

Similarity Day 1

Geometry - Similarity

Symbol: ~

Meaning: Same shape

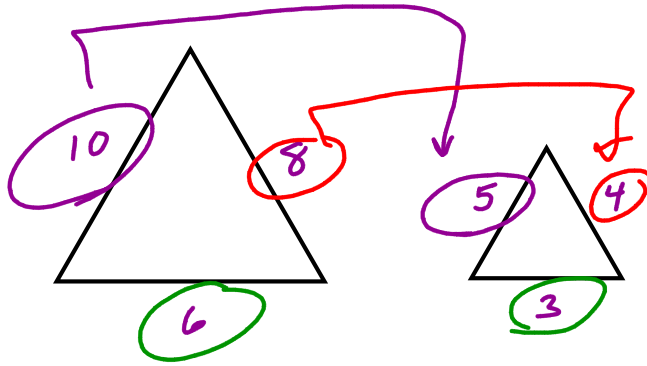


If two triangles are similar, then two things are true.

→ 1. Corresponding angles are congruent.

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

→ 2. Corresponding sides are proportional.



$$\frac{10}{5} = \frac{8}{4} = \frac{6}{3} = 2$$

$$\frac{5}{10} = \frac{4}{8} = \frac{3}{6} = \frac{1}{2}$$

Model Problems: Determining if figures are similar. If they are similar, complete the similarity statement and explain why they are similar.

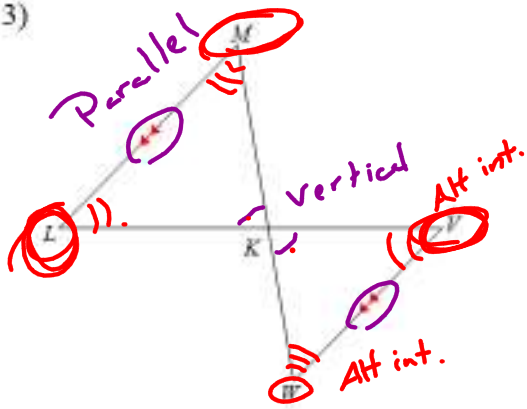
1)

$\frac{89}{40} \neq \frac{153}{59}$
 big / small
 $89(59) = 153(40)$
 $5251 \neq 6120$
 $\Delta VUT \sim \text{---} \text{Not Similar}$

2)

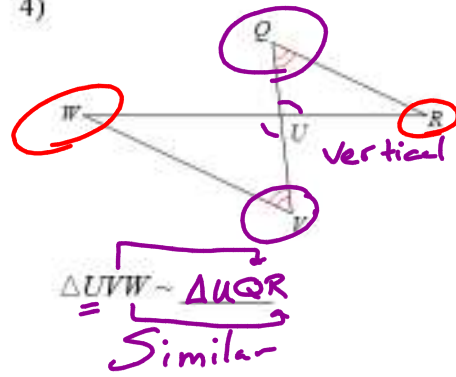
$\Delta ABC \sim \text{---} \text{Not similar}$
 $\frac{49}{10} \neq \frac{35}{7}$
 $49 \cdot 7 = 35 \cdot 10$
 $343 \neq 350$

3)

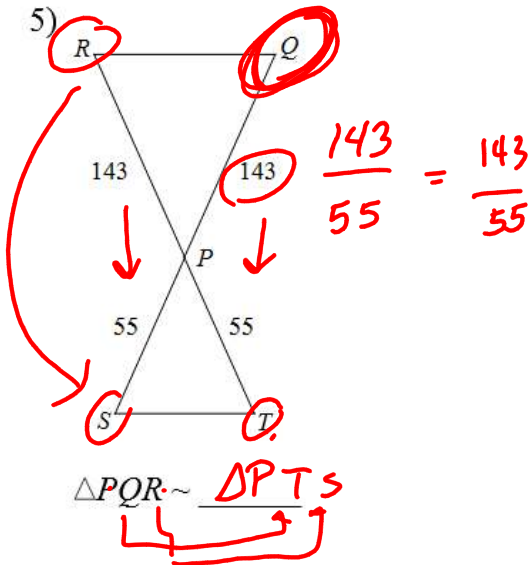


$\Delta KLM \sim \Delta K VW$
Similar

4)



5)



$$\frac{143}{55} = \frac{143}{55}$$

6)

