

Volume Formula

In this video, we will find the volumes of two rectangular prisms using the volume formula. The formula for volume of a rectangular prism is $\text{Volume} = \text{Length} \times \text{Width} \times \text{Height}$. We write this as $V = L \times W \times H$. Let's get started.

Find the volume of the rectangular prism below.

The prism has a length of 2 inches, a width of 6 inches, and a height of 5 inches. We write the formula, $V = L \times W \times H$, and now we substitute the dimensions into the formula: $V = 2 \times 6 \times 5$. Now we solve. $2 \times 6 = 12$. $12 \times 5 = 60$. The volume of the rectangular prism is 60 cubic inches.

Find the volume of the rectangular prism below.

This prism has a length of 7 feet, a width of 3 feet, and a height of 4 feet. We write the formula, and now we substitute in the dimensions. We solve. $7 \times 3 = 21$. $21 \times 4 = 84$. This rectangular prism has a volume of 84 cubic feet.
