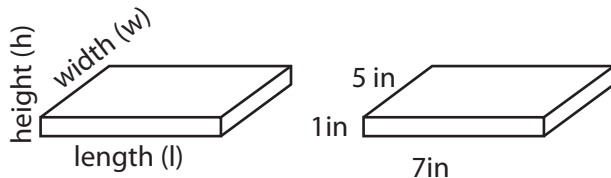


# Volume Calculations Introduction # 2

**Volume** is the measure of space inside of a solid object.  
Volume is measured in **cubic units** ( $\text{in}^3$ ,  $\text{yd}^3$ ,  $\text{cm}^3$ ,  $\text{ft}^3$ ).

To find the volume of a rectangular prism, multiply the length (**l**) by the width (**w**) by the height (**h**).

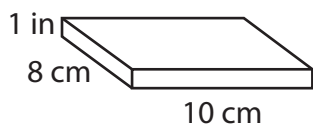


$$\begin{aligned} l \times w \times h &= \text{Volume (V)} \\ (7 \text{ in} \times 5 \text{ in}) \times 1 \text{ in} &= \text{Volume (V)} \\ (35 \text{ in}^2) \times 1 \text{ in} &= \text{Volume (V)} \\ 35 \text{ in}^3 &= \text{Volume (V)} \end{aligned}$$

**Directions:** Calculate the volume of each solid using the equation  $l \times w \times h = \text{volume}$ .

1.

$$\underline{10\text{in}} \times \underline{8\text{in}} \times \underline{1\text{in}} = V$$



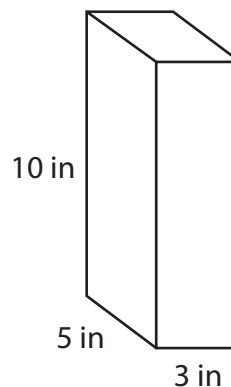
$$(\underline{10\text{in}} \times \underline{8\text{in}}) \times \underline{1\text{in}} = V$$

$$(\underline{80\text{in}^2}) \times \underline{1\text{in}} = V$$

$$\underline{80\text{in}^3} = \text{Volume}$$

2.

$$\underline{3\text{in}} \times \underline{5\text{in}} \times \underline{10\text{in}} = V$$



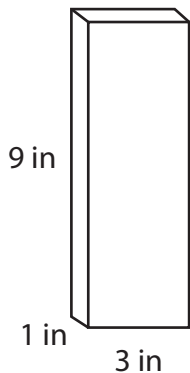
$$(\underline{3\text{in}} \times \underline{5\text{in}}) \times \underline{10\text{in}} = V$$

$$(\underline{15\text{in}^2}) \times \underline{10\text{in}} = V$$

$$\underline{150\text{in}^3} = \text{Volume}$$

3.

$$\underline{3\text{in}} \times \underline{1\text{in}} \times \underline{9\text{in}} = V$$



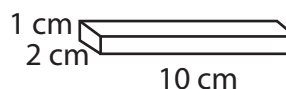
$$(\underline{3\text{in}} \times \underline{1\text{in}}) \times \underline{9\text{in}} = V$$

$$(\underline{3\text{in}^2}) \times \underline{9\text{in}} = V$$

$$\underline{27\text{in}^3} = \text{Volume}$$

4.

$$\underline{10\text{cm}} \times \underline{2\text{cm}} \times \underline{1\text{cm}} = V$$



$$(\underline{10\text{cm}} \times \underline{2\text{cm}}) \times \underline{1\text{cm}} = V$$

$$(\underline{20\text{cm}^2}) \times \underline{1\text{cm}} = V$$

$$\underline{20\text{cm}^3} = \text{Volume}$$