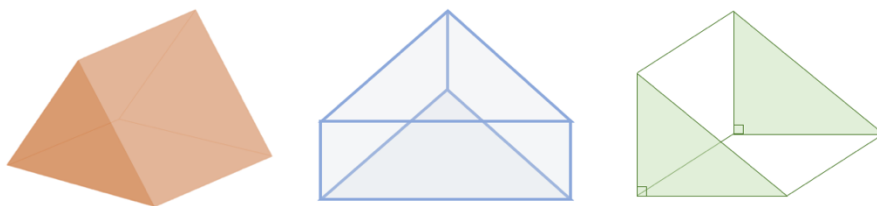
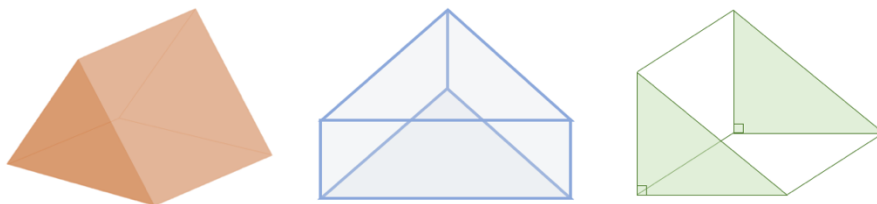


# Volume of a Triangular Prism

- How would I describe the triangular prisms shown below?

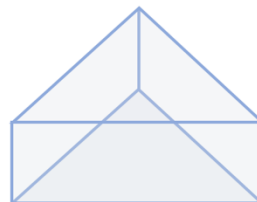


- How would I label each triangular prism as a three-dimensional object?



Measuring volume can be thought of as filling a three-dimensional space.

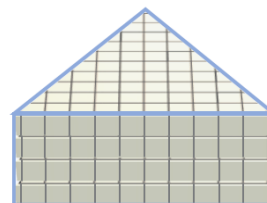
- How would I explain filling the three-dimensional space of this triangular prism using unit cubes?



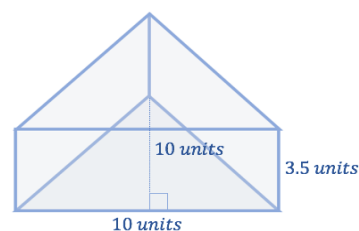
$2ab + 6k$   
 $2ab + 6k$



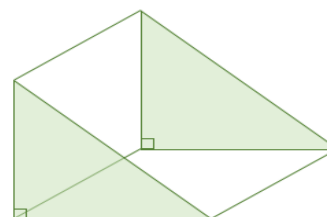
- How does filling the three-dimensional space inside the prism allow me to develop a formula for calculating the volume of the prism?



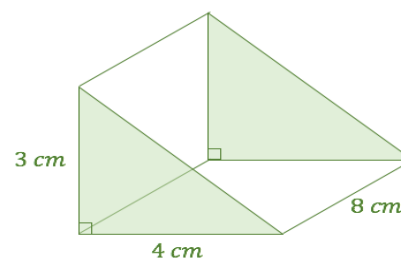
- How would I demonstrate calculating the volume of the prism using...  $V = \text{base area} \times \text{height}$ ?



- Why does my solution for calculating the volume of a triangular prism involve multiplying by one-half or dividing by two?

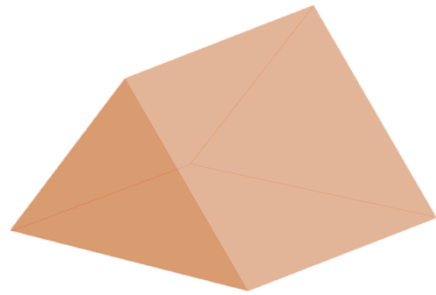


- How would I demonstrate calculating the volume of the prism using...  $V = \text{base area} \times \text{length}$ ?

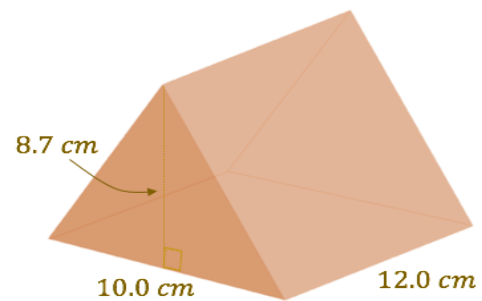


I could also describe calculating volume as... *calculating a 2-D area, then extending that area along the length of a 3-D prism.*

- How would I explain this approach for calculating the volume of my triangular prism?



- How would I demonstrate using this approach to calculate the volume of the triangular prism?



# Volume of a Triangular Prism



Which statements do I feel confident explaining and demonstrating?

Which statements do I not feel confident explaining and demonstrating?

- ✓ I can describe a triangular prism
- ✓ I can explain and show why a triangular prism is a three-dimensional object
- ✓ I can explain why measuring volume can be thought of as filling a three-dimensional space
- ✓ I can explain how filling a three-dimensional space using unit cubes illustrates a formula I can use for calculating volume
- ✓ I can explain why calculating the volume of a triangular prism involves  $\times \frac{1}{2}$  or  $\div 2$
- ✓ I can explain and demonstrate calculating the volume of a triangular prism using...  
 $V = \text{base area} \times \text{height/length}$