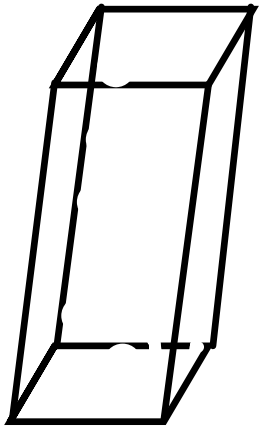
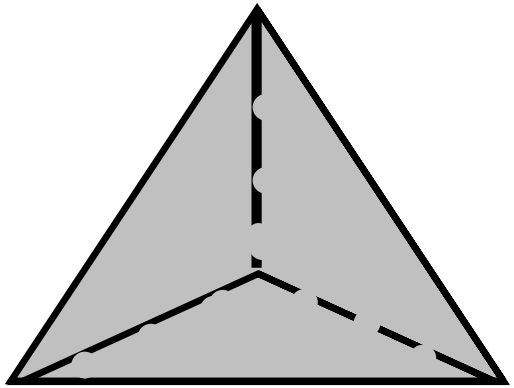
8.7. Volume

May 16, 2007

Prisms vs. Pyramids.



2 Bases



1 Base w/1 Pt.

Area is in Squared units ②

2 #'s to get Area

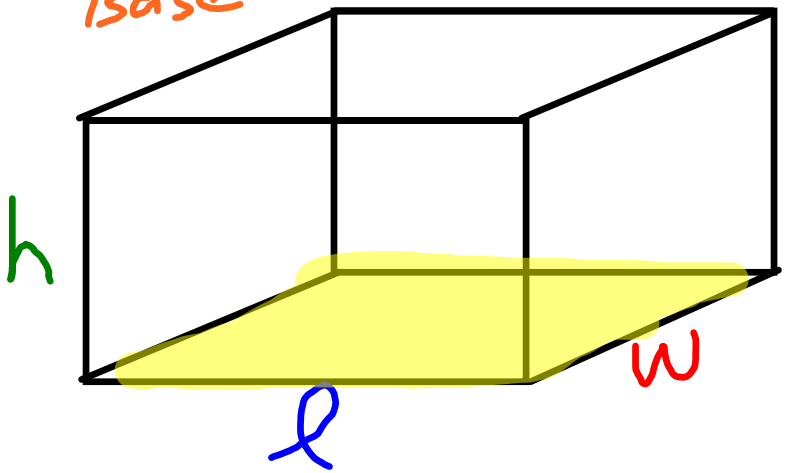
Volume is in cubed units ③

3 #'s to get Volume

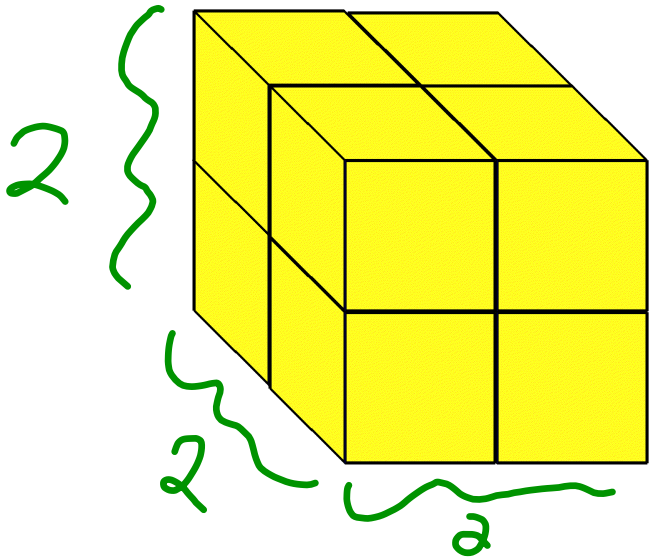
Rectangular Prism.

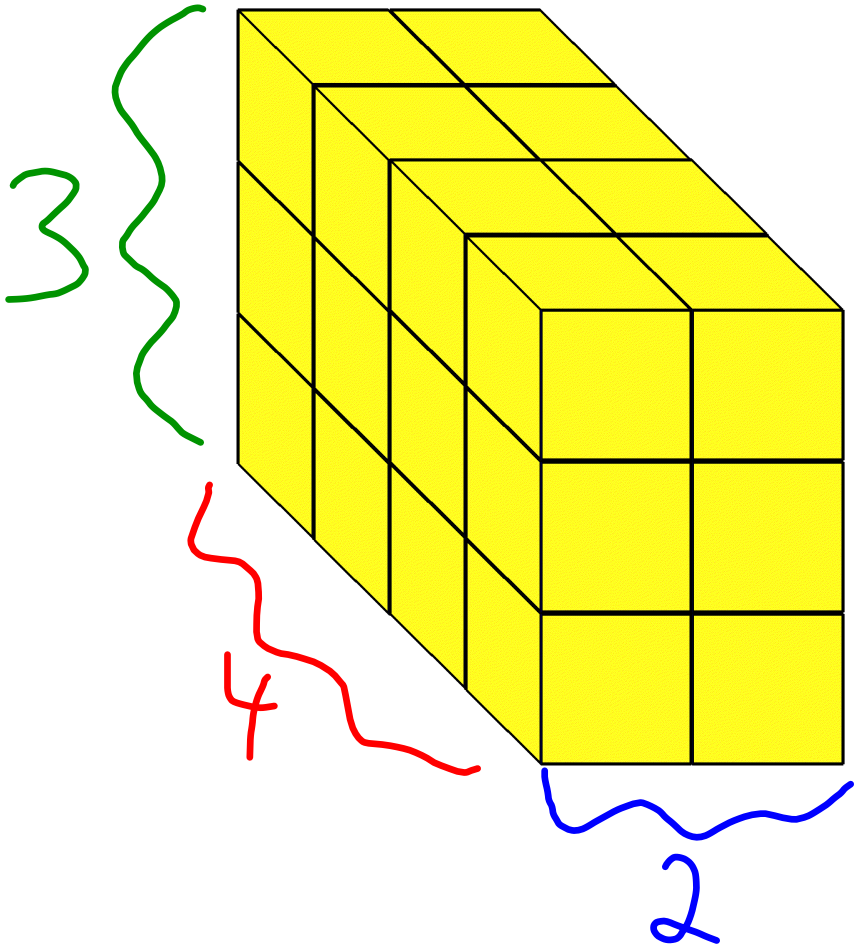
Base

Shape



How Many Cubes





$V = 3 \cdot 4 \cdot 2$

$= 24$ cubes

$V = \ell \cdot w \cdot h$ $\Rightarrow$ Rectangular Prism

$V = A_{RB} \cdot h$

(Area of the Base) $\cdot$ Height

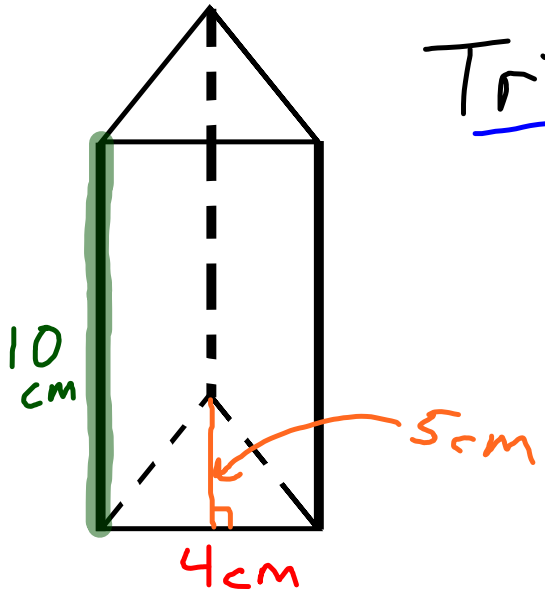
$V = A_{\Delta B} \cdot h$

$A_\Delta = \frac{1}{2} \cdot b \cdot h$

(Area of Base) $\cdot h$

Triangular Prism

(Base) (shape)



$$V = A_B \cdot h$$

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

$$= \frac{1}{2}(4\text{cm})(5\text{cm})$$

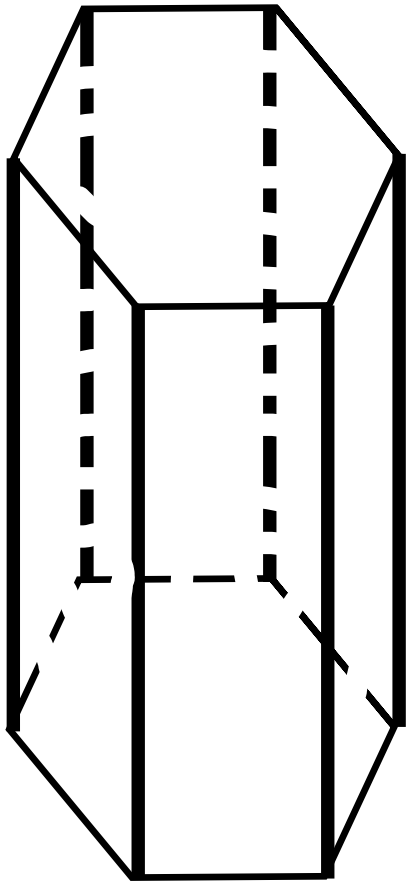
$$= \frac{1}{2}\,20\,\text{cm}^2$$

$$= 10\,\text{cm}^2$$

$$V = A_B \cdot h$$

$$= (10\,\text{cm}^2)(10\,\text{cm})$$

$$= 100\,\text{cm}^3$$

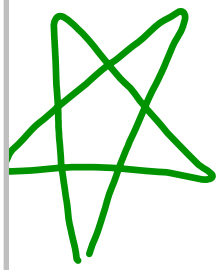


Hexagonal Prism

$$V = A_B \cdot h$$

O.T.L.

None



1: Posters Due Wednesday May 23, 2007

2: Notebooks Due Wednesday May 23, 2007