10.7 Continued...Triangular Prisms

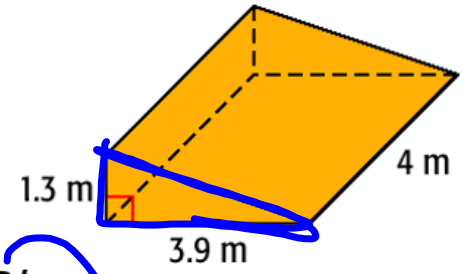
5-23-18 Pg. 572

To find the volume of any prism, you can use the formula $V = Bh$, where B is the area of the base, and h is the prism's height. So, to find the volume of a triangular prism, B is the area of the triangular base and h is the height of the prism.

Caution!

The bases of a prism are always two congruent, parallel polygons.

Find the volume of each triangular prism.

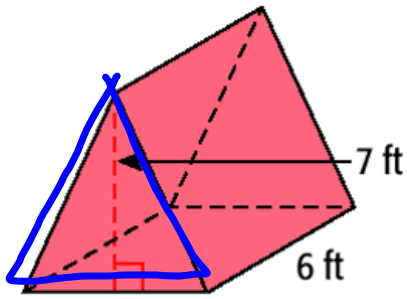


$V = Bh$ *Write the formula.*

$V = (\frac{1}{2} \cdot 3.9 \cdot 1.3) \cdot 4$ $B = \frac{1}{2} \cdot 3.9 \cdot 1.3$; $h = 4$.

$V = 10.14\ m^3$ *Multiply.*

Find the volume of the triangular prism.



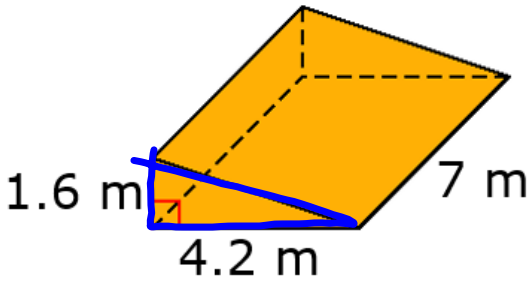
$V = Bh$ *Write the formula.*

$V = \left(\frac{1}{2} \cdot 6.5 \cdot 7\right) \cdot 6$

$22.75 \cdot 6$

$136.5 ft^3$

Find the volume of each triangular prism.



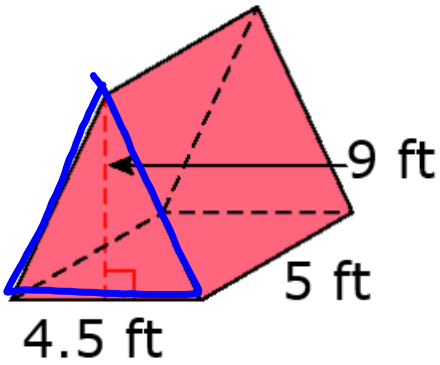
$V = (\text{Area of tri}) \cdot \text{height of prism}$

$\left(\frac{1}{2} \cdot 4.2 \cdot 1.6\right) \cdot 7$

$3.36 \cdot 7$

$V = 23.52\ m^3$

Find the volume of each triangular prism.



$V = Bh$ *Write the formula.*

$V = \left(\frac{1}{2} \cdot 4.5 \cdot 9\right) \cdot 5$

$20.25 \cdot 5$

$101.25 ft^3$

$V = (\text{Area of tri}) \cdot \text{height of prism}$

$V = \underbrace{\left(\frac{1}{2} b \cdot h\right)}_{\text{Triangle}} \cdot h$