

G5-M5-Lesson 9

Find three rectangular prisms around your house. Describe the item you are measuring (e.g., cereal box, tissue box), and then measure each dimension to the nearest whole inch and calculate the volume.

a. Rectangular Prism A

Item: *Cereal box*

I will measure a cereal box, and then multiply the three dimensions to find the volume.

Height: 12 inchesLength: 8 inchesWidth: 3 inchesVolume: 288 cubic inches

$$\begin{aligned}\text{Volume} &= \text{length} \times \text{width} \times \text{height} \\ &= 8 \text{ in} \times 3 \text{ in} \times 12 \text{ in} \\ &= 288 \text{ in}^3\end{aligned}$$

b. Rectangular Prism B

Item: *Tissue box*

I will measure a tissue box, and then multiply the three dimensions to find the volume.

Height: 3 inchesLength: 9 inchesWidth: 5 inchesVolume: 135 cubic inches

$$\begin{aligned}\text{Volume} &= \text{length} \times \text{width} \times \text{height} \\ &= 9 \text{ in} \times 5 \text{ in} \times 3 \text{ in} \\ &= 45 \text{ in}^2 \times 3 \text{ in} \\ &= 135 \text{ in}^3\end{aligned}$$

The volume of the tissue box is 135 cubic inches.