

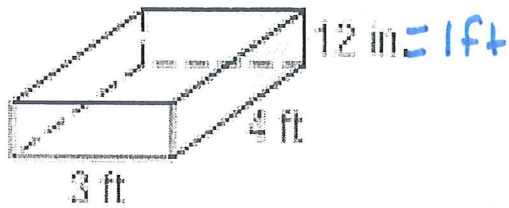
## Volume of Prisms and Pyramids Notes

Volume of:

Prism =  $B \cdot H$   
 ↑  
 area of Base

Pyramid =  $\frac{1}{3} B \cdot H$

**Ex1** Find the volume of a rectangular pool that is 12 in. deep, 3 ft wide, and 4 ft long?

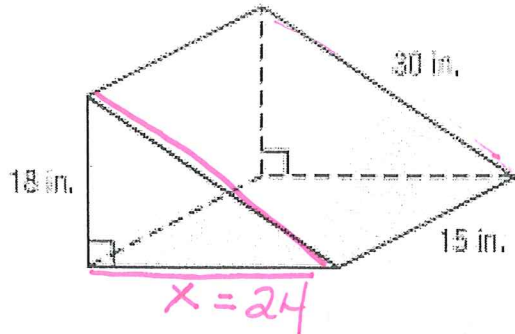


$$V = B \cdot H$$

$$= (3 \times 4) \cdot 1$$

$$V = 12 \text{ ft}^3$$

**Ex2** Find the volume of the triangular prism.



$$V = B \cdot H$$

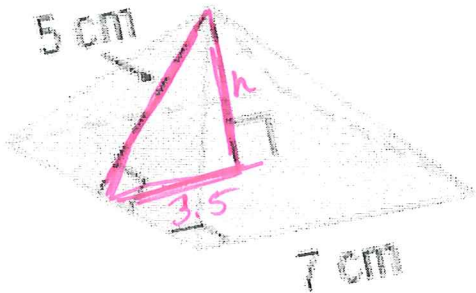
$$V = \frac{1}{2} \cdot 24 \times 18 \times 15$$

$$V = 3,240 \text{ in}^3$$

area of Base

$$B = \frac{1}{2} \cdot 24 \times 18$$

Ex 3.



$$V = \frac{1}{3} B \cdot H$$

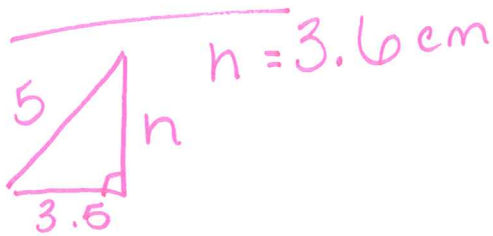
$$V = \frac{1}{3} (7 \times 7) 3.6$$

$$V = 58.8 \text{ cm}^3$$

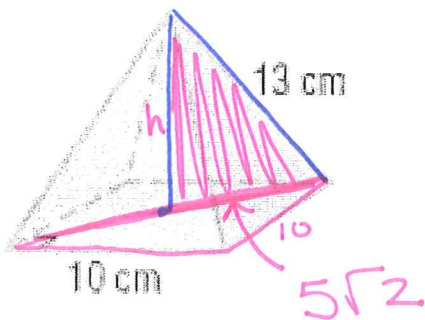
1.) area of the Base

$$B = 7 \times 7$$

2.) Find  $h$



Ex.4



$$h^2 + (5\sqrt{2})^2 = 13^2$$

$$h = 10.9$$

$$B = 10 \times 10$$

$$V = \frac{1}{3} (10 \times 10) 10.9$$

$$V = 363.3 \text{ cm}^3$$