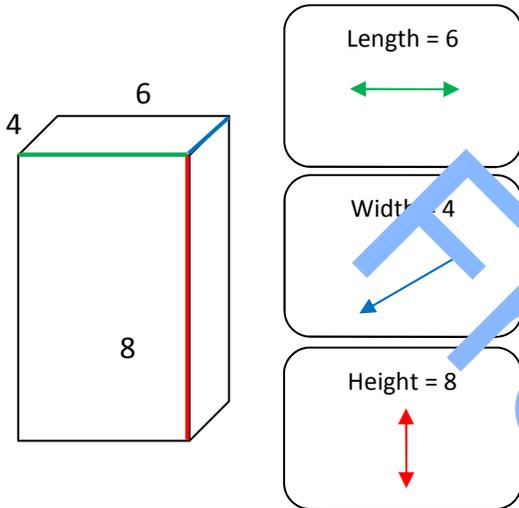


Triangle Method of Surface Area and Volume



Volume and Surface Area both depend on finding the three dimensions of a solid.

Volume is how much space something takes up, or how much it takes to fill that solid. Answers are in units cubed or units³

Surface Area is a measure of how much space or area something has on all of its faces or sides. Answers are in units squared or units²

Start with finding the **length** (sometimes called **base**), **width**, and **height**.

SURFACE AREA

$\begin{array}{r} 4 \\ \times \times \\ 6 \times 8 \end{array}$	$\begin{array}{r} 4 \\ \times \times \\ 6 \times 8 \end{array}$	$\begin{array}{r} 4 \\ \times \times \\ 6 \times 8 \end{array}$	$\begin{array}{r} 4 \\ \times \times \\ 6 \times 8 \end{array}$	$\begin{array}{r} 24 \\ + 32 \\ + 48 \\ \hline 104 \end{array}$	$\begin{array}{r} 104 \\ \times 2 \\ \hline 208 \text{ units}^2 \end{array}$
<p>1. Arrange all three measurements of the dimensions in a triangle in any order.</p>	<p>2. Multiply down one of the sides. It doesn't matter which you start with.</p>	<p>3. Do another side.</p>	<p>4. Do the last side. Now you've done all three sides of the triangle.</p>	<p>5. Add the three answers from the previous steps.</p>	<p>6. Multiply your answer by 2, and label in units².</p>

VOLUME:

$\begin{array}{r} 4 \\ \times \times \\ 6 \times 8 \end{array}$	$\begin{array}{r} 4 \\ \times \times \\ 6 \times 8 \end{array}$	$\begin{array}{r} 4 \\ \times \times \\ 6 \times 8 \end{array}$	$\begin{array}{l} 4 \times 6 = 24 \\ 24 \times 8 = 192 \\ \text{units}^3 \end{array}$
<p>1. Arrange all three measurements of the dimensions in a triangle in any order.</p>	<p>2. Multiply down one of the sides. It doesn't matter which you start with.</p>	<p>3. Multiply your first answer by the unused number. Now you've used all three.</p>	<p>4. Your answer must be labeled in units³.</p>