

Name _____

Date _____

Find The Volume Of A Right Rectangular Prism - Guided Lesson Explanation

Explanation#1

The formula of Surface Area of a Rectangular Solid is:

Surface Area of a Rectangular Solid = Width x Height

Area the rectangle carpet = $14 \times 8 = 112$

Since the units are feet times feet, the units are squared.

Area the rectangle carpet = 112 Feet^2

Explanation#2

Step 1) The formula of the area of a triangle is:

Area of Triangle = $\frac{1}{2} \times \text{Base} \times \text{Height}$

Step 2) The area of the triangle house = $\frac{1}{2} \times \text{Base} \times \text{Height}$

Area of the triangle house = $\frac{1}{2} \times 12 \times 24$ (units are meters times meters)

Area of the triangle house = 144 meters^2

Explanation#3

Step 1) The volume V of a rectangular prism is the product of the length, width, and height.

The formula of volume of rectangle is:

$V = \text{Length} \times \text{Width} \times \text{Height}$

Step 2) $V = \text{Length} \times \text{width} \times \text{height}$

$V = 30 \times 60 \times 80 = 144,000$

Units are cubed because it is centimeters x centimeters x centimeters

$V = 144,000 \text{ centimeters}^3$

