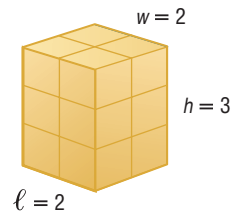


## Volume

**Volume** is the measure of space occupied by a solid. Volume is measured in cubic units. The prism at the right has a volume of 12 cubic units.



To find the volume of a rectangular prism, use the formula  $V = \ell \cdot w \cdot h$ . Stated in words, volume equals length times width times height.

### EXAMPLE

**Find the volume of the rectangular prism.**

A rectangular prism has a height of 3 feet, width of 4 feet, and length of 2 feet.

$$\begin{aligned} V &= \ell \cdot w \cdot h && \text{Volume formula} \\ &= 2 \cdot 4 \cdot 3 && \text{Replace } \ell \text{ with 2, } w \text{ with 4, and } h \text{ with 3.} \\ &= 24 && \text{Simplify.} \end{aligned}$$

The volume is 24 cubic feet.

