

# Surface Area

April 24, 2007

## Review

8.2) Formulas:

$$A_R = b \cdot h$$

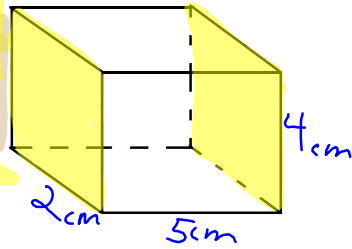
$$A_P = b \cdot h$$

$$A_T = \frac{1}{2} b \cdot h$$

What's so...  
Special about  
the height?

The height is  
**ALWAYS**  
Perpendicular to  
the base!

Surface Area: The Sum of the Areas of the Sides of a 3-D Shape



$A_{\text{Top+Bottom}}$

$A_{\text{Front+Back}}$

$A_{\text{Side+Side}}$

$$A_{\text{Top}} = 2\text{cm} \cdot 5\text{cm} = 10\text{cm}^2 = A_{\text{Bottom}}$$

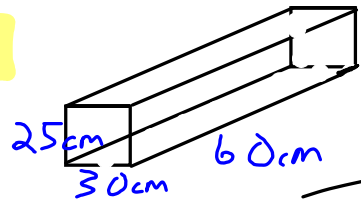
$$A_{\text{Front}} = 5\text{cm} \cdot 4\text{cm} = 20\text{cm}^2 = A_{\text{Back}}$$


$$A_{\text{Side}} = 2\text{cm} \cdot 4\text{cm} = 8\text{cm}^2 = A_{\text{Side}}$$

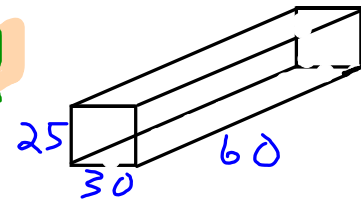
$$SA = A_{\text{Top}} + A_{\text{Bottom}} + A_{\text{Front}} + A_{\text{Back}} + A_{\text{Side}} + A_{\text{Side}}$$

$$= 10\text{cm}^2 + 10\text{cm}^2 + 20\text{cm}^2 + 20\text{cm}^2 + 8\text{cm}^2 + 8\text{cm}^2$$

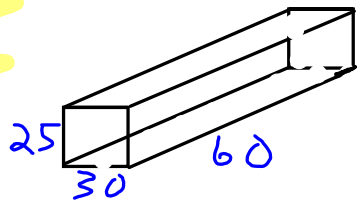
$$= \underline{76\text{cm}^2}$$



Front + Back 



Sides 



Top + Bottom

$$A_{SA} = F + B + S + S + T + B$$
$$=$$

O.T.L.

My Directions:

Find the Surface Area  
of : #'s 13, 14, + 15

from pg 249.

\* Include the unit measure!