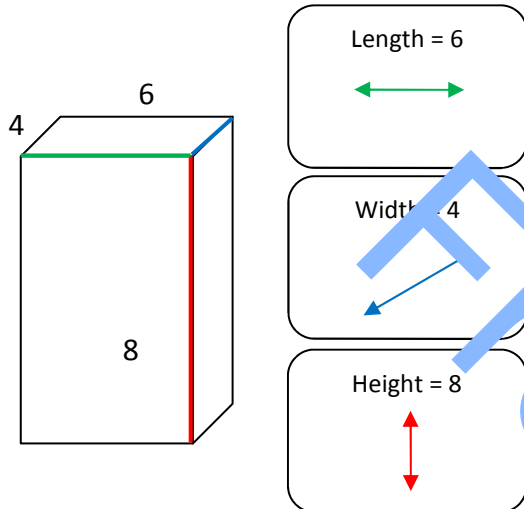


Triangle Method of Surface Area and Volume



Length = 6



Width = 4



Height = 8



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

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

VOLUME:

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