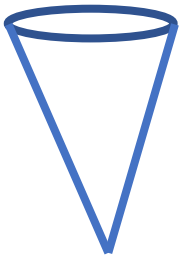
Volumes of Pyramids

To find the volumes of pyramids, you multiply the area of the base by the height (H) of the pyramid and divide by three.

Example: Find the volume of the cone with radius of 4" and height 9"



$V = \frac{\pi r^2 H}{3}$ or $V = \frac{1}{3}\pi r^2 H$

$= \frac{\pi 4^2 9}{3}$

$= \frac{\pi (16)(9)}{3}$

$= \frac{16\pi (9)}{3} = 16\pi (3) = 48\pi$ cu. "

1. **Draw and find the volume of a cone with radius 5 cm. and height 12 cm.**

2. **Draw and find the volume of a rectangular pyramid with dimensions 6 in. by 10 in. with height 12 in.**

3. **Draw and find the volume of a trapezoidal pyramid with bases of 8 ft. and 10 ft, height of the trapezoid 6 ft. and the height of the pyramid 12 ft.**

4. **Draw and find the volume of a square pyramid with base of 10 mm. and height of the pyramid 12 mm.**

5. **Draw and find the volume of a triangular pyramid with the base of the triangle equal 10 in., the height of the triangle 6 in. and the height of the pyramid 15 in.**

6. **Find the length of a rectangular pyramid with volume 360 cu. m. and width of 10 m. and height of the pyramid 9 m.**

7. **Find the volume of a cone with diameter 6 cm. and height of the pyramid 20 cm.**