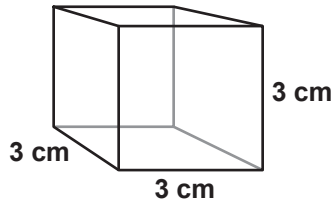


Volume

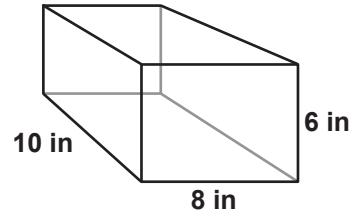
- 1 Find the volume of this cube.



$$\text{Area of Base} = 3 \times 3 = 9 \text{ cm}^2$$

$$\text{Volume} = 9 \text{ cm}^2 \times 3 \text{ cm} = 27 \text{ cm}^3$$

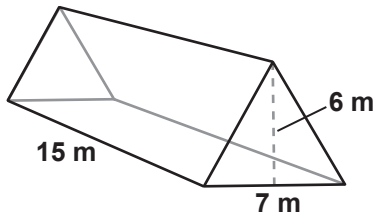
- 2 Find the volume of this rectangular prism.



$$\text{Area of Base} = 6 \times 8 = 48 \text{ in}^2$$

$$\text{Volume} = 48 \text{ in}^2 \times 10 \text{ in} = 480 \text{ in}^3$$

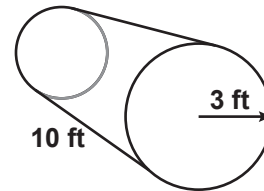
- 3 Find the volume of this triangular prism.



$$\text{Area of Base} = \frac{1}{2} (6 \times 7) = \frac{42}{2} = 21 \text{ m}^2$$

$$\text{Volume} = 21 \text{ m}^2 \times 15 \text{ m} = 315 \text{ m}^3$$

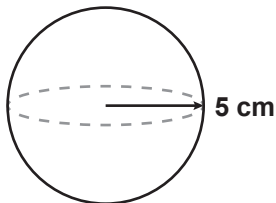
- 4 Find the volume of this cylinder.



$$\text{Area of Base} = \pi \times (3 \text{ ft})^2 = 3.14 \times 9 \text{ ft}^2 = 28.26 \text{ ft}^2$$

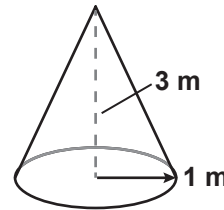
$$\text{Volume} = 28.26 \text{ ft}^2 \times 10 \text{ ft} = 282.6 \text{ ft}^3$$

- 5 Find the volume of this sphere.



$$\begin{aligned} \text{Volume} &= \frac{4}{3} \times \pi \times r^3 \\ &= \frac{4}{3} \times 3.14 \times (5 \times 5 \times 5) \text{ cm}^3 \\ &= \frac{4 \times 392.5}{3} = 523.33 \text{ cm}^3 \end{aligned}$$

- 6 Find the volume of this cone.



$$\begin{aligned} \text{Volume} &= \frac{1}{3} \times h \times \pi \times r^2 \\ &= \frac{1}{3} \times 3 \text{ m} \times 3.14 \times (1 \times 1) \text{ m}^2 \\ &= 1 \text{ m} \times 3.14 \text{ m}^2 = 3.14 \text{ m}^3 \end{aligned}$$