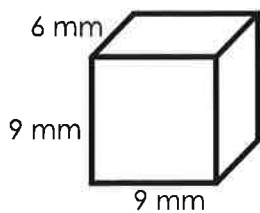


Name: \_\_\_\_\_

## Volume of Rectangular Prisms

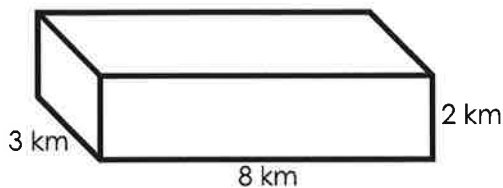
Find the volume of each rectangular prism. Don't forget to label the units.

a.



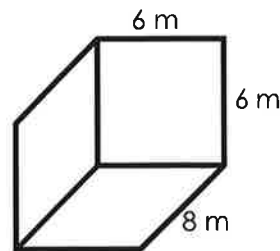
volume: \_\_\_\_\_

b.



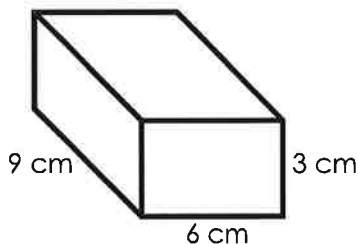
volume: \_\_\_\_\_

c.



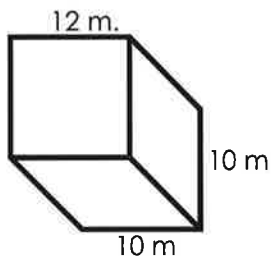
volume: \_\_\_\_\_

d.



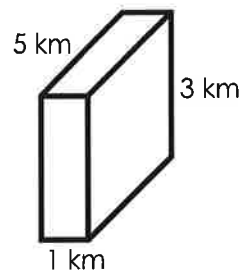
volume: \_\_\_\_\_

e.



volume: \_\_\_\_\_

f.



volume: \_\_\_\_\_

g.

$l = 9 \text{ m}$   
 $w = 7 \text{ m}$   
 $h = 3 \text{ m}$

volume: \_\_\_\_\_

h.

$l = 12 \text{ cm}$   
 $w = 2 \text{ cm}$   
 $h = 3 \text{ cm}$

volume: \_\_\_\_\_

i.

$l = 5 \text{ km}$   
 $w = 8 \text{ km}$   
 $h = 4 \text{ km}$

volume: \_\_\_\_\_

j.

$l = 2 \text{ km}$   
 $w = 6 \text{ km}$   
 $h = 10 \text{ km}$

volume: \_\_\_\_\_

k.

$l = 11 \text{ mm}$   
 $w = 9 \text{ mm}$   
 $h = 3 \text{ mm}$

volume: \_\_\_\_\_

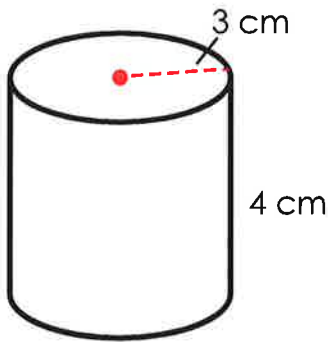
l.

$l = 5 \text{ cm}$   
 $w = 7 \text{ cm}$   
 $h = 7 \text{ cm}$

volume: \_\_\_\_\_

Name: \_\_\_\_\_

## Volume of a Cylinder



A cylinder has a circular base. Use  $A = \pi r^2$  to find the area of the base.

$$A \approx 3.14 \times 3^2$$
$$A \approx 3.14 \times 9$$
$$A \approx 28.26 \text{ cm}^2$$

The volume of the cylinder is equal to its base area times its height.

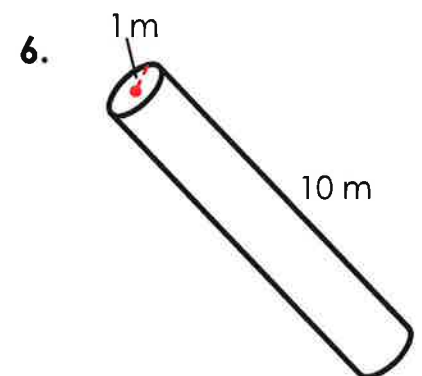
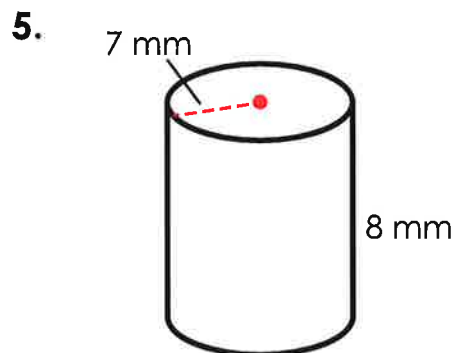
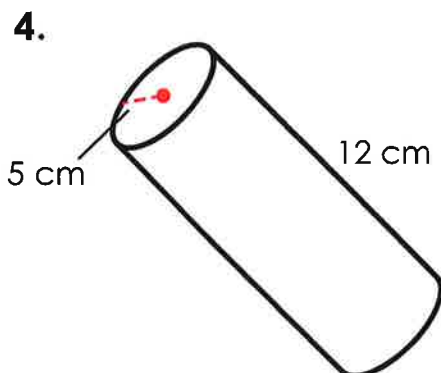
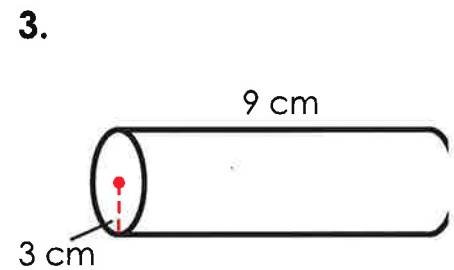
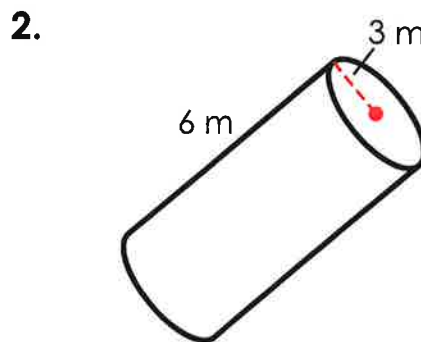
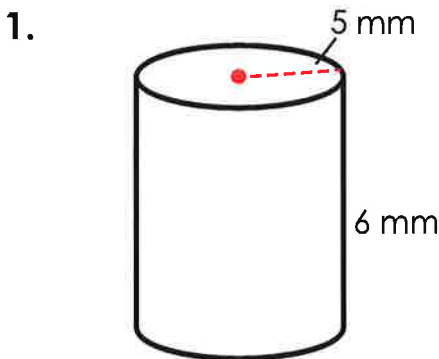
$$V \approx 28.26 \text{ cm}^2 \times 4 \text{ cm}$$
$$V \approx 113.04 \text{ cm}^3$$

The formula for finding the volume of a cylinder can be expressed as:

$$\text{Volume} = \pi \times \text{radius squared} \times \text{height}$$

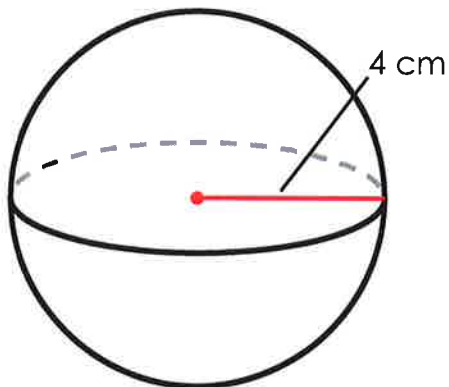
$$V = \pi r^2 h$$

**Find the volume of each cylinder. Use 3.14 for  $\pi$ . Round your answer to the nearest tenth.**



Name: \_\_\_\_\_

## Volume of a Sphere

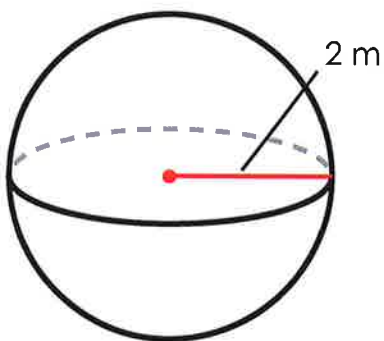


$$\begin{aligned}V &= \frac{4}{3}\pi r^3 \\ &\approx \frac{4}{3} \cdot 3.14 \cdot 4^3 \\ &\approx \frac{4}{3} \cdot 3.14 \cdot 64 \\ &\approx 267.947\end{aligned}$$

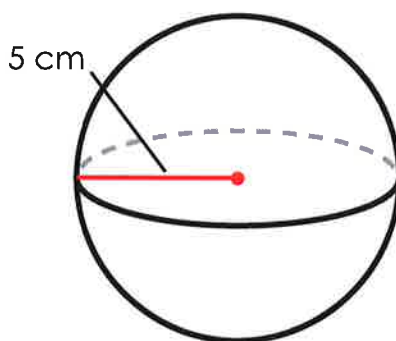
The volume of the sphere is approximately 267.9 cm<sup>3</sup>.

Find the volume of each sphere. Use 3.14 for  $\pi$ .  
Round your answer to the nearest tenth.

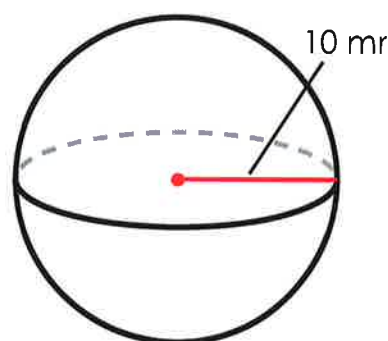
1.



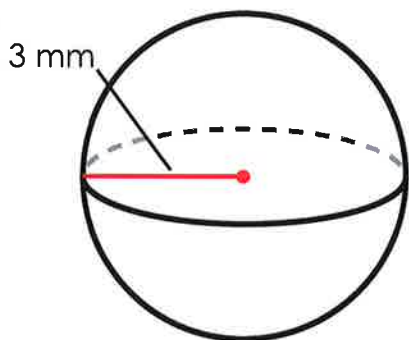
2.



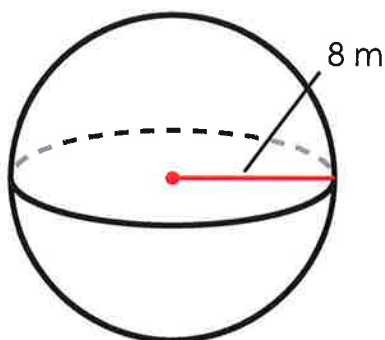
3.



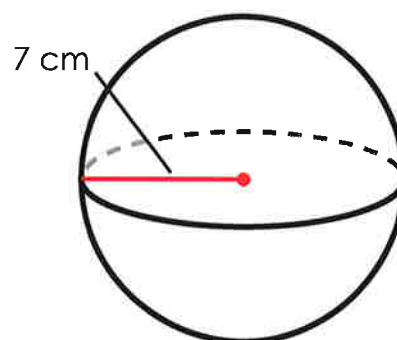
4.



5.

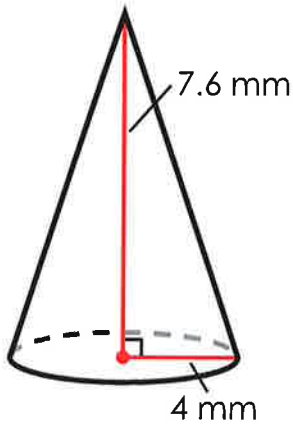


6.



Name: \_\_\_\_\_

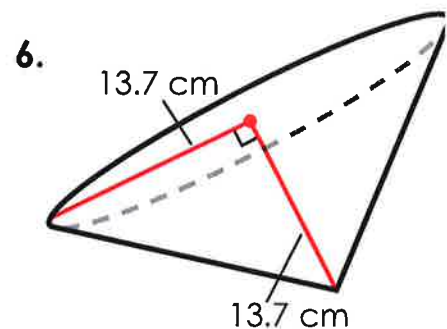
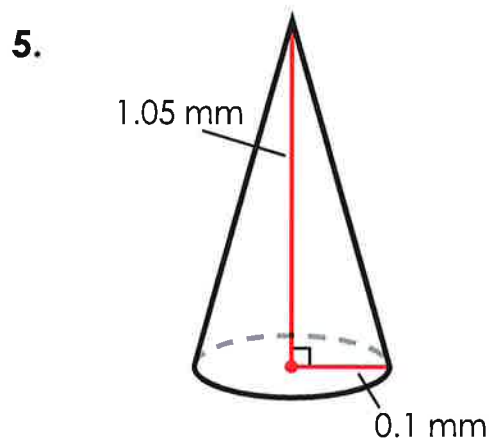
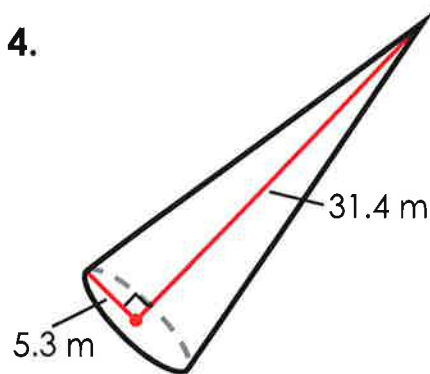
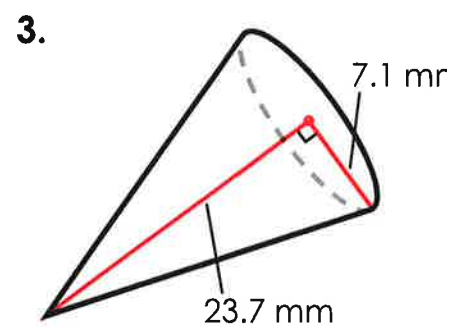
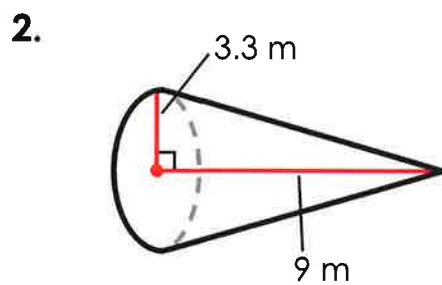
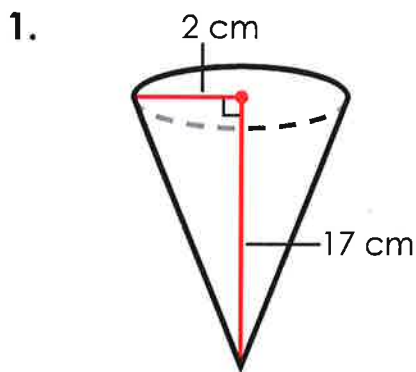
## Volume of a Cone



$$\begin{aligned}V &= \frac{1}{3} \pi r^2 h \\ &\approx \frac{1}{3} \cdot 3.14 \cdot 4^2 \cdot 7.6 \\ &\approx \frac{1}{3} \cdot 3.14 \cdot 16 \cdot 7.6 \\ &\approx 127.27466\end{aligned}$$

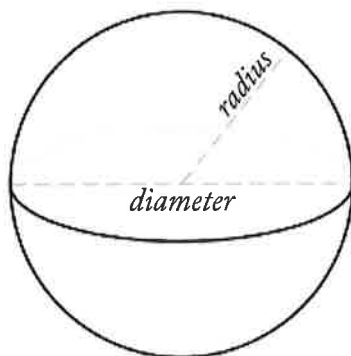
The volume of the cone is approximately 127.27 mm<sup>3</sup>.

Find the volume of each cone. Use 3.14 for  $\pi$ .  
Round your answers to the nearest hundredth.



Name: \_\_\_\_\_

## Surface Area of a Sphere

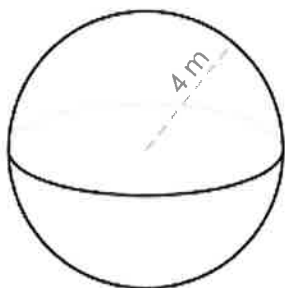


$$\pi = 3.14$$

$$\text{Surface Area} = 4\pi r^2$$

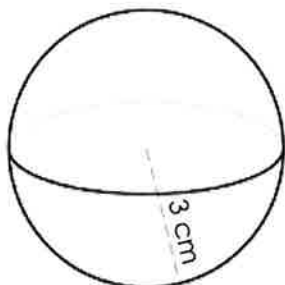
Calculate the *Surface Area (S.A.)* for each sphere by using the formula  $S.A. = 4\pi r^2$ . Use 3.14 for  $\pi$ .

a.



a. \_\_\_\_\_

b.



b. \_\_\_\_\_

c. *radius* = 5 mm

c. \_\_\_\_\_