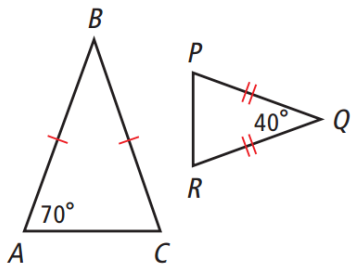


**4.4.D1 – TRIANGLE SIMILARITY**

Determine whether the triangles shown are similar and explain your reasoning. If the triangles are similar, identify the similarity theorem – AA, SSS, or SAS – and complete the similarity statement.

1.



Explain your reasoning:

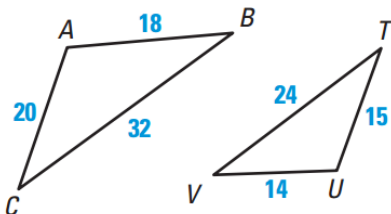
Similar? Yes No

Similarity Theorem:

AA SSS SAS

$\triangle ABC \sim$  \_\_\_\_\_

2.



Explain your reasoning:

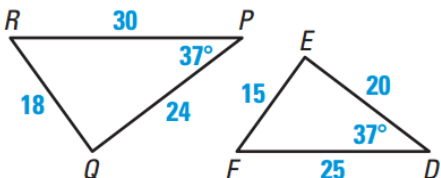
Similar? Yes No

Similarity Theorem:

AA SSS SAS

$\triangle ABC \sim$  \_\_\_\_\_

3.



Explain your reasoning:

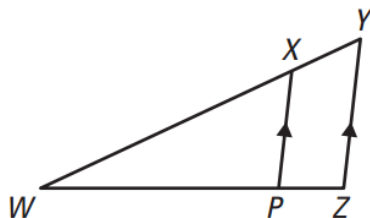
Similar? Yes No

Similarity Theorem:

AA SSS SAS

$\triangle RQP \sim$  \_\_\_\_\_

4.



Explain your reasoning:

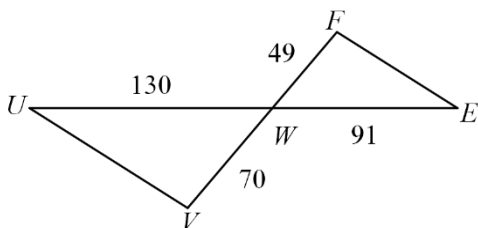
Similar? Yes No

Similarity Theorem:

AA SSS SAS

$\triangle WZY \sim$  \_\_\_\_\_

5.



Explain your reasoning:

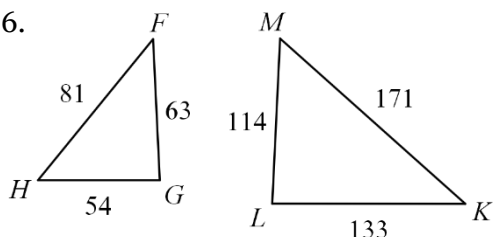
Similar? Yes No

Similarity Theorem:

AA SSS SAS

$\triangle WUV \sim$  \_\_\_\_\_

6.



Explain your reasoning:

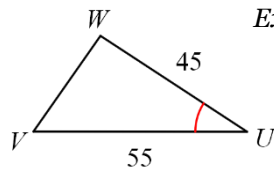
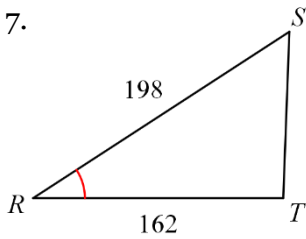
Similar? Yes No

Similarity Theorem:

AA SSS SAS

$\triangle FGH \sim$  \_\_\_\_\_

7.



Explain your reasoning:

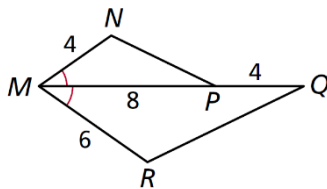
Similar? Yes No

Similarity Theorem:

AA SSS SAS

$\triangle RST \sim$  \_\_\_\_\_

8.



Explain your reasoning:

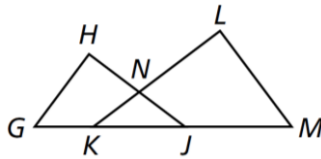
Similar? Yes No

Similarity Theorem:

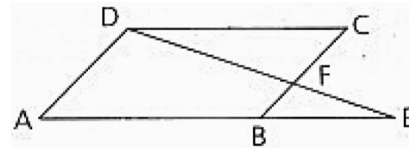
AA SSS SAS

$\triangle MQR \sim$  \_\_\_\_\_

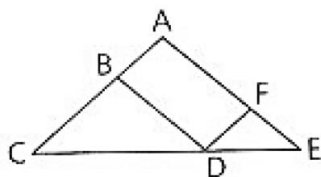
9. Given: isosceles  $\triangle KNJ$  with base  $\overline{JK}$ ,  $\angle H \cong \angle L$   
Explain how  $\triangle GHJ \sim \triangle MLK$ .



10. Given:  $ABCD$  is a parallelogram  
Explain how  $\triangle BFE \sim \triangle CFD$ .



11. Given:  $\overline{AC} \cong \overline{AE}$ ,  $\angle CBD \cong \angle FED$   
Explain how  $\triangle CBD \sim \triangle FED$ .



12. Given:  $\angle A \cong \angle D$ ,  $\angle 2 \cong \angle 4$   
Explain how  $\triangle ABC \sim \triangle DEF$ .

