

Unit7 Notes4: Triangle Similarity with Proofs

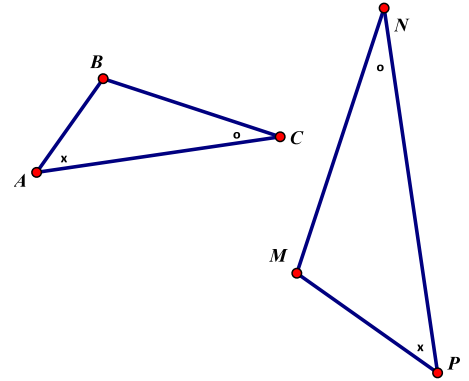
I can determine if triangles are similar.

Similar Triangles have: 1. _____
 2. _____

Goal - Prove that if two triangles have two congruent corresponding angles, then they must be similar.

Given: $\angle A \cong \angle P$ and $\angle C \cong \angle N$

Prove: $\triangle ABC \sim \triangle PMN$

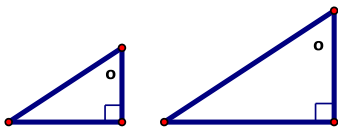


Triangles can be proven similar by:
 1. _____ 2. _____ 3. _____

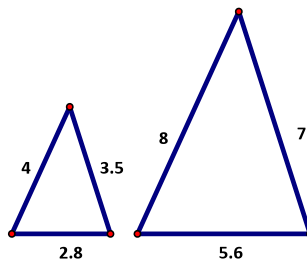
Using the theorems: Are the following pairs of triangles similar?

If they are, then name their similarity criteria. (SSS~, SAS~, AA~)

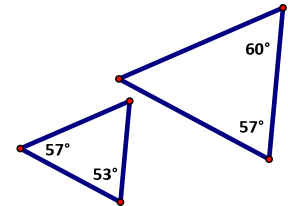
a) Yes / No _____



b) Yes / No _____

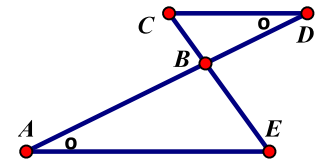


c) Yes / No _____



Given: $\angle A \cong \angle D$

Prove: $\triangle ABE \sim \triangle DBC$



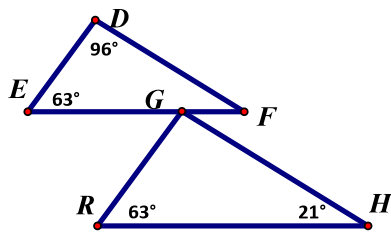
| STATEMENTS | REASONS |
|------------|---------|
| | |

Are the following pairs of triangle similar? If YES, name the similarity criteria (SSS~, SAS~, AA~) and create a similarity statement. If NO, just circle No.

a) Yes / No

Criteria _____

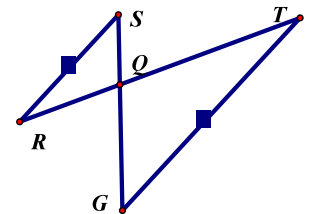
Δ _____ \sim Δ _____



b) Yes / No

Criteria _____

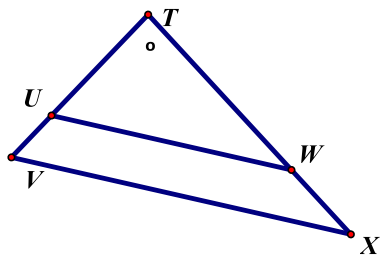
Δ _____ \sim Δ _____



c) Yes / No

Criteria _____

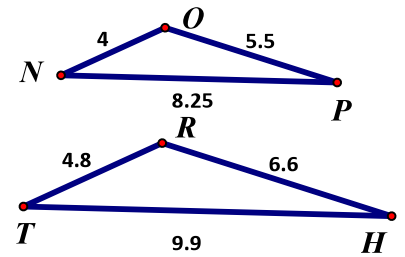
Δ _____ \sim Δ _____



d) Yes / No

Criteria _____

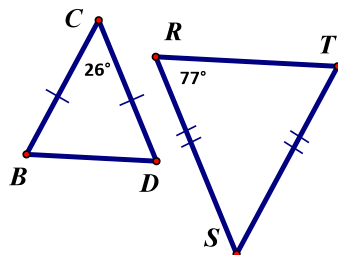
Δ _____ \sim Δ _____



e) Yes / No

Criteria _____

Δ _____ \sim Δ _____



f) Yes / No

Criteria _____

Δ _____ \sim Δ _____

