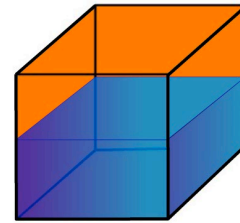


13-1 Volumes of Prisms & Cylinders

Volume:

* Refers to how much space that a encloses.

* How much can the object hold.
(May not always look the same)



Volume

* Label is always cubic units or u^3 .

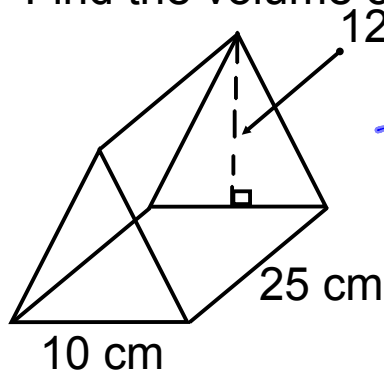
Volume of a Prism:

$$V = Bh$$

B = Area of Base

h = height of prism

1. Find the volume of the triangular prism.



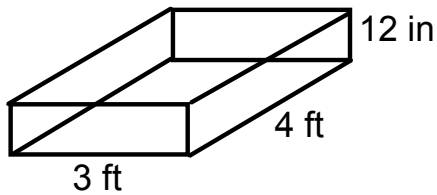
$$\frac{1}{2} (10)(12) = 60(25)$$

$$V = 1,500 \text{ cm}^3$$

Volume of a Box:

$$V = lwh$$

l = length
w = width
h = height



$$12 \text{ in} = 1 \text{ ft}$$

$$1 \times 3 \times 4 = 12 \text{ ft}^3$$

Volume of a Cylinder:

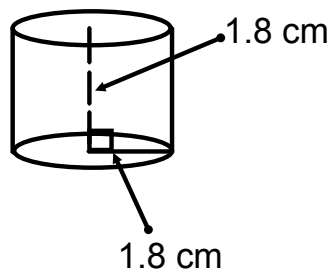
$$V = Bh$$

B = Area of base

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

$$B = \pi r^2$$

3. Find the volume of each cylinder to the nearest tenth.



$$V = \pi (1.8)^2 (1.8)$$

$$V = 18.3 \text{ cm}^3$$