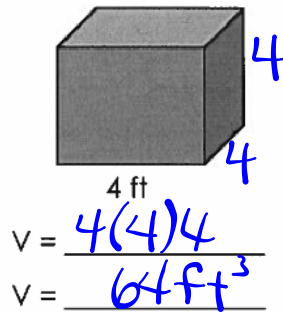
**Rectangular Prism 1**



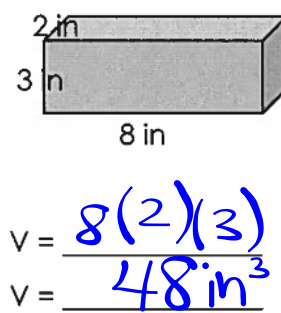
■ This cube  $1 \text{ ft} \cdot 1 \text{ ft} \cdot 1 \text{ ft} = 1 \text{ ft}^3$

24 of these can fit inside the cube to the left.

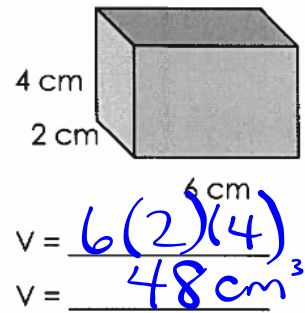
**Rectangular Prism 1**



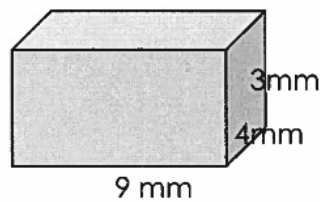
**Rectangular Prism 2**



**Rectangular Prism 3**



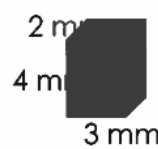
**Rectangular Prism 4**



$V = \underline{\hspace{2cm}}$   
 $V = \underline{\hspace{2cm}}$

$SA = \underline{\hspace{2cm}}$   
 $SA = \underline{\hspace{2cm}}$

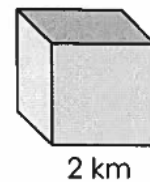
**Rectangular Prism 5**



$V = \underline{\hspace{2cm}}$   
 $V = \underline{\hspace{2cm}}$

$SA = \underline{\hspace{2cm}}$   
 $SA = \underline{\hspace{2cm}}$

**Rectangular Prism 6**



$V = \underline{\hspace{2cm}}$   
 $V = \underline{\hspace{2cm}}$

$SA = \underline{\hspace{2cm}}$   
 $SA = \underline{\hspace{2cm}}$

After Quiz Complete Surface area and Volume Problems

Homework is 6th grade IXL

FF.15 show all work on notebook page