

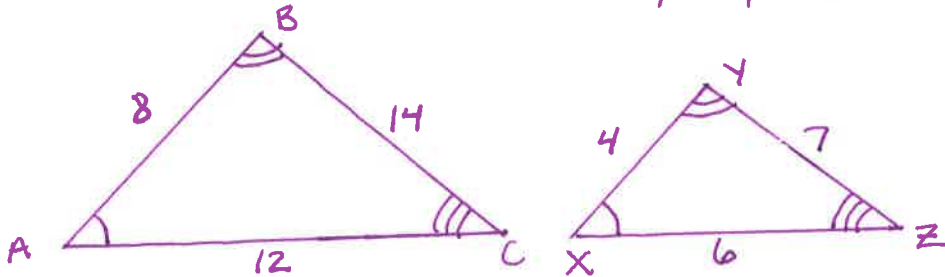
Notes:

Similarity: When corresponding angles are congruent and corresponding sides are proportional

Symbol $\rightarrow \sim$

(the fractions are the equal or the same)

Example: Are these two Δ 's similar?
Mathematically prove it!!!



* Remember, to show similarity, you must show all 3 corresponding angles are congruent and all 3 corresponding sides are proportional *

Answer:

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

$$\angle B \cong \angle Y$$

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

Big
Small \downarrow

$$\frac{AB}{XY} = \frac{8}{4} = 2 \checkmark$$

$$\frac{BC}{YZ} = \frac{14}{7} = 2 \checkmark$$

$$\frac{AC}{XZ} = \frac{12}{6} = 2 \checkmark$$

ratios are the same which means they are proportional \checkmark

the math shows that, by definition,
 $\Delta ABC \sim \Delta XYZ$