

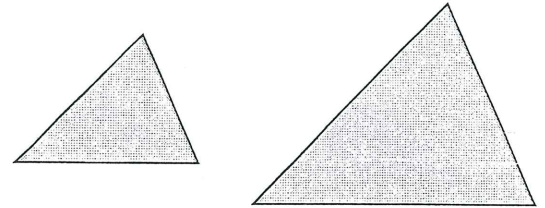
Name: _____

Triangle Similarity

Angle Angle Similarity:

AA~

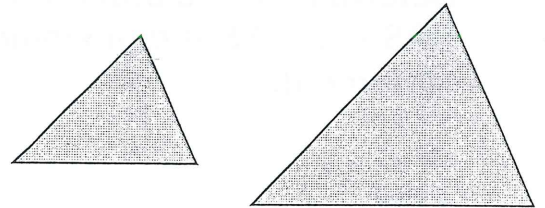
If 2 angles of one triangle are congruent to 2 angles of another triangle, then the triangles are similar.



Side Side Side Similarity:

SSS~

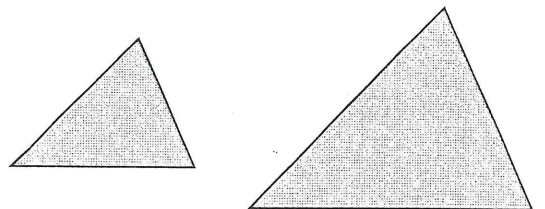
If corresponding sides of two triangles are proportional, then the two triangles are similar.



Side Angle Side Similarity:

SAS~

If an angle of one triangle is congruent to an angle of another triangle and the sides including those angles are in proportion, then the triangles are similar.



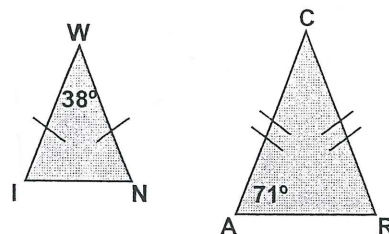
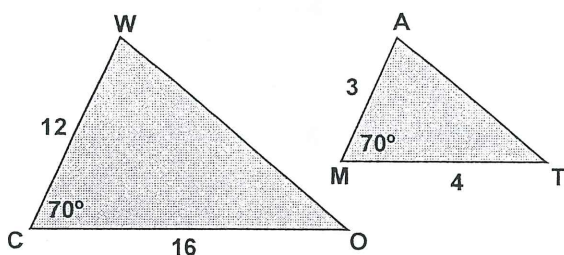
Guided Practice

1. Reason: _____

2. Reason: _____

Δ _____ \sim Δ _____

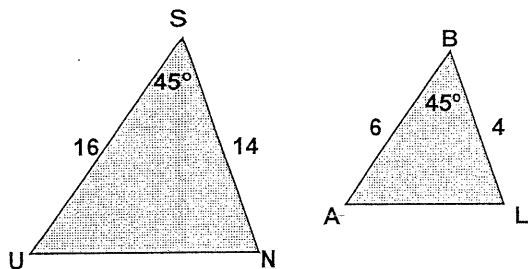
Δ _____ \sim Δ _____



Geometry
Triangle Similarity Notes

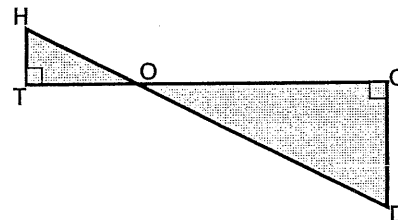
3. Reason: _____

Δ _____ \sim Δ _____



4. Reason: _____

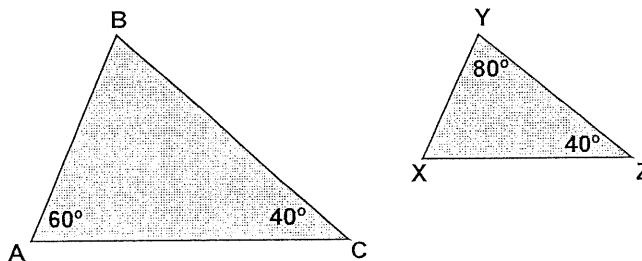
Δ _____ \sim Δ _____



Determine if the triangles are similar. If so, state the reason (AA~, SAS~, or SSS~) that would prove this and then complete the similarity statement.

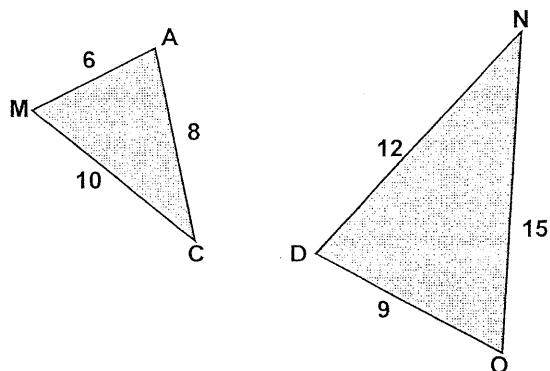
1. Reason: _____

Δ _____ \sim Δ _____



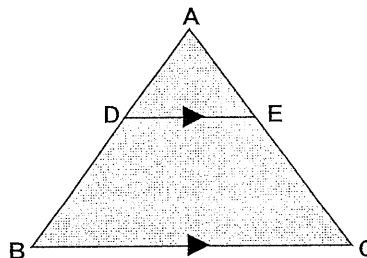
2. Reason: _____

Δ _____ \sim Δ _____



3. Reason: _____

Δ _____ \sim Δ _____

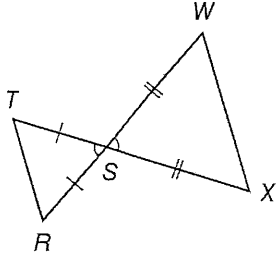


7-3 Skills Practice

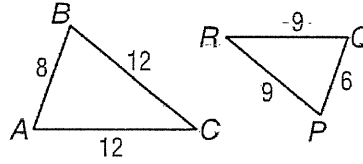
Similar Triangles

Determine whether each pair of triangles is similar. If so, write a similarity statement. If not, what would be sufficient to prove the triangles similar? Explain your reasoning.

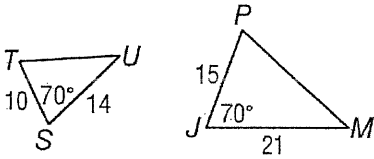
1.



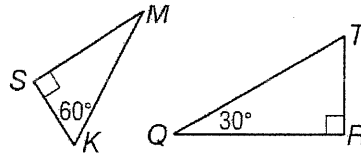
2.



3.

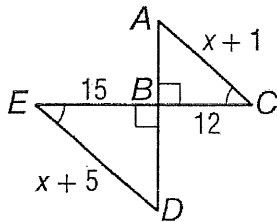


4.

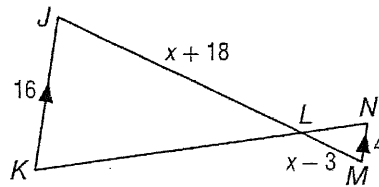


ALGEBRA Identify the similar triangles. Then find each measure.

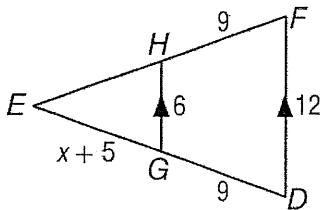
5. *AC*



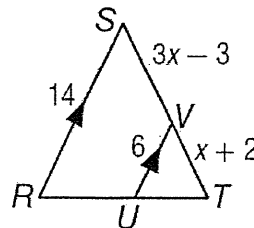
6. *JL*



7. *EH*



8. *VT*

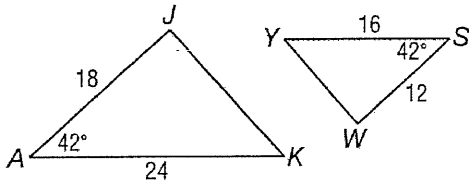


7-3 Practice

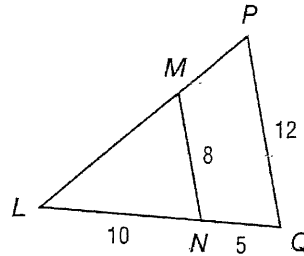
Similar Triangles

Determine whether the triangles are similar. If so, write a similarity statement. If not, what would be sufficient to prove the triangles similar? Explain your reasoning.

9)

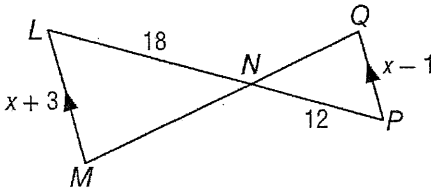


10)

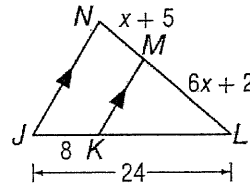


ALGEBRA Identify the similar triangles. Then find each measure.

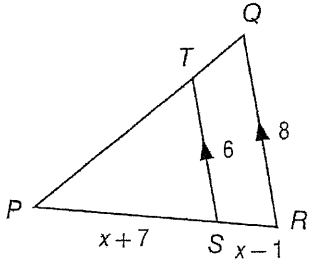
11) LM, QP



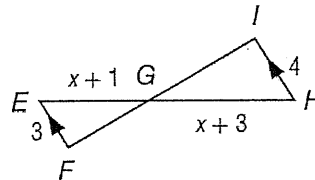
12) NL, ML



13) PS, PR



14) EG, HG



15) **INDIRECT MEASUREMENT** A lighthouse casts a 128-foot shadow. A nearby lamppost that measures 5 feet 3 inches casts an 8-foot shadow.

a. Write a proportion that can be used to determine the height of the lighthouse.

b. What is the height of the lighthouse?