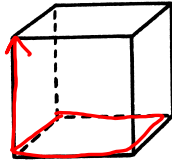


Volume of three-dimensional figures is found by multiplying the area of the base by the height.



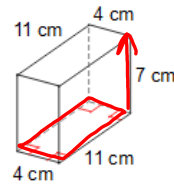
Rectangular Prisms

Area of the base: 44cm^2

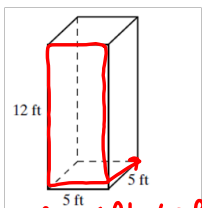
Volume of Rectangular Prism: 308cm^3

$4\text{cm} \times 11\text{cm} = 44\text{cm}^2$

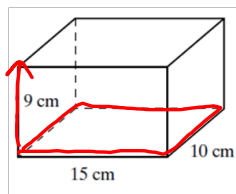
$44\text{cm}^2 \times 7\text{cm} =$



Find the volume:

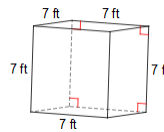


$12\text{ft} \times 5\text{ft} = 60\text{ft}^2$
 $\times 5\text{ft}$
 300ft^3

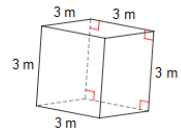


$15\text{cm} \cdot 10\text{cm} = 150\text{cm}^2$
 $\times 9\text{cm}$
 1350cm^3

Find the Volume for each Cube



$7 \cdot 7 \cdot 7 = 343\text{ft}^3$
 $7^3 = 343\text{ft}^3$



$3 \cdot 3 \cdot 3 = 27\text{m}^3$

Luisa is selling girl scout cookies. She needs to pack all her orders of Thin Mints into a box in order to ship them.

The dimensions of the Thin Mints box is 2.3 in x 7 in x 4.6 in. The dimensions of the shipping box is 12 in x 12 in x 5.5 in. How many boxes of Thin Mints will fit into one shipping box? Explain how you found your answer.

$$792 \text{ in}^3 \div 74.06 \text{ in}^3 = \sim 10.7$$

10 boxes



Find the height of a rectangular prism with a length of 3 meters, width of 1.5 meters, and a volume of 60.3 cubic meters.

$$V = lwh$$

$$60.3 = 3 \times 1.5 \times h$$

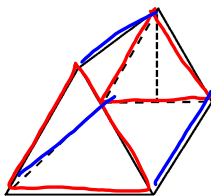
$$\frac{60.3}{4.5} = \frac{4.5h}{4.5}$$

13.4m

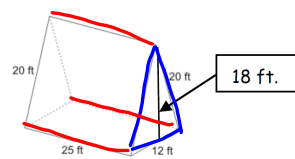
Triangular Prisms

Volume of Triangular Prism: Bh

B (area of base) x h (length between the bases)

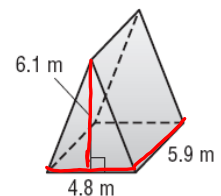


Find the volume for each figure



$$\frac{12 \cdot 18}{2} = 108$$

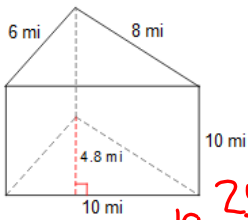
$$108 \times 25 = 2700 \text{ ft}^3$$



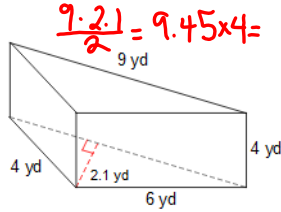
$$\frac{4.8 \times 6.1}{2} = 14.64$$

$$14.64 \times 5.9 = 86.4 \text{ m}^3$$

Find the volume of the triangular prism



$$24 \times 10 \times \frac{4.8}{4} = 240 \text{ mi}^3$$



$$\frac{9 \cdot 2.1}{2} = 9.45 \times 4 = 37.8 \text{ yd}^3$$

David's favorite candy bar is tobleron. The base of the triangle is 1.4 in, the height of the triangle is 1.25 in and the height of the prism is 8.25 in. What is the volume of the candy?



$$1.4 \times 1.25 \div 2 = .875 \cdot 8.25$$

$$V = 7.2 \text{ in}^3$$

Katie's perfume bottle can hold 108 cubic centimeters of perfume. The base of the triangle is 6 cm and the height is 4 cm. What is the height of the Katie's perfume bottle?