

Lesson 11-9

Example 1 Volume of a Rectangular Prism

Find the volume of the rectangular prism.

$$V = \ell wh$$

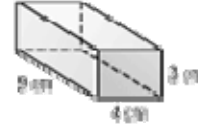
$$V = 4 \cdot 9 \cdot 3$$

$$V = 108$$

Volume of a rectangular prism

Replace ℓ with 4, w with 9, and h with 3.

Multiply.



The volume is 108 cubic centimeters.

Example 2 Volume of a Rectangular Prism

PASTA Find the volume of a box of pasta that is 12 inches in length, 3 inches in width, and 2 inches in height.

$$V = \ell wh$$

$$V = 12 \cdot 3 \cdot 2$$

$$V = 72$$

Volume of a rectangular prism

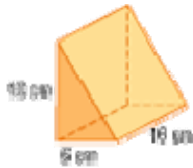
Replace ℓ with 12, w with 3, and h with 2.

Multiply.

The volume of the box of pasta is 72 cubic inches.

Example 3 Volume of a Triangular Prism

Find the volume of the triangular prism shown.



$$V = Bh$$

$$V = \left(\frac{1}{2} \cdot 6 \cdot 10 \right) h$$

$$V = \left(\frac{1}{2} \cdot 6 \cdot 10 \right) 16$$

$$V = 480$$

Volume of a prism

Replace B with $\frac{1}{2} \cdot 6 \cdot 10$.

The height of the prism is 16.

Multiply.

The volume is 480 cubic centimeters or 480 cm^3 .