

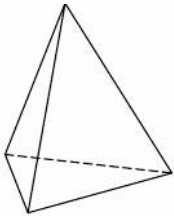
Volume of Cone and Pyramid

Concept

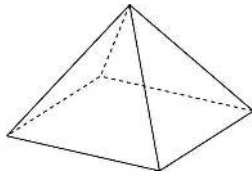
In this worksheet we will talk about volume of Cones and Pyramids. The process is almost exactly the same as prism and cylinder

Volume = (Area of base x Height), Except for one small difference.

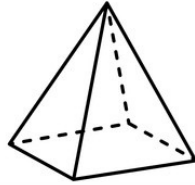
Below are some examples of Cones and Pyramids



Triangular Pyramid



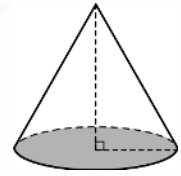
Rectangular Pyramid



Square Pyramid

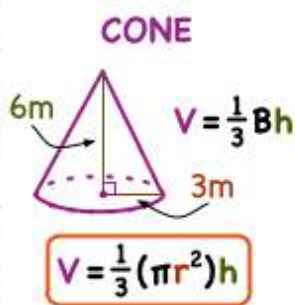
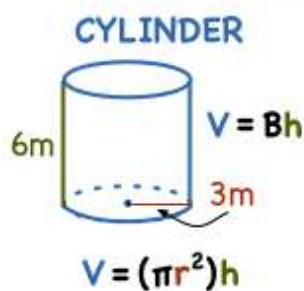


Octagonal Pyramid



Cone

Let's do an example to better explain how to find the volume of a cone here is a cylinder and cone. They both have the same base and height. The only difference between them is that the cone has a pointed top while the cylinder's top is the same as base



Find the Volume:

$r = 4\text{mm}$
 $h = 12\text{mm}$
 $\pi = 3.14$

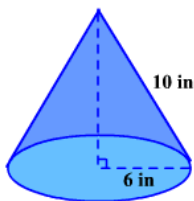
$V = \frac{1}{3} Bh$
 $B = \pi r^2$

$V = \frac{1}{3} \pi r^2 h = \frac{1}{3} (3.14)(4)^2 12 = \frac{1}{3} (3.14)(16) 12$
 $V = \frac{1}{3} (50.24) 12 = \frac{1}{3} (602.88) = 200.96$

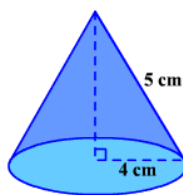
Assignment

Find the volume of each shape.

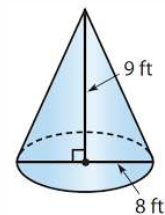
a)



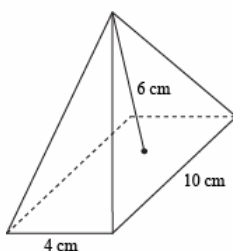
b)



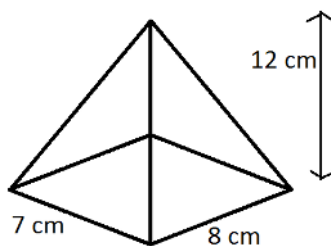
c)



d)



e)



f)

