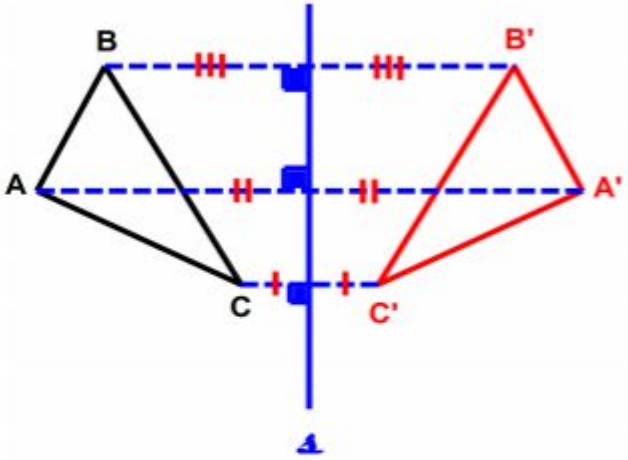
Reflections

What is a Reflection?

A **reflection** is a geometric transformation that **flips** a point, a line, or a figure across a line this is called the **axis of reflection**.

The reflection of ΔABC looks like this:



ΔABC is the original figure

Line is the axis of reflection

is the reflected figure

Line ▲ is the **perpendicular bisector** of line segments $\overline{AA'}$, $\overline{BB'}$, and $\overline{CC'}$

This means that the distance from **point A** to Line ▲ is the same as the distance from **point A'** to Line ▲.

The same is true for the other vertices of the triangles and Line ▲.

Let's look at how to do a reflection of a line segment.

Steps to Reflection

Step 1 - Draw Perpendicular Lines (use the set square) through line s (the line of reflection) and each point in the original shape. Extend your lines.

Step 2 - Measure the distance from point A to the reflection line s. Place the image of A the same distance on the opposite side of the reflection line.