




Digits Lesson 13-4

Volume of Pyramids and Cones


Goal: I will be able to **find the volume of pyramids and cones**

Tool Bag
Formulas, equations,
Vocabulary, etc

Here's How... Notes & Examples

	Rectangular Pyramid	Triangular Pyramid	Cone
			
	Height	Height	Height
	Base	Base	Base
Pyramids	$\text{Volume} = \frac{1}{3} \text{ Volume of Cube}$ $= \frac{1}{3} \text{ Base Area} \cdot \text{height}$		
Cones	$\text{Volume} = \frac{1}{3} \text{ volume of a cylinder}$ $= \frac{1}{3} \pi r^2 h$		


Example #1 Find the volume of each figure:

a) 

$$V = \frac{1}{3} \cdot 5 \cdot 3 \cdot 8$$

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$$= 40 \text{ ft}^3$$

b) 

$$V = \frac{1}{3} \cdot \text{cylinder}$$

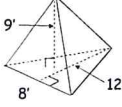
$$= \frac{1}{3} (\pi r^2 h)$$

$$= \frac{1}{3} (\pi 3^2 \cdot 9)$$

$$= \frac{1}{3} \cdot \pi \cdot 3 \cdot 9$$

$$= 27\pi \text{ in}^3$$

You Try Find the volume of each figure:

a) 

$$V = \frac{1}{3} \text{ Vol. Pyramid}$$

$$= \frac{1}{3} (\text{Area}_{\text{Base}} \cdot \text{height})$$

$$= \frac{1}{3} (\frac{1}{2} \cdot 8 \cdot 12 \cdot 9)$$

$$=$$

b) 