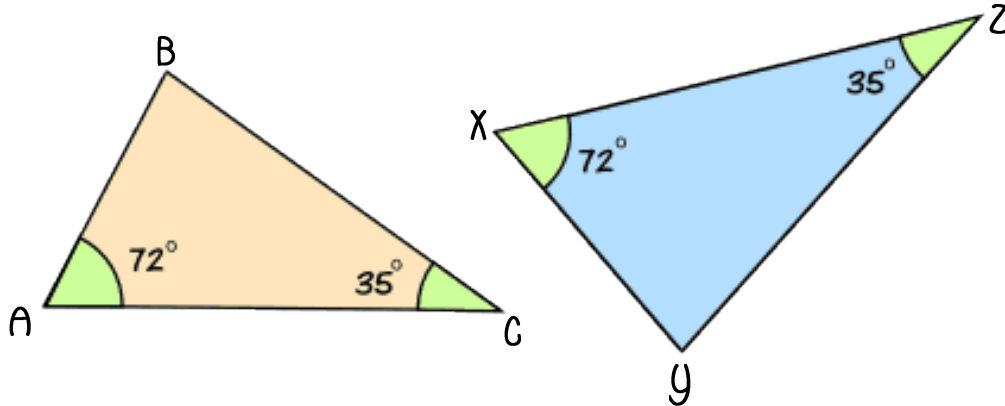


Angle-Angle (AA) Similarity Theorem

If two angles of one triangle are congruent to two angles of another triangle, then the triangles are similar.



$$\angle A \cong \angle X$$

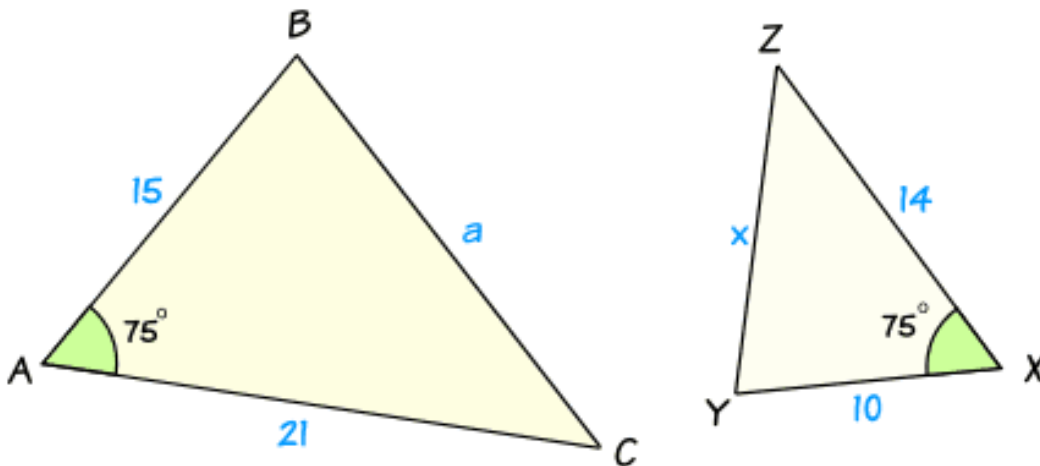
$$\angle C \cong \angle Z$$

$$\triangle ABC \sim \triangle XYZ$$

by the AA Similarity Theorem

Side-Angle-Side (SAS) Similarity Theorem

If two of the corresponding sides of two triangles are proportional and the included angles are congruent, then the triangles are similar.



$$\frac{AB}{XY} = \frac{AC}{XZ}$$
$$\frac{15}{10} = \frac{21}{14} \rightarrow \frac{3}{2}$$

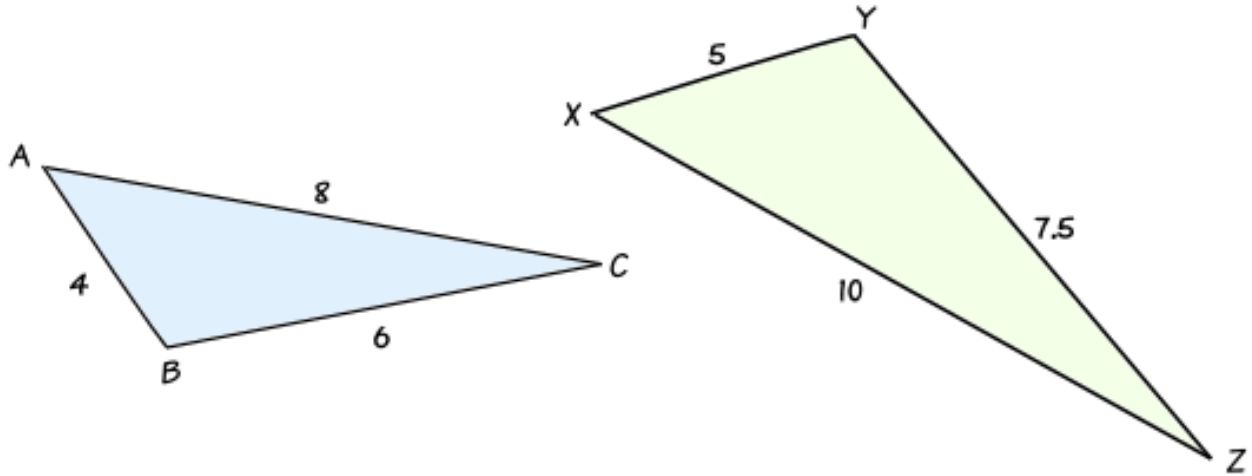
$$\angle A \cong \angle X$$

$$\triangle BAC \sim \triangle YXZ$$

by the SAS Similarity Theorem

Side-Side-Side (SSS) Similarity Theorem

If the corresponding sides of two triangles are proportional, then the triangles are similar.



$$\frac{AB}{XY} = \frac{BC}{YZ} = \frac{AC}{XZ}$$
$$\frac{4}{5} = \frac{6}{7.5} = \frac{8}{10} \rightarrow \frac{4}{5}$$

$\triangle ABC \sim \triangle XYZ$
by the SSS Similarity Theorem