If…

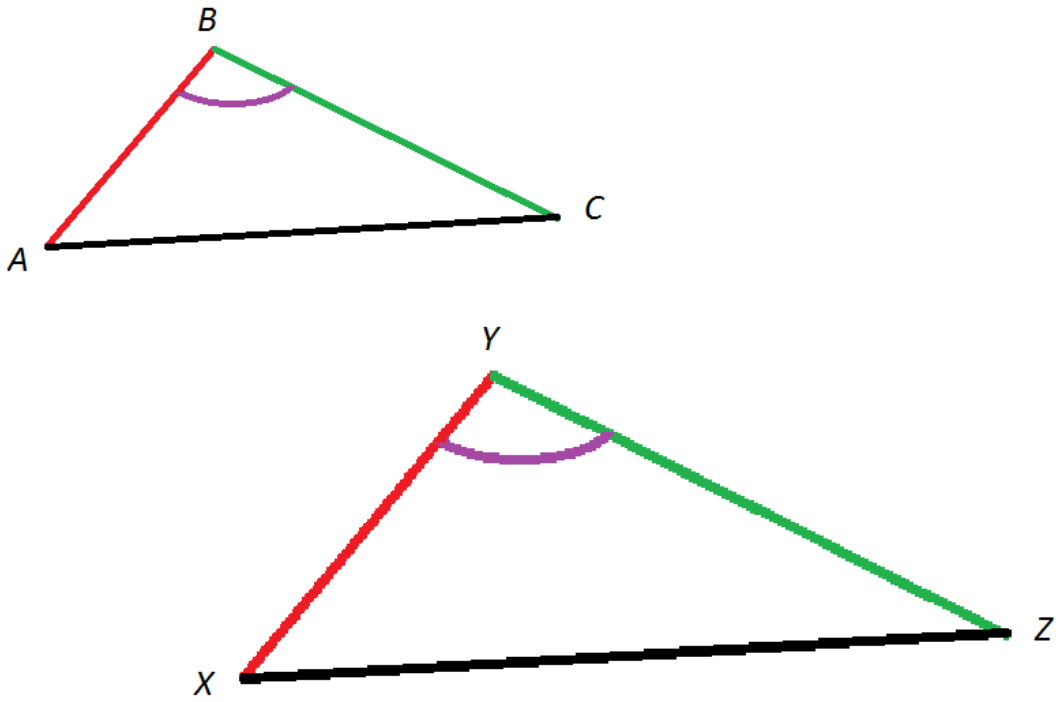
an **angle** of one triangle is **congruent** (≅) to an **angle** from a second triangle,

and…

the **sides** that make that angle in one triangle are **proportional** (same ratio) as the **sides** that make the angle in the second triangle,

then…

the two triangles are similar (~) by **SAS Similarity**

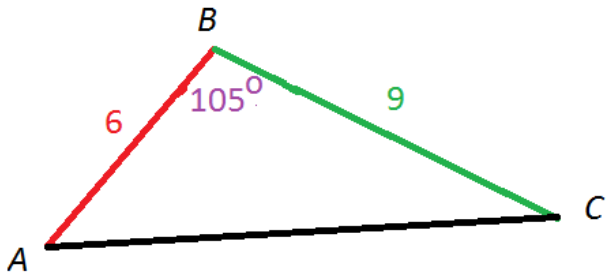


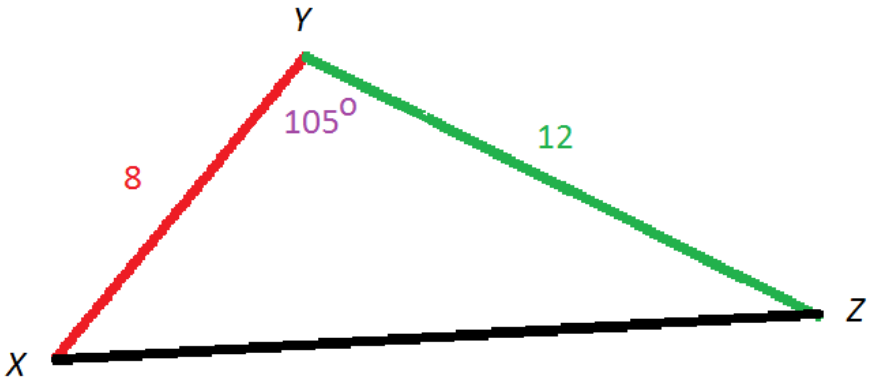
$\measuredangle B \measuredangle \cong \measuredangle Y$ (that's the **A**) and $\frac{AB}{XY} = \frac{BC}{YZ}$ (that's the **S** and **S**), so…

$$\Delta ABC \sim \Delta XYZ$$

by SAS Similarity

Example 1





1. What are the **congruent angles**? _____

2. What is the ratio of the **red** sides of the triangles? _____

3. What is the ratio of the **green** sides of the triangles (use the same order for your fraction as #2)?

   _____

4. Double check – are the congruent angles between the red and green sides in both triangles? YES or NO

5. We have **SAS Similarity**! Write a similar triangle statement:

   _____