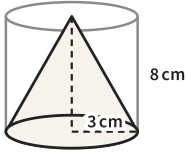


Volume of Cones, Spheres and Pyramids



1

Same base, same height. Find the volume of the cylinder, then the cone.
Give your answer to 1 decimal place.



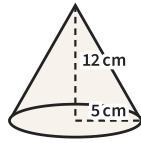
Cylinder: $\pi \times 3^2 \times 8 =$

Cone: a third of it, $\div 3$

Volume

2

Find the volume of the cone.
Give your answer to 1 decimal place.

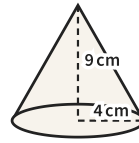


$V = \frac{1}{3} \times \pi \times 5^2 \times$

Volume

3

Find the volume of the cone.
Give your answer to 1 decimal place.

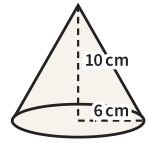


$V = \frac{1}{3} \times \pi \times$ $^2 \times$

Volume

4

Find the volume of the cone.
Give your answer to 1 decimal place.

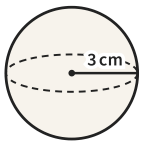


$V = \frac{1}{3} \times \pi \times$ $^2 \times$

Volume

5

Find the volume of the sphere.
Give your answer to 1 decimal place.

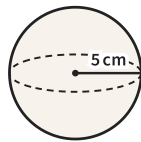


$V = \frac{4}{3} \times \pi \times$ ^{3}

Volume

6

Find the volume of the sphere.
Give your answer to 1 decimal place.

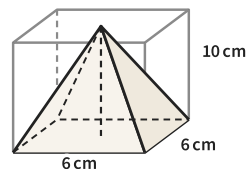


$V = \frac{4}{3} \pi r^3$

Volume

7

Same base, same height. Find the volume of the cuboid, then the pyramid.



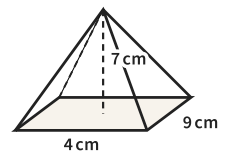
Cuboid: $6 \times 6 \times 10 =$

Pyramid: a third of it, $\div 3$

Volume

8

Find the volume of the pyramid.



$V = \frac{1}{3} \times \text{base area} \times \text{height}$

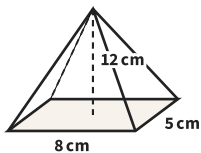
Volume

Volume of Cones, Spheres and Pyramids *further practice*



9

Find the volume of the pyramid.

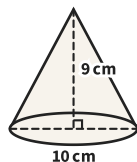


Pyramid: $V = \frac{1}{3} \times \text{base area} \times \text{height}$

Volume

10

Find the volume of the cone to 1 decimal place.

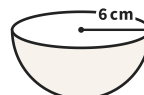


Cone: $V = \frac{1}{3} \pi r^2 h$

Volume

11

The solid is a hemisphere (half a sphere). Find its volume to 1 decimal place.



Sphere: $V = \frac{4}{3} \pi r^3$

Volume

12

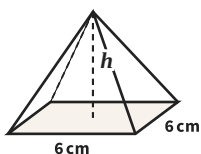
A bath bomb is a sphere with a radius of 3.5 cm. Find its volume to 1 decimal place.

Sphere: $V = \frac{4}{3} \pi r^3$

Volume

13

This pyramid has a square base and a volume of 96 cm^3 . Find its height, h .

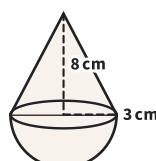


Pyramid: $V = \frac{1}{3} \times \text{base area} \times \text{height}$

$h =$

14

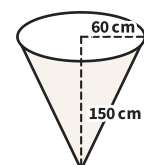
A toy is a cone on top of a hemisphere. Find the volume of the toy to 1 decimal place.



Volume

15

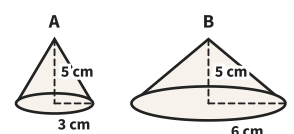
A water tank is a cone with its point at the bottom. How many litres does it hold when full? Give your answer to 1 decimal place. (1 litre = 1000 cm^3)



Answer

16

Cone B has twice the radius of cone A. They are the same height. Priya says cone B has twice the volume of cone A. Is Priya right? Explain.



Answer